DEPARTMENT OF THE AIR FORCE

COMMITTEE STAFF PROCUREMENT BACKUP BOOK
FY 2001 BUDGET ESTIMATES
FEBRUARY 2000



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OTHER PROCUREMENT, AIR FORCE

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(HQ USAF/ILSR)

DEPARTMENT OF THE AIR FORCE
OTHER PROCUREMENT APPROPRIATION ESTIMATES
FOR FISCAL YEAR 2001

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Vehicular Equipment
Electronics and Telecommunications Equipment
Other Base Maintenance and Support Equipment
Spares and Repair Parts

IDENTIFICATION CODES

Code "A" - Line items of material which have been approved for Air Force service use, i.e., line items which have been classified as standard or alternate.

Code "B" - Line items of material that have not been approved for Service use as defined in Code "A".

GLOSSARY

Contract Method

ALLOT - Allotment
C - Competitive
DO - Delivery Order
FCA - Fund Cite Authorization
MIPR - Military Interdepartmental Purchase Request
OA - Obligation Authority
OPT - Option
OTH - Other
PO - Project Order
REQN - Requisition
SS - Sole Source
WP - Work Project
MIPR-OPT - Military Interdepartmental Purchase Request - Option
MIPR-C - Military Interdepartmental Purchase Request - Competitive
MIPR-SS - Military Interdepartmental Purchase Request - Sole Source
MIPR-OTH - Military Interdepartmental Purchase Request - Other

Contract Type

C/FP - Competitive/Fixed Price
C/FFP - Competitive/Firm Fixed Price
C/FPIS - Competitive Fixed Price Incentive with Successive Targets
CM-5 - Competitive Multi-year - 5 years
CPAF - Cost Plus Award Fee
CPFF - Cost Plus Fixed Fee
CPIF - Cost Plus Incentive Fee
FFP - Firm Fixed Price
FFP W/OPT - Firm Fixed Price with Options
FP - Fixed Price
FP W/OPT - Fixed Price with Options
FPAF - Fixed Price Award Fee
FPE - Fixed Price with Escalation
FPIF - Fixed Price Incentive Fee
FPIS - Fixed Price Incentive With Successive Targets
IDIQ - Indefinite Delivery/Indefinite Quantity
M-5 (Yr 1) - Multiyear, 5 years (Yr 1)
M-5 (Yr 2) - Multiyear, 5 years (Yr 2)
M-5 (Yr 3) - Multiyear, 5 years (Yr 3)
M-5 (Yr 4) - Multiyear, 5 years (Yr 4)
M-5 (Yr 5) - Multiyear 5 years (Yr 5)
OTH - Other

Location of PCO

11 WING - 11th Support Wing, Washington, DC
ACC - Air Combat Command, Langley AFB, VA
AAC - Air Armament Center, Eglin AFB, FL
AEDC - Arnold Engineering Development Center, Arnold AFB, TN
AETC - Air Education and Training Command, Randolph AFB, TX
AFCIC - Air Force Communications and Information Center, Washington, DC
AFCESA - Air Force Civil Engineering Support Agency, Tyndall AFB, FL
AFFTC - Air Force Flight Test Center, Edwards AFB, CA
AFMC - Air Force Materiel Command, Wright-Patterson AFB, OH
AFMETCAL - Air Force Metrology and Calibration Office, Health, Ohio
AFMLO - Air Force Medical Logistics Office, Ft Detrick, MD
AIA - Air Intelligence Agency, Kelly AFB, TX
AMC - Air Mobility Command, Scott AFB, IL
ASC - Aeronautical Systems Center, Wright-Patterson AFB, OH & Eglin AFB, FL
AFWA - Air Force Weather Agency, Offutt AFB, NE
DGSC - Defense General Support Center, Richmond, VA
DPSC - Defense Personnel Support Center, Philadelphia, PA
ER - Eastern Range, Patrick AFB, FL
ESC - Electronic Systems Center, Hanscom AFB, MA
HSC - Human Services Center, Brook AFB, TX
OC-ALC - Oklahoma City Air Logistics Center, Tinker AFB, OK
OO-ALC - Ogden Air Logistics Center, Hill AFB, UT
SA-ALC - San Antonio Air Logistics Center, Kelly AFB, TX
SM-ALC - Sacramento Air Logistics Center, McClellan AFB, CA
SMC - Space & Missile Systems Center, Los Angeles AFB, CA
US STRATCOM - US Strategic Command, Offutt AFB, NE

WACC - Washington Area Contracting Center, Washington DC
WR - Western Range, Vandenberg AFB, CA
WR-ALC - Warner-Robins Air Logistics Center, Robins AFB, GA
AFSPC - Air Force Space Command, Peterson AFB, CO
HQ ANG - Headquarters, Air National Guard, Washington, DC
USAFE - United States Air Force Europe, Ramstein AFB, GE
USAFA - United States Air Force Academy, Colorado Springs, CO
SSG - Standard Systems Group, Maxwell AFB-Gunter Annex, AL

Bases/Organizations

11 WING - 11th Support Wing
ACC - Air Combat Command
AETC - Air Education & Training Command
AFCAO - Air Force Computer Acquisition Office
AFCESA - Air Force Civil Engineering Support Agency
AFCIC - AF Communications & Information Center
AFCSC - Air Force Cryptologic Service Center
AFESC - Air Force Engineering Services Center
AFGWC - Air Force Global Weather Central
AFIT - Air Force Institute of Technology
AFMC - Air Force Materiel Command
AFMETCAL - Air Force Metrology and Calibration Office
AFMLO - Air Force Medical Logistics Office
AFNEWS - Air Force Information & News Service Center
AFOSI - Air Force Office of Special Investigation
AFOTEC - Air Force Operational Test & Evaluation Center
AFPC - Air Force Personnel Center

AFPSL - AF Primary Standards Lab
AFR - Air Force Reserve
AFSOC - AF Special Operations Command
AFSPC - Air Force Space Command
AIA - Air Intelligence Agency
AMC - Air Mobility Command
ANG - Air National Guard
AU - Air University
AWS - Air Weather Service
CIA - Central Intelligence Agency
DGSC - Defense General Support Center
DLA - Defense Logistics Center
DOE - Department of Energy
DSCC - Defense Supply Center, Columbus
DPSC - Defense Personnel Support Center
ER - Eastern Range
ESC - Electronic Systems Center
ESMC - Eastern Space & Missile Center
FAA - Federal Aviation Agency
FBI - Federal Bureau of Investigation
GSA - General Services Administration
JCS - Joint Chiefs of Staff
JCS - Johnson Space Center
NATO - North Atlantic Treaty Organization
NBS - National Bureau of Standards
PACAF - Pacific Air Forces
USAF - United States Air Force
USAFA - United States Air Force Academy

USAFE - United States Air Force Europe
USCENTCOM - United States Central Command
USEUCOM - United States European Command
USMC - United States Marine Corps
USSTRATCOM - United States Strategic Command
WPAFB - Wright-Patterson AFB, OH
WR - Western Range
WSMC - Western Space and Missile Center

APPROPRIATION LANGUAGE

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 otherwise provided for; the purchase of not to exceed 1 vehicle required for physical security of personnel, notwithstanding price limitation applicable to passenger vehicles but not to exceed $200,340 per vehicle; the purchase of not to exceed 173 passenger motor vehicles of which all shall be for replacement only; and expansion of public and private plants, Government-owned equipment and installation thereof in such plants, erection of structures, and acquisition of land, for the foregoing purposes, and such lands and interests therein, may be acquired, and construction prosecuted thereon, prior to approval of title; reserve plant and Government and contractor-owned equipment layaway; $7,699,127,000 to remain available for obligation until September 30, 2003.

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BUDGET ITEM JUSTIFICATION (EXHIBIT P-40)	DATE: FEBRUARY 2000
APPROP CODE/BA: OPAF/VEHICULAR EQUIPMENT	**P-1 NOMENCLATURE:** SEDAN 4 DR 4X2

		FY1999	FY2000	FY2001	FY2002	FY2003	FY2004	FY2005
QUANTITY		33	0	16	0	0	0	0
COST (in Thousands)		$547	$0	$254	$0	$0	$0	$0

Description:

These vehicles transport personnel in performance of official duties. Each vehicle utilizes a four or six cylinder, cost effective gasoline or compressed natural gas (CNG) engine. The total Air Force FY01 procurement requirement is 16 sedans. Items requested in FY01 are identified on the following P-40A and are representative of items to be procured. Items procured during execution may change based on critical equipment needed to support current Air Force mission requirements.

	P-1 ITEM NO: 1		PAGE NO: 1		Page 1 of 1

BUDGET ITEM JUSTIFICATION FOR AGGREGATED ITEMS (EXHIBIT P- 40A)	DATE: FEBRUARY 2000
APPROP CODE/BA: OPAF/VEHICULAR EQUIPMENT	**P-1 NOMENCLATURE:** SEDAN 4 DR 4x2

PROCUREMENT ITEMS	ID CODE			FY1999		FY2000		FY2001	
		QTY.	COST	QTY.	COST	QTY.	COST	QTY.	COST
COMPACT (US) (BPAC 1012)	A			8	$91				
COMPACT (JAPAN) (BPAC 1014)	A							2	$20
COMPACT (KOREA) (BPAC 101A)	A							1	$15
MIDSIZE SEDAN (OSI) (BPAC 101C)	A			3	$88				
COMPACT (OSI) (BPAC 101F)	A			11	$174				
COMPACT (US) BI FUEL (BPAC 101H)	A							9	$179
SUBCOMPACT (US) (CHASE CAR) (BPAC 101J)	A			7	$139				
COMPACT (TURKEY) (BPAC 101L)	A			4	$55				
MIDSIZE SEDAN (GERMANY) (BPAC 101Y)	A							1	$15
COMPACT SEDAN (GERMANY) (BPAC 101Z)	A							3	$25
Totals:				33	$547			16	$254

Remarks:

	P-1 ITEM NO: 1		PAGE NO: 2		Page 1 of 1

BUDGET ITEM JUSTIFICATION (EXHIBIT P-40)	DATE: FEBRUARY 2000
APPROP CODE/BA: OPAF/VEHICULAR EQUIPMENT	**P-1 NOMENCLATURE:** BUSES

		FY1999	FY2000	FY2001	FY2002	FY2003	FY2004	FY2005
QUANTITY		65	0	66	113	418	229	34
COST (in Thousands)		$3,812	$0	$4,101	$7,556	$27,260	$15,536	$2,584

Description:

These commercial buses address a broad range of mission-related mass transit requirements, dictating the procurement of a variety of sizes, ranging from 14 passenger to 52 passenger capacity. They equip our bases with a fuel efficient diesel vehicle for base shuttle bus operations and for transporting large aircraft crews together with their related flight gear during military exercises. Air Force buses are also used to meet any official base function requiring transport of large groups of personnel. In USAFE and PACAF, buses are procured with kits which can convert the regular bus to an ambulance bus, negating the requirement to buy a separate bus for medical evacuation (MED EVAC) operations. The total Air Force FY01 procurement requirement is 1,190 vehicles against an inventory objective of 1,595. Items requested in FY01 are identified on the following P40a and are representative of items to be procured. Items procured during execution may change based on critical equipment needed to support current Air Force mission requirements.

BUDGET ITEM JUSTIFICATION FOR AGGREGATED ITEMS (EXHIBIT P- 40A)	DATE: FEBRUARY 2000
APPROP CODE/BA: OPAF/VEHICULAR EQUIPMENT	**P-1 NOMENCLATURE:** BUSES

PROCUREMENT ITEMS	ID CODE			FY1999		FY2000		FY2001	
		QTY.	COST	QTY.	COST	QTY.	COST	QTY.	COST
28 PASSENGER (BPAC 124A)	A			42	$2536	0	$0	17	$1030
41 PASSENGER (BPAC 124C)	A							2	$405
44 MED DUTY (BPAC 124K)	A							6	$383
44 TRANSIT (BPAC 124L)	A			9	$562			33	$1943
28 PASSENGER (BPAC 124S)	A			6	$343				
16 PAX DED (BPAC 1242)	A							2	$103
16 PAX GAS (BPAC 1243)	A			5	$210			3	$111
16 PAX JAPAN (BPAC 1244)	A			1	$44			1	$25
23 PAX SURREY (BPAC 1245)	A			2	$117			2	$101
Totals:				65	$3,812			66	$4,101

Remarks:

	P-1 ITEM NO: 3		PAGE NO: 4		Page 1 of 1

BUDGET ITEM JUSTIFICATION (EXHIBIT P-40)	DATE: FEBRUARY 2000
APPROP CODE/BA: OPAF/VEHICULAR EQUIPMENT	**P-1 NOMENCLATURE:** AMBULANCES

		FY1999	FY2000	FY2001	FY2002	FY2003	FY2004	FY2005
QUANTITY		8	0	8	26	85	40	0
COST (in Thousands)		$574	$0	$646	$2,163	$6,950	$3,335	$0

Description:

This line item provides funding for both bus and modular ambulances. Bus ambulances support Medical Evacuations (MED EVAC) operations and have the capability of transporting up to 12 litter patients from air evacuation aircraft to hospitals. Modular ambulances are standard, commercial ambulances in both two and four-wheel drive configurations. They perform MED EVAC operations and move patients doing field operations and aircraft crash rescue operations. In normal day-to-day operations they provide emergency and routine transportation for patients to and from medical facilities and hospitals. Modular ambulances have eight cylinder engines, automatic transmissions, power steering and brakes and essential medical life support systems. Capacity depends on patient status; the ambulances can transport three litter patients or eight seated patients. The total FY01 procurement requirement is 168 units against an inventory objective of 637. Items requested in FY01 are identified on the following P-40a and are representative of items to be procured. Items procured during execution may change based on critical equipment needed to support current Air Force mission requirements.

BUDGET ITEM JUSTIFICATION FOR AGGREGATED ITEMS (EXHIBIT P- 40A)	DATE: FEBRUARY 2000
APPROP CODE/BA: OPAF/VEHICULAR EQUIPMENT	**P-1 NOMENCLATURE:** AMBULANCES

PROCUREMENT ITEMS	ID CODE			FY1999		FY2000		FY2001	
		QTY.	COST	QTY.	COST	QTY.	COST	QTY.	COST
MODULAR AMB 4X4 US (BPAC 1354)	A			4	$253			1	$65
BUS, AMB 44 PAX CONV US (BPAC 1359)	A			4	$321			7	$581
Totals:				8	$574			8	$646

Remarks:

	P-1 ITEM NO: 4		PAGE NO: 6		Page 1 of 1

BUDGET ITEM JUSTIFICATION (EXHIBIT P-40)	DATE: FEBRUARY 2000
APPROP CODE/BA: OPAF/VEHICULAR EQUIPMENT	**P-1 NOMENCLATURE:** LAW ENFORCEMENT VEHICLE

		FY1999	FY2000	FY2001	FY2002	FY2003	FY2004	FY2005
QUANTITY		134	53	83	45	87	46	1
COST (in Thousands)		$2,465	$1060	$1,706	$937	$1,920	$1,038	$26

Description:

This vehicle consists of commercial gasoline engine powered sedans equipped with a heavy duty component package for law enforcement and security missions. Due to high mileage vehicle usage, these vehicles have a four-year life expectancy. The total Air Force FY01 procurement requirement is 403 law enforcement vehicles against an inventory objective of 703. Items requested in FY01 are identified on the following P-40a and are representative of items to be procured. Items procured during execution may change based on critical equipment needed to support current Air Force mission requirements.

	P-1 ITEM NO: 5		PAGE NO: 7		Page 1 of 1

BUDGET ITEM JUSTIFICATION FOR AGGREGATED ITEMS (EXHIBIT P- 40A)	DATE: FEBRUARY 2000
APPROP CODE/BA: OPAF/VEHICULAR EQUIPMENT	**P-1 NOMENCLATURE:** LAW ENFORCEMENT VEHICLE

PROCUREMENT ITEMS	ID CODE			FY1999		FY2000		FY2001	
		QTY.	COST	QTY.	COST	QTY.	COST	QTY.	COST
US GAS (BPAC 1601)	A			134	$2465	53	$1060	54	$1037
JAPAN GAS (BPAC 1602)	A							5	$99
US BI FUEL (BPAC 1607)	A							24	$570
Totals:				134	$2,465	53	$1,060	83	$1,706

Remarks:

The Bi fuel vehicle (BPAC 1607) purchase for FY01 is an alternate fuel vehicle (AFV). The Energy Policy Act of 1992 and Executive Order 13031 (13 Dec 96) dir agencies to acquire specific minimum levels of AFVs.

BUDGET ITEM JUSTIFICATION (EXHIBIT P-40)	DATE: FEBRUARY 2000
APPROP CODE/BA: OPAF/VEHICULAR EQUIPMENT	**P-1 NOMENCLATURE:** ARMORED SEDAN

		FY1999	FY2000	FY2001	FY2002	FY2003	FY2004	FY2005
QUANTITY		1	0	1	1	1	0	0
COST (in Thousands)		$165	$0	$200	$230	$230	$0	$0

Description:

1. The Air Force Office of Special Investigations (AFOSI) has responsibility for non-tactical Fully Armored Vehicles (FAVs). FAVs are used during protective service operations to transport permanent party and visiting senior U.S. military and civilian personnel within designated high terrorist threat areas (These vehicles transport in-theater USAF and NATO command officials, the Secretary of Defense, Secretary of the Air Force) and augment support for the President of the United States.

2. FAV requirements are determined from threat assessment and vulnerability surveys of terrorist threats which are fully investigated and validated by US/foreign, federal and military (e.g. CIA and DoD) counter-intelligence and anti-terrorism experts.

3. Seven (7) of the FAVs on hand have exceeded their life expectancy of eight years or 72,000 miles. Factory reconditioning for engines, drive trains, and major components by Mercedes-Benz has extended vehicle life by 4-5 years. However, the protective integrity of the vehicle's armor cannot be guaranteed by the manufacturer for an additional reconditioning. Therefore, it is neither economically feasible nor safe to upgrade pre-1988 FAVs a second time necessitating this procurement activity.

4. FAVs incorporate new technology introduced during the last five years significantly increased ballistic defeat capability and overall safety of vehicle occupants through use of enhanced armoring materials/techniques. Additional improvements have been made on anti-lock braking systems, driver/passenger restraint devices and side impact devices.

BUDGET ITEM JUSTIFICATION (EXHIBIT P-40)	DATE: FEBRUARY 2000
APPROP CODE/BA: OPAF/VEHICULAR EQUIPMENT	**P-1 NOMENCLATURE:** ARMORED SEDAN

Description (cont.):

5. FY01 funding continues the USAF FAV replacement program. A replacement buy is essential to ensure optimum protection against possible terrorist attacks. The total Air Force FY01 procurement requirement is 9 sedans against an inventory objective of 12. Items requested in FY01 are identified on the following P-5A.

6. Code A Item.

BUDGET PROCUREMENT HISTORY PLANNING (EXHIBIT P- 5A)	DATE: FEBRUARY 2000
APPROP CODE/BA: OPAF/VEHICULAR EQUIPMENT	**P-1 NOMENCLATURE:** ARMORED SEDAN

ITEM / FISCAL YEAR	QTY.	UNIT COST	LOCATION OF PCO	CONTRACT METHOD & TYPE	CONTRACTOR AND LOCATION	AWD. DATE	DATE FIRST DEL.	SPECS AVAIL NOW	DATE REV. AVAIL
ARMORED SEDAN (BPAC 1702) OSI									
FY99	1	165,000	AFMC/WR-ALC	FCA/OTH	WIESBADEN REGIONAL CON. WIESBADEN GERMANY	AUG 99	NOV 99		
FY01	1	200,000	AFMC/WR-ALC	FCA/OTH	OSI (UNKNOWN)	APR 01	JUN 01	Y	

REMARKS:
OTH - Other

	P-1 ITEM NO: 6		PAGE NO: 11		Page 1 of 1

BUDGET ITEM JUSTIFICATION (EXHIBIT P-40)	DATE: FEBRUARY 2000
APPROP CODE/BA: OPAF/VEHICULAR EQUIPMENT	**P-1 NOMENCLATURE:** TRUCK, MULTI-STOP, 1T 4X2

		FY1999	FY2000	FY2001	FY2002	FY2003	FY2004	FY2005
QUANTITY		0	0	0	0	0	0	0
COST (in Thousands)		$9,366	$0	$17,593	$7,311	$930	$10,511	$28,192

Description:

This family group consists of commercial panel trucks with sliding front doors and double rear doors, as well as delivery vans with cut-off cabs and full width rear doors with windows. Defining characteristics include two wheel drive, automatic transmissions and diesel engines. The trucks support mission needs for light cargo transport and mobile post offices, as well as transportation for air/flight crew personnel, maintenance crews, flightline crews, supplies/tools, and various types of equipment used in the field. The vehicles primarily support flightline operations (aircraft maintenance) and air base civil engineers performing base and airfield maintenance. The total Air Force FY01 procurement requirement is 3,404 vehicles against an inventory objective of 5,545. Items requested in FY01 are identified on the following P-40a and are representative of items to be procured. Items procured during execution may change based on critical equipment needed to support current Air Force mission requirements.

BUDGET ITEM JUSTIFICATION FOR AGGREGATED ITEMS (EXHIBIT P- 40A)	DATE: FEBRUARY 2000
APPROP CODE/BA: OPAF/VEHICULAR EQUIPMENT	**P-1 NOMENCLATURE:** TRUCK, MULTI-STOP, 1T 4x2

PROCUREMENT ITEMS	ID CODE			FY1999		FY2000		FY2001	
		QTY.	COST	QTY.	COST	QTY.	COST	QTY.	COST
DELIVERY VAN (GERMANY) (BPAC 216A)	A							30	$920
DELIVERY VAN (JAPAN) (BPAC 216C)	A			8	$181			10	$230
DELIVERY VAN (ITALY) (BPAC 216E)	A							15	$480
DELIVERY VAN (TURKEY) (BPAC 216F)	A							15	$480
DELIVERY VAN (US) (BPAC 2165)	A			297	$9185			483	$15444
DELIVERY VAN (US) BIFUEL (BPAC 2168)	A							1	$39
Totals:				305	$9,366			554	$17,593

Remarks:

For better purchase cost most of these vehicles are bought in the above countries. The Bi fuel vehicle (BPAC 2168) is an alternate fuel vehicle purchase.

	P-1 ITEM NO: 11		PAGE NO: 13		Page 1 of 1

BUDGET PROCUREMENT HISTORY PLANNING (EXHIBIT P- 5A)	DATE: FEBRUARY 2000
APPROP CODE/BA: OPAF/VEHICULAR EQUIPMENT	**P-1 NOMENCLATURE:** TRUCK, MULTI-STOP, 1T 4x2

ITEM / FISCAL YEAR	QTY.	UNIT COST	LOCATION OF PCO	CONTRACT METHOD & TYPE	CONTRACTOR AND LOCATION	AWD. DATE	DATE FIRST DEL.	SPECS AVAIL NOW	DATE REV. AVAIL
DELIVERY VAN (GERMAN									
FY01	30	30671	AFMC/WR-ALC	MIPR/OPT/FFP	GSA (UNKNOWN)	FEB 01	AUG 01	Y	
DELIVERY VAN (JAPAN)									
FY99	8	22625	AFMC/WR-ALC	MIPR/OPT/FFP	NAVY, (MITSUBISHI, TOKOYO, JAPAN))	MAY 99	DEC 99		
FY01	10	23046	AFMC/WR-ALC	MIPR/OPT/FFP W/OPT	NAVY (UNKNOWN)	FEB 01	AUG 01	Y	
DELIVERY VAN (ITALY)									
FY01	15	31975	AFMC/WR-ALC	MIPR/OPT/FFP	GSA (UNKNOWN)	FEB 01	AUG 01	Y	
DELIVERY VAN (TURKEY)									
FY01	15	31975	AFMC/WR-ALC	MIPR/OPT/FFP	GSA (UNKNOWN)	FEB 01	AUG 01	Y	
DELIVERY VAN (US) (BPAC 2165)									

BUDGET PROCUREMENT HISTORY PLANNING (EXHIBIT P- 5A)	DATE: FEBRUARY 2000
APPROP CODE/BA: OPAF/VEHICULAR EQUIPMENT	**P-1 NOMENCLATURE:** TRUCK, MULTI-STOP, 1T 4x2

ITEM / FISCAL YEAR	QTY.	UNIT COST	LOCATION OF PCO	CONTRACT METHOD & TYPE	CONTRACTOR AND LOCATION	AWD. DATE	DATE FIRST DEL.	SPECS AVAIL NOW	DATE REV. AVAIL
FY99	297	30925	AFMC/WR-ALC	MIPR/OPT/FFP	GSA (CARTER CHEV/TULARE, CA)	MAR 99	SEP 99		
FY01	483	31975	AFMC/WR-ALC	MIPR/OPT/FFP W/OPT	GSA (UNKNOWN)	MAR 01	SEP 01	Y	
DELIVERY VAN (US) BIFUEL (BPAC 2168)									
FY01	1	38960	AFMC/WR-ALC	MIPR/OPT/FFP	GSA (UNKNOWN)	FEB 01	AUG 01	Y	

REMARKS:

	P-1 ITEM NO: 11		PAGE NO: 15		Page 2 of 2

BUDGET ITEM JUSTIFICATION (EXHIBIT P-40)	DATE: FEBRUARY 2000
APPROP CODE/BA: OPAF/VEHICULAR EQUIPMENT	**P-1 NOMENCLATURE:** FAMILY MEDIUM TACTICAL VEHICLES

		FY1999	FY2000	FY2001	FY2002	FY2003	FY2004	FY2005
QUANTITY		0	0	0	0	0	0	0
COST (in Thousands)		$0	$2,251	$5,869	$7,643	$132	$19,413	$52,854

Description:

1. These cargo trucks consist of a family of Medium Tactical Vehicles (MTVs), which have the capability to operate in austere adverse terrain locations. They provide required support to civil engineering, communications and special operations airlift communities. These trucks are utilized extensively by the US Army; thus, with requirements to conduct combined joint operations, this vehicle family is also the logical choice for the Air Force due to the commonality, compatibility of parts, and maintenance support in a joint force environment. The total Air Force FY01 procurement requirement is 3,373 vehicles against an inventory objective of 4,200. Items requested in FY01 are identified on the following P-40A and are representative of items to be procured. Items procured during execution may change based on critical equipment needed to support current Air Force mission requirements.

*FY00 buy requirements were requested in Line Item # 19, Items less Than $5 Million (Cargo-Utility), in the FY00/01 President's Budget.

	P-1 ITEM NO: 13		PAGE NO: 16		Page 1 of 1

BUDGET ITEM JUSTIFICATION FOR AGGREGATED ITEMS (EXHIBIT P- 40A) | **DATE:** FEBRUARY 2000

APPROP CODE/BA:
OPAF/VEHICULAR EQUIPMENT

P-1 NOMENCLATURE:
FAMILY MEDIUM TACTICAL VEHICLES

PROCUREMENT ITEMS	ID CODE	FY1999				FY2000		FY2001	
		QTY.	COST	QTY.	COST	QTY.	COST	QTY.	COST
TRK, CGO, MTV, M1078, 2.5T (BPAC 2231)	A					3	$313	2	$209
TRK, CGO, MTV, M1083, 5T (BPAC 2232)	A					8	$1,003	42	$5,344
TRK, WRECKER, MTV, M1089, (BPAC 2234)	A					3	$935	1	$316
Totals:						14	$2,251	45	$5,869

Remarks:

	P-1 ITEM NO: 13		PAGE NO: 17		Page 1 of 1

BUDGET PROCUREMENT HISTORY PLANNING (EXHIBIT P- 5A)	DATE: FEBRUARY 2000
APPROP CODE/BA: OPAF/VEHICULAR EQUIPMENT	**P-1 NOMENCLATURE:** FAMILY MEDIUM TACTICAL VEHICLES

ITEM / FISCAL YEAR	QTY.	UNIT COST	LOCATION OF PCO	CONTRACT METHOD & TYPE	CONTRACTOR AND LOCATION	AWD. DATE	DATE FIRST DEL.	SPECS AVAIL NOW	DATE REV. AVAIL
TRK, CGO, MTV, M1078, 2.5T (BPAC 2231)									
FY00	3	104,333	AFMC/WR-ALC	MIPR/CM-5 (Yr2)	ARMY/TACOM STEWART&STEVENSON/SEALY, TX	JAN 00	JAN 01		
FY01	2	104,500	AFMC/WR-ALC	MIPR/CM-5 (Yr3)	ARMY/TACOM, STEWART&STEVENSON SEALY, TX	JAN 01	JAN 02	Y	
TRK, CGO, MTV, M1083, 5T (BPAC 2232)									
FY00	8	125,375	AFMC/WR-ALC	MIPR/CM-5 (Yr2)	ARMY/TACOM STEWARTS&STEVENSON SEALY, TX	JAN 00	JAN 01		
FY01	42	127,238	AFMC/WR-ALC	MIPR/CM-5 (Yr3)	ARMY/TACOM STEWART&STEVENSON SEALY, TX	JAN 01	JAN 02	Y	
TRK, WRECKER, MTV, M1089, (BPAC 2234)									
FY00	3	311,667	AFMC/WR-ALC	MIPR/CM-5 (Yr2)	ARMY/TACOM STEWART&STEVENSON SEALY, TX	JAN 00	JAN 01		
FY01	1	316,000	AFMC/WR-ALC	MIPR/CM-5 (Yr3)	ARMY/TACOM STEWART&STEVENSON SEALY, TX	JAN 01	JAN 02	Y	

REMARKS:

	P-1 ITEM NO: 13		PAGE NO: 18		Page 1 of 1

BUDGET ITEM JUSTIFICATION (EXHIBIT P-40)	DATE: FEBRUARY 2000
APPROP CODE/BA: OPAF/VEHICULAR EQUIPMENT	**P-1 NOMENCLATURE:** HIGH MOBILITY VEHICLE

		FY1999	FY2000	FY2001	FY2002	FY2003	FY2004	FY2005
QUANTITY		0	0	0	0	0	0	0
COST (in Thousands)		$6,120	$10,205	$13,435	$13,573	$1,173	$1,324	$3,155

Description:

1. These utility trucks are High Mobility Multi-Purpose Wheeled Vehicles (HMMWV) and have the capability to operate under tactical conditions in austere adverse terrain locations. They support security police, civil engineering, communications, and special operations airlift communities. The M1097A2 model serves as the prime tactical vehicle for the US Army. Requirements to conduct combined joint operations, with the Army makes this vehicle the logical choice for fulfilling Air Force requirements due to the commonality/compatibility of parts, and standardized maintenance support in a joint force environment. This requirement addresses mission-essential tactical vehicle requirements inherent in the Air Force's global operational commitments. The total Air Force FY01 procurement requirement is 1415 vehicles against an inventory objective of 2070.

2. Items requested in FY01 are identified on the following P-5A and are representative of items to be procured. Items procured during execution may change based on critical equipment needed to support current Air Force mission requirements.

3. Ident. Code A

	P-1 ITEM NO: 14		PAGE NO: 19		Page 1 of 1

BUDGET PROCUREMENT HISTORY PLANNING (EXHIBIT P- 5A)	DATE: FEBRUARY 2000
APPROP CODE/BA: OPAF/VEHICULAR EQUIPMENT	**P-1 NOMENCLATURE:** HIGH MOBILITY VEHICLE

ITEM / FISCAL YEAR	QTY.	UNIT COST	LOCATION OF PCO	CONTRACT METHOD & TYPE	CONTRACTOR AND LOCATION	AWD. DATE	DATE FIRST DEL.	SPECS AVAIL NOW	DATE REV. AVAIL
M1097A2 HMMWV BPAC (2261)									
FY99	107	57196	AFMC/WR-ALC	MIPR/CM-5 (Yr4)	ARMY/TACOM AM GENERAL, SOUTH BEND, IN	MAY 99	JUN 00		
FY00	175	58314	AFMC/WR-ALC	MIPR/CM-5 (Yr5)	ARMY/TACOM AM GENERAL, SOUTH BEND, IN	FEB 00	FEB 01	Y	
FY01	226	59444	AFMC/WR-ALC	MIPR/CM-5 (Yr1)	ARMY/TACOM (UNKNOWN)	FEB 01	FEB 02	N	JAN 01

REMARKS:

	P-1 ITEM NO: 14		PAGE NO: 20		Page 1 of 1

BUDGET ITEM JUSTIFICATION (EXHIBIT P-40)							DATE: FEBRUARY 2000
APPROP CODE/BA: OPAF/VEHICULAR EQUIPMENT			**P-1 NOMENCLATURE:** CAP VEHICLES				

		FY1999	FY2000	FY2001	FY2002	FY2003	FY2004	FY2005
QUANTITY								
COST (in Thousands)		$1,400	$751	$768	$780	$787	$804	$822

Description:

This program acquires vehicles to support Civil Air Patrol (CAP) operational and management activities. Operational support applications include command and control for search and rescue, counter-drug, disaster relief, and training missions. FY01 funding continues procurement of vehicles to support CAP missions.

BUDGET ITEM JUSTIFICATION (EXHIBIT P-40)	DATE: FEBRUARY 2000
APPROP CODE/BA: OPAF/VEHICULAR EQUIPMENT	**P-1 NOMENCLATURE:** ITEMS LESS THAN $5,000,000 (CARGO-UTILITY)

		FY1999	FY2000	FY2001	FY2002	FY2003	FY2004	FY2005
QUANTITY								
COST (in Thousands)		$6,216	$29,012	$29,235	$34,167	$67,623	$80,335	$118,384

Description:

This P-1 line includes various cargo-utility vehicles and equipment with procurement value of less than $5,000,000 and are Code A. These items are critical across the spectrum of functional users throughout the Air Force and provide multi-purpose capabilities. Items requested in FY01 are identified on the following P-40A and are representative of items to be procured. Items procured during execution may change based on critical equipment needed to support current Air Force mission requirements.

BUDGET ITEM JUSTIFICATION FOR AGGREGATED ITEMS (EXHIBIT P- 40A-IL)	DATE: FEBRUARY 2000
APPROP CODE/BA: OPAF/VEHICULAR EQUIPMENT	**P-1 NOMENCLATURE:** ITEMS LESS THAN $5,000,000 (CARGO-UTILITY)

PROCUREMENT ITEMS	NSN			FY2001	
		QTY.	COST	QTY.	COST
TRUCK, PICKUP 3/4T 4X4 (BPAC 2992002)	2320009116869			17	$321
COMPACT PICKUP 4X4 (BPAC 2992003)	2320010878223			26	$409
COMPACT PICKUP US BIFUEL (BPAC 2992004)	2320010878225			57	$913
COMPACT PICKUP 4X2 US (BPAC 2992006)	2320010096194			75	$1,033
1/2TON PICKUP 4X2 US (BPAC 2992009)	2320005401428			39	$621
3/4 TON PICKUP 4X4 US (BPAC 2992011)	2320008116869			8	$201
1/2 TON PICKUP EXTENDED CAB 4X4 (BPAC 2992013)	2320014627874			4	$93
1/2 TON PICKUP 4X2 US BIFUEL (BPAC 2992014)	232000501428			41	$639
COMPACT PICKUP JAPAN (BPAC 2992015)	2320010096196			2	$22
TRAILER, SEMI, FLAT BED, 45 FT AIR RIDE (BPAC 2993001)	2330010618609			2	$95
TRAILER, SEMI, LOW BED, 60 TONS (BPAC 2993002)	2330003492572			1	$30
TRAILER, SEMI, 20 TONS, 25 FT. (BPAC 2993003)	2330008997527			1	$20
TRAILER, SEMI, 20 TONS, 38 FT. (BPAC 2993004)	2330013819477			11	$230
TRAILER, SEMI, LOW BED, 35 TONS (BPAC 2993007)	2330010516648			8	$215
TRAILER, SEMI, 40 FT. W/463L RLRSS (BPAC2993009)	2330010940007			2	$76
TRUCK VAN (BAND) 24KGVW US (BPAC 2994002)	2320010397929			1	$35
CUCV UTIL M1009 (BPAC 2996024)	2320011232665			4	$132
CUCV CARGO M1008 (BPAC 2996025)	2320011232671			53	$1,577
CUCV SHELTER M1028 (BPAC 2996026)	2320011275077			1	$37

BUDGET ITEM JUSTIFICATION FOR AGGREGATED ITEMS (EXHIBIT P- 40A-IL)	DATE: FEBRUARY 2000
APPROP CODE/BA: OPAF/VEHICULAR EQUIPMENT	**P-1 NOMENCLATURE:** ITEMS LESS THAN $5,000,000 (CARGO-UTILITY)

PROCUREMENT ITEMS	NSN			FY2001	
		QTY.	COST	QTY.	COST
TRAILER, HIGH MOBILITY, LIGHT (BPAC 2996036)	2330013886662			12	$143
TRK TRAC 24K 4X2 (BPAC 2999003)	2320006112429			2	$110
TRK TRAC 44.5G (BPAC 2999005)	2320002711432			17	$1,310
TRK TRAC 55 GVW 6X4 (BPAC 2999006)	2320010585724			2	$141
TRK TRAC 39.5G (BPAC 2999007)	2320013417627			13	$895
TRK TRAC MSL SPT (BPAC 2999009)	2320003444397			1	$88
TRUCK, TRACTOR SWA (BPAC 2999011)	2320013571367			8	$482
TRAILER, FLAT BED, 6 TONS (BPAC 299A003)	2330008775646			2	$11
TRUCK, UTILITY 4K 4X4 (BPAC 299B001)	2320009889120			40	$775
TRUCK, UTILITY 6K 4X4 (BPAC 299B002)	2320010795354			0	$0
TRUCK, UTILITY 4X2 (BPAC 299B003)	2320012518501			7	$124
TRUCK, CARGO 1/2 TON (BPAC 299B004)	2320005802954			91	$2,377
TRUCK, CARGO 3/4 TON (BPAC 299B006)	2320005802955			176	$4,879
TRUCK, CARGO 3/4 TON JAPAN (BPAC 299B008)	2320005802955			3	$53
TRUCK, CARGO 1/2 TON 4X2 US BIFUEL (BPAC 299B009)	2320005802954			3	$101
TRUCK, UTILITY 4K 4X4 US BIFUEL (BPAC 299B016)	2320009889120			7	$136
TRUCK, CARGO 3/4 TON 4X4 US BIFUEL (BPAC 299B018)	2320005802955			4	$148
TRUCK, UTILITY 4000GVW 4X4 US BIFUEL (BPAC 299B019)	2320013386502			4	$83
TRUCK, UTILITY 4X2 (BPAC 299B022)	2320014416914			21	$558

	P-1 ITEM NO: 18		PAGE NO: 24		Page 2 of 4

BUDGET ITEM JUSTIFICATION FOR AGGREGATED ITEMS (EXHIBIT P- 40A-IL)	DATE: FEBRUARY 2000
APPROP CODE/BA: OPAF/VEHICULAR EQUIPMENT	**P-1 NOMENCLATURE:** ITEMS LESS THAN $5,000,000 (CARGO-UTILITY)

PROCUREMENT ITEMS	NSN			FY2001	
		QTY.	COST	QTY.	COST
TRUCK, UTILITY 4X4 (BPAC 299B023)	2320014416916			13	$376
MINOR REPLACEMENT EQUIPMENT (BPAC 299C002)	299C002			1	$189
C-ALL 8 PAX (BPAC 299C003)	2320008797662			55	$1192
TRUCK, S&P 19,000 GVW (BPAC 299C004)	2320010648540			1	$28
C-ALL 8 PAX TURKEY (BPAC 299C005)	2320008797662			8	$184
C-ALL 8 PAX ITALY (BPAC 299C006)	2320008797664			20	$409
TRUCK, 4X4 6 PAX DUAL (BPAC 299C009)	2320014242760			1	$30
TRUCK, 4X2 6 PAX DUAL (BPAC 299C010)	2320010107351			12	$290
TRUCK, CARGO, 2.5T 4X4 (BPAC 299C011)	2320008017593			4	$213
TRUCK, CARGO, 2.5T 4X2 (BPAC 299C014)	2320007023537			1	$28
TRUCK, PANEL 4X2 GERMANY (BPAC 299C019)	2320010132754			14	$383
TRUCK, PANEL 4X2 ITALY (BPAC 299C023)	2320010132756			12	$203
C-ALL 4X4 9 PAX (BPAC 299C024)	2320009504238			3	$89
1T STAKE & PLATFORM 4X2 (BPAC 299C026)	2320008518481			30	$606
TRUCK, S&P 10,000 GVW (BPAC 299C027)	2320012507367			44	$1,134
TRUCK, S&P 10,000 GVW 4X4 (BPAC 299C028)	2320013022698			2	$53
C-ALL 8 PAX US (BPAC 299C029)	2920008797662			33	$685
C-ALL 15 PAX (BPAC 299C030)	2320010366569			92	$2,261
C-ALL COMPACT (BPAC 299C031)	2320011736113			7	$141

	P-1 ITEM NO: 18		PAGE NO: 25		Page 3 of 4

BUDGET ITEM JUSTIFICATION FOR AGGREGATED ITEMS (EXHIBIT P- 40A-IL)	DATE: FEBRUARY 2000
APPROP CODE/BA: OPAF/VEHICULAR EQUIPMENT	**P-1 NOMENCLATURE:** ITEMS LESS THAN $5,000,000 (CARGO-UTILITY)

PROCUREMENT ITEMS	NSN			FY2001	
		QTY.	COST	QTY.	COST
C-ALL LOWPRO (BPAC 299C032)	2320004501005			3	$90
TRUCK, PANEL 4X2 (BPAC 299C040)	2320010132754			4	$102
C-ALL 15 PAX (BPAC 299C043)	2320010366569			6	$154
C-ALL COMPACT US BIFUEL (BPAC 299C044)	2320011736113			2	$49
C-ALL 8 PAX US BIFUEL (BPAC 299C045)	2320008797662			8	$206
C-ALL 9 PAX 4X4 US BIFUEL (BPAC 299C047)	2320009504238			2	$77
TRUCK, S&P 10,000 GVW ITALY (BPAC 299C053)	2320012507367			12	$232
TRUCK, S&P 10,000 GVW GERMANY (BPAC 299C054)	2320012507367			15	$463
TRUCK, S&P 10,000 GVW TURKEY (BPAC 299C055)	2320012507367			8	$126
TRUCK, PANEL 4X2 TURKEY (BPAC 299C056)	2320010132754			8	$129
TOTALS:					$29,235

	P-1 ITEM NO: 18		PAGE NO: 26		Page 4 of 4

BUDGET ITEM JUSTIFICATION (EXHIBIT P-40)	DATE: FEBRUARY 2000
APPROP CODE/BA: OPAF/VEHICULAR EQUIPMENT	**P-1 NOMENCLATURE:** HMMWV, ARMORED

		FY1999	FY2000	FY2001	FY2002	FY2003	FY2004	FY2005
QUANTITY								
COST (in Thousands)		$1,770	$346	$5,586	$2,465	$1,462	$6,876	$17,382

Description:

1. This program provides funding for armored High Mobility Multipurpose Wheeled Vehicles (HMMWV). These vehicles consists of the standard diesel powered HMMWV utility trucks with armor plating to provide ballistic protection for armament components, crew, and ammunition. The total Air Force FY01 procurement requirement is 1,312 against an inventory objective of 1,810.

2. The Air Force and the US Army jointly programs these requirements in order to provide an armored vehicle which will satisfy both services' requirements. This vehicle satisfies Air Force Explosive Ordnance Disposal (EOD), Civil Engineering (CE), Base Recovery After Attack (BRAAT) and Security Forces (SF) requirements, as well as being essential to the ongoing Force Protection/Anti-Terrorism (FA/AT) effort. EOD employs this vehicle as an Unexploded (UXO) team work platform; CE uses it to support damage assessment and as an Armored Personnel Carrier (APC); and the SF requires this vehicle for force protection, nuclear weapon security, and Air Base Defense operations. Items requested in FY01 are identified on the following P-40A and are representative of items to be procured. Items procured during execution may change based on critical equipment needed to support current Air Force mission requirements.

* FY99 and FY00 dollars are part of funding contained in Items Less Than $5,000,000, Special Purpose Vehicles, P-1 line #21.

BUDGET ITEM JUSTIFICATION FOR AGGREGATED ITEMS (EXHIBIT P- 40A)	DATE: FEBRUARY 2000
APPROP CODE/BA: OPAF/VEHICULAR EQUIPMENT	**P-1 NOMENCLATURE:** HMMWV, ARMORED

PROCUREMENT ITEMS	ID CODE			FY1999		FY2000		FY2001	
		QTY.	COST	QTY.	COST	QTY.	COST	QTY.	COST
TRK, HMMWV, ARMORED M1116, (BPAC 3201)	A							1	$166
TRK, HMMWV, ARMORED M1025A2, (BPAC 3202)	A			26	$1770	5	$346	77	$5420
Totals:				26	$1,770	5	$346	78	$5,586

Remarks:

	P-1 ITEM NO: 19		PAGE NO: 28		Page 1 of 1

BUDGET PROCUREMENT HISTORY PLANNING (EXHIBIT P- 5A)	DATE: FEBRUARY 2000
APPROP CODE/BA: OPAF/VEHICULAR EQUIPMENT	**P-1 NOMENCLATURE:** HMMWV, ARMORED

ITEM / FISCAL YEAR	QTY.	UNIT COST	LOCATION OF PCO	CONTRACT METHOD & TYPE	CONTRACTOR AND LOCATION	AWD. DATE	DATE FIRST DEL.	SPECS AVAIL NOW	DATE REV. AVAIL
TRK, HMMWV, ARMORED M1116, (BPAC 3201)									
FY01	1	166,474	AFMC/WR-ALC	MIPR/CM-5 (Yr5)	ARMY/TACOM, AM GENERAL, SOUTH BEND, IN	FEB 01	FEB 02	Y	
TRK, HMMWV, ARMORED M1025A2, (BPAC 3202)									
FY99	26	68,066	AFMC/WR-ALC	MIPR/CM-5 (Yr3)	ARMY/TACOM, AM GENERAL, SOUTH BEND, IN	FEB 99	FEB 00		
FY00	5	69,223	AFMC/WR-ALC	MIPR/CM-5 (Yr4)	ARMY/TACOM, AM GENERAL, SOUTH BEND, IN	FEB 00	FEB 01	Y	
FY01	77	70,384	AFMC/WR-ALC	MIPR/CM-5 (Yr5)	ARMY/TACOM, AM GENERAL, SOUTH BEND, IN	FEB 01	FEB 02	Y	

REMARKS:

	P-1 ITEM NO: 19		PAGE NO: 29		Page 1 of 1

BUDGET ITEM JUSTIFICATION (EXHIBIT P-40)	DATE: FEBRUARY 2000
APPROP CODE/BA: OPAF/VEHICULAR EQUIPMENT	**P-1 NOMENCLATURE:** TRACTOR, TOW, FLIGHTLINE

		FY1999	FY2000	FY2001	FY2002	FY2003	FY2004	FY2005
QUANTITY								
COST (in Thousands)		$8,519	$7,710	$5,042	$7,936	$13,369	$7,495	$1,098

Description:

1. This vehicle family consists of diesel engine driven, two and four wheel drive tow tractors necessary for towing aircraft on the flightline. This tractor tows support equipment, munition trailers and fighter aircraft, as well as helicopters and smaller passenger carrying aircraft. Most Major Commands, including the Pacific Air Force, Air Force Materiel Command, United States Air Force Europe, and Air Combat Command operate this vehicle in direct mission support roles. Depending on the terrain and the mission requirements, various configuration may be procured (e.g., heavy winterization). The total Air Force FY01 procurement requirement is 1,379 tractors against an inventory objective of 3,609.

2. Items requested in FY01 are identified on the following P-40A and are representative of items to be procured. Items procured during execution may change based on critical equipment needed to support current Air Force mission requirements.

BUDGET ITEM JUSTIFICATION FOR AGGREGATED ITEMS (EXHIBIT P- 40A)	DATE: FEBRUARY 2000
APPROP CODE/BA: OPAF/VEHICULAR EQUIPMENT	**P-1 NOMENCLATURE:** TRACTOR, TOW, FLIGHTLINE

PROCUREMENT ITEMS	ID CODE			FY1999		FY2000		FY2001	
		QTY.	COST	QTY.	COST	QTY.	COST	QTY.	COST
TRACTOR, TOW, FLIGHTLINE									
(BPAC 3332)	A			278	$8391	248	$7710	159	$5042
TRACTOR, TOW, FLIGHTLINE									
(BPAC 3334)	A			2	$81				
TRACTOR, TOW, FLIGHTLINE									
(BPAC 3335)	A			1	$47				
Totals:				281	$8,519	248	$7,710	159	$5,042

Remarks:

BPAC 3334 and 3335 are commercial type tow tractors being tested at Eglin and Nellis AFBs.

	P-1 ITEM NO: 20		PAGE NO: 31		Page 1 of 1

BUDGET PROCUREMENT HISTORY PLANNING (EXHIBIT P- 5A)	DATE: FEBRUARY 2000
APPROP CODE/BA: OPAF/VEHICULAR EQUIPMENT	**P-1 NOMENCLATURE:** TRACTOR, TOW,FLIGHTLINE

ITEM / FISCAL YEAR	QTY.	UNIT COST	LOCATION OF PCO	CONTRACT METHOD & TYPE	CONTRACTOR AND LOCATION	AWD. DATE	DATE FIRST DEL.	SPECS AVAIL NOW	DATE REV. AVAIL
TRACTOR, TOW, FLTLINE									
(BPAC 3332)									
FY99	278	30184	AFMC/WR-ALC	C/FFP W/OPT	STINAR CORP ST. PAUL, MN	SEP 99	MAY 00		
FY00	248	31090	AFMC/WR-ALC	OPT/FFP	STINAR CORP ST.PAUL, MN	JUN 00	DEC 00	Y	
FY01	159	31711	AFMC/WR-ALC	C/FFP W/OPT	UNKNOWN	FEB 01	JUL 01	N	FEB 00
TRACTOR, TOW, FLTLINE									
(BPAC 3334)									
FY99	1	40382	AFMC/WR-ALC	SS/FFP	WOLLARD AIRPORT EQUIP CO EAU CLAIRE, WI	JUN 99	DEC 99		
FY99	1	40382	AFMC/WR-ALC	SS/FFP	LIFT-A-LOT INCORPORATED MUNCIE, IN	JUN 99	DEC 99		
TRACTOR, TOW, FLTLINE									
(BPAC 3335)									
FY99	1	46695	AFMC/WR-ALC	SS/FFP	CHARLATTE OF AMERICA BLUEFIELD, VA	JUN 99	DEC 99		

BUDGET PROCUREMENT HISTORY PLANNING (EXHIBIT P- 5A)	DATE: FEBRUARY 2000
APPROP CODE/BA: OPAF/VEHICULAR EQUIPMENT	**P-1 NOMENCLATURE:** TRACTOR, TOW,FLIGHTLINE

ITEM / FISCAL YEAR	QTY.	UNIT COST	LOCATION OF PCO	CONTRACT METHOD & TYPE	CONTRACTOR AND LOCATION	AWD. DATE	DATE FIRST DEL.	SPECS AVAIL NOW	DATE REV. AVAIL

REMARKS:

	P-1 ITEM NO: 20		PAGE NO: 33		Page 2 of 2

BUDGET ITEM JUSTIFICATION (EXHIBIT P-40)	DATE: FEBRUARY 2000
APPROP CODE/BA: OPAF/VEHICULAR EQUIPMENT	**P-1 NOMENCLATURE:** ITEMS LESS THAN $5,000,000 (SPECIAL PURPOSE)

		FY1999	FY2000	FY2001	FY2002	FY2003	FY2004	FY2005
QUANTITY								
COST (in Thousands)		$14,121	$22,164	$18,373	$16,852	$53,487	$51,560	$62,618

Description:

This P-1 line includes various special purpose vehicles with a procurement value of less than $5,000,000 and are Code A items. These vehicles includes flightline, maintenance and facility vehicles essential to base and flying operations. Items requested in FY01 are identified on the following P-40A and are representative of items to be procured. Items procured during execution may change based on critical equipment needed to support current Air Force mission requirements.

	P-1 ITEM NO: 21		PAGE NO: 34		Page 1 of 1

BUDGET ITEM JUSTIFICATION FOR AGGREGATED ITEMS (EXHIBIT P- 40A-IL)	DATE: FEBRUARY 2000
APPROP CODE/BA: OPAF/VEHICULAR EQUIPMENT	**P-1 NOMENCLATURE:** ITEMS LESS THAN $5,000,000 (SPECIAL PURPOSE)

PROCUREMENT ITEMS	NSN			FY2001	
		QTY.	COST	QTY.	COST
REF TRK REAR HOIST (BPAC 3991002)	2320008026354			1	$88
A24 TANK TRK (BPAC 3993001)	2320000898979			2	$102
TRK TANK 1200G 4X4 (BPAC 3993010)	2320001776778			1	$86
TRAILER, SEMI, V ACRD, 10 TONS (BPAC 3994017)	2330008359037			1	$81
TRAILER, CHASSIS 1T MB-1 (BPAC 3995001)	2330005403715			2	$10
TRAILER, WATER, 400 GAL, M-149 (BPAC 3996003)	2330000606511			8	$97
TRAILER, ISO CONTAINER, M872 (BPAC 3996053)	2330011421385			2	$68
REEFER VAN 19000GVW (BPAC 3997001)	2320007704467			2	$91
SHOP VAN 4X2 19GVW (BPAC 3997004)	2320008188015			2	$71
SHOP VAN 4X4 (BPAC 3997005)	2320008562480			1	$51
TRK MISSILE VAN (BPAC 3997006)	2320013755833			8	$724
TRK HI LIFT 9 TON (BPAC 3999002)	2320005403991			2	$298
TRK HI LIFT 3 TON (BPAC 3999003)	2320005403489			1	$87
TRK TP MNT 6 PAX (BPAC 399A001)	2320004512184			35	$887
3/4T 4X4 MNT TRK (BPAC 399A006)	2320005411714			35	$903
HI REACH 45 FT (BPAC 399A007)	2320009955610YW			8	$833
HI REACH 65 FT (BPAC 399A008)	2320009897163YW			1	$139
HI REACH 100 FT (BPAC 399A009)	2320004869951YW			2	$509
TRK TEL MNT COMPACT 4X2 (BPAC 399A011)	2320010939261			19	$384

	P-1 ITEM NO: 21		PAGE NO: 35		Page 1 of 2

BUDGET ITEM JUSTIFICATION FOR AGGREGATED ITEMS (EXHIBIT P- 40A-IL)	DATE: FEBRUARY 2000
APPROP CODE/BA: OPAF/VEHICULAR EQUIPMENT	**P-1 NOMENCLATURE:** ITEMS LESS THAN $5,000,000 (SPECIAL PURPOSE)

PROCUREMENT ITEMS	NSN			FY2001	
		QTY.	COST	QTY.	COST
TRK TEL MNT DERRICK (BPAC 399A012)	2320004558464			4	$733
TRK TEL MNT STD UTIL 4X2 (BPAC 399A019)	2320008019193			64	$1410
TRK MNT DIGGER DERRICK (BPAC 399A026)	2320013977528			5	$776
TRK STAKE HI LIFT 3 TON (BPAC 399B001)	2320009354696			1	$80
TRK HYDRANT HOSE R12 (BPAC 399B002)	2320011252481			16	$2,383
MINOR REPLACEMENT IT (BPAC 399B013)	2320NSL29			2	$300
VAN MULTI PURPOSE (BPAC 399B030)	2320013180935			1	$36
TRK TNK FUEL 6000 GAL R11 (BPAC 399B050)	2320004335695			12	$2,890
MB-2 TOW TRACTOR (BPAC 399C002)	1740014388464YW			17	$1,659
FLIGHTLINE TOW TRACTOR, U-30 (BPAC 399C003)	1740013679485YW			2	$415
FLIGHTLINE TOW TRACTOR, MB-4 (BPAC 399C013)	1740005807990YW			12	$1,086
WRECKER TILT BED (BPAC 399E001)	2320013804755			6	$527
TRK WRK 4X2 32GVW HYD TYPE 1 (BPAC 399E004)	2320013033010			5	$569
TOTALS:					$18,373

	P-1 ITEM NO: 21		PAGE NO: 36		Page 2 of 2

BUDGET ITEM JUSTIFICATION (EXHIBIT P-40)	DATE: FEBRUARY 2000
APPROP CODE/BA: OPAF/VEHICULAR EQUIPMENT	**P-1 NOMENCLATURE:** TRUCK, CRASH P-19

		FY1999	FY2000	FY2001	FY2002	FY2003	FY2004	FY2005
QUANTITY								
COST (in Thousands)		$2,317	$465	$8,761	$2,791	$5,687	$5,228	$6,524

Description:

This aircraft crash rescue fire truck equips our bases with a vehicle capable of rapidly extinguishing aircraft fires. The truck has a high reach extendable turret and a 1,500 gallon tank in lieu of the 1,000 gallon tank installed on prior year models. The total Air Force FY01 procurement requirement is 387 against an inventory objective of 465.

* FY00 buy requirement was requested in Line Item # 26, Items Less Than $5 Million (Fire Fighting), in the FY00/01 President's Budget.

BUDGET ITEM JUSTIFICATION FOR AGGREGATED ITEMS (EXHIBIT P- 40A)	DATE: FEBRUARY 2000
APPROP CODE/BA: OPAF/VEHICULAR EQUIPMENT	**P-1 NOMENCLATURE:** TRUCK, CRASH P-19

PROCUREMENT ITEMS	ID CODE			FY1999		FY2000		FY2001	
		QTY.	COST	QTY.	COST	QTY.	COST	QTY.	COST
TRK CRASH P19 BPAC 4012	A			5	$2317	1	$465	16	$8761
Totals:				5	$2,317	1	$465	16	$8,761

Remarks:

	P-1 ITEM NO: 22		PAGE NO: 38		Page 1 of 1

BUDGET PROCUREMENT HISTORY PLANNING (EXHIBIT P- 5A)	DATE: FEBRUARY 2000
APPROP CODE/BA: OPAF/VEHICULAR EQUIPMENT	**P-1 NOMENCLATURE:** TRUCK, CRASH P-19

ITEM / FISCAL YEAR	QTY.	UNIT COST	LOCATION OF PCO	CONTRACT METHOD & TYPE	CONTRACTOR AND LOCATION	AWD. DATE	DATE FIRST DEL.	SPECS AVAIL NOW	DATE REV. AVAIL
TRK CRASH P19 BPAC 4012									
FY99*	5	463,333	AFMC/WR-ALC	MIPR/IDIQ	***DSCP (UNKNOWN)	MAR 00	JUN 00	Y	
FY00	1	464,625	AFMC/WR-ALC	MIPR/IDIQ	DSCP (UNKNOWN)	MAR 00	OCT 00	Y	
FY01**	16	547,538	AFMC/WR-ALC	MIPR/IDIQ	DSCP (UNKNOWN)	DEC 00	JUN 01	Y	

REMARKS:

* Since this particular vehicle will be new to the Air Force inventory, it was determined that it would be best to await fielding of the FY98 buy before placing the FY99 requirement on contract. This will allow the Air Force to determine the feasibility of awarding the FY99 buy to the same contractor.

** FY01 Unit Cost is an estimate price based on a FY98 version of the P-19. Price could decrease before actual award date.

***DSCP-Defense Supply Center/Philadelphia

	P-1 ITEM NO: 22		PAGE NO: 39		Page 1 of 1

BUDGET ITEM JUSTIFICATION (EXHIBIT P-40)	DATE: FEBRUARY 2000
APPROP CODE/BA: OPAF/VEHICULAR EQUIPMENT	**P-1 NOMENCLATURE:** ITEMS LESS THAN $5,000,000 (FIRE FIGHTING)

		FY1999	FY2000	FY2001	FY2002	FY2003	FY2004	FY2005
QUANTITY								
COST (in Thousands)		$2,731	$4,756	$3,700	$5,762	$3,638	$2,323	$0

Description:

This P-1 line includes fire trucks with a procurement value of less than $5,000,000 and are Code A items. These fire fighting vehicles provide critical capability in support of aircraft crash/recovery, personnel rescue, and hazardous material mishaps. Items requested in FY01 are identified on the following P-40A and are representative of items to be procured. Items procured during execution may change based on critical equipment needed to support current Air Force mission requirements.

	P-1 ITEM NO: 21		PAGE NO: 40		Page 1 of 1

BUDGET ITEM JUSTIFICATION FOR AGGREGATED ITEMS (EXHIBIT P- 40A-IL)	DATE: FEBRUARY 2000
APPROP CODE/BA: OPAF/VEHICULAR EQUIPMENT	**P-1 NOMENCLATURE:** ITEMS LESS THAN $5,000,000 (FIRE FIGHTING)

PROCUREMENT ITEMS	NSN			FY2001	
		QTY.	COST	QTY.	COST
P26 WATER TRUCK (499D)	4210013564907			2	$487
P22 FIRE TRK PUMPER (499F)	4210002244564			2	$365
HAZARDOUS MATERIAL VEHICLE (HMV) (499G)	4210013965219			2	$473
HEAVY RESCUE VEHICLE (HRV) (499H)	4210013696048			5	$1,313
TRK FFGT MED RESCUE (MRT) (499J)	4210014525121			1	$185
P23 CRASH TRUCK (4991)	4210007026801			2	$877
TOTALS:					$3,700

	P-1 ITEM NO: 21		PAGE NO: 41		Page 1 of 1

BUDGET ITEM JUSTIFICATION (EXHIBIT P-40)	DATE: FEBRUARY 2000
APPROP CODE/BA: OPAF/VEHICULAR EQUIPMENT	**P-1 NOMENCLATURE:** TRUCK, F/L 10,000 LB

		FY1999	FY2000	FY2001	FY2002	FY2003	FY2004	FY2005
QUANTITY								
COST (in Thousands)		$4,107	$6,890	$4,857	$3,119	$154	$120	$245

Description:

1. This family of vehicles consists of commercial 10,000 pound forklifts with pneumatic tires. These forklifts constitute the basic 463L air cargo system support vehicles to handle 108" X 88" pallets. They are compatible with and support all strategic and tactical airlift aircraft except the wide-body Civil Reserve Air Fleet (CRAF) aircraft. The family consists of the standard model with dual 105" lift, 72" tine configuration and lateral shift capacity, as well as the adverse terrain (AT) model which utilizes a front end scoop loader chassis to provide the required mobility. The AT model permits rapid loading/offloading of aircraft cargo at forward combat locations. The total Air Force FY01 procurement requirement is 1,162 units against an inventory objective of 2,575.

2. Items requested in FY01 are identified on the following P-40A and are representative of items to be procured. Items procured during execution may change based on critical equipment needed to support current Air Force mission requirements.

BUDGET ITEM JUSTIFICATION FOR AGGREGATED ITEMS (EXHIBIT P- 40A)	DATE: FEBRUARY 2000
APPROP CODE/BA: OPAF/VEHICULAR EQUIPMENT	**P-1 NOMENCLATURE:** TRUCK, F/L 10,000 LB

PROCUREMENT ITEMS	ID CODE			FY1999		FY2000		FY2001	
		QTY.	COST	QTY.	COST	QTY.	COST	QTY.	COST
TRUCK, FORKLIFT 10K AT (BPAC 5031)	A			33	$3053	54	$5040	33	$3043
TRUCK, FORKLIFT 10K STD (BPAC 5032)	A			17	$965	34	$1850	32	$1814
TRUCK, FORKLIFT 10K AT (AEF) (BPAC 5036)	A			1	$89				
Totals:				51	$4,107	88	$6,890	65	$4,857

Remarks:

	P-1 ITEM NO: 25		PAGE NO: 43		Page 1 of 1

BUDGET ITEM JUSTIFICATION (EXHIBIT P-40)	DATE: FEBRUARY 2000
APPROP CODE/BA: OPAF/VEHICULAR EQUIPMENT	**P-1 NOMENCLATURE:** 60K A/C LOADER

		FY1999	FY2000	FY2001	FY2002	FY2003	FY2004	FY2005
QUANTITY		38	48	48	44	0	0	0
COST (in Thousands)		$86,966	$94,545	$96,948	$90,342	$0	$0	$0

Description:

Funds for this program were added through FY00 Emergency Supplemental Appropriations and transferred to the Air Force from the overseas Contingency Operations Transfer Fund. The 60K (Tunner) aircraft loader replaces all of the current 463L material handling equipment (MHE) 40K aircraft loaders, lower lobe aircraft loaders, and Wide Body Elevator Loaders (WBEL). The Tunner is becoming the most critical asset of the strategic airlift MHE fleet by virtue of its capacity and rapid on/off load capability for strategic airlift including Civil Reserve Air Fleet (CRAF) aircraft. The Tunner expeditiously handles all configurations of air cargo. Manufactured by Systems and Electronics, Inc., St. Louis, Mo., it accommodates six pallets and carries a maximum of 30 tons to a height of 18.5 feet. It interfaces with all military and CRAF cargo aircraft and meets nuclear material handling safety criteria and certification. The Tunner is drive-on/drive-off and air transportable on C-141, C-5, and C-17 aircraft. It has reduced B-747 aircraft load times by 50 percent, reduced Wide Body Elevator deployment by nearly 50 percent and achieved a 100 percent mission effectiveness rate during Operation DESERT FOX. In addition, 27 Tunners successfully supported Operations ALLIED FORCE and SHINING HOPE. FY00 Appropriations Conference added funds in FY00 to procure nine additional loaders bringing the total to 48, thus maximizing efficient production capability. Programmed funding provides a total of 281 loaders out of an inventory objective of 318.

WEAPON SYSTEM COST ANALYSIS (EXHIBIT P- 5)		DATE: FEBRUARY 2000
APPROP CODE/BA: OPAF/VEHICULAR EQUIPMENT	**P-1 NOMENCLATURE:** 60K A/C LOADER	

WEAPON SYSTEM COST ELEMENTS	IDENT CODE				FY1999			FY2000			FY2001		
		QTY	UNIT COST	TOTAL COST	QTY	UNIT COST	TOTAL COST	QTY	UNIT COST	TOTAL COST	QTY	UNIT COST	TOTAL COST
60K A/C LOADER(BPAC 5121)	A				38	1,493,086	56,737	48	1,439,147	69,079	48	1,452,164	69,704
1. PROD SUPPORT (BPAC 5122)							{3,878}			{4,676}			{4,916}
A. ECO							181			2,086			2,246
B. SPO OPERATIONS/SUPT							1,952			2,590			2,670
C. COST REDUCTION INIT							1,745						
2. FLD SUPPLY SUPT (BPAC 5124)							{99}			{178}			
SPECIAL TOOLS							99			178			
3. TUNNER RELB SUPTBLTY PLN (BPAC 5125)							{26,252}			{20,612}			{22,328}
TOTALS:					38		86,966	48		94,545	48		96,948

REMARKS:

	P-1 ITEM NO: 26		PAGE NO: 45		Page 1 of 1

BUDGET PROCUREMENT HISTORY PLANNING (EXHIBIT P- 5A)	DATE: FEBRUARY 2000
APPROP CODE/BA: OPAF/VEHICULAR EQUIPMENT	**P-1 NOMENCLATURE:** 60K A/C LOADER

ITEM / FISCAL YEAR	QTY.	UNIT COST	LOCATION OF PCO	CONTRACT METHOD & TYPE	CONTRACTOR AND LOCATION	AWD. DATE	DATE FIRST DEL.	SPECS AVAIL NOW	DATE REV. AVAIL
60K A/C LOADER(BPAC 5120)									
FY99	38	1493086	AFMC/WR-ALC	SS/FFP	SYSTEMS & ELECTRONICS INC, ST. LOUIS, MO	FEB 99	MAR 00		
FY00	48	1439147	AFMC/WR-ALC	OPT/FFP	SYSTEMS & ELECTRONICS INC, ST. LOUIS, MO	DEC 99	APR 01		
FY01	48	1452164	AFMC/WR-ALC	OPT/FFP	SYSTEMS & ELECTRONICS INC, ST. LOUIS, MO	DEC 00	APR 02	Y	

REMARKS:

	P-1 ITEM NO: 26		PAGE NO: 46		Page 1 of 1

PRESIDENT'S BUDGET PRODUCTION SCHEDULE (EXHIBIT P- 21) | **DATE:** FEBRUARY 2000

APPROP CODE/BA: OPAF/VEHICULAR EQUIPMENT

P-1 NOMENCLATURE: 60K A/C LOADER

ITEM/MANUFACTURER/ PROCUREMENT YEAR	SERV.	PROC. QTY.	ACCEP. PRIOR TO 1 OCT.	BAL DUE AS OF 1 OCT.	1998	CALENDAR 1999											CALENDAR 2000											Later
						FY1999											FY2000											
					OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	
60K A/C LOADER(BPAC 5120)																												
PRIOR YEARS	AF	59	41	18		1	1	3	5	7	1																	
FY98	AF	44	0	44							6	4	5	4	4	4	3	3	4	3	4								
FY99	AF	38	0	38					C													3	3	3	3	3	3	3	17
FY00	AF	48	0	48															C										48
FY01	AF	48	0	48																									48
FY02	AF	44	0	44																									44
TOTALS		281	41	240		1	1	3	5	7	7	4	5	4	4	4	3	3	4	3	4	3	3	3	3	3	3	3	157

ITEM/MANUFACTURER/ PROCUREMENT YEAR	SERV.	PROC. QTY.	ACCEP. PRIOR TO 1 OCT.	BAL DUE AS OF 1 OCT.	2000	CALENDAR 2001											CALENDAR 2002											Later
						FY2001											FY2002											
					OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	
60K A/C LOADER(BPAC 5120)																												
PRIOR YEARS	AF	59	59	0																								
FY98	AF	44	44	0																								
FY99	AF	38	21	17	3	3	3	3	3	2																		
FY00	AF	48	0	48							3	4	3	3	4	4	5	4	3	5	5	5							
FY01	AF	48	0	48			C																4	4	4	4	4	4	24
FY02	AF	44	0	44															C										44
TOTALS		281	124	157	3	3	3	3	3	2	3	4	3	3	4	4	5	4	3	5	5	5	4	4	4	4	4	4	68

MANUFACTURER'S NAME AND LOCATION	PRODUCTION RATES MIN SUST	1-8-5	MAX
SYSTEMS & ELECTRONICS, INC	2		4
ST. LOUIS, MO			

	PROCUREMENT LEAD TIME			
	ADMIN LEAD TIME		MANUFACT.	TOTAL
	PRIOR TO 1 OCT	AFTER 1 OCT	PLT	1 OCT
INITIAL	0	0	13	13
REORDER	0	2	15	17

REMARKS:

The initial 13 months manufacturing procurement lead time (PLT) was accomplished through the prime contractor's extraordinary efforts with their vendor base to prevent additional production break beyond Feb 00. Normal PLT is 15 months as reflected in the reorder block.

BUDGET ITEM JUSTIFICATION (EXHIBIT P-40)	DATE: FEBRUARY 2000
APPROP CODE/BA: OPAF/VEHICULAR EQUIPMENT	**P-1 NOMENCLATURE:** NEXT GENERATION SMALL LOADER (NGSL)

		FY1999	FY2000	FY2001	FY2002	FY2003	FY2004	FY2005
QUANTITY		0	13	34	84	84	42	0
COST (in Thousands)		$0	$9,669	$24,144	$59,170	$59,010	$29,421	$0

Description:

1. The Next Generation Small Loader (NGSL) will replace the oldest and increasingly unreliable 25K loaders and remainder of the Wide Body Elevator Loader (WBEL) fleet. Unlike the Tunner (60K Aircraft Loader), the NGSL will be C-130 transportable, further enhancing the Air Force's ability to support rapid deployment to austere operating locations in accordance with Expeditionary Aerospace Force (EAF) doctrine. The NGSL, in conjunction with the Tuner, will be an integral part of the airlift system during peacetime logistics missions and assume minimum ground times for increased capability during wartime and contingency surges.

2. The NGSL handles all configurations of air cargo, including 463L pallets, commercial pallets, Army Type V airdrop platforms, container delivery systems loads, international standard organization containers, and rolling stock. The NGSL accommodates three pallets, loads and off-loads a maximum of 25,000 pounds to a height of at least 18.5 feet (to accommodate 747 aircraft), and has a lowering capacity to 39 inches to accommodate C-130 aircraft. It will interface with current and planned military cargo aircraft, current civilian model aircraft utilized by commercial carriers, and the Civil Reserve Air Fleet.

3. The U.S. Air Force has procured six loaders (3 each from Teledyne Brown Engineering and FMC Corp) using RDT&E funding to undergo an Operational Assessment (OA)*. The results from the OA will assist in down selecting one contractor in May 2000. Deliveries will commence in Feb 2001. A total of 257 loaders out of a USAF objective of 264 are currently funded through FY04.

* Project # 675150 PE 0401214F

WEAPON SYSTEM COST ANALYSIS (EXHIBIT P- 5)		DATE: FEBRUARY 2000
APPROP CODE/BA: OPAF/VEHICULAR EQUIPMENT	**P-1 NOMENCLATURE:** NEXT GENERATION SMALL LOADER (NGSL)	

WEAPON SYSTEM COST ELEMENTS	IDENT CODE				FY1999			FY2000			FY2001		
		QTY	UNIT COST	TOTAL COST	QTY	UNIT COST	TOTAL COST	QTY	UNIT COST	TOTAL COST	QTY	UNIT COST	TOTAL COST
NGSL (BPAC 5151)	A							13	600000	7,800	34	600000	20,400
PRODUCT SUPPORT (BPAC 5152)										958			2,305
DATA (BPAC 5153)										70			150
SUPPLY SUPPORT AGREEMENT (BPAC 5154)										841			1,289
TOTALS:								13		9,669	34		24,144

REMARKS:

	P-1 ITEM NO: 27		PAGE NO: 49		Page 1 of 1

BUDGET PROCUREMENT HISTORY PLANNING (EXHIBIT P- 5A)	DATE: FEBRUARY 2000
APPROP CODE/BA: OPAF/VEHICULAR EQUIPMENT	**P-1 NOMENCLATURE:** NEXT GENERATION SMALL LOADER (NGSL)

ITEM / FISCAL YEAR	QTY.	UNIT COST	LOCATION OF PCO	CONTRACT METHOD & TYPE	CONTRACTOR AND LOCATION	AWD. DATE	DATE FIRST DEL.	SPECS AVAIL NOW	DATE REV. AVAIL
NGSL (BPAC 5151)									
FY00	13	600,000	AFMC/ASC	C/FFP	UNKNOWN	MAY 00	FEB 01	N	APR 00
FY01 (1)	13	600,000	AFMC/ASC	OPT/FFP	UNKNOWN	OCT 00	NOV 01	Y	
FY01 (1)	21	600,000	AFMC/ASC	OPT/FFP	UNKNOWN	JUN 01	MAY 02	Y	

REMARKS:
(1) The FY01 contract award will include a Low Rate Initial Production (LRIP) buy of 13 units, plus 21 production units after Milestone III.

	P-1 ITEM NO: 27		PAGE NO: 50		Page 1 of 1

PRESIDENT'S BUDGET PRODUCTION SCHEDULE (EXHIBIT P-21) | **DATE:** FEBRUARY 2000

APPROP CODE/BA: OPAF/VEHICULAR EQUIPMENT

P-1 NOMENCLATURE: NEXT GENERATION SMALL LOADER (NGSL)

ITEM/MANUFACTURER/ PROCUREMENT YEAR	SERV.	PROC. QTY.	ACCEP. PRIOR TO 1 OCT.	BAL DUE AS OF 1 OCT.	1998	CALENDAR 1999											CALENDAR 2000											Later
						FY1999											FY2000											
					OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	
NGSL (BPAC 5150)																												
FY00	AF	13	0	13																				C				13
FY01	AF	13	0	13																								13
FY01	AF	21	0	21																								21
TOTALS		47	0	47																								47

ITEM/MANUFACTURER/ PROCUREMENT YEAR	SERV.	PROC. QTY.	ACCEP. PRIOR TO 1 OCT.	BAL DUE AS OF 1 OCT.	2000	CALENDAR 2001											CALENDAR 2002											Later
						FY2001											FY2002											
					OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	
NGSL (BPAC 5150)																												
FY00	AF	13	0	13					1	1	1	1	1	2	2	2	2											
FY01	AF	13	0	13	C													2	2	2	2	2	3					
FY01	AF	21	0	21									C											5	8	8		
TOTALS		47	0	47					1	1	1	1	1	2	2	2	2	2	2	2	2	2	3	5	8	8		

MANUFACTURER'S NAME AND LOCATION	PRODUCTION RATES MIN SUST	1-8-5	MAX
UNKNOWN			

	PROCUREMENT LEAD TIME ADMIN LEAD TIME PRIOR TO 1 OCT	ADMIN LEAD TIME AFTER 1 OCT	MANUFACT. PLT	TOTAL 1 OCT
INITIAL	0	7	9	16
REORDER	0	0	13	13

REMARKS:

Two vendors (Teledyne Brown Engineering & FMC) have built three loaders each. These units completed Operational Assessment in Dec 99. The government plans to down select to a single manufacturer in May 00. The FY01 Contract Award will include a LRIP buy of 13 units, plus 21 units after Milestone III decision.

BUDGET ITEM JUSTIFICATION (EXHIBIT P-40)	DATE: FEBRUARY 2000
APPROP CODE/BA: OPAF/VEHICULAR EQUIPMENT	**P-1 NOMENCLATURE:** ITEMS LESS THAN $5,000,000 (MATERIALS HANDL EQUIP)

		FY1999	FY2000	FY2001	FY2002	FY2003	FY2004	FY2005
QUANTITY								
COST (in Thousands)		$5,157	$6,537	$4,530	$4,072	$519	$429	$277

Description:

This program includes various material handling vehicles with a procurement value of less than $5,000,000 and are Code A items. These vehicles consists of lifting trucks, and sequencing trucks and other warehouse equipment critical to depot and base supply operations. Items requested for procurement in FY01 are identified on the following P-40A. Items procured during execution may change based on critical equipment needed to support current Air Force mission requirements.

	P-1 ITEM NO: 28		PAGE NO: 52		Page 1 of 1

BUDGET ITEM JUSTIFICATION FOR AGGREGATED ITEMS (EXHIBIT P- 40A-IL)	DATE: FEBRUARY 2000
APPROP CODE/BA: OPAF/VEHICULAR EQUIPMENT	**P-1 NOMENCLATURE:** ITEMS LESS THAN $5,000,000 (MATERIALS HANDL EQUIP)

PROCUREMENT ITEMS	NSN			FY2001	
		QTY.	COST	QTY.	COST
13K AT FL (BPAC 5991003)	3930011260457CT			4	$445
F/L 15K DED (BPAC 5991004)	3930010113650			3	$183
F/L 4K ELECTRIC ST 144" (BPAC 5991005)	3930000539175			3	$94
FORKLIFT N/AISLE ELECT (BPAC 5991010)	3930011028906			1	$24
F/L 6K ELECT ST (BPAC 5991013)	3930010471157			2	$55
50K AT CONTAINER HANDLER (BPAC 5991020)	3930013073658			2	$735
10K FORKLIFT NON-463L (BPAC 5991023)	3930010153965			1	$43
TRK, F/L NARROW AISLE 6K (BPAC 5991024)	3930014214083			1	$98
6K FORKLIFT DED (BPAC 5991026)	3930010525219			48	$1335
4K FORKLIFT DED (BPAC 5991027)	3930010130338			5	$114
6K FORKLIFT RT (BPAC 5991029)	3930008792157			8	$559
F/L 4K COMMERCIAL (BPAC 5991035)	3930014330885			5	$88
CRANE WHSE GAS 10000 LB (BPAC 5992005)	3950005555021			3	$259
TRK MTD CONV BELT (BPAC 5993001)	3930000195630			1	$29
WHSE TRACTOR 4K (BPAC 5994007)	3930010070115			19	$469
TOTALS:					$4,530

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BUDGET ITEM JUSTIFICATION (EXHIBIT P-40)	DATE: FEBRUARY 2000
APPROP CODE/BA: OPAF/VEHICULAR EQUIPMENT	**P-1 NOMENCLATURE:** TRUCK, DUMP

		FY1999	FY2000	FY2001	FY2002	FY2003	FY2004	FY2005
QUANTITY								
COST (in Thousands)		$1,146	$5,425	$1,763	$2,037	$3,819	$6,811	$12,746

Description:

1. This vehicle family consists of standard commercial dump trucks. These vehicles have many applications, but are used primarily by civil engineers to haul debris and other material. They provide crucial support to Rapid Runway Repair (RRR) operations and are also used for moving material at construction sites. The total Air Force FY01 procurement requirement is 836 trucks against an inventory objective of 1,878.

2. FY99 funding was programmed in Line Item # 32, Items Less Than $5 Million (Base Maintenance Spt) in the FY99 President's Budget.

3. Items requested in FY01 are identified on the following P-40A and are representative of items to be procured. Items procured during execution may change based on critical equipment needed to support current Air Force mission requirements.

BUDGET ITEM JUSTIFICATION FOR AGGREGATED ITEMS (EXHIBIT P- 40A)	DATE: FEBRUARY 2000
APPROP CODE/BA: OPAF/VEHICULAR EQUIPMENT	**P-1 NOMENCLATURE:** TRUCK, DUMP

PROCUREMENT ITEMS	ID CODE			FY1999		FY2000		FY2001	
		QTY.	COST	QTY.	COST	QTY.	COST	QTY.	COST
TRUCK DUMP 5T 4X2 (BPAC 6131)	A			4	$181	32	$ 1391	2	$79
TRUCK DUMP 5T 4X4 (BPAC 6132)	A					6	$344	3	$174
TRUCK DUMP 44.5G 6X4 (BPAC 6133)	A			14	$965	66	$3588	21	$1293
TRUCK DUMP 55G 6X4 (BPAC 6134)	A					1	$102	2	$ 217
Totals:				18	$1,146	105	$5,425	28	$1,763

Remarks:

	P-1 ITEM NO: 29		PAGE NO: 55		Page 1 of 1

BUDGET ITEM JUSTIFICATION (EXHIBIT P-40)	DATE: FEBRUARY 2000
APPROP CODE/BA: OPAF/VEHICULAR EQUIPMENT	**P-1 NOMENCLATURE:** RUNWAY SNOW REMOVAL AND CLEANING EQUIPMENT

		FY1999	FY2000	FY2001	FY2002	FY2003	FY2004	FY2005
QUANTITY		0	0	0	0	0	0	0
COST (in Thousands)		$4,258	$7,312	$5,852	$5,326	$1,547	$2,180	$3,212

Description:

1. This family of vehicles consists of commercial sweepers and snow removal vehicles used on all airfield surfaces to help prevent foreign object damage (FOD) to aircraft engines and tires and to remove snow. Snow removal equipment includes front mounted brooms, multi-purpose blowers, and plows. Multi-purpose vacuum sweepers maintain airfields, roads, and grounds. Since fighter aircraft cannot land or take off with ice on the runway during winter at northern tier bases, snow removal vehicles provide critical mission support to airfield operations. Vacuum sweepers provide equally important support at all air bases due to the high cost of FOD and the potential for loss in FOD-related engine incidents of aircraft. The FY01 procurement requirement is 817 units against an inventory objective of 1,796.

2. Items requested in FY01 are identified on the following P-40A and are representative of items to be procured. Items procured during execution may change based on critical equipment needed to support current Air Force mission requirements.

BUDGET ITEM JUSTIFICATION FOR AGGREGATED ITEMS (EXHIBIT P- 40A)	DATE: FEBRUARY 2000
APPROP CODE/BA: OPAF/VEHICULAR EQUIPMENT	**P-1 NOMENCLATURE:** RUNWAY SNOW REMOVAL AND CLEANING EQUIPMENT

PROCUREMENT ITEMS	ID CODE			FY1999		FY2000		FY2001	
		QTY.	COST	QTY.	COST	QTY.	COST	QTY.	COST
SNOW SWEEPER TRUCK MOUNTED (BPAC 621B)	A			6	$920	17	$2603	10	$1601
CLEANER, VAC MULTIPURPOSE (BPAC 6211)	A			19	$1553	38	$3025	22	$1777
RRR DIRT SWEEPER (BPAC 6215)	A			3	$159			1	$39
DUMP W/SNOW PLOW (BPAC 6218)	A			7	$826	1	$118	1	$119
54K PLOW (BPAC 6219)	A			5	$800	9	$1566	14	$2316
Totals:				40	$4,258	65	$7,312	48	$5,852

Remarks:

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BUDGET PROCUREMENT HISTORY PLANNING (EXHIBIT P- 5A)	DATE: FEBRUARY 2000
APPROP CODE/BA: OPAF/VEHICULAR EQUIPMENT	**P-1 NOMENCLATURE:** RUNWAY SNOW REMOVAL AND CLEANING EQUIPMENT

ITEM / FISCAL YEAR	QTY.	UNIT COST	LOCATION OF PCO	CONTRACT METHOD & TYPE	CONTRACTOR AND LOCATION	AWD. DATE	DATE FIRST DEL.	SPECS AVAIL NOW	DATE REV. AVAIL
SNOW SWEEPER TRUCK MOUNTED (BPAC 621B)									
FY99	6	153333	AFMC/WR-ALC	MIPR/IDIQ	DLA/SWEEPSTER/DEXTER, MI	AUG 99	JAN 00		
FY00	17	153118	AFMC/WR-ALC	MIPR/IDIQ	DLA/SWEEPSTER/DEXTER,MI	MAR 00	AUG 00	Y	
FY01	10	160100	AFMC/WR-ALC	MIPR/IDIQ	DLA/SWEEPSTER/DEXTER, MI	MAR 01	AUG 01	Y	
CLEANER, VAC MULTIPURPOSE (BPAC 6211)									
FY99	19	81760	AFMC/WR-ALC	MIPR/IDIQ	DLA/UNKNOWN	FEB 00	MAY 00		
FY00	38	79614	AFMC/WR-ALC	MIPR/IDIQ	DLA/UNKNOWN	APR 00	OCT 00	Y	
FY01	22	80772	AFMC/WR-ALC	MIPR/IDIQ	DLA/UNKNOWN	APR 01	OCT 01	Y	
RRR DIRT SWEEPER (BPAC 6215)									
FY99	3	53000	AFMC/WR-ALC	MIPR/IDIQ	DLA/SMITH EQUIP/LAKELAND, FL	DEC 99	JUN 00		
FY01	1	39000	AFMC/WR-ALC	MIPR/IDIQ	DLA/SMITH EQUIP/LAKELAND, FL	APR 01	OCT 01	Y	

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BUDGET PROCUREMENT HISTORY PLANNING (EXHIBIT P- 5A)	DATE: FEBRUARY 2000
APPROP CODE/BA: OPAF/VEHICULAR EQUIPMENT	**P-1 NOMENCLATURE:** RUNWAY SNOW REMOVAL AND CLEANING EQUIPMENT

ITEM / FISCAL YEAR	QTY.	UNIT COST	LOCATION OF PCO	CONTRACT METHOD & TYPE	CONTRACTOR AND LOCATION	AWD. DATE	DATE FIRST DEL.	SPECS AVAIL NOW	DATE REV. AVAIL
DUMP W/SNOW PLOW (BPAC 6218)									
FY99	7	118000	AFMC/WR-ALC	MIPR/IDIQ	DLA/UNKNOWN*	FEB 00	MAY 00	Y	
FY00	1	118469	AFMC/WR-ALC	MIPR/IDIQ	DLA/UNKNOWN	APR 00	JUL 00	Y	
FY01	1	119000	AFMC/WR-ALC	MIPR/IDIQ	DLA/UNKNOWN	APR 01	JUL 01	Y	
54K PLOW (BPAC 6219)									
FY99	5	160014	AFMC/WR-ALC	MIPR/IDIQ	DLA/OSHKOSH/OSHKOSH, WI	FEB 99	AUG 99		
FY00	9	173952	AFMC/WR-ALC	MIPR/IDIQ	DLA/OSHKOSH/OSHKOSH, WI	FEB 00	AUG 00	Y	
FY01	14	165428	AFMC/WR-ALC	MIPR/IDIQ	DLA/OSHKOSH/OSHKOSH, WI	FEB 01	AUG 01	Y	

REMARKS:
* FY99 award date was late due to changes in specifications.

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BUDGET ITEM JUSTIFICATION (EXHIBIT P-40)	DATE: FEBRUARY 2000
APPROP CODE/BA: OPAF/VEHICULAR EQUIPMENT	**P-1 NOMENCLATURE:** MODIFICATIONS

		FY1999	FY2000	FY2001	FY2002	FY2003	FY2004	FY2005
QUANTITY								
COST (in Thousands)		$197	$65	$387	$373	$370	$372	$374

Description:

Permanent modifications consist of configuration changes to in-service systems and equipment. These modifications correct deficiencies (material, design, etc.) or add or delete capability. Safety modifications correct deficiencies which would potentially produce hazards to personnel, systems, or equipment. This budget line encompasses both new and on-going modification efforts for vehicular equipment.

The funds budgeted in FY01 are for "Miscellaneous Low Cost Modifications" to satisfy unforeseen modification requirements generally discovered during extended field use.

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BUDGET ITEM JUSTIFICATION (EXHIBIT P-40)	DATE: FEBRUARY 2000
APPROP CODE/BA: OPAF/VEHICULAR EQUIPMENT	**P-1 NOMENCLATURE:** ITEMS LESS THAN $5,000,000 (BASE MAINTENANCE SPT)

		FY1999	FY2000	FY2001	FY2002	FY2003	FY2004	FY2005
QUANTITY								
COST (in Thousands)		$5,365	$9,410	$8,616	$5,910	$5,731	$5,652	$5,695

Description:

This program includes various base maintenance vehicles with a procurement value of less than $5,000,000 and are Code A items. These vehicles provide Civil Engineering personnel with the capability to conduct sanitary landfill operations, improve airfield safety by removing foreign object damage (FOD) materials, and repair and construct base physical plant requirements. Items requested in FY01 are identified on the following P-40A-IL and are representative of items to be procured. Items procured during execution may change based on critical equipment needed to support current Air Force mission requirements.

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BUDGET ITEM JUSTIFICATION FOR AGGREGATED ITEMS (EXHIBIT P- 40A-IL)	DATE: FEBRUARY 2000
APPROP CODE/BA: OPAF/VEHICULAR EQUIPMENT	**P-1 NOMENCLATURE:** ITEMS LESS THAN $5,000,000 (BASE MAINTENANCE SPT)

PROCUREMENT ITEMS	NSN			FY2001	
		QTY.	COST	QTY.	COST
SCOOP LOADER 2.5CY PT (BPAC 6995002)	3805002601967			4	$370
SCOOP LOADER W/BACKHOE (BPAC 6995003)	3805001482169			14	$744
SCP LDR 1.5CY W/O COUPLER (BPAC 6995007)	3805010748111			3	$267
SCOOP LOADER 4 CY PT (BPAC 6995008)	3805010751816			9	$1,363
ROLLER ROAD MOTOR TANDEM (BPAC 6997005)	3895002436797			1	$26
ROLLER VIB TYPE II (BPAC 6997006)	3895010715625			1	$92
7.5 TON CRANE (BPAC 6998010)	3810010673991			3	$552
CRANE 15 TON (BPAC 6998011)	3810003294154			2	$472
TRENCHER S/PROP W/TL (BPAC 699B002)	3805010329974			9	$548
1500G WATER DISTR (BPAC 699C026)	3825005541808			1	$70
TRK SEWER CLEANER (BPAC 699C041)	2320013721823			1	$105
SHEEPS FOOT COMPACTOR (BPAC 699C045)	3805013597626			1	$235
IW90 TRACTOR INDUSTRIAL (BPAC 699E004)	2420014062995			4	$162
TRACTOR INDUSTRIAL IW 70 (BPAC 699E005)	2420001138984			38	$887
TRK DUMP 22T (BPAC 699F010)	3805009310616			3	$511
T4 DOZER (BPAC 699G001)	2410001664176			1	$93
T7 DOZER (BPAC 699G002)	2410007561161			6	$976
T9 DOZER (BPAC 699G003)	2410008165091			1	$247
T11 DOZER (BPAC 699G004)	2410007317872			1	$217

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BUDGET ITEM JUSTIFICATION FOR AGGREGATED ITEMS (EXHIBIT P- 40A-IL)	DATE: FEBRUARY 2000
APPROP CODE/BA: OPAF/VEHICULAR EQUIPMENT	**P-1 NOMENCLATURE:** ITEMS LESS THAN $5,000,000 (BASE MAINTENANCE SPT)

PROCUREMENT ITEMS	NSN			FY2001	
		QTY.	COST	QTY.	COST
GRADER, SIZE II TYPE III (BPAC 699J003)	3805013374623			7	$578
GRADER, SIZE V, TYPE III (BPAC 699J004)	3805013374624			1	$101
TOTALS:					$8,616

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BUDGET ITEM JUSTIFICATION (EXHIBIT P-40)	DATE: FEBRUARY 2000
APPROP CODE/BA: OPAF/ELECTRONICS & TELECOMMUNICATION EQUIPMENT	**P-1 NOMENCLATURE:** NATIONAL AIRSPACE SYSTEM

		FY1999	FY2000	FY2001	FY2002	FY2003	FY2004	FY2005
QUANTITY								
COST (in Thousands)		$13,735	$44,997	$58,663	$62,633	$53,549	$47,553	$47,583

Description:

The National Airspace System (NAS) will modernize the Department of Defense (DoD) Air Traffic Control (ATC) system, in conjunction with the Federal Aviation Administration (FAA) modernization effort. The program will also develop and field the Military Airspace Management System (MAMS), an airspace scheduling, management, and reporting tool. NAS increases safety of flight; provides systems and facilities interoperable with FAA modernization; replaces aging DoD ATC systems; provides identical service to military and civilian aircraft; prevents DoD flight cancellations/delays; and reduces maintenance. Equipment procured includes fixed site approach control and control tower automation systems, radars, voice switches, site preparation, installation support and ancillary supplies. Use of Non-Developmental Items (NDI) will be maximized. NAS addresses the critical need to modernize ATC equipment. Current systems are approaching the end of their planned life cycle and have become increasingly more expensive and difficult to repair. As the FAA modernizes the nation's air traffic control system, DoD must remain operationally compatible in order to continue to provide service to the military community and the civilian users who depend on DoD's ATC services. The Air Force has been assigned as the lead service for the NAS program which will modernize 92 DoD sites, with a site-unique array of equipment. Of these 92 DoD sites, 44 constitute Air Force sites requiring Air Force funding.

Note 1: The Feb 1999 P-40 of the FY00/01 President's Budget submitted to Congress referenced systems procurement for 65 DoD sites, of which 26 were Air Force sites requiring Air Force funding. Revised program quantities (92) incorporate Major Range and Test Facility Base (MRTFB) requirements as determined in FY99.

Note 2: The increase in FY01 funding will provide contractor turn-key procurement services, to include engineering, installation and drawings.

BUDGET ITEM JUSTIFICATION (EXHIBIT P-40)	DATE: FEBRUARY 2000
APPROP CODE/BA: OPAF/ELECTRONICS & TELECOMMUNICATION EQUIPMENT	**P-1 NOMENCLATURE:** NATIONAL AIRSPACE SYSTEM

Description (cont.):
Due to re-engineering of the 38th Engineering and Installation Wing (EIW), these Engineering and Installation (E&I) services will not be available within the Air Force starting in FY01.

1. DOD ADVANCED AUTOMATION SYSTEM (DAAS): The DAAS provides equipment tailored for the operation of two types of ATC facilities: Radar Approach Controls (RAPCONs) and military control tower facilities. DAAS will replace the current generation air traffic control automation system in DoD RAPCONs. It will provide digital controller displays, consoles, automation hardware and software to replace those systems approaching the end of their life cycle. FY00/01 funds will procure and install three and two DAAS, respectively, at key Air Force locations. Equipment quantity and configurations will be tailored to meet specific site requirements, which will result in varying unit costs.

2. DIGITAL AIRPORT SURVEILLANCE RADAR (DASR): The DASR consists of two subsystems: a primary and a secondary surveillance radar. DASR replaces the DoD current generation analog ATC surveillance radars with digital airport surveillance radars that provide aircraft position and other data to the controller displays in the RAPCON and at select control tower locations. FY00/01 funds will procure and install two and six DASRs, respectively, at key Air Force locations. Equipment quantity and configurations will be tailored to meet specific site requirements, which will result in varying unit costs.

3. VOICE COMMUNICATIONS SWITCHING SYSTEM (VCSS): VCSS replaces current switches with new digital voice switches for DoD RAPCONs and some stand-alone control towers. VCSS provides the connectivity for the controllers to communicate via landlines and radios with requisite aircraft, vehicles, and agencies. FY 99/00/01 funds procure and install 71 VCSS (17/23/31 VCSS, respectively) at key Air Force locations. Equipment quantity and configurations will be tailored to meet specific site requirements, which will result in varying unit costs.

4. MILITARY AIRSPACE MANAGEMENT SYSTEM (MAMS): The MAMS program responds to two General Accounting Office (GAO) audits which criticized the FAA and DoD for inefficient management, use and tracking of Special Use Airspace (SUA). MAMS, an Air

BUDGET ITEM JUSTIFICATION (EXHIBIT P-40)	DATE: FEBRUARY 2000
APPROP CODE/BA: OPAF/ELECTRONICS & TELECOMMUNICATION EQUIPMENT	**P-1 NOMENCLATURE:** NATIONAL AIRSPACE SYSTEM

Description (cont.):
Force-led program, provides an automated scheduling and utilization reporting tool which will interconnect DoD SUA managers, and allow more efficient scheduling and management of activities in a specifically designated SUA. FY99 funds procured equipment for one MAMS. The contractor experienced difficulty integrating the new hardware with the MAMS software resulting in a delay of the final equipment configuration delivery. AF realigned FY00 funds within the program to cover shortfall to complete the effort. FY00 funds provides equipment integration efforts, delivery of the final MAMS configuration, and implementation support for the user. No FY01 funds requested.

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BUDGET ITEM JUSTIFICATION FOR AGGREGATED ITEMS (EXHIBIT P- 40A)	DATE: FEBRUARY 2000
APPROP CODE/BA: OPAF/ELECTRONICS & TELECOMMUNICATION EQUIPMENT	**P-1 NOMENCLATURE:** NATIONAL AIRSPACE SYSTEM

PROCUREMENT ITEMS	ID CODE			FY1999		FY2000		FY2001	
		QTY.	COST	QTY.	COST	QTY.	COST	QTY.	COST
DOD ADVANCED AUTOMATION SYSTEM	A						$10,503		$8,306
DIGITAL AIRPORT SURVEILLANCE RADAR	A						$11,443		$25,075
VOICE COMMUNICATIONS SWITCHING SYSTEM	A				$12,735		$21,276		$25,282
MILITARY AIRSPACE MANAGEMENT SYSTEM	A				$1,000		$1,775		
Totals:					$13,735		$44,997		$58,663

Remarks:

	P-1 ITEM NO: 41		PAGE NO: 4		Page 1 of 1

BUDGET PROCUREMENT HISTORY PLANNING (EXHIBIT P- 5A)						DATE: FEBRUARY 2000			
APPROP CODE/BA: OPAF/ELECTRONICS & TELECOMMUNICATION EQUIPMENT				**P-1 NOMENCLATURE:** NATIONAL AIRSPACE SYSTEM					
ITEM / FISCAL YEAR	**QTY.**	**UNIT COST**	**LOCATION OF PCO**	**CONTRACT METHOD & TYPE**	**CONTRACTOR AND LOCATION**	**AWD. DATE**	**DATE FIRST DEL.**	**SPECS AVAIL NOW**	**DATE REV. AVAIL**
DOD ADVANCED AUTOMATION SYSTEM									
FY00 (1)			AFMC/ESC	OPT/FFP(2)	RAYTHEON CORP., MARLBORO, MA	FEB 00	AUG 00	Y	
FY01 (1)			AFMC/ESC	OPT/FFP(2)	RAYTHEON CORP., MARLBORO, MA	JAN 01	JUL 01	Y	
DIGITAL AIRPORT SURVEILLANCE RADAR									
FY00 (1)			AFMC/ESC	OPT/FFP(3)	RAYTHEON CORP., MARLBORO, MA	FEB 00	JUN 01	Y	
FY01 (1)			AFMC/ESC	OPT/FFP(3)	RAYTHEON CORP., MARLBORO, MA	JAN 01	MAY 02	Y	
VOICE COMMUNICATIONS SWITCHING SYSTEM									
FY99 (1)			AFMC/ESC	OPT/FFP(4)	LITTON-DENRO, GAITHERSBURG, MD	JUN 99	DEC 99		
FY00 (1)			AFMC/ESC	OPT/FFP(4)	LITTON-DENRO, GAITHERSBURG, MD	JAN 00	JUL 00		
FY01 (1)			AFMC/ESC	OPT/FFP(4)	LITTON-DENRO, GAITHERSBURG, MD	JAN 01	JUL 01	Y	

	P-1 ITEM NO: 41		PAGE NO: 5		Page 1 of 2

BUDGET PROCUREMENT HISTORY PLANNING (EXHIBIT P- 5A)	DATE: FEBRUARY 2000
APPROP CODE/BA: OPAF/ELECTRONICS & TELECOMMUNICATION EQUIPMENT	**P-1 NOMENCLATURE:** NATIONAL AIRSPACE SYSTEM

ITEM / FISCAL YEAR	QTY.	UNIT COST	LOCATION OF PCO	CONTRACT METHOD & TYPE	CONTRACTOR AND LOCATION	AWD. DATE	DATE FIRST DEL.	SPECS AVAIL NOW	DATE REV. AVAIL
MILITARY AIRSPACE MANAGEMENT SYSTEM									
FY99 (5)			AFMC/ESC	C/FFP	RAYTHEON ELEC, LONG BEACH, CA	MAR 99	AUG 99		
FY00 (5)			AFMC/ESC	OPT (6)/FFP	RAYTHEON ELEC, LONG BEACH, CA	DEC 99	MAY 00		

REMARKS:

1. System equipment quantity and configurations are tailored to meet specific site requirements. The result is varying unit costs in all systems.
2. Option to the FAA Standard Terminal Automated Replacement System contract awarded in September 1996.
3. Option to the Air Force Digital Airport Surveillance Radar contract awarded in August 1996.
4. Option to the FAA Enhanced Terminal Voice Switch contract awarded in July 1995.
5. FY99 funds procured equipment for one MAMS. FY00 funds procure equipment integration and implementation support for the user.
6. Option to the Military Airspace Management System contract awarded March 1999.

BUDGET ITEM JUSTIFICATION (EXHIBIT P-40)	DATE: FEBRUARY 2000
APPROP CODE/BA: OPAF/ELECTRONICS & TELECOMMUNICATION EQUIPMENT	**P-1 NOMENCLATURE:** THEATER AIR CONTROL SYSTEM IMPROVEMENT

		FY1999	FY2000	FY2001	FY2002	FY2003	FY2004	FY2005
QUANTITY								
COST (in Thousands)		$20,996	$27,673	$15,431	$22,805	$34,442	$36,682	$41,839

Description:

The Theater Air Control System Improvements (TACSI) program acquires and sustains the state-of-the-art equipment and capabilities essential to the survival and combat effectiveness of tactical command and control (C2). Collectively, they provide the flexibility, responsiveness, reliability and maintainability necessary for effective C2. The TACSI program was restructured in FY99 due to new operational requirements and mission needs driven from recent theater deployment which reduced near term funding needs. Tactical support needs inherent in new Expeditionary Aerospace Force (EAF) taskings have necessitated new system research, development, and test for software and hardware, footprint reduction, and mobility. The program has embarked on a three phased modernization plan to restructure the Ground Theater Air Control System (GTACS) with the capability and flexibility to fulfill Commander-in-Chief (CINC) C2 execution requirements. FY01 funding decreased since submission of the FY00/01 President's Budget largely due to the need to transfer Other Procurement funds to Research, Development, Test and Evaluation (RDT&E) to support TACSI program restructure.

1. GROUND THEATER AIR CONTROL SYSTEM (GTACS): GTACS supports the roles of aerospace control, force application, force enhancement, and force support. The system supports worldwide operations ranging from military-operations-other-than-war and peacetime contingencies to projecting decisive force into a major regional conflict to support a strategic war. GTACS deploys rapid reaction capability into a theater, then to forward locations within that theater, to establish self-sufficient bases of operations. GTACS elements accomplish five core competencies: theater air defense, datalink management, surveillance, combat identification and air battle execution. The GTACS program provides for connectivity among elements of the Theater Air Control System (TACS) within a designated Area of Responsibility (AOR) to include United State Air Force, Navy, Marine Corps, Army, and allied assets. The following describes the FY99-01 projects:

BUDGET ITEM JUSTIFICATION (EXHIBIT P-40)	DATE: FEBRUARY 2000
APPROP CODE/BA: OPAF/ELECTRONICS & TELECOMMUNICATION EQUIPMENT	**P-1 NOMENCLATURE:** THEATER AIR CONTROL SYSTEM IMPROVEMENT

Description (cont.):

a. MODULAR CONTROL EQUIPMENT (MCE) PRE-PLANNED PRODUCT IMPROVEMENTS (P3I)/OPERATIONS MODULE (OM): GTACS MCE mobile C2 centers link with existing Airborne Warning and Control Systems, Joint Stars, the Airborne Battlefield C2 Center and other communication systems to provide the integrated air picture for command and control. The MCE P3I program, structured into two phases, replaces obsolete equipment (operator consoles, shelters, computers, radios, etc.) in GTACS and upgrades C2 interoperability, flexibility, mobility, communications, and worldwide operational capability. Phase One integrated secure anti-jam Ultra High Frequency (UHF) radios, and included an upgrade to the weapons control and Joint Tactical Air Operations data link software. Phase Two included the integration of a Joint Tactical Information Distribution System (JTIDS)/Tactical Digital Information Link-J (TADIL-J) capability, the integration of an Automated Air Tasking Order (AATO) capability, the integration of secure anti-jam Very High Frequency (VHF) Single Channel Ground and Air Radio System (SINCGARS) radios; and upgrades to the Ground Mobile Forces/Satellite Communications digital communications interfaces into the MCE OM. FY99/00 funding provides for ongoing equipment upgardes (i.e. OM interface kit and Government Furnished Equipment (GFE) installations, installation site support, computer based operator training, digitization of technical orders, Interim Contract Support (ICS) and program/engineering support). FY01 funding will provide for ongoing installation site support and upgrades to MCE interfaces with TAD MTS and ground/satellite communications.

b. PROGRAM ENGINEERING SUPPORT: FY99/00 funding continues to provide program engineering support to MCE P3I composite capability (JTIDS/Link-16). No FY01 dollars are requested.

c. AN/TPS-75 EQUIPMENT IMPROVEMENT: The AN/TPS-75 is the supporting radar for the GTACS system. FY99/00 funding provides for the correction of deficiencies to the radar's frequency stability, section speed and noise, transmitter failures and power deficiencies. Lack of funding will degrade target identification capabilities for the Expert Missile Tracker and will increase critical failures due to parts obsolescence precluding necessary readiness of the radar and the GTACS system. FY01 funding is required for remaining kits and equipment improvement installations.

BUDGET ITEM JUSTIFICATION (EXHIBIT P-40)	DATE: FEBRUARY 2000
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Description (cont.):

d. INTERIM CONTRACTOR SUPPORT (ICS): FY99/00 funding provides for MCE ICS which provides the ability to plan, direct, and control tactical air operations, and to perform specific airspace management tasks. FY99 funding also provides ICS for the Anti-Radiation Missile (ARM) Decoy, a countermeasure which protects against hostile missile threats to the AN/TPS-75 Radar and for the AN-TSC-147 JTIDS Module (JM) system which provides Link-16 capability to the MCE. In FY01, the ARM Decoy will be supported through Contractor Logistics Support (CLS), and organic capability will be established for MCE and JM systems. No FY01 funds are requested.

2. AIR FORCE MISSION SUPPORT SYSTEM (AFMSS): This program provides a suite of mission planning systems that can be integrated with Theater Battle Management (TBM) systems for aircrews to electronically receive tasking orders and intelligence information; prepare and calculate flight and weapons delivery planning data (e.g., maps, charts, imagery, flight logs, radar predictions); and electronically transfer this data to the aircraft and weapons. These systems increase the combat effectiveness of Air Force (active duty, guard, and reserve forces) and Special Operations Forces aircraft and weapons by increasing wartime sortie rates, supporting sophisticated avionics and precision/autonomous guided munitions, and providing the ability to analyze and defeat complex threats. The program procures the following workstations and program engineering support: Mission Planning System (MPS), MPS Upgrades, Ruggedized Portable Flight Planning Software (PFPS), and Non-Ruggedized (NR) PFPS. These workstations provide a cost effective range of increasingly more capable systems to meet the continuum of peacetime, contingency, and wartime mission planning requirements. Adjustments have been made since the FY00/01 President's Budget submission for the following technologically-driven reasons: the evolutionary nature of the AFMSS mission requires hardware changes to meet overall system requirements; advances in commercial-off-the-shelf (COTS) technology makes available new capabilities which may lower component costs or address component obsolescence; and changes in the number, type, and deployment of aircraft/weapons require changes in the number and mix of MPS, MPS Upgrades, and Ruggedized and Non-Ruggedized PFPS systems. Market surveys and analysis of COTS products support production decisions. FY99-01 projects are outlined below:

a. MPS: MPS consists of transportable UNIX-based workstations integrated with MPS/AFMSS software to provide considerable mission

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Description (cont.):
planning functionality, large data storage, and full interoperability with TBM systems. MPS quantities indicate the number of single seat workstations to be procured. FY99-01 funding procures these workstations.

b. MPS UPGRADES: MPS Upgrades include retrofit programs that upgrade existing workstation capabilities, performance, and size. FY01 funds procure a smaller MPS which reuses components from decommissioned MPSs to defray overall costs. These upgrades do not result in an increase to the total inventory of MPSs.

c. PFPS: The Ruggedized PFPS consists of a rugged personal computer (PC)-based laptop computer integrated with PFPS/AFMSS software to provide flight planning functionality. Ruggedized PFPSs are required to support aircraft that may operate from austere locations as defined in their concept of operations. FY99-01 funding procures these workstations.

d. PFPS-NON-RUGGEDIZED: The Non-Ruggedized PFPS consists of a standard PC-based laptop computer integrated with PFPS/AFMSS software to provide flight planning functionality. Non-Ruggedized PFPSs provide capability to support aircraft operating from fixed base locations. FY00/01 funding will procure these workstations.

e. PROGRAM/ENGINEERING SUPPORT: FY99-01 funding continues program/engineering support for AFMSS.

WEAPON SYSTEM COST ANALYSIS (EXHIBIT P- 5)		DATE: FEBRUARY 2000
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WEAPON SYSTEM COST ELEMENTS	IDENT CODE	FY1999			FY2000			FY2001			FY2001		
		QTY	UNIT COST	TOTAL COST	QTY	UNIT COST	TOTAL COST	QTY	UNIT COST	TOTAL COST	QTY	UNIT COST	TOTAL COST
1. GROUND THEATER AIR CONTROL SYSTEM (GTACS)							{14,961}			{15,040}			{2,048}
A. MCE P3I OM							7,364			7,899			1,048
B. PROGRAM ENGINEERING SUPPORT							3,448			5,068			
C. AN/TPS-75 EQUIP IMPROVEMENT	A						2,799			1,323			1,000
D. INTERIM CONTRACTOR SUPPORT (ICS)							1,350			750			
2. AIR FORCE MISSION PLANNING SYSTEM (AFMSS)							{6,035}			{12,633}			{13,383}
A. MISSION PLANNING SYSTEM (MPS)	A				82	36,631	3,004	75	48,000	3,600	27	48,000	1,296
B. MPS UPGRADES	A										8	25,000	200
C. PORTABLE FLIGHT PLANNING SOFTWARE (PFPS) RUGGEDIZED (R)	A				451	5,050	2,278	792	6,500	5,148	1,351	6,500	8,782
D. PFPS-NON-RUGGEDIZED (NR)	A							308	6,000	1,848	35	6,000	210
E. PROGRAM/ENGINEERING SUPPORT							753			2,037			2,895
TOTALS:							20,996			27,673			15,431

REMARKS:

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BUDGET PROCUREMENT HISTORY PLANNING (EXHIBIT P- 5A)	DATE: FEBRUARY 2000
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ITEM / FISCAL YEAR	QTY.	UNIT COST	LOCATION OF PCO	CONTRACT METHOD & TYPE	CONTRACTOR AND LOCATION	AWD. DATE	DATE FIRST DEL.	SPECS AVAIL NOW	DATE REV. AVAIL
1. GROUND THEATER AIR CONTROL SYSTEM (GTACS)									
C. AN/TPS-75 EQUIP IMPROVEMENT									
FY99 (1)			AFMC/SM-ALC	OPT/FFP (1)	RAYTHEON, LONG BEACH, CA	APR 99	OCT 99		
FY00 (1)			AFMC/ESC	C/FFP (1)	UNKNOWN	JUN 00	MAY 01	Y	
FY01 (1)			AFMC/ESC	C/FFP (1)	UNKNOWN	JAN 01	JUN 01	Y	
2. AIR FORCE MISSION PLANNING SYSTEM (AFMSS)									
A. MISSION PLANNING SYSTEM (MPS)									
FY99	82	36,631	AFMC/ESC	OPT/FFP	BTG, FAIRFAX, VA	NOV 98	FEB 99		
FY00	75	48,000	AFMC/ESC	OPT/FFP	GTSI, CHANTILLY, VA	NOV 99	FEB 00		
FY01	27	48,000	AFMC/ESC	OPT/FFP (2)	UNKNOWN	JAN 01	APR 01	Y	
B. MPS UPGRADES									
FY01	8	25,000	AFMC/ESC	OPT/FFP	RUGGED PORTABLE SYSTEMS (RPS), LOS ANGELES, CA	JAN 01	MAY 01	Y	

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BUDGET PROCUREMENT HISTORY PLANNING (EXHIBIT P- 5A)	DATE: FEBRUARY 2000
APPROP CODE/BA: OPAF/ELECTRONICS & TELECOMMUNICATION EQUIPMENT	**P-1 NOMENCLATURE:** THEATER AIR CONTROL SYSTEM IMPROVEMENT

ITEM / FISCAL YEAR	QTY.	UNIT COST	LOCATION OF PCO	CONTRACT METHOD & TYPE	CONTRACTOR AND LOCATION	AWD. DATE	DATE FIRST DEL.	SPECS AVAIL NOW	DATE REV. AVAIL
C. PORTABLE FLIGHT PLANNING SOFTWARE (PFPS) RUGGEDIZED (R)									
FY99 (3)	451	5,050	AFMC/ESC	OPT/FFP	GTSI, CHANTILLY, VA	FEB 99	MAR 99		
FY00	792	6,500	AFMC/ESC	OPT/FFP	GTSI, CHANTILLY, VA	NOV 99	MAR 00		
FY01	1,351	6,500	AFMC/ESC	OPT/FFP (2)	UNKNOWN	FEB 01	MAR 01	Y	
D. PFPS-NON-RUGGEDIZED (NR)									
FY00	308	6,000	AFMC/ESC	OPT/FFP (2)	UNKNOWN	MAR 00	APR 00	N	MAR 00
FY01	35	6,000	AFMC/ESC	OPT/FFP (2)	UNKNOWN	FEB 01	MAR 01	N	FEB 01

REMARKS:
1. Raytheon, Long Beach, CA: Option to basic contract awarded Jun 97. FY00/01 are competitive follow-on buys.
2. AFMSS components are procured as commercial-off-the-shelf equipment available through various contract sources, e.g., GSA, IDIQ contracts, blanket purchase agreements. Examples of contractors include Beyond Technology (BTG), Fairfax VA; Government Technology Service, Inc. (GTSI), Chantilly VA; and Tracor Enterprise Solutions, Reston, VA. Award/delivery dates reflect date of first award and delivery.
3. Price reflects one-time lower unit cost due to excess warehouse inventory.

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APPROP CODE/BA: OPAF/ELECTRONICS & TELECOMMUNICATION EQUIPMENT	**P-1 NOMENCLATURE:** WEATHER OBSERVATION/FORECAST

		FY1999	FY2000	FY2001	FY2002	FY2003	FY2004	FY2005
QUANTITY								
COST (in Thousands)		$24,838	$28,129	$33,515	$28,520	$24,361	$22,956	$23,422

Description:

This is a continuing program for acquisition of meteorological and space environmental equipment supporting the global missions of the Air Force, Army, Special Operations Forces, unified commands, and other government agencies. In support of the Expeditionary Aerospace Force (EAF) concept, fixed and transportable equipment will provide observing and forecasting capabilities at in-garrison and deployed locations. Weather system technological upgrades have emerged as critical needs to support modern air combat operations. These systems enhance the lethality of Air Force weapon systems and precision munitions by accurately predicting weather which provides optimal targeting conditions.

Beginning in FY00, Air Force Weather programs are aligned under the five core competency areas of weather data collection, analysis, forecasting, product tailoring/warfighter applications, and dissemination as described in the Air Force Weather Mission Support Plan. Through this alignment, Air Force Weather will ensure an integrated and systems-oriented approach to program management decisions. FY99 program funding will be addressed as identified in previous budget documents with cross-reference to the new program descriptions for any applicable FY00/01 funding. The Air Force Chief of Staff's (CSAF) decision to stand-up Operational Weather Squadrons (OWS) in support of Air Force Weather Re-engineering has created the need to restructure the funding in the Product Tailoring/Warfighter Applications program for FY00/01.

1. TACTICAL OBSERVING AND FORECASTING SYSTEM (TOFS): TOFS gives deployed weather forces a first-in observation and forecasting capability directly supporting deployed Air Force and Army operations. TOFS provides the capability to manually collect weather element data, manipulate data, and disseminate weather observations, forecasts, advisories, warnings, briefings, and current weather information to air operation centers, flying squadrons, air traffic control facilities, deployed weather teams, and Army elements located within a theater of

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Description (cont.):
operations. TOFS has two components: the Tactical Forecast System (TFS) and the Manual Observing System (MOS).

a. TFS: The TFS is a small, lightweight "first-in" combat weather forecast capability which receives data feeds from a regional OWS. TFS consists of government-furnished software, commercial and non-developmental item (CaNDI) hardware, and a CaNDI satellite communications system, the Very Small Aperture Terminal (VSAT). The TFS receives and disseminates data via theater deployable communications, satellite communications, or operates in a stand-alone configuration receiving weather data through DoD weather dial-in services. Prior year funding began procurement of TFS systems. FY99 funds continued the TFS procurement. Funds ($1.5M) for this project was added through the FY00 Emergency Supplemental Appropriations and transferred to the Air Force from the Overseas Contingency Operations Fund. FY00 funds replace Kosovo damaged/unservicable TFS equipment. Procurement of Meteorological Operations Capability/Forecast System 21st Century (MOC FS-21) under the Product Tailoring/Warfighter Applications via FY00/01 funding will complete the fielding of TFS capabilities (see paragraph 4 of this document).

b. TFS VSAT: The VSAT provides the required two-way (send/receive) communications to support world-wide operations of the TFS. VSAT is a CaNDI-based acquisition. FY99 completes the procurement of VSAT. No FY01 funds are requested.

c. MOS: The MOS is a single-person portable system containing basic weather observing equipment. MOS procurement began with prior year funding. FY99 funds continued the procurement and were supplemented ($700K) under the FY99 Emergency Supplemental Appropriations to meet critical Air Force combat mission needs in Kosovo. Funding for MOS capabilities in FY00/01 will continue under the Observing System 21st Century (OS-21) procurement under Weather Data Collection (described in the following paragraph).

2. WEATHER DATA COLLECTION: Weather Data Collection integrates weather radars and meteorological sensors into a single meteorological sensing and instrumentation approach for battlefield and in-garrison operations. Components include the following programs:

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Description (cont.):

a. TACTICAL WEATHER RADAR (TWR): The TWR program supports worldwide military operations by providing tactical/deployable Doppler weather radar capability, replacing existing radars at deployed locations and at fixed locations overseas. The current deployable (TPS-68) and fixed (FPQ-21 and FPS-77) weather radars require unacceptably high levels of maintenance and, therefore, do not meet operational needs for flight operations and resource protection. The TWR provides the combat forces a modern, Doppler radar technology and allows connectivity to programmed weather forecast systems for the distribution of severe weather products to standard command, control, communications, computer, and intelligence (C4I) systems. Prior year and FY99 funding purchased one deployable and three fixed systems. FY00 funds procure seven fixed and four deployable systems. FY01 funding will procure 12 deployable systems. Total inventory objective is 17 deployable (1 for training) and 10 fixed units. Inadequate funding will reduce the number of units procured and diminish tactical weather radar data in C4I systems, adding unnecessary risk to warfighter decisions.

b. OBSERVING SYSTEM 21ST CENTURY (OS-21): The OS-21 program will provide much needed state-of-the-art life-cycle replacement via off-the-shelf acquisition for systems which are approaching 20 years old. FY00/01 funds procure fixed, automated weather observing systems for in-garrison operations, deployable automated systems for both fixed-forward and tactical operations, and manual systems for use where automated systems are not available or where rapid mobility is required. The OS-21 includes five different configurations: Fixed, Deployable, Remote, Manual, and Upper Air.

c. REMOTE MINIATURE WEATHER SENSORS (RMWS): Funds for this project were added through FY00 Emergency Supplemental Appropriations and transferred to the Air Force from the Overseas Contingency Operations Transfer Fund. RMWS enhances the effectiveness of air operations by improving real-time battle space weather awareness and enhancing precision engagement effectiveness. The sensors provide accuate, real-time weather information from forward unmanned locations in either friendly or hostile territory. Hand-emplaced or air dropped miniature sensor units automatically measure environmental data and forward it via satellite communications to weather forecasters supporting operational missions. RMWS provides critical cloud base height data available only from surface observations. No FY01 funding requested.

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Description (cont.):

d. SMALL TACTICAL TERMINAL (STT): STT provides worldwide tactical users with a survivable "first-in" source of meteorological satellite data, processed by small, portable terminals in forward areas of conflict. These terminals process remote-sensed visual/thermal imagery and other non-imagery weather data to support combat forces. Prior year funding procured sufficient units to meet Air Force requirements. FY99-01 funds will procure high resolution geostationary antennas and upgrades. (Funding prior to FY01 was included in P-1 line 63, Defense Meteorological Satellite Program (DMSP). Realignment of DMSP ground segment funds to the Weather Observation/Forecast P-1 line beginning in FY01 was based upon technological commonality of equipment and systems).

3. WEATHER FORECASTING: This program provides strategic, operational, and tactical level weather forecasting models used to support worldwide military operations of the Air Force, Army, Special Operations Forces, and other government agencies. Hardware upgrades and replacements provide streamlined computer and communications architectures at forecast centers, ensuring weather system interoperability with DoD standard communications and C4I systems. Components include:

a. CLOUD DEPICTION AND FORECAST SYSTEM (CDFS) II: CDFS II provides hourly, high resolution, worldwide cloud analyses, forecasts, and products to operational forces and other U.S. government agencies worldwide. Funding purchases equipment to replace logistically unsupportable mainframe computers at the Air Force Weather Agency (AFWA), Offutt AFB, NE. Funding also procures upgrades to satellite data processing, cloud depiction, and classified weather support functions for operational commanders and National Programs, providing a capability that cannot be met with the current system. FY99 continued the procurement, which included interface and cloud analysis hardware and associated software, cloud forecast hardware/software, plus the network and integration required for the system. FY00 funding will acquire hardware needed to attain final operational capability in FY01, allowing merger of the strategic and theater level forecasting systems at the weather centers and OWSs in support of the AF Weather Strategic Plan. No FY01 funding requested.

b. GLOBAL THEATER WEATHER ANALYSIS AND PREDICTION SYSTEM (GTWAPS): GTWAPS replaces the computer hardware

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Description (cont.):
and software that comprise the Advanced Weather Analysis and Prediction System located at the AFWA. GTWAPS provides forecast products consistent with TBM requirements, and improves support to the warfighter by incorporating an advanced computing platform, providing for future expansion of computer requirements, state-of-the-science theater-scale analysis and forecast software, and the capability to ingest and use observation from classified locations. Prior year funding began the acquisition; FY99/00 funds procure computer hardware and associated program integration, which provide improved computing power for the weather prediction model. FY01 funding will bring the program to final operational capability, allowing further merger of the strategic and theater level forecasting systems at the weather centers and OWS in support of the AF Weather Strategic Plan.

c. SPACE WEATHER ANALYSIS AND FORECAST SYSTEM (SWAFS): The SWAFS will replace the aging hardware at the 55th Space Weather Squadron (55 SWXS) located at Schriever AFB, CO. The SWAFS will upgrade and transition the current space weather software infrastructure to an open system environment located at the Air Force Weather Agency (AFWA) and integrate models. Further, it will revamp the operational capability by implementing current and future technologies and applications to derive warfighter products and future advanced physics space environment Space Environmental Technology Transition (SETT) models (reference AF Descriptive Summaries, project 2738, PE 35111) into the operational system. FY99-01 funds will modernize and upgrade current operational capabilities, implement new capability, and integrate remote command and control of new optical and radio ground-based sensors (Solar Environment Observation Network).

d. TARGET-SCALE WEATHER FORECAST MODEL (TSWFM): FY99 funding procured the TSWFM to meet critical United States Air Forces in Europe combat mission needs for Operation-Allied Force/Noble Anvil. This system provides USAFE air tasking order (ATO) planners greater resolution and accuracy in weather forecasts, enabling them to anticipate and exploit pockets of good weather for air operations. TSWFM also provides increased computing power at AFWA to improve weather forecasting accuracy at finer resolution over longer periods of time, including an ability to merge and process imagery from both military and civilian satellites. No FY01 funds requested.

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Description (cont.):

4. PRODUCT TAILORING/WARFIGHTER APPLICATIONS: FY00 funding begins the procurement and integration of the MOC FS-21 at fixed and deployed Air Force and Army locations around the world. This program supports the stand-up of OWSs and Weather Flights/Detachments (WF/Dets) as directed by the Air Force Weather Strategic Plan. Funding for the following programs, which were not displayed in the FY00/01 President's Budget Submission, have been broken out for better visibility of program costs.

a. FS-21 (OWS): FY00 funding procures MOC FS-21 systems for OWSs. The OWS MOC FS-21 consists of an integrated computer hardware and software suite enabling meteorologists and forecasters timely access to pertinent weather data to create or enhance products aimed directly at warfighter support within a given area of responsibility (AOR). FY00 funding completes this procurement.

b. FS-21 (WF/DET): FY00/01 funds will procure MOC FS-21 systems for WF/Dets. These systems will be fielded at AF bases, Army posts, and deployed locations in the Continental United States and overseas. The automated systems provided to WF/Dets will provide daily weather support to tactical-level operators.

5. WEATHER DATA ANALYSIS: FY01 funding will be used to support modernization of the AFWA center communications and data processing infrastructure. This effort will 1) incorporate Meteorological Satellite (METSAT) imagery, along with various other data elements, into the AFWA data base structure; 2) significantly increase the data base capacity, 3) field a robust data base structure management system allowing data base replication to OWS locations; 4) implement auto processing function to incorporate new METSAT data through automated processing by CaNDI workflow management system; and, 5) expand the four-tiered architecture for efficient data access and processing.

WEAPON SYSTEM COST ANALYSIS (EXHIBIT P- 5)		DATE: FEBRUARY 2000
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WEAPON SYSTEM COST ELEMENTS	IDENT CODE	FY1999			FY2000			FY2001					
		QTY	UNIT COST	TOTAL COST	QTY	UNIT COST	TOTAL COST	QTY	UNIT COST	TOTAL COST	QTY	UNIT COST	TOTAL COST
1. TACTICAL OBSERVING & FORECASTING SYSTEM (TOFS)							{11,595}			{744}			
A. TACTICAL FORECAST SYSTEM (TFS)							{9,435}			{744}			
PRIME MISSION EQUIPMENT	A				216	31,000	6,696	18	31,000	558			
TECHNICAL DATA							727			86			
ENGR/PROGRAM MGT							2,012			100			
B. TFS VERY SMALL APERTURE TERMINAL (VSAT)							{1,289}						
PRIME MISSION EQUIPMENT	A				100	11,000	1,100						
ENGR/PROGRAM MGT							189						
C. MANUAL OBSERVING SYSTEM (MOS)							{871}						
PRIME MISSION EQUIPMENT	A						871						
2. WEATHER DATA COLLECTION							{1,377}			{10,321}			{19,470}
A. TWR							{1,377}			{4,876}			{4,620}
PRIME MISSION EQUIPMENT	A				3	350,000	1,050	11	350,000	3,850	12	300,000	3,600
TECHNICAL DATA							106			246			260
ENGR/PROGRAM MGT							221			780			760

WEAPON SYSTEM COST ANALYSIS (EXHIBIT P- 5)		DATE: FEBRUARY 2000
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WEAPON SYSTEM COST ELEMENTS	IDENT CODE	FY1999			FY2000			FY2001					
		QTY	UNIT COST	TOTAL COST	QTY	UNIT COST	TOTAL COST	QTY	UNIT COST	TOTAL COST	QTY	UNIT COST	TOTAL COST
B. OS-21										{3,945}			{9,050}
PRIME MISSION EQUIPMENT	A							20	100,000	2,000	70	100,000	7,000
TECHNICAL DATA										845			620
ENGR/PROGRAM MGT										1,100			1,430
C. REMOTE MINIATURE WEATHER SENSOR (RMWS)										{1,500}			
PRIME MISSION EQUIPMENT	A									1,500			
D. SMALL TACTICAL TERMINAL (STT)													{5,800}
PRIME MISSION EQUIPMENT	A										38	141,000	5,358
ENGR/PROGRAM MGT													442
3. WEATHER FORECASTING							{11,866}			{6,401}			{3,980}
A. CDFS II							{4,431}			{1,796}			
PRIME MISSION EQUIPMENT	A						3,431			1,201			
ENGR/PROGRAM MGT							1,000			595			

WEAPON SYSTEM COST ANALYSIS (EXHIBIT P- 5)		DATE: FEBRUARY 2000
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WEAPON SYSTEM COST ELEMENTS	IDENT CODE				FY1999			FY2000			FY2001		
		QTY	UNIT COST	TOTAL COST	QTY	UNIT COST	TOTAL COST	QTY	UNIT COST	TOTAL COST	QTY	UNIT COST	TOTAL COST
B. GTWAPS							{3,300}			{2,900}			{2,000}
PRIME MISSION EQUIPMENT	A						2,700			2,300			1,350
TECHNICAL DATA							100			100			150
ENGR/PROGRAM MGT							500			500			500
C. SWAFS							{1,755}			{1,705}			{1,980}
PRIME MISSION EQUIPMENT	A						881			1,100			1,734
TECHNICAL DATA							500			88			38
PROG MGMNT							374			517			208
D. TSWFM							{2,380}						
PRIME MISSION EQUIPMENT	A						2,380						
4. PRODUCT TAILORING & WARFIGHTER APPLICATIONS										{10,663}			{4,915}
A. FS-21 (OWS)										{9,756}			
PRIME MISSION EQUIPMENT	A							6	1,336,000	8,016			
TECHNICAL DATA										384			
ENGR/PROGRAM MGT										1,356			

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WEAPON SYSTEM COST ELEMENTS	IDENT CODE				FY1999			FY2000			FY2001		
		QTY	UNIT COST	TOTAL COST	QTY	UNIT COST	TOTAL COST	QTY	UNIT COST	TOTAL COST	QTY	UNIT COST	TOTAL COST
B. FS-21 (WF/DET)										{907}			{4,915}
PRIME MISSION EQUIPMENT	A							22	31,000	682	131	31,000	4,061
TECHNICAL DATA										80			364
ENGR/PROGRAM MGT										145			490
5. WEATHER DATA ANALYSIS													{5,150}
PRIME MISSION EQUIPMENT	A												4,470
TECHNICAL DATA													180
ENGR/PROGRAM MGT													500
TOTALS:							24,838			28,129			33,515

REMARKS:

BUDGET PROCUREMENT HISTORY PLANNING (EXHIBIT P- 5A)	DATE: FEBRUARY 2000
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ITEM / FISCAL YEAR	QTY.	UNIT COST	LOCATION OF PCO	CONTRACT METHOD & TYPE	CONTRACTOR AND LOCATION	AWD. DATE	DATE FIRST DEL.	SPECS AVAIL NOW	DATE REV. AVAIL
1. TOFS									
A. TFS									
FY99	216	31,000	AFMC/ESC	OPT/FFP (1)	RAYTHEON, FULLERTON, CA AND TRW, REDONDO BEACH, CA	APR 99	MAY 99		
FY00	18	31,000	AFMC/ESC	OPT/FFP (1)	RAYTHEON, FULLERTON, CA AND TRW, REDONDO, CA	MAR 00	APR 00	Y	
B. TFS (VSAT)									
FY99	100	11,000	HQ AWS	MIPR/OPT/CPFF (2)	GSA/RAYTHEON, BELLEVUE, NE	JAN 99	APR 99		
C. MOS (6)									
FY99			HQ AWS	OPT/FFP (3)	MULTIPLE	OCT 98	JAN 99		
2. WEATHER DATA COLLECTION									
A. TWR									
FY99	3	350,000	AFMC/ESC	MIPR/OPT/FFP (4)	NAVY/RAYTHEON, INDIANAPOLIS, IN	MAR 99	DEC 00		
FY00	11	350,000	AFMC/ESC	MIPR/OPT/FFP (4)	NAVY/RAYTHEON, INDIANAPOLIS, IN	NOV 99	FEB 00		
FY01	12	300,000	AFMC/ESC	MIPR/OPT/FFP (4)	NAVY/RAYTHEON, INDIANAPOLIS, IN	NOV 00	APR 01	Y	

BUDGET PROCUREMENT HISTORY PLANNING (EXHIBIT P- 5A)	DATE: FEBRUARY 2000
APPROP CODE/BA: OPAF/ELECTRONICS & TELECOMMUNICATION EQUIPMENT	**P-1 NOMENCLATURE:** WEATHER OBSERVATION/FORECAST

ITEM / FISCAL YEAR	QTY.	UNIT COST	LOCATION OF PCO	CONTRACT METHOD & TYPE	CONTRACTOR AND LOCATION	AWD. DATE	DATE FIRST DEL.	SPECS AVAIL NOW	DATE REV. AVAIL
B. OS-21									
FY00	20	100,000	AFMC/ESC	C/FPIF	UNKNOWN	MAR 00	AUG 00	Y	
FY01	70	100,000	AFMC/ESC	OPT/FPIF	UNKNOWN	NOV 00	FEB 01	Y	
C. RMWS (6)									
FY00			AFMC/ESC	MIPR/OPT/FFP	GSA/MCQ ASSOCIATES, FREDERICKSBURG VA	APR 00	JUN 00	Y	
D. STT									
FY01	38	141,000	AFMC/SMC	OPT/FFP (5)	HARRIS CORP, MELBOURNE, FL	DEC 00	JUN 01	Y	
3. WEATHER FORECASTING									
A. CDFS II (6)									
FY99			AFMC/SMC	OPT/CPAF (7)	STERLING CORP, BELLEVUE, NE	OCT 98	SEP 00		
FY00			AFMC/SMC	OPT/CPAF (7)	STERLING CORP, BELLEVUE, NE	OCT 99	SEP 01		

BUDGET PROCUREMENT HISTORY PLANNING (EXHIBIT P- 5A)	DATE: FEBRUARY 2000
APPROP CODE/BA: OPAF/ELECTRONICS & TELECOMMUNICATION EQUIPMENT	**P-1 NOMENCLATURE:** WEATHER OBSERVATION/FORECAST

ITEM / FISCAL YEAR	QTY.	UNIT COST	LOCATION OF PCO	CONTRACT METHOD & TYPE	CONTRACTOR AND LOCATION	AWD. DATE	DATE FIRST DEL.	SPECS AVAIL NOW	DATE REV. AVAIL
B. GTWAPS (6)									
FY99			AFMC/ESC	OPT/FPIF (8)	TRW, BELLEVUE, NE	FEB 99	AUG 99		
FY00			AFMC/ESC	OPT/FPIF (8)	TRW, BELLEVUE, NE	OCT 99	MAR 00		
FY01			AFMC/ESC	OPT/FFP (8)	TRW, BELLEVUE, NE	OCT 00	JUL 01	Y	
C. SWAFS (6)									
FY99			AFMC/SMC	MIPR/FP	GSA/AEROSPACE CORP, EL SEGUNDO, CA	JAN 99	FEB 99		
FY00			AFMC/SMC	MIPR/FP	GSA/UNKNOWN	FEB 00	MAR 00	Y	
FY01			AFMC/SMC	MIPR/FP	GSA/UNKNOWN	JAN 01	MAY 01	Y	
D. TSWFM (6)(9)									
FY99			AFMC/ESC	OPT/FPIF	TRW, BELLEVUE, NE	MAY 99	JUN 99		
FY99			AFMC/SMC	OPT/CPAF	STERLING CORP, BELLEVUE, NE	MAY 99	JUN 99		

BUDGET PROCUREMENT HISTORY PLANNING (EXHIBIT P- 5A)	DATE: FEBRUARY 2000
APPROP CODE/BA: OPAF/ELECTRONICS & TELECOMMUNICATION EQUIPMENT	**P-1 NOMENCLATURE:** WEATHER OBSERVATION/FORECAST

ITEM / FISCAL YEAR	QTY.	UNIT COST	LOCATION OF PCO	CONTRACT METHOD & TYPE	CONTRACTOR AND LOCATION	AWD. DATE	DATE FIRST DEL.	SPECS AVAIL NOW	DATE REV. AVAIL
4. PRODUCT TAILORING & WARFIGHTER APPLICATIONS									
A. FS-21 (OWS)									
FY00	6	1,336,00	AFMC/ESC	OPT/FFP (1)	RAYTHEON, FULLERTON, CA AND TRW, REDONDO BEACH, CA (1)	MAR 00	AUG 00	Y	
B. FS-21 (WF/DET)									
FY00	22	31,000	AFMC/ESC	MIPR/OPT/FFP (10)	GSA/GTE, THOUSAND OAKS, CA	MAR 00	AUG 00	Y	
FY01	131	31,000	AFMC/ESC	MIPR/OPT/FFP (10)	GSA/GTE, THOUSAND OAKS, CA	NOV 00	JAN 01	Y	
5. WEATHER DATA ANALYSIS (6)									
FY01			AFMC/ESC	C/FPIF	UNKNOWN	NOV 00	MAR 01	Y	

REMARKS:
1. Command and Control Product Line (CCPL) is a pre-competed contract vehicle that was awarded Feb 97. Contractors: TRW, Redondo Beach, CA and Raytheon, Fullerton, CA
2. Information Technology contract with Raytheon through GSA, Kansas City, MO.
3. Multiple contractors to include Litton, Windsor CT, McQ Associates, Fredericksburg VA. Awards and delivery dates reflect first contract award date and delivery date.
4. Delivery order on U. S. Navy contract to Raytheon, Indianapolis, IN.
5. Option to Harris contract awarded Jun 94.

BUDGET PROCUREMENT HISTORY PLANNING (EXHIBIT P- 5A)							DATE: FEBRUARY 2000		
APPROP CODE/BA: OPAF/ELECTRONICS & TELECOMMUNICATION EQUIPMENT				P-1 NOMENCLATURE: WEATHER OBSERVATION/FORECAST					
ITEM / FISCAL YEAR	QTY.	UNIT COST	LOCATION OF PCO	CONTRACT METHOD & TYPE	CONTRACTOR AND LOCATION	AWD. DATE	DATE FIRST DEL.	SPECS AVAIL NOW	DATE REV. AVAIL

6. Quantity and unit cost vary due to site specific configurations.
7. Option to basic Cloud Depiction and Forecast System (CDFS) 2 contract for hardware, support and services, awarded Jun 95.
8. TRW, Redondo Beach, CA selected through pre-competed Command and Control Product Line (CCPL) contract vehicle. Contract to TRW awarded Oct 97. TRW, Redondo Beach, delegated GTWAPS project to TRW, Bellevue, NE
9. The combined efforts of two Procuring Contracting Offices (PCO) were required to meet the compressed timelines of the Combat Mission Needs Statement that generated the TSWFM. The ESC portion of TSWFM was responsible for increased resolution of forecasting while the SMC portion was responsible for enhanced cloud data processing.
10. Information Technology contract with GTE through GSA, Kansas City, MO.

BUDGET ITEM JUSTIFICATION (EXHIBIT P-40)	DATE: FEBRUARY 2000
APPROP CODE/BA: OPAF/ELECTRONICS & TELECOMMUNICATION EQUIPMENT	**P-1 NOMENCLATURE:** STRATEGIC COMMAND AND CONTROL

		FY1999	FY2000	FY2001	FY2002	FY2003	FY2004	FY2005
QUANTITY								
COST (in Thousands)		$10,653	$21,950	$20,858	$19,544	$16,801	$16,152	$16,790

Description:

The Strategic Command and Control program procures mission critical communications and computer systems required to ensure the President of the United States has the capability for effective command and control of the Twin Triad (nuclear and conventional). It procures hardware replacements/upgrades to maintain the only computer system that produces the nation's nuclear war plan and performs conventional/contingency war planning. Additionally, the program supports life-cycle replacement of outdated and unreliable communications equipment in support of the B-2 Program.

1. NUCLEAR PLANNING AND EXECUTION SYSTEM (NPES): NPES is the single, survivable national command and control (C2) automated information system (AIS) supporting the National Command Authorities (NCA), Joint Staff, and nuclear Commanders-in-Chief (CINCs) in the trans/post phases of nuclear conflict. The NPES requirement includes both aircraft and non-aircraft applications. This funding covers only the non-aircraft portion. Funding for NPES ensures that the National Air Operations Center (NAOC) platform keeps pace with its ground mobile and fixed site command center counterparts. This capability mirrors fixed and ground mobile command centers with the ability to receive, process, and transmit battle staff information while flying. Prior year funds procured the first and second suite of equipment for the NAOC aircraft/ground platform. FY00 funding begins the phased procurement of the third suite of equipment. In addition, one suite of equipment will be purchased for the NAOC command post facility. The command post system is not required to meet the same Federal Aviation Administration (FAA) requirements as the NAOC aircraft/ground system. Therefore, the cost of acquiring a complete command post system is much less than the cost of a single system for the NAOC aircraft/ground system. FY01 funds will complete the third suite and begin the phased procurement of the fourth suite of equipment. Two-way communications processing with the NAOC Message Processing System

BUDGET ITEM JUSTIFICATION (EXHIBIT P-40)	DATE: FEBRUARY 2000
APPROP CODE/BA: OPAF/ELECTRONICS & TELECOMMUNICATION EQUIPMENT	**P-1 NOMENCLATURE:** STRATEGIC COMMAND AND CONTROL

Description (cont.):
(MPS) will also begin in FY01, allowing NPES to transmit information from the aircraft as opposed to the receive-only limitations that are currently in place.

2. MOBILE CONSOLIDATED COMMAND CENTER (MCCC): The Mobile Consolidated Command Center (MCCC), Offutt AFB, NE, provides contingency reconstitution and continuity for command capabilities to accomplish direct CINC missions in the event primary C2 facilities are incapacitated. FY00/01 funding supports the following efforts: Radio Frequency (RF) Databus replacement due to obsolescence and logistics unsupportability; Global Command and Control System (GCCS) integration; and Global Broadcast System (GBS) integration. FY01 funds also begin integration of a second MILSTAR Command Post Terminal onto the MCCC platform.

3. STRATEGIC WAR PLANNING SYSTEM (SWPS): This funding continues the phased modernization, sustainment and life-cycle replacement of the SWPS. SWPS is one of DoD's most complex classified computer systems, and the only system that produces the Single Integrated Operational Plan (SIOP) which assigns a target to every strategic nuclear warhead in the US inventory. The system performs tasks ranging from running threat scenarios to providing data for developing bomber aircraft crews' strike mission data in digital and hard copy formats. Planned life-cycle replacement is three years for servers and two years for personal computers (PCs). Additionally, the infrastructure necessary to operate the Theater Integrated Sub-System (TIPS) will be acquired. TIPS will allow for Weapons of Mass Destruction planning information and option packages to be distributed to Theater CINCs via a secure web server/web page. Life-cycle workstation (UNIX platform) replacements continue through FY01. In FY00, the network infrastructure upgrade (e.g., routers, hubs, servers (firewall, N/W encryption) and blades) required to meet Full Operational Capability (FOC) will begin. Additional hardware (e.g., servers, workstations and PCs) for evolving theater and analysis requirements will be purchased during FY00 and FY01. Enterprise Management System (EMS) and server upgrades will also begin in FY00. In FY01, hardware life-cycle replacements, e.g., PCs, tape silos storage devices, and high availability disk arrays, will commence.

4. B-2 SUPPORT: The B-2 weapon system relies heavily on C2 equipment to meet its operational capability. These funds support the

BUDGET ITEM JUSTIFICATION (EXHIBIT P-40)	DATE: FEBRUARY 2000
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Description (cont.):
following B-2 dedicated systems:

a. ENGINEERING DATA SYSTEMS (EDS): EDS provides engineers with specialized computers for on-line access to B-2 aircraft data. This data consists of items such as engineering analysis, manufacturing data, aircraft designs, and software documentation to help solve technical issues on B-2 aircraft in the field which are integral to strategic C2. Locations with EDS computers include: Langley AFB, VA; Whiteman AFB, MO; Wright-Patterson AFB, OH; Oklahoma City Air Logistics Center, OK; and Northrop Grumman Corp in CA. FY99/00 funds procure new Computer Aided Design (CAD) workstations, upgrade system servers, purchase additional Redundant Array of Inexpensive Disks (RAID) storage capability (data storage device with multiple disks), and migrate much of the system to Windows NT format. FY01 funds will upgrade PC workstations and servers to then-current technology.

b. WEAPON SYSTEM SUPPORT CENTER (WSSC): The WSSC, located at Oklahoma Air Logistics Center, OK, provides software support and maintenance for the B-2 aircraft. Software maintenance fixes to aircraft systems include flight controls, flight management, navigation systems, weapons, and defensive management system. These software maintenance fixes are accomplished with the use of the WSSC's Software Development System (SDS), a complex VAX computer, by analyzing and designing fixes to existing aircraft software. FY99 funds provided upgrades to computer equipment contained in the subcontractor software laboratories that were relocated from Northrop Grumman's California facility to Oklahoma City Air Logistics Center, OK. These contractor laboratories are 1980s vintage systems. FY00 funds begin the replacement of obsolete equipment and computers. FY01 funds will continue the replacement of obsolete equipment and computers, as well as upgrade existing local area networks (LANs) to current technologies and capabilities.

BUDGET ITEM JUSTIFICATION FOR AGGREGATED ITEMS (EXHIBIT P- 40A)	DATE: FEBRUARY 2000
APPROP CODE/BA: OPAF/ELECTRONICS & TELECOMMUNICATION EQUIPMENT	**P-1 NOMENCLATURE:** STRATEGIC COMMAND AND CONTROL

PROCUREMENT ITEMS	ID CODE			FY1999		FY2000		FY2001	
		QTY.	COST	QTY.	COST	QTY.	COST	QTY.	COST
1. NUCLEAR PLANNING AND EXECUTION SYSTEM (NPES)	A				$240		$365		$201
2. MOBILE CONSOLIDATED COMMAND CENTER (MCCC)	A						$3,960		$1,561
3. STRATEGIC WAR PLANNING SYSTEM (SWPS)	A				$4,494		$11,858		$12,998
4. B-2 SUPPORT					${5,919}		${5,767}		${6,098}
A. ENGINEERING DATA SYSTEMS (EDS)	A				$1,524		$1,478		$1,478
B. WEAPON SYSTEM SUPPORT CENTER (WSSC)	A				$4,395		$4,289		$4,620
Totals:					$10,653		$21,950		$20,858

Remarks:

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APPROP CODE/BA: OPAF/ELECTRONICS & TELECOMMUNICATION EQUIPMENT	**P-1 NOMENCLATURE:** STRATEGIC COMMAND AND CONTROL

ITEM / FISCAL YEAR	QTY.	UNIT COST	LOCATION OF PCO	CONTRACT METHOD & TYPE	CONTRACTOR AND LOCATION	AWD. DATE	DATE FIRST DEL.	SPECS AVAIL NOW	DATE REV. AVAIL
1. NUCLEAR PLANNING AND EXECUTION SYSTEM (NPES)									
FY99 (1)			USSTRATCOM	C/FP	MULTIPLE (2)	NOV 98	JAN 99		
FY00 (1)			USSTRATCOM	C/FP	MULTIPLE (2)	NOV 99	JAN 00		
FY01 (1)			USSTRATCOM	C/FP	MULTIPLE (2)	NOV 00	JAN 01	Y	
2. MOBILE CONSOLIDATED COMMAND CENTER (MCCC)									
FY00 (1)			AFMC/ESC	OPT/CPAF	JAYCOR, ALBUQUERQUE, NM (3)	OCT 99	JAN 00		
FY01 (1)			AFMC/ESC	OPT/CPAF	JAYCOR, ALBUQUERQUE, NM (3)	OCT 00	JAN 01	Y	
3. STRATEGIC WAR PLANNING SYSTEM (SWPS)									
FY99 (1)			USSTRATCOM	C/FP	MULTIPLE (2)	OCT 98	JAN 99		
FY00 (1)			USSTRATCOM	C/FP	MULTIPLE (2)	JAN 00	FEB 00		
FY01 (1)			USSTRATCOM	C/FP	MULTIPLE (2)	JAN 01	FEB 01	N	DEC 00

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BUDGET PROCUREMENT HISTORY PLANNING (EXHIBIT P- 5A)	DATE: FEBRUARY 2000
APPROP CODE/BA: OPAF/ELECTRONICS & TELECOMMUNICATION EQUIPMENT	**P-1 NOMENCLATURE:** STRATEGIC COMMAND AND CONTROL

ITEM / FISCAL YEAR	QTY.	UNIT COST	LOCATION OF PCO	CONTRACT METHOD & TYPE	CONTRACTOR AND LOCATION	AWD. DATE	DATE FIRST DEL.	SPECS AVAIL NOW	DATE REV. AVAIL
4. B-2 SUPPORT									
A. ENGINEERING DATA SYSTEMS (EDS)									
FY99 (1)			AFMC/OC-ALC	C/FP	MULTIPLE (4)	MAR 99	APR 99		
FY00 (1)			AFMC/OC-ALC	C/FP	MULTIPLE (4)	MAR 00	APR 00	Y	
FY01 (1)			AFMC/OC-ALC	C/FP	MULTIPLE (4)	MAR 01	APR 01	Y	
B. WEAPON SYSTEM SUPPORT CENTER (WSSC)									
FY99 (1)			AFMC/OC-ALC	C/FP	MULTIPLE (4)	MAR 99	JUL 99		
FY00 (1)			AFMC/OC-ALC	C/FP	MULTIPLE (4)	MAR 00	JUL 00	Y	
FY01 (1)			AFMC/OC-ALC	C/FP	MULTIPLE (4)	MAR 01	JUL 01	Y	

REMARKS:

(1) Varying unit costs and quantities due to multiple types of equipment being procured.

(2) Procurement through various GSA contract sources and contractors. Contractors include: Government Technology Service, Inc., Chantilly, VA; Worldwide Technology, St Louis, MO; Sun Microsystems, Mountain View, CA; ANIXTER, Reston, VA; Storage Area Networks, Castle Rock, CO; and Gateway 2000, North Sioux City, SD. Award/delivery dates are the date of first contract award and delivery.

(3) Jaycor contract first awarded June 1, 1995.

(4) Procurement through various GSA contract sources and contractors. Contractors include: Transtel, Inc., Oklahoma City, OK; TRW, Oklahoma City, OK; Telos, Oklahoma City, OK; DEC Microsystems, Oklahoma City, OK; IBM, Oklahoma City, OK. Award/delivery dates are the date of first contract award and delivery.

BUDGET ITEM JUSTIFICATION (EXHIBIT P-40)	DATE: FEBRUARY 2000
APPROP CODE/BA: OPAF/ELECTRONICS & TELECOMMUNICATION EQUIPMENT	**P-1 NOMENCLATURE:** CHEYENNE MOUNTAIN COMPLEX

		FY1999	FY2000	FY2001	FY2002	FY2003	FY2004	FY2005
QUANTITY								
COST (in Thousands)		$887	$10,365	$602	$2,820	$4,133	$4,756	$3,440

Description:

This program supports acquisition for the Cheyenne Mountain Complex (CMC). The CMC program:

- Provides real-time processing and display of missile warning and force management information to the CMC and the Alternate Missile Warning Center (AMWC) as well as direct sensor input to National Strategic Response Plan (NSRP) decision-makers at fixed command centers
- Provides communications services for all communications into or out of CMC and between CMC mission processors
- Replaces the processors and display systems supporting the North American Aerospace Defense (NORAD) Air Center (NAC), NORAD Command Center, Resource Center (NORAD Battle Staff), and Weather Support Unit
- Provides an effective command post to support NORAD's multiple warning and defense missions
- Automates the manual handling of space surveillance and warning messages
- Provides communications interface processors at all mission warning sensors and command centers
- Provides an alternate missile warning center

The program also provides Air Force Space Command (AFSPC) with funding needed to acquire communications and computer equipment in support of US Space Command (USSPACECOM) command centers and sensor systems; AFSPC Base Level Switching systems; the Defense Message System (DMS) and Base Network Control Center (BNCC); USSPACECOM Mobile Consolidated Command Center (formerly known as CINC Mobile Alternate Headquarters (CMAH)); and the Cheyenne Mountain Training System (CMTS). Items requested in FY01 are identified on the P-40A are representative of items to be procured. Items procured during execution may change based on critical equipment needed to support current Air Force mission requirements.

BUDGET ITEM JUSTIFICATION (EXHIBIT P-40)	DATE: FEBRUARY 2000
APPROP CODE/BA: OPAF/ELECTRONICS & TELECOMMUNICATION EQUIPMENT	**P-1 NOMENCLATURE:** CHEYENNE MOUNTAIN COMPLEX

Description (cont.):

1. NORAD/USSPACECOM WARFIGHTING SUPPORT SYSTEM (N/UWSS): N/UWSS provides the foundation for the future architecture of the NORAD/USSPACECOM Battle Management/Command, Control, Communications and Intelligence (C4I) system (in compliance with the Defense Information Infrastructure Common Operating Environment (DII COE), Joint Technical Architecture (JTA)) to achieve Department of Defense (DoD)/Joint Command and Control (C2) interoperability. N/UWSS objectives are to provide NORAD/USSPACECOM a Battle Management Command and Control (BMC2) system that provides flexible response to evolving mission needs (e.g. Space Based Infrared System (SBIRS), National Missile Defense (NMD), Space Control, and Information Operations). The system will also have improved capability to support theater warfighting Commander-in-Chief (CINCs) with an integrated battlespace picture. FY99-01 funds the hardware and associated software to transition from the current stand-alone, stove-piped systems architecture to a DII COE compliant open architecture. This project is supported by the Air Force Long Range Plan, Joint Vision 2010, and the Defense Planning Guidance.

2. COMMANDER-IN-CHIEF (CINC) MOBILE CONSOLIDATED COMMAND CENTERS (MCCCs): The CINC MCCCs provide backup facilities and continuity of command capabilities to accomplish directed CINC missions in the event primary command and control facilities are incapacitated. FY99-01 funding procures equipment supporting the USSPACECOM MCCC modernization efforts. These modernization efforts which migrate toward DII COE compliance include equipment procurements to: modernize legacy communication systems; replace obsolete, insupportable and expensive technologies; increase capacity in the intermediate processors; and upgrade automating inbound and outbound message handling.

BUDGET ITEM JUSTIFICATION FOR AGGREGATED ITEMS (EXHIBIT P- 40A)	DATE: FEBRUARY 2000
APPROP CODE/BA: OPAF/ELECTRONICS & TELECOMMUNICATION EQUIPMENT	**P-1 NOMENCLATURE:** CHEYENNE MOUNTAIN COMPLEX

PROCUREMENT ITEMS	ID CODE	FY1999		FY2000		FY2001	
		QTY.	COST	QTY.	COST	QTY.	COST	QTY.	COST
1. N/UWSS (TW/AA)	A				$444		$495		$602
2. CINC MOBILE CONSOLIDATED COMMAND CENTER (MCCC)	A				$443		$9,870		
Totals:					$887		$10,365		$602

Remarks:

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BUDGET ITEM JUSTIFICATION (EXHIBIT P-40)	DATE: FEBRUARY 2000
APPROP CODE/BA: OPAF/ELECTRONICS & TELECOMMUNICATION EQUIPMENT	**P-1 NOMENCLATURE:** TACTICAL SIGINT SUPPORT

		FY1999	FY2000	FY2001	FY2002	FY2003	FY2004	FY2005
QUANTITY								
COST (in Thousands)		$0	$1,786	$1,447	$970	$406	$0	$0

Description:

Tactical Signals Intelligence (SIGINT) Support procures a variety of signals processing, modeling, and support equipment necessary to operate and maintain tactical cryptologic programs. Funding also procures equipment to support ground processing functions associated with airborne operations. Items procured in FY01 are identified on the attached P-5 and are representative of items to be procured. Items procured during execution may change based on critical equipment needed to support current Air Force mission requirements.

1. TACTICAL INFORMATION BROADCAST SERVICE (TIBS) IMPROVEMENTS: The TIBS improvements continues procurement of equipment, associated software, and peripherals to support the fielding of multi-sensor, multi-source intelligence correlation capabilities for TIBS. TIBS is a collateral-level, near-real-time intelligence broadcast which provides situational awareness at all levels of command, disseminating highly perishable threat or target information. HQ Air Intelligence Agency (AIA) manages the TIBS program. The TIBS program office sets acquisition requirements for TIBS to include the following: software and hardware upgrades for the worldwide network architecture, new Service (Army, Navy, Air Force) changes, documentation, and equipment for training. TIBS equipment is acquired through the BIG SAFARI program, which is managed by the Air Force Materiel Command. FY00 funding procures TIBS electronic noise filters, related documentation, and program support. No FY01 funding is requested.

2. SENSOR ACE PROGRAM IMPROVEMENTS: This program procures specialized signals processing equipment and computer hardware for testing hardware and software algorithms designed to detect and exploit target nation proforma (machine-to-machine) signals, such as navigation and Identification Friend or Foe (IFF). Rapid information age innovations highlight the criticality of modernizing proforma detection

BUDGET ITEM JUSTIFICATION (EXHIBIT P-40)	DATE: FEBRUARY 2000
APPROP CODE/BA: OPAF/ELECTRONICS & TELECOMMUNICATION EQUIPMENT	**P-1 NOMENCLATURE:** TACTICAL SIGINT SUPPORT

Description (cont.):

and processing equipment. Without accurate proforma data, situational awareness at all levels of command would degrade to an unacceptable level for security requirements. FY00/01 funding provides high speed digitizers for emerging higher data rates and pulsed signals in targeted countries.

3. TACTICAL ANALYSIS AND REPORTING PROGRAM (TARP) IMPROVEMENTS: This program procures technical refreshment of powerful computers for high speed 3-dimensional simulation of targeted nations air tactics, as well as video production equipment to record and narrate results. Results are reviewed annually by intelligence and operational personnel at nine theater oriented conferences. Conference results affect air crew training, permitting our forces to emulate adversary tactics at exercises such as Red Flag and Green Flag, and develop and refine counter-tactics. FY01 funding will provide technical refreshment and video digitization capability.

WEAPON SYSTEM COST ANALYSIS (EXHIBIT P- 5)		DATE: FEBRUARY 2000
APPROP CODE/BA: OPAF/ELECTRONICS & TELECOMMUNICATION EQUIPMENT	**P-1 NOMENCLATURE:** TACTICAL SIGINT SUPPORT	

WEAPON SYSTEM COST ELEMENTS	IDENT CODE	FY1999			FY2000			FY2000			FY2001		
		QTY	UNIT COST	TOTAL COST	QTY	UNIT COST	TOTAL COST	QTY	UNIT COST	TOTAL COST	QTY	UNIT COST	TOTAL COST
1. TIBS IMPROVEMENTS										{985}			
COMPUTER EQUIPMENT	A									595			
DOCUMENTATION										170			
PROGRAM SUPPORT										220			
2. SENSOR ACE IMPROVEMENTS										{801}			{801}
SIGNAL PROCESSORS	A									801			801
3. TARP IMPROVEMENTS													{646}
VIDEO PROCESSING EQUIPMENT	A												105
COMPUTER EQUIPMENT	A												541
TOTALS:										1,786			1,447

REMARKS:
Quantity/unit costs vary according to the site and different types/configurations of equipment being procured.

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BUDGET ITEM JUSTIFICATION (EXHIBIT P-40)	DATE: FEBRUARY 2000
APPROP CODE/BA: OPAF/ELECTRONICS & TELECOMMUNICATION EQUIPMENT	**P-1 NOMENCLATURE:** AUTOMATIC DATA PROCESSING EQUIPMENT

		FY1999	FY2000	FY2001	FY2002	FY2003	FY2004	FY2005
QUANTITY								
COST (in Thousands)		$37,510	$81,769	$74,771	$65,753	$59,618	$60,451	$63,312

Description:

This program provides for commercially available automatic data processing equipment (ADPE) acquisitions and equipment additions to government-owned computer systems. Items to be purchased include: desktop computers and associated peripheral devices (keyboards, monitors, printers); file servers; local area networks; gateways; and routers. New systems and system upgrades directly support operational mission requirements. All programs in this line improve Air Force automated capabilities via specific hardware and software tools. Many support and enhance war fighting capability and all enhance productivity in support of Air Force weapon systems and personnel. Funds will support a standard system infrastructure allowing major commands to purchase computer equipment capabilities and quality networking. Items requested in FY01 are identified on the P-40A and are representative of items to be procured. Items procured during execution may change based on critical equipment needed to support current Air Force mission requirements.

11TH WING (11WG)

1. HEADQUARTERS INFORMATION TECHNOLOGY (IT) INVESTMENT: FY99-01 funding provides significant infrastructure improvements in many ADPE categories at Headquarters, United States Air Force (HQ USAF). HQ USAF personnel, including the Secretary of the Air Force and the Chief of Staff of the Air Force, will receive office automation systems and computer networks critical to supporting their mission of issuing Air Force directives and coordinating with DoD and the Joint Staff. HQ USAF personnel will receive computer systems which meet increased office automation needs. They will be afforded high quality, high speed connections to classified and unclassified networks such as the Internet and the Secure Internet Protocol Routed Network (SIPRNET). HQ USAF personnel will also receive centralized

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Description (cont.):

services such as business-quality electronic mail and network management through programs such as the Network File Sharing System. Other investments include World Wide Web services, remote computing services, and video teleconferencing.

2. HEADQUARTERS MAINFRAME SYSTEM SUPPORT: Numerous ADPE upgrades will be accomplished with FY99-01 funding. Magnetic tape systems will be upgraded to meet increasing data storage requirements and enhance the read/write capability and archival storage capacity. FY99-01 funding also addresses mainframe communications equipment upgrades in order to maintain computer system and network interface compatibility and provide ADPE technology user enhancements. Mainframe hardware upgrades meet required ADP technology enhancements for customers and maintain operating system and application software compatibility. Upgrades for open systems' architecture meet mandated ADP enhancements and improve system performance capabilities. Computer operations equipment (hardware/software) will be updated to improve management of multiple ADP functions, and print output media systems will be enhanced to improve operational throughput capacity.

3. NATIONAL MILITARY COMMAND CENTER (NMCC): FY99-01 funds provide capital investment in new and updated ADPE for the National Command and Control System (NCCS) in the NMCC. The NCCS supports the Joint Staff and the National Command Authority with real-time crisis decision-making information. Funding provides classified network upgrades, command post communication improvements, and upgrades audiovisual capabilities with improved digital capabilities.

4. TRANSPORTATION COORDINATORS'-AUTOMATED INFORMATION FOR MOVEMENT SYSTEM II (TC-AIMS II): No FY01 funding requested.

AIR COMBAT COMMAND (ACC)

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Description (cont.):

5. BASE OPERATIONS: FY99-01 funds purchase systems to build Part Task Trainers (PTT) for aircrew training. In-house fabrication of these trainers allows for a more timely and cost effective response to training requirements than having private industry produce small numbers of low cost training devices.

AIR EDUCATION AND TRAINING COMMAND (AETC)

6. ADVANCED TRAINING SYSTEM (ATS): No FY01 funding requested.

7. AIR FORCE INSTITUTE OF TECHNOLOGY (AFIT) EDUCATION AND RESEARCH SYSTEM (EARS): FY 99-01 funds provide for purchase of communications-computer equipment to meet AFIT's requirements. This program acquires computer systems, ranging from workstations to super mini-computers and large parallel processing systems, networked together to provide educational computer support. It provides computing resources in support of all students, faculty, and staff applications, with the exception of specialized laboratory processing and other applications requiring super-computer class machines. This program provides AFIT with state-of-the-art computer systems to preclude dependency on outside organizations for computer support. Acquisitions for FY99-FY01 funding provide for high-speed network upgrades, centralized scientific computing system upgrades, additional systems for network support, completion of network file server replacement, consolidation of scientific and engineering data storage, and establishment of a central classified computing capability.

8. EDUCATION AND TRAINING TECHNOLOGY APPLICATIONS PROGRAM: This program provides innovative applications of commercial off-the-shelf, state-of-the-art technologies in the education and training arena. It allows AETC managers the opportunity to prioritize potential applications according to mission critical needs. The implementation of these systems increases training efficiency as well as preparing units to fully utilize new information technologies such as the Internet for the betterment of education and training. FY99-01 funds continue procurement of computer training hardware to support technology applications related to distance learning and virtual reality.

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Description (cont.):

9. 333rd TRAINING SQUADRON (TS) TECHNICAL REFRESH/EXPANSION: FY99-01 funding equips the 333 TS located at Keesler AFB, MS with hardware and associated software upgrades. This technical refresh/expansion program increases efficiency through the replacement of outdated equipment with enhanced connectivity and other improved capabilities to support the 333 TS training mission.

10. INTELLIGENCE TRAINING: FY01 funds will provide updated computerized systems in support of intelligence training associated with Operation LONESTAR and Rivet Joint. Operation LONESTAR provides intelligence exercise training for several career fields at Goodfellow AFB, TX. Funds for LONESTAR will ensure adequate computer equipment and modeling software for fusion of imagery and signals intelligence in simulated joint training exercises. Additionally, funds will provide classroom computerized training of operators in support of Rivet Joint, an airborne intelligence mission. Additional workstations, network connections, server/domain controllers, unique keyboards, printers, and larger storage devices will be procured to support voice processing training of crypto linguistics associated with Rivet Joint.

11. OFFICER TRAINING SCHOOL (OTS) AUDIOVISUAL SYSTEM: No FY01 funding requested.

12. AIR UNIVERSITY (AU): FY00/01 funds will establish information infrastructure (local networks and associated equipment) to facilitate research, enhance curriculum, conduct modeling and simulation of war games, and provide information required to execute the education mission. The purchase of this enhanced hardware and associated software will improve the quality of professional military education provided to the war fighter.

13. AIR FORCE RECRUITER INFORMATION SUPPORT SYSTEM (AFRISS): AFRISS is the Air Force's modernization program to replace the legacy system, Procurement Management Information System. FY00/01 funds will purchase hardware and associated software necessary to automate and streamline the recruiting processes to provide improved integration with the Air Force Personnel Data System (PDS). AFRISS will provide the capability to process recruits much faster, an important capability in an increasing competitive market.

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Description (cont.):

14. AIRBORNE WARNING & CONTROL SYSTEM (AWACS): No FY01 funding requested.

AIR FORCE COMMUNICATIONS AGENCY (AFCA)

15. KEESLER COMPUTER NETWORK TRAINING: FY00/01 funds will provide for the purchase of communications-computer equipment at Keesler AFB, MS, to meet training requirements for specialized computer operators and tech controllers. Funding will replace the current outdated network and tech control training equipment and provide vital remote training capability. Failure to provide funds in this area will weaken the professional skill level of computer operators maintaining AF networks, inhibiting the ability to properly manage and protect critical information systems vital to national security.

AIR FORCE CENTER FOR QUALITY AND MANAGEMENT INNOVATION (AFCQMI)

16. MANPOWER DATA SYSTEM (MDS): FY01 funds will provide replacement/refreshment computer servers for every major command. MDS processes manpower changes for all force structure actions into the programming, budgeting and personnel systems (recruiting, assignments, training, and career field management). Without replacement/refreshment equipment, the Air Force will be unable to accomplish accurate and timely personnel assignments, recruiting projections, and training planning.

AIR FORCE MATERIEL COMMAND (AFMC)

17. COMPREHENSIVE ENGINE MANAGEMENT SYSTEM (CEMS): CEMS is an information storage and retrieval system which manages over 400,000 critical parts in the Air Force's large fleet of 22,000 active turbine engines. CEMS provides an invaluable tool at base level to discover, diagnose, and prevent engine problems. FY99-01 funds provide for continued CEMS upgrades, miscellaneous ADP equipment in

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Description (cont.):
support of CEMS direct line reporting and interfaces to the Core Automated Maintenance System.

18. EMBEDDED (COMPUTER RESOURCES) SUPPORT IMPROVEMENT PROGRAM (ESIP): ESIP utilizes specific hardware and software tools to improve the quality, productivity, and accessibility of weapon system software and minimize increasing backlogs of weapon system software requirements. ESIP consists of three primary domains or tasks: Advanced Research & Development at the Air Force Research Lab (AFRL), Wright-Patterson AFB, OH; Software Technology Support at the Software Technology Support Center (STSC), Hill AFB, UT; and Software Readiness managed by the ESIP program office at Hill AFB, UT. Standard configuration off-the-shelf hardware does not fulfill the requirements inherent in these functions. FY99-01 funds continues procurement of a wide range of special configurations of mini/micro computers and commercial/peculiar hardware devices essential for weapon system support.

19. F-117A TACTICAL DATA PROCESSOR SUITE (TDPS): The TDPS is a ground-based, mobile ADPE system which supports global F-117 missions through mission information processing. Details of this program are classified at the sensitive compartmented information (SCI) level. FY01 funds will procure hardware, software, and associated peripheral equipment to upgrade and enhance the TDPS, enabling it to interface with the new national intelligence collection system.

20. ENTERPRISE DATA INTEGRATION SYSTEM (EDIS) (Formerly LOGISTICS DATA INTEGRATION SYSTEM (LOGDIS)): EDIS provides users with a standard electronic mail system and world-wide access to multiple dissimilar host computers via user friendly interfaces. The EDIS user base consists of 105,000 users, with systems at all Air Force Materiel Command installations. FY00/01 funding will procure hardware and associated peripheral equipment to improve data integration and reduced cycle times.

21. WEAPON SYSTEM MANAGEMENT INFORMATION SYSTEM (WSMIS): WSMIS provides an automated logistics decision support system to ensure that USAF weapon systems and combat forces meet their wartime taskings as well as peacetime operating requirements. FY99/00 funds procure computer hardware and associated peripheral equipment for the transition of the Readiness Spares Packages (RSP),

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Description (cont.):

Computation and Assessment System (RCAS), and the Supportability Analysis Visibility (SAV) portions of WSMIS modules to a common data/operating environment. FY01 funds will procure hardware to decentralize the WSMIS projects, satisfy new WSMIS decision support processes, and ensure these implementations maintain the foundation infrastructure to achieve Defense Information Infrastructure Common Operating Environment (DII COE)/Global Command and Control System (GCCS) compatibility.

22. TAILORED INTELLIGENCE MATERIALS PRODUCTION PROGRAM: This program procures hardware and software necessary to provide aircrews with worldwide virtual intelligence mission planning capabilities. FY99 funds procured workstations, routers, servers, fiber optic cable, and software necessary to extend, upgrade, and maintain the 480th Intelligence Group's Air Force Intelligence Network (AFINTNET) at Langley AFB, VA. FY00/01 funds will continue expansion of AFINTNET's high speed classified data transfer for tailored intelligence production at the 20th Intelligence Squadron, Offutt AFB, and the 27th Intelligence Squadron, Langley AFB.

23. RDT&E SUPPORT COMPLEX (RSC)/CENTER FOR RESEARCH SUPPORT (CERES) UPGRADES: FY99-01 funding continues RSC/CERES computer and other hardware upgrade efforts to improve the consolidated telemetry, tracking, and commanding (TT&C) facilities at Kirtland AFB, NM and Schriever AFB, CO. These facilities support the space test research and readiness control mode and interface with the Air Force Satellite Control Network (AFSCN) and other agencies in support of space system testing.

24. EMBEDDED COMPUTER SYS INTEGRATED SUPPORT FACILITY (ISF): No FY01 funding requested.

25. SPARE PARTS PRODUCTION AND REPROCUREMENT SYSTEM (SPARES): Funds for this project were added by Congress in the FY00 markup of the FY00 Air Force budget. Reference Appropriation Conference Report 106-371, October 8, 1999, page 198. FY99 funding was also added by Congress. Reference Appropriation Conference Report 105-746, September 25, 1998, page 124. No FY01 funding requested.

26. AUTOMATED LOGISTICS MANAGEMENT AND SUPPORT SYSTEM (ALMSS): No FY01 funding requested.

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Description (cont.):

27. NATIONAL AIR AND SPACE MODEL (NASM): NASM is the USAF Modeling and Simulation (M&S) program to develop the aerospace portion of the Joint Simulation System (JSIMS). NASM will ensure the full range of aerospace roles and missions are accurately represented in JSIMS, including strategic and cascading effects. JSIMS will be the sole readiness training simulation used at service/joint simulation centers to train CINCS, Joint Task Force commanders, component commanders, and their staffs. FY99 funds provide equipment, installation and checkout of commercial-off-the-shelf (COTS) hardware required for the Software Support Facility (SSF) at the Air Force Agency for Modeling & Simulation (AFAMS), Orlando, FL. FY00/01 funds will provide processors, workstations, local network upgrades, simulation security hardware and test stations required at the Command and Control Training and Innovation Group (C2TIG), Hurlburt AFB, FL and the Warrior Preparation Center (WPC) in Einesiedlerhof, Germany. C2TIG and WPC requires this hardware to run JSIMS software in support of joint and AF operational training events.

28. EXPEDITIONARY FORCE EXPERIMENT: No FY01 funding requested.

29. INTEGRATED MAINTENANCE DATA SYSTEM (IMDS): IMDS is an integrated information system for aircraft maintenance and communications-electronics. It will replace numerous legacy systems and interface with many others, cutting across multiple functions to provide the maintainers the ability to obtain the required information supporting their daily maintenance activities. Managers and commanders will be able to retrieve real-time equipment status from a single system instead of several. All IMDS data will be stored and processed via a central server located at Maxwell Air Force Base, Gunter Annex, AL. FY00-01 funding purchases computer hardware, local area networks and servers in support of operation, test, and evaluation of IMDS. FY00 funds also provide software licenses. FY00/01 IMDS funding was realigned from Base Level Data Automation Program (BLDA), P-1 line 56,to improve resource management.

<u>AIR FORCE OFFICE OF SPECIAL INVESTIGATIONS (AFOSI)</u>

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Description (cont.):

30. AFOSI COMPUTER NETWORK: No FY01 funding requested.

AIR FORCE PERSONNEL CENTER (AFPC)

31. PERSONNEL DATA SYSTEM (PDS): PDS encompasses personnel data processing from all current Active, Guard, and Reserve units. FY00/01 funding upgrades PDS by replacing two tiers of the legacy PDS systems, consolidating two mainframe computing environments into a client-server, relational database system incorporating state-of-the-art transaction processing and reporting database technology.

32. REGIONALIZATION OF CIVILIAN PERSONNEL SUPPORT: FY99-01 funding continues to support the Regionalization of the civilian personnel operations. The Air Force must provide the hardware and connectivity support to implement the Defense Civilian Personnel Data System. Funds provide computer hardware (microcomputers, servers, printers, storage devices, networking support, associated peripheral devices, and associated software) to establish the center and outfit installation-level Civilian Personnel Flights (CPFs) with critically-required remote access capabilities. There are 97 sites worldwide that will require the hardware and connectivity support necessary to implement the system. The equipment will support electronic records management systems, Functional Process Improvements (FPIs), and electronic management of Official Personnel Folders (OPFs).

US AIR FORCE ACADEMY (USAFA)

33. AIR FORCE ACADEMY COMPUTER SUPPORT: FY99-01 funding continues the modernization of the Cadet Administrative Management Information System (CAMIS) from the legacy platform to an upgraded platform supporting migration to Windows NT. CAMIS supports all facets of student management.

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Description (cont.):

UNITED STATES AIR FORCES EUROPE (USAFE)

34. INTELLIGENCE AUTOMATIC DATA PROCESSING EQUIPMENT (ADPE): This project provides continued equipment upgrades for USAFE intelligence ADP systems and communications networks. FY99-01 funds will upgrade the ADPE needed in support of analysis and dissemination of intelligence to aircrews for mission planning throughout the USAFE area of responsibility directly supporting combat/crisis/peacekeeping operations.

35. WARRIOR PREPARATION CENTER (WPC): The WPC provides senior battle commanders and their staff the opportunity to train at the operational level of war using interactive computer simulations that replicate as closely as possible, the real-world environment. The WPC extends this training opportunity to our NATO allies. Additionally, WPC supports real-world operations such as Operation Joint Endeavor as well as exercise requirements in remote areas such as Turkey. The WPC's robust training schedule consists of 10-12 exercises/computer assisted events per year, including some world-wide exercises involving up to 9000 personnel. A large portion of WPC workstations, terminals and peripherals are nearing the end of their life cycle and have become too costly to repair. FY99-01 funds continue procurement of simulation workstations, terminal and peripheral equipment to meet USAFE mission needs.

US SPACE COMMAND (USSPACECOM)

36. PETERSON AFB COMPUTER SUPPORT (Formerly REFACILITATION): FY00/01 funds will procure computer hardware and associated engineering, integration, and installation support for the new USSPACECOM Headquarters facility at Peterson AFB, CO. FY00/01 funds will also provide network servers, command and control consoles, video teleconferencing capabilities, and general automation needs.

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Description (cont.):

US STRATEGIC COMMAND (USSTRATCOM)

37. COMMAND MANAGEMENT LAN NETWORK INFRASTRUCTURE: The USSTRATCOM unclassified and classified Command Management Local Area Network (CM LAN) provides all HQ USSTRATCOM users a standard suite of software applications. FY99-01 funding continues infrastructure and component upgrades for network file servers, mail servers, and printer servers; stratus servers and Standard Query Language (SQL) servers; and gateways, hubs, routers and other associated network peripherals.

AIR FORCE WIDE (MULTIPLE COMMANDS)

38. BATTLELAB COLLABORATIVE NETWORK: Funds for this project were added by Congress in the FY00 markup of the FY00 Air Force budget. Reference Appropriation Conference Report 106-371, October 8, 1999, page 198. FY99 funding was also added by Congress. Reference Appropriation Conference Report 105-746, September 25, 1998, page 124. FY99/00 funds provide the six Air Force battlelabs a collaborative network that allows modeling and simulation information; collaborative computing, and other information; and databases to be shared amongst themselves, creating a virtual battlelab environment (VBE). A VBE is essential to realize the full capability of information sharing and initiative collaboration between battlelabs. No FY01 funding requested.

BUDGET ITEM JUSTIFICATION FOR AGGREGATED ITEMS (EXHIBIT P- 40A)	DATE: FEBRUARY 2000
APPROP CODE/BA: OPAF/ELECTRONICS & TELECOMMUNICATION EQUIPMENT	**P-1 NOMENCLATURE:** AUTOMATIC DATA PROCESSING EQUIPMENT

PROCUREMENT ITEMS	ID CODE			FY1999		FY2000		FY2001	
		QTY.	COST	QTY.	COST	QTY.	COST	QTY.	COST
11SPTW					${10,326}		${23,703}		${12,887}
1. HQS IT INVESTMENT	A				$6,298		$8,779		$9,106
2. HQS MAINFRAME SYS SPT	A				$3,248		$3,228		$3,268
3. NMCC	A				$780		$378		$513
4. TC-AIMS II	A						$11,318		
ACC					${241}		${617}		${629}
5. BASE OPERATIONS	A				$241		$617		$629
AETC					${6,466}		${8,292}		${17,565}
6. ATS	A				$697				
7. AFIT EARS	A				$536		$601		$608
8. EDUCATION AND TRAINING TECH APPLICATIONS PRGM	A				$1,487		$1,891		$1,916
9. 333TS TECH REFRESH/EXPANSION	A				$407		$573		$433
10. INTELLIGENCE TRAINING	A								$9,445
11. OTS AUDIOVISUAL SYSTEM	A				$1,439				
12. AU	A						$1,133		$1,129
13. AFRISS	A						$4,094		$4,034
14. AWACS	A				$1,900				

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PROCUREMENT ITEMS	ID CODE			FY1999		FY2000		FY2001	
		QTY.	COST	QTY.	COST	QTY.	COST	QTY.	COST
AFCA							${2,577}		${4,546}
15. KEESLER COMPUTER NETWORK TRAINING	A						$2,577		$4,546
AFCQMI									${947}
16. MDS	A								$947
AFMC					${9,906}		${23,114}		${12,077}
17. CEMS	A				$170		$208		$217
18. ESIP	A				$2,356		$2,235		$2,266
19. F-117A TDPS	A								$2,377
20. EDIS	A						$551		$567
21. WSMIS	A				$566		$620		$640
22. TAILORED INTELLIGENCE MATERIALS PRODUCTION PRGM	A				$541		$596		$619
23. RSC/CERES UPGRADES	A				$175		$190		$212
24. EMBEDDED COMPUTER SYSTEM ISF	A				$653				
25. SPARES	A				$3,000		$6,000		
26. ALMSS SUPPORT	A				$580				
27. NATIONAL AIR AND SPACE MODEL (NASM)	A				$1,230		$655		$2,559
28. EXPEDITIONARY FORCE EXPERIMENT	A				$635				

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PROCUREMENT ITEMS	ID CODE			FY1999		FY2000		FY2001	
		QTY.	COST	QTY.	COST	QTY.	COST	QTY.	COST
29. INTEGRATED MAINTENCE DATA SYSTEM (IMDS)(1)							$12,059		$2,620
AFOSI					${482}				
30. AFOSI COMPUTER NETWORK	A				$482				
AFPC					${3,446}		${8,556}		${8,743}
31. PDS	A						$978		$991
32. REGIONALIZATION OF CIVILIAN PERSONNEL SPT	A				$3,446		$7,578		$7,752
USAFA					${2,366}		${3,147}		${2,643}
33. USAFA COMPUTER SPT	A				$2,366		$3,147		$2,643
USAFE					${761}		${776}		${880}
34. INTELLIGENCE ADPE	A				$293		$260		$337
35. WPC	A				$468		$516		$543
USSPACECOM							${7,346}		${13,270}
36. PETERSON AFB COMPUTER SUPPORT	A						$7,346		$13,270

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PROCUREMENT ITEMS	ID CODE			FY1999		FY2000		FY2001	
		QTY.	COST	QTY.	COST	QTY.	COST	QTY.	COST
USSTRATCOM					${516}		${641}		${584}
37. COMMAND MANAGEMENT LAN NETWORK INFRASTRUCTURE	A				$516		$641		$584
AF-WIDE (MULTIPLE COMMANDS)					${3,000}		${3,000}		
38. BATTLELAB COLLABORATIVE NETWORK	A				$3,000		$3,000		
Totals:					$37,510		$81,769		$74,771

Remarks:

(1) Beginning in FY00, IMDS funding was realigned from BLDA, P-1 line 56.

BUDGET PROCUREMENT HISTORY PLANNING (EXHIBIT P- 5A)	DATE: FEBRUARY 2000
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ITEM / FISCAL YEAR	QTY.	UNIT COST	LOCATION OF PCO	CONTRACT METHOD & TYPE	CONTRACTOR AND LOCATION	AWD. DATE	DATE FIRST DEL.	SPECS AVAIL NOW	DATE REV. AVAIL
11SPTW(1)									
1. HQS IT INVESTMENT									
FY99			11WING	C/FP	MULTIPLE(2)	MAR 99	JUN 99		
FY00			11WING	C/FP	MULTIPLE(2)	MAR 00	JUN 00	Y	
FY01			11WING	C/FP	MULTIPLE(2)	MAR 01	JUN 01	Y	
2. HQS MAINFRAME SYS SPT									
FY99			11WING	C/FP	MULTIPLE(2)	MAR 99	JUL 99		
FY00			11WING	C/FP	MULTIPLE(2)	MAR 00	JUL 00	Y	
FY01			11WING	C/FP	MULTIPLE(2)	MAR 01	JUL 01	Y	
3. NMCC									
FY99			11WING	C/FP	MULTIPLE(2)	FEB 99	JUN 99		
FY00			11WING	C/FP	MULTIPLE(2)	JAN 00	MAY 00		
FY01			11WING	C/FP	MULTIPLE(2)	JAN 01	MAY 01	Y	

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ITEM / FISCAL YEAR	QTY.	UNIT COST	LOCATION OF PCO	CONTRACT METHOD & TYPE	CONTRACTOR AND LOCATION	AWD. DATE	DATE FIRST DEL.	SPECS AVAIL NOW	DATE REV. AVAIL
4. TC-AIMS II									
FY00			11WING	C/FP	MULTIPLE(2)	JUN 00	AUG 00	Y	
ACC(1)									
5. BASE OPERATIONS									
FY99			HQ ACC	C/FP	MULTIPLE(2)	MAY 99	AUG 99		
FY00			HQ ACC	C/FP	MULTIPLE(2)	MAY 00	AUG 00	Y	
FY01			HQ ACC	C/FP	MULTIPLE(2)	MAY 01	AUG 01	Y	
AETC(1)									
6. ATS									
FY99			HQ AETC	C/FP	MULTIPLE(2)	MAR 99	MAY 99		
7. AFIT EARS									
FY99			AFMC/ASC	C/FP	MULTIPLE(2)	FEB 99	APR 99		
FY00			AFMC/ASC	C/FP	MULTIPLE(2)	FEB 00	APR 00	Y	
FY01			AFMC/ASC	C/FP	MULTIPLE(2)	FEB 01	APR 01	Y	

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ITEM / FISCAL YEAR	QTY.	UNIT COST	LOCATION OF PCO	CONTRACT METHOD & TYPE	CONTRACTOR AND LOCATION	AWD. DATE	DATE FIRST DEL.	SPECS AVAIL NOW	DATE REV. AVAIL
8. EDUCATION AND TRAINING TECH APPLICATIONS PRGM									
FY99			HQ AETC	C/FP	MULTIPLE(2)	FEB 99	APR 99		
FY00			HQ AETC	C/FP	MULTIPLE(2)	JAN 00	MAR 00		
FY01			HQ AETC	C/FP	MULTIPLE(2)	JAN 01	MAR 01	Y	
9. 333TS TECH REFRESH/EXPANSION									
FY99			HQ AETC	C/FP	MULTIPLE(2)	FEB 99	MAY 99		
FY00			HQ AETC	C/FP	MULTIPLE(2)	FEB 00	MAY 00	Y	
FY01			HQ AETC	C/FP	MULTIPLE(2)	FEB 01	MAY 01	Y	
10. INTELLIGENCE TRAINING									
FY01			HQ AETC	C/FP	MULTIPLE(2)	JAN 01	MAR 01	Y	
11. OTS AUDIOVISUAL SYSTEM									
FY99			HQ AETC	C/FP	MULTIPLE(2)	JUL 99	DEC 99		

BUDGET PROCUREMENT HISTORY PLANNING (EXHIBIT P- 5A)	DATE: FEBRUARY 2000
APPROP CODE/BA: OPAF/ELECTRONICS & TELECOMMUNICATION EQUIPMENT	**P-1 NOMENCLATURE:** AUTOMATIC DATA PROCESSING EQUIPMENT

ITEM / FISCAL YEAR	QTY.	UNIT COST	LOCATION OF PCO	CONTRACT METHOD & TYPE	CONTRACTOR AND LOCATION	AWD. DATE	DATE FIRST DEL.	SPECS AVAIL NOW	DATE REV. AVAIL
12. AU									
FY00			HQ AETC	C/FP	MULTIPLE(2)	DEC 99	FEB 00		
FY01			HQ AETC	C/FP	MULTIPLE(2)	NOV 00	JAN 01	Y	
13. AFRISS									
FY00			HQ AETC	C/FP	MULTIPLE(2)	JAN 00	MAR 00		
FY01			HQ AETC	C/FP	MULTIPLE(2)	JAN 01	MAR 01	Y	
14. AWACS									
FY99			HQ AETC	DO/CPFF	SOUTHWEST RESEARCH INSTITUTE SAN ANTONIO, TX	JAN 99	JUN 00		
AFCA(1)									
15. KEESLER COMPUTER NETWORK TRAINING									
FY00			HQ AFCA	C/FP	MULTIPLE(2)	JAN 00	MAR 00		
FY01			HQ AFCA	C/FP	MULTIPLE(2)	JAN 01	MAR 01	Y	

BUDGET PROCUREMENT HISTORY PLANNING (EXHIBIT P- 5A)	DATE: FEBRUARY 2000
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ITEM / FISCAL YEAR	QTY.	UNIT COST	LOCATION OF PCO	CONTRACT METHOD & TYPE	CONTRACTOR AND LOCATION	AWD. DATE	DATE FIRST DEL.	SPECS AVAIL NOW	DATE REV. AVAIL
AFCQMI(1)									
16. MDS									
FY01			11WING	C/FP	MULTIPLE(2)	JAN 01	MAR 01	Y	
AFMC(1)									
17. CEMS									
FY99			AFMC/SA-ALC	DO/FP	DELL COMPUTERS, AUSTIN, TX	APR 99	JUN 99		
FY00			AFMC/SA-ALC	DO/FP	DELL COMPUTERS, AUSTIN, TX	MAR 00	MAY 00	Y	
FY01			AFMC/OC-ALC	DO/FP	DELL COMPUTERS, AUSTIN, TX	MAR 01	MAY 01	Y	
18. ESIP									
FY99			AFMC/ASC	DO/CPFF	MULTIPLE(3)	FEB 99	JUN 99		
FY00			AFMC/ASC	DO/CPFF	MULTIPLE(3)	MAR 00	AUG 00	Y	
FY01			AFMC/ASC	DO/CPFF	MULTIPLE(3)	MAR 01	AUG 01	Y	

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ITEM / FISCAL YEAR	QTY.	UNIT COST	LOCATION OF PCO	CONTRACT METHOD & TYPE	CONTRACTOR AND LOCATION	AWD. DATE	DATE FIRST DEL.	SPECS AVAIL NOW	DATE REV. AVAIL
19. F-117A TDPS									
FY01			AFMC/ASC	MIPR/CPFF	ARMY/UNKNOWN	NOV 00	NOV 01	Y	
20. EDIS									
FY00			AFMC/ASC	C/FFP	UNKNOWN	APR 00	JUN 00	Y	
FY01			AFMC/ASC	C/FFP	UNKNOWN	MAR 01	MAY 01	Y	
21. WSMIS									
FY99			AFMC/ASC	MIPR/FFP	DISA/DMC, DAYTON WPAFB, OH(4)	FEB 99	APR 99		
FY00			AFMC/ASC	MIPR/FFP	DISA/DMC, DAYTON WPAFB, OH(4)	FEB 00	APR 00	Y	
FY01			AFMC/ASC	MIPR/FFP	DISA/DMC, DAYTON WPAFB, OH(4)	FEB 01	APR 01	Y	
22. TAILORED INTELLIGENCE MATERIALS PRODUCTION PRGM									
FY99			AFMC/OO-ALC	C/FP	WORLD WIDE TECHNOLOGY, INC. ST LOUIS, MO	MAY 99	JUL 99		

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ITEM / FISCAL YEAR	QTY.	UNIT COST	LOCATION OF PCO	CONTRACT METHOD & TYPE	CONTRACTOR AND LOCATION	AWD. DATE	DATE FIRST DEL.	SPECS AVAIL NOW	DATE REV. AVAIL
FY00			AFMC/OO-ALC	C/FP	UNKNOWN	FEB 00	APR 00	Y	
FY01			AFMC/OO-ALC	C/FP	UNKNOWN	FEB 01	APR 01	Y	
23. RSC/CERES UPGRADES									
FY99			AFMC/SMC	OPT/CPAF	LMWDL, ALBUQUERQUE, NM(5)	JUN 99	JUL 99		
FY00			AFMC/SMC	OPT/CPAF	LMWDL, ALBUQUERQUE, NM(5)	JAN 00	MAR 00		
FY01			AFMC/SMC	OPT/CPAF	LMWDL, ALBUQUERQUE, NM(5)	JAN 01	MAR 01	Y	
24. EMBEDDED COMPUTER SYSTEM ISF									
FY99			AFMC/SA-ALC	DO/FP	MICRON INC, NAMPA, IN	MAR 99	MAY 99		
25. SPARES									
FY99			AFMC/OO-ALC	DO/OTH (6)	GENERAL ATOMICS, SAN DIEGO, CA	AUG 99	SEP 99		
FY00			AFMC/OO-ALC	DO/OTH (6)	GENERAL ATOMICS, SAN DIEGO, CA	APR 00	MAY 00		
26. ALMSS SUPPORT									
FY99			AFMC/WR-ALC	DO/IDIQ	IBM, BETHESDA, MD	FEB 99	MAR 99		

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ITEM / FISCAL YEAR	QTY.	UNIT COST	LOCATION OF PCO	CONTRACT METHOD & TYPE	CONTRACTOR AND LOCATION	AWD. DATE	DATE FIRST DEL.	SPECS AVAIL NOW	DATE REV. AVAIL
27. NATIONAL AIR AND SPACE MODEL (NASM)									
FY99			AFMC/ESC	OPT/CPFF	RAYTHEON, MARLBOROUGH, MA (7)	SEP 99	APR 00		
FY00			AFMC/ESC	OPT/CPFF	RAYTHEON, MARLBOROUGH, MA (7)	OCT 99	DEC 99		
FY01			AFMC/ESC	OPT/CPFF	RAYTHEON, MARLBOROUGH, MA (7)	OCT 00	DEC 00	Y	
28. EXPEDITIONARY FORCE EXPERIMENT									
FY99			AFMC/ESC	OPT/FFP	MULTIPLE(8)	JUL 99	SEP 99		
29. INTEGRATED MAINTENCE DATA SYSTEM (IMDS) (9)									
FY00			AFMC/SSG	OPT/FP	MULTIPLE(2)	NOV 99	APR 00		
FY01			AFMC/SSG	OPT/FP	MULTIPLE(2)	FEB 01	APR 01	Y	
AFOSI(1)									
30. AFOSI COMPUTER NETWORK									

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ITEM / FISCAL YEAR	QTY.	UNIT COST	LOCATION OF PCO	CONTRACT METHOD & TYPE	CONTRACTOR AND LOCATION	AWD. DATE	DATE FIRST DEL.	SPECS AVAIL NOW	DATE REV. AVAIL
FY99			11WING	C/FP	TECH COMM CORP, CONCORD, MA	FEB 99	APR 99		
AFPC(1)									
31. PDS									
FY00			HQ AFPC	OPT/FP	MULTIPLE(10)	NOV 99	APR 00		
FY01			HQ AFPC	OPT/FP	MULTIPLE(10)	NOV 00	APR 01	Y	
32. REGIONALIZATION OF CIVILIAN PERSONNEL SPT									
FY99			HQ AFPC	OPT/FP	MULTIPLE(10)	FEB 99	APR 99		
FY00			HQ AFPC	OPT/FP	MULTIPLE(10)	NOV 99	JAN 00		
FY01			HQ AFPC	OPT/FP	MULTIPLE(10)	NOV 00	JAN 01	Y	
USAFA(1)									
33. USAFA COMPUTER SPT									
FY99			HQ USAFA	C/FP	MULTIPLE(2)	MAR 99	MAY 99		
FY00			HQ USAFA	C/FP	MULTIPLE(2)	FEB 00	APR 00	Y	
FY01			HQ USAFA	C/FP	MULTIPLE(2)	FEB 01	APR 01	Y	

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ITEM / FISCAL YEAR	QTY.	UNIT COST	LOCATION OF PCO	CONTRACT METHOD & TYPE	CONTRACTOR AND LOCATION	AWD. DATE	DATE FIRST DEL.	SPECS AVAIL NOW	DATE REV. AVAIL
USAFE(1)									
34. INTELLIGENCE ADPE									
FY99			HQ USAFE	C/FP	MULTIPLE(2)	FEB 99	MAY 99		
FY00			HQ USAFE	C/FP	MULTIPLE(2)	FEB 00	MAY 00	Y	
FY01			HQ USAFE	C/FP	MULTIPLE(2)	FEB 01	MAY 01	Y	
35. WPC									
FY99			HQ USAFE	OPT/FP	GTE, WARNER-ROBINS, GA (11)	FEB 99	MAY 99		
FY00			HQ USAFE	OPT/FP	GTE, WARNER-ROBINS, GA (11)	FEB 00	MAY 00	Y	
FY01			HQ USAFE	OPT/FP	GTE, WARNER-ROBINS, GA (11)	FEB 01	MAY 01	Y	
USSPACECOM(1)									
36. PETERSON AFB COMPUTER SUPPORT									
FY00			HQ AFSPC	C/FP	MULTIPLE(2)	JAN 00	MAR 00		
FY01			HQ AFSPC	C/FP	MULTIPLE(2)	JAN 01	MAR 01	Y	

BUDGET PROCUREMENT HISTORY PLANNING (EXHIBIT P- 5A)	DATE: FEBRUARY 2000
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ITEM / FISCAL YEAR	QTY.	UNIT COST	LOCATION OF PCO	CONTRACT METHOD & TYPE	CONTRACTOR AND LOCATION	AWD. DATE	DATE FIRST DEL.	SPECS AVAIL NOW	DATE REV. AVAIL
USSTRATCOM(1)									
37. COMMAND MANAGEMENT LAN NETWORK INFRASTRUCTURE									
FY99			USSTRATCOM	C/FP	MULTIPLE(2)	FEB 99	MAR 00		
FY00			USSTRATCOM	C/FP	MULTIPLE(2)	FEB 00	MAR 00	Y	
FY01			USSTRATCOM	C/FP	MULTIPLE(2)	FEB 01	MAR 01	Y	
AF-WIDE (MULTI CMDS)(1)									
38. BATTLELAB COLLABORATIVE NETWORK									
FY99			11WING	OPT/FP	MULTIPLE(12)	FEB 99	MAR 99		
FY00			11WING	OPT/FP	MULTIPLE(12)	MAR 00	APR 00		

REMARKS:

1. Quantities and costs vary for each program based on location and configuration.

2. Multiple GSA schedule contractors, including Electronic Data Systems (EDS), Herndon, VA; General Analytics Corp, McLean, VA; HSF Inc, McLean, VA; GTE, West Lake, CA; IBM, Bethesda, MD; PRC, San Antonio, TX; Toshiba American, Irvine, CA; FGM Inc, Herndon, VA; Computer Science Corp

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ITEM / FISCAL YEAR	QTY.	UNIT COST	LOCATION OF PCO	CONTRACT METHOD & TYPE	CONTRACTOR AND LOCATION	AWD. DATE	DATE FIRST DEL.	SPECS AVAIL NOW	DATE REV. AVAIL

(CSC), Hanover, MD; Systems Research & Applications (SRA), Arlington, VA; and Logicon Tech, San Pedro, CA. Award/delivery dates reflect date of first award and delivery.

3. Delivery order options to FY96 cost plus fixed fee contracts awarded in Jun 1996 to Scientific Applications Corp (SAIC), San Diego, CA and in Sep 1996 to TRW, Dayton, OH.

4. AFMC contracts through Defense Information System Agency (DISA)/Defense Mega Center (DMC) to General Services Administration (GSA), Washington, DC.

5. Option to 1996 cost plus award fee contract (CPAF) awarded to Lockheed Martin Western Development Laboratory (LMWDL), Albuqerque, NM.

6. Time and materials contract. Basic contract awarded Sep 97. Delivery dates reflect date of first delivery.

7. Cost plus fixed fee options to basic contract awarded Mar 97. Award/delivery dates reflect date of first award and delivery.

8. Options to multiple existing contracts. Award/delivery dates reflect date of first award and delivery.

9. IMDS FY99 contractual information is reflected in BLDA, P-1 Line 56.

10. Options to multiple standard contracts including Desktop IV, Ulana, Super-Mini, Standard Multiuser Small Computer Requirements Contract (SMSCRC).

11. Option to basic GTE contract awarded in Feb 97.

12. Options to multiple standard contracts with Autometric, Inc, Springfield, VA; and Concurrent Technology Corp, Johnstown, PA. Award/delivery dates reflect date of first award and delivery.

BUDGET ITEM JUSTIFICATION (EXHIBIT P-40)	DATE: FEBRUARY 2000
APPROP CODE/BA: OPAF/ELECTRONICS & TELECOMMUNICATION EQUIPMENT	**P-1 NOMENCLATURE:** AIR FORCE GLOBAL COMMAND & CONTROL SYSTEM

		FY1999	FY2000	FY2001	FY2002	FY2003	FY2004	FY2005
QUANTITY								
COST (in Thousands)		$4,436	$5,672	$14,753	$15,083	$15,365	$21,617	$22,011

Description:

The Air Force Global Command & Control System (AFGCCS) program provides the common Air Force infrastructure necessary to pass Air Force command and control (C2) data among commands, their components, and the joint Global Command and Control System (GCCS). This program procures GCCS networking components, servers, workstations, and associated peripherals; and integrates GCCS at the following locations to establish initial and full operational capability: Air Force supported Commander-In-Chiefs (CINCs), Headquarters United States Air Force (HQ USAF), Major Command (MAJCOM) headquarters, Numbered Air Forces, Wings, Air National Guard (ANG) bases, Air Force Reserve (AFR) bases and remote sites. The FY01 increase in funding will be used to procure required software licenses and maintenance agreements. This program provides a flexible open-system, distributed C2 architecture necessary to support the client/server-based Department of Defense (DoD) GCCS. Items requested in FY01 are identified on the attached P-40A and are representative of items to be procured. Items procured during execution may change based on critical equipment needed to support current Air Force mission requirements.

1. AIR FORCE SYSTEMS NETWORKING (AFSN): AFSN was previously called the Air Force Command and Control Network (AFC2N). AFSN prepares a site for GCCS operations by installing and upgrading a site's classified C2 network through extensive use of commercial-off-the-shelf (COTS) technology that adheres to the Air Force command, control, communications and computer (AFC4) building codes and standards. The classified communications infrastructure of the MAJCOM C2 facilities, e.g., command posts, will be modernized by installing state-of-the-art networking components for improved interoperability, data throughput, and system security. Each site will comply with current Air Force and DoD network initiatives by employing a standardized interface among Air Force base level classified C2 networks, Air Force base level network control centers, and the joint Deployable Information Systems Architecture (DISA) Secret Internet Protocol

BUDGET ITEM JUSTIFICATION (EXHIBIT P-40)	DATE: FEBRUARY 2000
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Description (cont.):

Network (SIPRNET). FY99-01 funds will be used to install SIPRNET connections at 50 units each year. Equipment purchased includes COTS routers, router cards, cryptologic equipment, modems, cabinets, containers, hubs to connect terminals, and installation supplies.

2. AF GLOBAL COMMAND AND CONTROL SYSTEM (AFGCCS) MODERNIZATION: This funding procures and installs AFGCCS at required AF supported CINCs, active Air Force, ANG and AFR sites. It also upgrades or replaces C2 communications and computer systems to modernize logistically unsupportable MAJCOM C2 systems and capitalize on AFSN and AFGCCS improvements.

- FY99 funds procured initial network infrastructure for multiple new sites, continued fielding of GCCS hardware at MAJCOM and ANG locations; expanded the GCCS architecture to include new functional users on each base; and provided initial technical refreshment of fielded hardware.

- FY00/01 funds initial network infrastructure for multiple new sites, continues fielding of GCCS hardware at MAJCOM, ANG and AFR locations, expands the GCCS architecture to include new functional users on each base, and provides initial technical refreshment of fielded hardware. Additional funds in FY01 will also be used to procure software licenses and maintenance agreements.

BUDGET ITEM JUSTIFICATION FOR AGGREGATED ITEMS (EXHIBIT P- 40A)	DATE: FEBRUARY 2000
APPROP CODE/BA: OPAF/ELECTRONICS & TELECOMMUNICATION EQUIPMENT	**P-1 NOMENCLATURE:** AIR FORCE GLOBAL COMMAND & CONTROL SYSTEM

PROCUREMENT ITEMS	ID CODE	FY1999		FY2000		FY2001	
		QTY.	COST	QTY.	COST	QTY.	COST	QTY.	COST
1. AFSN	A				$1,738		$1,114		$562
2. AFGCCS MODERNIZATION	A				$2,698		$4,558		$14,191
Totals:					$4,436		$5,672		$14,753

Remarks:

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APPROP CODE/BA: OPAF/ELECTRONICS & TELECOMMUNICATION EQUIPMENT	**P-1 NOMENCLATURE:** AIR FORCE GLOBAL COMMAND & CONTROL SYSTEM

ITEM / FISCAL YEAR	QTY.	UNIT COST	LOCATION OF PCO	CONTRACT METHOD & TYPE	CONTRACTOR AND LOCATION	AWD. DATE	DATE FIRST DEL.	SPECS AVAIL NOW	DATE REV. AVAIL
1. AFSN (1)									
FY99			AFMC/ESC	OPT/FP(2)	MULTIPLE	OCT 98	DEC 98		
FY00			AFMC/ESC	OPT/FP(2)	MULTIPLE	OCT 99	DEC 99		
FY01			AFMC/ESC	OPT/FP(2)	MULTIPLE	OCT 00	DEC 00	Y	
2. AFGCCS MODERNIZATION (1)									
FY99			AFMC/ESC	MIPR/IDIQ	GSA, KANSAS CITY, MO (3)	JAN 99	APR 99		
FY00			AFMC/ESC	MIPR/IDIQ	GSA, KANSAS CITY, MO (3)	JAN 00	APR 00		
FY01			AFMC/ESC	MIPR/IDIQ	GSA, KANSAS CITY, MO (3)	JAN 01	APR 01	Y	

REMARKS:

1. Quantity and unit costs vary due to different types/configuations of equipment being procured.
2. Option to Ulana II contract. Contractors are TRW, Carson, CA; EDS, Herndon, VA; World Wide Technology, St. Louis, MO; Mykotronix, Torrance, CA. Award/delivery dates reflect date of first award and delivery.
3. Multipe GSA contracts utilized: TRW, Carson, CA; EDS, Herndon, VA; World Wide Technology, St Louis, MO; and Mykotronix, Torrance, CA. Award/delivery dates reflect date of first award and delivery.

BUDGET ITEM JUSTIFICATION (EXHIBIT P-40)	DATE: FEBRUARY 2000
APPROP CODE/BA: OPAF/ELECTRONICS & TELECOMMUNICATION EQUIPMENT	**P-1 NOMENCLATURE:** MOBILITY COMMAND AND CONTROL

		FY1999	FY2000	FY2001	FY2002	FY2003	FY2004	FY2005
QUANTITY								
COST (in Thousands)		$8,128	$10,275	$8,495	$8,827	$9,134	$9,325	$9,488

Description:

Air Mobility Command (AMC) supports national power projection force deployments and time sensitive logistics requirements. To perform this mission, AMC requires an effective mobility command and control (C2) system that provides for efficient centralized management of the entire US strategic mobility fleet. Base command, control, communications and computer (C4) infrastructure provide the fiber optical backbone for base-wide multi-media connectivity to accomplish AMC's strategic missions. Items requested in FY01 are identified on the attached P-40A and are representative of items to be procured. Items procured during execution may change based on critical equpment needed to support current Air Force mission requirements.

1. GLOBAL C2 ARCHITECTURE: These funds continue AMC's integrated upgrade of C2 systems. The following are the specific details of FY99-01 AMC procurement:

a. OBJECTIVE WING COMMAND POST (OWCP): OWCP funding provides for standardization and upgrades to all AMC wing-level C4 systems and enroute C2 center functions. Currently, a typical AMC base has several round-the-clock C2 center functions, each occupying a different facility on the base (e.g., aerial port terminal operations, maintenance control, mobility operations, airfield operations, etc.). At each of the 24 mobility bases, the OWCP will standardize and upgrade C4 systems to facilitate the consolidation of C2 functions into one central C2 facility. The two major subprograms are the Air Mobility Advanced Console System (AMACS) which upgrades telephone/radio capability and the Closed Circuit Flightline Video (CCFV) which installs a flightline video camera systems. FY99 funding procured two CCFV systems. FY00 funding provides AMACS for two sites and two flight line video upgrades. FY01 funds will procure CCFV for three sites.

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Description (cont.):

b. LOCAL AREA NETWORK (LAN): FY99-01 funding continues procurement of network equipment at each AMC base/unit to build an enhanced, robust and reliable command-wide intra-building networking infrastructure. This infrastructure will host critical Air Force systems such as the Defense Message System (DMS), Combat Information Transport System (CITS), Base Level Systems Modernization, and other AMC systems such as Command and Control Information Processing System (C2IPS), OWCP, etc. Upgrades keep pace with changing technology by constantly reassessing the needs of the war-fighter and obtaining the necessary LAN infrastructure needed to sustain current capabilities and implement new C2 systems.

c. ADVANCED COMPUTER FLIGHT PLAN (ACFP): The ACFP is a user-friendly, menu-driven, computer-generated flight planning C2 system, used to generate wind optimized flight plans for all MAJCOMs. FY99 funding upgraded the hardware platform to support a more robust database for improved interoperability with other AMC managed C2 programs. Funding also procured hardware with necessary operating system software and the associated warranties. FY00 funding continues hardware platform upgrades to increase processing speeds for increased user loads. FY01 funding will provide increased 3-dimensional optimization capabilities.

d. DEPLOYED SATELLITE COMMUNICATIONS (DSATCOM): The DSATCOM program constitutes the primary acquisition support vehicle for deployed AMC Tanker Airlift Control Element (TALCE) and Mission Support Team (MST) C2 operations. The program consists of various procurements to enhance initial and intra-theater deployed voice and data communications connectivity. Resources directly support C2 of, and in-transit visibility over, deployed and en-route personnel, aircraft, and cargo. FY99 funds procured new lightweight, high data rate, super high frequency (SHF) SATCOM terminals, associated modem equipment, and Deployable, Rapidly Assembled Shelter (DRASH) systems. Additionally, FY99 funds integrated new ultra high frequency (UHF) demand assigned multiple access (DAMA) SATCOM radios into AMC Mobile Air Reporting and Communications (MARC) shelter systems. FY00 funds continue the procurement of Tri-band SHF SATCOM and DRASH systems and begin the integration of SHF SATCOM into MARC shelters. FY01 funds complete procurement of SHF SATCOM and DRASH shelters, integrate remaining SHF SATCOM systems into MARC shelters, and upgrade existing MARC local area network (LAN)

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Description (cont.):
systems. Additionally, FY01 funds will procure and integrate new audio and data switching equipment into the TALCE MARC shelters.

2. AIR FORCE SPECIAL OPERATIONS COMMAND (AFSOC) TACTICAL COMMAND AND CONTROL (TAC C2) PROGRAM: The AFSOC TAC C2 Program provides funds for the purchase of new and enhanced communications systems and equipment essential for Special Tactics Teams (STT) (including pararescue) to provide C2 to the furthest reaching elements of AFSOC's C2 structure. STTs input intelligence, weather and assault zone assessments into AFSOC's C2 network and receive/relay mission taskings. As the forward site C2 and air traffic control element, STTs provide the DoD with the flexibility to conduct airdrops, assault landings and use austere airfields. FY00/01 funds will procure multiple devices to support STT missions: (1) UHF SATCOM radios which meet Joint Chiefs of Staff mandated narrowband and DAMA standards; (2) new high frequency portable radios with automatic link establishment to allow communications within the AFSOC's C2 network in the automatic mode; and (3) Multiband, Multimode Beacons, which guide aircraft to drop zones, landing zones, or extraction zones to support combat operations.

BUDGET ITEM JUSTIFICATION FOR AGGREGATED ITEMS (EXHIBIT P- 40A)	DATE: FEBRUARY 2000
APPROP CODE/BA: OPAF/ELECTRONICS & TELECOMMUNICATION EQUIPMENT	**P-1 NOMENCLATURE:** MOBILITY COMMAND AND CONTROL

PROCUREMENT ITEMS	ID CODE			FY1999		FY2000		FY2001	
		QTY.	COST	QTY.	COST	QTY.	COST	QTY.	COST
1. GLOBAL C2 ARCHITECTURE					${8,128}		${10,123}		${8,212}
A. OWCP	A				$851		$1,932		$1,295
B. LAN	A				$3,200		$4,207		$3,792
C. ACFP	A				$1,172		$976		$390
D. DSATCOM	A				$2,905		$3,008		$2,735
2. AFSOC TAC C2 PROGRAM	A						$152		$283
Totals:					$8,128		$10,275		$8,495

Remarks:

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ITEM / FISCAL YEAR	QTY.	UNIT COST	LOCATION OF PCO	CONTRACT METHOD & TYPE	CONTRACTOR AND LOCATION	AWD. DATE	DATE FIRST DEL.	SPECS AVAIL NOW	DATE REV. AVAIL
1. GLOBAL C2 ARCHITECTURE (1)									
A. OWCP									
FY99			HQ AMC	OPT/FFP (2)	SIEMENS ROLM, VIENNA, VA	FEB 99	MAR 99		
FY00			HQ AMC	OPT/FFP (2)	SIEMENS ROLM, VIENNA, VA	FEB 00	MAR 00	Y	
FY01			HQ AMC	OPT/FFP (2)	SIEMENS ROLM, VIENNA, VA	FEB 01	MAR 01	Y	
B. LAN									
FY99			HQ AMC	OPT/FP	MULTIPLE(3)	OCT 98	DEC 98		
FY00			HQ AMC	OPT/FP	MULTIPLE(3)	OCT 99	DEC 99		
FY01			HQ AMC	OPT/FP	MULTIPLE(3)	OCT 00	DEC 00	Y	
C. ACFP									
FY99			HQ AMC	SS/FFP	COMPAQ, ST LOUIS, MO	APR 99	JUL 99		
FY00			HQ AMC	SS/FFP	COMPAQ, ST LOUIS, MO	JAN 00	MAR 00		
FY01			HQ AMC	SS/FFP	COMPAQ, ST LOUIS, MO	OCT 00	JAN 01	Y	

BUDGET PROCUREMENT HISTORY PLANNING (EXHIBIT P- 5A)	DATE: FEBRUARY 2000
APPROP CODE/BA: OPAF/ELECTRONICS & TELECOMMUNICATION EQUIPMENT	**P-1 NOMENCLATURE:** MOBILITY COMMAND AND CONTROL

ITEM / FISCAL YEAR	QTY.	UNIT COST	LOCATION OF PCO	CONTRACT METHOD & TYPE	CONTRACTOR AND LOCATION	AWD. DATE	DATE FIRST DEL.	SPECS AVAIL NOW	DATE REV. AVAIL
D. DSATCOM									
FY99			HQ AMC	DO/FFP	MULTIPLE(5)	JAN 99	JUN 99		
FY00			HQ AMC	DO/FFP	MULTIPLE(5)	JAN 00	JUN 00		
FY01			HQ AMC	DO/FFP	MULTIPLE(5)	JAN 01	JUN 01	Y	
2. AFSOC TAC C2 PROGRAM (1)									
FY00			HQ AFSOC	OPT/FP (4)	MULTIPLE(5)	JAN 00	MAR 00		
FY01			HQ AFSOC	OPT/FP (4)	MULTIPLE(5)	JAN 01	MAR 01	Y	

REMARKS:

1. Quantities and unit costs vary due to different site configurations/computer items being procured.
2. Option to prior year contract awarded Feb 96 to Siemens Rolm, Vienna, VA.
3. Utilizes AFCAC 308 and Desktop IV & V contracts. Multiple award and delivery dates to multiple vendors; award/delivery dates reflect date of first award and delivery.
4. Option to existing AFSOC and US Army contracts. Award/delivery dates reflect dates of first award/delivery.
5. Delivery Orders with multiple contractors to include RAM, Reston, VA; GSA, Kansas City, MO; Siemens Rolm, Vienna, VA; award/delivery dates reflect date of first award and delivery.

BUDGET ITEM JUSTIFICATION (EXHIBIT P-40)	DATE: FEBRUARY 2000
APPROP CODE/BA: OPAF/ELECTRONICS & TELECOMMUNICATION EQUIPMENT	**P-1 NOMENCLATURE:** AIR FORCE PHYSICAL SECURITY SYSTEM

		FY1999	FY2000	FY2001	FY2002	FY2003	FY2004	FY2005
QUANTITY								
COST (in Thousands)		$26,032	$32,214	$34,519	$28,288	$28,764	$27,949	$28,604

Description:

This program procures and installs physical security equipment to protect aircraft, missiles, nuclear weapons, and other critical war fighting resources under the control of Air Force major commands. The program funds modern security equipment to replace older generation intrusion detection systems at fixed sites, provide relocatable sensors for use on Air Force flightlines, respond to transient security threats, and provide tactical sensors and communications equipment for air base defense forces.

Items requested in FY01 are identified on the following P-40A and are representative of items to be procured. Items procured during execution may change based on critical equipment needed to support current Air Force mission requirements.

1. AIR BASE DEFENSE SENSORS: These funds support the Air Force tactical sensor program which addresses Air Base Defense requirements for security forces to detect intrusions and assess targets. The total Air Force requirement consists of 826 Tactical Automated Security System (TASS) kits to support two major theater wars and provide robust force protection capabilities world-wide. TASS kit procurement addresses squad, boundary, headquarters and basic starter kit configurations, each containing varying numbers of active, passive, telescope infrared and breakwire sensors, as well as communications modules, assessment devices and associated support equipment. FY99-01 funds continue the procurement of tailored TASS kits.

2. AIR LAUNCH CRUISE MISSILE (ALCM) SECURITY SYSTEMS: These funds procure intrusion detection sensors, alarm annunciators, closed circuit television cameras and associated program office support to maintain and replace unsupportable air launch cruise missile (ALCM)

BUDGET ITEM JUSTIFICATION (EXHIBIT P-40)	DATE: FEBRUARY 2000
APPROP CODE/BA: OPAF/ELECTRONICS & TELECOMMUNICATION EQUIPMENT	**P-1 NOMENCLATURE:** AIR FORCE PHYSICAL SECURITY SYSTEM

Description (cont.):
security command and control subsystems. FY99-01 funding procures equipment integration and upgrades for the intermediate maintenance facilities (IMFs) and intermediate munitions storage (IMS) facilities at Barksdale AFB, LA, Minot AFB, ND, and Whiteman AFB, MO.

3. ANTI-TERRORISM: Anti-terrorism funds procure intrusion detection and assessment equipment to protect overseas resources that have been evaluated as potentially soft targets for terrorist attacks. Equipment includes portable tactical sensors, thermal imagers, fiber optic sensors, and other state-of-the-art detection and assessment equipment. FY99 funds procured portable security equipment to be used by Force Protection Expeditionary Forces in response to changing and evolving threat scenarios world-wide. FY00/01 funds will procure equipment in support of anti-terrorist intelligence activities by the Air Force Office of Special Investigation (AFOSI) and asset hardening efforts performed by United States Air Forces Europe (USAFE).

4. BASE PHYSICAL SECURITY SYSTEMS: The Air Force has a continuing need to upgrade and modernize existing physical security systems presently installed at fixed sites worldwide. These systems must be replaced an average of every eight years, depending on environmental conditions, type of sensor, and availability of spare parts due to technical obsolescence.

a. FLIGHTLINE SECURITY: Flightline security equipment reduces risk to Air Force personnel, weapon systems and facilities deployed on base flightlines. DoD downsizing, reductions in forward basing, and aircraft technology advances have elevated Air Force weapon systems into increasingly valuable national power projection capabilities. However, the security afforded most Air Force aircraft and associated personnel and facilities in terms of equipment or manpower has not kept pace with the developments. In FY96, the Air Force began procurement of flightline security assessment equipment as part of a new TASS contract. TASS includes a variety of sensors to meet a broad range of intrusion detection needs (perimeter, tactical, flightline). Flightline sensors include the use of microwave technology with tunable frequencies for world-wide deployment. FY99 began a program of aggressive enhancement of high value flightline security for USAFE and a project with special emphasis on Air Mobility Command's "fly-away" assets. FY99 funds upgraded the USAFE Flightline areas for Phase 1 equipment (Surveillance/Assessment) at RAF Lakenheath, UK, and Ramstein AB, GE, and began site specific equipment layout design work for Phase 1

BUDGET ITEM JUSTIFICATION (EXHIBIT P-40)	DATE: FEBRUARY 2000
APPROP CODE/BA: OPAF/ELECTRONICS & TELECOMMUNICATION EQUIPMENT	**P-1 NOMENCLATURE:** AIR FORCE PHYSICAL SECURITY SYSTEM

Description (cont.):
installations at Spangdahlem AB, GE, and Incirlik, AB, TK. FY00 funding completes installation and equipment procurements for all remaining Flightlines (Phase 1) to include Spangdahlem, AB, GE, and Incirlik AB, TK, and begin Phase 2 (Intrusion Detection) architecture/design work (site surveys) and Phase 2 design work at RAF Mildenhall, UK. FY01 funds will complete Phase 2 design, installation and equipment procurement at RAF Mildenhall, UK, and begin Phase 2 design and installation activities at Aviano AB, IT, and RAF Lakenheath, UK.

b. FIXED-SITE SECURITY: Fixed-Site Security projects support long-term physical security requirements at permanent Air Force installations world-wide. Permanently-based aircraft and missiles, nuclear weapons in depot storage, satellite control facilities, and other key Air Force assets require permanently installed intrusion detection systems (both interior and exterior) and access control systems. FY99 funds upgraded the intrusion detection and entry control systems at the Kirtland Underground Munitions Maintenance & Storage Complex (KUMMSC) at Kirtland AFB, NM. FY99 funds continued the installation of an Advanced Entry Control System (AECS) and Weapons Storage Area (WSA) security upgrades at Minot AFB, ND and at KUMMSC. FY99-01 funds continue to procure and install Video Storage Systems (VSS) at WSA locations within the Continental US (CONUS) which require security upgrades. FY00/01 funds provide the replacement and upgrade of the intrusion detection systems (IDS) and annunciation systems at Nellis AFB, NV and Malmstrom AFB, MT. Increased FY01 funding will provide contractor turn-key procurement services to include engineering, installation, and drawings, necessitated by re-engineering of the 38th Engineering and Installation (E&I) Wing, whose organic E&I services will not be available starting in FY01. Initial WSA security engineering and upgrade planning for WSAs at Barksdale AFB, LA, F.E. Warren AFB, WY and Whiteman AFB, MO, will commence in FY01 and continue through FY05.

5. MINUTEMAN SQUADRON SECURITY: These funds procure intrusion detection sensors, alarm annunciators, closed circuit television cameras and program office support to maintain and replace critical Minuteman warhead storage security command and control subsystems that can no longer be supported. FY99-01 funds continue purchase and upgrade of equipment for missile security missions at Malmstrom AFB, MT, Minot AFB, ND, and F. E. Warren AFB, WY, as well as selected AF Space Command locations.

BUDGET ITEM JUSTIFICATION FOR AGGREGATED ITEMS (EXHIBIT P- 40A)	DATE: FEBRUARY 2000
APPROP CODE/BA: OPAF/ELECTRONICS & TELECOMMUNICATION EQUIPMENT	**P-1 NOMENCLATURE:** AIR FORCE PHYSICAL SECURITY SYSTEM

PROCUREMENT ITEMS	ID CODE			FY1999		FY2000		FY2001	
		QTY.	COST	QTY.	COST	QTY.	COST	QTY.	COST
1. AIR BASE DEFENSE SENSORS	A				$3,424		$3,507		$3,435
2. AIR LAUNCH CRUISE MISSILE (ALCM) SECURITY SYSTEMS	A				$1,185		$1,297		$1,311
3. ANTI-TERRORISM	A				$716		$2,040		$2,634
4. BASE PHYSICAL SECURITY SYSTEMS					${20,303}		${24,840}		${26,603}
A. FLIGHTLINE SECURITY	A				$12,276		$18,721		$17,276
B. FIXED-SITE SECURITY	A				$8,027		$6,119		$9,327
5. MINUTEMAN SQUADRON SECURITY	A				$404		$530		$536
Totals:					$26,032		$32,214		$34,519

Remarks:

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BUDGET PROCUREMENT HISTORY PLANNING (EXHIBIT P- 5A)	DATE: FEBRUARY 2000
APPROP CODE/BA: OPAF/ELECTRONICS & TELECOMMUNICATION EQUIPMENT	**P-1 NOMENCLATURE:** AIR FORCE PHYSICAL SECURITY SYSTEM

ITEM / FISCAL YEAR	QTY.	UNIT COST	LOCATION OF PCO	CONTRACT METHOD & TYPE	CONTRACTOR AND LOCATION	AWD. DATE	DATE FIRST DEL.	SPECS AVAIL NOW	DATE REV. AVAIL
1. AIR BASE DEFENSE SENSORS									
FY99			AFMC/ESC	DO/FFP	MULTIPLE (1) (2)	NOV 98	MAR 99		
FY00			AFMC/ESC	DO/FFP	MULTIPLE (1) (2)	JAN 00	MAR 00		
FY01			AFMC/ESC	DO/FFP	MULTIPLE (1) (2)	NOV 00	MAR 01	Y	
2. AIR LAUNCH CRUISE MISSILE (ALCM) SECURITY SYSTEMS									
FY99			AFMC/ESC	OTH/OTH	MULTIPLE (1) (3)	FEB 99	AUG 99		
FY00			AFMC/ESC	OTH/OTH	MULTIPLE (1) (3)	FEB 00	AUG 00	Y	
FY01			AFMC/ESC	OTH/OTH	MULTIPLE (1) (3)	FEB 01	AUG 01	Y	
3. ANTI-TERRORISM									
FY99			AFMC/ESC	DO/FFP	MULTIPLE (1) (2)	MAR 99	JUL 99		
FY00			AFMC/ESC	DO/FFP	MULTIPLE (1) (2)	JAN 00	MAY 00		
FY01			AFMC/ESC	DO/FFP	MULTIPLE (1) (2)	JAN 01	MAY 01	Y	

BUDGET PROCUREMENT HISTORY PLANNING (EXHIBIT P- 5A)	DATE: FEBRUARY 2000
APPROP CODE/BA: OPAF/ELECTRONICS & TELECOMMUNICATION EQUIPMENT	**P-1 NOMENCLATURE:** AIR FORCE PHYSICAL SECURITY SYSTEM

ITEM / FISCAL YEAR	QTY.	UNIT COST	LOCATION OF PCO	CONTRACT METHOD & TYPE	CONTRACTOR AND LOCATION	AWD. DATE	DATE FIRST DEL.	SPECS AVAIL NOW	DATE REV. AVAIL
4. BASE PHYSICAL SECURITY SYSTEMS									
A. FLIGHTLINE SECURITY									
FY99			AFMC/ESC	OTH/OTH	MULTIPLE (1) (4)	JAN 99	MAY 99		
FY00			AFMC/ESC	DO/FFP	MULTIPLE (1) (2)	JAN 00	JUL 00		
FY01			AFMC/ESC	DO/FFP	MULTIPLE (1) (2)	FEB 01	JUL 01	Y	
B. FIXED-SITE SECURITY									
FY99			AFMC/ESC	OTH/OTH	MULTIPLE (1) (3)	JAN 99	NOV 99		
FY00			AFMC/ESC	OTH/OTH	MULTIPLE (1) (3)	JAN 00	JUL 00		
FY01			AFMC/ESC	OTH/OTH	MULTIPLE (1) (3)	JAN 01	JUL 01	Y	
5. MINUTEMAN SQUADRON SECURITY									
FY99			AFMC/ESC	OTH/OTH	MULTIPLE (1) (3)	MAR 99	SEP 99		
FY00			AFMC/ESC	OTH/OTH	MULTIPLE (1) (3)	DEC 99	MAY 00		
FY01			AFMC/ESC	OTH/OTH	MULTIPLE (1) (3)	DEC 00	MAY 01	Y	

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BUDGET PROCUREMENT HISTORY PLANNING (EXHIBIT P- 5A)	DATE: FEBRUARY 2000
APPROP CODE/BA: OPAF/ELECTRONICS & TELECOMMUNICATION EQUIPMENT	**P-1 NOMENCLATURE:** AIR FORCE PHYSICAL SECURITY SYSTEM

ITEM / FISCAL YEAR	QTY.	UNIT COST	LOCATION OF PCO	CONTRACT METHOD & TYPE	CONTRACTOR AND LOCATION	AWD. DATE	DATE FIRST DEL.	SPECS AVAIL NOW	DATE REV. AVAIL

REMARKS:

1. Unit costs vary due to various types and quantities of physical security equipment procured for each site.
2. In Oct 97, AFMC/ESC awarded three (3) five-year delivery order contracts to TRW, Carson, CA, EER Systems, Seabrook MD, and LAU Technologies, Littleton, MA. Award/delivery dates represent the date of first award/delivery.
3. Locations of PCO varies from AFMC/ESC, AFMC/38th, AFMC/46TW, and GSA, Ft. Worth, TX. Contract Methods include Delivery Orders, MIPRs and Task Orders. Type of contract varies from Firm Fixed Price, Time & Materials, Organic Support and Labor Hour. Typical contractors may include Booz Allen & Hamilton, Ft. Worth, TX, Systems Planning Corp., Arlington, VA and BAE Systems, Eglin AFB, FL. Award/delivery dates represent the date of first award/delivery.
4. Multiple contract method and types: Delivery Order/Firm Fixed Price contracts to TRW, Carson, CA, EER Systems, Seabrook MD, and LAU Technologies, Littleton, MA. Task Order/Labor Hour contracts to Kylmar, LTD., Andover, UK. Award/delivery dates represent the date of first award/delivery.

BUDGET ITEM JUSTIFICATION (EXHIBIT P-40)	DATE: FEBRUARY 2000
APPROP CODE/BA: OPAF/ELECTRONICS & TELECOMMUNICATION EQUIPMENT	**P-1 NOMENCLATURE:** COMBAT TRAINING RANGES

		FY1999	FY2000	FY2001	FY2002	FY2003	FY2004	FY2005
QUANTITY								
COST (in Thousands)		$18,767	$45,023	$26,003	$27,625	$26,824	$33,667	$32,096

Description:

This program procures electronic telecommunications and instrumentation equipment/systems for training ranges worldwide. These systems provide real-time monitoring and control of aircrew air-to-air, air-to-ground, ground-to-air, and electronic warfare training along with the ability to record events for crew debriefing and analysis. This program also procures weapons scoring systems, advanced threat simulator systems to satisfy Electronic Warfare (EW) training capability requirements, aircraft/pod interfaces, software interoperability among services' ranges and the encryption of range/aircraft data links. FY99-01 funding continues the upgrade of these critical training systems. Emphasis in FY00/01 is placed on acquiring increased Global Positioning System (GPS) capability while operating in a rangeless, joint environment under advanced radar threat. In particular, the Joint Tactical Combat Training System, Advanced Threats Upgrades and Air Combat Training Systems Upgrades programs directly support these advancements.

1. AIR COMBAT TRAINING SYSTEMS (ACTS)

In FY99, Congress added $15.0 million to the Other Procurement, Air Force appropriation. Of this amount, $7 million was appropriated for the purchase of equipment needed to conduct a technical evaluation between the Joint Tactical Combat Training System (JTCTS) and Large Area Tracking Range/Kadena Interim Training System (LATR/KITS). Of the $7 million, OSD transferred $3 million to Research, Development, Test, and Evaluation, Navy (lead service) to properly execute the funds. Congress directed the remaining $8 million to begin installation of a rangeless training system to support Cope Thunder exercises conducted at Alaska ranges. The Senate Appropriations Committee recommended a $28 million plus-up in FY00 for the Unmanned Threat Emitter (UMTE) System. Reference Senate Appropriations Committee Report 106-53, 25 May 99, page 87. Congress approved the increased funding and added it in the FY00 markup of the FY00 Air Force budget. Reference

BUDGET ITEM JUSTIFICATION (EXHIBIT P-40)	DATE: FEBRUARY 2000
APPROP CODE/BA: OPAF/ELECTRONICS & TELECOMMUNICATION EQUIPMENT	**P-1 NOMENCLATURE:** COMBAT TRAINING RANGES

Description (cont.):
Appropriation Conference Committee Report 106-371, October 8, 1999, page 197.

a. ALASKAN AIR COMBAT TRAINING SYSTEM (AACTS): FY99 funds procured the Cope Thunder AACTS systems to include data link encryption and test equipment. The AACTS increased training capabilities for the Yukon Measurement and Debriefing System (YMDS) at Eielson AFB, AK and the Alaska Air Combat Maneuvering Instrumentation (ACMI) system at Elemendorf AFB, AK. No FY01 funds requested.

b. JOINT ADVANCED WEAPON SCORING SYSTEM (JAWSS): The JAWSS program in FY99-01 consists of Navy-developed scoring systems which upgrade the weapon and laser spot scoring on AF and Air National Guard (ANG) ranges. The upgrades provide multiple new capabilities, to include scoring of day or night operations, production of a data stream with immediate displays, and results transmission to the pilot. Other provisions include the capability to monitor and control an extended, realistic target environment for simulated ordnance delivery, and aircrew training for airborne laser designators. FY99 funds provided upgrades for four AF ranges. FY00 funds procure upgrades for one ANG and four AF ranges. FY01 funds will provide upgrades for two ANG and four AETC ranges.

c. ADVANCED DISPLAY AND DEBRIEFING SYSTEM (ADDS): The ADDS procurement supports the Tactical Air Combat Training systems (TACTS), Air Combat Maneuvering Instrumentation (ACMI) Systems, and Measurement and Debriefing Systems (MDS) that provide real time air combat training for US Navy, Air Force, and Air National Guard aircrews. The MDS consists of two major subsystems, the Control and Computation Subsystem (CCS) and the Display and Debriefing System (DDS). The CCS computer keeps track of aircraft location and weapons status, processes weapons fly-out simulations, and archives data for debriefing. The DDS is a large classroom display system which utilizes a mainframe computer and graphics processor to display data for range activity evaluation. The ADDS is a smaller, low-cost, enhanced capability DDS, in a workstation configuration, utilizing COTS computer equipment. FY99 funding completed procurement of the required systems and associated equipment, and provided CCS support for Cope Thunder. No FY01 funding is requested.

BUDGET ITEM JUSTIFICATION (EXHIBIT P-40)	DATE: FEBRUARY 2000
APPROP CODE/BA: OPAF/ELECTRONICS & TELECOMMUNICATION EQUIPMENT	**P-1 NOMENCLATURE:** COMBAT TRAINING RANGES

Description (cont.):

d. JOINT TACTICAL COMBAT TRAINING SYSTEM (JTCTS): JTCTS is a joint Air Force/Navy program with the Navy as the lead service. FY99 funds provided a technical evaluation between JTCTS and the integrated Large Area Tracking Range/Kadena Interim Training System (LATR/KITS). The technical evaluation report is complete and was released to Congress in November 1999. FY00 funding procures ground components to provide tactical aircrews with live ground monitoring of training activity. The ground/airborne subsystems consist of all hardware and associated software required to provide the functional performance for rangeless operation, live monitor operation, aircrew debriefings, security, and maintenance.

e. ALPENA KADENA INTERIM TRAINING SYSTEM (AKITS): FY99 funding provided a system consisting of 24 Global Positioning System (GPS) based training pods and three display and debriefing stations for conducting air-to-air training exercises at the Air National Guard Combat Readiness Training Center (CRTC) located in Alpena, Michigan. AKITS provides an interim capability until JTCTS is fielded. No FY01 funding is requested.

f. ADVANCED THREATS UPGRADE: FY99-01 funding for the Mini-MUTES (Multiple Threat Emitter System) Modernization Program (M3P) provides system upgrades for the AN/MST-T1(V), Mini-MUTES to satisfy electronic warfare (EW) training capability requirements. Mini-MUTES provides surface-to-air missile radar electronic threat signals. The M3P will modernize Mini-MUTES by incorporating the latest, most lethal, advanced threats, enabling use of the Mini-MUTES as a high quality training system through the year 2020. In accordance with FY99 Congressional language, FY99 funds provided for development of technical manuals for Cope Thunder. FY99 funding also provided support to the Mobile Threat Emitter System (MOTES), a version of the Unmanned Threat Emitter (UMTE), to support the Gulfport, MS, Air National Guard range. The UMTE, AN/TPT-T1, is an unmanned, remotely operable radar threat simulator which simulates densely deployed surface-to-air missiles (SAMs) and anti-aircraft artillery (AAA). The FY00 funds will procure the UMTE Modernization Program. This program will upgrade existing UMTE infrastructures, fix configuration problems, and install communications links, infrared cameras, electronic countermeasure receivers, and UMTE operator control units. The additional funds will also procure UMTE systems for deployment to Combat Air Force ranges, such as Volk Field WI, Yukon Range AK, and Barry M. Goldwater Range AZ. FY01

BUDGET ITEM JUSTIFICATION (EXHIBIT P-40)	DATE: FEBRUARY 2000
APPROP CODE/BA: OPAF/ELECTRONICS & TELECOMMUNICATION EQUIPMENT	**P-1 NOMENCLATURE:** COMBAT TRAINING RANGES

Description (cont.):
funding continues this modernization, to include upgrade of existing UMTE infrastructure and configuration efforts to increase performance, reliability, and mission capability.

g. AIR COMBAT TRAINING SYSTEMS (ACTS) UPGRADES: FY99-01 funds provide a "modular" approach to ACMI range upgrades, which includes additional security equipment and GPS capability. FY99 funds procured equipment in support of the Alaska ranges. FY99-01 funding continues upgrade of selected legacy systems to a more state-of-the-art, functional configuration. Aging computational and control systems (CCS) and advanced display and debriefing systems (ADDS) with high sustainment costs will be replaced with smaller, more capable, efficient open architecture computer systems capable of hosting the latest fielded software upgrades. In addition, security equipment and GPS capability will be added to ranges to support an immediate need for AMRAAM training. Security equipment will encrypt the data link needed for AMRAAM training and GPS capability will provide expanded range coverage also needed to accommodate AMRAAM training.

BUDGET ITEM JUSTIFICATION FOR AGGREGATED ITEMS (EXHIBIT P- 40A)	DATE: FEBRUARY 2000
APPROP CODE/BA: OPAF/ELECTRONICS & TELECOMMUNICATION EQUIPMENT	**P-1 NOMENCLATURE:** COMBAT TRAINING RANGES

PROCUREMENT ITEMS	ID CODE			FY1999		FY2000		FY2001	
		QTY.	COST	QTY.	COST	QTY.	COST	QTY.	COST
1. AIR COMBAT TRAINING SYSTEM									
A. ALASKAN AIR COMBAT TRAINING SYSTEMS (AACTS)					$6,639				
B. JOINT ADVANCED WEAPON SCORING SYSTEM (JAWSS)	A				$2,619		$6,700		$4,140
C. ADVANCED DISPLAY AND DEBRIEFING SYSTEM (ADDS)					${1,445}				
(1). DISPLAY AND DEBRIEFING SYSTEM (DDS)	A				$1,158				
(2). CONTROL AND COMPUTATION SUBSYSTEM (CCS)	A				$287				
D. JOINT TACTICAL COMBAT TRAINING SYSTEM (JTCTS)					$4,000		$2,293		
E. ALPENA KADENA INTERIM TRAINING SYSTEM (AKITS)	A				$742				
F. ADVANCED THREATS UPGRADE (1)					$3,022		$34,210		$18,380

BUDGET ITEM JUSTIFICATION FOR AGGREGATED ITEMS (EXHIBIT P- 40A)	DATE: FEBRUARY 2000
APPROP CODE/BA: OPAF/ELECTRONICS & TELECOMMUNICATION EQUIPMENT	**P-1 NOMENCLATURE:** COMBAT TRAINING RANGES

PROCUREMENT ITEMS	ID CODE			FY1999		FY2000		FY2001	
		QTY.	COST	QTY.	COST	QTY.	COST	QTY.	COST
G. AIR COMBAT TRAINING SYSTEM (ACTS) UPGRADES	A				$300		$1,820		$3,483
Totals:					$18,767		$45,023		$26,003

Remarks:

1. FY00 cost includes $28 million Congressional add to the FY00 Air Force budget. Reference Appropriation Conference Report 106-371, October 8, 1999, page

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BUDGET PROCUREMENT HISTORY PLANNING (EXHIBIT P- 5A)	DATE: FEBRUARY 2000
APPROP CODE/BA: OPAF/ELECTRONICS & TELECOMMUNICATION EQUIPMENT	**P-1 NOMENCLATURE:** COMBAT TRAINING RANGES

ITEM / FISCAL YEAR	QTY.	UNIT COST	LOCATION OF PCO	CONTRACT METHOD & TYPE	CONTRACTOR AND LOCATION	AWD. DATE	DATE FIRST DEL.	SPECS AVAIL NOW	DATE REV. AVAIL
1. AIR COMBAT TRAINING SYSTEMS (1)									
A. ALASKAN AIR COMBAT TRAINING SYSTEMS (AACTS)									
FY99			AFMC/AAC	OPT/FFP (2)	APPLIED DATA TECHNOLOGY INC. (ADTI), SAN DIEGO, CA	JUL 99	MAR 00		
B. JOINT ADVANCED WEAPON SCORING SYSTEM (JAWSS)									
FY99			AFMC/AAC	MIPR/OTH	NAVY - MULTIPLE (3)	MAR 99	NOV 99		
FY00			AFMC/AAC	MIPR/OTH	NAVY - MULTIPLE (3)	MAR 00	NOV 00	Y	
FY01			AFMC/AAC	MIPR/OTH	NAVY - MULTIPLE (3)	MAR 01	NOV 01	Y	
C. ADVANCED DISPLAY AND DEBRIEFING SYSTEM (ADDS)									
(1). DDS									
FY99			AFMC/AAC	DO/OTH (4)	ANALYTICAL SERVICES INC. (ASI), HUNTSVILLE, AL	MAY 99	JUN 99		

BUDGET PROCUREMENT HISTORY PLANNING (EXHIBIT P- 5A)	DATE: FEBRUARY 2000
APPROP CODE/BA: OPAF/ELECTRONICS & TELECOMMUNICATION EQUIPMENT	**P-1 NOMENCLATURE:** COMBAT TRAINING RANGES

ITEM / FISCAL YEAR	QTY.	UNIT COST	LOCATION OF PCO	CONTRACT METHOD & TYPE	CONTRACTOR AND LOCATION	AWD. DATE	DATE FIRST DEL.	SPECS AVAIL NOW	DATE REV. AVAIL
(2). CCS									
FY99			AFMC/AAC	MIPR/FFP	NAVY/COMPUTER TECHNOLOGY ASSOCIATES, BETHESDA, MD	SEP 99	JAN 00		
D. JOINT TACTICAL COMBAT TRAINING SYSTEM (JTCTS)									
FY99			AFMC/AAC	MIPR/CPAF	NAVY - RAYTHEON PORTSMOUTH, RI	JUL 99	APR 00		
FY00			AFMC/AAC	MIPR/CPAF	NAVY - RAYTHEON PORTSMOUTH, RI	JUL 00	MAR 01	Y	
FY01			AFMC/AAC	MIPR/CPAF	NAVY - RAYTHEON PORTSMOUTH, RI	JUL 01	MAR 02	Y	
E. ALPENA KADENA INTERIM TRAINING SYSTEM (AKITS)									
FY 99			AFMC/AAC	SS/FFP (5)	CUBIC, SAN DIEGO, CA	MAR 00	JUN 00	Y	
F. ADVANCED THREATS UPGRADE									
FY99			HQ AMC	OPT/OTH (6)	SIERRA TECHNOLOGIES, INC., BUFFALO, NY	MAR 99	DEC 99		
			AFMC/AAC	OPT/CPFF (7)	HARRIS CORP, MELBOURNE, FL	AUG 99	AUG 01		

BUDGET PROCUREMENT HISTORY PLANNING (EXHIBIT P- 5A)	DATE: FEBRUARY 2000
APPROP CODE/BA: OPAF/ELECTRONICS & TELECOMMUNICATION EQUIPMENT	**P-1 NOMENCLATURE:** COMBAT TRAINING RANGES

ITEM / FISCAL YEAR	QTY.	UNIT COST	LOCATION OF PCO	CONTRACT METHOD & TYPE	CONTRACTOR AND LOCATION	AWD. DATE	DATE FIRST DEL.	SPECS AVAIL NOW	DATE REV. AVAIL
			AFMC/SM-ALC	OPT/FFP (7)	HARRIS CORP, MELBOURNE, FL	AUG 99	AUG 01		
FY00			HQ AMC	OTH/OTH (6)	SIERRA TECHNOLOGIES, INC., BUFFALO, NY	APR 00	JAN 01	Y	
			AFMC/SM-ALC	OPT/FFP (7)	HARRIS CORP, MELBOURNE, FL	FEB 00	JAN 01	Y	
FY01			AFMC/SM-ALC	OPT/FFP (7)	HARRIS CORP, MELBOURNE, FL	JAN 01	JAN 02	Y	
G. AIR COMBAT TRAINING SYSTEM (ACTS) UPGRADES									
FY99			AFMC/AAC	C/FFP	APPLIED DATA TECHNOLOGY, INC. SAN DIEGO, CA	JUL 99	JAN 00		
FY00			AFMC/AAC	C/FFP	UNKNOWN	MAY 00	JAN 02	Y	
FY01			AFMC/AAC	C/FFP	UNKNOWN	MAY 01	JAN 03	Y	

REMARKS:

1. Quantity and unit cost varies due to the amount and types of equipment being installed at different ranges.
2. Option to Applied Data Technology Inc. contract awarded May 98.
3. Joint Advanced Weapons Scoring System (JAWSS) procured by Naval Warfare Assessment Station, Corona, CA and Naval Air Warfare Center, Point Mugu, CA. Award dates and date of first delivery reflect the first award and delivery dates.
4. Small business set aside, sole source, Analytical Services , Inc. (ASI). Option to basic time and materials contract awarded Jul 96.
5. Contract award was on hold per Congressional language pending completion of the JTCTS technical evaluation. Air Force requested a waiver to Congressional direction which was approved November 99.
6. Option to Serria Technologies time and materials contract awarded Mar 95.
7. Option to Harris Corp. contract awarded Jul 98.

BUDGET ITEM JUSTIFICATION (EXHIBIT P-40)	DATE: FEBRUARY 2000
APPROP CODE/BA: OPAF/ELECTRONICS & TELECOMMUNICATION EQUIPMENT	**P-1 NOMENCLATURE:** MINIMUM ESSENTIAL EMERGENCY COMMUNICATIONS NETWORK

		FY1999	FY2000	FY2001	FY2002	FY2003	FY2004	FY2005
QUANTITY								
COST (in Thousands)		$1,502	$5,122	$1,584	$2,076	$1,085	$0	$0

Description:

The Minimum Essential Emergency Communications Network (MEECN) systems provide assured communications connectivity between the National Command Authorities (NCA) and the strategic deterrent forces.

1. The Defense Improved Emergency Message Automatic Transmission System (IEMATS) Replacement Command & Control Terminals (DIRECT) is a strategic nuclear command and control (C2) system directly supporting the Chairman of the Joint Chiefs of Staff (CJCS) and the NCA. The Director, Joint Staff, established an urgent and compelling need to field an IEMATS replacement no later than second quarter FY99. Program funding adjustments caused fielding to slip to the second quarter FY00. This revised fielding date meets the initial fielding date called out in the latest draft of the DIRECT Operational Requirements Document. DIRECT will provide all current IEMATS requirements, including the build and release of Emergency Action Messages (EAMs), to allow the warfighter to remain responsive to NCA directives. DIRECT will be certified to Top Secret-Single Integrated Operational Plan (SIOP) messaging. Prior year funding procured and installed DIRECT at seven operational nuclear command centers to prepare the initial cadre of users and trainers. FY99 funding provided for Engineering Change Orders (ECO), installation and checkout, and interim contractor support (ICS) for the last quarter of FY99. FY00 funding procures and installs one DIRECT unit at the DIRECT Software Support Facility (DSSF). The DIRECT unit at the DSSF will be used to modify and test required software changes resulting from changes to the warplan messages. FY00 funding also adds AUTODIN interfaces, and provides for ECO and ICS through FY00 until follow-on maintenance support will be available. FY01 funding will procure and install an additional DIRECT system for a nuclear command center in Europe.

BUDGET ITEM JUSTIFICATION (EXHIBIT P-40)	DATE: FEBRUARY 2000
APPROP CODE/BA: OPAF/ELECTRONICS & TELECOMMUNICATION EQUIPMENT	**P-1 NOMENCLATURE:** MINIMUM ESSENTIAL EMERGENCY COMMUNICATIONS NETWORK

Description (cont.):

2. FY01 funding was significantly reduced due to restructure of the Minuteman MEECN Program (MMP) and realignment of Other Procurement, AF funding to Missile Procurement, AF (MPAF). Funding for all requirements supporting MMP will be requested under MPAF.

WEAPON SYSTEM COST ANALYSIS (EXHIBIT P- 5)		DATE: FEBRUARY 2000
APPROP CODE/BA: OPAF/ELECTRONICS & TELECOMMUNICATION EQUIPMENT	**P-1 NOMENCLATURE:** MINIMUM ESSENTIAL EMERGENCY COMMUNICATIONS NETWORK	

WEAPON SYSTEM COST ELEMENTS	IDENT CODE	FY1999			FY2000			FY2001			FY2002		
		QTY	UNIT COST	TOTAL COST	QTY	UNIT COST	TOTAL COST	QTY	UNIT COST	TOTAL COST	QTY	UNIT COST	TOTAL COST
1. DIRECT							{1,502}			{5,122}			{1,584}
SYSTEM HARDWARE	A							1	1,670,000	1,670	1	1,400,000	1,400
ECP/ECO							281			971			
INSTALL & CHECKOUT							963			554			184
ICS							258			1,927			
TOTALS:							1,502			5,122			1,584

REMARKS:

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BUDGET ITEM JUSTIFICATION (EXHIBIT P-40)	DATE: FEBRUARY 2000
APPROP CODE/BA: OPAF/ELECTRONICS & TELECOMMUNICATION EQUIPMENT	**P-1 NOMENCLATURE:** C3 COUNTERMEASURES

		FY1999	FY2000	FY2001	FY2002	FY2003	FY2004	FY2005
QUANTITY								
COST (in Thousands)		$21,046	$15,637	$15,681	$9,567	$10,514	$9,266	$9,470

Description:

U.S. military forces operate in an information age where the need for precise, instantaneous intelligence is increasing and expanding across the entire spectrum of military operations. However, this increasing technical sophistication leads to a dependency on technology which, in turn, may represent potentially crippling vulnerabilities. The Air Force addresses this vulnerability through Information Operations (IO). IO includes those actions taken to gain, exploit, defend or attack information and information systems and include both information-in-warfare and information warfare. Information Warfare (IW) consists of IO conducted to defend one's own information and information systems, or to attack and affect an adversary's information and information systems.

Command and Control Warfare (C2W) is a warfighting application of IW in military operations. Capabilities used to conduct information warfare include Electronic Warfare (EW), Psychological Operations (PSYOP), military deception, physical attack, information attack, and various security measures. The Air Intelligence Agency (AIA), Air Force Information Warfare Center (AFIWC), 67th Intelligence Wing, and Joint Information Operations Center (JIOC), all located in San Antonio, TX, are responsible for IW and C2W operations supporting joint, air component, and/or national objectives. Procurement funds in this program provide the equipment (computer, communications, and unique intelligence and analysis systems) vital to accomplishing and supporting those organizations' IW and C2W missions. Elements of the program are addressed individually below.

Items requested in FY01 are identified on the following P-40A and are representative of items to be procured. Items procured during execution may change based on critical equipment needed to support current Air Force mission requirements.

BUDGET ITEM JUSTIFICATION (EXHIBIT P-40)	DATE: FEBRUARY 2000
APPROP CODE/BA: OPAF/ELECTRONICS & TELECOMMUNICATION EQUIPMENT	**P-1 NOMENCLATURE:** C3 COUNTERMEASURES

Description (cont.):

1. AF INFORMATION WARFARE CENTER (AFIWC) SUPPORT: AFIWC has been designated the AF center of excellence for IW. AFIWC provides technical assistance to the AF for IW and EW analysis and strategy for combat preparation, planning, and operations/weapons systems development and assessment. AFIWC also provides advanced IW training for the Air Force. FY 99-01 Funding procures equipment and tools for the following projects:

a. AUTOMATIC DATA PROCESSING (ADP) UPGRADES: FY99-01 funding continues to replace basic AFIWC internal computer infrastructure and network requirements for administrative and management functions.

b. MODELING AND SIMULATION: FY99-01 funds purchase computer equipment to conduct AFIWC analysis providing the capability to show detailed analysis and graphic displays vital to the protection of USAF aircraft, the assessment of operational USAF EW systems, and the testing of new/modified aircraft and EW systems.

c. COMMAND AND CONTROL WARFARE (C2W) OPERATIONS SUPPORT: FY99-01 funds procure equipment to maintain the Integrated C2W Knowledge base, (formerly called CONSTANT WEB), an approved migration database for C2W operations. This proven capability served the nation effectively during Desert Storm/Desert Shield and recent operations in southwest Asia, Bosnia, and Kosovo.

d. INFORMATION WARFARE (IW): FY99-01 funds procure computer and computer related equipment to support the integration of C2W decision aids into combat planning and execution cycles. This equipment will provide in-theater offensive IW planning aids to help quickly choose IW options related to targeting recommendations via modeling and simulation tools, allowing the Air Operations Center to provide supported Commanders in Chief (CINCs) with the most efficient IW tools and targets, and integrate lethal and non-lethal options.

e. OFFENSIVE IW: FY99-01 funding continues the procurement of computer, computer related, memory storage, local and long-haul

BUDGET ITEM JUSTIFICATION (EXHIBIT P-40)	DATE: FEBRUARY 2000
APPROP CODE/BA: OPAF/ELECTRONICS & TELECOMMUNICATION EQUIPMENT	**P-1 NOMENCLATURE:** C3 COUNTERMEASURES

Description (cont.):

communications, contractor information system specialties, infrastructure, and unique intelligence and analysis equipment required to support IW analysis. This enables a modern USAF IW capability for both training (including Distributed Interactive Simulation) and combat operations. This equipment facilitates a vital migration of AF combat capabilities to Numbered Air Forces (NAFs) and IO personnel responsible for the integration and execution of tools necessary to gain, exploit, defend, and attack information and information systems.

2. 67th INTELLIGENCE WING SUPPORT: The 67th Intelligence Wing, Kelly AFB TX, conducts AIA's global mission. The wing directs the planning of multi-source intelligence, electronic combat services, information warfare, and communications security. It assists Air Force components in the development of airpower concepts, conducting exercises and employment of AIA forces in contingencies, low-intensity conflict, and special operations.

a. COMMUNICATIONS SECURITY (COMSEC) ASSESSMENT SUPPORT: FY99-01 funding continues the procurement of equipment to monitor friendly unsecured telecommunications, providing USAF commanders an Operations Security (OPSEC) vulnerability assessment of their units.

b. TELECOMMUNICATIONS MONITORING AND ASSESSMENT PROGRAM (TMAP): FY99-01 funding provides systems equipment to monitor digital voice, data, facsimile, and video in an integrated package.

3. JOINT INFORMATION OPERATIONS CENTER (JIOC): The JIOC (formerly called the Joint Command and Control Warfare Center (JC2WC)) provides joint force commanders (combatant commanders, subordinate unified commanders and joint task force commanders), service component commanders and functional component commanders direct Information Operations (IO) support. The JIOC supports the integration of the constituent elements of IO throughout the planning and execution phases of operations. The JIOC provides IO planning and predictive analysis to U.S. forces involved in contingency operations and worldwide exercises. The JIOC also provides enhanced training of battlefield commanders through the JQUAD (Note: JQUAD is not an acronym) suite of training simulations. JQUAD functionality will be

BUDGET ITEM JUSTIFICATION (EXHIBIT P-40)	DATE: FEBRUARY 2000
APPROP CODE/BA: OPAF/ELECTRONICS & TELECOMMUNICATION EQUIPMENT	**P-1 NOMENCLATURE:** C3 COUNTERMEASURES

Description (cont.):
re-engineered to the Joint Simulation System (JSIMS) high level architecture. The JIOC analyzes and correlates all-source data on both friendly and threat forces. This data is used as input into sophisticated IO computer models, simulations, planning analysis tools. These high-fidelity simulations provide field commanders with targeting options and composite analytic pictures. The JIOC provides tactical and technical evaluations to include integrated soft/hard kill options and technical feasibility and trade-offs. This analysis results in complete assessment of IO options and effectiveness predictions. FY99-01 funding provides continuing upgrades to multi-processor systems to improve performance and achieve interoperability with virtual simulations. Additional processors and storage capacity must be added to the JIOC analysis networks and systems to improve performance of IO computer models. Systematically modernized workstations which deploy with CINC support teams and provide on-scene analytical support as well as reach-back capability must be systematically modernized to meet current requirements. Computer hardware hosting the JQUAD training simulation system at training centers worldwide must be replaced with computer systems compatible with the JSIMS architecture. Funding also provides for deployable field support systems, equipment, and training for detecting, identifying, locating, targeting, exploiting and countering signals in support of combatant commanders, national agencies, exercises, and advanced concept technology of demonstrations (ACTD) vulnerability assessments.

a. ELECTRONIC COMBAT (EC) ANALYST NETWORK: FY99-01 funding provides continuing upgrades to multi-processor systems to improve performance and achieve interoperability with virtual simulations. Additional processors and storage capacity will be added to the JIOC analysis networks and systems to improve performance of IO computer models.

b. COMBAT ANALYSIS SYSTEM: FY99-01 funding provides for field commander support systems including automated support systems for IO training.

c. FIELD COMMANDERS SUPPORT: FY99-01 funding procures workstations which deploy with CINC support teams providing on-scene analytical support as well as reach-back capability.

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Description (cont.):

d. COMPUTER TRAINING SIMULATION: FY99-01 funding provides for computer hardware which hosts the JQUAD training simulation system at training centers worldwide.

e. IO RED TEAM SUPPORT (formerly called C2W TEST SUPPORT): FY99-01 funding provides for deployable field support systems, equipment, and training for detecting, identifying, locating, targeting, exploiting and signals in support of combatant commanders, national agencies, exercises, and ACTD vulnerability assessments.

A reduction or loss in funding would severely hamper joint force, service, and functional component commanders from receiving essential C2W/IO support. Specifically, the lack of funding would result in the following: (1) Inability to replace readiness-critical computer systems to host training simulations in gaming centers worldwide; (2) Degraded performance and significantly delayed interoperability with virtual simulations; (3) Severe restriction in the use of IO computer models for field Commander Targeting Support and IO Red Team vulnerability assessments; (4) A dramatic restriction in Protect/Defense support.

4. SECURE TERMINAL EQUIPMENT (STE): The assurance of secure voice and data transmissions is essential for the conduct of operations within the Air Force. FY99 funding for STE contributes to a secure reachback capability for IW personnel assigned to the USAF Numbered Air Forces (NAF). In FY00, $2.5 million was added to the STE program by Congress in the markup of the FY00 Air Force budget. Reference Appropriation Conference Report 106-371, October 8, 1999, page 197. These funds will procure additional STEs, as well as a centrally managed STE equipment stock at the Air Force Cryptologic Support Group, Kelly AFB TX. This equipment will be issued to operational units based on highest priority mission needs and ongoing contingencies. No FY01 funds are requested.

5. INFORMATION WARFARE (IW) FLIGHTS: In Jun 98, the Chief of Staff of the Air Force (CSAF) directed the establishment of IO Cadres {since renamed IW Flights (IWFs)} in six warfighting NAFs worldwide in order to embed operational IO activities and support within the warfighting NAFs/Joint Forces Air Component Commander (JFACC) staffs. The IWFs will assume all responsibilities previously assigned to

BUDGET ITEM JUSTIFICATION (EXHIBIT P-40)	DATE: FEBRUARY 2000
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Description (cont.):
the 609th IWS for their respective NAFs, as the CSAF decision also directed the deactivation of the 609th IWS concurrent with activation of the 9AF IWF. The IWFs will: Operationalize Offensive Counter Information (OCI) and Defensive Counter Information (DCI), provide Air Force Forces (AFFOR) a single IW focal point, create an IW team for the AOC to plan and integrate all IW capabilities, and provide AFFOR real-time network defense and visibility of the entire IW battlespace. FY99-00 funding will procure the necessary equipment (computers, Automated Data Processing Equipment (ADPE), network monitoring equipment, communications, etc.) to allow the activation of these IWFs. FY01 funds will provide upgrades to previous fielded equipment.

BUDGET ITEM JUSTIFICATION FOR AGGREGATED ITEMS (EXHIBIT P- 40A)	DATE: FEBRUARY 2000
APPROP CODE/BA: OPAF/ELECTRONICS & TELECOMMUNICATION EQUIPMENT	**P-1 NOMENCLATURE:** C3 COUNTERMEASURES

PROCUREMENT ITEMS	ID CODE	FY1999		FY2000		FY2001	
		QTY.	COST	QTY.	COST	QTY.	COST	QTY.	COST
1. AFIWC SUPPORT					${7,037}		${6,896}		${8,319}
A. ADP UPGRADES	A				$220		$230		$237
B. MODELING AND SIMULATION	A				$812		$614		$620
C. C2W OPS SUPPORT	A				$325		$327		$333
D. INFORMATION WARFARE	A				$2,068		$2,609		$3,441
E. OFFENSIVE IW	A				$3,612		$3,116		$3,688
2. 67TH INTEL WING SUPPORT					${1,418}		${1,356}		${1,307}
A. COMSEC ASSESSMENT SPT	A				$398		$396		$404
B. TMAP	A				$1,020		$960		$903
3. JIOC					${1,649}		${1,732}		${1,621}
A. EC ANALYST NETWORK	A				$322		$334		$308
B. COMBAT ANALYSIS SYSTEM	A				$940		$1,000		$936
C. FIELD COMMANDERS SUPPORT	A				$94		$104		$99
D. COMPUTER TNG SIM	A				$188		$190		$179
E. IO RED TEAM SUPPORT	A				$105		$104		$99
4. SECURE TERMINAL EQUIPMENT (STE)	A				$7,442		$2,500		
5. IW FLIGHTS	A				$3,500		$3,153		$4,434

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BUDGET ITEM JUSTIFICATION FOR AGGREGATED ITEMS (EXHIBIT P- 40A)	DATE: FEBRUARY 2000
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PROCUREMENT ITEMS	ID CODE			FY1999		FY2000		FY2001	
		QTY.	COST	QTY.	COST	QTY.	COST	QTY.	COST
Totals:					$21,046		$15,637		$15,681

Remarks:

Multiple quantities and unit costs associated with C3 Countermeasures equipment.

The AIA is the primary contracting office (PCO) for these Countermeasures items. Multiple contracts with varying award and delivery dates exist to procure the va equipment throughout the fiscal years. Typical contractors involved are: Silicon Graphics, Mountain View CA; Loral, Las Vegas NV; Ratheon, Galeta CA; L3 Co Corp, Camden NJ; and Southwest Research Inc (SWRI), San Antonio TX.

BUDGET ITEM JUSTIFICATION (EXHIBIT P-40)	DATE: FEBRUARY 2000
APPROP CODE/BA: OPAF/ELECTRONICS & TELECOMMUNICATION EQUIPMENT	**P-1 NOMENCLATURE:** BASE LEVEL DATA AUTOMATION PROGRAM

		FY1999	FY2000	FY2001	FY2002	FY2003	FY2004	FY2005
QUANTITY								
COST (in Thousands)		$25,635	$25,456	$23,788	$12,820	$12,793	$13,069	$13,308

Description:

Base Level Data Automation (BLDA) consists of several standard Air Force-wide base level computer programs. These programs include automation support of 12 major base level functions such as maintenance, fuels, civil engineering, transportation, contracting and supply. They provide productivity gains and increase the overall efficiencies of base level functions. Some programs, such as Wing Automatic Data Processing, support the consolidation of Automated Data Processing Equipment (ADPE) and migration to open systems architecture and software standardization at Regional Processing Centers (RPCs) based on the Ada programming language. These programs are key to the Air Force's global engagement strategy. They provide the warfighter with a "one-update-one time" data processing environment. FY01 funding decreased due to realignment of funds to higher priority Air Force requirements.

Items for BLDA requested in FY01 are identified on the following P-5 and are representative of items to be procured. Items procured during execution may change based on critical equipment needed to support current Air Force mission requirements.

1. CARGO MOVEMENT OPERATIONS SYSTEM (CMOS): Capable of supporting routine and surge requirements, CMOS automates base shipping and deployment processes, produces movement documentation, and furnishes timely information to Major Commands (MAJCOMs), transportation component commands and the joint deployment community. CMOS not only serves as the Air Force's system for command and control of cargo and passenger movements, but contributes significantly to the Global Transportation Network (GTN), the Department of Defense's (DoD) system for in-transit visibility. FY99-01 funds provide Radio Frequency (RF) Data Collection technology hardware to enable current hand-held terminals to scan bar-coded shipping documents and transmit the data electronically via RF to the CMOS server for

BUDGET ITEM JUSTIFICATION (EXHIBIT P-40)	DATE: FEBRUARY 2000
APPROP CODE/BA: OPAF/ELECTRONICS & TELECOMMUNICATION EQUIPMENT	**P-1 NOMENCLATURE:** BASE LEVEL DATA AUTOMATION PROGRAM

Description (cont.):
processing.

2. WING AUTOMATIC DATA PROCESSING (ADP) SUPPORT (WAS): This program provides for Life Cycle Management (LCM) of Standard Base Level Computer (SBLC) systems at Air Force installations worldwide. During both peace and wartime contingencies, all active duty Air Force bases are sustained and maintained with hardware/software tools and services that ensure effective communications between the users and the mainframe computers. This support extends to flightline maintenance, supply, accounting and finance, budget and personnel service systems. Additionally, Air National Guard, Air Force Reserve installations, and Defense Megacenters (DMCs) receive this same support to ensure a common operating environment of interoperability. This program maintains base computer capabilities but does not develop new systems or application code. FY99-01 funding continues to provide hardware upgrades and communications interfaces.

3. COMBAT AMMUNITION SYSTEM (CAS): CAS provides the munitions community with a stand-alone, dedicated computer system to support peacetime and wartime munitions requirements. CAS improves Air Force combat capabilities and logistics by providing effective munitions management, accountability and fiscal control at each level of combat execution from the unit through the Joint Chiefs of Staff. CAS has four levels of operation: (a) depot level; (b) base level; (c) MAJCOM level; and (d) deployed locations. CAS-B and D perform accounting and management processes while CAS-A and C provide only managerial oversight. FY99 funds procured servers for migrating the CAS-B application off obsolete, unsupportable hardware. No FY01 funding requested.

4. FUELS AUTOMATED MANAGEMENT SYSTEM (FAMS): FAMS provides a fuels data collection/information management system using state-of-the-art microcircuit technology to automate the management and control of vital petroleum support operations. FAMS provides numerous mission-related benefits: (1) assures inventory visibility of this critical warfighting commodity; (2) reduces error rates in the $2.7 billion annual AF fuels budget; (3) mitigates personnel and property risks; (4) reduces USAF fuels management manpower; and (5) provides accurate data to support war planning. One hundred thirteen (113) manpower positions were previously taken out of the Air Force budget based on projected FAMS savings. FAMS eliminates much of the paperwork and manual input required for current fuels management

BUDGET ITEM JUSTIFICATION (EXHIBIT P-40)	DATE: FEBRUARY 2000
APPROP CODE/BA: OPAF/ELECTRONICS & TELECOMMUNICATION EQUIPMENT	**P-1 NOMENCLATURE:** BASE LEVEL DATA AUTOMATION PROGRAM

Description (cont.):
processes, providing total asset visibility while improving cash flow, credit management, and permitting just-in-time deliveries of fuel supplies. The system consists of three hardware components that collect fuel transactions and inventory data at base level for service stations (Automated Fuels Service Stations (AFSS)), storage tanks (Automatic Tank Gauging (ATG) devices), and aircraft refueling systems (Automated Data Collection/Fuel Dispensing System (ADC/FDS) point of sale (POS) devices). In addition, FAMS provides an information management system that supports all users. At the Air Force level, FAMS enhances the aviation fuel tracking/billing system. Test and the installation of 50 ATG devices and 975 ADC/FDS systems in Pacific Air Forces (PACAF); and installation of 150 ATG devices and equipment at 34 AFSS at Air National Guard sites were funded in prior years. FY99-01 funding continues the installation of 308 ATG devices and 3,170 ADC/FDS POS devices worldwide.

5. STANDARD PROCUREMENT SYSTEM (SPS): The SPS is a DoD-directed Information Technology Overarching Integrated Process Team (IPT) program. SPS will replace all DoD non-classified procurement information systems and databases, providing over 51,000 DoD procurement professionals (approximately 7,900 Air Force) with an Automated Information System (AIS) based on standard DoD procurement processes and DoD standard data. The Air Force, along with other DoD procurement agencies supporting SPS, has the acquisition responsibility to provide hardware and communications connectivity to support the SPS. FY99 funding procured computer hardware and associated software, local area networks, servers, and communications infrastructure at the Major Commands and base level contracting offices. FY00 funding will procure hardware and communications infrastructure for fourteen Air Force Materiel Command (AFMC) weapon system product centers and acquire Interim Contractor Support (ICS) for SPS deployment at fifty-six operational contracting locations. FY01 funding will procure hardware and communications infrastructure for three AFMC logistics centers, acquire ICS for SPS deployment to 45 operational contracting sites, and begin the process of upgrading equipment purchased in prior years for operational contracting.

6. PERSONNEL ADMINISTRATION: FY99 funding completed the procurement of commercial-off-the-shelf (COTS) desktop and notebook computers and secure telephone equipment to replace the current inventory of the in-garrison/deployable Deliberate and Crisis Action Planning and Execution System (DCAPES) and the Manpower and Personnel Base-Level (MANPER-B) computers for the Air Force Personnel Center,

BUDGET ITEM JUSTIFICATION (EXHIBIT P-40)	DATE: FEBRUARY 2000
APPROP CODE/BA: OPAF/ELECTRONICS & TELECOMMUNICATION EQUIPMENT	**P-1 NOMENCLATURE:** BASE LEVEL DATA AUTOMATION PROGRAM

Description (cont.):
Randolph AFB, TX. No FY01 funding is requested.

7. INTEGRATED MAINTENANCE DATA SYSTEM (IMDS): IMDS is an integrated information system for aircraft maintenance and communications-electronics. It replaces numerous legacy systems and interfaces with many others, cutting across multiple functions to provide maintainers the ability to obtain required information for supporting their daily maintenance activities. Managers and commanders will be able to retrieve real-time equipment status from a single system instead of several. All IMDS data will be stored and processed via a central server located at Maxwell Air Force Base, Gunter Annex, AL. FY99-01 funding purchases computer hardware, local area networks and servers in support of operations, test, and evaluation of IMDS. Beginning in FY00, IMDS funding has been transferred to the Automated Data Processing Equipment (ADPE) Program, P-1 Line 48.

WEAPON SYSTEM COST ANALYSIS (EXHIBIT P- 5)		DATE: FEBRUARY 2000
APPROP CODE/BA: OPAF/ELECTRONICS & TELECOMMUNICATION EQUIPMENT	**P-1 NOMENCLATURE:** BASE LEVEL DATA AUTOMATION PROGRAM	

WEAPON SYSTEM COST ELEMENTS	IDENT CODE				FY1999			FY2000			FY2001		
		QTY	UNIT COST	TOTAL COST	QTY	UNIT COST	TOTAL COST	QTY	UNIT COST	TOTAL COST	QTY	UNIT COST	TOTAL COST
1. CMOS	A						301			314			320
2. WING ADP (WAS)	A						2,734			2,800			2,972
3. CAS (1)	A				45	15,555	700						
4. FAMS	A						8,557			9,026			9,439
5. SPS							{11,086}			{13,316}			{11,057}
SPS COMM INFRASTRUCTURE	A						11,086			10,316			8,057
ICS										3,000			3,000
6. PERSONNEL ADMIN	A						1,321						
7. IMDS (2)	A						936						
TOTALS:							25,635			25,456			23,788

REMARKS:
1. CAS procured 45 servers used in the CAS-B application migration.
2. IMDS program transferred to ADPE, P-1 Line 48, beginning in FY00.

BUDGET PROCUREMENT HISTORY PLANNING (EXHIBIT P- 5A)	DATE: FEBRUARY 2000
APPROP CODE/BA: OPAF/ELECTRONICS & TELECOMMUNICATION EQUIPMENT	**P-1 NOMENCLATURE:** BASE LEVEL DATA AUTOMATION PROGRAM

ITEM / FISCAL YEAR	QTY.	UNIT COST	LOCATION OF PCO	CONTRACT METHOD & TYPE	CONTRACTOR AND LOCATION	AWD. DATE	DATE FIRST DEL.	SPECS AVAIL NOW	DATE REV. AVAIL
1. CMOS (1)									
FY99			AFMC/SSG	OPT/FP (2)	MULTIPLE	OCT 98	MAR 99		
FY00			AFMC/SSG	OPT/FP (2)	MULTIPLE	MAR 00	JUN 00	Y	
FY01			AFMC/SSG	OPT/FP (2)	MULTIPLE	OCT 00	MAR 01	Y	
2. WING ADP (WAS) (1)									
FY99			AFMC/SSG	OPT/FP (3)	MULTIPLE	OCT 98	NOV 98		
FY00			AFMC/SSG	OPT/FP (3)	MULTIPLE	OCT 99	NOV 99		
FY01			AFMC/SSG	OPT/FP (3)	MULTIPLE	OCT 00	NOV 00	Y	
3. CAS (7)									
FY99	45	15,555	AFMC/SSG	OPT/FP (8)	DELL MARKETING L.P., ROUND ROCK, TX.	AUG 99	JUN 00		
4. FAMS (1)									
FY99			AFMC/SA-ALC	OPT/FP (5)	MULTIPLE	NOV 98	JAN 99		
FY00			AFMC/SA-ALC	OPT/FP (5)	MULTIPLE	NOV 99	JAN 00		

BUDGET PROCUREMENT HISTORY PLANNING (EXHIBIT P- 5A)	DATE: FEBRUARY 2000
APPROP CODE/BA: OPAF/ELECTRONICS & TELECOMMUNICATION EQUIPMENT	**P-1 NOMENCLATURE:** BASE LEVEL DATA AUTOMATION PROGRAM

ITEM / FISCAL YEAR	QTY.	UNIT COST	LOCATION OF PCO	CONTRACT METHOD & TYPE	CONTRACTOR AND LOCATION	AWD. DATE	DATE FIRST DEL.	SPECS AVAIL NOW	DATE REV. AVAIL
FY01			AFMC/SA-ALC	OPT/FP (5)	MULTIPLE	NOV 00	JAN 01	Y	
5. SPS COMM INFRASTRUCTURE (1)									
FY99			AFMC/SSG	OPT/FP (6)	MULTIPLE	FEB 99	APR 99		
FY00			AFMC/SSG	OPT/FP (6)	MULTIPLE	DEC 99	APR 00		
FY01			AFMC/SSG	OPT/FP (6)	MULTIPLE	DEC 00	APR 01	Y	
6. PERSONNEL ADMIN (1)									
FY99			HQ AFPC	OPT/FP (4)	SUN MICRO SYS, MTN VIEW, CA AND HUGHES DATA SYS, IRVINE, CA	FEB 99	AUG 99		
7. IMDS (9)			AFMC/SSG	OPT/FP (10)	MULTIPLE	JUN 99	NOV 99		

REMARKS:

1. Quantity/unit costs vary depending on configuration of each site.
2. Options to multiple contractor to include: FY94 Automatic Identification Technology contract with Intermec Corp, Everett WA; Super Mini Contract with PRC Corp., Reston VA; GSA Schedule Contracts. Award/delivery dates represent the date of first award/delivery.
3. Options to multiple GSA Schedule contracts. Award/delivery dates represent the date of first award and delivery.
4. Option to the standard Air Force workstation contract awarded in Mar 1996 to Sun Micro Systems, Mountain View, CA and Hughes Data Systems, Irvine, CA.
5. Options to multiple contracts to include the following companies: Syn-Tech, Tallahassee, FL; Trans-Flo Instruments Ltd, United Kingdom; Alsom Automation Systems, Cannonsburg, PA; Barton Instrument Systems, City of Industry, CA. Award/delivery dates represent the date of first award/delivery.

BUDGET PROCUREMENT HISTORY PLANNING (EXHIBIT P- 5A)	DATE: FEBRUARY 2000
APPROP CODE/BA: OPAF/ELECTRONICS & TELECOMMUNICATION EQUIPMENT	**P-1 NOMENCLATURE:** BASE LEVEL DATA AUTOMATION PROGRAM

ITEM / FISCAL YEAR	QTY.	UNIT COST	LOCATION OF PCO	CONTRACT METHOD & TYPE	CONTRACTOR AND LOCATION	AWD. DATE	DATE FIRST DEL.	SPECS AVAIL NOW	DATE REV. AVAIL

6. Options to Desk Top V and Ulana standard contracts. Award/delivery dates represent the date of first award/delivery.
7. CAS procured 45 servers used in the CAS-B application migration.
8. CAS equipment procured off a Blanket Purchase Agreement (BPA), managed by Maxwell AFB Gunter Annex, AL.
9. IMDS FY00/01 contractual information is reflected in ADPE, P-1 Line 48.
10. Multiple GSA schedule contractors, including Electronic Data Systems (EDS), Herndon, VA; General Analytics Corp, McLean, VA; HSF Inc, McLean, VA; GTE, West Lake, CA; IBM, Bethesda, MD; PRC, San Antonio, TX; Toshiba American, Irvine, CA; FGM Inc, Herndon, VA; Computer Science Corp (CSC), Hanover, MD; Systems Research & Applications (SRA), Arlington, VA; and Logicon Tech, San Pedro, CA. Award/delivery dates reflect date of first award and delivery.

BUDGET ITEM JUSTIFICATION (EXHIBIT P-40)	DATE: FEBRUARY 2000
APPROP CODE/BA: OPAF/ELECTRONICS & TELECOMMUNICATION EQUIPMENT	**P-1 NOMENCLATURE:** THEATER BATTLE MANAGEMENT C2 SYSTEM

		FY1999	FY2000	FY2001	FY2002	FY2003	FY2004	FY2005
QUANTITY								
COST (in Thousands)		$79,882	$47,150	$56,820	$59,486	$58,809	$60,311	$60,925

Description:

THEATER BATTLE MANAGEMENT CORE SYSTEMS (TBMCS) is an integrated battle management system used to plan, execute and manage an air campaign. It provides automated planning tools enabling consistent, coordinated battle management at the Air Operations Center (AOC) (force level) and unit levels (operations and intelligence functions). TBMCS is the U.S. joint standard system for generation and dissemination of the air tasking order, and will be interoperable with allied units at the AOC, wing, and unit levels. The TBMCS program integrated several "stovepipe" systems into a common operating environment, subsuming the functions of the Contingency Theater Automated Planning System (CTAPS), the Combat Intelligence System (CIS), and the Wing Command and Control System (WCCS). This integration provides a consistent software architecture that tightly streamlines the flow of information.

This program purchases state-of-the-art equipment to satisfy Air Force requirements for automated support of command and control (C2) functions at both force and unit levels worldwide. As the functions of CTAPS (force level), WCCS (unit level) and CIS (intelligence) migrated into TBMCS, the funding for the earlier separate procurements (CTAPS and WCCS) was realigned under this program. Procurement to support Theater Battle Management Combat Intelligence System is funded in P-1 line 37, Intelligence Data Handling System (IDHS), through FY00. Beginning in FY01, CIS (IDHS) funding was realigned with the TBMCS P-1 line.

$4.5 million of FY99 funds for TBMCS were added through the FY99 Year 2000 (Y2K) supplemental and transferred to the Air Force from the Information Technology Systems and Security Transfer Account for Y2K conversion activities. FY 99-01 funding will procure hardware replacements for fielded force, and unit level installations necessary to sustain operations and to support TBMCS software versions. TBMCS

BUDGET ITEM JUSTIFICATION (EXHIBIT P-40)	DATE: FEBRUARY 2000
APPROP CODE/BA: OPAF/ELECTRONICS & TELECOMMUNICATION EQUIPMENT	**P-1 NOMENCLATURE:** THEATER BATTLE MANAGEMENT C2 SYSTEM

Description (cont.):

funds will also procure a full complement of equipment for initial unit level installations at three sites in FY99, four in FY00 and four in FY01. Currently (through FY00), of the 42 required unit level installations, 18 are complete and 4 are in progress. The fielding of TBMCS Version 1.0 incorporates the TBMCS Y2K solution. Minimum operational performance requirements dictated a significant hardware upgrade in FY99 in support of this software. The Y2K supplemental enabled reinsertion of FY99 initial unit installations (justified in the FY99 Amended President's Budget) into the baseline since the FY00 President's Budget, and the hardware upgrades have been procured. FY99-01 funds also provide required software licenses, type one training, interim contractor support, engineering support, and system program office support for TBMCS applications.

Additionally, FY99-01 funds procure, integrate and deploy the Combat Integration Capability (CIC) into the AOCs to process time critical targets (TCT) during the execution of daily operations. The CIC will allow the commander to monitor the battle space, discriminate TCTs from other tactical activity, identify the best available weapon to engage the TCT, and coordinate engagement of the weapon and weapon platform.

CIS acquires improved hardware and installation/integration support for intelligence systems required at the air component/force and wing/squadron levels. FY01 funding procures commercial-off-the-shelf and government furnished equipment, to include user workstations, servers, mass data storage devices, printers, and equipment supporting connectivity to the Defense Data Network.

WEAPON SYSTEM COST ANALYSIS (EXHIBIT P- 5)		DATE: FEBRUARY 2000
APPROP CODE/BA: OPAF/ELECTRONICS & TELECOMMUNICATION EQUIPMENT	**P-1 NOMENCLATURE:** THEATER BATTLE MANAGEMENT C2 SYSTEM	

WEAPON SYSTEM COST ELEMENTS	IDENT CODE				FY1999			FY2000			FY2001		
		QTY	UNIT COST	TOTAL COST	QTY	UNIT COST	TOTAL COST	QTY	UNIT COST	TOTAL COST	QTY	UNIT COST	TOTAL COST
1. TBMCS (1)							{54,259}			{24,290}			{21,575}
A. FORCE	A						12,919			2,290			2,007
B. UNIT	A						34,581			18,000			12,800
C. CIC	A						6,759			4,000			2,000
D. CIS	A												4,768
2. COTS SOFTWARE LICENSES							8,956			1,281			12,400
3. TYPE 1 TRAINING (2)							4,556			9,967			5,321
4. INTERIM CONTRACTOR SUPPORT (ICS)							879			1,956			2,987
5. ENGINEERING/PROGRAM SUPPORT							11,232			9,656			14,537
TOTALS:							79,882			47,150			56,820

REMARKS:

1. Y2K funding in the amount of $36,077 was added to the FY99 procurement line. Hardware upgrades to the TBMCS system have been made and minimum operational performance requirements can be satisfied.

NOTE: Beginning in FY01, the CIS portion of TBMCS, previously reported as part of the Intelligence Data Handling System (IDHS) (P-1 Line #37), is requested in this P-1 Line.

2. The evolutionary nature of the TBMCS software development results in frequent major software releases, at which time a surge in Type 1 training is required. Type 1 training is also an annual requirement driven by the TBMCS installation schedule.

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BUDGET PROCUREMENT HISTORY PLANNING (EXHIBIT P- 5A)									DATE: FEBRUARY 2000
APPROP CODE/BA: OPAF/ELECTRONICS & TELECOMMUNICATION EQUIPMENT				P-1 NOMENCLATURE: THEATER BATTLE MANAGEMENT C2 SYSTEM					
ITEM / FISCAL YEAR	QTY.	UNIT COST	LOCATION OF PCO	CONTRACT METHOD & TYPE	CONTRACTOR AND LOCATION	AWD. DATE	DATE FIRST DEL.	SPECS AVAIL NOW	DATE REV. AVAIL
1. TBMCS									
A. FORCE									
FY99 (1)			AFMC/ESC	OPT/IDIQ	GSA, MULTIPLE (2)	OCT 98	DEC 98		
FY00 (1)			AFMC/ESC	OPT/IDIQ	GSA, MULTIPLE (2)	OCT 99	DEC 99		
FY01 (1)			AFMC/ESC	OPT/IDIQ	GSA, MULTIPLE (2)	OCT 00	DEC 00	Y	
B. UNIT									
FY99 (1)			AFMC/ESC	OPT/IDIQ	GSA, MULTIPLE (2)	OCT 98	DEC 98		
FY00 (1)			AFMC/ESC	OPT/IDIQ	GSA, MULTIPLE (2)	OCT 99	DEC 99		
FY01 (1)			AFMC/ESC	OPT/IDIQ	GSA, MULTIPLE (2)	OCT 00	DEC 00	Y	
C. CIC									
FY99 (1)			AFMC/ESC	OPT/IDIQ	GSA, MULTIPLE (3)	NOV 98	JAN 99		
FY00 (1)			AFMC/ESC	OPT/IDIQ	GSA, MULTIPLE (3)	NOV 99	JAN 00		
FY01 (1)			AFMC/ESC	OPT/IDIQ	GSA, MULTIPLE (3)	NOV 00	JAN 01	Y	
D. CIS									
FY01 (1)			AFMC/ESC	OPT/IDIQ	GSA, MULTIPLE (2)	NOV 00	JAN 01	Y	

BUDGET PROCUREMENT HISTORY PLANNING (EXHIBIT P- 5A)	DATE: FEBRUARY 2000
APPROP CODE/BA: OPAF/ELECTRONICS & TELECOMMUNICATION EQUIPMENT	**P-1 NOMENCLATURE:** THEATER BATTLE MANAGEMENT C2 SYSTEM

ITEM / FISCAL YEAR	QTY.	UNIT COST	LOCATION OF PCO	CONTRACT METHOD & TYPE	CONTRACTOR AND LOCATION	AWD. DATE	DATE FIRST DEL.	SPECS AVAIL NOW	DATE REV. AVAIL

REMARKS:

1. Varying quantities and unit costs due to number/types of equipment being procured for specific sites.
2. Multiple GSA contracts for commerical off-the-shelf equipment are used. Due to more competitive pricing and delivery, the GSA contracts have been selected, at this time, as an alternative to the Sun Microsystem and Hughes contracts. Award/Delivery dates reflect date of first award and delivery.
3. The CIC effort requires two major contractors: GSA to procure the Government Furnished Equipment and Lockheed-Martin Command and Control Systems, Colorado Springs, CO, for integration and assembly tasks. Option to basic contract with Lockheed-Martin awarded in Oct 1995. Award/Delivery dates reflect date of first award and delivery.

BUDGET ITEM JUSTIFICATION (EXHIBIT P-40)	DATE: FEBRUARY 2000
APPROP CODE/BA: OPAF/ELECTRONICS & TELECOMMUNICATION EQUIPMENT	**P-1 NOMENCLATURE:** BASE INFORMATION INFRASTRUCTURE

		FY1999	FY2000	FY2001	FY2002	FY2003	FY2004	FY2005
QUANTITY								
COST (in Thousands)		$156,405	$136,555	$177,283	$155,043	$157,952	$220,304	$238,028

Description:

The Base Information Infrastructure (BII) procurement line funds the Combat Information Transport System (CITS) Program, Network Connectivity, and Public Key Infrastructure (PKI). The driving factor behind the FY01 funding increase in the CITS program is to provide switch upgrades and contractor turn-key procurement services, to include engineering, installation and drawings. As part of the re-engineering plan for the 38th Engineering and Installation Wing (EIW), beginning in FY01 planning and installation services will be provided through contractor support.

1. COMBAT INFORMATION TRANSPORT SYSTEM (CITS): CITS is the Air Force component of the National Information Infrastructure (NII) and the Defense Information Infrastructure (DII) plans. CITS will modernize the information transport capability at the base level by replacing maintenance intensive equipment, replacing or upgrading some existing voice switching systems, providing network management of information systems, increasing the capacity of saturated information transmission systems, and providing information protect tools. The program upgraded non-compliant Year 2000 (Y2K) base telephone switches Air Force-wide prior to the start of the millennium. The current CITS program provides fiber installations to core buildings at Air Force bases. This infrastructure must be provided to allow the warfighter and wing command center full access to real-time Command and Control (C2) information during contingencies. Lack of full C2 access would severely limit reach-back capability supporting deployable forward footprint-push/pull information capability and impede proactive information protection countermeasures to support collaborative information exchange. The program includes five (5) product areas which are centrally funded and managed by the CITS Program Office. The product areas are described below:

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APPROP CODE/BA: OPAF/ELECTRONICS & TELECOMMUNICATION EQUIPMENT	**P-1 NOMENCLATURE:** BASE INFORMATION INFRASTRUCTURE

Description (cont.):

a. INFORMATION TRANSPORT SYSTEM (ITS): The ITS product area will provide each Air Force base with a broad-band, fiber-optic digital information transport network to provide near-instantaneous information transfer. The system will have sufficient capacity to meet each base's data, voice, video, imagery, and telemetry requirements. At most Air Force bases, the existing infrastructure is incapable of supporting the current and future communications needs of the warfighter. Initial capability will include data transport with other media, incorporated as technology and funding permit. FY99-01 funding procures the initial phase of ITS installation projects. Any delay in ITS installation will impact the schedules of several C2 and combat support automation modernization programs dependent upon the in-place fiber optic ITS infrastructure. As a result of the 38th EIW re-engineering, FY01 funding was increased to provide contractor turn-key procurement services, to include engineering, installation and drawings.

b. NETWORK MANAGEMENT SYSTEM/BASE INFORMATION PROTECT (NMS/BIP): The NMS/BIP product area delivers a modern network management system for the base, Major Command (MAJCOM) and Air Force network control centers. NMS/BIP supports the International Standards Organization's (ISO) five network management functions: fault management, configuration management, performance management, accounting management, and security management. NMS/BIP provides the information assurance tools for each Air Force base to detect, deter, isolate, contain, reconstitute, and recover from information systems and network security intrusions or attacks. The tools will ensure information integrity, security, and confidentiality are maintained while passing information across the network(s). The CITS Program Office leverages the experience of two industry-leading network companies (Electronic Data Systems (EDS) and TRW, Inc) to provide best value for the Air Force. The FY99-01 funding continues the installation of critical information equipment capabilities in fixed-based network control centers and deployed installations worldwide. Additionally, standard network management and trouble ticketing solutions will be provided for fixed-based installations. The NMS/BIP Information Assurance funding was increased $15M by Congress in the FY00 markup of the FY00 Air Force budget. Reference Appropriation Conference Report 106-371, October 8, 1999, page 198. These funds will be used to protect Air Force Geographically Separated Units (GSUs).

c. VOICE SWITCHING SYSTEM (VSS): The VSS product area, formerly Digital Switch System (DSS), will provide technology upgrades

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APPROP CODE/BA: OPAF/ELECTRONICS & TELECOMMUNICATION EQUIPMENT	**P-1 NOMENCLATURE:** BASE INFORMATION INFRASTRUCTURE

Description (cont.):
to some existing base telephone systems and, at some bases, new Commercial-Off-the-Shelf (COTS) digital switching equipment to replace telephone switches no longer capable of meeting mission requirements. The increased capacity and standard interfaces of the new or upgraded equipment (dial central offices, information transport nodes, remote switching centers, private branch exchanges, etc.) will improve intrabase connectivity and capability to move information worldwide. Funding ensures bases will have sufficient capacity critical for intrabase connectivity, new mission growth and increasing demands for fax machine and secure telephone dial-in connectivity. FY99-01 funding procures upgrades for 201 main base switches in AF inventory, bringing them up to the manufacturer's current release. Funding increased in FY00 as a result of program restructuring due to realignment of Air Force priorities. Funding increases starting in FY01 are a result of the re-engineering plan for the 38th EIW.

d. YEAR 2000 (Y2K) SWITCHES: This product area upgraded base phone switches for Y2K compliance. All CITS switches are now Y2K compliant. No FY01 funding is requested.

e. TELECOMMUNICATIONS MANAGEMENT SYSTEM (TMS): This product area, formerly CMS, fields automated telecommunications management systems integrating telephone subscriber, connectivity, and equipment data. TMS uses a client/server architecture and a relational database to increase productivity while reducing cost. System functionality includes charge-back billing, automated call collection and fault management, unattended call rating, configuration management, telephone directory generation, online directory assistance, and extensive tracking and reporting options. TMS may be stand-alone or connected to base networks; it interfaces directly with the VSS. FY99-01 funding procures TMS for multiple Air Force bases. Funding is critical for automation of bases which are using disparate, manual methods to accomplish the same work.

2. NETWORK CONNECTIVITY: CITS provides a broad fiber optic network to deliver data to user facilities but is not funded at a sufficient level to connect individual user systems or applications. A majority of downward directed automation programs also are not sufficiently funded for network connectivity. FY01 funds will close this critical gap and provide network routers, hubs, and internal building wiring to connect new

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APPROP CODE/BA: OPAF/ELECTRONICS & TELECOMMUNICATION EQUIPMENT	**P-1 NOMENCLATURE:** BASE INFORMATION INFRASTRUCTURE

Description (cont.):
systems to the fiber optic backbone provided by CITS.

3. PUBLIC KEY INFRASTRUCTURE (PKI): A Department of Defense (DoD) PKI was mandated by the Deputy Secretary of Defense on 8 Aug 97. PKI provides non-repudiation, user identification, and confidentiality for government electronic business. FY00/01 funds procure infrastructure computers and Air Force-wide public/private key hardware needed to generate, certify, and distribute public/private key pairs for computer applications requiring information assurance capabilities (digital signatures and data encryption).

4. AIR FORCE OFFICE OF SPECIAL INVESTIGATIONS (AFOSI): FY99 funded Computer Crimes Investigation (CCI) equipment required to upgrade AFOSI program capability. No FY01 funding is requested.

BUDGET ITEM JUSTIFICATION FOR AGGREGATED ITEMS (EXHIBIT P- 40A)	DATE: FEBRUARY 2000
APPROP CODE/BA: OPAF/ELECTRONICS & TELECOMMUNICATION EQUIPMENT	**P-1 NOMENCLATURE:** BASE INFORMATION INFRASTRUCTURE

PROCUREMENT ITEMS	ID CODE			FY1999		FY2000		FY2001	
		QTY.	COST	QTY.	COST	QTY.	COST	QTY.	COST
1. COMBAT INFORMATION TRANSPORT SYSTEM (CITS)					${155,405}		${131,803}		${158,026}
A. INFORMATION TRANSPORT SYSTEM (ITS) (1)	A			24	$63,743	29	$95,375	31	$108,985
B. NETWORK MANAGEMENT SYSTEM/BASE INFORMATION PROTECT (NMS/BIP) (2)	A			109	$40,636	75	$22,477	80	$34,680
C. VOICE SWITCHING SYSTEM (VSS)	A			6	$9,363	62	$12,647	201	$10,168
D. YEAR 2000 (Y2K) SWITCHES	A			35	$37,716				
E. TELECOMMUNICATONS MANAGEMENT SYSTEM (TMS)	A			13	$3,947	4	$1,304	13	$4,193
2. NETWORK CONNECTIVITY	A								$5,854
3. PUBLIC KEY INFRASTRUCTURE (PKI)	A						$4,752		$13,403
4. AFOSI	A				$1,000				
Totals:					$156,405		$136,555		$177,283

Remarks:

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APPROP CODE/BA: OPAF/ELECTRONICS & TELECOMMUNICATION EQUIPMENT	**P-1 NOMENCLATURE:** BASE INFORMATION INFRASTRUCTURE

ITEM / FISCAL YEAR	QTY.	UNIT COST	LOCATION OF PCO	CONTRACT METHOD & TYPE	CONTRACTOR AND LOCATION	AWD. DATE	DATE FIRST DEL.	SPECS AVAIL NOW	DATE REV. AVAIL
1. COMBAT INFORMATION TRANSPORT SYSTEM (CITS)									
A. INFORMATION TRANSPORT SYSTEM (ITS)									
FY99 (1) (2)	7		AFMC/ESC	DO/FFP	38TH EIW, TINKER AFB, OK	DEC 98	JAN 99		
FY99 (1) (2)	17		AFMC/ESC	DO/FFP	GTE SERVICES, FREDERICK, MD	DEC 98	JAN 99		
FY00 (1) (2) (3)	29		AFMC/ESC	DO/FFP	GENERAL DYNAMICS, NEEDHAM, MA; LUCENT, GREENSBORO, NC; 38TH EIW, TINKER AFB, OK	OCT 99	DEC 99		
FY01 (1) (2) (3)	31		AFMC/ESC	DO/FFP	GENERAL DYNAMICS, NEEDHAM, MA; LUCENT, GREENSBORO, NC	OCT 00	DEC 00	Y	
B. NETWORK MANAGEMENT SYSTEM/BASE INFORMATION PROTECT (NMS/BIP)									
FY99 (1) (2)	109		AFMC/ESC	DO/FFP	EDS, HERNDON, VA TRW, SAN ANTONIO, TX	FEB 99	MAR 99		
FY00 (1) (2)	75		AFMC/ESC	DO/FFP	EDS, HERNDON, VA TRW, SAN ANTONIO, TX	NOV 99	JAN 00		
FY01 (1) (2)	80		AFMC/ESC	DO/FFP	EDS, HERNDON, VA TRW, SAN ANTONIO, TX	NOV 00	JAN 01	Y	

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ITEM / FISCAL YEAR	QTY.	UNIT COST	LOCATION OF PCO	CONTRACT METHOD & TYPE	CONTRACTOR AND LOCATION	AWD. DATE	DATE FIRST DEL.	SPECS AVAIL NOW	DATE REV. AVAIL
C. VOICE SWITCHING SYSTEM (VSS)									
FY99 (1) (2)	2		AFMC/ESC	DO/FFP	GTE, NEEDHAM, MA	OCT 98	DEC 98		
FY99 (1) (2)	4		AFMC/ESC	DO/FFP	LUCENT, GREENSBORO, NC	OCT 98	DEC 98		
FY00 (1) (2)	2		AFMC/ESC	DO/FFP	LUCENT, GREENSBORO, NC	OCT 99	DEC 99		
FY00 (1) (2)	60		AFMC/ESC	DO/FFP	GENERAL DYNAMICS, NEEDHAM MA	DEC 99	SEP 00		
FY01 (1) (2)	201		AFMC/ESC	DO/FFP	GENERAL DYNAMICS, NEEDHAM MA; LUCENT, GREENSBORO, NC	OCT 00	SEP 01	Y	
D. YEAR 2000 (Y2K) SWITCHES									
FY99 (2) (6)	4		AFMC/ESC	DO/FFP	LUCENT, GREENBORO, NC	OCT 98	DEC 98		
FY99 (2) (6)	31		AFMC/ESC	DO/FFP	GTE, NEEDHAM, MA	OCT 98	DEC 98		
E. TELECOMMUNICATONS MANAGEMENT SYSTEM (TMS)									
FY99 (1) (2)	13		AFMC/ESC	DO/FFP	ANSTEC, INC, FAIRFAX, VA	OCT 98	MAY 99		
FY00 (1) (2)	4		AFMC/ESC	DO/FFP	ANSTEC, INC, FAIRFAX, VA	OCT 99	MAY 00		
FY01 (1) (2)	13		AFMC/ESC	DO/FFP	ANSTEC, INC, FAIRFAX, VA	OCT 00	MAY 01	Y	

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ITEM / FISCAL YEAR	QTY.	UNIT COST	LOCATION OF PCO	CONTRACT METHOD & TYPE	CONTRACTOR AND LOCATION	AWD. DATE	DATE FIRST DEL.	SPECS AVAIL NOW	DATE REV. AVAIL
2. NETWORK CONNECTIVITY									
FY01 (2)			HQ AFCA	DO/FFP	MULTIPLE (4)	OCT 00	MAY 01	Y	
3. PUBLIC KEY INFRASTRUCTURE (PKI)									
FY00			AFMC/SSG	DO/FFP	MULTIPLE (5)	JAN 00	FEB 00		
FY01			AFMC/SSG	DO/FFP	MULTIPLE (5)	DEC 00	JAN 01	Y	
4. AFOSI									
FY99 (2)			HQ AFOSI	MIPR/FFP	GSA (MULTIPLE) (5)	MAR 99	JUN 99		

REMARKS:

1. Quantities reflect number of fixed-based or deployed installations.
2. Unit cost varies because of number/types of equipment being procured (site layout, number of users, data throughput, cable lengths, etc).
3. Award/delivery dates reflect date of first award and delivery.
4. Multiple contractors will be used to procure Network Connectivity equipment. Award/delivery dates reflect date of first award and delivery. Typical contractors include EDS, Herndon, VA; TRW, San Antonio, TX; General Dynamics, Needham, MA.
5. Multiple options to existing contracts or delivery orders from the GSA schedule will be used to satisfy contracting requirements. Quantities/unit costs vary because of different types of equipment being procured. Award/delivery dates reflect date of first award and delivery.

BUDGET PROCUREMENT HISTORY PLANNING (EXHIBIT P- 5A)										DATE: FEBRUARY 2000
APPROP CODE/BA: OPAF/ELECTRONICS & TELECOMMUNICATION EQUIPMENT				P-1 NOMENCLATURE: BASE INFORMATION INFRASTRUCTURE						
ITEM / FISCAL YEAR	QTY.	UNIT COST	LOCATION OF PCO	CONTRACT METHOD & TYPE	CONTRACTOR AND LOCATION	AWD. DATE	DATE FIRST DEL.	SPECS AVAIL NOW	DATE REV. AVAIL	
6. Quantities represent number of switches upgraded for Y2K compliance.										

BUDGET ITEM JUSTIFICATION (EXHIBIT P-40)	DATE: FEBRUARY 2000
APPROP CODE/BA: OPAF/ELECTRONICS & TELECOMMUNICATION EQUIPMENT	**P-1 NOMENCLATURE:** USCENTCOM

		FY1999	FY2000	FY2001	FY2002	FY2003	FY2004	FY2005
QUANTITY								
COST (in Thousands)		$4,406	$5,719	$7,335	$6,855	$6,559	$6,390	$6,497

Description:

The Air Force is the executive agent for US Central Command (USCENTCOM) and the Joint Communications Support Element (JCSE). USCENTCOM is geographically separated from its area of responsibility (AOR) by over 7,000 miles. In order to meet its mission responsibilities despite that geographical handicap, USCENTCOM relies on command, control, communications and computer (C4) systems capable of achieving full spectrum information superiority. The US Commander-in-Chief Central Commands' (CINCCENT) warfighting Command Automation System provides the necessary automated systems for command and control of all assigned forces. USCENTCOM uses the Joint Staff's Modern Aids to Planning Program (MAPP) to run automated courses of action studies and wargaming simulations to validate operational planning actions. Items requested in FY01 are identified on the attached P-40A and are representative of items to be procured. Items procured during execution may change based on critical equipment needed to support current Air Force mission requirements.

1. USCENTCOM COMMAND AND CONTROL SYSTEMS: This program procures essential C4 systems in support of deployed forces as well as garrison-based contingency and peacetime operations. FY99-01 funds continue to provide for modernization of communications and automation systems, including procurement of USCENTCOM-specific Global Command and Control System (GCCS) equipment, commercial satellite communications terminals, telephone switches, Command Center Demand Assigned Access compliant radios, and upgrades to the MAPP system.

2. JOINT COMMUNICATIONS SUPPORT ELEMENT (JCSE): JCSE is the only joint DoD unit specifically formed to provide Command, Control, and Communications (C3) support for the Joint Chiefs of Staff (JCS) contingency operations worldwide. FY99-01 funds provide the

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Description (cont.):
Air Force's one-third share to procure C3 equipment in support of deployed Joint Task Force Headquarters and deployed Special Operations Command Headquarters. Equipment requirements are approved annually by the JCS and assigned to the respective services for procurement through the Executive Acquisition Agent (Air Force).

BUDGET ITEM JUSTIFICATION FOR AGGREGATED ITEMS (EXHIBIT P- 40A)	DATE: FEBRUARY 2000
APPROP CODE/BA: OPAF/ELECTRONICS & TELECOMMUNICATION EQUIPMENT	**P-1 NOMENCLATURE:** USCENTCOM

PROCUREMENT ITEMS	ID CODE			FY1999		FY2000		FY2001	
		QTY.	COST	QTY.	COST	QTY.	COST	QTY.	COST
1. USCENTCOM COMMAND AND CONTROL SYSTEMS	A				$1,330		$2,711		$4,277
2. JOINT COMMUNICATIONS SUPPORT ELEMENT (JCSE)	A				$3,076		$3,008		$3,058
Totals:					$4,406		$5,719		$7,335

Remarks:

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BUDGET PROCUREMENT HISTORY PLANNING (EXHIBIT P- 5A)	DATE: FEBRUARY 2000
APPROP CODE/BA: OPAF/ELECTRONICS & TELECOMMUNICATION EQUIPMENT	**P-1 NOMENCLATURE:** USCENTCOM

ITEM / FISCAL YEAR	QTY.	UNIT COST	LOCATION OF PCO	CONTRACT METHOD & TYPE	CONTRACTOR AND LOCATION	AWD. DATE	DATE FIRST DEL.	SPECS AVAIL NOW	DATE REV. AVAIL
1. USCENTCOM COMMAND AND CONTROL SYSTEMS (1)									
FY99			USCENTCOM	C/FFP	MULTIPLE (2)	APR 99	JUN 99		
FY00			USCENTCOM	C/FFP	MULTIPLE (2)	JAN 00	FEB 00		
FY01			USCENTCOM	C/FFP	MULTIPLE (2)	DEC 00	JAN 01	Y	
2. JOINT COMMUNICATIONS SUPPORT ELEMENT (JCSE) (1)									
FY99			11WING	C/FFP	MULTIPLE (2)	DEC 98	FEB 99		
FY00			11WING	C/FFP	MULTIPLE (2)	JAN 00	FEB 00		
FY01			11WING	C/FFP	MULTIPLE (2)	NOV 00	JAN 01	Y	

REMARKS:

1. Quantities and unit costs vary because multiple types of equipment are being procured.
2. Multiple contract awards for small acquisitions with various contractors and contracting agencies. Some contractor examples are: GTE, Needham Heights, MA; Booz-Allen Hamilton, St. Inigoes, MD; SPAWAR, North Charleston, SC; MITRE, Fort Monmouth, NJ; SAIC, San Diego, CA; Microsoft, Charlotte, NC; Sun, McLean, VA; Xerox, Tampa, FL; and NISE East, Portsmouth, VA. Award/delivery dates reflect date of first award and delivery.

BUDGET ITEM JUSTIFICATION (EXHIBIT P-40)	DATE: FEBRUARY 2000
APPROP CODE/BA: OPAF/ELECTRONICS & TELECOMMUNICATION EQUIPMENT	**P-1 NOMENCLATURE:** DEFENSE MESSAGE SYSTEM (DMS)

		FY1999	FY2000	FY2001	FY2002	FY2003	FY2004	FY2005
QUANTITY								
COST (in Thousands)		$15,332	$18,503	$17,947	$12,059	$20,305	$20,548	$20,725

Description:

This program acquires equipment necessary to implement Air Force (AF) email/messaging requirements for the Defense Message System (DMS). Items requested in FY01 are identified on the attached P-40A and are representative of items to be procured. Items procured during execution may change based on critical equipment needed to support current Air Force mission requirements. The DMS provides essential capabilities to carry on the wartime and peactime missions of the AF in lieu of the base telecommunications centers and Automatic Digital Network (AUTODIN) switches. This is an OSD-mandated system to replace AUTODIN, which has been scaled back to support a small population of critical users from December 1999 through FY03 when AUTODIN will be shutdown.

Record messaging communicates and documents command and control directives, agreements, financial data, and other mission essential data. To that end, it must provide the users with confidence that the message is authentic, credible, and traceable back to the originator. DMS provides these assurances while maintaining the look, feel, and simplicity of e-mail. All features of DMS must be operational and extended to all users in order to terminate AUTODIN. The transition will occur in three distinct phases:
- All Top Secret/Collateral (TS/C) and below General Service (GENSER) non-Special Category/Special Handling Designator (SPECAT/SHD) users will transition by 15 Sep 00 (most users are in this category)
- All SPECAT/SHD users will transition within 6 months of the version 3.0 fielding decision (expected in CY01)
- All remaining users (intelligence and allied communities) will transition by the end of FY03

Without DMS system funding, the AF will not have the capability to support a majority of its message traffic after September 2000. The Air

BUDGET ITEM JUSTIFICATION (EXHIBIT P-40)	DATE: FEBRUARY 2000
APPROP CODE/BA: OPAF/ELECTRONICS & TELECOMMUNICATION EQUIPMENT	**P-1 NOMENCLATURE:** DEFENSE MESSAGE SYSTEM (DMS)

Description (cont.):
Force has started DMS migration with a small portion of its operational users. After the upcoming software maintenance release is installed, an additional emphasis will be placed on transitioning users from AUTODIN to DMS in order to adhere to DEPSECDEF guidance.

1. DMS Components: FY99-01 funding continues all DMS efforts at 90 Air Force bases and 143 sub-sites. Efforts include engineering/installation services, DMS software upgrades, message handling capability, and initiation of a critical technical refresh program intended to ensure DMS hardware is capable of continued mission support through the maturation of software. DMS capabilities are in the early stages of meeting mission requirements and continue to expand/evolve. Funding levels must be maintained to ensure DMS capabilities are extended to the entire user population and continue to meet mission requirements.

2. DMS Security (formerly called Enhanced Security Capability): FY00 and FY01 funds procure ten High Assurance Guards (HAG) each year to enable messages with attachments to transit from one security level to another without potentially breaching national security. This capability is critical to the Expeditionary Air Force forces and any other element which may be required to fight in a multi-national force environment. FY99/00 funds procure FORTEZZA security cards and card readers for all USAF users in order to comply with the established timelines. FY01 funds will procure replacements and FORTEZZA cards/readers for the tactical community.

3. Deployable DMS: Deployable DMS provides the warfighter with the same messaging capability whether deployed or in-garrison. Due to Expeditionary Air Force restructuring and the addition of requirements for US Central Command, the Air National Guard and test facilities, the number of units requiring deployable packages increased by 27 percent over previously reported estimates to 148 units. In order to meet mission requirements, the deployment suite equipment package was modified to ruggedize components and add critical peripheral equipment. FY99 funds procured six deployable suites. FY00/01 funding will continue DMS deployment to 70 percent of the remaining deployable units and add mission essential components which provide minimum support to in-theater deployed forces. Until these remaining components are provided, the deployed units will have to reach back to CONUS for these specialized capabilities, straining deployed bandwidth resources.

BUDGET ITEM JUSTIFICATION FOR AGGREGATED ITEMS (EXHIBIT P- 40A)	DATE: FEBRUARY 2000
APPROP CODE/BA: OPAF/ELECTRONICS & TELECOMMUNICATION EQUIPMENT	**P-1 NOMENCLATURE:** DEFENSE MESSAGE SYSTEM (DMS)

PROCUREMENT ITEMS	ID CODE			FY1999		FY2000		FY2001	
		QTY.	COST	QTY.	COST	QTY.	COST	QTY.	COST
1. DMS COMPONENTS	A				$6,285		$10,658		$8,240
2. DMS SECURITY					${1,500}		${1,200}		${1,550}
A. FORTEZZA	A				$1,500		$500		$800
B. GUARDS	A						$700		$750
3. DEPLOYABLE DMS	A				$7,547		$6,645		$8,157
Totals:					$15,332		$18,503		$17,947

Remarks:

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BUDGET PROCUREMENT HISTORY PLANNING (EXHIBIT P- 5A)	DATE: FEBRUARY 2000
APPROP CODE/BA: OPAF/ELECTRONICS & TELECOMMUNICATION EQUIPMENT	**P-1 NOMENCLATURE:** DEFENSE MESSAGE SYSTEM (DMS)

ITEM / FISCAL YEAR	QTY.	UNIT COST	LOCATION OF PCO	CONTRACT METHOD & TYPE	CONTRACTOR AND LOCATION	AWD. DATE	DATE FIRST DEL.	SPECS AVAIL NOW	DATE REV. AVAIL
1. DMS COMPONENTS (1)									
FY99			AFMC/SSG	OPT (2)/FFP	LOCKHEED-MARTIN CORP., MANASSAS, VA	DEC 98	FEB 99		
FY00			AFMC/SSG	OPT (2)/FFP	LOCKHEED-MARTIN CORP., MANASSAS, VA	DEC 99	FEB 00		
FY01			AFMC/SSG	OPT (2)/FFP	LOCKHEED-MARTIN CORP., MANASSAS, VA	DEC 00	FEB 01	Y	
2. DMS SECURITY (1) (3)									
A. FORTEZZA									
FY99			AFMC/SSG	MIPR/FFP	NAVY/MYKOTRONX, TORRANCE, CA	APR 99	MAY 99		
FY00			AFMC/SSG	MIPR/FFP	NAVY/MYKOTRONX, TORRANCE, CA	APR 00	MAY 00	Y	
FY01			AFMC/SSG	MIPR/FFP	NAVY/MYKOTRONX, TORRANCE, CA	APR 01	MAY 01	Y	
B. GUARDS									
FY99			AFMC/SSG	MIPR/FFP	NSA, FT. MEADE, MD	APR 99	MAY 99		
FY00			AFMC/SSG	MIPR/FFP	NSA, FT. MEADE, MD	APR 00	MAY 00	Y	
FY01			AFMC/SSG	MIPR/FFP	NSA, FT. MEADE, MD	APR 01	MAY 01	Y	

BUDGET PROCUREMENT HISTORY PLANNING (EXHIBIT P- 5A)	DATE: FEBRUARY 2000
APPROP CODE/BA: OPAF/ELECTRONICS & TELECOMMUNICATION EQUIPMENT	**P-1 NOMENCLATURE:** DEFENSE MESSAGE SYSTEM (DMS)

ITEM / FISCAL YEAR	QTY.	UNIT COST	LOCATION OF PCO	CONTRACT METHOD & TYPE	CONTRACTOR AND LOCATION	AWD. DATE	DATE FIRST DEL.	SPECS AVAIL NOW	DATE REV. AVAIL
3. DEPLOYABLE DMS (1) (3)									
FY99			AFMC/SSG	C/FFP	TRW, SAN ANTONIO, TX	JAN 99	MAR 99		
FY00			AFMC/SSG	OPT (4)/FFP	TRW, SAN ANTONIO, TX	APR 00	MAY 00	Y	
FY01			AFMC/SSG	OPT (4)/FFP	TRW, SAN ANTONIO, TX	APR 01	MAY 01	Y	

REMARKS:

1. Quantities and unit costs vary due to different site configurations.
2. Option to Lockheed-Martin Corp., Manassas VA contract awarded Oct 96.
3. Acquisition strategy has changed to take advantage of more competitively priced contracts for these items.
4. Option to TRW, San Antonio, TX awarded April 99.

BUDGET ITEM JUSTIFICATION (EXHIBIT P-40)	DATE: FEBRUARY 2000
APPROP CODE/BA: OPAF/ELECTRONICS & TELECOMMUNICATION EQUIPMENT	**P-1 NOMENCLATURE:** NAVSTAR GPS SPACE

		FY1999	FY2000	FY2001	FY2002	FY2003	FY2004	FY2005
QUANTITY								
COST (in Thousands)		$3,306	$13,198	$9,112	$4,023	$7,710	$4,386	$4,394

Description:

The NAVSTAR Global Positioning System (GPS) satisfies validated joint service requirements for worldwide, accurate, common grid, three-dimensional positioning/navigation for military aircraft, ships, ground vehicles and ground personnel. The system is comprised of three segments: (1) satellites, (2) a control network and (3) user equipment (UE). The satellites broadcast high accuracy data using precisely synchronized signals that are received and processed by UE installed in military platforms. The control network updates the navigation messages broadcast from the satellites to provide system vectors to target location or navigational waypoints. Other Procurement AF funding procures UE which consists of 5-channel handheld sets and the Precision Lightweight GPS Receiver (PLGR).

1. PRECISION LIGHTWEIGHT GPS RECEIVER (PLGR): The PLGR is a lightweight, handheld GPS set that receives satellite signals and processes the data into precise position and velocity information for low dynamic motion users. This non-developmental item supports Air Liaison Officers (ALOs), Forward Air Controllers (FACs), Explosive Ordnance Disposals Teams, Security Police and Combat Control Teams (CCTs) by supplying precise position information on a universal grid reference system and time synchronization for anti-jam communications systems. The Air Force has lead service responsibility for PLGR procurement.

a. PLGR MISSION PLANNING SOFTWARE: FY99 funds procured the upgrade and correction of existing Mission Planning Software (MPS) for PLGR. The upgrade corrected known deficiencies, allowing migration of MPS to newer operating systems and increasing customer functionality. No FY01 funding is requested.

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APPROP CODE/BA: OPAF/ELECTRONICS & TELECOMMUNICATION EQUIPMENT	**P-1 NOMENCLATURE:** NAVSTAR GPS SPACE

Description (cont.):

b. PLGR WARRANTY EXTENSION: FY00/01 funding will extend the PLGR warranty.

2. HANDHELD TESTING SUPPORT: FY99-01 funding provides testing support for the next-generation user equipment concepts, as well as the current GPS handheld receiver (PLGR).

3. KEY DATA LOADING INSTALLATION FACILITY (KLIF)/GPS SECURITY DEVICE: FY99-01 funding provides for programming of black key algorithms into Selective Availability Anti-Spoofing Module (SAASM) chips, providing an accurate positioning solution for GPS users utilizing secure equipment.

4. ALTERNATE MASTER CONTROL STATION (AMCS): The AMCS, located at Vandenberg AFB, CA, will be functionally equivalent to the Master Control Station (MCS) at Schriever AFB, CO. The AMCS will serve as the alternate GPS satellite constellation control site during system upgrades, tests, repairs, or other real-world events which prevent MCS control of the constellation. The AMCS will also be used to test system upgrades and new features with live resources prior to their installation on the MCS, thereby minimizing impact to operations. Additionally, the AMCS will provide equipment for Air Education and Training Command (AETC) to train 2nd Space Operations Squadron (2nd SOPS) operators, and provide support for 2nd SOPS control personnel, Air Force Technical Applications Center (AFTAC), satellite vehicle contractors, and auxiliary users. Failure to provide full funding will result in the MCS being the only control station for the satellite constellation beginning in FY01 when the existing back-up facility in Gaithersburg, MD will no longer be available. Without the AMCS to control the satellite constellation during MCS downtime, GPS data will continue to degrade to unacceptable accuracies over a period of just a few hours. All military and commercial users will be unable to maintain required accuracy resulting in adverse impacts on navigational applications and weapons delivery. FY00 funding provides commercial servers, workstations, software packages, some developed interface code, system integration/installation, and all required communications equipment purchase/installation. FY01 funding will procure additional commercial servers, associated software, integration/installation, and any necessary communications equipment engineering changes which support initial control capability for the new Block IIF satellites.

WEAPON SYSTEM COST ANALYSIS (EXHIBIT P- 5)		DATE: FEBRUARY 2000
APPROP CODE/BA: OPAF/ELECTRONICS & TELECOMMUNICATION EQUIPMENT	**P-1 NOMENCLATURE:** NAVSTAR GPS SPACE	

WEAPON SYSTEM COST ELEMENTS	IDENT CODE				FY1999			FY2000			FY2001		
		QTY	UNIT COST	TOTAL COST	QTY	UNIT COST	TOTAL COST	QTY	UNIT COST	TOTAL COST	QTY	UNIT COST	TOTAL COST
NAVSTAR GPS							{3,306}			{2,453}			{1,658}
1. PLGR							{141}			{260}			{300}
A. PLGR MISSION PLANNING SW							141						
B. PLGR WARRANTY EXTENSION										260			300
2. HANDHELD TEST SUPPORT							2,560			1,579			714
3. KLIF/GPS SECURITY DEVICES							605			614			644
4. ALTERNATE MASTER CONTROL STATION	A									10,745			7,454
TOTALS:							3,306			13,198			9,112

REMARKS:

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BUDGET PROCUREMENT HISTORY PLANNING (EXHIBIT P- 5A)						DATE: FEBRUARY 2000			
APPROP CODE/BA: OPAF/ELECTRONICS & TELECOMMUNICATION EQUIPMENT				P-1 NOMENCLATURE: NAVSTAR GPS SPACE					
ITEM / FISCAL YEAR	QTY.	UNIT COST	LOCATION OF PCO	CONTRACT METHOD & TYPE	CONTRACTOR AND LOCATION	AWD. DATE	DATE FIRST DEL.	SPECS AVAIL NOW	DATE REV. AVAIL
4. ALTERNATE MASTER CONTROL STATION									
FY00 (1)			AFMC/SMC	SS/CPAF	BOEING NORTH AMERICA, SEAL BEACH, CA	FEB 00	SEP 00	Y	
FY01 (1)			AFMC/SMC	SS/CPAF	BOEING NORTH AMERICA, SEAL BEACH, CA	OCT 00	SEP 01	N	SEP 00

REMARKS:

1. Quantities and unit costs vary due to different types/configurations of equipment being procured.

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BUDGET ITEM JUSTIFICATION (EXHIBIT P-40)	DATE: FEBRUARY 2000
APPROP CODE/BA: OPAF/ELECTRONICS & TELECOMMUNICATION EQUIPMENT	**P-1 NOMENCLATURE:** NUDET DETECTION SYSTEM (NDS) SPACE

		FY1999	FY2000	FY2001	FY2002	FY2003	FY2004	FY2005
QUANTITY								
COST (in Thousands)		$1,265	$3,459	$2,674	$8,443	$7,957	$12,677	$11,876

Description:

The United States Nuclear Detonation (NUDET) Detection System (USNDS) provides a worldwide, highly survivable capability to detect, locate, and report nuclear detonations in the earth's atmosphere or in near space in near real-time. USNDS supports NUDET detection requirements for US Space Command (USSPACECOM) {Integrated Tactical Warning and Attack Assessment (ITW/AA)}, US Strategic Command (USSTRATCOM) (Nuclear Force Management), and the Air Force Technical Applications Center (AFTAC) (Treaty Monitoring). USNDS consists of three segments: space, control, and ground mission processing. The space segment consists of NUDET detection sensors on both the Global Positioning System (GPS)/Nuclear Detonation System (NDS) satellites and the Defense Support Program (DSP)/NDS satellites. The control segment of the GPS/NDS Integrated Correlation and Display System (ICADS) receives daily navigation update messages and NUDET detection mission data from the satellites. The ground mission processing segment consists of the Ground NDS Terminals (GNT), and the DSP/NDS Advanced Radiation Detection Units (ARDU).

The GNTs process raw NDS sensor data and are the only systems that provide survivable NUDET detection, analysis, and reporting to the DoD and the National Command Authorities (NCA). The ICADS receives daily navigation update messages and NUDET detection mission data from the satellites. Presently, the USNDS supports national level missions for AF Space Command (AFSPC), USSPACECOM, USSTRATCOM, Air Combat Command (ACC), AF Technical Applications Center (AFTAC), NCA, and Congress. NUDET reporting is required for the ITW/AA, Nuclear Force Management (NFM), and nuclear test ban treaty monitoring missions.

ICADS UPGRADES: FY99 funding provided for ICADS upgrades to enhance compatibility with the new block satellites and specifically to

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APPROP CODE/BA: OPAF/ELECTRONICS & TELECOMMUNICATION EQUIPMENT	**P-1 NOMENCLATURE:** NUDET DETECTION SYSTEM (NDS) SPACE

Description (cont.):
process the detection data of the new Block IIR GPS satellites. FY00/01 funding continues life cycle replacement of ICADS computer hardware, receivers, antennas and communication links for the Block IIR and IIF GPS satellites.

BUDGET ITEM JUSTIFICATION FOR AGGREGATED ITEMS (EXHIBIT P- 40A)	DATE: FEBRUARY 2000
APPROP CODE/BA: OPAF/ELECTRONICS & TELECOMMUNICATION EQUIPMENT	**P-1 NOMENCLATURE:** NUDET DETECTION SYSTEM (NDS) SPACE

PROCUREMENT ITEMS	ID CODE			FY1999		FY2000		FY2001	
		QTY.	COST	QTY.	COST	QTY.	COST	QTY.	COST
ICADS UPGRADE	A				$1,265		$3,459		$2,674
Totals:					$1,265		$3,459		$2,674

Remarks:

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BUDGET ITEM JUSTIFICATION (EXHIBIT P-40)	DATE: FEBRUARY 2000
APPROP CODE/BA: OPAF/ELECTRONICS & TELECOMMUNICATION EQUIPMENT	**P-1 NOMENCLATURE:** AIR FORCE SATELLITE CONTROL NETWORK SPACE

		FY1999	FY2000	FY2001	FY2002	FY2003	FY2004	FY2005
QUANTITY								
COST (in Thousands)		$22,349	$31,314	$39,094	$39,750	$34,329	$37,533	$32,501

Description:

The Air Force Satellite Control Network (AFSCN) is a global infrastructure of control centers, Remote Tracking Stations (RTS), and communications links that provide the highly reliable command and control, communications, and range systems required to support the nation's surveillance, navigation, communications, and weather satellite operations. The AFSCN is the DoD common user network that provides satellite state-of-health, tracking, telemetry, and commanding (TT&C) for the following operational satellite systems: Defense Meteorological Satellite Program (DMSP), Global Positioning System (GPS), Defense Satellite Communications System (DSCS), Defense Support Program (DSP), Fleet Satellite (FLTSAT), Military Strategic and Tactical Relay (MILSTAR) Satellite, Skynet, North Atlantic Treaty Organization (NATO), and classified program systems. The AFSCN also provides mandatory launch and early orbit tracking operations in support of all major US launches.

This project procures mission critical electronics and telecommunications equipment for aging command and control communications (C3), and range elements of the AFSCN. These technological upgrades will ensure that DoD space systems will be operationally ready to support future Commanders-in-Chief (CINCs) warfighting requirements.

AIR FORCE SATELLITE CONTROL NETWORK IMPROVEMENT AND MODERNIZATION (AFSCN I&M): AFSCN I&M is an on-going program of replacements and upgrades which will meet Air Force Space Command (AFSPC) operational requirements to replace non-standard, unsupportable equipment with commercial-off-the-self (COTS) hardware and software. This new equipment will dramatically reduce AFSPC satellite operations hardware/software (HW/SW) maintenance. Principal efforts within AFSCN I&M include:

BUDGET ITEM JUSTIFICATION (EXHIBIT P-40)	DATE: FEBRUARY 2000
APPROP CODE/BA: OPAF/ELECTRONICS & TELECOMMUNICATION EQUIPMENT	**P-1 NOMENCLATURE:** AIR FORCE SATELLITE CONTROL NETWORK SPACE

Description (cont.):

a. COMMAND & CONTROL SYSTEM UPGRADES (CCSU): The Electronic Schedule Dissemination (ESD) and Orbital Analysis Subsystem (OAS) replaced the former manpower-intensive scheduling system and telemetry allocation systems. The ESD provides AFSCN resource monitoring and schedule dissemination capability. The OAS provides for satellite collision avoidance capability. Both ESD and OAS utilized COTS HW and SW to the maximum extent possible. ESD and OAS resulted from the descope and restructure of the originally planned Resource Management System upgrade. FY00 funding provides equipment for demonstration to migrate users from the current command and control system. No FY01 funding is requested.

b. RANGE AND COMMUNICATIONS UPGRADES: These projects will transition the current, point-to-point AFSCN communications network to a distributed communications system that integrates government and commercial networks. This project implements several standardization efforts to improve and modernize the communications and ground segment elements of the AFSCN, including: (1) archival recorder systems to replace obsolete, manpower-intensive analog equipment with automated, standardized digital COTS-based systems; (2) a Wide Area Network Interface Unit (WANIU) which standardizes hardware, enables future access to the Defense Information System Network (DISN) global grid, and reduces Operations and Maintenance (O&M) costs; and (3) an Operational Switch Replacement (OSR), which will allow for AFSPC's distributed command and control of satellites. AFSCN capacity, reliability, data quality, and user access will be significantly improved. FY99 funding procured equipment, associated installation costs, and project management for OSR at Schriever Air Force Base (AFB), CO, and Onizuka Air Station (AS), CA. OSR redundancy meets AFSPC requirements to preclude any single points of failure which could contribute to loss of satellite control. Funding also procured equipment to meet DMSP communications requirements, and equipment to provide data archival capability at the Eastern Vehicle Checkout Facility (EVCF). FY00 funds procure COTS equipment for demonstrations to facilitate an Automated Remote Tracking Stations (ARTS) upgrade with open system COTS-based architecture, thereby overcoming severe memory and processing capacity limitations which currently exist on the Control and Status (C&S) Processor. FY00 funds also procure the first of several replacement antenna (the first being installed at Oakhanger, England), reducing growing maintenance costs while increasing system reliability. Other FY00 funds procure equipment to transition the current Secure Voice System to a

BUDGET ITEM JUSTIFICATION (EXHIBIT P-40)	DATE: FEBRUARY 2000
APPROP CODE/BA: OPAF/ELECTRONICS & TELECOMMUNICATION EQUIPMENT	**P-1 NOMENCLATURE:** AIR FORCE SATELLITE CONTROL NETWORK SPACE

Description (cont.):
Defense Information Systems Agency (DISA) standard Defense Red Switch Network (DRSN) at Schriever AFB, CO, Onizuka AS, CA, and all Remote Tracking Stations. Finally, remaining FY00 funds procure equipment for the development of AFSCN standard protocols. FY01 funds will procure interface equipment to establish AFSCN DISN external user connectivity for additional external users, a second replacement antenna, equipment for an ARTS modulation upgrade which allow the Space Based Infrared System (SBIRS) to use AFSCN for telemetry, the necessary equipment to complete installation of the DRSN Secure Voice equipment at the last RTS. FY01 funds will also procure equipment for a self-contained transportable resource to augment/replace TT&C capabilities at an RTS during planned or unplanned outages.

c. SECURITY UPGRADES: These upgrade projects improve security for assets essential to the assured operational capability of the AFSCN. FY99 funding replaced the security control system microwave intrusion detection system at the AFSCN Control Node with an infrared detection system. Funds also procured equipment which enables the Defense Satellite Communications System building to interface with the security control system at Schriever AFB, CO. No FY01 funding is requested.

BUDGET ITEM JUSTIFICATION FOR AGGREGATED ITEMS (EXHIBIT P- 40A)	DATE: FEBRUARY 2000
APPROP CODE/BA: OPAF/ELECTRONICS & TELECOMMUNICATION EQUIPMENT	**P-1 NOMENCLATURE:** AIR FORCE SATELLITE CONTROL NETWORK SPACE

PROCUREMENT ITEMS	ID CODE			FY1999		FY2000		FY2001	
		QTY.	COST	QTY.	COST	QTY.	COST	QTY.	COST
AFSCN I&M					${22,349}		${31,314}		${39,094}
A. COMMAND & CONTROL SYSTEM UPGRADES	A						$2,500		
B. RANGE AND COMMUNICATIONS UPGRADES	A				$18,849		$28,814		$39,094
C. SECURITY UPGRADES	A				$3,500				
Totals:					$22,349		$31,314		$39,094

Remarks:

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BUDGET PROCUREMENT HISTORY PLANNING (EXHIBIT P- 5A)	DATE: FEBRUARY 2000
APPROP CODE/BA: OPAF/ELECTRONICS & TELECOMMUNICATION EQUIPMENT	**P-1 NOMENCLATURE:** AIR FORCE SATELLITE CONTROL NETWORK SPACE

ITEM / FISCAL YEAR	QTY.	UNIT COST	LOCATION OF PCO	CONTRACT METHOD & TYPE	CONTRACTOR AND LOCATION	AWD. DATE	DATE FIRST DEL.	SPECS AVAIL NOW	DATE REV. AVAIL
AFSCN I&M									
A. COMMAND & CONTROL SYSTEM UPGRADES									
FY00 (1)			AFMC/SMC	OPT/CPAF	UNKNOWN (2)	MAR 00	DEC 00	Y	
B. RANGE AND COMMUNICATIONS UPGRADES									
FY99 (1)			AFMC/SMC	OPT/CPAF (3)	LOCKHEED MARTIN MISSION SYSTEMS, SUNNYVALE, CA	DEC 98	MAR 99		
FY00 (1)			AFMC/SMC	OPT/CPAF	UNKNOWN (4)	MAR 00	JUN 00	Y	
FY01 (1)			AFMC/SMC	C/CPAF	UNKNOWN (5)	DEC 00	MAR 01	N	OCT 00
C. SECURITY UPGRADES									
FY99 (1)			AFMC/SM-ALC	OPT/CPAF (6)	ALLIED SIGNAL, COLO SPRINGS, CO	OCT 98	JAN 99		

REMARKS:

1. Unit costs vary due to different types/configurations of equipment being procured. Delivery dates reflect first delivery date of multiple deliveries.
2. Option to existing contract; to be selected from several existing AFMC/SMC contracts.
3. Option to prior year Lockheed Martin Mission Systems, Sunnyvale, CA. Mar 96 basic contract award.
4. Option to either Allied Signal Corp., Colorado, Springs, CO (Jan 95, basic contract award) or Lockheed Martin Mission Systems, Sunnyvale, CA (Mar 96 basic contract award).
5. New SCN contract baseline.
6. Option to prior year SM-ALC equipment contract for security systems with Allied Signal Corporation, Colorado Springs, CO, Jan 95 basic

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APPROP CODE/BA: OPAF/ELECTRONICS & TELECOMMUNICATION EQUIPMENT				P-1 NOMENCLATURE: AIR FORCE SATELLITE CONTROL NETWORK SPACE					
ITEM / FISCAL YEAR	QTY.	UNIT COST	LOCATION OF PCO	CONTRACT METHOD & TYPE	CONTRACTOR AND LOCATION	AWD. DATE	DATE FIRST DEL.	SPECS AVAIL NOW	DATE REV. AVAIL
contract award.									

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BUDGET ITEM JUSTIFICATION (EXHIBIT P-40)	DATE: FEBRUARY 2000
APPROP CODE/BA: OPAF/ELECTRONICS & TELECOMMUNICATION EQUIPMENT	**P-1 NOMENCLATURE:** SPACELIFT RANGE SYSTEM SPACE

		FY1999	FY2000	FY2001	FY2002	FY2003	FY2004	FY2005
QUANTITY								
COST (in Thousands)		$91,340	$82,682	$92,714	$145,209	$135,043	$146,268	$164,479

Description:

Spacelift Range System Space was formerly known as Eastern/Western Range I&M Space. The P-1 nomenclature was changed to be consistent with the program's RDT&E appropriation naming convention and to better reflect the overall initiative. The Eastern Range (ER), headquartered at Patrick AFB, FL, and the Western Range (WR), headquartered at Vandenberg AFB (VAFB), CA, are the nation's Spacelift Ranges. They provide tracking, telemetry, communications, flight analysis, and other capabilities necessary to safely conduct Department of Defense, civil, and commercial spacelift operations; intercontinental and sea-launched ballistic missile operational test and evaluations (T&E); and aeronautical and guided weapons T&E. Many of the range assets have become outdated, less reliable, inefficient, and costly to operate and maintain.

The Air Force (AF) is addressing range shortcomings through aggressive modernization and recapitalization programs. Modernization meets documented requirements for a new standardized and automated spacelift range system to support the evolving launch mission. Recapitalization replaces obsolete and difficult to sustain equipment with new components, reducing mission impact and cost of ownership. Much of the range system is computer-based, requiring periodic replacement to keep pace with technological improvements. Larger, capital-intensive systems such as radars and optical trackers must also be replaced, but at greater intervals.

The AF re-packaged existing efforts under this P-1 Line to better meet operational requirements, and enhance program oversight and management flexibility. The AF is implementing range modernization and recapitalization through three related programs to improve operational flexibility for all users, increase reliability, enhance supportability, and reduce operations and maintenance costs. First, the Range Standardization and Automation (RSA) Phase IIA program provides a systems architecture and associated upgrades to the control/display and

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APPROP CODE/BA: OPAF/ELECTRONICS & TELECOMMUNICATION EQUIPMENT	**P-1 NOMENCLATURE:** SPACELIFT RANGE SYSTEM SPACE

Description (cont.):
communication segments. Second, range-specific Improvement and Modernization (I&M) projects continue through FY00 to support and extend the life of current systems to meet operational needs. Third, the Spacelift Range System Contract (SLRSC): (1) develops and procures an integrated suite of automated instrumentation, to include items previously planned for a follow-on RSA contract; and (2) engineers and executes a proactive recapitalization process in lieu of the reactive I&M program to replace hardware no longer sustainable. Following are details of the FY99-01 program:

1. RANGE STANDARDIZATION AND AUTOMATION (RSA) Phase IIA: The RSA Phase IIA program modernizes both the ER and WR, creating a standardized Spacelift Range System (SLRS). It standardizes equipment and operations between the ER and WR, eliminating reliance upon separate, non-standard logistics support and maintenance infrastructures. The resulting SLRS architecture will provide the capability for reconfiguration from one major operation to another in hours versus days; reduction of operations and maintenance costs; enhanced range safety capability; and standardization of operations and logistics support. The SLRS will mitigate risks involved with launch vehicle destruct decisions by providing improved monitoring instrumentation.

The RSA Phase IIA contract includes integrated RDT&E activities and the procurement efforts described herein to provide an integrated SLRS. This effort will replace aging equipment, such as control and display, planning and scheduling, metric tracking, flight operations and analysis, range operations, communications, and weather equipment. The contract will also provide infrastructure, such as consoles, local area networks, computers, and software to populate the new Western Range Operations Control Center (ROCC). The RSA Phase IIA contract provides phased improvements in operational capabilities. The last increment is projected for operational turnover in 2006. Funding for the associated RDT&E efforts is in Budget Activity 7, Operational Systems Development, PE 35182F of the AF Descriptive Summaries.

FY99 funds exercised the remaining options for voice, video and data product items. These product items integrate voice, video, data and telemetry functions into a single network. Also exercised in FY99 was the option for Global Positioning System (GPS) based metric tracking. It provided equipment and software for SLRS GPS flight safety metric data acquisition, vehicle position corrections, and satellite constellation

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Description (cont.):
integrity checking at both the ER and WR. FY99 funds also provided Interim Contractor Support (ICS) for RSA IIA during the testing and integration phase to sustain an early scheduling product delivered to the ER, until organic or contractor logistics support starts. Additionally, the RSA IIA program was selected as the only program within the Other Procurement AF (OPAF) appropriation to participate in the Reengineered Supply Support Process (RSSP) pilot program. Accordingly, beginning in FY00, the AF moved funding for RSA Phase IIA spares from the OPAF Spares and Repair Parts P-1 line 110 into this P-1 line as a separate sub-line to the equipment. This funding provides Interim Supply Support (ISS), to include initial spares and supply services, based on failure rate experience and analysis, for delivered systems during the interim period.

FY00 funds procure the Flight Operations and Analysis (FOA) products that perform the major range safety analysis functions before, during, and after launches. The RSA IIA FOA system integrates the range safety processing control and display functions with pre-mission flight analysis and mission planning capability. FY00 funds also exercise the Control and Display (C&D) Infrastructure and Data Format updates that support FOA by providing automated data processing equipment, consoles and data interfaces. FY00 funds also procure ICS. Additionally, as in FY99, FY00 funds procure ISS for delivered systems as a pilot program under the RSSP.

FY01 funds will procure the range operations product that provides the ROCC system for management of range operations including countdown control. Range operations add the capability for centralized, remote, and automated configuration control and monitoring. Additionally, FY01 funds will procure other product items in the range operations area to support the range operations and range safety functions. These include: C&D planning and scheduling upgrades, C&D simulation, and the final C&D infrastructure and data format upgrades. The C&D planning and scheduling upgrade adds the ability to automatically commit and manage assets critical to range operations. C&D simulation provides the capability to replay data from prior missions for current mission rehearsal. The C&D infrastructure and data format upgrades will support range operations by providing automated data processing equipment, consoles, and data interfaces. FY01 funds will also fund the digital telemetry products that will convert the ranges from slow, expensive wide bandwidth analog telemetry to high-speed, inexpensive low bandwidth digital telemetry. Additionally, FY01 funds will also provide ICS and ISS.

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Description (cont.):

2. EASTERN RANGE IMPROVEMENT AND MODERNIZATION (I&M). The I&M program has upgraded or replaced critical systems to sustain adequate operational capabilities as the ranges have aged. In FY00, the AF will implement the last I&M projects before transitioning to the recapitalization effort under the SLRSC (see paragraph 4).

Following are descriptions of the FY99 and FY00 I&M projects under three range segments: instrumentation; network; and control and display. The I&M projects discussed are a representative list based upon current priorities and funding.

A. INSTRUMENTATION SEGMENT: FY99 funded continued replacement of the radar/telemetry site computers, upgrade of the Multiple Object Tracking Radar (MOTR) at Cape Canaveral Air Station (CCAS), FL, activation of Consolidated Instrumentation Facilities (CIF), and command capability support for northern launches at Bermuda and Wallops Island. FY00 funds continue the Instrumentation Segment's efforts by providing lightning protection for the MOTR and procuring two meteorological sounding system ground stations. No FY01 funding is requested, since this activity will be replaced by recapitalization projects under the SLRSC (see paragraph 4).

B. NETWORK SEGMENT: FY99 funds continued acquisition, installation, and integration of the digital intercom system, replaced additional communications cables at CCAS, initiated acquisition of concentrator switches for the Standard Digital Transport System (SDTS), and initiated replacement of the range tandem switch automatic control facility computer and communication systems. FY00 funds continue the acquisition, installation, and integration of the digital intercom system, replace additional lead air-filled communications cables at CCAS, and continue the acquisition of the concentrator switches for the SDTS. No FY01 funding is requested, since this activity will be replaced by recapitalization projects under the SLRSC (see paragraph 4).

C. CONTROL & DISPLAY SEGMENT: FY99 funds replaced the obsolete distributed range safety display front end processor and master controller at CCAS, and provided network monitoring and analysis of the range safety/range control systems. FY00 funds continue the Control

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Description (cont.):
and Display Segment by providing for the replacement of the downrange data switches at Antigua, West Indies, Ascension Island, and Jonathan Dickinson Missile Tracking Annex (JDMTA), FL, and replacement of the associated single-point acquisition and radar controller at the ROCC. No FY01 funding is requested, since this activity will be replaced by recapitalization projects under the SLRSC (see paragraph 4).

3. WESTERN RANGE IMPROVEMENT AND MODERNIZATION. See paragraph 2 for descriptive information common to the ER and WR I&M programs.

A. INSTRUMENTATION SEGMENT: FY99 funds procured the antenna pointing system upgrade as well as the lightning location protection system. FY99 funds also finished the expansion of the ocean surveillance system and provided the hardware to implement a space and missile ballistic missile metric tracking capability using GPS hardware. FY00 funds continue the Instrumentation Segment by procuring the Automated Meteorological Profiling System (AMPS) to replace the unreliable meteorological sounding system, and upgrading the unsupportable automated train surveillance system display unit. In addition, FY00 funds resolve an uninterruptable power supply problem at Tranquillon Peak, VAFB. No FY01 funding is requested, since this activity will be replaced by recapitalization projects under the SLRSC (see paragraph 4).

B. NETWORK SEGMENT: FY99 funds provided a fiber optic transmission system between the High Accuracy Instrumentation Radar building and the data transfer center to replace unsupportable transmission systems. Similarly, FY99 funds procured installation of a new transmission system to support CT-2, CT-3, a radar site, and other facilities at VAFB. Additionally, they acquired voice communication panels compatible with the WR voice switch for WR remote sites. FY00 funds continue this effort through replacement of antiquated radio frequency monitoring and direction-finding antenna systems at the frequency monitoring station/operational support test facility, replacement of the transponder phase measurement and velocity error extractor subsystems, upgrades of the telemetry analog equipment room and telemetry integrated processing data transfer system to meet current standards, and procurement of additional voice communication panels for WR remote sites. No FY01 funding is requested, since this activity will be replaced by recapitalization projects under the SLRSC (see paragraph 4).

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Description (cont.):

C. CONTROL & DISPLAY SEGMENT: FY99 funds replaced the meteorological interactive data display system with a Year 2000-compliant system which provides real-time weather satellite imagery, making use of the advanced weather information processing system/National Oceanic and Atmospheric Association receiver system. FY00 funds continue the Control and Display Segment by replacing the Metric Data Processing System (MDPS) central processors and elements of the existing network connecting the real-time and non real-time MDPS. No FY01 funding is requested, since this activity will be replaced by recapitalization projects under the SLRSC (see paragraph 4).

4. SPACELIFT RANGE SYSTEM CONTRACT (SLRSC) (formerly Spacelift Range System Contract Recapitalization): The SLRSC implements a proactive recapitalization program, satisfies remaining systems engineering and integration requirements, and completes range automation. It procures recapitalization projects (previously included in the I&M program) to replace obsolete and unsustainable systems, as well as provides engineering and procures an integrated suite of automated instrumentation.

Sustainment of the ranges in the past was performed by the previously described I&M program, which reacted to system failures rather than predicting problems and correcting them, resulting in a significant burden on mission operations. Under SLRSC, the AF is transitioning to a proactive recapitalization program for the SLRS. This program is based upon reliability, maintainability, and availability (RMA) data collected on the system and analyzed by AFMC for the best overall return on investment. The collection of RMA data, necessary to support this approach, begins in FY00.

The FY00 and FY01 recapitalization efforts focus on I&M projects already underway or previously validated. FY00 funds replace aging equipment for the Argentia, Newfoundland, command transmitters, eliminate single point of failure architecture, and continue activation of the CIFs. FY00 funds also complete test and certification of the geostationary orbiting environment satellite (GOES) weather data imagery converters, and continue the replacement of the fixed and mobile metric systems optic site computers to achieve optical tracking system/site commonality. Using RMA data to set prioritization, FY01 funds will support a backlog of sustainment actions, which include: continuing CIF

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Description (cont.):
activation; continuing integration and beginning test and certification of the digital intercom system; beginning installation, integration, testing and certification of the access extension of RSA I CCAS fiber optic network nodes and radar telemetry site computers; and continuing replacement of launch and orbital real-time processors and the transition to a GPS-based sounding system.

WEAPON SYSTEM COST ANALYSIS (EXHIBIT P- 5)		DATE: FEBRUARY 2000
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WEAPON SYSTEM COST ELEMENTS	IDENT CODE				FY1999			FY2000			FY2001		
		QTY	UNIT COST	TOTAL COST	QTY	UNIT COST	TOTAL COST	QTY	UNIT COST	TOTAL COST	QTY	UNIT COST	TOTAL COST
1. RANGE STANDARDIZATION & AUTOMATION (RSA) PHASE IIA							{59,484}			{62,682}			{70,214}
EQUIPMENT/HARDWARE/SOFTWARE	A						58,570			55,433			63,004
INTERIM SUPPLY SUPPORT (ISS)										4,649			3,167
INTERIM CONTRACTOR SUPPORT (ICS)							914			2,600			4,043
2. EASTERN RANGE I&M							{16,575}			{8,505}			
A. INSTRUMENTATION SEGMENT	A						2,469			2,755			
B. NETWORK SEGMENT	A						13,230			4,800			
C. CONTROL & DISPLAY SEGMENT	A						876			950			
3. WESTERN RANGE I&M							{15,281}			{10,100}			
A. INSTRUMENTATION SEGMENT	A						8,051			2,221			
B. NETWORK SEGMENT	A						6,589			7,488			
C. CONTROL & DISPLAY SEGMENT	A						641			391			
4. SPACELIFT RANGE SYSTEM CONTRACT (SLRSC)	A									1,395			22,500
TOTALS:							91,340			82,682			92,714

REMARKS:

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ITEM / FISCAL YEAR	QTY.	UNIT COST	LOCATION OF PCO	CONTRACT METHOD & TYPE	CONTRACTOR AND LOCATION	AWD. DATE	DATE FIRST DEL.	SPECS AVAIL NOW	DATE REV. AVAIL
1. RSA PHASE IIA (1) (2)									
FY 99			AFMC/SMC	OPT/CPAF	LOCKHEED MARTIN, SUNNYVALE, CA	DEC 98	FEB 99		
				/CPFF					
FY 00			AFMC/SMC	OPT/CPAF	LOCKHEED MARTIN, SUNNYVALE, CA	NOV 99	FEB 00		
				/CPFF					
FY 01			AFMC/SMC	OPT/CPAF	LOCKHEED MARTIN, SUNNYVALE, CA	DEC 00	FEB 01	Y	
				/CPFF					
2. EASTERN RANGE I&M									
A. INSTRUMENTATION SEGMENT (1)									
FY 99			HQ AFSPC	C/FP	MULTIPLE (3)	JAN 99	MAR 99		
FY 00			HQ AFSPC	C/FP	MULTIPLE (3)	JAN 00	APR 00		
B. NETWORK SEGMENT (1)									
FY 99			HQ AFSPC	C/FP	MULTIPLE (3)	JAN 99	MAR 99		
FY 00			HQ AFSPC	C/FP	MULTIPLE (3)	JAN 00	APR 00		

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ITEM / FISCAL YEAR	QTY.	UNIT COST	LOCATION OF PCO	CONTRACT METHOD & TYPE	CONTRACTOR AND LOCATION	AWD. DATE	DATE FIRST DEL.	SPECS AVAIL NOW	DATE REV. AVAIL
C. CONTROL & DISPLAY SEGMENT (1)									
FY 99			HQ AFSPC	C/FP	MULTIPLE (3)	FEB 99	APR 99		
FY 00			HQ AFSPC	C/FP	MULTIPLE (3)	JAN 00	APR 00		
3. WESTERN RANGE I&M									
A. INSTRUMENTATION SEGMENT (1)									
FY 99			HQ AFSPC	C/FP	MULTIPLE (3)	DEC 98	FEB 99		
FY 00			HQ AFSPC	C/FP	MULTIPLE (3)	JAN 00	JAN 01		
B. NETWORK SEGMENT (1)									
FY 99			HQ AFSPC	C/FP	MULTIPLE (3)	DEC 98	MAR 99		
FY 00			HQ AFSPC	C/FP	MULTIPLE (3)	JAN 00	JAN 01		
C. CONTROL & DISPLAY SEGMENT (1)									
FY 99			HQ AFSPC	C/FP	MULTIPLE (3)	DEC 98	MAR 99		

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ITEM / FISCAL YEAR	QTY.	UNIT COST	LOCATION OF PCO	CONTRACT METHOD & TYPE	CONTRACTOR AND LOCATION	AWD. DATE	DATE FIRST DEL.	SPECS AVAIL NOW	DATE REV. AVAIL
FY 00			HQ AFSPC	C/FP	MULTIPLE (3)	JAN 00	JAN 01		
4. SPACELIFT RANGE SYSTEM CONTRACT (SLRSC) (1)									
FY 00			AFMC/SMC	C/CPAF	UNKNOWN	MAR 00	SEP 00	Y	
				/CPFF (4)					
FY 01			AFMC/SMC	OPT/CPAF	UNKNOWN	NOV 00	FEB 01	Y	
				/CPFF (4)					

REMARKS:

1. The quantities vary due to numerous increments of products being delivered across fiscal years. Additionally, unit costs vary because of different types/configurations of equipment being procured.

2. The RSA phase IIA contract was competitively awarded in FY96 to Lockheed Martin, Sunnyvale, CA (with hardware procurement options for six years). Integration and interim contractor support activities will carry the contract through FY06. The contract has multiple options for various related product items. Dates shown reflect first contract option award and delivery date for each FY. Cost plus award fee (CPAF) contract type is for labor, while cost plus fixed fee (CPFF) contract type is for materiel.

3. I&M procurement will consist of numerous individual components to upgrade obsolete and worn out equipment currently in use. Components are integrated by the range technical services contractors: Computer Sciences/Raytheon at Cape Canaveral Air Station, Florida, and ITT Federal Systems at Vandenberg AFB, California. Contractors providing the components include: SUMMA, Inc; Orbital Sciences Corp; Reliable Systems Svc Corp; NYMA; Orion Systems Inc; FEDSIM; PRC, Inc; Microdyne Corp; Alliant Techsystems; Xontech; and Raytheon. Dates shown reflect first contract award and delivery date for each FY.

4. Contract will be similar to RSA phase IIA contract, and will include CPAF and CPFF with multiple options per year.

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		FY1999	FY2000	FY2001	FY2002	FY2003	FY2004	FY2005
QUANTITY								
COST (in Thousands)		$25,673	$41,888	$53,027	$43,142	$48,648	$68,066	$49,950

Description:

MILSATCOM consists of a set of joint service satellite communications systems that provides a broad range of satellite communication capabilities to include secure, jam-resistant, 24-hour, worldwide communications to meet essential strategic, tactical, and general purpose operational requirements for high-priority military users. The equipment supports validated communication requirements for the National Command Authorities (NCA), Unified and Specified Commanders-in-Chief (CINC), uniformed services and defense agencies.

1. COMMAND POST TERMINALS (CPTs): The Air Force has responsibility for the procurement of CPTs that support communications at major NCA and CINC command centers, as well as the relay of warning data from sensor sites. FY99-01 funds will provide installation support, factory repair, system engineering and program support. Additionally, FY00/01 funds will provide terminal enhancements primarily associated with the Contingency Antenna/Pedestal Control Unit (CAPCU). The CAPCU is a water protection modification to prevent secondary failure due to leakage on transportable CPTs for extremely high frequency (EHF) and EHF/ultra high frequency (UHF) configurations.

2. SINGLE CHANNEL ANTI-JAM MAN-PORTABLE (SCAMP) TERMINALS: SCAMP is a single channel, man-portable tactical terminal designed for use with multiple Milstar Extremely High Frequency (EHF) systems. It is capable of transmitting/receiving low data rate (LDR) voice, data and facsimiles. The Air Force procurement of SCAMP supports HQ US Strategic Command (USSTRATCOM) and Air Force Special Operations Command (AFSOC) communications requirements. FY99 funds provided for Type 1 training. Additionally, FY99-01 funds provide program support for fielding Air Force terminals.

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Description (cont.):

3. SECURE, MOBILE ANTI-JAM RELIABLE TACTICAL TERMINALS (SMART-T): SMART-T is a multi-channel tactical communications platform being designed by the US Army for use with Milstar EHF, capable of transmitting/receiving LDR and medium data rate (MDR) voice, data and facsimiles. The Air Force procurement of SMART-T supports Air Force Space Command (AFSPC), Air Intelligence Agency (AIA), Air Mobility Command (AMC), Pacific Air Forces (PACAF) and US Air Forces Europe (USAFE) communications requirements. FY99-01 funds will procure Air Force required terminals with associated installation and program support .

4. SCAMP/GWEN: The Ground Wave Emergency Network (GWEN) provides minimum essential communications to USSTRATCOM-assigned units for emergency action message dissemination. Congress directed the GWEN system not be maintained; upgraded Milstar SCAMP terminals will replace that connectivity at the former GWEN sites. FY99 funds provided ancillary equipment, program and engineering support. FY00/01 funds procurement and integration of SCAMP terminals for former GWEN fixed sites. FY00/01 funds also provide program support for completing integration of ancillary equipment.

5. ULTRA HIGH FREQUENCY (UHF) SATELLITE COMMUNICATIONS (SATCOM): Increasing requirements for UHF satellite capacity, coupled with limited channel capacity, led the Joint Staff to mandate new UHF interoperability standards to improve satellite access and efficiency through Demand Assigned Multiple Access (DAMA) techniques. The Air Force is procuring DAMA capable Enhanced Manpack UHF Terminals (EMUT) and installation equipment (e.g., power supplies, vehicle mounts, antennas, power adapters and input/output devices) to support AFSOC, AMC, Air Combat Command (ACC), and other users in response to the JCS mandate.

a. NETWORK CONTROL SYSTEM (NCS): NCS satisfies the JCS mandate to implement DAMA on 5 Kilohertz (KHZ) and 25 KHZ UHF communications channels. The Air Force procured four network controllers to field an initial system capable of controlling five channels of 5 KHZ DAMA and two channels at 25 KHZ DAMA at four sites worldwide. FY99 funding provided program support for the four network control system sites. No FY01 funding requested.

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Description (cont.):

b. GROUND TERMINALS: FY99 funds procured AITG DAMA ground terminals, associated engineering, and program support for US Central Command and White House Communication Agency fixed sites to provide compatibility with airborne platform AITGs. No FY01 funding requested. FY00/01 funding procures UHF ground DAMA terminals, ancillary equipment, system engineering, and program support to provide capability to AFSOC, AMC, Air Combat Command (ACC), and other users.

6. SUPER HIGH FREQUENCY (SHF) TERMINAL: SHF terminals, operating over the Defense Satellite Communications System (DSCS), support the command and control requirements of unified and specified CINCs, and the connectivity requirements of the NCA, US strategic and tactical forces and NATO. The Air Force has responsibility for selected locations which help comprise the ground segment.

a. GROUND MOBILE FORCES SATELLITE COMMUNICATIONS (GMFSC): GMFSC provides survivable, jam resistant communications for rapid tactical and crisis/contingency operations. Terminals support the Theater Air Control System, Expeditionary Air Force operations, and NCA/JCS directed operations. FY99 funding provided program support for this equipment. No FY01 funding requested.

b. DEFENSE SATELLITE COMMUNICATIONS SYSTEM (DSCS)/JAM RESISTANT SECURE COMMUNICATIONS (JRSC): The JRSC network is a subnet of the DSCS. It provides jam resistant, secure, nuclear effects protected MILSATCOM connectivity between selected Air Force facilities and elements of the NCA. This equipment has the ability to either stabilize or maximize the data throughput for critical communications lines. FY99-01 funding provides program support and procures equipment for modernization of the DSCS and JRSC network, to include sensor sites and DSCS hub stations. The specific equipment being procured includes: Heavy/medium ground terminal modernization kits, fiber optic modems, patch panels, timing sources, and interconnect facility links.

c. SINGLE CHANNEL TRANSPONDER INJECTION SYSTEM (SCTIS): SCTIS provides Emergency Action Message (EAM) and Force Direction Message (FDM) dissemination capability to selected command centers and force elements for the control of nuclear forces. FY99 funding provided program support for 12 SCTIS systems. No FY01 funding requested.

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APPROP CODE/BA: OPAF/ELECTRONICS & TELECOMMUNICATION EQUIPMENT	**P-1 NOMENCLATURE:** MILSATCOM SPACE

Description (cont.):

7. GLOBAL BROADCAST SERVICE (GBS): GBS is a joint program to implement a world-wide, high capacity satellite broadcast information system that will provide a continuous, high speed, one-way flow of high volume classified and unclassified data, imagery and other information to forces in garrison, deployed, or on the move. (Reference the Air Force Descriptive Summary document for Program Element 63854F). This reduces reliance on costly commercial satellite leased communications. Current DoD Low Rate Initial Production (LRIP) acquisition strategy has approved procurement of 500 Receive Suites prior to the production decision.

a. GBS RECEIVE SUITES: FY00/01 funding procures ground receive suites which will provide lower echelon AF users with efficient, high data rate in-theater and reachback connectivity to many distributed information sources hosted on Ultra High Frequency Follow-on (UFO) satellites providing near worldwide service. All three GBS payloads are currently on-orbit, with the third to be launched in FY00. Additionally, FY00/01 funding procures integration and install, systems engineering and program support. These non-recurring costs, which were not displayed in the FY00/01 President's Budget Submission, have been broken out for better visibility of program costs.

Reductions in terminal quantities from the FY00/01 President's Budget are due to (1) reduction in overall funding due to program delays and hardware pending software maturity (Reference FY00 Appropriations Conference Report, October 8, 1999, page 198); (2) increased unit costs; and (3) increase in integration and installation, systems engineering and program management costs.

b. THEATER INJECTION POINT SYSTEM (TIPS): The TIPS is a ground mobile satellite transmission suite transportable via two Heavy High Mobility Multi-purpose Wheeled Vehicles (HMMWV). The TIPs provide the Joint Force Air Component Commander one-way high capacity connectivity to supply lower echelon wings/bases with intelligence dissemination, air tasking order transmission, unmanned aerial vehicle videos, and other information critical to the conduct of air campaigns. FY01 funds procure two TIPs (planned for Southwest Asia and Europe operations), system engineering and program support.

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Description (cont.):

8. COMMAND AND CONTROL SYSTEM - CONSOLIDATED (CCS-C): CCS-C will continue MILSATCOM satellite command and control capabilities after the sustainment contract ends in FY03. CCS-C will support increasingly automated control of satellite launch and on-orbit operations of new and legacy satellites (starting in FY03 with new Wideband Gapfiller system first launch and in FY05 for legacy satellites such as Milstar and DSCS). FY01 funds will provide Commercial-off-the-Shelf (COTS) hardware, support equipment and services including program management, system engineering, site preparation, assembly, installation, Type 1 training, and documentation. Additionally, FY01 funds will provide COTS software licenses, contractor support, and installation warranty services.

Reference Research, Development Test and Evaluation (RDT&E) funding for CCS-C reported in Program Element #33511F of the Descriptive Summaries.

WEAPON SYSTEM COST ANALYSIS (EXHIBIT P- 5)		DATE: FEBRUARY 2000
APPROP CODE/BA: OPAF/ELECTRONICS & TELECOMMUNICATION EQUIPMENT	P-1 NOMENCLATURE: MILSATCOM SPACE	

WEAPON SYSTEM COST ELEMENTS	IDENT CODE				FY1999			FY2000			FY2001		
		QTY	UNIT COST	TOTAL COST	QTY	UNIT COST	TOTAL COST	QTY	UNIT COST	TOTAL COST	QTY	UNIT COST	TOTAL COST
1. COMMAND POST TERMINALS							{3,661}			{4,328}			{8,186}
TERMINAL ENHANCEMENTS	A									2,400			6,283
INSTALLATION SUPPORT							782			300			200
FACTORY REPAIR							600			500			250
SYSTEM ENGINEERING							096			820			853
PROGRAM SUPPORT							2,183			308			600
2. SCAMP TERMINALS							{655}			{321}			{101}
TYPE 1 TRAINING							455						
PROGRAM SUPPORT							200			321			101
3. SMART-T							{11,106}			{15,712}			{10,720}
TERMINALS	A				20	460,000	9,200	26	463,000	12,038	18	494,000	8,892
INTEGRATION AND INSTALL							823			2,215			814
PROGRAM SUPPORT							1,083			1,459			1,014

WEAPON SYSTEM COST ANALYSIS (EXHIBIT P- 5)		DATE: FEBRUARY 2000
APPROP CODE/BA: OPAF/ELECTRONICS & TELECOMMUNICATION EQUIPMENT	**P-1 NOMENCLATURE:** MILSATCOM SPACE	

WEAPON SYSTEM COST ELEMENTS	IDENT CODE				FY1999			FY2000			FY2001		
		QTY	UNIT COST	TOTAL COST	QTY	UNIT COST	TOTAL COST	QTY	UNIT COST	TOTAL COST	QTY	UNIT COST	TOTAL COST
4. SCAMP/GWEN							{2,838}			{6,262}			{475}
TERMINALS (1)	A							14	180,000	2,520	1	300,000	300
INTEGRATION & INSTALL							484			3,108			122
EQUIPMENT (I/O DEVICES)	A						616						
SUPPORT ENGINEERING							1,355						
PROGRAM SUPPORT							383			634			53
5. UHF SATCOM							{4,572}			{8,914}			{9,635}
A. NETWORK CONTROL SYS							{271}						
PROGRAM SUPPORT							271						
B. GROUND TERMINALS							{4,301}			{8,914}			{9,635}
DAMA GROUND TERMINALS (2)	A						{4,301}	98	37,000	3,626	98	37,000	3,626
PROGRAM SUPPORT							1,154			1,100			1,100
TERMINAL UPGRADES	A				10	274,678	2,747			3,873			4,594
SYSTEM ENGINEERING							400			315			315
6. SHF TERMINAL							{2,841}			{3,520}			{1,881}
A. GMFSC	A						{61}						
PROGRAM SUPPORT							61						

WEAPON SYSTEM COST ANALYSIS (EXHIBIT P- 5)		DATE: FEBRUARY 2000
APPROP CODE/BA: OPAF/ELECTRONICS & TELECOMMUNICATION EQUIPMENT	P-1 NOMENCLATURE: MILSATCOM SPACE	

WEAPON SYSTEM COST ELEMENTS	IDENT CODE				FY1999			FY2000			FY2001		
		QTY	UNIT COST	TOTAL COST	QTY	UNIT COST	TOTAL COST	QTY	UNIT COST	TOTAL COST	QTY	UNIT COST	TOTAL COST
B. DSCS/JRSC							{2,719}			{3,520}			{1,881}
DSCS/JRSC	A						1,728			2,981			1,502
PROGRAM SUPPORT							991			539			379
C. SCTIS							{61}						
PROGRAM SUPPORT							61						
7. GBS (3)										{2,831}			{17,177}
A. GBS RECEIVER SUITES										{2,831}			{5,442}
RECEIVE SUITES (4)	A							3	196,333	589	19	196,679	3,737
INTEGRATION & INSTALL (5)										737			711
SYSTEM ENGINEERING (5)										942			531
PROGRAM SUPPORT (5)										563			463
B. TIPS													{11,735}
TIPS	A										2	5,752,700	11,505
SYSTEM ENGINEERING													117
PROGRAM SUPPORT													113

WEAPON SYSTEM COST ANALYSIS (EXHIBIT P- 5)		DATE: FEBRUARY 2000
APPROP CODE/BA: OPAF/ELECTRONICS & TELECOMMUNICATION EQUIPMENT	**P-1 NOMENCLATURE:** MILSATCOM SPACE	

WEAPON SYSTEM COST ELEMENTS	IDENT CODE				FY1999			FY2000			FY2001		
		QTY	UNIT COST	TOTAL COST	QTY	UNIT COST	TOTAL COST	QTY	UNIT COST	TOTAL COST	QTY	UNIT COST	TOTAL COST
8. CCS-C	A												4,852
TOTALS:					30		25,673	141		41,888	138		53,027

REMARKS:

1. Terminal unit cost in FY01 is the priced option.
2. Original requirements for 210 and 223 UHF terminals in FY00 and FY01, respectively, have been reduced to 196 terminals (98 terminals per year). The FY00/01 terminal upgrades procure ancillary equipment enabling these fewer, but more capable, terminals to meet combat air forces requirements.
3. FY00 appropriations reduced funding for GBS terminals (Reference FY00 Appropriations Conference Report, October 8, l999, page 198).
4. Reduction in quantities is due to (1) reduction in overall funding, (2) increased unit costs, and (3) increase in integration and installation, system engineering, and program management.
5. Non-recurring costs for GBS terminals, not broken out in the FY00/01 President's Budget submission, are provided for better visibility of program costs.

BUDGET PROCUREMENT HISTORY PLANNING (EXHIBIT P- 5A)	DATE: FEBRUARY 2000
APPROP CODE/BA: OPAF/ELECTRONICS & TELECOMMUNICATION EQUIPMENT	**P-1 NOMENCLATURE:** MILSATCOM SPACE

ITEM / FISCAL YEAR	QTY.	UNIT COST	LOCATION OF PCO	CONTRACT METHOD & TYPE	CONTRACTOR AND LOCATION	AWD. DATE	DATE FIRST DEL.	SPECS AVAIL NOW	DATE REV. AVAIL
1. COMMAND POST TERMINALS									
TERMINAL ENHANCEMENTS (1) (3)									
FY00			AFMC/ESC	OPT/FFP (2)	RAYTHEON, MARLBOROUGH, MA; ROCKWELL, RICHARDSON, TX	FEB 00	APR 00	Y	
FY01			AFMC/ESC	OPT/FFP (2)	RAYTHEON, MARLBOROUGH, MA; ROCKWELL, RICHARDSON, TX	FEB 01	APR 01	Y	
3. SMART-T									
TERMINALS									
FY99	20	460,000	AFMC/ESC	MIPR/OPT/FFP (4)	ARMY/RAYTHEON, MARLBOROUGH, MA (4A)	JAN 99	JUL 00		
FY00	26	463,000	AFMC/ESC	MIPR/OPT/FFP (4)	ARMY/RAYTHEON, MARLBOROUGH, MA (4A)	FEB 00	OCT 02	Y	
FY01	18	494,000	AFMC/ESC	MIPR/OPT/FFP (4)	ARMY/RAYTHEON, MARLBOROUGH, MA (4A)	FEB 01	JUN 03	Y	
4. SCAMP/GWEN									
TERMINALS									
FY00	14	180,000	AFMC/ESC	MIPR/OPT/FFP (4)	ARMY/ROCKWELL,RICHARDSON,TX	NOV 99	MAY 00		

BUDGET PROCUREMENT HISTORY PLANNING (EXHIBIT P- 5A)	DATE: FEBRUARY 2000
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ITEM / FISCAL YEAR	QTY.	UNIT COST	LOCATION OF PCO	CONTRACT METHOD & TYPE	CONTRACTOR AND LOCATION	AWD. DATE	DATE FIRST DEL.	SPECS AVAIL NOW	DATE REV. AVAIL
FY01	1	300,000	AFMC/ESC	MIPR/OPT/FFP (4)	ARMY/ROCKWELL,RICHARDSON,TX	NOV 00	MAY 01	Y	
5. UHF SATCOM									
GROUND TERMINALS									
FY99	10	274,678	AFMC/ESC	OPT/FFP (5)	RAYTHEON, ST PETERSBURG, FL	DEC 98	DEC 99		
FY00	98	37,000	AFMC/ESC	C/FFP	UNKNOWN	MAR 00	NOV 00	Y	
FY01	98	37,000	AFMC/ESC	C/FFP	UNKNOWN	NOV 00	FEB 01	Y	
6. SHF TERMINAL									
B. DSCS/JRSC (1)									
FY99			AFMC/ESC	MIPR/C/FFP	MULTIPLE (6)	DEC 98	FEB 99		
FY00 (8)			AFMC/ESC	MIPR/C/FFP	MULTIPLE (6)	APR 00	JUN 00	Y	
FY01			AFMC/ESC	MIPR/C/FFP	MULTIPLE (6)	DEC 00	FEB 01	Y	
7. GBS									
A. GBS RECEIVE SUITES									
FY00	3	196,333	AFMC/SMC	OPT/CPAF (7)	RAYTHEON, RESTON, VA	APR 00	DEC 00	Y	

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ITEM / FISCAL YEAR	QTY.	UNIT COST	LOCATION OF PCO	CONTRACT METHOD & TYPE	CONTRACTOR AND LOCATION	AWD. DATE	DATE FIRST DEL.	SPECS AVAIL NOW	DATE REV. AVAIL
FY01	19	196,679	AFMC/SMC	OPT/CPAF (7)	RAYTHEON, RESTON, VA	DEC 00	AUG 01	Y	
B. TIPS									
FY01	2	5752700	AFMC/SMC	OPT/CPAF (7)	RAYTHEON, RESTON, VA	FEB 01	JUN 02	Y	
8. CCS-C (1)									
FY01			AFMC/SMC	C/CPFF/FP	UNKNOWN	AUG 00	NOV 01	Y	

REMARKS:

1. Quantities and unit costs vary because several different types of equipment or mulitple types of equipment are being procured.
2. Option to basic command post terminal contract awarded May 93.
3. Multiple award and delivery dates to be awarded to existing contracts. Award/delivery dates reflect first award and delivery dates.
4. Air Force option to Army contract(s) awarded Feb 96.

4a. Date for first delivery represents date that item is first released to the Air Force from a multi-customer production line.

5. Option to basic contract, awarded Apr 98.
6. GSA/Army contracts with multiple contractors and multiple contract award/delivery dates. Award/delivery dates reflect first award and delivery dates.
7. Option to basic R&D contract, awarded Nov 97.
8. Revised Army Installation schedule caused schedule change.

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		FY1999	FY2000	FY2001	FY2002	FY2003	FY2004	FY2005
QUANTITY								
COST (in Thousands)		$7,757	$2,810	$25,959	$31,813	$10,014	$12,442	$13,601

Description:

Permanent modifications are configuration changes to in-service systems and equipment which correct materiel or other deficiencies, or which add or delete capability. Safety modifications correct deficiencies which would produce hazards to personnel, systems, or equipment. This budget line encompasses both new and on-going modification efforts for space equipment and systems. Modification installation funding is budgeted in the year the installation occurs. Modifications requested in FY01 are identified on the attached P-40A and are representative of configuration changes/deficiency corrections to be accomplished. Modifications procured during execution may change based on critical changes/corrections needed to support current Air Force mission requirements.

1. DEFENSE METEOROLOGICAL SATELLITE PROGRAM (DMSP): DMSP is a joint service program with the mission to collect and disseminate specialized meteorological, oceanographic and solar-geophysical data to support worldwide DoD operations and high priority programs. The three major components in the DMSP system are the space segment, command, control and communications (C3) segment and the users segment.

   A. MOD# T7191, Data Ingest Processing (DIPS): No FY01 funding requested.

   B. Miscellaneous Low Cost Mods: No FY01 funding requested.

2. DEFENSE SUPPORT PROGRAM (DSP): DSP provides a space-based surveillance system to detect and report missile and space launches

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Description (cont.):
and nuclear detonations in near real time during pre-trans and post-attack periods. DSP's primary mission is to provide tactical warning and limited attack assessment of a ballistic missile attack. DSP also detects and reports nuclear detonation events and provides information for theater warning and exploitation.

Miscellaneous Low Cost Mods (ground stations only): No FY01 funding requested.

3. NAVSTAR GLOBAL POSITIONING SYSTEM (GPS): The NAVSTAR Global Positioning System is a space-based radio navigation, time distribution, and nuclear detonation (NUDET) detection system (NDS). The GPS mission is to provide highly accurate position, velocity, timing, and NUDET information to properly equipped air, land, sea, and space-based users worldwide. The GPS system consists of four segments: the Space Segment (SS), the Operational Control Segment (OCS), the Navigation User Segment (NUS), and the NDS Segment. The OCS segment requires modifications (described below) to replace high failure rate parts and preclude system operational degradation. Without these modifications, aging and obsolete equipment will continue to fail excessively and degrade system operational availability. Inaccurate navigation data will be transmitted to worldwide users, resulting in potential loss of life and/or operational equipment, including multi-million dollar satellites.

A. MOD #30726, Telemetry/Pseudo Random Noise (PRN) Ranging Upgrade: No FY01 funding requested.

B. MOD #S605133, Operational Support Environment (OSE) (previously Weapon Support System): This modification upgrades the Weapon Support System (WSS) environment and the GPS Support Facility (GSF) to be compatible with the new Control Segment architecture, and is required to maintain the existing and the future upgrade of the Operational Control Segment. This modification also includes installation and support for the GPS High Fidelity System Simulator (HFSS). This upgrade provided for disposal of obsolete systems in the WSS and full GPS HFSS capability in FY99. FY00 funds procure a distributed network system to replace the existing GSF mainframe-based legacy computer system. These changes allow the GSF to function as a Replica Master Control Station. FY01 funding will procure installation of the HFSS into

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Description (cont.):
the GSF.

C. MOD #S5005800101, Transmitter/Exciter Replacement: This modification will replace the existing obsolete, unsupportable, and high failure HP8660 signal generators. Current repair and calibration time is extensive, resulting in excessive downtime due to inoperable signal generators. If these units are not replaced, downtime to failed signal generators will continue to increase and ultimately the GPS Ground Antenna mission will fail. The Operational Control Segment will be unable to upload updated navigation messages and satellite commands to the GPS constellation. Inaccurate navigation will be transmitted to worldwide military and civilian users, resulting in potential loss of life and/or operational equipment, including multi-million dollar satellites. FY01 funds will provide for engineering and procurement of the initial kit.

D. MOD #T7215, Monitor Station Timing Subsystem Enhancement (MSTSE): The MSTSE replaces at the GPS Monitor Stations the existing unsupportable HP5061 Cesium frequency standards with HP5071 Cesium frequency standards that are more stable and less sensitive to environmental changes. This upgrade will provide more accurate frequency and timing measurements. Without this modification, the existing frequency standards will be susceptible to continuing failure and drift associated with changing environmental conditions. The GPS navigation signal provided to worldwide civilian and military users will degrade, resulting in potential loss of life and/or operational equipment. FY01 funds will procure the initial kit, and required associated software changes at the Master Control Station.

4. 474N SEA LAUNCHED BALLISTIC MISSILE (SLBM) DETECTION AND WARNING SYSTEM: The 474N SLBM Detection and Warning System consists of the AN/FPQ-16 Perimeter Acquisition Radar Attack Characterization System (PARCS) and the AN/FPS-123 PAVE PAWS System (Phased Array Radars for SLBM Detection and Warning System). The primary mission is to provide the Cheyenne Mountain Complex (CMC) with credible Tactical Warning/Attack Assessment (TW/AA) data on all SLBMs penetrating the coverage area. This data includes an estimation of launch and impact locations and times. The secondary mission is to provide the CMC and other users with TW/AA data on Inter-Continental Ballistic Missiles (ICBMs) penetrating the coverage area. Additionally, PAVE PAWS and PARCS support

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Description (cont.):
the Space Surveillance Network by providing space vehicle surveillance, tracking and identification as required by the Space Surveillance Center and the Joint Space Intelligence Center. The sensors have an operational availability requirement of 98 percent. PAVE PAWS consists of two operational sites: Site I at Cape Cod, MA and Site II at Beale AFB, CA.

A. AN/FPQ-16 PERIMETER ACQUISITION RADAR ATTACK CHARACTERIZATION SYSTEM (PARCS): The AN/FPQ-16 radar sensor and the AN/FSQ-100 Data Processing System (DPS) are the two major subsystems which comprise the PARCS system at Cavalier AFB, ND. The PARCS is a single faced, long range phased array radar whose primary mission is to provide tactical warning and assessment of SLBM and ICBM attack against North America. This one-of-a-kind system was originally developed in the early 1970's, and has operated continuously without significant upgrade since 1974.

(1) MOD #P7302, PARCS IMPROVED TRANSMITTER MONITORING SYSTEM: The PARCS employs 128 traveling wave tubes (TWTs) in support of its mission. Approximately 48 of these tubes are consumed annually. The repair cost of these TWTs has fluctuated from $74K to in excess of $200K, and is currently costed at $103K each. FY01 funds will provide improvements which will allow the site maintainers to log faults for trend analysis and detect failing components that can destroy TWTs. If not funded, high maintenance costs will continue.

(2) MOD #S532492, PARCS DISPLAY UPGRADE: FY01 also funds this modification, which replaces unsupportable and unreliable display subsystem equipment. This equipment is composed of unique custom built components which were obsolete in the early 1980's. Parts for this equipment are no longer available. Site operations have continued through cannibalization from spares and training consoles. This subsystem has been shown to have a mean time between failure of 79 hours with a mean time to repair (MTTR) of 150 minutes. When cannibalization is no longer an option, the MTTR is expected to increase. Since some of the consoles exert active control over the system, failure to upgrade increases the risk of catastrophic failure of the radar system.

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Description (cont.):

(3) MOD #P7258, PARCS DISPERSIVE DELAY LINES: No FY01 funding requested.

B. SERVICE LIFE EXTENSION PROGRAM (SLEP):

The legacy Mission Critical Computer Resources (MCCR) at the SLBM PAVE PAWS sites are obsolete and will become unsustainable by 2001. With increasing age of these 1960's technology systems, failure rates are increasing and manufacturers are discontinuing production or repair of some components. By 2001, the stock of 18 critical items will be depleted such that the system is not supportable. The mission software uses the obsolete programming language JOVIAL-13, for which it is nearly impossible to find an adequate pool of competent programmers with expertise. As a result, there have been significant schedule delays and cost overruns in implementing required mission software releases, which has impacted important AF Space Command requirements.

This reliability and maintainability modification will upgrade the following unsupportable subsystems with improved critical components: graphics display consoles, the radar controllers, the network processing units, the disk and tape drives, digital module test sets, and solid state module test sets. In the outyears, this modification also upgrades the mission processor hardware, and rehosts the software under the same architecture and baseline using the existing Jovial programming language. Training suites, test equipment, and System Programming Activity (SPA) systems will also be upgraded to conform to a standard Ballistic Missile Early Warning System (BMEWS)-SLBM configuration. This modification is integral to the concurrent modification to the three BMEWS sensor sites at Thule, Greenland, Clear AS, AK, and RAF Fylingdales, UK. (Reference P-1 Line 77, Comm Elect Mods, BMEWS SLEP, 838010).

Total System Performance Responsibility of this modification will proceed in two phases. FY01 funding will procure Phase 1, which will modify the graphics display consoles, the network processing uits, the digital module test set, the solid state module test set, the disk and tape drives, and the radar controllers. Outyear funding will procure Phase 2, which will modify and install the mission processor components and rehost the existing software at Cape Code AS using the current baseline and architecture. See corresponding P-3a for detailed cost/schedule.

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Description (cont.):

C. MISCELLANEOUS LOW COST MODS: No FY01 funding requested.

5. 496L SPACETRACK NETWORK: The 496L Spacetrack Network is comprised of the AN/FPS-85 Phased Array Radar (Eglin AFB, FL) and the AN/FSQ-114 Ground-based Electro-Optical Deep Space Surveillance System (GEODSS) Optical Sensor System. The SPACETRACK system provides data on near-earth and deep space objects to constantly update the Cheyenne Mountain Complex (CMC) satellite catalog. The system also performs critical early warning and tracking of potential threats to North America, and assessment and characterization of potential atmospheric, ballistic missile and space attacks.

A. Mod #19303B, EGLIN TRANSMITTER MODULE UPGRADE: No FY01 funding requested.

B. AN/FSQ-114 GROUND-BASED ELECTRO-OPTICAL DEEP SPACE SURVEILLANCE (GEODSS) SYSTEM. GEODSS is a segment of the SPACETRACK Network which provides metric track data, deep space Space Object Identification (SOI), and visible light photometry data to the CMC. More specifically, the primary mission of GEODSS is to provide the Space Surveillance Center (SSC) with observational (metric) data on deep-space satellites and optical characteristics information as tasked by the Combined Space Intelligence Center. GEODSS also supports command mission responsibilities for cataloging and maintenance of deep-space satellite payloads and debris, New Foreign Launch (NFL) orbit determination and mission assessment, as well as collision avoidance taskings.

(1) Mod #39709B, GEODSS MODERNIZATION PROGRAM: No FY01 funding requested.

(2) Mod # TBD, GEODSS CHARGE-COUPLED DEVICE (CCD) CAMERA/MODULAR PRECISION ANGULAR CONTROL SYSTEM (MPACS): FY01 funds will provide for production, testing and fielding of 10 CCD Cameras, which will replace Ebsicon tubes that are no longer manufactured or supported by any vendor. The current supply of Ebiscon tube spares will be exhausted during FY02. Funds also provide

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Description (cont.):
for sensor controller hardware and associated software modifications, and MPACS replacement, critical to the CCD modification. MPACS is the telescope mount control system that enables the tracking of space objects which have constant velocity or apparent acceleration. Replacement of the MPACS will improve reliability, maintainability and supportability by replacing antiquated 1970's equipment with modern technology.

BUDGET ITEM JUSTIFICATION FOR AGGREGATED ITEMS (EXHIBIT P- 40A)	DATE: FEBRUARY 2000
APPROP CODE/BA: OPAF/ELECTRONICS & TELECOMMUNICATION EQUIPMENT	**P-1 NOMENCLATURE:** SPACE MODS SPACE

PROCUREMENT ITEMS	ID CODE			FY1999		FY2000		FY2001	
		QTY.	COST	QTY.	COST	QTY.	COST	QTY.	COST
1. DEFENSE METEOROLOGICAL SATELLITE PROGRAM (DMSP)					${289}				
A. DATA INGEST PROCESSING (DIPS) MOD #T7191					$200				
B. MISCELLANEOUS LOW COST MODS					$89				
2. DEFENSE SUPPORT PROGRAM (DSP)					${114}				
MISCELLANEOUS LOW COST MODS					$114				
3. NAVSTAR GLOBAL POSITIONING SYSTEM (GPS)					${6,441}		${2,810}		${4,884}
A. TELEMETRY/PRN RANGING UPGRADE MOD #30726					$2,603				
B. OPERATIONAL SUPPORT ENVIRONMENT (OSE) (PREVIOUSLY WEAPON SUPPORT SYSTEM (WSS) MOD #S605133					$3,838		$2,810		$2,333
C. TRANSMITTER/EXCITER REPLACEMENT MOD# S5005800101									$601

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BUDGET ITEM JUSTIFICATION FOR AGGREGATED ITEMS (EXHIBIT P- 40A)	DATE: FEBRUARY 2000
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PROCUREMENT ITEMS	ID CODE			FY1999		FY2000		FY2001	
		QTY.	COST	QTY.	COST	QTY.	COST	QTY.	COST
D. MONITOR STATION TIMING SUBSYSTEM ENHANCEMENT (MSTSE) MOD# T7215									$1,950
4. 474N SEA LAUNCHED BALLISTIC MISSILE (SLBM), DETECTION AND WARNING SYSTEM									
A. PARCS									
(1). IMPROVED TRANSMITTER MONITORING SYSTEM MOD #P7302									$1,207
(2). DISPLAY UPGRADE MOD #S532492									$2,487
(3). DISPERSIVE DELAY LINES MOD #P7258					$42				
B. SERVICE LIFE EXTENSION PROGRAM									$8,307
C. MISCELLANEOUS LOW COST MODS					$153				
5. SPACETRACK NETWORK					${718}				${9,074}

	P-1 ITEM NO: 68		PAGE NO: 180		Page 2 of 3

BUDGET ITEM JUSTIFICATION FOR AGGREGATED ITEMS (EXHIBIT P- 40A)	DATE: FEBRUARY 2000
APPROP CODE/BA: OPAF/ELECTRONICS & TELECOMMUNICATION EQUIPMENT	**P-1 NOMENCLATURE:** SPACE MODS SPACE

PROCUREMENT ITEMS	ID CODE			FY1999		FY2000		FY2001	
		QTY.	COST	QTY.	COST	QTY.	COST	QTY.	COST
A. EGLIN TRANSMITTER MODULE UPGRADE, MOD# 19303B					$268				
B. AN/FSQ-114 GROUND-BASED ELECTRO-OPTICAL DEEP SPACE SURVEILLANCE (GEODSS) SYSTEM					${450}				${9,074}
(1) GEODSS MODERNIZATION PROGRAM MOD # 39709B					$450				
(2) GEODSS CCD CAMERA/MPACS MOD # TBD									$9,074
Totals:					$7,757		$2,810		$25,959

Remarks:

	P-1 ITEM NO: 68		PAGE NO: 181		Page 3 of 3

INDIVIDUAL MODIFICATIONS (EXHIBIT P- 3A) | **DATE:** FEBRUARY 2000

Modification Title and No: Submarine Launched Ballistic Missile (SLBM) Radar Warning System - Service Life Extension Program

Models of Systems Affected: PAVE PAWS System Cape Cod AS, MA and Beale AFB, CA

Description/Justification: The legacy Mission Critical Computer Resources at the SLBM warrning sites are obsolete and will become unsustainable in 2001. This reliability and maintainability modification will upgrade the following unsupportable subsystems: graphics display consoles, the radar controllers, the network processing units, the disk & tape drives, digital module test sets and solid state module test sets. Mission processors at Cape Cod AS will be upgraded in FY 02-04 with the current Jovial programming language release. "Other" costs include training and program office support. This modification is concurrent and parallel to the modification of the BMEWS systems at Clear AS, AK, Thule AB, Greenland, and RAF Fylingdales, UK.

Development Status/Major Development Milestones: Contract award Dec 00; Phase 1 CDR Jan 01; Install NPUs, DMTS, GDCs, SSMTS, RCLs Jul 01 - Dec 01; CDR Phase 2 mission processor Mar 02; Install mission processors at Cape Cod AS Nov 02 Phase 2 complete Mar 04

Financial Plan $ (in Millions)	PY		FY1998		FY1999		FY2000		FY2001		FY2002		TOTAL	
	Qty	Cost	Qty	Cost	Qty	Cost	Qty	Cost	Qty	Cost	Qty	Cost	Qty	Cost
RDT&E														
Ref. R-1 PE No:													0	
Procurement:														
Equipment Kits									4	2.211	5	0.620	9	2.8
Equipment Kits Non-recurring										2.854		3.719	0	6.6
Engineering Change Orders													0	
Data										0.226		0.096	0	0.3
Training Equipment										0.121		0.071	0	0.2
Support Equipment										0.101			0	0.1
Software										1.416		4.527	0	5.9
Interim Contractor Support										0.107			0	0.1
Other										0.670		0.750	0	1.4
Total Procurement Costs:	0		0		0		0		4	7.7	5	9.8	9	17.4
Hardware Installation:														
(PY) Eqpt (Kits)													0	0
(FY98) Eqpt (Kits)													0	0
(FY99) Eqpt (Kits)													0	0
(FY00) Eqpt (Kits)													0	0
(FY01) Eqpt (4 Kits)									4	0.602			4	0.602
(FY02) Eqpt (5 Kits)											5	1.714	5	1.714
Total Installation Costs:	0		0		0		0		4	0.6	5	1.7	9	2.3
Total Modification Costs:	0		0		0		0		4	8.3	5	11.5	9	19.7

Method of Installation: CONTRACTOR, FIELD INSTALL | **Administrative Lead-time (After 1 Oct):** 2 Month(s) | **Production Lead-time:** 7 Month(s)

Contract Date:	PY		FY1998		FY1999		FY2000		FY2001	DEC 00	FY2002	OCT 01
Delivery Date:	PY		FY1998		FY1999		FY2000		FY2001	JUL 01	FY2002	NOV 02

Installations:	PY	FY1998				FY1999				FY2000				FY2001				FY2002				Total
		1ST	2ND	3RD	4TH	1ST	2ND	3RD	4TH	1ST	2ND	3RD	4TH	1ST	2ND	3RD	4TH	1ST	2ND	3RD	4TH	
Input																4		5				9
Output																	4		5			9

	P-1 ITEM NO: 68		PAGE NO: 182		Page 1 of 1

INDIVIDUAL MODIFICATIONS (EXHIBIT P- 3A) | **DATE:** FEBRUARY 2000

Modification Title and No: Ground-Based Electro-Optical Sensor System (GEODSS), MOD# TBD **Models of Systems Affected:** AN/FSQ-114

Description/Justification: GEODSS is a segment of the SPACETRACK network, which provides metric track data, deep Space Object Identification (SOI), and visible light photometry data to the Cheyenne Mountain Complex (CMC). GEODSS supports command mission responsibilities for cataloging and maintenance of deep-space satellite payloads, debris, New Foreign Launch orbit determination and collision avoidance. Funds provide for production, integration, testing and fielding of 10 Charge Coupled Device (CCD) cameras, which replace Ebsicon tubes that are no longer manufactured or supported by any vendor. Funds also provide for Sensor Controller hardware and associated software modifications, and Modular Precision Angular Control Systems (MPACS) replacement, critical to the CCD modification. The CCD cameras will ensure GEODSS capability to meet operational requirements.

Development Status/Major Development Milestones: Contract Awd: Feb 00; Exercise Opt: Oct 00; PDR: Mar 02; OT&E: Jun 02; IOC: Jul 02.

Financial Plan $ (in Millions)	PY		FY1998		FY1999		FY2000		FY2001		FY2002		TOTAL	
	Qty	Cost	Qty	Cost	Qty	Cost	Qty	Cost	Qty	Cost	Qty	Cost	Qty	Cost
RDT&E														
Ref. R-1 PE No:													0	
Procurement:														
Equipment Kits									3	4.0	6	5.4	9	9.4
Equipment Kits Non-recurring										1.4		0.3	0	1.7
Engineering Change Orders													0	
Data										0.5			0	0.5
Training Equipment													0	
Support Equipment										0.2			0	0.2
Software										0.5			0	0.5
Interim Contractor Support													0	
Other										2.5		2.3	0	4.8
Total Procurement Costs:	0		0		0		0		3	9.1	6	8	9	17.1
Hardware Installation:														
(PY) Eqpt (Kits)													0	0
(FY98) Eqpt (Kits)													0	0
(FY99) Eqpt (Kits)													0	0
(FY00) Eqpt (Kits)													0	0
(FY01) Eqpt (3 Kits)											3	.8	3	0.8
(FY02) Eqpt (6 Kits)													0	0
Total Installation Costs:	0		0		0		0		0		3	0.8	3	0.8
Total Modification Costs:	0		0		0		0		3	9.1	6	8.8	9	17.9

Method of Installation: CONTRACTOR, FIELD INSTALL **Administrative Lead-time (After 1 Oct):** 0 Month(s) **Production Lead-time:** 14 Month(s)

Contract Date:	PY		FY1998		FY1999		FY2000		FY2001	OCT 00	FY2002	OCT 01
Delivery Date:	PY		FY1998		FY1999		FY2000		FY2001	FEB 01	FY2002	FEB 02

Installations:	PY	FY1998				FY1999				FY2000				FY2001				FY2002				Total
		1ST	2ND	3RD	4TH	1ST	2ND	3RD	4TH	1ST	2ND	3RD	4TH	1ST	2ND	3RD	4TH	1ST	2ND	3RD	4TH	
Input																				3		3
Output																				3		3

P-1 ITEM NO: 68 **PAGE NO:** 183 Page 1 of 1

BUDGET ITEM JUSTIFICATION (EXHIBIT P-40)	DATE: FEBRUARY 2000
APPROP CODE/BA: OPAF/ELECTRONICS & TELECOMMUNICATION EQUIPMENT	**P-1 NOMENCLATURE:** TACTICAL C-E EQUIPMENT

		FY1999	FY2000	FY2001	FY2002	FY2003	FY2004	FY2005
QUANTITY								
COST (in Thousands)		$36,322	$79,014	$101,222	$100,540	$151,091	$169,380	$104,134

Description:

The Tactical Communications-Electronics (C-E) equipment procurement program acquires essential command, control, communications and computer (C4) systems to satisfy requirements for Pacific Air Forces (PACAF), United States Air Forces Europe (USAFE), Air Mobility Command (AMC), Air Force Special Operations Command (AFSOC), Air Combat Command (ACC), and the Air National Guard (ANG). These funds also replace or upgrade logistically unsupportable communications systems fielded in the Theater Air Control System (TACS) and combat communications units, and procure the next generation of lightweight tactical communications equipment that will support US flying operations worldwide.

1. THEATER DEPLOYABLE COMMUNICATIONS (TDC) PROGRAM: The TDC program, which replaces the Tri-service Tactical Communications (TRI-TAC) system, provides telephone/computer networks and message service to deploying Air Force units. TDC will support a wide range of mission areas and users including: ACC, AMC, USAFE, PACAF, AFSOC, and the ANG. No additional ANG units will be fielded between FY99-01. For both AMC and AFSOC, TDC provides new combat communications capability not previously available but critical to support Air Expeditionary Force (AEF) operations. In addition, TDC will support joint operations through its link into the joint tactical communications architecture. TDC will play a major role in the successful implementation of the Global Broadcast Service (GBS) to disseminate timely intelligence information to the warfighter. TDC will support the ground dissemination of GBS information.

TDC is composed of three components: the Lightweight Multiband Satellite Terminal (LMST), the Integrated Communications Access Packages (ICAP), and Network Management System/Base Information Protection (NMS/BIP). Together, these three systems provide the

BUDGET ITEM JUSTIFICATION (EXHIBIT P-40)	DATE: FEBRUARY 2000
APPROP CODE/BA: OPAF/ELECTRONICS & TELECOMMUNICATION EQUIPMENT	**P-1 NOMENCLATURE:** TACTICAL C-E EQUIPMENT

Description (cont.):

communications infrastructure for deployed bare base environments. TDC connects all levels of users, from base up to the National Command Authority, using various C4 and intelligence (C4I) applications and the Tactical Internet. TDC funding supports Wing Initial Communication Packages (WICPs), Air Operations Centers (AOC), Air Support Operations Centers (ASOCs), Control Reporting Centers/Elements (CRCs/CREs), as well as expeditionary and robusting units of the AEF. TDC is modular and adaptable--capable of supporting the war effort from deployment on day one to the buildup of a fully operational base. TDC provides a continuous spiral process to upgrade fielded systems with updated communications capabilities and technologies to take advantage of commercial upgrades to meet evolving user requirements. FY01 is the first year that TDC fielded units will benefit from implementation of the Spiral upgrade process to incorporate new technology in the baseline. TDC funding increase of $30M was added by Congress in the FY00 markup of the FY00 Air Force budget. Reference Appropriation Conference Report 106-371, October 8, 1999, page 197.

a. LIGHTWEIGHT MULTIBAND SATELLITE TERMINALS (LMSTs): LMSTs are a critical link providing the two-way communications connectivity between the deployed base and command authorities at other locations. LMSTs augment existing X-Band tactical satellite terminals and provide a significant increase in capability, leveraging not only the military X-band satellite channels but also the bands available on commercial communications satellites. This alleviates many operational problems, since the military X-band channels are nearing capacity. The LMST significantly reduces airlift, requiring just 25 percent of a C-130 load versus a full C-130 load to move the terminal it replaces. FY99-01 funding continues procurement of LMSTs.

b. INTEGRATED COMMUNICATIONS ACCESS PACKAGE (ICAP): The ICAP program provides modular and scaleable packages of routers, switches, multiplexers and network management systems, forming the communications backbone for a deployed base. Users will plug-in their computer, telephones, and faxes into the backbone the ICAP provides. ICAP provides significant advantages over TRI-TAC in the areas of bandwidth efficiency, adaptability, and airlift. ICAP employs "smart multiplexers" allowing sequencing of several messages over a single line, versus the multiple dedicated lines used in TRI-TAC. Additionally, ICAP packages come in multiple configurations varying in sizing/composition based on application. This allows for greater flexibility to meet different contingency operations. For example, the Wing

BUDGET ITEM JUSTIFICATION (EXHIBIT P-40)	DATE: FEBRUARY 2000
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Description (cont.):

Initial Communication Package is the smallest sized unit (C-130 load) designed to provide an immediate communications capability during the initial phase of deployment. As subsequent airlift becomes available, additional packages can be "added," building up to a full size robusting package. The TRI-TAC system lacked this flexibility, requiring a large portion (six to seven C-130 loads) to be in-place before the system became operational. FY99-01 funds continue the procurement of ICAP.

c. NETWORK MANAGEMENT SYSTEM/BASE INFORMATION PROTECTION (NMS/BIP): NMS/BIP provides the same network management/information protection capabilities for deployed operations that exists on fixed bases. Specific functions include data management, intrusion detection and firewall capabilities for both the classified and unclassified networks. All equipment is packaged in transit cases for deployed operations. Formerly an integral part of the ICAP suite, this capability has been separated for better management oversight. Initial procurement for NMS/BIP capabilities was funded in FY99. Additionally, FY99 funding was provided for Joint Expeditionary Forces Experiment (JEFX) efforts. FY00/01 funding continues NMS/BIP capabilities.

d. Year 2000 (Y2K) Upgrades for Legacy TRI-TAC Equipment: Funds for this project ($2.8M) were added through FY99 Y2K Supplemental and transferred to the Air Force from the Information Technology Systems and Security Transfer Account for Y2K conversion activities. No FY01 funding requested.

2. TACTICAL AIR CONTROL PARTY (TACP) MODERNIZATION: The TACP Modernization Program enhances the ability of TACPs to interface with joint and multinational forces by replacing aging communications and information systems equipment utilized by ACC TACPs and AFSOC Special Tactics Teams (STTs). Both types of units deploy with Army maneuver units and provide the command and control link for Close Air Support (CAS), airlift, and reconnaissance. TACP Modernization provides ultra high frequency (UHF) satellite communications (SATCOM), data capabilities, process automation, and integrated capabilities to improve operational effectiveness and reduce the risk of fratricide. Without modernization, TACPs will be non-interoperable with the US Army's digitized battlefield and processing close air support requests will be delayed, jeopardizing support of ground forces.

BUDGET ITEM JUSTIFICATION (EXHIBIT P-40)	DATE: FEBRUARY 2000
APPROP CODE/BA: OPAF/ELECTRONICS & TELECOMMUNICATION EQUIPMENT	**P-1 NOMENCLATURE:** TACTICAL C-E EQUIPMENT

Description (cont.):

The TACP Modernization Program consists of four components: (1) laser range finders (with Global Positioning Satellite (GPS) and computer interface) which provide target location and observation devices to help reduce incidents of fratricide, (2) ruggedized computers with information software to provide gateway functionality and to display situational awareness imagery and messages in the battlefield environment, (3) multiple waveform manportable radios (manpacks) to replace the three different manpacks now in use that each operate in a separate waveform, and (4) vehicle-mounted communications systems (starting beyond FY01). TACP modernization remedies joint/combined interoperability, inaccurate targeting, lack of automation, limited situational awareness, and size/weight concerns. FY00 funding starts the procurement of two components (computer support and manpack radios) for the TACP Modernization Program. FY01 funding starts the procurement of the laser range finders and continues the computer support and manpack radio procurements.

WEAPON SYSTEM COST ANALYSIS (EXHIBIT P- 5)		DATE: FEBRUARY 2000
APPROP CODE/BA: OPAF/ELECTRONICS & TELECOMMUNICATION EQUIPMENT	**P-1 NOMENCLATURE:** TACTICAL C-E EQUIPMENT	

WEAPON SYSTEM COST ELEMENTS	IDENT CODE	FY1999			FY2000			FY2000			FY2001		
		QTY	UNIT COST	TOTAL COST	QTY	UNIT COST	TOTAL COST	QTY	UNIT COST	TOTAL COST	QTY	UNIT COST	TOTAL COST
1.TDC PROGRAM							{36,322}			{65,821}			{81,368}
A. LMST (1)	A				8		9,250	11		19,250	7		8,750
B. ICAP (1)	A				11		14,615	6		43,571	11		67,118
C. NMS/BIP (2)	A				10		9657	6	500,000	3,000	11	500,000	5,500
D.Y2K UPGRADES LEGACY TRI-TAC EQUIPMENT	A						2,800						
2. TACP MODERNIZATION (3)										{13,193}			{19,854}
A. LASER RANGE FINDERS	A										72	50,200	3,614
B. COMPUTERS										5,049			3,115
C. MANPACK RADIOS	A							221	36,850	8,144	350	37,500	13,125
TOTALS:							36,322			79,014			101,222

REMARKS:
(1) Quantities represent systems. LMST/ICAP unit costs vary because system composition depends on application.
(2) NMS/BIP includes increased funding for JEFX. The various JEFX quantities consist of hardware, software, cryptos, routers, CITS nodes, IDNX nodes, telephones, and VTC equipment/interfaces which provide a coherent communications infrastructure for strategic experimentation.
(3) Quantity and cost changes from FY00/01 President's Budget submission due to TACP Modernization Operational Requirements Document (ORD) approval and reprioritization of requirements.

BUDGET PROCUREMENT HISTORY PLANNING (EXHIBIT P- 5A)	DATE: FEBRUARY 2000
APPROP CODE/BA: OPAF/ELECTRONICS & TELECOMMUNICATION EQUIPMENT	**P-1 NOMENCLATURE:** TACTICAL C-E EQUIPMENT

ITEM / FISCAL YEAR	QTY.	UNIT COST	LOCATION OF PCO	CONTRACT METHOD & TYPE	CONTRACTOR AND LOCATION	AWD. DATE	DATE FIRST DEL.	SPECS AVAIL NOW	DATE REV. AVAIL
1. TDC PROGRAM									
A. LMST									
FY99 (1)(2)	8		AFMC/ESC	MIPR/FFP	ARMY/CECOM, HARRIS CORP, MELBOURNE, FL	DEC 98	JAN 00		
FY00 (1)(2)	11		AFMC/ESC	MIPR/FFP	ARMY/CECOM, HARRIS CORP, MELBOURNE, FL	JAN 00	JAN 01		
FY01 (1)(2)	7		AFMC/ESC	MIPR/FFP	ARMY/CECOM, HARRIS CORP, MELBOURNE, FL	JAN 01	JAN 02	Y	
B. ICAP									
FY99 (2)	11		AFMC/ESC	OPT/FFP (3)	MOTOROLA SSTG, SCOTTSDALE, AZ	DEC 98	JUN 99		
FY00 (2)	6		AFMC/ESC	OPT/FFP (3)	MOTOROLA SSTG, SCOTTSDALE, AZ	DEC 99	JUN 00		
FY01 (2)	11		AFMC/ESC	OPT/FFP (3)	MOTOROLA SSTG, SCOTTSDALE, AZ	DEC 00	JUN 01	Y	
C. NMS/BIP									
FY99	10		AFMC/SSG	C/IDIQ	TRW, SAN ANTONIO, TX	FEB 99	JUL 99		
FY99 (5)			AFMC/ESC	C/FP	MULTIPLE (5)	FEB 99	JUL 99		
FY00	6	500,000	AFMC/SSG	C/IDIQ	TRW, SAN ANTONIO, TX	FEB 00	JUL 00	Y	
FY01	11	500,000	AFMC/SSG	C/IDIQ	TRW, SAN ANTONIO, TX	FEB 01	JUL 01	Y	

BUDGET PROCUREMENT HISTORY PLANNING (EXHIBIT P- 5A)	DATE: FEBRUARY 2000
APPROP CODE/BA: OPAF/ELECTRONICS & TELECOMMUNICATION EQUIPMENT	**P-1 NOMENCLATURE:** TACTICAL C-E EQUIPMENT

ITEM / FISCAL YEAR	QTY.	UNIT COST	LOCATION OF PCO	CONTRACT METHOD & TYPE	CONTRACTOR AND LOCATION	AWD. DATE	DATE FIRST DEL.	SPECS AVAIL NOW	DATE REV. AVAIL
D. Y2K UPGRADES LEGACY TRI-TAC EQUIPMENT									
FY99			AFMC/WR-ALC	MIPR/FFP	MULTIPLE (6)	DEC 99	JAN 00		
2. TACP MODERNIZATION									
A. LASER RANGE FINDERS									
FY01(4)	72	50,200	AFMC/ESC	OPT/FFP	UNKNOWN	JAN 01	FEB 02	Y	
C. MANPACK RADIOS									
FY00 (4)	221	36,850	AFMC/ESC	OPT/FFP	UNKNOWN	JUN 00	NOV 00	Y	
FY01 (4)	350	37,500	AFMC/ESC	OPT/FFP	UNKNOWN	DEC 00	JUL 01	Y	

REMARKS:

(1) Option to FY95 C/FFP contract with Harris Corp., Melbourne, FL.
(2) LMST and ICAP unit costs vary because system sizing composition depends on application.
(3) Option to FY96 ICAP contract with Motorola Space Command Systems Technology Group (SSTG), Scottsdale, AZ.
(4) Existing contractual vehicles will be utilized to place orders early in FY00 and 01. Options are available from several vendors. Typical contractors are: Harris, Rochester, NY; Raytheon, Largo, FL; Litton Laser, Apopka, FL; GSA Catalog; ANZUS, San Diego, CA.
(5) EFX 99 awarded multiple contracts to purchase a variety of equipment in FY99. Various contracts are available through the following vendors: Motorola SSTG, Scottsdale, AZ; GSA, Kansas City, MO; MITRE Corp, Bedford, MA; and CCPL, Bedford, MA. Award and delivery dates reflect date of first award and delivery.
(6) Legacy TRI-TAC Memory, software and Hard Disk Drive upgrades to meet Y2K compliance, multiple contracts awarded, via National Security Agency (NSA), and Naval Surface Warfare Center Division (NAVSURFWARCENDIV). Contractors include California Microwave Systems, Woodland Hills, CA. Award and delivery dates reflect date of first award and delivery.

BUDGET ITEM JUSTIFICATION (EXHIBIT P-40)	DATE: FEBRUARY 2000
APPROP CODE/BA: OPAF/ELECTRONICS & TELECOMMUNICATION EQUIPMENT	**P-1 NOMENCLATURE:** COMBAT SURVIVOR/EVADER LOCATOR RADIO

		FY1999	FY2000	FY2001	FY2002	FY2003	FY2004	FY2005
QUANTITY								
COST (in Thousands)		$2,916	$836	$3,104	$2,249	$5,830	$5,956	$6,064

Description:

The Combat Survivor/Evader Locator (CSEL) system will address existing deficiencies in support of isolated personnel and recovery forces during war, military operations-other-than-war, and peacetime. CSEL will replace existing PRC-90 and PRC-112 survival radios with current technologies in a new end-to-end system to provide enhanced Combat Search and Rescue (CSAR) capabilities. The CSEL system is composed of three segments. The user segment features a new multi-function, hand-held software reprogrammable radio which incorporates near real-time geo-positioning using Global Positioning System (GPS) Precise Positioning System (PPS) capabilities. The satellite communications segment incorporates four ultra high frequency (UHF) base stations colocated with Navy command and control facilities to support two-way, over-the-horizon, secure data messaging and the potential integration of commercial satellite systems capabilities. The ground segment contains a Joint Search and Rescue Center software application which allows command and control interface with other government systems.

The CSEL program progressed along a standard new start acquisition path until the June 1995 shoot down, evasion, and eventual recovery of a US pilot heightened the urgency to develop and acquire an enhanced CSAR capability. In July 1995, the Under Secretary of Defense for Acquisition and Technology USD (A&T) issued a memorandum directing the accelerated development of a CSEL capability. In November 1995, the Vice Chief of Staff of the Air Force approved the CSEL operational requirements document and the USD (A&T) approved the overall acquisition strategy. In December 1995, the Vice Chief of Staff of the Air Force approved the CSEL operational requirements document and the USD (A&T) approved the overall acquisition strategy. In December 1995, the Secretary of Defense endorsed the CSEL program, including a four-phase plan for CSAR.

BUDGET ITEM JUSTIFICATION (EXHIBIT P-40)	DATE: FEBRUARY 2000
APPROP CODE/BA: OPAF/ELECTRONICS & TELECOMMUNICATION EQUIPMENT	**P-1 NOMENCLATURE:** COMBAT SURVIVOR/EVADER LOCATOR RADIO

Description (cont.):

In February 1996, the Commander of the Space and Missile Systems Center announced the contract award of a Cost Plus Award Fee contract (Research, Development, Test and Evaluation (RDT&E), Air Force funds) for the Engineering and Manufacturing Development (EMD) of the CSEL system (reference Program Element 35176F of the Air Force Descriptive Summaries). The first production option was awarded in July 1997 with delivery of the first Low Rate Initial Production (LRIP) units in the 3rd quarter of FY99. Headquarters Air Combat Command (HQ ACC) refined their operational concept and reduced the total requirement for CSEL from 23,450 to 16,500. These numbers will continue to fluctuate with force structure and Concept of Operations (CONOPS) changes. Ultimately, an estimated 45,344 CSEL radios will be procured by the Air Force, Army, and Navy. CSEL is a joint procurement with the Army and Navy separately funding their own quantities of CSEL radios. Radio unit costs are contingent on full participation by all three Services.

FY99 procurement funded producibility modifications and production of new very high frequency (VHF)/UHF radio modules in response to deficiencies identified in EMD radios tested during the first Operational Assessment in FY98. FY99 procurement funds were also used to upgrade the option 1 radio GPS module to a Selective Availability Anti Spoofing Module (SAASM)-based design. These new GPS modules, along with new VHF/UHF modules, will be retrofitted into the last 90 option 1 radios in FY00. FY00 funding verifies the performance of these production-configured radios to support a Sep 00 Operational Assessment and an Option 2 LRIP decision in early FY01. Better insight into the cost of low rate production of radios has reduced the Air Force FY01 quantity from 50 to 45 radios. This is part of the total Army, Navy, Air Force Option 2 buy of 250 radios, in addition to equipment for one UHF base station (UBS) and hardware to upgrade a second UHF base station (UBS DAMA-C kit) required to support Initial Operational Test and Evaluation (IOT&E) in FY02. The IOT&E results will then support a Full Rate Production/Fielding decision later in FY02. Without the FY01 funding to procure the necessary Air Force assets for IOT&E, the FY02 system fielding decision will be delayed a year. Delaying this operational capability will leave isolated personnel and rescue forces with 20 to 30 year old technology, continuing to put our rescue and recovery forces at risk and leaving survivors/evaders with equipment found to be inadequate in the 1995 search and recovery in Bosnia.

WEAPON SYSTEM COST ANALYSIS (EXHIBIT P- 5)		DATE: FEBRUARY 2000
APPROP CODE/BA: OPAF/ELECTRONICS & TELECOMMUNICATION EQUIPMENT	**P-1 NOMENCLATURE:** COMBAT SURVIVOR/EVADER LOCATOR RADIO	

WEAPON SYSTEM COST ELEMENTS	IDENT CODE				FY1999			FY2000			FY2001		
		QTY	UNIT COST	TOTAL COST	QTY	UNIT COST	TOTAL COST	QTY	UNIT COST	TOTAL COST	QTY	UNIT COST	TOTAL COST
CSEL SYSTEM							{2,916}			{836}			{3,104}
CSEL RADIOS	B										45	12,111	545
PROGRAM SUPT EQUIP (1)													28
UBS													656
UBS DAMA-C KIT													270
PRODUCIBILITY/DEFICIENCY							91						
PRODUCTION ENGINEERING							2,825			836			1,605
TOTALS:							2,916			836	45		3,104

REMARKS:

1. Program support equipment consists of radio set adapters, mission planning software, batteries, flyaway costs, antennas, earpieces, etc.

.

BUDGET ITEM JUSTIFICATION (EXHIBIT P-40)	DATE: FEBRUARY 2000
APPROP CODE/BA: OPAF/ELECTRONICS & TELECOMMUNICATION EQUIPMENT	**P-1 NOMENCLATURE:** RADIO EQUIPMENT

		FY1999	FY2000	FY2001	FY2002	FY2003	FY2004	FY2005
QUANTITY								
COST (in Thousands)		$12,729	$20,257	$16,630	$14,845	$7,621	$7,922	$7,996

Description:

This program procures new, high frequency (HF) radio equipment for the Air Force (AF) and upgrades or procures tactical/land mobile radio systems at various AF installations. The majority of current AF high power, HF radio stations located around the world are more than 20 years old, and increasingly difficult and costly to maintain. Due to a declining support posture, and efforts to collocate/close US facilities overseas, the Department of Defense (DoD) HF Mission Area Review directed the Services/Agencies to reduce and collocate HF resources throughout the world. The Joint Chiefs of Staff (JCS) tasked the AF to be the executive agent for the DoD HF collocation effort. Items requested in FY01 are identified on the attached P-5 and are representative of items to be procured. Items procured during execution may change based on critical equipment needed to support current Air Force mission requirements.

1. SCOPE COMMAND HIGH FREQUENCY (HF) RADIO STATION REPLACEMENT: The Scope Command program provides for modernization of selected high power HF ground radio equipment which serves as the sole command and control resource for Air Mobility Command (AMC) cargo and tanker aircraft. This program supports Mystic Star, the United States Air Force Global HF System, Defense Communications Systems (DCS) HF Entry, US Navy HICOM, and other high power HF networks. It also supports war plans and operational requirements for the following organizations: White House Communications Agency (WHCA), JCS, Defense Information Systems Agency (DISA), AMC, Air Combat Command (ACC), Air Intelligence Agency (AIA), Air Force Space Command (AFSPC), United States Air Forces Europe (USAFE), and Pacific Air Forces (PACAF).

The Scope Command program is divided into three distinct phases and upgrades 14 AF HF Global sites with state-of-the-art,

BUDGET ITEM JUSTIFICATION (EXHIBIT P-40)	DATE: FEBRUARY 2000
APPROP CODE/BA: OPAF/ELECTRONICS & TELECOMMUNICATION EQUIPMENT	**P-1 NOMENCLATURE:** RADIO EQUIPMENT

Description (cont.):
commercial-off-the-shelf (COTS) HF radio equipment. Scope Command will also posture the AF to move to a centralized net control capability with unmanned HF radio facilities (referred to as Lights Out). The phases are:

Phase A, Initial Scope Command (ISC), procured two HF radio levels for each station to provide an HF Automatic Link Establishment (ALE) capability to meet AMC's command and control requirements and aircraft modification schedules. ISC was completed in Dec 98 with prior year funding.

Phase B, Full Up, procures equipment for the full HF capability to satisfy all remaining Air Force HF mission requirements. Phase B includes the equipment, engineering, installation, and operational testing costs to achieve full operational capability.

Phase C, Lights Out, will allow remote control of the Scope Command HF radios/equipment at other stations from a central control site at Andrews AFB, MD. Phase C includes definition, design, proof-of-concept, installation, and operational testing costs of the Centralized Net Control Station (CNCS) at Andrews AFB, MD, and the associated software and equipment necessary to install the Lights Out capability at the other HF Global Stations.

Other program efforts and costs include selective replacement of older, degraded HF antennas, when required, to maximize the effectiveness of the new Scope Command Full-Up equipment.

FY99 funding procured Scope Command equipment/installation for two Phase B Full Up HF stations, Phase C CNCS equipment at Andrews AFB, MD, Lights Out equipment/installation for four stations, HF antennas, Type I factory training, and engineering/integration support.

FY00 funding procures Scope Command equipment/installation for three Phase B Full Up stations, Phase C equipment/installation for eight stations, engineering/integration support, and HF antennas replacement. Additional funding ($3.75M) for Scope Command was appropriated by Congress in the FY00 markup of the FY00 Air Force budget. Reference Appropriation Conference Report 106-371, October 8, 1999, page 197.

FY01 funding will procure Scope Command equipment/installation for four Phase B Full Up stations, Scope Command/Phase C engineering/integration support, and HF antennas replacement. Increased FY01 funding allows for expanded engineering/integration support

BUDGET ITEM JUSTIFICATION (EXHIBIT P-40)	DATE: FEBRUARY 2000
APPROP CODE/BA: OPAF/ELECTRONICS & TELECOMMUNICATION EQUIPMENT	**P-1 NOMENCLATURE:** RADIO EQUIPMENT

Description (cont.):
and additional HF antenna replacements.

2. AF OFFICE OF SPECIAL INVESTIGATIONS (AFOSI) TACTICAL RADIO SYSTEM: The AFOSI's Land Mobile Radio (LMR) Tactical Radio System Program provides secure, two-way communications internally between AFOSI personnel and externally between AFOSI agents and other government/investigative agencies. This program is responsible for planning, acquisition, and implementation of command-wide LMR systems. Externally, these systems provide anti-terrorism, fraud, criminal, counterintelligence, and force protection mission support to base commanders and deployed DoD units at more than 170 worldwide locations. Internally, LMR operations include immediate two-way radio communications for garrison and deployed AFOSI mission needs. A goal of the LMR program is to standardize equipment and maximize interoperability for the complete LMR equipment inventory to ensure maximum compatibility throughout the command. FY00/01 funding procures portable LMR equipment and "narrow" bandwidth capability for LMR equipment in support of AFOSI missions.

3. AIR COMBAT COMMAND (ACC) TRUNKED LAND MOBILE RADIO (LMR) SYSTEM: This program procures for ACC bases trunked LMR systems which provide a trunking infrastructure to manage all radio nets under a single integrated network with significantly reduced bandwidth. FY99-01 funding continues procurement of improved LMR capability in support of ACC missions.

4. AIR EDUCATION AND TRAINING COMMAND (AETC) SYSTEM: FY99 funds were added through FY99 Y2K Supplemental Appropriations and transferred to the Air Force from the Information Systems and Security Transfer Account. FY99 funds provided for a trunked LMR system at Luke AFB, AZ. No FY01 funds are requested.

WEAPON SYSTEM COST ANALYSIS (EXHIBIT P- 5)		DATE: FEBRUARY 2000
APPROP CODE/BA: OPAF/ELECTRONICS & TELECOMMUNICATION EQUIPMENT	**P-1 NOMENCLATURE:** RADIO EQUIPMENT	

WEAPON SYSTEM COST ELEMENTS	IDENT CODE				FY1999			FY2000			FY2001		
		QTY	UNIT COST	TOTAL COST	QTY	UNIT COST	TOTAL COST	QTY	UNIT COST	TOTAL COST	QTY	UNIT COST	TOTAL COST
1. SCOPE COMMAND HF RADIO STATION REPLACEMENT							{11,503}			{19,279}			{15,658}
PHASE B FULL UP	A						5,898			12,910			14,130
PHASE C LIGHTS OUT	A						5,605			6,369			1,528
2. AFOSI TACTICAL RADIO SYSTEM	A									413			412
3. ACC TRUNKED LMR SYSTEM	A						576			565			560
4. AETC TRUNKED LMR SYSTEM	A						650						
TOTALS:							12,729			20,257			16,630

REMARKS:

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BUDGET PROCUREMENT HISTORY PLANNING (EXHIBIT P- 5A)	DATE: FEBRUARY 2000
APPROP CODE/BA: OPAF/ELECTRONICS & TELECOMMUNICATION EQUIPMENT	**P-1 NOMENCLATURE:** RADIO EQUIPMENT

ITEM / FISCAL YEAR	QTY.	UNIT COST	LOCATION OF PCO	CONTRACT METHOD & TYPE	CONTRACTOR AND LOCATION	AWD. DATE	DATE FIRST DEL.	SPECS AVAIL NOW	DATE REV. AVAIL
1. SCOPE COMMAND HF RADIO STATION REPLACEMENT									
PHASE B FULL UP									
FY 99 (1)			AFMC/SM-ALC	DO (2)/FFP	ROCKWELL, RICHARDSON TX	JAN 99	JAN 00		
FY 00 (1)			AFMC/SM-ALC	DO (2)/FFP	ROCKWELL, RICHARDSON TX	JAN 00	JAN 01		
FY 01 (1)			AFMC/SM-ALC	DO (2)/FFP	ROCKWELL, RICHARDSON TX	JAN 01	JAN 02	Y	
PHASE C LIGHTS OUT									
FY 99 (1)			AFMC/SM-ALC	DO (2)/FFP	ROCKWELL, RICHARDSON TX	AUG 99	FEB 00		
FY 00 (1)			AFMC/SM-ALC	DO (2)/FFP	ROCKWELL, RICHARDSON TX	JAN 00	JUL 00		
FY 01 (1)			AFMC/SM-ALC	DO (2)/FFP	ROCKWELL, RICHARDSON TX	JAN 01	JUL 01	Y	
2. AFOSI TACTICAL RADIO SYSTEM									
FY00 (1)			HQ AFOSI	OPT (3)/FP	MOTOROLA, INC; HANOVER, MA	JAN 00	MAR 00		
FY01 (1)			HQ AFOSI	OPT (3)/FP	MOTOROLA, INC; HANOVER, MA	JAN 01	MAR 01	Y	

BUDGET PROCUREMENT HISTORY PLANNING (EXHIBIT P- 5A)	DATE: FEBRUARY 2000
APPROP CODE/BA: OPAF/ELECTRONICS & TELECOMMUNICATION EQUIPMENT	**P-1 NOMENCLATURE:** RADIO EQUIPMENT

ITEM / FISCAL YEAR	QTY.	UNIT COST	LOCATION OF PCO	CONTRACT METHOD & TYPE	CONTRACTOR AND LOCATION	AWD. DATE	DATE FIRST DEL.	SPECS AVAIL NOW	DATE REV. AVAIL
3. ACC TRUNKED LMR SYSTEM									
FY99 (1)			HQ ACC	OPT/FFP	MULTIPLE (4)	MAY 99	DEC 99		
FY00 (1)			HQ ACC	OPT/FFP	MULTIPLE (4)	MAY 00	DEC 00	Y	
FY01 (1)			HQ ACC	OPT/FFP	MULTIPLE (4)	MAY 01	DEC 01	Y	
4. AETC TRUNKED LMR SYSTEM									
FY99 (1)			HQ AETC	OPT/FFP	MULTIPLE (4)	MAY 99	DEC 99		

REMARKS:
1. Quantities and unit costs vary due to site specific requirements.
2. Option to contract with Rockwell, awarded November 1997.
3. Option to contract with Motorola, Inc. awarded July 1997.
4. Multiple options from existing ACC, AETC, and GSA schedule contracts. Award/delivery dates represent dates of first contract award and delivery.

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BUDGET ITEM JUSTIFICATION (EXHIBIT P-40)	DATE: FEBRUARY 2000
APPROP CODE/BA: OPAF/ELECTRONICS & TELECOMMUNICATION EQUIPMENT	**P-1 NOMENCLATURE:** TV EQUIPMENT (AFRTV)

		FY1999	FY2000	FY2001	FY2002	FY2003	FY2004	FY2005
QUANTITY								
COST (in Thousands)		$1,964	$1,974	$2,005	$2,024	$2,020	$2,065	$2,102

Description:

This continuing program procures broadcasting equipment needed by the Air Force Broadcasting Service (AFBS) to support the worldwide mission of the Armed Forces Radio and Television Service (AFRTS). The Air Force operates radio and television facilities overseas in support of the internal information mission of United States Central Command, United States Pacific Command, Air Combat Command, Air Force Space Command, and United States European Command. This program also procures radio and television equipment for the Air Force News Agency (AFNEWS) Production Center, Kelly AFB, TX. AFNEWS produces and distributes corporate Air Force radio and television news productions to AFRTS outlets, commercial stations and Air Force units throughout the world in support of the Air Force's Internal Information Program and the Army and Air Force Hometown News Service. Items requested in FY01 are identified on the attached P-40A and are representative of items to be procured. Items procured during execution may change based on critical equipment needed to support current Air Force mission requirements.

1. AFRTS EQUIPMENT PROCUREMENT: FY99-01 funds procure radio and television broadcasting equipment to include TV cameras, audio consoles, video cassette recorders, audio recorders, integrated receiver decoders, equalizers, mixers, multi-channel video/audio switchers, editors, routers, TV monitors, radio/TV transmitters and antennae, microwave transmitters and antennae, satellite downlinks and fiber optic links, and specialized test equipment. This funding is critical to ensure the capability to deliver AFRTS radio and TV service to uniformed service members, civilian employees, and family members serving overseas, many of whom are serving in remote locations where AFRTS is their sole source of news and information. Failure to fund this program in its entirety will delay the replacement of aging equipment, thereby increasing the frequency of maintenance and repair to keep the older equipment in serviceable condition.

BUDGET ITEM JUSTIFICATION (EXHIBIT P-40)	DATE: FEBRUARY 2000
APPROP CODE/BA: OPAF/ELECTRONICS & TELECOMMUNICATION EQUIPMENT	**P-1 NOMENCLATURE:** TV EQUIPMENT (AFRTV)

Description (cont.):

2. AFNEWS PRODUCTION CENTER: FY99-01 funds procure radio and TV broadcasting equipment for use within the AFNEWS Production Center. Equipment includes electronic news gathering cameras, amplifiers, receivers, mixers, switches, routers, monitors, video cassette recorders/players, editors, camcorders, consoles, equalizers, transmitters, portable satellite uplink, and keyboards. Failure to fund this program will impede the ability of AFNEWS to produce and distribute radio and TV productions in support of the Air Force's Internal Information Program and the Army Air Force Hometown News Service.

BUDGET ITEM JUSTIFICATION FOR AGGREGATED ITEMS (EXHIBIT P- 40A)	DATE: FEBRUARY 2000
APPROP CODE/BA: OPAF/ELECTRONICS & TELECOMMUNICATION EQUIPMENT	**P-1 NOMENCLATURE:** TV EQUIPMENT (AFRTV)

PROCUREMENT ITEMS	ID CODE			FY1999		FY2000		FY2001	
		QTY.	COST	QTY.	COST	QTY.	COST	QTY.	COST
1. AFRTS EQ PROCUREMENT	A				$1,686		$1,693		$1,721
2. AFNEWS PRODUCTION CTR	A				$278		$281		$284
Totals:					$1,964		$1,974		$2,005

Remarks:

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BUDGET ITEM JUSTIFICATION (EXHIBIT P-40)	DATE: FEBRUARY 2000
APPROP CODE/BA: OPAF/ELECTRONICS & TELECOMMUNICATION EQUIPMENT	**P-1 NOMENCLATURE:** CCTV/AUDIOVISUAL EQUIPMENT

		FY1999	FY2000	FY2001	FY2002	FY2003	FY2004	FY2005
QUANTITY								
COST (in Thousands)		$3,162	$3,180	$3,227	$3,256	$3,259	$3,329	$3,391

Description:

Closed Circuit Television (CCTV) and Audiovisual (AV) systems and their products are used throughout the Air Force to help manage, train and employ war fighters. Video and Multimedia based products support war fighter operations, readiness training, medical videography, public and internal information, testing and evaluation, and corporate communications. Combat video imagery provides operational reporting and analysis, battle damage assessment, intelligence and operational analysis, casualty identification, and historical records. These funds replace older television studio systems with newer and more capable equipment and systems for Air Force television production and combat/contingency documentation. With the recognition that imagery conveys very accurate information more quickly, commanders request increasing amounts of video imagery to help meet the challenges of a very active warfighting force. CCTV systems are centrally managed to establish and maintain standardization of systems and to insure full interoperability with all other electronic image acquisition and presentation systems used in the Air Force. FY99-01 CCTV/AV projects are described below. Items procured in FY01 are identified on the attached P-40A and are representative of items to be procured. Items procured during execution may change based on critical equipment needed to support current Air Force mission requirements.

1. IMAGE ACQUISITION/TELEVISION STUDIO EQUIPMENT: FY99-01 funds continue procurement of replacement equipment and upgrades for studio based closed circuit television equipment. Increased implementation of digitally based video systems for image signal capture, processing, editing and transmission, enable our TV centers to offer greater capability in image articulation and customer understanding. The equipment includes cameras, editing and duplication, and all accessories necessary for image capture, processing and distribution. This program funds for 19 production centers and provides products for combat operations, education and training, and corporate communications.

BUDGET ITEM JUSTIFICATION (EXHIBIT P-40)	DATE: FEBRUARY 2000
APPROP CODE/BA: OPAF/ELECTRONICS & TELECOMMUNICATION EQUIPMENT	**P-1 NOMENCLATURE:** CCTV/AUDIOVISUAL EQUIPMENT

Description (cont.):

2. COMBAT CAMERA SYSTEMS: The FY99-01 program continues funding to replace heavily used and worn mobile combat documentation video cameras, portable video recorders and portable non-linear digital video editors for mobility tasked combat camera and Visual Information forces world-wide. This program provides for technology upgrades to portable video systems and includes lightweight digital video cameras and camcorders providing enhanced video quality to the war fighter. These newer systems reduce the transportation footprint, reduce work load, and enable combat camera personnel to transmit motion and still imagery across satellite and terrestrial systems providing war fighters with greater flexibility in decision-making with real-time operational and combat imagery.

BUDGET ITEM JUSTIFICATION FOR AGGREGATED ITEMS (EXHIBIT P- 40A)	DATE: FEBRUARY 2000
APPROP CODE/BA: OPAF/ELECTRONICS & TELECOMMUNICATION EQUIPMENT	**P-1 NOMENCLATURE:** CCTV/AUDIOVISUAL EQUIPMENT

PROCUREMENT ITEMS	ID CODE			FY1999		FY2000		FY2001	
		QTY.	COST	QTY.	COST	QTY.	COST	QTY.	COST
IMAGE ACQ/TV STUDIO EQUIP	A				$1,608		$1,572		$1,597
COMBAT CAMERA SYSTEMS	A				$1,554		$1,608		$1,630
Totals:					$3,162		$3,180		$3,227

Remarks:

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BUDGET ITEM JUSTIFICATION (EXHIBIT P-40)	DATE: FEBRUARY 2000
APPROP CODE/BA: OPAF/ELECTRONICS & TELECOMMUNICATION EQUIPMENT	**P-1 NOMENCLATURE:** BASE COMMUNICATIONS INFRASTRUCTURE

		FY1999	FY2000	FY2001	FY2002	FY2003	FY2004	FY2005
QUANTITY								
COST (in Thousands)		$44,948	$54,062	$74,301	$62,817	$62,774	$75,342	$76,222

Description:

The Base Communications Infrastructure program procures and supports communications equipment for base-level infrastructure programs. This equipment replaces maintenance intensive equipment, upgrades existing digital switching systems, provides information system network management, and increases telecommunication transmissions system capacity. Modernization initiatives facilitate rapid dissemination of vital Air Force command and control and/or business processing systems information. Requirements are established by Major Command (MAJCOM), Air National Guard (ANG), and/or Air Force Reserve (AFR) components, and interface the Combat Information Transport Systems requirements contained in P-1 Line 59, Base Information Infrastructure. As part of the re-engineering plan for the 38th Engineering and Installation Wing (EIW), beginning in FY01 planning and installation services will be provided through contractor support. Items requested in FY01 are identified on the attached P-40A and are representative of items to be procured. Items procured during execution may change based on critical equipment needed to support current Air Force mission requirements.

The P-40 funding line does not match the P-1 funding profile due to incorporation of P-1 Line 58, Information Transmissions Systems, into P-1 Line 74, Base Communications Infrastructure. The consolidation of like program efforts will increase management flexibility in execution, streamline reporting procedures, provide for improved oversight, and support the overall DoD efforts to minimize the absolute number of funding lines. The information contained in this budget exhibit is the result of this incorporation.

1. HEADQUARTERS AIR FORCE COMMUNICATIONS AGENCY (HQ AFCA): This program procures small-scale communications and information systems equipment supporting AFCA's Information Technology (IT) mission. FY99-01 funds purchase real-time video systems,

BUDGET ITEM JUSTIFICATION (EXHIBIT P-40)	DATE: FEBRUARY 2000
APPROP CODE/BA: OPAF/ELECTRONICS & TELECOMMUNICATION EQUIPMENT	**P-1 NOMENCLATURE:** BASE COMMUNICATIONS INFRASTRUCTURE

Description (cont.):
satellite terminal upgrades, and high speed data processing equipment to host models and simulations. Funding also upgrades AFCA network infrastructure providing more network ports and increased bandwidth available to the desktop.

2. AIR NATIONAL GUARD (ANG): Funding procures new and upgraded digital switching systems (DSS), Private Branch Exchanges (PBXs), and Information Transport Systems (ITS) enabling migration to Asynchronous Transfer Mode (ATM) data networks. These networks include voice, video, imagery, telemetry and base information protection systems. These systems ensure that the ANG (in support of ANG state and Federal missions) maintains technologically viable systems, compatible and interoperable with the DoD and Air Force command, control, communications, computer, information and intelligence architecture. FY99-01 funding provides base communications infrastructure funding to upgrade communications systems at 89 ANG flying units and over 200 geographically separated units.

3. AIR FORCE SPACE COMMAND (AFSPC): FY99-01 funding supports Air Force Space Command modernization and life cycle replacement of information transmission systems, base information infrastructure, the command engineering and installation program, and base communications infrastructure. Funds procure wide and local area network hardware (fiber-optic cable, servers, routers, hubs, secure/nonsecure telephone switches, network management systems) and software upgrades. Funds provide critical base-level network connectivity to facilities not funded under the Air Force Combat Information Transport System (CITS) program.

4. HQ US AIR FORCE EUROPE (USAFE): FY99-01 funding supports infrastructure expansion and modernization by purchasing wireless network equipment, network servers, fiber, metallic wiring, fiber optic transceivers, network hubs, and voice and data switching equipment not covered by the CITS program. FY01 funding will procure telephone switches to replace Siemans switches not maintainable after FY04. FY01 funding also will procure equipment supporting expansion and modernization of Air Force maintained portions of the Defense Information Systems Network-Europe (DISN-E). FY01 funding also upgrades communications at seven USAFE Bases: Spangdahlem AB, GE; Aviano AB, IT; Ramstein AB, GE; Incirlik AB, TU; RAFs Lakenheath and Mildenhall, UK; and Ghedi AS, IT. Communication backbone expansions are required at Ramstein, Spangdahlem, and RAF Croughton, UK due to on-going closure at Rhein Mein AB, GE and potential closures at RAFs

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APPROP CODE/BA: OPAF/ELECTRONICS & TELECOMMUNICATION EQUIPMENT	**P-1 NOMENCLATURE:** BASE COMMUNICATIONS INFRASTRUCTURE

Description (cont.):

Molesworth, Upwood, and Alconbury, UK. FY01 funding provides engineering and installation services for future and downward directed systems, expeditionary forces communications requirements, and emergency or unplanned repairs. Additionally, funding supports transfer of the Rhein-Main airlift mission to Ramstein and Spangdahlem ABs. This is a 6-year effort (FY00-05). The Rhein-Main relocation allows USAFE to continue as an en-route hub to support South West Asia (SWA) and other contingency efforts, and the Air Force to fully support airlift operations from Europe.

5. HEADQUARTERS AIR EDUCATION AND TRAINING COMMAND (HQ AETC): FY99-01 funding supports the Air Force education mission by procuring information infrastructure, transmission systems, communications backbone facilities and intrabuilding network wiring. These purchases facilitate research, enhance curriculum, enable modeling and simulation exercises, and provide access to information. FY99 funds supported AETC's migration from Banyan Vines software to the AF-wide standard Windows NT operating system. New terminal equipment was procured eliminating single points of network failure at Maxwell AFB Gunter Annex, AL. FY00 funds support computer modernization efforts required for the Expeditionary Aerospace Force (EAF) career field expansion. Funds also purchase computerized training emulators to ensure mission ready operators for the Defense Satellite Communications System (DSCS) and Global Positioning System (GPS). FY00/01 funds support communications infrastructure modernization systems required to meet advanced technical training requirements for 175,000 trainees per year in twenty different career fields. FY00/01 funding also provides a technology refreshment for course development host servers. FY01 funds will provide communication/computer equipment to bring financial management, survival, ground combat skills, and several other career fields training programs up-to-date. FY01 funds will also continue computer modernization efforts supporting EAF requirements.

6. HQ AIR FORCE MATERIEL COMMAND (AFMC): FY99-01 funding supports Air Force Systems Networking (AFSN) modernization which provides a single, shared high-speed connection to the Defense Information Systems Agency classified and unclassified networks. It also upgrades network hardware and software to improve performance, security, and manageability. FY00/01 funds provide "bandwidth on demand" telecommunications services to non-core buildings (buildings not initally part of CITS base infrastructure plans), and other base areas not

BUDGET ITEM JUSTIFICATION (EXHIBIT P-40)	DATE: FEBRUARY 2000
APPROP CODE/BA: OPAF/ELECTRONICS & TELECOMMUNICATION EQUIPMENT	**P-1 NOMENCLATURE:** BASE COMMUNICATIONS INFRASTRUCTURE

Description (cont.):
covered by CITS. These services enable AFMC bases to provide voice, data, video, imagery, and sensory system data via high speed fiber optic cables.

7. HQ PACIFIC AIR FORCE (PACAF): FY99 funding provided continued information transmission upgrades for Hickam AFB, HI; Elmendorf AFB, AK; Eielson AFB, AK; Andersen AFB, Guam; Yokota AB, JA; Misawa AB, JA; and Osan AB, Korea. Funds expanded the PACAF-wide secret-level network to improve the warfighters' access and upgrades switches. FY00/01 funding upgrades the Commanders Secure Network (CSN) serving numbered air force (NAF) and wing commanders across the theater. Four bases are expected to be completed in FY00, with the remaining five bases to be completed in FY01.

8. HQ AIR COMBAT COMMAND (ACC): FY99-01 funding procures networks and infrastructure to provide efficient high-speed transport systems for communications from headquarters staff and combat forces command, control, communications and computers (C4) operations to base facilities, organizations, and fighting forces. Funding is used to install/upgrade/complete information transmission systems at ACC bases in the continental United States and Lajes Field, Azores. Systems are made up of various local area network/wide area network equipment items (network file servers, network management systems, network storage units) and transmission components (multipliers, bridges, routers, cabling).

9. HQ AIR MOBILITY COMMAND (HQ AMC): FY01 funding supports turn-key procurement of base communications infrastructure. Areas supported include base networks expansion to support new users; increased Secret Internet Protocol Router Network (SIPRNET) access through secure local area networks; upgraded telephone switches to accommodate new users; increased use of fax and video systems; improved base information security; and infrastructure support for DoD-wide automation systems such as the Standard Procurement System, Global Command and Control System, Theater Battle Management Core System, and Integrated Maintenance Data System.

BUDGET ITEM JUSTIFICATION FOR AGGREGATED ITEMS (EXHIBIT P- 40A)	DATE: FEBRUARY 2000
APPROP CODE/BA: OPAF/ELECTRONICS & TELECOMMUNICATION EQUIPMENT	**P-1 NOMENCLATURE:** BASE COMMUNICATIONS INFRASTRUCTURE

PROCUREMENT ITEMS	ID CODE			FY1999		FY2000		FY2001	
		QTY.	COST	QTY.	COST	QTY.	COST	QTY.	COST
1. HQ AFCA	A				$1,612		$472		$660
2. ANG	A				$24,677		$23,030		$23,570
3. HQ AFSPC	A				$5,272		$5,174		$5,261
4. HQ USAFE	A				$1,902		$5,147		$12,832
5. HQ AETC	A				$1,760		$9,682		$19,270
6. HQ AFMC	A				$2,029		$6,972		$7,388
7. HQ PACAF	A				$1,196		$965		$1,152
8. HQ ACC	A				$6,500		$2,620		$3,807
9. HQ AMC	A								$361
Totals:					$44,948		$54,062		$74,301

Remarks:

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BUDGET PROCUREMENT HISTORY PLANNING (EXHIBIT P- 5A)	DATE: FEBRUARY 2000
APPROP CODE/BA: OPAF/ELECTRONICS & TELECOMMUNICATION EQUIPMENT	**P-1 NOMENCLATURE:** BASE COMMUNICATIONS INFRASTRUCTURE

ITEM / FISCAL YEAR	QTY.	UNIT COST	LOCATION OF PCO	CONTRACT METHOD & TYPE	CONTRACTOR AND LOCATION	AWD. DATE	DATE FIRST DEL.	SPECS AVAIL NOW	DATE REV. AVAIL
1. HQ AFCA (1)									
FY99			HQ AFCA	OPT/FFP	MULTIPLE (3)	NOV 98	FEB 99		
FY00			HQ AFCA	OPT/FFP	MULTIPLE (3)	NOV 99	FEB 00		
FY01			HQ AFCA	OPT/FFP	MULTIPLE (3)	NOV 00	APR 01	Y	
2. ANG (1)									
FY99			ANGRC	OPT/FFP	MULTIPLE (3)	JAN 99	FEB 99		
FY00			ANGRC	OPT/FFP	MULTIPLE (3)	OCT 99	DEC 99		
FY01			ANGRC	OPT/FFP	MULTIPLE (3)	OCT 00	DEC 00	Y	
3. HQ AFSPC (1)									
FY99			HQ AFSPC	C/FP	MULTIPLE (2) (3)	JAN 99	MAY 99		
FY00			HQ AFSPC	C/FP	MULTIPLE (2) (3)	MAY 00	AUG 00		
FY01			HQ AFSPC	C/FP	MULTIPLE (2) (3)	JAN 01	MAY 01	Y	

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BUDGET PROCUREMENT HISTORY PLANNING (EXHIBIT P- 5A)	DATE: FEBRUARY 2000
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ITEM / FISCAL YEAR	QTY.	UNIT COST	LOCATION OF PCO	CONTRACT METHOD & TYPE	CONTRACTOR AND LOCATION	AWD. DATE	DATE FIRST DEL.	SPECS AVAIL NOW	DATE REV. AVAIL
4. HQ USAFE (1)									
FY99			HQ USAFE	OPT/FFP	MULTIPLE (2) (3)	JUN 99	JUL 99		
FY00			HQ USAFE	OPT/FFP	MULTIPLE (2) (3)	OCT 99	DEC 99		
FY01			HQ USAFE	OPT/FFP	MULTIPLE (2) (3)	OCT 00	DEC 00	Y	
5. HQ AETC (1)									
FY99			HQ AETC	OPT/FFP	MULTIPLE (2) (3)	DEC 98	MAR 99		
FY00			HQ AETC	OPT/FFP	MULTIPLE (2) (3)	JAN 00	MAR 00		
FY01			HQ AETC	OPT/FFP	MULTIPLE (2) (3)	JAN 01	MAR 01	Y	
6. HQ AFMC (1)									
FY99			AFMC/AAC	MIPR/OPT/FFP	GSA/MULTIPLE (2,3)	FEB 99	APR 99		
FY00			AFMC/AAC	MIPR/OPT/FFP	GSA/MULTIPLE (2,3)	JAN 00	APR 00		
FY01			AFMC/AAC	MIPR/OPT/FFP	GSA/MULTIPLE (2,3)	JAN 01	MAR 01	Y	
7. HQ PACAF (1)									

BUDGET PROCUREMENT HISTORY PLANNING (EXHIBIT P- 5A)	DATE: FEBRUARY 2000
APPROP CODE/BA: OPAF/ELECTRONICS & TELECOMMUNICATION EQUIPMENT	**P-1 NOMENCLATURE:** BASE COMMUNICATIONS INFRASTRUCTURE

ITEM / FISCAL YEAR	QTY.	UNIT COST	LOCATION OF PCO	CONTRACT METHOD & TYPE	CONTRACTOR AND LOCATION	AWD. DATE	DATE FIRST DEL.	SPECS AVAIL NOW	DATE REV. AVAIL
FY99			HQ PACAF	OPT/FP	MULTIPLE (2)	JUN 99	JUL 99		
FY00			HQ PACAF	OPT/FP	MULTIPLE (2)	JUN 00	JUL 00	Y	
FY01			HQ PACAF	OPT/FFP	MULTIPLE (2)	JAN 01	MAR 01	Y	
8. HQ ACC (1)									
FY99			HQ ACC	OPT/FP	MULTIPLE (2)	FEB 99	APR 99		
FY00			HQ ACC	OPT/FP	MULTIPLE (2)	APR 00	JUN 00	Y	
FY01			HQ ACC	OPT/FFP	MULTIPLE (2)	JAN 01	MAR 01	Y	
9. HQ AMC (1)									
FY01			HQ AMC	OPT/FFP	MULTIPLE (2)	JAN 01	MAR 01	Y	

REMARKS:

1 Quantities and unit costs vary due to different site configurations.

2. Options were used to procure multiple pieces of equipment from the GSA Schedule, AF Minicomputer multi-user system, AFCAC 308, Unified local area network architecture (Ulana) II, and Desktop IV contracts. Award and delivery dates reflect date of first award/delivery.

3. Options to various competitive, fixed price/firm fixed price contracts are available through the following vendors for execution of Base Communications Infrastructure funding: AT&T Federal Communications Systems, Silver Spring, MD; AT&T Englewood, CO; Tennmark, Nashville, TN; Sun Micro Systems, Alexandria, VA; GTE Government Systems and Dichroma, Falls Church, VA; Amerind INC, Alexandria, VA; Presidio, Lanham, MD; Digicom, Bethesda, MD; NORTEL, Richardson, TX; DELL, Dallas, TX; STI, Rosslyn, VA; and GTSI, Chantilly, VA. Award/delivery dates represent the date of first award and first delivery.

BUDGET ITEM JUSTIFICATION (EXHIBIT P-40)	DATE: FEBRUARY 2000
APPROP CODE/BA: OPAF/ELECTRONICS & TELECOMMUNICATION EQUIPMENT	**P-1 NOMENCLATURE:** CAP COM & ELECT

		FY1999	FY2000	FY2001	FY2002	FY2003	FY2004	FY2005
QUANTITY								
COST (in Thousands)		$450	$379	$386	$0	$0	$0	$0

Description:

The Civil Air Patrol (CAP) Communications and Electronics Program is a continuing program for acquisition of communications and computer equipment required to support nationwide CAP activities of both an operational and management nature. General operational support applications include command and control of search and rescue, counterdrug, disaster relief and training activities. CAP activities require automated data processing equipment (ADPE) support for processing and storage of CAP membership information, aerospace education and cadet training program data, operational and logistics data, bookstore, depot inventory and sales information (CAP accounting system) and other day-to-day management activities. FY99-01 funding continues procurement of such items as (1) very high frequency-frequency modulated (VHF-FM) transceivers and signal repeaters; (2) high frequency (HF) transceivers, power supplies and antennas; (3) HF voice system upgrade, and (4) the continuation of the National Digital Radio Network (NDRN) Expansion Project. CAP items procured during FY01 execution may change based on critical equipment needed to support current Air Force mission requirements.

BUDGET ITEM JUSTIFICATION (EXHIBIT P-40)	DATE: FEBRUARY 2000
APPROP CODE/BA: OPAF/ELECTRONICS & TELECOMMUNICATION EQUIPMENT	**P-1 NOMENCLATURE:** ITEMS LESS THAN $5 MILLION

		FY1999	FY2000	FY2001	FY2002	FY2003	FY2004	FY2005
QUANTITY								
COST (in Thousands)		$8,581	$6,998	$7,204	$6,059	$6,021	$6,139	$6,263

Description:

The "Items Less Than $5M" line funds various procurements that support the missions of all Air Force Commands. This program contains numerous miscellaneous items of electronics and telecommunications equipment. The major procurement activities in this line are the Allowance Sources (AS) Equipment and replacement Power Conditioning and Continuation Interface Equipment (PCCIE). Miscellaneous AS authorizations provide new and/or replacement equipment items to organizational units in the field. PCCIE systems are used to back up and protect power sensitive/dependent computer systems. All items have an annual procurement value of less than $5,000,000 and are Code A. Items requested in FY01 are identified on the following P-40A and are representative of items to be procured. Items procured during execution may change based on the most critical equipment needed to support Air Force mission critical requirements.

1. ALLOWANCE SOURCES (AS) AUTHORIZATIONS: Requirements funded in this program are generated as the result of condemnations of existing equipment, an increase in the basis of issue on an individual item, or a change in the basing structure. Units requisition items based on AS authorizations which match support equipment authorizations to unit missions. The Equipment Item Requirements Computation generates a total net buy requirement based on a comparison of authorizations and on-hand assets. Examples of equipment procured are: special electronics atmospheric equipment, electronic warfare and bombing gunnery range equipment, equipment for communications evaluation/maintenance teams, and ground radar special mission and support equipment.

2. POWER CONDITIONING AND CONTINUATION INTERFACING EQUIPMENT (PCCIE): PCCIE consists of commercial power quality equipment. This equipment is fielded as a complete system and, once installed, provides 100% uninterrupted power to critical AF installations.

BUDGET ITEM JUSTIFICATION (EXHIBIT P-40)	DATE: FEBRUARY 2000
APPROP CODE/BA: OPAF/ELECTRONICS & TELECOMMUNICATION EQUIPMENT	**P-1 NOMENCLATURE:** ITEMS LESS THAN $5 MILLION

Description (cont.):
This program procures replacement PCCIE for all Air Force, Air National Guard, and Air Force Reserve units. Examples include the Air Defense Center at Cheyenne Mountain Air Station (AS) CO, perimeter acquisition radar sites at Cavalier AS ND, and Beale AFB CA, all regional Air defense sector radar sites, combat communications centers worldwide, radar sites in Middle Eastern countries, satellite tracking stations worldwide, numerous information processing sites, and Next Generation Radar (NEXRAD) sites. Without the equipment the sites will experience power outages, brownouts, power surges and sags, all of which will cause loss of mission capability.

BUDGET ITEM JUSTIFICATION FOR AGGREGATED ITEMS (EXHIBIT P- 40A-IL)	DATE: FEBRUARY 2000
APPROP CODE/BA: OPAF/ELECTRONICS & TELECOMMUNICATION EQUIPMENT	**P-1 NOMENCLATURE:** ITEMS LESS THAN $5 MILLION

PROCUREMENT ITEMS	NSN			FY2001	
		QTY.	COST	QTY.	COST
1. ALLOWANCE SOURCES AUTHORIZATIONS					$3,252
2. POWER CONDITIONING AND CONTINUATION INTERFACING EQUIPMENT					$3,952
TOTALS:					$7,204

	P-1 ITEM NO: 76		PAGE NO: 217		Page 1 of 1

BUDGET ITEM JUSTIFICATION (EXHIBIT P-40)	DATE: FEBRUARY 2000
APPROP CODE/BA: OPAF/ELECTRONICS & TELECOMMUNICATION EQUIPMENT	**P-1 NOMENCLATURE:** COMM ELECT MODS

		FY1999	FY2000	FY2001	FY2002	FY2003	FY2004	FY2005
QUANTITY								
COST (in Thousands)		$56,523	$49,921	$54,372	$67,698	$64,767	$51,566	$48,366

Description:

Permanent modifications are configuration changes to in-service systems and equipment which correct materiel or other deficiencies, or which add or delete capability. Safety modifications correct deficiencies which would produce hazards to personnel, systems, or equipment. This budget line encompasses both new and on-going modification efforts for space equipment and systems. Modification installation funding is budgeted in the year the installation will be physically done. Modifications requested in FY01 are identified on the attached P-40A and are representative of configuration changes/deficiency corrections to be accomplished. Modifications procured during execution may change based on critical changes/corrections needed to support current Air Force mission requirements.

1. NORTH WARNING SYSTEM (NWS): The NWS, a component of the Integrated Tactical Warning and Attack Assessment (ITW/AA) network, provides early warning for all atmospheric threats. This system includes sensors (such as the AN/FPS-117, a minimally attended, long range radar) and operations centers that use the AN/FYQ-93 computer system to fuse and act on warning data to launch intercepts at potential hostile threats. The system data is forwarded to the National Command Center at Cheyenne Mountain Complex (CMC) for overall control of defense operations by North American Aerospace Defense (NORAD) Command.

MOD# 38516B, AN/FPS-117 Reliability, Maintainability & Supportability Improvement: No FY01 funding requested.

2. GROUND THEATER AIR CONTROL SYSTEM (GTACS): The GTACS, the ground based portion of the Theater Air Control System (TACS), consists of a family of communications-electronics components that provide the battlefield commander with systems and resources to

BUDGET ITEM JUSTIFICATION (EXHIBIT P-40)	DATE: FEBRUARY 2000
APPROP CODE/BA: OPAF/ELECTRONICS & TELECOMMUNICATION EQUIPMENT	**P-1 NOMENCLATURE:** COMM ELECT MODS

Description (cont.):
support situational awareness, joint, allied, and combined forces planning, execution of the air tasking order, all interdiction, close air support, counter air, airlift, air refueling, special operation, electronic combat, surveillance, reconnaissance, and search and rescue missions. The GTACS uses as its primary sensor the AN/TPS-75 radar, a mobile, three dimensional (range, azimuth, altitude) surveillance, acquisition, and tracking radar which enables aerospace control in the theater of air operations.

A. MOD# M00018, UPX-27 Identification Friend or Foe (IFF) Interrogator: No FY01 funds requested.

B. MOD# M00016, AN/TPS-75 Radar Shelter Replacement: FY00/01 funds provide for procurement of the radar shelter modification which replaces 20-year-old shelters (which are deteriorated, corroded, costly to operate/maintain and mission limiting) with an improved version possessing an increased weight capability to handle weight growth already incurred. Increasing maintenance costs and mission limiting assets in the field are driving this modification.

C. MOD# M00020, Antenna Bearing Redesign: FY99-01 funds provide for procurement and installation of the modification that replaces the current AN/TPS-75 radar antenna rotational and stationary pedestal system and the antenna bearing with a more robust, reliable design. The current bearing is unable to withstand the axial and radial shock loads experienced in a tactical environment. Engineering analysis shows that the current design experiences degradation in bearing life with wind loads over 31 knots. This presents a safety of equipment hazard since the technical order requires the bearings to withstand winds over 50 knots. The current design cannot meet operational mission requirement and/or is mission-limiting. The new design will provide two to three times more operational life.

3. BALLISTIC MISSILE EARLY WARNING SYSTEM: The Ballistic Missile Early Warning System (BMEWS) primary mission is to provide US Commander in Chief, Space Command at Cheyenne Mountain Complex with timely, accurate and unambiguous Tactical Warning/Attack Assessment data on intercontinental ballistic missiles penetrating the coverage area. BMEWS has the additional mission of providing space vehicle surveillance, tracking, and identification to the space control centers. BMEWS consists of three operational sites: Site I

BUDGET ITEM JUSTIFICATION (EXHIBIT P-40)	DATE: FEBRUARY 2000
APPROP CODE/BA: OPAF/ELECTRONICS & TELECOMMUNICATION EQUIPMENT	**P-1 NOMENCLATURE:** COMM ELECT MODS

Description (cont.):
at Thule AB, Greenland; Site II at Clear AFS, AK; and Site III at RAF Fylingdales, UK.

A. Clear Radar Upgrade: No FY01 funds requested.

B. BMEWS Service Life Extension Program: The legacy Mission Critical Computer Resources (MCCR) at the BMEWS sites are obsolete and will become unsustainable by 2001. With increasing age of these 1960's technology systems, failure rates are increasing and manufacturers are discontinuing production or repair of components. By 2001, the stock of spares for 18 critical items will be depleted such that sustainment of the system is at risk. This reliability and maintainability modification will upgrade the following unsupportable subsystems with improved critical components: graphics display consoles, radar controllers, network processing units (NPU), disk and tape drives, digital module test sets (DMTS), and solid state module test sets (SSMTS). The operating system and mission software have become extremely difficult and expensive to maintain. The mission software uses the obsolete programming language JOVIAL-13, for which it is nearly impossible to find qualified programmers. Training suites, test equipment, and System Programming Activity (SPA) systems will also be upgraded to conform to a standard BMEWS-SLBM configuration. This modification is integral to the concurrent Space Mods upgrade of two Sea Launched Ballistic Missile (SLBM) PAVE PAWS sensor sites at Cape Cod, MA and Beale AFB, CA (reference P-1 Line # 68, Space Mods Space, SLBM SLEP).

Total System Performance Responsibility of this modification will proceed in two phases. FY01 funding will procure Phase 1, which will modify the graphics display consoles, the network processing units, the digital module test set, the solid state module test set, the disk and tape drives, and the radar controllers. Outyear funding will procure Phase 2, which will modify and install the mission processor components and rehost the existing software using the current baseline and architecture. See corresponding P-3a for detailed cost/schedule.

4. CHEYENNE MOUNTAIN COMPLEX (CMC): The CMC provides real-time processing and display of missile warning and force management information which enables the Commander-in-Chief, North American Aerospace Defense (CINCNORAD) to provide real-time Integrated Tactical Warning/Attack Assessment (ITW/AA) information to the National Command Authorities. The CMC also provides direct

BUDGET ITEM JUSTIFICATION (EXHIBIT P-40)	DATE: FEBRUARY 2000
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Description (cont.):
sensor input to National Strategic Response Plan decision-makers at fixed command centers, as well as processors/display systems supporting the CMC Air Defense Operations Center, NORAD Command Center, Resource Center (NORAD Battle Staff), and Weather Support Unit.

A. MOD# S7201713501, 3090 Mainframe Replacement: No FY01 funds requested.

B. MOD# S529382, Comm Infrastructure Upgrade (formerly titled Message Processing Distribution System/Replacement): FY99-01 funds this modification to replace the existing Bytex AS 240 time division multiplexors, which are slowly becoming unsupportable and inadequate to support the necessary circuit types. Growth capacity is limited, and the design is a "blocking type switch." The new switch will be "non-blocking," and will be able to handle the additional circuit growth capacity. The overall approach will optimize a distributed architecture to the maximum extent possible, while ensuring compatibility with current technical control systems and processors.

C. MOD# S604628, Visual Display System (VDS) Monitor Replacement (Granite Sentry): FY01 funding procures this modification. These 19-inch multisync video monitors provide color displays in numerous centers throughout the CMC. The multisync monitor receives red, green, blue (RGB) analog video signals. The Federal Communications Commission has mandated transition to digital video by 2006. These monitors differ from regular television (TV) in horizontal scan rate and bandwidth. Regular TV uses a horizontal scan rate of 15KHz; Granite Sentry requires a horizontal scan rate of 15 to 90 KHz. Regular TV uses a bandwidth of 14 MHz; the bandwidth required for these monitors is 15 to 140 MHz. Regular TV uses sync on green; these monitors are required to sync on RGB. This monitor is no longer manufactured or supportable.

D. MOD # S7201802101, Global Command & Control System (GCCS)/Granite Sentry Migration: No FY01 funding requested.

E. MOD# S7201802203, Space Work Station Migration: The Space Defense Operations Center (SPADOC) is located in CMC, and is the command, control, and communications element of the Space Defense Command and Control System (SPADCCS). SPADOC provides the capability for making a tactical assessment of a potential threat against United States space assets. The Digital Display Group is comprised of

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APPROP CODE/BA: OPAF/ELECTRONICS & TELECOMMUNICATION EQUIPMENT	**P-1 NOMENCLATURE:** COMM ELECT MODS

Description (cont.):
several graphics work stations providing the monitoring, message generation and review, and display functions required to support mission tasks. Recent logistics analysis indicates the current Space Work Stations will be unsupportable by FY03. FY01 funding will procure the space work station replacement.

F. MOD# G7201818901, Mission Communications Information Transport Backbone: No FY01 funds requested.

G. MOD# N/A, SPADOC Communications Interface: The SPADOC Communications Interface project replaces existing computer systems that interface the SPADOC main processors with the Cheyenne Mountain communications network. These systems will be unsupportable by FY03. Failure to accomplish this modification will result in the loss of the communications links between CMC subsystems and external sensors. FY01 funding begins the replacement program.

H. MOD# N/A, Enterprise Database Infrastructure: FY00-01 funds the modification which provides the equipment and commercial-off-the-shelf software required to migrate current stove-pipe, mission-aligned databases into a modern, supportable enterprise-wide environment. In addition to improving supportability, this modification will result in lower cost of ownership.

I. MOD# N/A, Processing Display Subsystem Migration (PDSM): No FY01 funding is requested.

J. MOD # MISC, Miscellaneous Low Cost MODs: No FY01 funding requested.

5. AIR TRAFFIC CONTROL AND LANDING SYSTEMS (ATCALS): ATCALS is a combination of USAF ground facilities and equipment, both fixed and tactical, with associated avionics, personnel and procedures that provide air traffic control to USAF/DoD flying missions worldwide. ATCALS provides en route and terminal navigation control and separation, approach, departure and landing guidance. ATCALS also provides operability with the North Atlantic Treaty Organization, the U.S. National Airspace System and the International Civil Aviation

BUDGET ITEM JUSTIFICATION (EXHIBIT P-40)	DATE: FEBRUARY 2000
APPROP CODE/BA: OPAF/ELECTRONICS & TELECOMMUNICATION EQUIPMENT	**P-1 NOMENCLATURE:** COMM ELECT MODS

Description (cont.):
Organization. The following modifications are procured under the single Mod # B7165:

A. AN/GRN-30 Instrument Landing System Antenna/Distribution Unit: See corresponding P-3A for detailed description.

B. Miscellaneous Low Cost Modifications: FY00/01 funding procures a variety of safety and operations-related modifications, which include the AN/FRN-45 Remote Maintenance Monitor/Facility Central Processing Unit to allow maintenance actions from remote locations, upgrade of instrument landing system meters and freqency synthesizers, AN/MPN-14K Towing Capability Safety Upgrade, and AN/GPN-22 Shelter Grounding which brings the grounding configuration into compliance with National Electric Code.

6. WEATHER OBSERVATION AND FORECAST SYSTEM: This system consists of meteorological and space environmental equipment needed to provide information to support the worldwide missions of the Air Force, the Army, Special Operations Forces (SOF), Unified Commands, and other government agencies. Fixed and transportable equipment provide warfighters at in-garrison, contingency, and deployed locations with accurate, timely terrestrial and space weather observations and forecasts.

A. GROUND WEATHER: The ground weather mission provides timely worldwide support by observing, analyzing, and forecasting terrestrial weather phenomena impacting the DoD's ability to operate on the ground and in the tropospheric environment. Worldwide weather forecasts, model output, observations, and weather warnings, are generated and distributed to Air Force Weather forces and customers. The following modifications are in support of this mission:

(1) MOD# 93-008, Automated Weather Distribution System (AWDS): No FY01 funds requested.

(2) MOD# 94-003A, Next Generation Radar (NEXRAD) Transmitter Upgrade: No FY01 funds requested.

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Description (cont.):

(3) MOD# 94-003B, NEXRAD Radar Data Acquisition (RDA) Group Migration: The WSR-88D transmitter is experiencing a higher than expected failure rate. FY01 funds begin this modification which migrates RDA proprietary software and hardware to open systems standards. This will result in decreased retrofit costs, since current single source components will be replaced with open standard hardware available from multiple vendors. In addition, software maintenance will be made more efficient and cost effective.

(4) MOD# 94-004A, NEXRAD Radar Product Generator (RPG) Migration: No FY01 funding requested.

(5) MOD# 94-004B, NEXRAD Principle User Processor (PUP) Group Replacement: The PUP workstation is the primary vehicle for displaying NEXRAD data. FY99-01 funds the modification which migrates the PUP software to open system standards and ports it to commercial off-the-shelf, multiple vendor hardware platforms. This migration will result in cost-effective maintenance and logistics, reduce life-cycle costs, and provide a growth path to support greater processing capacity. The program will also replace the current stand-alone PUPs with a robust client/server architecture at the AF Operational Weather Squadrons (OWS) under AF Weather Re-engineering, and provide to Weather Flight/Detachments software which will allow remote log-in to the OWS server to meet weather radar product needs.

(6) MOD# 95-003, Weather Information Processing System (WIPS) Upgrade: No FY01 funding requested.

(7) MOD# 95-010, Tactical Forecast System (TFS)/AWDS Merged System TFS-2000: Funds for this project were added through FY99 Emergency Supplemental Appropriations and transferred to the Air Force from the Overseas Contingeny Operations Transfer Fund. No FY01 funding requested.

(8) MOD# 95-011, Tactical Meterological (TACMET) Observing System Upgrade: FY99 funds for this project were added through FY99 Emergency Supplemental Appropriations and transferred to the Air Force from the Overseas Contingeny Operations Transfer Fund. No FY01 funds requested.

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APPROP CODE/BA: OPAF/ELECTRONICS & TELECOMMUNICATION EQUIPMENT	**P-1 NOMENCLATURE:** COMM ELECT MODS

Description (cont.):

(9) MOD# 98-001, Air Force Weather Agency (AFWA) Dissemination Subsystem: FY01 funding procures this modification which will upgrade and replace AFWA dissemination subsystem hardware/software/cable infrastructure, enabling rapid receipt, staging, and transmission of graphics and text-based weather products and data to the warfighter. These enhancements will increase the capacity of AF Weather Strategic Center OWS and deployed units to provide timely information where it is needed.

(10) MOD# 98-003, Weather Forecasting: FY01 funding procures this modification, which will upgrade existing AF Weather Strategic Center hardware/software/communications infrastructure to support fine scale weather and cloud model forecasts simultaneously in numerous theaters and areas of operational interest. Current infrastructure will only support a limited number of theaters/areas of interest. In addition, current infrastructure does not support the AF spatial and temporal weather and cloud model forecast resolution requirements or have the capacity to handle extremely large data files.

B. SPACE WEATHER: The Space Environmental Support System (SESS) mission is to provide timely space weather support through observation, analysis and forecasting of solar phenomena and the state of the magnetosphere and ionosphere inhibiting or enhancing DOD's ability to operate in or through the space environment. The Air Force Weather Agency (AFWA) collects and processes data on solar activity, the state of the magnetosphere and ionosphere. Alerts, warnings, forecasts and other products are then produced and distributed to many world wide users concerned with high frequency radio communications, global positioning system navigation accuracy, geomagnetic storm activity, satellite anomaly resolution, and space environmental conditions.

(1) MOD# 93-003, Ionospheric Measuring System (IMS) Communications Modification: This modification was formerly part of the Space Weather Ionospheric Characterization System (SWICS), which combined space weather modifications 93-003, 93-004, and 95-019. FY00/01 funds procure software and hardware to allow two way communications between the IMS sites and AFWA. AFWA personnel will be able to initiate the retransmission of IMS data when messages are not correctly received. Data transmission rates will also be upgraded.

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Description (cont.):

(2) MOD# 93-004, Ionospheric Measuring System (IMS) Scintillation Modification: This modification was formerly part of the Space Weather Ionospheric Characterization System (SWICS), which combined space weather modifications 93-003, 93-004, and 95-019. FY00/01 funds procure updated hardware and software to allow the IMS computation of ionospheric phase and amplitude scintillation. This will enable more accurate correction of Global Positioning System location data.

(3) MOD# 93-005, Radio Solar Telescope Network (RSTN) Modification for Solar Radio Burst Locator (SRBL): No FY01 funds requested.

(4) MOD# 95-019, Digital Ionospheric Sounding System (DISS) Modification: This modification was formerly part of the Space Weather Ionospheric Characterization System (SWICS), which combined space weather modifications 93-003, 93-004, and 95-019. FY01 funds will begin procurement of updated hardware and software for the DISS. The DISS provides the ability to collect and process reliable ionospheric data in near real time to support over-the-horizon backscatter radars, AF Special Operations, airlift, satellite tracking, navigation, and command, control, and communications missions. The current system was built in the early 1980s and is rapidly becoming obsolete and unsupportable. The DISS system upgrade is necessary to satisfy the required 95 percent system uptime rate and enhance logistics support.

(5) MOD# 96-001, Solar Electro-Optical Network (SEON) Solar Max (SSM): No FY01 funds requested.

(6) MOD# 96-031, Improved Solar Observing Optical Network (ISOON): FY99-01 funds this modification which retrofits the 1960s technology optical telescope to decrease maintenance costs and to keep the system operationally effective because various components of the current system are becoming unsupportable. The optical telescopes are the only means of providing real-time reporting of solar flare activity. The centralized forecasting facility requires the ISOON's accurate data as input to their forecast models. Accurate solar activity warnings are vital to effective space, radar, and communications missions.

BUDGET ITEM JUSTIFICATION FOR AGGREGATED ITEMS (EXHIBIT P- 40A)	DATE: FEBRUARY 2000
APPROP CODE/BA: OPAF/ELECTRONICS & TELECOMMUNICATION EQUIPMENT	**P-1 NOMENCLATURE:** COMM ELECT MODS

PROCUREMENT ITEMS	ID CODE			FY1999		FY2000		FY2001	
		QTY.	COST	QTY.	COST	QTY.	COST	QTY.	COST
1. NORTH WARNING SYSTEM					${290}				
MOD# 38516B, RELIABILITY, MAINTENANCE & SUPPORT IMPROVEMENT	A				$290				
2. GROUND THEATER AIR CONTROL SYSTEM (GTACS)					${1,932}		${4,072}		${790}
A. MOD #M00018, IDENTIFICATION FRIEND/FOE INTEROGATOR	A				$610				
B. MOD #M00016, RADAR SHELTER REPLACEMENT	A						$297		$310
C. MOD #M00020, ANTENNA BEARING REDESIGN	A				$1322		$3,775		$480
3. BALLISTIC MISSILE EARLY WARNING SYSTEM (BMEWS)					${21,684}		${20,646}		${13,725}
A. MOD# N/A CLEAR RADAR UPGRADE (CRU)	A				$21,684		$20,646		
B. MOD# N/A BMEWS EARLY LIFE EXTENSION PROGRAM									$13,725
4. CHEYENNE MOUNTAIN COMPLEX					${10,472}		${4,045}		${16,377}

BUDGET ITEM JUSTIFICATION FOR AGGREGATED ITEMS (EXHIBIT P- 40A)	DATE: FEBRUARY 2000
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PROCUREMENT ITEMS	ID CODE			FY1999		FY2000		FY2001	
		QTY.	COST	QTY.	COST	QTY.	COST	QTY.	COST
A. MOD# S7201713501, 3090 MAINFRAME REPLACEMENT	A				$8,412				
B. MOD# S529382, COMM INFRASTRUCTURE UPGRADE	A				$175		$923		$7261
C. MOD# S604628, VDS MONITOR REPLACEMENT (GRANITE SENTRY)	A								$1,055
D. MOD# S7201802101, GLOBAL COMMAND & CONTROL (GCCS)/GRANITE SENTRY MIGRATION	A				$1,200				
E. MOD# S7201802203, SPACE WORK STATION MIGRATION	A								$3,834
F. MOD# G7201818901, MISSION COMMUNICATIONS INFORMATION TRANSPORT BACKBONE	A				$620				
G. MOD# N/A, SPADOC COMMUNICATIONS INTERFACE	A								$3,282
H. MOD# N/A, ENTERPRISE DATABASE INFRASTRUCTURE	A						$2,400		$945

BUDGET ITEM JUSTIFICATION FOR AGGREGATED ITEMS (EXHIBIT P- 40A)	DATE: FEBRUARY 2000
APPROP CODE/BA: OPAF/ELECTRONICS & TELECOMMUNICATION EQUIPMENT	**P-1 NOMENCLATURE:** COMM ELECT MODS

PROCUREMENT ITEMS	ID CODE			FY1999		FY2000		FY2001	
		QTY.	COST	QTY.	COST	QTY.	COST	QTY.	COST
I. MOD# N/A, PROCESSING DISPLAY SUBSYSTEM MIGRATION	A						$522		
J. MOD# MISC, MISCELLANEOUS LOW COST MODS	A				$65		$200		
5. AIR TRAFFIC CONTROL LANDING SYSTEM (ATCALS)							${8,947}		${10,521}
A. AN/GRN-30 INSTRUMENT LANDING SYSTEM ANTENNA/DU	A								$8,471
B. MISCELLANEOUS LOW COST MODS	A						$8,947		$2,050
6. WEATHER OBSERVATION & FORECAST SYSTEM					${22,145}		${12,211}		${12,959}
A. GROUND WEATHER					${16,705}		${7,679}		${9,360}
(1) MOD# 93-008, AUTOMATED WEATHER DISTRIBUTION SYSTEM (AWDS)	A				$818		$1,822		
(2) MOD# 94-003A, NEXRAD TRANSMITTER UPGRADE	A				$533				
(3) MOD# 94-003B, NEXRAD RADAR DATA ACQUISITION (RDA) GROUP MIGRATION	A								$1,296

BUDGET ITEM JUSTIFICATION FOR AGGREGATED ITEMS (EXHIBIT P- 40A)	DATE: FEBRUARY 2000
APPROP CODE/BA: OPAF/ELECTRONICS & TELECOMMUNICATION EQUIPMENT	**P-1 NOMENCLATURE:** COMM ELECT MODS

PROCUREMENT ITEMS	ID CODE			FY1999		FY2000		FY2001	
		QTY.	COST	QTY.	COST	QTY.	COST	QTY.	COST
(4) MOD# 94-004A, NEXRAD RADAR PRODUCT GENERATOR (RPG) MIGRATION	A				$1,182		$1,200		
(5) MOD# 94-004B, NEXRAD PRINCIPAL USER PROCESSOR (PUP) GROUP REPLACEMENT	A				$2,000		$1,970		$1,440
(6) MOD# 95-003, WEATHER INFORMATION PROCESSING SYSTEM (WIPS) UPGRADE	A				$4,913		$1,800		
(7) MOD# 95-010, TACTICAL FORECAST SYSTEM (TFS)/ AWDS MERGED SYSTEM TFS-2000	A				$3,213				
(8) MOD# 95-011, TACTICAL METEROLOGICAL (TACMET) OBSERVING SYSTEM UPGRADE	A				$4,046		$887		
(9) MOD# 98-001, AIR FORCE WEATHER AGENCY (AFWA) DISSEMINATION SUBSYSTEM	A								$2,600
(10) MOD# 98-003, WEATHER FORECASTING	A								$4,024
B. SPACE WEATHER					${5,440}		${4,532}		${3,599}

	P-1 ITEM NO: 77		PAGE NO: 230		Page 4 of 5

BUDGET ITEM JUSTIFICATION FOR AGGREGATED ITEMS (EXHIBIT P- 40A)	DATE: FEBRUARY 2000
APPROP CODE/BA: OPAF/ELECTRONICS & TELECOMMUNICATION EQUIPMENT	**P-1 NOMENCLATURE:** COMM ELECT MODS

PROCUREMENT ITEMS	ID CODE			FY1999		FY2000		FY2001	
		QTY.	COST	QTY.	COST	QTY.	COST	QTY.	COST
(1) MOD# 93-003, IONOSPHERIC MEASURING SYSTEM (IMS) COMMUNICATIONS MODIFICATION	A						$476		$162
(2) MOD# 93-004, IONOSPHERIC MEASURING SYSTEM (IMS) SCINTILLATION MODIFICATION	A						$560		$956
(3) MOD# 93-005, RADIO SOLAR TELESCOPE NETWORK (RSTN) MOD FOR SOLAR RADIO BURST LOCATOR (SRBL)	A				$1,024		$348		
(4) MOD# 95-019, DIGITAL IONOSPHERIC SOUNDING SYSTEM (DISS)	A								$2,381
(5) MOD# 96-001, SOLAR ELECTRO-OPTICAL NETWORK (SEON) SOLAR MAX (SSM)	A						$1,451		
(6) MOD# 96-031, IMPROVED SOLAR OBSERVING OPTICAL NETWORK (ISOON)	A				$4,416		$1,697		$100
Totals:					$56,523		$49,921		$54,372

Remarks:

	P-1 ITEM NO: 77		PAGE NO: 231		Page 5 of 5

INDIVIDUAL MODIFICATIONS (EXHIBIT P- 3A) | **DATE:** FEBRUARY 2000

Modification Title and No: Ballistic Missile Early Warning System (BMEWS) - SLEP

Models of Systems Affected: Ballistic Missile Early Warning System

Description/Justification: The legacy Mission Critical Computer Resources at the BMEWS sites are obsolete and will become unsustainable in 2001. This reliability and maintainability modification will upgrade the following unsupportable subsystems: graphics display consoles, the radar controllers, the network processing units, the disk & tape drives, the digital module test set and the solid state module test sets. The BMEWS mission processors will be upgraded in FY 02-04 with software rehosted in Jovial programming language. Other costs include training and program office support. This modification is concurrent and parallel to the modification of the SLBM systems at Beale and Cape Cod AS (reference P-1 Line # 68, Space Mods Space, SLBM SLEP.

Development Status/Major Development Milestones: Contract award Dec 00; Phase 1 CDR Jan 01; Install NPUs, DMTS, GDCs, SSMTS, RCLs Jul 01 - Dec 02; CDR Phase 2 mission processor Mar 02; Install mission processors at Clear Thule & Fylindales Dec 02 - Jun 03; Phase 2 complete Mar 04

Financial Plan $ (in Millions)	PY		FY1998		FY1999		FY2000		FY2001		FY2002		TOTAL	
	Qty	Cost	Qty	Cost	Qty	Cost	Qty	Cost	Qty	Cost	Qty	Cost	Qty	Cost
RDT&E														
Ref. R-1 PE No:													0	
Procurement:														
Equipment Kits									7	3.646	9	1.265	16	4.9
Equipment Kits Non-recurring										4.704		7.588	0	12.3
Engineering Change Orders													0	
Data										0.372		0.195	0	0.6
Training Equipment										0.199		0.146	0	0.3
Support Equipment										0.167			0	0.2
Software										2.333		9.175	0	11.5
Interim Contractor Support										0.176			0	0.2
Other										1.135		1.531	0	2.7
Total Procurement Costs:	0		0		0		0		7	12.7	9	19.9	16	32.7
Hardware Installation:														
(PY) Eqpt (Kits)													0	0
(FY98) Eqpt (Kits)													0	0
(FY99) Eqpt (Kits)													0	0
(FY00) Eqpt (Kits)													0	0
(FY01) Eqpt (7 Kits)									7	0.992			7	0.992
(FY02) Eqpt (9 Kits)											9	3.496	9	3.496
Total Installation Costs:	0		0		0		0		7	1	9	3.5	16	4.5
Total Modification Costs:	0		0		0		0		7	13.7	9	23.4	16	37.2

Method of Installation: CONTRACTOR, FIELD INSTALL

Administrative Lead-time (After 1 Oct): 2 Month(s)

Production Lead-time: 7 Month(s)

Contract Date:	PY		FY1998		FY1999		FY2000		FY2001	DEC 00	FY2002	DEC 01		
Delivery Date:	PY		FY1998		FY1999		FY2000		FY2001	JUL 01	FY2002	JUL 02		

Installations:	PY	FY1998				FY1999				FY2000				FY2001				FY2002				Total
		1ST	2ND	3RD	4TH	1ST	2ND	3RD	4TH	1ST	2ND	3RD	4TH	1ST	2ND	3RD	4TH	1ST	2ND	3RD	4TH	
Input																7		9				16
Output																	7		9			16

P-1 ITEM NO: 77 | **PAGE NO:** 232 | Page 1 of 1

INDIVIDUAL MODIFICATIONS (EXHIBIT P- 3A) | **DATE:** FEBRUARY 2000

Modification Title and No: Comm Infrastructure Upgrade (S529382)

Models of Systems Affected: Cheyenne Mountain Complex (CMC)

Description/Justification: An upgrade is required to replace the existing Message Processing Distribution System (MPDS) which is becoming unsupportable and inadequate to support the necessary circuit types (T-1, EIA-530, or LAN). Growth capacity is limited and the design is a "blocking type switch." The replacement system will be "non-blocking" and will handle additional circuit growth capacity. This approach optimizes a distributed architecture to the maximum extent possible, while ensuring compatibility with current Technical Control Systems and processors. MPDS replacement will allow new missions to interface with the ITW/AA through a standardized connection, lowering the cost of new missions because they will not have to recreate the current proprietary interface. Failure to accomplish this upgrade will result in loss of all ITW/AA message traffic due to non-supportable, Stratus information systems.

Development Status/Major Development Milestones: CCB Approval: Mar 96, Systems Requirement Panel (SRP)/Systems Requirement Council (SRC): Jun 98

Financial Plan $ (in Millions)	PY		FY1998		FY1999		FY2000		FY2001		FY2002		TOTAL	
	Qty	Cost	Qty	Cost	Qty	Cost	Qty	Cost	Qty	Cost	Qty	Cost	Qty	Cost
RDT&E														
Ref. R-1 PE No:													0	
Procurement:														
Equipment Kits									3	3000	1	1000	4	4000
Equipment Kits Non-recurring								700					0	700
Engineering Change Orders										2000			0	2000
Data						175		223					0	398
Training Equipment													0	
Support Equipment													0	
Software										900			0	900
Interim Contractor Support										485		303	0	788
Other													0	
Total Procurement Costs:	0		0		0	175	0	923	3	6385	1	1303	4	8786
Hardware Installation:														
(PY) Eqpt (Kits)													0	0
(FY98) Eqpt (Kits)													0	0
(FY99) Eqpt (Kits)													0	0
(FY00) Eqpt (Kits)													0	0
(FY01) Eqpt (3 Kits)									3	876			3	876
(FY02) Eqpt (1 Kits)											1	292	1	292
Total Installation Costs:	0		0		0		0		3	876	1	292	4	1168
Total Modification Costs:	0		0		0	175	0	923	3	7261	1	1595	4	9954

Method of Installation: CONTRACTOR, FIELD INSTALL

Administrative Lead-time (After 1 Oct): 8 Month(s)

Production Lead-time: 3 Month(s)

Contract Date:	PY		FY1998		FY1999	NOV 98	FY2000	JUN 00	FY2001	MAY 01	FY2002	MAY 02
Delivery Date:	PY		FY1998		FY1999		FY2000		FY2001	AUG 01	FY2002	AUG 02

Installations:	PY	FY1998				FY1999				FY2000				FY2001				FY2002				Total
		1ST	2ND	3RD	4TH	1ST	2ND	3RD	4TH	1ST	2ND	3RD	4TH	1ST	2ND	3RD	4TH	1ST	2ND	3RD	4TH	
Input																3				1		4
Output																	3				1	4

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PAGE NO: 233

INDIVIDUAL MODIFICATIONS (EXHIBIT P- 3A) | **DATE:** FEBRUARY 2000

Modification Title and No: AN/GRN-30 Instrument Landing System (ILS) Antenna/DU

Models of Systems Affected: Air Traffic Control and Landing Systems (ATCALS)

Description/Justification: The GRN-30 ILS antennas, antenna distribution unit, and monitor combining unit are becoming logistically unsupportable. The antennas cost $16K each to repair and $2.7K to purchase new. The antenna distribution units have been rebuilt numerous times and provide an unstable and erratic output. Many of the distribution units in the field are out of technical order specification but remain in service because replacements are not available or rebuilt ones are more out of tolerance than the ones in the system. The integral detectors in the monitor combining unit have been the single high failure part of the ILS system for years. This modification increases ILS operational availability, reducing risk that aircraft will be required to divert to other bases or attempt landings at night and/or in hazardous weather conditions without landing assistance, and ensures expeditious recovery of combat/training sorties.

Development Status/Major Development Milestones: SRD: Dec 99 SOO: Dec 99 Contract Award: Jul 00

Financial Plan $ (in Millions)	PY		FY1998		FY1999		FY2000		FY2001		FY2002		TOTAL	
	Qty	Cost	Qty	Cost	Qty	Cost	Qty	Cost	Qty	Cost	Qty	Cost	Qty	Cost
RDT&E														
Ref. R-1 PE No:													0	
Procurement:														
Equipment Kits							20	2.50	80	8.47	50	5.38	150	16.4
Equipment Kits Non-recurring							0	0.25					0	0.3
Engineering Change Orders													0	
Data							0	0.10					0	0.1
Training Equipment													0	
Support Equipment													0	
Software													0	
Interim Contractor Support													0	
Other													0	
Total Procurement Costs:	0		0		0		20	2.9	80	8.5	50	5.4	150	16.8
Hardware Installation:														
(PY) Eqpt (Kits)													0	0
(FY98) Eqpt (Kits)													0	0
(FY99) Eqpt (Kits)													0	0
(FY00) Eqpt (20 Kits)							20	0					20	0
(FY01) Eqpt (80 Kits)									80	0			80	0
(FY02) Eqpt (50 Kits)											50	0	50	0
Total Installation Costs:	0		0		0		20		80		50		150	
Total Modification Costs:	0		0		0		20	2.9	80	8.5	50	5.4	150	16.8

Method of Installation: CONTRACTOR, FIELD INSTALL

Administrative Lead-time (After 1 Oct): 9 Month(s)

Production Lead-time: 2 Month(s)

Contract Date:	PY		FY1998		FY1999		FY2000	JUL 00	FY2001	JAN 01	FY2002	JAN 02
Delivery Date:	PY		FY1998		FY1999		FY2000	SEP 00	FY2001	MAR 01	FY2002	MAR 02

Installations:	PY	FY1998				FY1999				FY2000				FY2001				FY2002				Total
		1ST	2ND	3RD	4TH	1ST	2ND	3RD	4TH	1ST	2ND	3RD	4TH	1ST	2ND	3RD	4TH	1ST	2ND	3RD	4TH	
Input													10	10	20	30	30		30	20		150
Output													10	10	20	30	30		30	20		150

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BUDGET ITEM JUSTIFICATION (EXHIBIT P-40)	DATE: FEBRUARY 1999
APPROP CODE/BA: OPAF/OTHER BASE MAINTENANCE & SUPPORT EQUIPMENT	**P-1 NOMENCLATURE:** BASE/ALC CALIBRATION PACKAGE

	FY1998	FY1999	FY2000	FY2001	FY2002	FY2003	FY2004	FY2005
QUANTITY								
COST (in Thousands)	$11,522	$11,021	$10,157	$11,606	$10,204	$11,417	$15,319	$15,919

Description:

1. The Base/ALC Metrology and Calibration (METCAL) equipment program provides calibration standards grouped in a series of generic measurement packages (Electrical, Mechanical and Systems equipment) to all major Air Force activities having a base Precision Measurement Equipment Laboratory (PMEL). PMELs calibrate and repair equipment used to maintain aircraft, missiles, communications and other ground systems. The PMEL is the direct link between the weapon system and the National Institute of Standards and Technology (NIST). This link ensures the systems used by the operational forces perform their primary mission of delivering weapons on target. Presently there are 73 PMELs and four Field Assistance Teams for Calibration (FASTCALs) worldwide, and the FY98-01 program includes funding for all of them. Funding for these calibration standards is required as all major aircraft depend heavily on offensive and defensive microwave avionics that must be calibrated to function properly in a wartime as well as in a training environment. All aircraft engines and airframes also require this calibration support. Additionally, this budget line supports space and airborne communications/electronics systems such as MILSATCOM.

2. A group of certified calibration standards is required at each base PMEL to assure accurate traceable measurements are made in the basic areas recognized by the NIST. These basic groups of standards enable each Air Force activity to attain standardized measurements and optimum self-sufficiency in the calibration and maintenance of critical precision measurement equipment required for daily base operational capability. The standards packages must be constantly surveyed and upgraded to stay current with the measurement art. In addition, as new and sophisticated systems enter the Air Force inventory, it is necessary to augment selected PMELs with special calibration standards or auxiliary equipment, the characteristics of which are critical to the systems supported.

BUDGET ITEM JUSTIFICATION (EXHIBIT P-40)	DATE: FEBRUARY 1999
APPROP CODE/BA: OPAF/OTHER BASE MAINTENANCE & SUPPORT EQUIPMENT	**P-1 NOMENCLATURE:** BASE/ALC CALIBRATION PACKAGE

Description (cont.):

3. The following support is provided by the measurement packages:

a. The Electrical and Mechanical Packages consist of equipment for calibration of common Test Measurement and Diagnostic Equipment (TMDE). Equipment procured as part of these packages is normally used by PMEL technicians in a laboratory environment. The equipment and standards provided will establish new or upgrade existing calibration capabilities.

b. The Electrical Package also provides the PMELs with standards and ancillary equipment used in the electro-optical, radio frequency (RF)/microwave, electrical, Radiation Detection Identification and Computation (RADIAC) technologies, and precise time and frequency measurement areas.

c. Additionally, the Mechanical Package includes standards and ancillary equipment for the mass, dimensional, optical, force, vibration, flow, and environmental measurement areas.

d. The Systems Package consists of equipment for calibration of common TMDE and Automatic Test Equipment (ATE) outside of a normal PMEL facility. Equipment procured as part of this package is normally used for on-site and/or in-place calibration to reduce the time of equipment non-availability to the user, eliminate the need to disassemble test stations, reduce transportation of delicate equipment, and calibrate to the user's minimum requirement. When not being used for calibration outside the PMEL, this equipment is available for calibration of routine PMEL workload.

4. A reduction to requested funding levels will affect the ability of the Air Force to support current weapon system measurements thus jeopardizing accuracies. Calibration traceability and Test Uncertainty Ratios (TURs) will also be compromised due to lack of state-of-the-art standards.

BUDGET ITEM JUSTIFICATION (EXHIBIT P-40)	DATE: FEBRUARY 1999
APPROP CODE/BA: OPAF/OTHER BASE MAINTENANCE & SUPPORT EQUIPMENT	**P-1 NOMENCLATURE:** BASE/ALC CALIBRATION PACKAGE

Description (cont.):

	P-1 ITEM NO: 82		PAGE NO: 3		Page 3 of 3

BUDGET ITEM JUSTIFICATION FOR AGGREGATED ITEMS (EXHIBIT P- 40A)	DATE: FEBRUARY 1999
APPROP CODE/BA: OPAF/OTHER BASE MAINTENANCE & SUPPORT EQUIPMENT	**P-1 NOMENCLATURE:** BASE/ALC CALIBRATION PACKAGE

PROCUREMENT ITEMS	ID CODE	FY1998		FY1999		FY2000		FY2001	
		QTY.	COST	QTY.	COST	QTY.	COST	QTY.	COST
(1) ELECTRICAL PACKAGE									
A. HIGH POWER HIGH FREQ SYS	A	6	$2,520						
B. HIGH POWER MED FREQ SYS	A	11	$2,695						
C. ILS/MODULATION METER	A	60	$1,072	20	$355				
D. AUTOMATED RESISTANCE SYS	A			35	$2,100	10	$600	10	$600
E. METER CALIBRATOR	A					20	$700	15	$525
F. ATTEN MEASUREMENT RCVR	A			20	$2,360	10	$1,180	9	$1,062
G. PHASE NOISE AMP MEAS. SYS	A					15	$2,625	15	$2,625
H. PROJECTS LESS THAN $500K	A		$1,149		$1,694		$755		$2,276
(2) MECHANICAL PACKAGE									
A. AF75 VIBRATION CALIBRATION	A	26	$586						
B. DIGITAL FORCE INDICATOR	A	69	$1,131						
C. HUMIDITY GENERATOR	A			30	$825	20	$550		
D. LOW GAS FLOW STANDARD	A			8	$600				
E. HYDRAULIC PRESSURE CONT.	A			45	$1,552				
F. PRECISION MANOMETER	A							2	$500
G. ENVIROMENTAL MON SYS	A					10	$500	20	$1,000
H. PROJECTS LESS THAN $500K	A		$1,129		$1,535		$2,447		$2,218

	P-1 ITEM NO: 82		PAGE NO: 4		Page 1 of 2

BUDGET ITEM JUSTIFICATION FOR AGGREGATED ITEMS (EXHIBIT P- 40A)	DATE: FEBRUARY 1999
APPROP CODE/BA: OPAF/OTHER BASE MAINTENANCE & SUPPORT EQUIPMENT	**P-1 NOMENCLATURE:** BASE/ALC CALIBRATION PACKAGE

PROCUREMENT ITEMS	ID CODE	FY1998		FY1999		FY2000		FY2001	
		QTY.	COST	QTY.	COST	QTY.	COST	QTY.	COST
(3) SYSTEMS PACKAGE									
A. PATEC LOCAL OSCILLATOR	A	60	$1,142						
B. STD CONTROLLER, PATEC/TFCU	A					100	$800	100	$800
C. PROJECTS LESS THAN $500K	A		$98						
Totals:			$11,522		$11,021		$10,157		$11,606

Remarks:

	P-1 ITEM NO: 82		PAGE NO: 5		Page 2 of 2

BUDGET PROCUREMENT HISTORY PLANNING (EXHIBIT P- 5A)	DATE: FEBRUARY 1999
APPROP CODE/BA: OPAF/OTHER BASE MAINTENANCE & SUPPORT EQUIPMENT	**P-1 NOMENCLATURE:** BASE/ALC CALIBRATION PACKAGE

ITEM / FISCAL YEAR	QTY.	UNIT COST	LOCATION OF PCO	CONTRACT METHOD & TYPE	CONTRACTOR AND LOCATION	AWD. DATE	DATE FIRST DEL.	SPECS AVAIL NOW	DATE REV. AVAIL
(1) ELECTRICAL PACKAGE									
A. HIGH PWR HIGH FREQ SYS									
FY98	6	420020	AFMETCAL	OPT/FFP	POWER SYS TECH, MELVILLE, NY (1)	NOV 97	JUN 98		
B. HIGH PWR MED FREQ SYS									
FY98	11	245035	AFMETCAL	OPT/FFP	POWER SYS TECH, MELVILLE, NY (2)	NOV 97	JUL 98		
C. ILS/MODULATION METER									
FY98	60	17867	AFMETCAL	C/FFP	TEXTRONIX, BEAVERTON, OR	NOV 97	SEP 98		
FY99	20	17750	AFMETCAL	OPT/FFP	TEXTRONIX, BEAVERTON, OR	AUG 99	FEB 00	Y	
D. AUTOMATED RESIS. SYS									
FY99	35	60000	AFMETCAL	C/FFP	UNKNOWN	JUL 99	FEB 00	N	JUN 99
FY00	10	60000	AFMETCAL	OPT/FFP	UNKNOWN	JUN 00	DEC 00	N	JUN 99
FY01	10	60000	AFMETCAL	OPT/FFP	UNKNOWN	JUN 01	DEC 01	N	JUN 99

BUDGET PROCUREMENT HISTORY PLANNING (EXHIBIT P- 5A)	DATE: FEBRUARY 1999
APPROP CODE/BA: OPAF/OTHER BASE MAINTENANCE & SUPPORT EQUIPMENT	**P-1 NOMENCLATURE:** BASE/ALC CALIBRATION PACKAGE

ITEM / FISCAL YEAR	QTY.	UNIT COST	LOCATION OF PCO	CONTRACT METHOD & TYPE	CONTRACTOR AND LOCATION	AWD. DATE	DATE FIRST DEL.	SPECS AVAIL NOW	DATE REV. AVAIL
E. METER CALIBRATOR									
FY00	20	35000	AFMETCAL	C/FFP	UNKNOWN	AUG 00	MAR 01	N	JUL 00
FY01	15	35000	AFMETCAL	OPT/FFP	UNKNOWN	JUL 01	FEB 02	N	JUL 00
F. ATTEN MEASURE. RCVR									
FY99	20	118000	AFMETCAL	C/FFP	UNKNOWN	AUG 99	FEB 00	N	JUL 99
FY00	10	118000	AFMETCAL	OPT/FFP	UNKNOWN	AUG 00	FEB 01	N	JUL 99
FY01	9	118000	AFMETCAL	OPT/FFP	UNKNOWN	AUG 01	FEB 02	N	JUL 99
G. PHASE NOISE AMP									
MEAS. SYS									
FY00	15	175000	AFMETCAL	C/FFP	UNKNOWN	AUG 00	FEB 01	N	JUL 00
FY01	15	175000	AFMETCAL	OPT/FFP	UNKNOWN	AUG 01	FEB 02	N	JUL 00

BUDGET PROCUREMENT HISTORY PLANNING (EXHIBIT P- 5A)	DATE: FEBRUARY 1999
APPROP CODE/BA: OPAF/OTHER BASE MAINTENANCE & SUPPORT EQUIPMENT	**P-1 NOMENCLATURE:** BASE/ALC CALIBRATION PACKAGE

ITEM / FISCAL YEAR	QTY.	UNIT COST	LOCATION OF PCO	CONTRACT METHOD & TYPE	CONTRACTOR AND LOCATION	AWD. DATE	DATE FIRST DEL.	SPECS AVAIL NOW	DATE REV. AVAIL
H. ELECTRICAL PACKAGE									
PROJECTS LESS THAN $500K									
FY98	VAR	VAR	AFMETCAL	C/FFP	MULTIPLE (3)	NOV 97	FEB 98		
FY99	VAR	VAR	AFMETCAL	C/FFP	MULTIPLE (3)	DEC 98	FEB 99		
FY00	VAR	VAR	AFMETCAL	C/FFP	MULTIPLE (3)	DEC 99	FEB 00	Y	
FY01	VAR	VAR	AFMETCAL	C/FFP	MULTIPLE (3)	DEC 00	FEB 01	Y	
(2) MECHANICAL PACKAGE									
A. AF75 VIBRATION CALIB.									
FY98	26	22541	AFMETCAL	C/FFP	MB DYNAMICS INC,	JUN 98	DEC 98		
					BEDFORD HEIGHTS, OH				
B. DIGITAL FORCE									
INDICATOR									
FY98	69	16391	AFMETCAL	OPT/FP	SPECTRIS TECHNOLOGIES (4)	NOV 97	DEC 97		
					DECATUR, GA				

BUDGET PROCUREMENT HISTORY PLANNING (EXHIBIT P- 5A)	DATE: FEBRUARY 1999
APPROP CODE/BA: OPAF/OTHER BASE MAINTENANCE & SUPPORT EQUIPMENT	**P-1 NOMENCLATURE:** BASE/ALC CALIBRATION PACKAGE

ITEM / FISCAL YEAR	QTY.	UNIT COST	LOCATION OF PCO	CONTRACT METHOD & TYPE	CONTRACTOR AND LOCATION	AWD. DATE	DATE FIRST DEL.	SPECS AVAIL NOW	DATE REV. AVAIL
C. HUMIDITY GENERATOR									
FY99	30	27500	AFMETCAL	C/FFP	UNKNOWN	JUL 99	JAN 00	Y	
FY00	20	27500	AFMETCAL	OPT/FFP	UNKNOWN	JUL 00	JAN 01	Y	
D. LOW GAS FLOW STANDARD									
FY99	8	75000	AFMETCAL	C/FFP	UNKNOWN	JUN 99	DEC 99	N	MAY 99
E. HYDRAULIC PRESS CONT.									
FY99	45	34488	AFMETCAL	C/FFP	UNKNOWN	MAY 99	NOV 99	N	APR 99
F. PRECISION MANOMETER									
FY01	2	250000	AFMETCAL	C/FFP	UNKNOWN	JUL 01	JAN 02	N	JUN 01
G. ENVIROMENTAL MON SYS									
FY00	10	50000	AFMETCAL	C/FFP	UNKNOWN	JUL 00	DEC 00	N	JUN 00

BUDGET PROCUREMENT HISTORY PLANNING (EXHIBIT P- 5A)	DATE: FEBRUARY 1999
APPROP CODE/BA: OPAF/OTHER BASE MAINTENANCE & SUPPORT EQUIPMENT	**P-1 NOMENCLATURE:** BASE/ALC CALIBRATION PACKAGE

ITEM / FISCAL YEAR	QTY.	UNIT COST	LOCATION OF PCO	CONTRACT METHOD & TYPE	CONTRACTOR AND LOCATION	AWD. DATE	DATE FIRST DEL.	SPECS AVAIL NOW	DATE REV. AVAIL
FY01	20	50000	AFMETCAL	OPT/FFP	UNKNOWN	JUL 01	DEC 01	N	JUN 01
H. MECHANICAL PACKAGE									
PROJECTS LESS THAN $500K									
FY98	VAR	VAR	AFMETCAL	C/FFP	MULTIPLE (3)	NOV 97	FEB 98		
FY99	VAR	VAR	AFMETCAL	C/FFP	MULTIPLE (3)	DEC 98	FEB 00		
FY00	VAR	VAR	AFMETCAL	C/FFP	MULTIPLE (3)	DEC 99	FEB 01	Y	
FY01	VAR	VAR	AFMETCAL	C/FFP	MULTIPLE (3)	DEC 00	FEB 02	Y	
(3) SYSTEMS PACKAGE									
A. PATEC LOCAL OSCILLATOR									
FY98	60	19040	AFMETCAL	MIPR/FFP	NAVY, WILTRON CORP	JUN 98	DEC 98		
					MORGAN HILL, CA				
B. STD CONTROLLER									
PATEC/TFCU									
FY00	100	8000	AFMETCAL	C/FFP	UNKNOWN	JUN 00	DEC 00	N	JUN 99

BUDGET PROCUREMENT HISTORY PLANNING (EXHIBIT P- 5A)	DATE: FEBRUARY 1999
APPROP CODE/BA: OPAF/OTHER BASE MAINTENANCE & SUPPORT EQUIPMENT	**P-1 NOMENCLATURE:** BASE/ALC CALIBRATION PACKAGE

ITEM / FISCAL YEAR	QTY.	UNIT COST	LOCATION OF PCO	CONTRACT METHOD & TYPE	CONTRACTOR AND LOCATION	AWD. DATE	DATE FIRST DEL.	SPECS AVAIL NOW	DATE REV. AVAIL
FY01	100	8000	AFMETCAL	OPT/FFP	UNKNOWN	JUN 01	DEC 01	N	JUN 99
C. SYSTEMS PACKAGE									
PROJECTS LESS THAN $500K									
FY98	VAR	VAR	AFMETCAL	C/FFP	MULTIPLE (3)	JUN 98	NOV 98		

REMARKS:
1. OPTION TO FY96 COMPETITIVE FIRM FIXED PRICE CONTRACT AWARDED TO POWER SYSTEMS TECHNOLOGY IN JAN 96.
2. OPTION TO FY96 COMPETITIVE FIRM FIXED PRICE CONTRACT AWARDED TO POWER SYSTEMS TECHNOLOGY IN JAN 96.
3. MULTIPLE COMPETITIVE CONTRACTS ARE USED TO EXECUTE PROJECTS LESS THAN $500K. THE AWARD DATE AND DATE OF FIRST DELIVERY REPRESENT THE APPROXIMATE FIRST AWARD OF FUNDING AND THE INITIAL DELIVERY OF EQUIPMENT.
4. OPTION TO FY97 COMPETITIVE FIRM FIXED PRICE CONTRACT AWARDED TO SPECTRIS TECHNOLOGIES, SEPT 97.

BUDGET ITEM JUSTIFICATION (EXHIBIT P-40)	DATE: FEBRUARY 1999
APPROP CODE/BA: OPAF/OTHER BASE MAINTENANCE & SUPPORT EQUIPMENT	**P-1 NOMENCLATURE:** PRIMARY STANDARDS LABORATORY PACKAGE

	FY1998	FY1999	FY2000	FY2001	FY2002	FY2003	FY2004	FY2005
QUANTITY								
COST (in Thousands)	$1,099	$1,064	$1,071	$1,105	$1,067	$1,100	$1,125	$1,150

Description:

1. The Primary Standards Laboratory Package consists of measurement standards required by the Air Force Primary Standards Laboratory (AFPSL). These standards and equipment enable the AFPSL to maintain a disciplined system of measurement control to assure standardized calibration of all precision measurement equipment at Precision Measurement Equipment Laboratories (PMELs) which in turn support aircraft, missiles and ground communications and space systems.

2. FY98-01 AFPSL funding supports all Air Force PMELs by providing the master calibration capability traceable to the National Institute of Standards and Technology (NIST), as well as specialized test and calibration support needed for Air Force research and development. Measurement standards and auxiliary measurement equipment are grouped in three packages: (a) Electrical, Photonics and Nucleonics Package, (b) Mechanical and Physical Package, and (c) Systems Package.

(a) The Electrical, Photonics & Nucleonics Package includes equipment to measure electrical units such as alternating current (AC) and direct current (DC) volts; resistance, and precise time and frequency; microwave/millimeter wave; radio frequency (RF) power, modulation, and phase noise; photonics/nucleonics quantities such as fiber optic power, spectral radiance and infrared thermometry; and laser power.

(b) The Mechanical and Physical Package includes equipment to measure pressure, force, flow and vibration, and dimensional quantities such as length, flatness, and angle.

BUDGET ITEM JUSTIFICATION (EXHIBIT P-40)	DATE: FEBRUARY 1999
APPROP CODE/BA: OPAF/OTHER BASE MAINTENANCE & SUPPORT EQUIPMENT	**P-1 NOMENCLATURE:** PRIMARY STANDARDS LABORATORY PACKAGE

Description (cont.):

(c) The Systems Package includes Automatic Test Equipment (ATE) equipment used in calibration software and procedure development projects.

3. Although AFPSL calibration services and the generation of calibration technical orders are performed by a private contractor, funding for new and enhanced calibration standards equipment remain an Air Force responsibility. Management of the Air Force Metrology and Calibration (AFMETCAL) Program remains an Air Force organic program. Air Force responsibilities include the identification and development of Air Force metrology and calibration requirements, calibration procedures development and management, and budgeting and acquisition of calibration standards. The operating contractor is provided Air Force Government Furnished Equipment (GFE). As the Air Force places more reliance on high technology weapons systems for our national security, the need for accurate and precise measurements becomes increasingly important. The accuracy, precision, and safety of Air Force systems are all traced back to the measurement standards of the AFPSL.

BUDGET ITEM JUSTIFICATION FOR AGGREGATED ITEMS (EXHIBIT P- 40A)	DATE: FEBRUARY 1999
APPROP CODE/BA: OPAF/OTHER BASE MAINTENANCE & SUPPORT EQUIPMENT	**P-1 NOMENCLATURE:** PRIMARY STANDARDS LABORATORY PACKAGE

PROCUREMENT ITEMS	ID CODE	FY1998		FY1999		FY2000		FY2001	
		QTY.	COST	QTY.	COST	QTY.	COST	QTY.	COST
A. ELECTRICAL, PHOTONICS	A		$641		$743		$730		$635
& NUCLEONICS PACKAGE									
ITEMS LESS THAN $500K									
B. MECHANICAL & PHYSICAL	A		$458		$321		$301		$470
PACKAGE									
ITEMS LESS THAN $500K									
C. SYSTEMS PACKAGE	A						$40		
ITEMS LESS THAN $500K									
Totals:			$1,099		$1,064		$1,071		$1,105

Remarks:

	P-1 ITEM NO: 83		PAGE NO: 14		Page 1 of 1

BUDGET ITEM JUSTIFICATION (EXHIBIT P-40)	DATE: FEBRUARY 1999
APPROP CODE/BA: OPAF/OTHER BASE MAINTENANCE & SUPPORT EQUIPMENT	**P-1 NOMENCLATURE:** ITEMS LESS THAN $5,000,000 (TEST EQUIPMENT)

	FY1998	FY1999	FY2000	FY2001	FY2002	FY2003	FY2004	FY2005
QUANTITY								
COST (in Thousands)	$7,477	$6,706	$9,750	$9,541	$17,391	$15,722	$15,825	$16,068

Description:

1. This program includes hundreds of test and measurement equipment items used throughout the Air Force. The equipment is used in Precision Measurement Equipment Laboratories (PMELs), Avionics Integrated Support Facilities (AISFs), Automated Test Support Facilities, Centralized Radio Shops, Radio/Radar Repair Shops, and Maintenance Shops. This equipment is also used to calibrate aircraft Avionics Intermediate Shop equipment. Failure to procure this equipment will inhibit performance of detailed analysis investigations; will impair the maintenance, repair and calibration of state-of-the-art measurement devices leading to increased avionics and communications equipment downtime; and may result in impairment of safety of flight as well as grounding of aircraft with direct impact on Air Force missions.

2. There are approximately 7,500 individual test items procured in this line. FY00 and FY01 funding procures both initial shortages as well as replacement equipment which is facing obsolescence. All items have an annual procurement value of less than $5,000,000 and are Code A. Items requested in FY00 and FY01 are identified on the following P-40a.

BUDGET ITEM JUSTIFICATION FOR AGGREGATED ITEMS (EXHIBIT P- 40A-IL)	DATE: FEBRUARY 1999
APPROP CODE/BA: OPAF/OTHER BASE MAINTENANCE & SUPPORT EQUIPMENT	**P-1 NOMENCLATURE:** ITEMS LESS THAN $5,000,000 (TEST EQUIPMENT)

PROCUREMENT ITEMS	NSN	FY2000 QTY.	FY2000 COST	FY2001 QTY.	FY2001 COST
SPECTRUM ANALYZER	6625012890854	90	$1,440	15	$348
OSCILLOSCOPE SYSTEM	6625014504919YA	113	$1,986	64	$1,146
DIGITAL DATA ANALYZER	6625014363603	61	$866	1	$15
WR-ALC INTEGRATED SUPPORT FACILITY			$350		$175
FSC 4920 - AIRCRAFT & REPAIR SHOP EQP			$400		$740
FSC 4940 - MISC REPAIR SHOP EQP			$73		$152
FSC 5860 - COHERENT RADIATION DEVICES			$113		$132
FSC 5915 - FILTERS ND NETWORKS			$120		$253
FSC 5985 - ANTENNAS, WAVE GUIDES			$150		$266
FSC 5996 - CABLE, CORD & WIRE ASSY			$226		$240
FSC 5998 - ELECT & ELECTRONIC ASSY			$122		$182
FSC 6130 - CONVERTERS, ELECTRICAL			$106		$287
FSC 6150 - MISC ELECT POWER			$108		$243
FSC 6625 - MEASURING & TEST EQP			$3,214		$4,671
FSC 6630 - CHEMICAL ANALYSIS EQP			$144		$380
FSC 6650 - OPTICAL INSTRUMENTS			$230		$210
FSC 6680 - MECH MOTION INSTRUMENTS			$102		$101
TOTALS:			$9,750		$9,541

BUDGET ITEM JUSTIFICATION (EXHIBIT P-40)	DATE: FEBRUARY 1999
APPROP CODE/BA: OPAF/OTHER BASE MAINTENANCE & SUPPORT EQUIPMENT	**P-1 NOMENCLATURE:** NIGHT VISION GOGGLES

	FY1998	FY1999	FY2000	FY2001	FY2002	FY2003	FY2004	FY2005
QUANTITY								
COST (in Thousands)	$5,004	$6,118	$2,800	$2,861	$3,369	$3,866	$5,618	$5,786

Description:

1. Modern warfare has led to an increase in airborne combat under the cover of darkness. Night missions include ground operations, encompassing preparation of the aircraft for takeoff, and landings in complete darkness, lights-off air refueling, and visual identification of enemy targets hidden under the night sky. Night Vision Goggles (NVGs) provide the capability to see in night/low visibility conditions, are essential for combat rescue and special operations missions, and reduce the possibility of mid-air collisions during combat/non-combat missions. The goggles are helmet-mounted; battery and/or aircraft powered, and weigh approximately 12 to 30 ounces. There are two versions of the NVG: aircrew goggles used by pilots and ground crew goggles used by security police in air defense, counter-narcotics and anti-terrorist operations.

2. The current night capability of the Combat Air Force (CAF) is extremely limited due to the lack of NVGs. Only approximately 12 percent of CAF fighter and attack aircraft are equipped with NVGs. This lack of NVGs will significantly impact combat capability in ever increasing night operations by decreasing flight safety and increasing the risk of fratricide. HH-60 helicopters, HC-130, F-16, and special mission C-130 aircraft operate primarily in covert night operations frequently in a low-altitude environment. Use of NVGs is vital to the success of these missions, providing a dramatic increase in safety situational awareness and survivability by allowing the use of near daytime tactics, including visual formation criteria. The proliferation of NVG equipped adversaries highlights the urgent need to supply critical night vision equipment.

3. The following aircrew and ground crew goggles plus test equipment are being procured with FY98-01 funding:

BUDGET ITEM JUSTIFICATION (EXHIBIT P-40)	DATE: FEBRUARY 1999
APPROP CODE/BA: OPAF/OTHER BASE MAINTENANCE & SUPPORT EQUIPMENT	**P-1 NOMENCLATURE:** NIGHT VISION GOGGLES

Description (cont.):

a. AN/PVS-7D Ground crew Goggle. These ground crew goggles are used primarily by security police in conducting air base defense, counter-narcotics and anti-terrorist operations. The units are also used by the base recovery after-attack teams and by some non-cockpit aircrew members. The goggles are monocular with a third-generation image intensifier. FY98-01 funding continues procurement of these goggles.

b. F-4949 Aircrew Goggle. The F-4949 night vision goggles provide aircraft and ground personnel with the capability to see the horizon, terrain features and enemy ground fire as well as reducing the potential for air-to-ground fratricide and possible mid-air collisions during night operations. The goggles are helmet mounted and weigh approximately 28 ounces. The F-4949 goggles are used by Air Combat Command, Air Mobility Command, Air Education and Training Command, United States Air Forces Europe, Pacific Air Force, Air Force Space Command, Air Force Special Operations Command, the Air National Guard and Air Force Reserve. FY98-01 funding continues procurement of these goggles.

c. Test Set, Infinity Focus. NVGs require an operational checkout prior to flying. The infinity focus test set (ANV-20/20) is a portable instrument which allows proper evaluation and adjustment of all goggle parameters to be done quickly and accurately. FY98-01 funding continues procurement of these test sets.

d. Test Set, Infrared Viewer. The ANV-126 NVG Infrared Viewer Test Set is a portable instrument for evaluating the performance or to properly "tune" the goggles. FY98-01 funding continues procurement of these test sets.

BUDGET ITEM JUSTIFICATION FOR AGGREGATED ITEMS (EXHIBIT P- 40A)	DATE: FEBRUARY 1999
APPROP CODE/BA: OPAF/OTHER BASE MAINTENANCE & SUPPORT EQUIPMENT	**P-1 NOMENCLATURE:** NIGHT VISION GOGGLES

PROCUREMENT ITEMS	ID CODE	FY1998		FY1999		FY2000		FY2001	
		QTY.	COST	QTY.	COST	QTY.	COST	QTY.	COST
GOGGLES									
A. AN/PVS-7D GROUNDCREW	A	191	$546	221	$633	76	$221	190	$572
B. F-4949 AIRCREW	A	450	$3,051	745	$5076	367	$2,485	299	$2,109
TEST SETS									
C. INFINITY FOCUS	A	151	$760	17	$94	7	$39	9	$52
D. INFRARED VIEWER	A	28	$647	13	$315	2	$55	5	$128
Totals:			$5,004		$6,118		$2,800		$2,861

Remarks:

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BUDGET ITEM JUSTIFICATION (EXHIBIT P-40)	DATE: FEBRUARY 1999
APPROP CODE/BA: OPAF/OTHER BASE MAINTENANCE & SUPPORT EQUIPMENT	**P-1 NOMENCLATURE:** ITEMS LESS THAN $5,000,000 (PERSONAL SAFETY & RESCUE EQ)

	FY1998	FY1999	FY2000	FY2001	FY2002	FY2003	FY2004	FY2005
QUANTITY								
COST (in Thousands)	$3,389	$3,528	$3,559	$5,610	$5,913	$8,463	$7,323	$4,720

Description:

1. This program contains numerous items of safety and rescue equipment used throughout the Air Force for protection of Air Force personnel, equipment and facilities. Typical items are anti-exposure coveralls, parachutes, life rafts, life preservers, and toxic indicators. Also included are deployable fire protection systems which augment normal fire-fighting equipment in a wartime environment by protecting aircraft during hot integrated combat turns, and providing limited quick reaction protection for high value facilities and equipment during water outages. Personal safety and rescue equipment is essential for the safety, rescue and protection of all Air Force resources.

2. FY00 and FY01 funding procures both initial shortages as well as replacement equipment which is facing obsolescence. All items have an annual procurement value of less than $5,000,000 and are Code A. Items requested in FY00 and FY01 are identified on the following P-40A.

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BUDGET ITEM JUSTIFICATION FOR AGGREGATED ITEMS (EXHIBIT P- 40A-IL)	DATE: FEBRUARY 1999
APPROP CODE/BA: OPAF/OTHER BASE MAINTENANCE & SUPPORT EQUIPMENT	**P-1 NOMENCLATURE:** ITEMS LESS THAN $5,000,000 (PERSONAL SAFETY & RESCUE EQ)

PROCUREMENT ITEMS	NSN	FY2000 QTY.	FY2000 COST	FY2001 QTY.	FY2001 COST
LIFE RAFT, 20 MAN	4220005633567LS	168	$364	114	$249
TEST SET, RADIO TS-4317-3	6625014222485LS	11	$273	20	$505
ADAPTER, TEST J-1603	6625014218180LS	7	$119	20	$346
ANTI-EXPOSURE COVERALLS	8475007682048	518	$205	901	$355
COMBUSTIBLE GAS ALARM	6665009416554	20	$95	41	$212
LIFE PRESERVER, MB-1	4220006061994LS	401	$163	408	$169
LIFE RAFT, ONE MAN	4220010036763LS	560	$147	594	$159
PASSENGER FLOTATION DEVICE	NSL			24675	$987
PARACHUTE REPLACEMENT	NSL			371	$1,000
DECONTAMINATION UNIT	4230012518702	20	$406	20	$407
DEMINERALIZER, WATER (MROD)	4610013136085	500	$293	500	$299
DEPLOYABLE FIRE PROTECTION SYSTEM (DFPS)	NSL	12	$931	8	$604
ADVANCED TECHNOLOGY ANTI-G SUIT (ATAGS)	8475014430712LS	266	$500	0	$0
FSC 4210 - FIRE FIGHTING EQUIPMENT			$17		$17
FSC 4240 - SAFETY & RESCUE EQUIP			$30		$293
FSC 4610 - WATER PURIFICATION			$16		$7
FSC 5120 - NONEDGED/NONPOWERED TOOLS					$1
TOTALS:			$3,559		$5,610

P-1 ITEM NO: 86	PAGE NO: 21	Page 1 of 1

BUDGET ITEM JUSTIFICATION (EXHIBIT P-40)	DATE: FEBRUARY 1999
APPROP CODE/BA: OPAF/OTHER BASE MAINTENANCE & SUPPORT EQUIPMENT	**P-1 NOMENCLATURE:** MECHANIZED MATERIAL HANDLING EQUIPMENT

	FY1998	FY1999	FY2000	FY2001	FY2002	FY2003	FY2004	FY2005
QUANTITY								
COST (in Thousands)	$10,917	$18,516	$15,320	$15,118	$14,277	$14,501	$14,550	$14,820

Description:

1. The Mechanized Material Handling Equipment program line provides funding for Mechanized Material Handling Systems (MMHS), Storage Aids Systems (SAS), and Automated Information Technology (AIT) projects.

a. MMHS/SAS programs provide bases worldwide with automated and static equipment for storing, receiving, and shipping material. MMHS/SAS equipment involves the design and acquisition of mechanized and non-automated material handling systems and storage aid systems for all Air Force supply and transportation facilities. Supply systems generally include equipment such as receiving-storage-distribution systems (RSDS), automated guided vehicle systems (AGVS), high density storage systems (HDSS), small parts handling systems (SPHS), carousel systems, conveyor systems, mezzanines, and a variety of racks, bin shelving and modular cabinets. Transportation systems generally include equipment such as aircraft passenger loading bridges and inbound/outbound (IB/OB) baggage conveyor systems for passenger terminals, heavy duty freight handling conveyors, pallet build-up-breakdown stations, elevating transfer vehicles, cargo storage/retrieval rack structures, and overhead bridge cranes for air freight terminal (AFT) systems; roller conveyor, cranes, and hoists for aerial delivery facilities (ADF); and a variety of conveyor systems with associated process control systems for air mail terminals (AMT). Adequately equipped facilities are essential to the storage and handling of weapon system components and the processing of personnel, baggage, mail and freight in a manner which reduces the pipeline time and improves Air Force capability to respond to crises and threats wherever they occur in the world. MMHS/SAS equipment increases the productivity of Air Force support personnel, enhances management control of assets, reduces multiple handling of logistical materials, increases the flexibility at a minimum investment cost, enhances safe operations, reduces losses due to damage of materials in transport or storage, and reduces congestion and delays in air terminals.

BUDGET ITEM JUSTIFICATION (EXHIBIT P-40)	DATE: FEBRUARY 1999
APPROP CODE/BA: OPAF/OTHER BASE MAINTENANCE & SUPPORT EQUIPMENT	**P-1 NOMENCLATURE:** MECHANIZED MATERIAL HANDLING EQUIPMENT

Description (cont.):

b. AIT is a collection of enabling technologies including linear and two-dimensional bar codes, radio frequency identification (RFID), smart cards, memory cards, laser cards, touch memory, voice and biometrics identification. These technologies provide timely and accurate automatic capture, aggregation and transfer of data to management information systems with minimal human involvement. Project funding enables compatibility of Air Force and industry standards in the core areas of supply, transportation, and maintenance as well as weaving commercial AIT business practices and standards into the Air Force logistics infrastructure.

Supply Asset Tracking System (SATS) is one example of an AIT project. SATS provides total asset visibility and reduces documentation at base level. It is a front-end processor application to the Standard Base Supply System that tracks all assets in base supply in a real-time mode. SATS incorporates radio frequency terminals, smart cards, and electronically confirms each transaction to eliminate documentation in the delivery process. Implementation has occurred at Shaw and Eglin AFBs, and Aviano and Ramstein ABs. In FY99, a $4 million congressional add provides funding to expedite implementation of SATS.

2. MMHS/SAS/AIT equipment by major command and individual projects are listed on the following P-40A and P-5A documents.

BUDGET ITEM JUSTIFICATION FOR AGGREGATED ITEMS (EXHIBIT P- 40A)	DATE: FEBRUARY 1999
APPROP CODE/BA: OPAF/OTHER BASE MAINTENANCE & SUPPORT EQUIPMENT	**P-1 NOMENCLATURE:** MECHANIZED MATERIAL HANDLING EQUIPMENT

PROCUREMENT ITEMS	ID CODE	FY1998		FY1999		FY2000		FY2001	
		QTY.	COST	QTY.	COST	QTY.	COST	QTY.	COST
1. AIR COMBAT COMMAND	A		$511		$625		$400		$500
2. AIR EDUCATION & TRAINING COMMAND			$986		$500		$250		$300
3. AF CIVIL ENGINEERING & SUPPORT ACTIVITY	A		$1461		$650		$200		$400
4. AIR FORCE MATERIEL COMMAND	A		$1056		$875		$400		$1,600
5. AF RESERVES	A				$100		$200		
6. AF SPECIAL OPERATIONS COMMAND					$250				
7. AIR FORCE SPACE COMMAND	A								$700
8. AIR MOBILITY COMMAND	A		$3443		$8,500		$10,225		$6,900
9. AIR NATIONAL GUARD	A		$963		$723		$573		$2,074
10. PACIFIC AIR FORCES	A		$482				$300		$250
11. US AIR FORCES EUROPE	A				$400		$580		$300
12. USAF-WIDE/AIT	A		$2,015		$1,893		$2,192		$2,094
A. USAF-WIDE SATS	A				$4,000				
Totals:			$10,917		$18,516		$15,320		$15,118

Remarks:

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BUDGET PROCUREMENT HISTORY PLANNING (EXHIBIT P- 5A)	DATE: FEBRUARY 1999
APPROP CODE/BA: OPAF/OTHER BASE MAINTENANCE & SUPPORT EQUIPMENT	**P-1 NOMENCLATURE:** MECHANIZED MATERIAL HANDLING EQUIPMENT

ITEM / FISCAL YEAR	QTY.	UNIT COST	LOCATION OF PCO	CONTRACT METHOD & TYPE	CONTRACTOR AND LOCATION	AWD. DATE	DATE FIRST DEL.	SPECS AVAIL NOW	DATE REV. AVAIL
1. AIR COMBAT COMMAND									
MISC SAS									
FY 98		511000	AFMC/LSO	C/FFP	MULTIPLE [1]	JUL 98	OCT 98		
FY 01		500000	AFMC/LSO	C/FFP	MULTIPLE [1]	JUL 01	OCT 02	N	JAN 01
INDIAN SPRINGS, NV									
HIGH DENSITY STORAGE									
SYSTEM FY98									
MCP LKTC983103									
FY 99		50000	AFMC/LSO	MIPR/C/FFP	ARMY / CORP OF ENGINEERS	MAR 99	SEP 99	N	FEB 99
					UNKNOWN				
ELLSWORTH AFB, SD									
SAS HAZMART									
FY 99		100000	AFMC/LSO	C/FFP	UNKNOWN	JUL 99	JAN 00	N	FEB 99

BUDGET PROCUREMENT HISTORY PLANNING (EXHIBIT P- 5A)	DATE: FEBRUARY 1999
APPROP CODE/BA: OPAF/OTHER BASE MAINTENANCE & SUPPORT EQUIPMENT	**P-1 NOMENCLATURE:** MECHANIZED MATERIAL HANDLING EQUIPMENT

ITEM / FISCAL YEAR	QTY.	UNIT COST	LOCATION OF PCO	CONTRACT METHOD & TYPE	CONTRACTOR AND LOCATION	AWD. DATE	DATE FIRST DEL.	SPECS AVAIL NOW	DATE REV. AVAIL
SHAW AFB, SC									
SAS WAREHOUSE									
FY 99		200000	AFMC/LSO	C/FFP	UNKNOWN	JUL 99	JAN 00	Y	
OFFUTT AFB, NE									
SAS MOBILITY BAGS									
FY 99		225000	AFMC/LSO	C/FFP	UNKNOWN	APR 99	AUG 99	Y	
MOODY AFB, GA									
SAS C-130									
AIRCRAFT PARTS STORE									
FY 99		50000	AFMC/LSO	C/FFP	UNKNOWN	APR 99	JUL 99	Y	
DYESS AFB, TX									
SAS C-130B									
AIRCRAFT PARTS STORE									
FY 00		200000	AFMC/LSO	C/FFP	UNKNOWN	JUN 00	NOV 00	N	NOV 99

BUDGET PROCUREMENT HISTORY PLANNING (EXHIBIT P- 5A)	DATE: FEBRUARY 1999
APPROP CODE/BA: OPAF/OTHER BASE MAINTENANCE & SUPPORT EQUIPMENT	**P-1 NOMENCLATURE:** MECHANIZED MATERIAL HANDLING EQUIPMENT

ITEM / FISCAL YEAR	QTY.	UNIT COST	LOCATION OF PCO	CONTRACT METHOD & TYPE	CONTRACTOR AND LOCATION	AWD. DATE	DATE FIRST DEL.	SPECS AVAIL NOW	DATE REV. AVAIL
SOTO CANO AB, HONDURAS									
SAS/INBOUND/OUTBOUND									
IB/OB CONVEYOR									
FY 00		200000	AFMC/LSO	C/FFP	UNKNOWN	JUN 00	NOV 00	N	DEC 99
2. AIR EDUCATION &									
TRAINING COMMAND									
SHEPPARD AFB, TX									
RECEIVING AND STORAGE									
SYSTEM									
FY96 MCP VNVP902005									
FY 98		597000	AFMC/LSO	C/FFP	GENESYS INC, WINTER SPRINGS, FL	NOV 98	MAR 99		

BUDGET PROCUREMENT HISTORY PLANNING (EXHIBIT P- 5A)	DATE: FEBRUARY 1999
APPROP CODE/BA: OPAF/OTHER BASE MAINTENANCE & SUPPORT EQUIPMENT	**P-1 NOMENCLATURE:** MECHANIZED MATERIAL HANDLING EQUIPMENT

ITEM / FISCAL YEAR	QTY.	UNIT COST	LOCATION OF PCO	CONTRACT METHOD & TYPE	CONTRACTOR AND LOCATION	AWD. DATE	DATE FIRST DEL.	SPECS AVAIL NOW	DATE REV. AVAIL
TYNDALL AFB, FL									
SAS SUPPLY WAREHOUSE									
MCP XLWU93038									
FY 98		389000	AFMC/LSO	C/FFP	GENESYS INC, WINTER SPRINGS, FL	JUN 98	DEC 98		
SHEPPARD AFB, TX									
FWD ASSET SUPPORT									
TRAINING AIRCRAFT									
PARTS STORE									
FY 99		300000	AFMC/LSO	C/FFP	UNKNOWN	JUL 99	JAN 00	Y	
RANDOLPH AFB, TX									
SAS									
FY 99		200000	AFMC/LSO	C/FFP	UNKNOWN	JUL 99	JAN 00	N	FEB 99

BUDGET PROCUREMENT HISTORY PLANNING (EXHIBIT P- 5A)	DATE: FEBRUARY 1999
APPROP CODE/BA: OPAF/OTHER BASE MAINTENANCE & SUPPORT EQUIPMENT	**P-1 NOMENCLATURE:** MECHANIZED MATERIAL HANDLING EQUIPMENT

ITEM / FISCAL YEAR	QTY.	UNIT COST	LOCATION OF PCO	CONTRACT METHOD & TYPE	CONTRACTOR AND LOCATION	AWD. DATE	DATE FIRST DEL.	SPECS AVAIL NOW	DATE REV. AVAIL
FAIRCHILD AFB, WA									
RECEIVING AND STORAGE									
SYSTEM MCP GJKZ920013									
FY 00		250000	AFMC/LSO	C/FFP	UNKNOWN	JUN 00	SEP 00	N	MAR 00
LACKLAND AFB, TX									
MECHANIZED HANDLING SYS									
CONSOL MOBILITY CENTER									
FY 01		300000	AFMC/LSO	C/FFP	UNKNOWN	JUN 01	DEC 01	N	DEC 00
3. AF CIVIL ENGINEERING									
& SUPPORT ACTIVITY									

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BUDGET PROCUREMENT HISTORY PLANNING (EXHIBIT P- 5A)	DATE: FEBRUARY 1999
APPROP CODE/BA: OPAF/OTHER BASE MAINTENANCE & SUPPORT EQUIPMENT	**P-1 NOMENCLATURE:** MECHANIZED MATERIAL HANDLING EQUIPMENT

ITEM / FISCAL YEAR	QTY.	UNIT COST	LOCATION OF PCO	CONTRACT METHOD & TYPE	CONTRACTOR AND LOCATION	AWD. DATE	DATE FIRST DEL.	SPECS AVAIL NOW	DATE REV. AVAIL
LANGLEY AFB, VA									
SAS MCP									
MUHJ943008									
FY 98		90000	AFMC/LSO	C/FFP	US MATERIEL HANDLING	OCT 98	APR 99		
					SYRACUSE, NEW YORK				
MISC SAS									
FY 98		1371000	AFMC/LSO	C/FFP	MULTIPLE [1]	SEP 98	JAN 99		
VANCE AFB, OK									
SAS CE IOE									
MCP DACA 56-97-C-0047									
FY 99		200000	AFMC/LSO	C/FFP	UNKNOWN	SEP 99	SEP 00	Y	
ELLSWORTH AFB, SD									

BUDGET PROCUREMENT HISTORY PLANNING (EXHIBIT P- 5A)	DATE: FEBRUARY 1999
APPROP CODE/BA: OPAF/OTHER BASE MAINTENANCE & SUPPORT EQUIPMENT	**P-1 NOMENCLATURE:** MECHANIZED MATERIAL HANDLING EQUIPMENT

ITEM / FISCAL YEAR	QTY.	UNIT COST	LOCATION OF PCO	CONTRACT METHOD & TYPE	CONTRACTOR AND LOCATION	AWD. DATE	DATE FIRST DEL.	SPECS AVAIL NOW	DATE REV. AVAIL
SAS									
FY 99		100000	AFMC/LSO	C/FFP	UNKNOWN	AUG 99	DEC 99	N	FEB 99
FAIRCHILD AFB, WA									
INTEGRATED MAIN FACILITY									
HOIST REPLACEMENT									
FY 99		350000	AFMC/LSO	C/FFP	UNKNOWN	JUN 99	DEC 99	Y	
SCOTT AFB, IL									
MECHANIZED HANDLING SYS									
GOV OPER CE STORE									
FY 00		200000	AFMC/LSO	C/FFP	UNKNOWN	MAY 00	NOV 00	N	NOV 99
MINOT AFB, ND									
SAS CE									
FY 01		200000	AFMC/LSO	C/FFP	UNKNOWN	MAY 01	NOV 01	N	NOV 00

BUDGET PROCUREMENT HISTORY PLANNING (EXHIBIT P- 5A)	DATE: FEBRUARY 1999
APPROP CODE/BA: OPAF/OTHER BASE MAINTENANCE & SUPPORT EQUIPMENT	**P-1 NOMENCLATURE:** MECHANIZED MATERIAL HANDLING EQUIPMENT

ITEM / FISCAL YEAR	QTY.	UNIT COST	LOCATION OF PCO	CONTRACT METHOD & TYPE	CONTRACTOR AND LOCATION	AWD. DATE	DATE FIRST DEL.	SPECS AVAIL NOW	DATE REV. AVAIL
MOUNTAIN HOME AFB, ID									
SAS CE									
FY 01		200000	AFMC/LSO	C/FFP	UNKNOWN	FEB 01	SEP 01	N	SEP 00
4. AIR FORCE MATERIEL									
COMMAND									
DAVIS MONTHAN AFB, AZ									
AMARC BASE SUPPLY									
MCP FBNV973502									
FY 98		534000	AFMC/LSO	C/FFP	INTERNATIONAL AUTOMATED SYS	FEB 98	AUG 98		
					ST PAUL, MN				
EGLIN AFB, FL									
REPLACE DOCK LEVELERS									
BLDG 612									
FY 98		80000	AFMC/LSO	C/FFP	JOHNL AND ASSOCIATES, INC	OCT 98	JAN 99		

BUDGET PROCUREMENT HISTORY PLANNING (EXHIBIT P- 5A)	DATE: FEBRUARY 1999
APPROP CODE/BA: OPAF/OTHER BASE MAINTENANCE & SUPPORT EQUIPMENT	**P-1 NOMENCLATURE:** MECHANIZED MATERIAL HANDLING EQUIPMENT

ITEM / FISCAL YEAR	QTY.	UNIT COST	LOCATION OF PCO	CONTRACT METHOD & TYPE	CONTRACTOR AND LOCATION	AWD. DATE	DATE FIRST DEL.	SPECS AVAIL NOW	DATE REV. AVAIL
					BIRMINGHAM, AL				
ROBINS AFB, GA									
SPHS BLDG 301									
FY 98		80000	AFMC/LSO	C/FFP	SOUTHERN MATERIEL HANDLING	NOV 98	FEB 99		
					MONTGOMERY, AL				
ROBINS AFB, GA									
AUTOMATED STG/RETR									
SYSTEM BLDG 640									
& BLDG 645									
FY 98		197000	AFMC/LSO	C/FFP	SILOAD RETREIVAL SYSTEMS	AUG 98	FEB 99		
					BROOKLYN, NY				

BUDGET PROCUREMENT HISTORY PLANNING (EXHIBIT P- 5A)	DATE: FEBRUARY 1999
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ITEM / FISCAL YEAR	QTY.	UNIT COST	LOCATION OF PCO	CONTRACT METHOD & TYPE	CONTRACTOR AND LOCATION	AWD. DATE	DATE FIRST DEL.	SPECS AVAIL NOW	DATE REV. AVAIL
ROBINS AFB, GA									
SPHS C-141									
FY 98		165000	AFMC/LSO	C/FFP	WERRES CORP, FREDERICK, MD	AUG 98	FEB 99		
EDWARDS AFB, CA									
SPHS									
FY 99		300000	AFMC/LSO	C/FFP	UNKNOWN	JUL 99	DEC 99	N	FEB 99
ROBINS AFB, GA									
RECEIVING AND STORAGE									
SYSTEM									
F-15 SEAT SHOP									
FY 99		200000	AFMC/LSO	C/FFP	UNKNOWN	APR 99	FEB 00	Y	
KIRTLAND AFB, NM									
MOBILITY BAG ASSY									
ISSUE FACILITY									

BUDGET PROCUREMENT HISTORY PLANNING (EXHIBIT P- 5A)	DATE: FEBRUARY 1999
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ITEM / FISCAL YEAR	QTY.	UNIT COST	LOCATION OF PCO	CONTRACT METHOD & TYPE	CONTRACTOR AND LOCATION	AWD. DATE	DATE FIRST DEL.	SPECS AVAIL NOW	DATE REV. AVAIL
FY 99		200000	AFMC/LSO	C/FFP	UNKNOWN	JUL 99	MAR 00	Y	
ROBINS AFB, GA									
VERTICAL CAROUSEL SYS									
TOOL ISSUE BLDG 640									
FY 99		70000	AFMC/LSO	C/FFP	UNKNOWN	APR 99	MAR 00	Y	
ROBINS AFB, GA									
BRIDGE CRANE SYSTEM									
COMPOSITE FACILITY									
FY 99		105000	AFMC/LSO	C/FFP	UNKNOWN	JUN 99	MAR 00	Y	
ROBINS AFB, GA									
SUPPLY WAREHOUSE IOE									

BUDGET PROCUREMENT HISTORY PLANNING (EXHIBIT P- 5A)	DATE: FEBRUARY 1999
APPROP CODE/BA: OPAF/OTHER BASE MAINTENANCE & SUPPORT EQUIPMENT	**P-1 NOMENCLATURE:** MECHANIZED MATERIAL HANDLING EQUIPMENT

ITEM / FISCAL YEAR	QTY.	UNIT COST	LOCATION OF PCO	CONTRACT METHOD & TYPE	CONTRACTOR AND LOCATION	AWD. DATE	DATE FIRST DEL.	SPECS AVAIL NOW	DATE REV. AVAIL
FY 99 MCP UHHZ880013									
FY 00		400000	AFMC/LSO	C/FFP	UNKNOWN	MAR 00	DEC 00	N	AUG 99
HILL AFB, UT									
CAD/PAD STORAGE FAC									
FY 01		800000	AFMC/LSO	C/FFP	UNKNOWN	NOV 00	MAR 01	N	MAY 00
ROBINS AFB, GA									
INITIAL OPERATING EQUIP									
COMPOSITES BLDG									
FY 01		600000	AFMC/LSO	C/FFP	UNKNOWN	APR 01	NOV 01	N	AUG 00
ROBINS AFB, GA									
VERTICAL CAROUSEL									
BLDG 300 & 301									

BUDGET PROCUREMENT HISTORY PLANNING (EXHIBIT P- 5A)	DATE: FEBRUARY 1999
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ITEM / FISCAL YEAR	QTY.	UNIT COST	LOCATION OF PCO	CONTRACT METHOD & TYPE	CONTRACTOR AND LOCATION	AWD. DATE	DATE FIRST DEL.	SPECS AVAIL NOW	DATE REV. AVAIL
FY 01		200000	AFMC/LSO	C/FFP	UNKNOWN	JUN 01	DEC 01	N	NOV 00
5. AIR FORCE RESERVE									
YOUNGSTOWN AFRB, OH									
MECH OF AIR DELIVERY									
FACILITY									
FY 99		100000	AFMC/LSO	C/FFP	UNKNOWN	JUL 99	SEP 99	Y	
DOBBINS AFRB, GA									
SAS									
BLDG 812									

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ITEM / FISCAL YEAR	QTY.	UNIT COST	LOCATION OF PCO	CONTRACT METHOD & TYPE	CONTRACTOR AND LOCATION	AWD. DATE	DATE FIRST DEL.	SPECS AVAIL NOW	DATE REV. AVAIL
FY 00		200000	AFMC/LSO	C/FFP	UNKNOWN	APR 00	JAN 01	N	OCT 99
6. AIR FORCE SPECIAL									
OPERATIONS COMMAND									
HURLBURT FIELD, FL									
MECH TRAFFIC MGT OFFICE									
FY 99		250000	AFMC/LSO	C/FFP	UNKNOWN	JUL 99	JAN 00	N	MAR 99
7. AIR FORCE SPACE									
COMMAND									
PATRICK AFB, FL									
MECH BASE SUPPLY FY 98									
MCP SXHT983006									
FY 01		700000	AFMC/LSO	C/FFP	UNKNOWN	JUN 01	DEC 01	N	DEC 00

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ITEM / FISCAL YEAR	QTY.	UNIT COST	LOCATION OF PCO	CONTRACT METHOD & TYPE	CONTRACTOR AND LOCATION	AWD. DATE	DATE FIRST DEL.	SPECS AVAIL NOW	DATE REV. AVAIL
8. AIR MOBILITY COMMAND									
MISC SAS - SQ OPS MCP									
FY 98		194000	AFMC/LSO	MIPR/C/FFP	ARMY / SPACESAVER STG SYS	DEC 98	JUN 99		
					LAS CRUCES, NM				
FY 99		550000	AFMC/LSO	C/FFP	UNKNOWN	JUN 99	DEC 99	N	FEB 99
FY 00		725000	AFMC/LSO	C/FFP	UNKNOWN	JUN 00	DEC 00	N	JAN 00
FY 01		150000	AFMC/LSO	C/FFP	UNKNOWN	JUN 01	DEC 01	N	JAN 01
ANDERSEN AB, GUAM									

BUDGET PROCUREMENT HISTORY PLANNING (EXHIBIT P- 5A)	DATE: FEBRUARY 1999
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ITEM / FISCAL YEAR	QTY.	UNIT COST	LOCATION OF PCO	CONTRACT METHOD & TYPE	CONTRACTOR AND LOCATION	AWD. DATE	DATE FIRST DEL.	SPECS AVAIL NOW	DATE REV. AVAIL
SAS FWD SUPPLY LOCATION									
IOE FY 97									
MCP AJJY97-1107A/B									
FY 98		84000	AFMC/LSO	C/FFP	INTERNATIONAL AUTOMATED SYS	SEP 98	MAY 99		
					TULLAHOMA, TN				
ANDREWS AFB, MD									
IB/OB CONVEYOR									
MCP AJXF95-1579									
FY 98		130000	AFMC/LSO	C/FFP	HORSLEY CORP, OGDEN, UT	SEP 98	FEB 99		
CHARLESTON AFB, SC									
CARGO LOADING DOCK									
CATWALKS									
FY 98		41000	AFMC/LSO	C/FFP	GENESYS INC, WINTER SPRINGS, FL	SEP 98	MAR 99		

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ITEM / FISCAL YEAR	QTY.	UNIT COST	LOCATION OF PCO	CONTRACT METHOD & TYPE	CONTRACTOR AND LOCATION	AWD. DATE	DATE FIRST DEL.	SPECS AVAIL NOW	DATE REV. AVAIL
KADENA AB, KOREA									
SAS FWD SUPPLY LOCATION									
IOE F 97 MCP LXEZ97-1230									
FY 98		165000	AFMC/LSO	C/FFP	INTERNATIONAL AUTOMATED SYS,	SEP 98	FEB 99		
					ST. PAUL, MN				
MACDILL AFB, FL									
CENTRALIZED LIFE SUPPORT									
MCP NYZR973718									
FY 98		46000	AFMC/LSO	C/FFP	SPACESAVER STG SYS, TAMPA, FL	AUG 98	MAR 99		
NAPLES NAS, ITALY									
IB/OB CONVEYOR									
IOE FY98									
MILCON P-196									

BUDGET PROCUREMENT HISTORY PLANNING (EXHIBIT P- 5A)	DATE: FEBRUARY 1999
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ITEM / FISCAL YEAR	QTY.	UNIT COST	LOCATION OF PCO	CONTRACT METHOD & TYPE	CONTRACTOR AND LOCATION	AWD. DATE	DATE FIRST DEL.	SPECS AVAIL NOW	DATE REV. AVAIL
FY 98		300000	AFMC/LSO	MIPR/C/FFP	ALA CONSTRUZIONI SPA	SEP 98	JUL 99		
					NAPLES, ITALY				
NAPLES NAS, ITALY									
MECH OF AIR FREIGHT									
TERMINAL IOE FY97									
MILCON P-112									
FY 98		251000	AFMC/LSO	C/FFP	GENESYS INC., WINTER SPRINGS, FL	SEP 98	AUG 99		
NORFOLK NAS, VA									
IB/OB BRIDGE									
MILCON P-296									
FY 98		975000	AFMC/LSO	WP/FFP	NAVY / AIR STATION CONST DIV	FEB 98	MAR 00		
					NORFOLK, VA				
RAMSTEIN AB, GERMANY									
IB/OB CONVEYOR									
FY 97 PIK									

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APPROP CODE/BA: OPAF/OTHER BASE MAINTENANCE & SUPPORT EQUIPMENT	**P-1 NOMENCLATURE:** MECHANIZED MATERIAL HANDLING EQUIPMENT

ITEM / FISCAL YEAR	QTY.	UNIT COST	LOCATION OF PCO	CONTRACT METHOD & TYPE	CONTRACTOR AND LOCATION	AWD. DATE	DATE FIRST DEL.	SPECS AVAIL NOW	DATE REV. AVAIL
FY 98		392000	AFMC/LSO	C/FFP	HORSLEY CORP, OGDEN, UT	SEP 98	FEB 99		
ANDERSEN AFB, GUAM									
SAS FLEET SERVICE FAC									
FY 98		20000	AFMC/LSO	C/FFP	SYSTEM CENTER INC, HONOLULU, HI	AUG 98	DEC 98		
CHARLESTON AFB, SC									
BALL TRANSFER CONVEYOR									
FY 98		50000	AFMC/LSO	C/FFP	GENESYS INC., WINTER SPRINGS, FL	OCT 98	MAR 99		
JACKSONVILLE NAS, FL									
IB/OB CONVEYOR									
FY 98		90000	AFMC/LSO	C/FFP	JERVIS WEBB CO.	SEP 98	MAY 99		
					MARIETTA, GA				
NORFOLK NAS, VA									
DOCK COVERS/SCISSOR JACKS									
FY98		30000	AFMC/LSO	C/FFP	ATLANTIC LIFT SYS INC.,	NOV 98	JAN 99		

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ITEM / FISCAL YEAR	QTY.	UNIT COST	LOCATION OF PCO	CONTRACT METHOD & TYPE	CONTRACTOR AND LOCATION	AWD. DATE	DATE FIRST DEL.	SPECS AVAIL NOW	DATE REV. AVAIL
					NORFOLK, VA				
MCCHORD AFB, WA									
STAGE DOCK EXTENSIONS									
FY98		500000	AFMC/LSO	C/FFP	UNKNOWN	AUG 99	OCT 99	Y	
MACDILL AFB, FL									
DOCK LEVELERS									
FY98		25000	AFMC/LSO	C/FFP	UNKNOWN	MAY 99	SEP 99	Y	
MCCHORD AFB, WA									
BRIDGE CRANES									
MCP PQWY973059,									
PQWY993050									
PQWY993059									
FY98		150000	AFMC/LSO	MIPR/FFP	ARMY / CORPS OF ENGINEERS, SEATTLE, WA	APR 99	AUG 99	Y	
MCGUIRE AFB, NJ									

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ITEM / FISCAL YEAR	QTY.	UNIT COST	LOCATION OF PCO	CONTRACT METHOD & TYPE	CONTRACTOR AND LOCATION	AWD. DATE	DATE FIRST DEL.	SPECS AVAIL NOW	DATE REV. AVAIL
MECH OF AIR MOBILITY OPS									
GROUP MCP PTFL983005									
FY 99		200000	AFMC/LSO	C/FFP	UNKNOWN	JUL 99	OCT 99	N	FEB 99
KADENA AB, JAPAN									
IB/OB JFY95USFJA343-D5									
BLDG 3409									
FY 99		300000	AFMC/LSO	C/FFP	UNKNOWN	JUL 99	AUG 00	N	FEB 99
YOKOTA AB, JAPAN									
SAS FWD SUPPLY LOCATION									
TOOL CRIB IOE									
MCP ZNRE9701109									
FY 99		300000	AFMC/LSO	C/FFP	UNKNOWN	JUL 99	FEB 00	N	MAR 99
KADENA AB, JAPAN									

BUDGET PROCUREMENT HISTORY PLANNING (EXHIBIT P- 5A)	DATE: FEBRUARY 1999
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ITEM / FISCAL YEAR	QTY.	UNIT COST	LOCATION OF PCO	CONTRACT METHOD & TYPE	CONTRACTOR AND LOCATION	AWD. DATE	DATE FIRST DEL.	SPECS AVAIL NOW	DATE REV. AVAIL
MECH OF INBOUND AIR									
FREIGHT TERMINAL									
JFY95USFJAF373-D5									
FY 99		6000000	AFMC/LSO	C/FFP	UNKNOWN (2)	SEP 99	JUN 00	Y	
RAMSTEIN AB, GERMANY									
INTERIM AIR FREIGHT									
TERMINAL INBOUND									
FY 99		500000	AFMC/LSO	C/FFP	UNKNOWN	SEP 99	DEC 00	Y	
YOKOTA AB, JAPAN									
IB/OB CONVEYOR									
FY 99		200000	AFMC/LSO	C/FFP	UNKNOWN	JUL 99	APR 00	Y	
TRAVIS AFB, CA									
SAS MOBILITY STORAGE									
FY 99		200000	AFMC/LSO	C/FFP	UNKNOWN	APR 99	AUG 99	Y	

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ITEM / FISCAL YEAR	QTY.	UNIT COST	LOCATION OF PCO	CONTRACT METHOD & TYPE	CONTRACTOR AND LOCATION	AWD. DATE	DATE FIRST DEL.	SPECS AVAIL NOW	DATE REV. AVAIL
SCOTT AFB, IL									
SAS WAREHOUSE									
FY 99		100000	AFMC/LSO	C/FFP	UNKNOWN	JUN 99	DEC 99	Y	
DOVER AFB, DE									
CRANE REPLACEMENT									
FY 99		150000	AFMC/LSO	C/FFP	UNKNOWN	JUL 99	FEB 00	Y	
CHARLESTON AFB, SC									
CENTRALIZED LIFE SUPPORT									
IOE FY 99 MCP DKFX993007									
FY 00		250000	AFMC/LSO	C/FFP	UNKNOWN	FEB 00	JUN 00	N	NOV 99
MCCHORD AFB, WA									

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ITEM / FISCAL YEAR	QTY.	UNIT COST	LOCATION OF PCO	CONTRACT METHOD & TYPE	CONTRACTOR AND LOCATION	AWD. DATE	DATE FIRST DEL.	SPECS AVAIL NOW	DATE REV. AVAIL
HIGH DENSITY STORAGE									
SYSTEM PARTS STG									
FY99 MCP PQWI983054									
FY 00		600000	AFMC/LSO	C/FFP	UNKNOWN	JUN 00	NOV 00	N	NOV 99
KADENA AB, JAPAN									
MECH OF OUTBOUND									
SPSH									
USFJAF373-D5 PHASE II									
FY 00		6150000	AFMC/LSO	OPT/FFP	UNKNOWN (2)	OCT 99	DEC 00	Y	
KADENA AB, JAPAN									
PREPACK DOCK									
FY 00		2500000	AFMC/LSO	OPT/FFP	UNKNOWN (2)	OCT 99	DEC 00	N	FEB 99
RAMSTEIN AB, GERMANY									
MECH OF INBOUND									

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ITEM / FISCAL YEAR	QTY.	UNIT COST	LOCATION OF PCO	CONTRACT METHOD & TYPE	CONTRACTOR AND LOCATION	AWD. DATE	DATE FIRST DEL.	SPECS AVAIL NOW	DATE REV. AVAIL
AIR FREIGHT TERMINAL									
FY 01		6000000	AFMC/LSO	C/FFP	UNKNOWN	SEP 01	DEC 02	N	DEC 00
MACDILL AFB, FL									
SAS SUPPLY									
FY 01		250000	AFMC/LSO	C/FFP	UNKNOWN	MAY 01	NOV 01	N	NOV 00
MCCONNELL AFB, KS									
SAS WAREHOUSE									
FY 01		200000	AFMC/LSO	C/FFP	UNKNOWN	MAY 01	NOV 01	N	NOV 00
ROOSEVELT ROADS, PR									
IB/OB CONVEYOR									
FY 01		300000	AFMC/LSO	C/FFP	UNKNOWN	JUN 01	DEC 01	N	DEC 00
9. AIR NATIONAL GUARD									

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ITEM / FISCAL YEAR	QTY.	UNIT COST	LOCATION OF PCO	CONTRACT METHOD & TYPE	CONTRACTOR AND LOCATION	AWD. DATE	DATE FIRST DEL.	SPECS AVAIL NOW	DATE REV. AVAIL
DALLAS ANGB, TX									
SUPPLY MCP DDPF909506									
FY 98		243000	AFMC/LSO	C/FFP	GENESYS INC, WINTER SPRINGS, FL	AUG 98	DEC 98		
FT WAYNE ANGB, IN									
RECEIVING AND STORAGE									
SYSTEM									
IOE FY96 MCP ATQZ001054									
FY 98		179000	AFMC/LSO	C/FFP	INTEGRATED CONV ENGINEERING	APR 98	OCT 98		
					ORLANDO, FL				
LINCOLN ANGB, NE									
RECEIVING AND STORAGE									
SYSTEM FY 98		250000	AFMC/LSO	C/FFP	UNKNOWN (5)	JUL 99	DEC 99	Y	
OKLAHOMA ANGB, OK									

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ITEM / FISCAL YEAR	QTY.	UNIT COST	LOCATION OF PCO	CONTRACT METHOD & TYPE	CONTRACTOR AND LOCATION	AWD. DATE	DATE FIRST DEL.	SPECS AVAIL NOW	DATE REV. AVAIL
HDSS									
BASE SUPPLY MCP									
FY 98		236000	AFMC/LSO	C/FFP	SYSTEMATIC SOLUTIONS INC.,	OCT 98	FEB 99		
					OKLAHOMA CITY, OK				
STATE COLLEGE, PA									
SAS									
FY 98		55000	AFMC/LSO	C/FFP	UNICOR METALS DIVISION	JUN 98	OCT 98		
					SPACESAVER SYS, PITTSBURGH, PA				
GOWEN FIELD BOISE, ID									
MECH AERIAL PORT FLIGHT									
MCP BXRH969622									
FY 99		180000	AFMC/LSO	C/FFP	UNKNOWN	JUN 99	NOV 99	Y	

BUDGET PROCUREMENT HISTORY PLANNING (EXHIBIT P- 5A)	DATE: FEBRUARY 1999
APPROP CODE/BA: OPAF/OTHER BASE MAINTENANCE & SUPPORT EQUIPMENT	**P-1 NOMENCLATURE:** MECHANIZED MATERIAL HANDLING EQUIPMENT

ITEM / FISCAL YEAR	QTY.	UNIT COST	LOCATION OF PCO	CONTRACT METHOD & TYPE	CONTRACTOR AND LOCATION	AWD. DATE	DATE FIRST DEL.	SPECS AVAIL NOW	DATE REV. AVAIL
MINNESPOLIS ANGB, MN									
BCE MAINT COMPLEX									
MCP QJKL939859									
FY 99		212000	AFMC/LSO	C/FFP	UNKNOWN	MAY 99	JUN 99	Y	
ILLINOIS ANGB, IL									
HDSS									
MCP VDYD959691									
FY 99		200000	AFMC/LSO	C/FFP	UNKNOWN	JUN 99	OCT 99	N	FEB 99
BUCKLEY ANGB, CO									
SAS TRAFFIC MGT OFFICE									
FY 99		131000	AFMC/LSO	C/FFP	UNKNOWN	AUG 99	JAN 00	N	FEB 99

BUDGET PROCUREMENT HISTORY PLANNING (EXHIBIT P- 5A)	DATE: FEBRUARY 1999
APPROP CODE/BA: OPAF/OTHER BASE MAINTENANCE & SUPPORT EQUIPMENT	**P-1 NOMENCLATURE:** MECHANIZED MATERIAL HANDLING EQUIPMENT

ITEM / FISCAL YEAR	QTY.	UNIT COST	LOCATION OF PCO	CONTRACT METHOD & TYPE	CONTRACTOR AND LOCATION	AWD. DATE	DATE FIRST DEL.	SPECS AVAIL NOW	DATE REV. AVAIL
SPRINGFIELD ANGB, OH									
MECH SUPPLY COMPLEX									
MCP WAAR969573									
FY 00		398000	AFMC/LSO	C/FFP	UNKNOWN	NOV 99	MAY 00	N	JUN 99
JACKSONVILLE ANGB, FL									
VERTICAL STORAGE/									
RETRIEVAL SYSTEM									
FY 00		175000	AFMC/LSO	C/FFP	UNKNOWN	APR 00	NOV 00	N	NOV 99
ELLINGTON ANGB, TX									
BASE SUPPLY COMPLEX									
MCP FWJH939520									
FY 01		250000	AFMC/LSO	C/FFP	UNKNOWN	JUN 01	DEC 01	N	DEC 00
MCGUIRE AFB, NJ									
MECH CE MAINT COMPLEX									

BUDGET PROCUREMENT HISTORY PLANNING (EXHIBIT P- 5A)	DATE: FEBRUARY 1999
APPROP CODE/BA: OPAF/OTHER BASE MAINTENANCE & SUPPORT EQUIPMENT	**P-1 NOMENCLATURE:** MECHANIZED MATERIAL HANDLING EQUIPMENT

ITEM / FISCAL YEAR	QTY.	UNIT COST	LOCATION OF PCO	CONTRACT METHOD & TYPE	CONTRACTOR AND LOCATION	AWD. DATE	DATE FIRST DEL.	SPECS AVAIL NOW	DATE REV. AVAIL
MCP PTFL000602									
FY 01		260000	AFMC/LSO	C/FFP	UNKNOWN	MAY 01	NOV 01	N	NOV 00
STANDIFORD ANGB, KY									
MECH AERIAL PORT									
TERMINAL MCP WEAS959620									
FY 01		275000	AFMC/LSO	C/FFP	UNKNOWN	JUN 01	DEC 01	N	NOV 00
TOLEDO ANGB, OH									
MECH SUPPLY/SP COMPLEX									
MCP WYTD969584									
FY 01		200000	AFMC/LSO	C/FFP	UNKNOWN	MAY 01	NOV 01	N	NOV 00
KINGSTOWN ANGB, RI									
MECH BASE SUPPLY									
FY 01		225000	AFMC/LSO	C/FFP	UNKNOWN	JUN 01	MAR 02	N	NOV 00

BUDGET PROCUREMENT HISTORY PLANNING (EXHIBIT P- 5A)	DATE: FEBRUARY 1999
APPROP CODE/BA: OPAF/OTHER BASE MAINTENANCE & SUPPORT EQUIPMENT	**P-1 NOMENCLATURE:** MECHANIZED MATERIAL HANDLING EQUIPMENT

ITEM / FISCAL YEAR	QTY.	UNIT COST	LOCATION OF PCO	CONTRACT METHOD & TYPE	CONTRACTOR AND LOCATION	AWD. DATE	DATE FIRST DEL.	SPECS AVAIL NOW	DATE REV. AVAIL
CHANNEL ISLAND ANGB, CA									
SUPPLY DISTRIBUTION SYS									
FY 01		250000	AFMC/LSO	C/FFP	UNKNOWN	FEB 01	SEP 01	N	SEP 00
SAN FRANCISCO ANGB, CA									
SAS WAREHOUSE									
FY 01		225000	AFMC/LSO	C/FFP	UNKNOWN	APR 01	SEP 01	N	NOV 00
WESTHAMPTON BEACH, VA									
SAS WAREHOUSE									
FY 01		230000	AFMC/LSO	C/FFP	UNKNOWN	MAY 01	JUL 01	N	OCT 00
GREAT FALLS ANGB, MT									
MECH BASE SUPPLY									

BUDGET PROCUREMENT HISTORY PLANNING (EXHIBIT P- 5A)	DATE: FEBRUARY 1999
APPROP CODE/BA: OPAF/OTHER BASE MAINTENANCE & SUPPORT EQUIPMENT	**P-1 NOMENCLATURE:** MECHANIZED MATERIAL HANDLING EQUIPMENT

ITEM / FISCAL YEAR	QTY.	UNIT COST	LOCATION OF PCO	CONTRACT METHOD & TYPE	CONTRACTOR AND LOCATION	AWD. DATE	DATE FIRST DEL.	SPECS AVAIL NOW	DATE REV. AVAIL
FY 01		159000	AFMC/LSO	C/FFP	UNKNOWN	MAY 01	NOV 01	N	NOV 00
10. PACIFIC AIR FORCES									
NAHA AIRPORT, JAPAN									
AIR MAIL TERMINAL									
FY 98		99000	AFMC/LSO	C/FFP	GENESYS INC,	SEP 98	MAR 99		
					WINTER SPRINGS, FL AND TULLAHOMA, TN				
YOKOTA AB, JAPAN									
AIR MAIL TERMINAL									
FY 98		383000	AFMC/LSO	C/FFP	GENESYS INC,	SEP 98	MAR 99		
					WINTER SPRINGS, FL AND TULLAHOMA, TN				
MISAWA AB, JAPAN									

BUDGET PROCUREMENT HISTORY PLANNING (EXHIBIT P- 5A)	DATE: FEBRUARY 1999
APPROP CODE/BA: OPAF/OTHER BASE MAINTENANCE & SUPPORT EQUIPMENT	**P-1 NOMENCLATURE:** MECHANIZED MATERIAL HANDLING EQUIPMENT

ITEM / FISCAL YEAR	QTY.	UNIT COST	LOCATION OF PCO	CONTRACT METHOD & TYPE	CONTRACTOR AND LOCATION	AWD. DATE	DATE FIRST DEL.	SPECS AVAIL NOW	DATE REV. AVAIL
MECH WRM STORAGE BLDG									
FY 00		300000	AFMC/LSO	C/FFP	UNKNOWN	JUN 00	DEC 00	N	NOV 99
YOKOTA AB, JAPAN									
SAS HAZMAT									
FY 01		250000	AFMC/LSO	C/FFP	UNKNOWN	JUN 01	JAN 02	N	DEC 00
11. US AIR FORCES EUROPE									
RAMSTEIN AB, GERMANY									
ELEC FORKLIFT/TIRE RACK									
BSS/IEU BLDG 2127									
FY 99		400000	AFMC/LSO	C/FFP	UNKNOWN	MAR 99	OCT 99	Y	
AVIANO AB, ITALY									
RETREIVAL/DISTR SYS									
FY 00		180000	AFMC/LSO	C/FFP	UNKNOWN	FEB 00	SEP 00	N	SEP 99

BUDGET PROCUREMENT HISTORY PLANNING (EXHIBIT P- 5A)	DATE: FEBRUARY 1999
APPROP CODE/BA: OPAF/OTHER BASE MAINTENANCE & SUPPORT EQUIPMENT	**P-1 NOMENCLATURE:** MECHANIZED MATERIAL HANDLING EQUIPMENT

ITEM / FISCAL YEAR	QTY.	UNIT COST	LOCATION OF PCO	CONTRACT METHOD & TYPE	CONTRACTOR AND LOCATION	AWD. DATE	DATE FIRST DEL.	SPECS AVAIL NOW	DATE REV. AVAIL
AVIANO AB, ITALY									
HDSS									
AIRCRAFT PARTS STORE									
BLDG 1029									
FY 00		200000	AFMC/LSO	C/FFP	UNKNOWN	FEB 00	SEP 00	N	SEP 99
AVIANO AB, ITALY									
HDSS									
AIRCRAFT PARTS STORE									
BLDG 1227									
FY 00		200000	AFMC/LSO	C/FFP	UNKNOWN	FEB 00	SEP 00	N	SEP 99
RAMSTEIN AB, GERMANY									
IOE									
MCP TYFR96-3004/APS									

BUDGET PROCUREMENT HISTORY PLANNING (EXHIBIT P- 5A)	DATE: FEBRUARY 1999
APPROP CODE/BA: OPAF/OTHER BASE MAINTENANCE & SUPPORT EQUIPMENT	**P-1 NOMENCLATURE:** MECHANIZED MATERIAL HANDLING EQUIPMENT

ITEM / FISCAL YEAR	QTY.	UNIT COST	LOCATION OF PCO	CONTRACT METHOD & TYPE	CONTRACTOR AND LOCATION	AWD. DATE	DATE FIRST DEL.	SPECS AVAIL NOW	DATE REV. AVAIL
FY 01		300000	AFMC/LSO	C/FFP	UNKNOWN	MAY 01	SEP 01	N	NOV 00
12. USAF-WIDE/AIT									
SHAW AFB, SC & EGLIN AFB									
SUPPLY ASSET TRACKING									
SYSTEM (SATS) CONVERSION									
TO ORACLE									
FY 98		350000	AFMC/LSO	MIPR/OPT/FFP	FEDSIM [3] / LOGICON-SYSCON WILLIAMSBURG, VA	FEB 98	JUL 98		
SHAW AFB & EGLIN AFB									
SATS RADIO FREQUENCY									
CARGO MOVEMENT									
OPERATING SYSTEM									
INTERFACE									
FY 98		165000	AFMC/LSO	MIPR/OPT/FFP	FEDSIM [3] / LOGICON-SYSCON WILLIAMSBURGH, VA	SEP 98	FEB 99		

BUDGET PROCUREMENT HISTORY PLANNING (EXHIBIT P- 5A)	DATE: FEBRUARY 1999
APPROP CODE/BA: OPAF/OTHER BASE MAINTENANCE & SUPPORT EQUIPMENT	**P-1 NOMENCLATURE:** MECHANIZED MATERIAL HANDLING EQUIPMENT

ITEM / FISCAL YEAR	QTY.	UNIT COST	LOCATION OF PCO	CONTRACT METHOD & TYPE	CONTRACTOR AND LOCATION	AWD. DATE	DATE FIRST DEL.	SPECS AVAIL NOW	DATE REV. AVAIL
SHAW AFB & EGLIN AFB									
SATS PHASE II									
FY 98		600000	AFMC/LSO	MIPR/OPT/FFP	FEDSIM [3] / LOGICON-SYSCON WILLIAMSBURGH, VA	SEP 98	MAR 99		
HOLLOMAN AFB, NM									
BARE BASE INVENTORY									
PHASE II									
FY 98		341000	AFMC/LSO	MIPR/OPT/FFP	FEDSIM [3] / LOGICON-SYSCON WILLIAMSBURGH, VA	MAY 99	SEP 99	N	FEB 99
LACKLAND AFB, TX									
CLOTHING SALES SYS									

BUDGET PROCUREMENT HISTORY PLANNING (EXHIBIT P- 5A)	DATE: FEBRUARY 1999
APPROP CODE/BA: OPAF/OTHER BASE MAINTENANCE & SUPPORT EQUIPMENT	**P-1 NOMENCLATURE:** MECHANIZED MATERIAL HANDLING EQUIPMENT

ITEM / FISCAL YEAR	QTY.	UNIT COST	LOCATION OF PCO	CONTRACT METHOD & TYPE	CONTRACTOR AND LOCATION	AWD. DATE	DATE FIRST DEL.	SPECS AVAIL NOW	DATE REV. AVAIL
FY98		20000	AFMC/LSO	OPT/FFP	INTERMEC CORP (4)	JAN 99	MAR 99		
					EVERETT, WA				
EGLIN, FL									
EGRESS EQUIP TRACKING									
SYSTEM									
FY 98		48000	AFMC/LSO	OPT/FFP	INTERMEC CORP (4)	SEP 98	FEB 99		
					EVERETT, WA				
USAFA COLORADO SPRINGS									
CO PHASE I									
AF ACADEMY SMART CARD									
FY 98		250000	AFMC/LSO	OPT/FFP	INTERMEC CORP (4)	JUL 98	MAR 99		
					EVERETT, WA				
NELLIS AFB, NV									
TOOL CONTROL SYS									

BUDGET PROCUREMENT HISTORY PLANNING (EXHIBIT P- 5A)	DATE: FEBRUARY 1999
APPROP CODE/BA: OPAF/OTHER BASE MAINTENANCE & SUPPORT EQUIPMENT	**P-1 NOMENCLATURE:** MECHANIZED MATERIAL HANDLING EQUIPMENT

ITEM / FISCAL YEAR	QTY.	UNIT COST	LOCATION OF PCO	CONTRACT METHOD & TYPE	CONTRACTOR AND LOCATION	AWD. DATE	DATE FIRST DEL.	SPECS AVAIL NOW	DATE REV. AVAIL
FY 98		135000	AFMC/LSO	MIPR/OPT/FFP	FEDSIM [3] / CDO TECHNOLOGIES	FEB 98	JUL 98		
					DAYTON, OH				
EGLIN AFB, FL									
MOBILITY INVENTORY									
CONTROL ACCOUNTABILITY									
SYSTEM									
FY 98		106000	AFMC/LSO	OPT/FFP	INTERMEC CORP (4)	JUN 98	DEC 98		
					EVERETT, WASH				
EGLIN AFB & SHAW AFB									
SATS									
DEFENSE REUSE MGMT									
SYSTEM									
FY 99		600000	AFMC/LSO	MIPR/OPT/FFP	FEDSIM [3] / LOGICON-SYSCOM WILLAMSBURGH, VA	JUN 99	SEP 99	N	APR 99

BUDGET PROCUREMENT HISTORY PLANNING (EXHIBIT P- 5A)	DATE: FEBRUARY 1999
APPROP CODE/BA: OPAF/OTHER BASE MAINTENANCE & SUPPORT EQUIPMENT	**P-1 NOMENCLATURE:** MECHANIZED MATERIAL HANDLING EQUIPMENT

ITEM / FISCAL YEAR	QTY.	UNIT COST	LOCATION OF PCO	CONTRACT METHOD & TYPE	CONTRACTOR AND LOCATION	AWD. DATE	DATE FIRST DEL.	SPECS AVAIL NOW	DATE REV. AVAIL
NELLIS AFB, NV									
TOOL CONTROL SYS									
FY 99		400000	AFMC/LSO	MIPR/OPT/FFP	FEDSIM [3] / CDO TECHNOLOGIES	APR 99	AUG 99	N	FEB 99
					DAYTON, OH				
HILL AFB, UT									
EGRESS EQUIP TRACK SYS									
FY 99		400000	AFMC/LSO	MIPR/OPT/FFP	FEDSIM [3] / CDO TECHNOLOGIES	JUL 99	SEP 99	N	MAY 99
					DAYTON, OH				
USAFA COLORADO SPRINGS									
CO PHASE II									
AF ACADEMY SMART CARD									

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BUDGET PROCUREMENT HISTORY PLANNING (EXHIBIT P- 5A)	DATE: FEBRUARY 1999
APPROP CODE/BA: OPAF/OTHER BASE MAINTENANCE & SUPPORT EQUIPMENT	**P-1 NOMENCLATURE:** MECHANIZED MATERIAL HANDLING EQUIPMENT

ITEM / FISCAL YEAR	QTY.	UNIT COST	LOCATION OF PCO	CONTRACT METHOD & TYPE	CONTRACTOR AND LOCATION	AWD. DATE	DATE FIRST DEL.	SPECS AVAIL NOW	DATE REV. AVAIL
FY 99		343000	AFMC/LSO	OPT/FFP	INTERMEC CORP (4)	APR 99	AUG 99	N	FEB 99
					EVERETT, WA				
EGLIN AFB, FL									
MOBILITY INVENTORY									
CONTROL ACCOUNTABILITY									
SYS ENHANCEMENTS									
EXEC SUPPORT SYS									
FY 99		150000	AFMC/LSO	OPT/FFP	INTERMEC CORP (4)	APR 99	JUL 99	N	FEB 99
					EVERETT, WA				
EGLIN AFB, FL									
SATS/ INTEGRATED									
MAINTENANCE DATA									
SYSTEM									
FY 00		600000	AFMC/LSO	MIPR/OPT/FFP	FEDSIM [3] / LOGICON-SYSCON WILLIAMSBURG, VA	FEB 00	SEP 00	N	JAN 00

BUDGET PROCUREMENT HISTORY PLANNING (EXHIBIT P- 5A)	DATE: FEBRUARY 1999
APPROP CODE/BA: OPAF/OTHER BASE MAINTENANCE & SUPPORT EQUIPMENT	**P-1 NOMENCLATURE:** MECHANIZED MATERIAL HANDLING EQUIPMENT

ITEM / FISCAL YEAR	QTY.	UNIT COST	LOCATION OF PCO	CONTRACT METHOD & TYPE	CONTRACTOR AND LOCATION	AWD. DATE	DATE FIRST DEL.	SPECS AVAIL NOW	DATE REV. AVAIL
EGLIN AFB, FL									
SATS AMMO									
FY 00		475000	AFMC/LSO	MIPR/OPT/FFP	FEDSIM [3] / LOGICON-SYSCON WILLIAMSBURG, VA	JAN 00	AUG 00	N	DEC 99
NELLIS AFB, NV									
RED FLAG									
EXERCISE SUPPORT									
FY 00		425000	AFMC/LSO	MIPR/OPT/FFP	FEDSIM [3] / CDO TECHNOLOGIES	FEB 00	AUG 00	N	JAN 00
					DAYTON, OH				
SCOTT AFB, IL									
VEHICLE TRACKING									

BUDGET PROCUREMENT HISTORY PLANNING (EXHIBIT P- 5A)	DATE: FEBRUARY 1999
APPROP CODE/BA: OPAF/OTHER BASE MAINTENANCE & SUPPORT EQUIPMENT	**P-1 NOMENCLATURE:** MECHANIZED MATERIAL HANDLING EQUIPMENT

ITEM / FISCAL YEAR	QTY.	UNIT COST	LOCATION OF PCO	CONTRACT METHOD & TYPE	CONTRACTOR AND LOCATION	AWD. DATE	DATE FIRST DEL.	SPECS AVAIL NOW	DATE REV. AVAIL
WORK ORDER GENERATION									
FY 00		400000	AFMC/LSO	MIPR/OPT/FFP	FEDSIM [3] / CDO TECHNOLOGIES	MAR 00	OCT 00	N	FEB 00
					WILLIAMSBURG, VA				
LACKLAND AFB, TX									
CRYPTO INVENTORY									
CONTROL SYSTEM									
FY 00		292000	AFMC/LSO	MIPR/OPT/FFP	FEDSIM [3] / LOGICON-SYSCON	JAN 00	AUG 00	N	DEC 99
					WILLIAMBURG, VA				
KIRKLAND AFB, NM									
ARMORY TRACKING									
FY 01		650000	AFMC/LSO	OPT/FFP	INTERMEC CORP (4)	JAN 01	AUG 01	N	DEC 00
					EVERETT, WA				
HILL AFB, UT									
HAZARDOUS MATERIAL									
MGMT SYSTEM									

BUDGET PROCUREMENT HISTORY PLANNING (EXHIBIT P- 5A)	DATE: FEBRUARY 1999
APPROP CODE/BA: OPAF/OTHER BASE MAINTENANCE & SUPPORT EQUIPMENT	**P-1 NOMENCLATURE:** MECHANIZED MATERIAL HANDLING EQUIPMENT

ITEM / FISCAL YEAR	QTY.	UNIT COST	LOCATION OF PCO	CONTRACT METHOD & TYPE	CONTRACTOR AND LOCATION	AWD. DATE	DATE FIRST DEL.	SPECS AVAIL NOW	DATE REV. AVAIL
FY 01		594000	AFMC/LSO	OPT/FFP	INTERMEC CORP (4)	FEB 01	OCT 01	N	JAN 01
					EVERETT, WA				
WRIGHT PATT AFB, OH									
HOSPITAL TRACKING SYS									
FY 01		500000	AFMC/LSO	MIPR/OPT/FFP	FEDSIM [3] / LOGICON-SYSCON WILLIAMSBURG, VA	MAR 01	SEP 01	N	FEB 01
MAXWELL AFB,									
AF DISTANCE CLEARING									
CENTER									
FY 01		350000	AFMC/LSO	MIPR/OPT/FFP	FEDSIM [3] / CDO TECHNOLOGIES DAYTON, OH	MAR 01	JUL 01	N	FEB 01
12. A. USAF-WIDE/SATS									
EDWARDS AFB, CA, (AFMC)									
FY 99		500000	AFMC/LSO	MIPR/OPT/FFP	FEDSIM [3] / LOGICON-SYSCON WILLIAMSBURG, VA	APR 99	DEC 99	N	FEB 99

BUDGET PROCUREMENT HISTORY PLANNING (EXHIBIT P- 5A)	DATE: FEBRUARY 1999
APPROP CODE/BA: OPAF/OTHER BASE MAINTENANCE & SUPPORT EQUIPMENT	**P-1 NOMENCLATURE:** MECHANIZED MATERIAL HANDLING EQUIPMENT

ITEM / FISCAL YEAR	QTY.	UNIT COST	LOCATION OF PCO	CONTRACT METHOD & TYPE	CONTRACTOR AND LOCATION	AWD. DATE	DATE FIRST DEL.	SPECS AVAIL NOW	DATE REV. AVAIL
HURLBURT FLD, FL, (AFSOC)									
FY 99		500000	AFMC/LSO	MIPR/OPT/FFP	FEDSIM [3] / LOGICON-SYSCON WILLIAMSBURG, VA	APR 99	DEC 99	N	FEB 99
PETERSON AFB, CO, (AFSPC)									
FY 99		500000	AFMC/LSO	MIPR/OPT/FFP	FEDSIM [3] / LOGICON-SYSCON WILLIAMSBURG, VA	MAY 99	DEC 99	N	MAR 99
ELMENDORF AFB, AK, (PACAF)									
FY 99		625000	AFMC/LSO	MIPR/OPT/FFP	FEDSIM [3] / LOGICON-SYSCON WILLIAMSBURG, VA	JUN 99	DEC 99	N	APR 99
HICKAM AFB, HI, (PACAF)									
FY 99		625000	AFMC/LSO	MIPR/OPT/FFP	FEDSIM [3] / LOGICON-SYSCON WILLIAMSBURG, VA	JUN 99	DEC 99	N	APR 99

BUDGET PROCUREMENT HISTORY PLANNING (EXHIBIT P- 5A)	DATE: FEBRUARY 1999
APPROP CODE/BA: OPAF/OTHER BASE MAINTENANCE & SUPPORT EQUIPMENT	**P-1 NOMENCLATURE:** MECHANIZED MATERIAL HANDLING EQUIPMENT

ITEM / FISCAL YEAR	QTY.	UNIT COST	LOCATION OF PCO	CONTRACT METHOD & TYPE	CONTRACTOR AND LOCATION	AWD. DATE	DATE FIRST DEL.	SPECS AVAIL NOW	DATE REV. AVAIL
KUNSAN AB, KOREA, (PACAF)									
FY 99		625000	AFMC/LSO	MIPR/OPT/FFP	FEDSIM [3] / LOGICON-SYSCON WILLIAMSBURG ,VA	JUL 99	DEC 99	N	MAY 99
OSAN AB, KOREA, (PACAF)									
FY 99		625000	AFMC/LSO	MIPR/OPT/FFP	FEDSIM [3] / LOGICON-SYSCON WILLIAMSBURG, VA	JUL 99	DEC 99	N	MAY 99

REMARKS:
(1) Storage Aid Systems (SAS) funding is sent to various Major Command Contracting Offices for execution. Dollars represent total project costs. Examples of contractors associated with SAS Projects are: Spacesaver Storage, Las Cruces, NM; Brooks, Glendors, CA; and Horsley Co., Ogden, UT. Award and Delivery dates represent the date of LAST award and delivery.
(2) Kadena project consists of three phases: Mech of Inbound Air Freight for $6M in FY99, Mech of Outbound Small Parts Handling for $6M in FY00, and Prepack Dock for $2.5M in FY00. FY99 contract for the Inbound Air Freight will include options for awarding the other two phases of the project.
(3) FEDSIM - Federal System Integration and Management Center at Falls Church, VA.
(4) Original contract signed in 1994. Options are renewed each year as task order contracts.
(5) Award date changed from Dec 98 to Jul 99 due to delay in MCP

BUDGET ITEM JUSTIFICATION (EXHIBIT P-40)	DATE: FEBRUARY 1999
APPROP CODE/BA: OPAF/OTHER BASE MAINTENANCE & SUPPORT EQUIPMENT	**P-1 NOMENCLATURE:** ITEMS LESS THAN $5,000,000 (BASE INDUSTRIAL SUPPORT EQ)

	FY1998	FY1999	FY2000	FY2001	FY2002	FY2003	FY2004	FY2005
QUANTITY								
COST (in Thousands)	$3,995	$4,124	$8,533	$9,241	$9,382	$12,174	$12,442	$12,716

Description:

1. This program provides a wide range of industrial equipment for base-level industrial shops used in support of aircraft, communications, welding shops, electronic components, and paint shops. This equipment is used in the repair of engines, hydraulic/pneudraulic systems, landing gear, airframe components and instruments. Also included in this program is state-of-the-art equipment required to upgrade and replace the antiquated metalworking equipment in Air Force base maintenance shops. As this type of equipment reaches its life expectancy, it must be replaced to prevent work stoppage in the repair and manufacture of critical weapon system components. Replacement of this type of equipment is a continual, proactive process necessary to prevent out-of-tolerance conditions that lead to excessive downtimes for the equipment and the components they repair.

2. This line has historically been underfunded. In the past, dollars were reprogrammed to BARE BASE and Medical Dental requirements. Today, both totally fund their own requirements. Funding of Base Industrial Support Equipment requirements will go from 58 percent in FY99, to 78 percent in FY00, to 88 percent in FY01.

3. FY00/01 funding procures both initial shortages as well as replacement equipment which is facing obsolescence. All items have an annual procurement value of less than $5,000,000 and are Code A. Items requested in FY00 and FY01 are identified on the following P-40a.

BUDGET ITEM JUSTIFICATION FOR AGGREGATED ITEMS (EXHIBIT P- 40A-IL)	DATE: FEBRUARY 1999
APPROP CODE/BA: OPAF/OTHER BASE MAINTENANCE & SUPPORT EQUIPMENT	**P-1 NOMENCLATURE:** ITEMS LESS THAN $5,000,000 (BASE INDUSTRIAL SUPPORT EQ)

PROCUREMENT ITEMS	NSN	FY2000 QTY.	FY2000 COST	FY2001 QTY.	FY2001 COST
BENDING MACHINE	3441009384573	3	$1,164		
FSC 3220 - WOODWORKING MACHINES			$700		$180
FSC 3405 - SAWS & FILING MACHINES			$365		$232
FSC 3408 - MACHINING CENTERS			$631		
FSC 3415 - GRINDING MACHINES			$1182		$1233
FSC 3416 - LATHES			$149		$1188
FSC 3417 - MILLING MACHINES			$1182		$1733
FSC 3419 - MISC. MACHINE TOOLS			$192		$218
FSC 3424 - METAL HEAT TREATING EQUIPMENT			$341		$255
FSC 3426 - METAL FINISHING EQUIPMENT			$32		$43
FSC 3431 - ELECTRIC ARC WELDING EQUIPMENT			$562		$647
FSC 3432 - ELEC. RESISTANCE WELDING			$8		$93
FSC 3433 - GAS WELD,HEAT CUT/METAL					$42
FSC 3438 - MISC. WELDING EQUIPMENT					$186
FSC 3441 - BENDING/FORMING MACHINE			$1182		$733
FSC 3445 - PUNCHING & SHEARING MACHNE			$62		$1878
FSC 3448 - RIVETING MACHINES					$119
FSC 3750 - GARDENING IMPLEMENT/TOOLS			$7		

BUDGET ITEM JUSTIFICATION FOR AGGREGATED ITEMS (EXHIBIT P- 40A-IL)	DATE: FEBRUARY 1999
APPROP CODE/BA: OPAF/OTHER BASE MAINTENANCE & SUPPORT EQUIPMENT	**P-1 NOMENCLATURE:** ITEMS LESS THAN $5,000,000 (BASE INDUSTRIAL SUPPORT EQ)

PROCUREMENT ITEMS	NSN	FY2000 QTY.	FY2000 COST	FY2001 QTY.	FY2001 COST
FSC 4430 - INDUSTRIAL FURNACES			$184		$252
FSC 4440 - DRIERS/DEHYDRATORS			$3		
FSC 4940 - MISC SPECIALIZED MAINT.					$1
FSC 3411- BORING MACHINES			$12		
FSC 3413 - DRILLING MACHINES			$56		
FSC 3446 - FORGING MACHINES			$26		$79
FSC 3750 - MACHINE SHOP SETS			$493		$129
TOTALS:			$8,533		$9,241

BUDGET ITEM JUSTIFICATION (EXHIBIT P-40)	DATE: FEBRUARY 1999
APPROP CODE/BA: OPAF/OTHER BASE MAINTENANCE & SUPPORT EQUIPMENT	**P-1 NOMENCLATURE:** FLOODLIGHTS

	FY1998	FY1999	FY2000	FY2001	FY2002	FY2003	FY2004	FY2005
QUANTITY								
COST (in Thousands)	$6,196	$10,708	$13,461	$10,718	$6,906	$6,976	$1,631	$0

Description:

1. Floodlights are one of the most valuable and versatile pieces of support equipment in the Air Force inventory. They are used in many facets of maintenance operations including performing night maintenance on aircraft, loading and unloading cargo, and providing essential emergency lighting. They are also required for perimeter defense, emergency disaster coverage, aircraft accident on-site investigations, auxilliary power for air conditioners and portable x-ray equipment, and for rapid runway repairs.

2. The current NF-2 floodlights were procured as early as 1960 and some of the units are still in the inventory. All currently fielded NF-2 and unmodified NF-2D's have exceeded their useful service life which is approximately 12 years. Spare parts are no longer available through contractor sources for repair of the floodlight sets. In FY97, a new contract for the FL-1D floodlight was awarded to Unicor (Prison Industries), Big Springs, Texas. The FL-1D consisting of a tower for mounting two 1,000 watt floodlights, power distribution equipment, and a diesel engine driven generator set is permanently mounted on a 4-wheel trailer type chassis. FY98-01 continues funding for procurement of floodlights.

WEAPON SYSTEM COST ANALYSIS (EXHIBIT P- 5)		DATE: FEBRUARY 1999
APPROP CODE/BA: OPAF/OTHER BASE MAINTENANCE & SUPPORT EQUIPMENT	**P-1 NOMENCLATURE:** FLOODLIGHTS	

WEAPON SYSTEM COST ELEMENTS	IDENT CODE	FY1998			FY1999			FY2000			FY2001		
		QTY	UNIT COST	TOTAL COST	QTY	UNIT COST	TOTAL COST	QTY	UNIT COST	TOTAL COST	QTY	UNIT COST	TOTAL COST
FL-1D FLOODLIGHT				{6196}			{10708}			{13461}			{10718}
FL-1D	A	400	12252	4,901	767	13961	10,708	948	14199	13461	741	14464	10,718
DATA				1,256									
TECH ORDERS				39									
TOTALS:				6,196			10,708			13,461			10,718

REMARKS:
DATA INCLUDES TESTING, TEST REPORTS, AND INITIAL START UP COSTS INCURRED BY UNICOR.

	P-1 ITEM NO: 90		PAGE NO: 74		Page 1 of 1

BUDGET PROCUREMENT HISTORY PLANNING (EXHIBIT P- 5A) | **DATE:** FEBRUARY 1999

APPROP CODE/BA:
OPAF/OTHER BASE MAINTENANCE & SUPPORT EQUIPMENT

P-1 NOMENCLATURE:
FLOODLIGHTS

ITEM / FISCAL YEAR	QTY.	UNIT COST	LOCATION OF PCO	CONTRACT METHOD & TYPE	CONTRACTOR AND LOCATION	AWD. DATE	DATE FIRST DEL.	SPECS AVAIL NOW	DATE REV. AVAIL
FL-1D FLOODLIGHT									
FY98	400	12252	AFMC/SA-ALC	MIPR/FPE	UNICOR, BIG SPRINGS, TX	OCT 97	DEC 98		
FY99	767	13961	AFMC/SA-ALC	MIPR/FPE	UNICOR, BIG SPRINGS, TX	NOV 98	JUN 99	Y	
FY00	948	14199	AFMC/SA-ALC	MIPR/FPE	UNICOR, BIG SPRINGS, TX	NOV 99	APR 00	Y	
FY01	741	14464	AFMC/SA-ALC	MIPR/FPE	UNICOR, BIG SPRINGS, TX	NOV 00	APR 01	Y	

REMARKS:
THE FEDERAL ACQUISITION REGULATION (FAR) DIRECTS THAT FEDERAL PRISON INDUSTRIES (UNICOR) BE GIVEN THE RIGHT OF FIRST REFUSAL FOR EQUIPMENT CONTRACTS FOR FEDERAL STOCK CLASS 6230. THE AF SUBMITTED A MIPR TO UNICOR IN JAN 1997 FOR INITIAL PRODUCTION OF THREE OPERATIONAL TEST & EVALUATION UNITS. IN AUG 1997, UNICOR AWARDED A CONTRACT TO A "MANUFACTURING PARTNER", T&J MFG, INC, OSHKOSH, WI, FOR PRODUCTION OF FLOODLIGHT PARTS.
UNIT COSTS ARE CALCULATED EACH FISCAL YEAR BASED ON REVISED ECONOMIC ASSUMPTIONS AND MATERIAL COSTS.

BUDGET ITEM JUSTIFICATION (EXHIBIT P-40)	DATE: FEBRUARY 1999
APPROP CODE/BA: OPAF/OTHER BASE MAINTENANCE & SUPPORT EQUIPMENT	**P-1 NOMENCLATURE:** ITEMS LESS THAN $5,000,000 (ELECTRICAL EQ)

	FY1998	FY1999	FY2000	FY2001	FY2002	FY2003	FY2004	FY2005
QUANTITY								
COST (in Thousands)	$1,737	$2,356	$7,638	$7,187	$6,026	$6,159	$10,295	$10,434

Description:

1. This program includes electrical power generators, switches, transformers and controls, connectors and portable lighting equipment for power distribution for use throughout the Air Force. These items support communications systems, radar systems, aircraft maintenance shops, hospitals, maintenance shelters, civil engineering functions and test ranges, and are used for daily operations as well as contingencies, natural disasters and war reserve material. Lack of funding will not only affect the operational readiness capability of aircraft, communications and base support missions, but will also degrade implementation of DoD directives for fuel standardization and emissions control.

2. FY00 and FY01 funding procures both initial shortages as well as replacement equipment which is facing obsolescence. All items have an annual procurement value of less than $5,000,000 and are Code A. Items requested for procurement in FY00 and FY01 are identified on the following P-40a.

3. The following item listed on the P-40a was funded in a discrete P-1 line in prior years:

Item	Previously Funded in P-1 Line
Power Plant 60KW/400HZ, AN/MJQ-1632	Generators, Mobile Electric, P-1 Line #89

BUDGET ITEM JUSTIFICATION FOR AGGREGATED ITEMS (EXHIBIT P- 40A-IL)	DATE: FEBRUARY 1999
APPROP CODE/BA: OPAF/OTHER BASE MAINTENANCE & SUPPORT EQUIPMENT	**P-1 NOMENCLATURE:** ITEMS LESS THAN $5,000,000 (ELECTRICAL EQ)

PROCUREMENT ITEMS	NSN	FY2000 QTY.	FY2000 COST	FY2001 QTY.	FY2001 COST
POWER PLANT, 60KW/400HZ, AN/MJQ-1632	6115013640157	18	$1,794	28	$2,843
GENERATOR, MEP 831A	6115012853012	150	$1,318	67	$600
GENERATOR, MEP 805A	6115012747389	45	$977	100	$2,210
POWER PLANT, AN/MJQ-37	6115012996035	14	$527		
GENERATOR, MEP 803A	6115012755061	40	$466	40	$475
GENERATOR, MEP 802A, 5KW	6115012747387	30	$308	75	$784
GENERATOR, MEP 816A	6115012747395	7	$196		
POWER DISTRIBUTION PANEL, 15KW	6110012363829YV	184	$546		
POWER DISTRIBUTION PANEL, 60KW	6110012374637YV	160	$569		
LIPS, 3KW	6115012561059	52	$80	80	$128
POWER PLANT, AN/MJQ-40	6115012996033			1	$68
MINOR PROJECTS					
FSC 6115 - GENERATORS - PWR PLANTS			$857		$79
TOTALS:			$7,638		$7,187

	P-1 ITEM NO: 91		PAGE NO: 77		Page 1 of 1

BUDGET ITEM JUSTIFICATION (EXHIBIT P-40)	DATE: FEBRUARY 1999
APPROP CODE/BA: OPAF/OTHER BASE MAINTENANCE & SUPPORT EQUIPMENT	**P-1 NOMENCLATURE:** BASE PROCURED EQUIPMENT

	FY1998	FY1999	FY2000	FY2001	FY2002	FY2003	FY2004	FY2005
QUANTITY								
COST (in Thousands)	$6,974	$7,725	$14,035	$14,970	$7,110	$7,265	$7,088	$7,138

Description:

1. Bases and units throughout the Air Force require and are authorized equipment that must be acquired directly from General Services Administration (GSA), Defense Logistics Agency (DLA), one of the other services, or from commercial sources. This results from federal policy to relieve the services of wholesale management of non-military and commercial items to reduce cost. Base Procured Equipment (BPE) provides funds for local procurement of equipment costing $100,000 or more which is not centrally managed and procured. Equipment examples include roads and grounds maintenance equipment; vehicle maintenance shop equipment; vehicle corrosion control equipment; specialized tool kits and test equipment, civil engineering maintenance, electrical and carpenter shop equipment; specialized laboratory equipment; kitchen and dining facilities equipment; printing plant equipment; air conditioning equipment; heating equipment; microfilm equipment; and graphics equipment.

2. The equipment described above is needed for day-to-day maintenance and operation of bases, weapons and support systems and for support of both active and air reserve forces. The program supports installations at multiple major commands. Requirements and priorities are affected by assignment and conversion of new equipment; reorganizations; natural disasters; new operational methods to increase efficiency and safety; beddown of new weapon systems; and energy conservation initiatives.

3. BPE resources programmed by Air Force major commands and/or field operating agencies are displayed on the following P-40a Budget Exhibit. Increased funding in FY00 and 01 is largely due to funds programmed by the Air National Guard and Air Force Reserves to procure ammunition training simulators.

	P-1 ITEM NO: 92		PAGE NO: 78		Page 1 of 1

BUDGET ITEM JUSTIFICATION FOR AGGREGATED ITEMS (EXHIBIT P- 40A) | **DATE:** FEBRUARY 1999

APPROP CODE/BA:
OPAF/OTHER BASE MAINTENANCE & SUPPORT EQUIPMENT

P-1 NOMENCLATURE:
BASE PROCURED EQUIPMENT

PROCUREMENT ITEMS	ID CODE	FY1998		FY1999		FY2000		FY2001	
		QTY.	COST	QTY.	COST	QTY.	COST	QTY.	COST
1. PACIFIC AIR FORCES	A		$794		$300		$591		$591
2. AF SPEC OPERATIONS CMD	A		$240		$243		$248		$256
3. AIR COMBAT CMD	A		$2,573		$2,907		$2,865		$2,850
4. US AIR FORCES EUROPE	A		$625		$630		$631		$636
5. AIR FORCE SPACE CMD	A		$850		$485		$477		$475
6. AF COMM SERVICE	A				$243		$238		$237
7. AIR MOBILITY CMD	A		$120		$340		$344		$352
8. AIR NATIONAL GUARD	A		$800		$1,800		$4,775		$4,750
9. AIR FORCE RESERVES	A						$2,366		$3,040
9. AIR EDUCATION & TRNG CMD	A		$615		$534		$535		$542
10. US AIR FORCE ACADEMY	A		$357		$243		$544		$1241
11. AF CIVIL ENGR SPT AGENCY	A						$421		
Totals:			$6,974		$7,725		$14,035		$14,970

Remarks:

	P-1 ITEM NO: 92		PAGE NO: 79		Page 1 of 1

BUDGET ITEM JUSTIFICATION (EXHIBIT P-40)	DATE: FEBRUARY 1999
APPROP CODE/BA: OPAF/OTHER BASE MAINTENANCE & SUPPORT EQUIPMENT	**P-1 NOMENCLATURE:** MEDICAL/DENTAL EQUIPMENT

	FY1998	FY1999	FY2000	FY2001	FY2002	FY2003	FY2004	FY2005
QUANTITY								
COST (in Thousands)	$9,946	$8,681	$14,331	$17,193	$15,616	$14,087	$14,500	$14,837

Description:

1. Medical/Dental War Reserve Material (WRM) Equipment supports Air Force medical readiness and contingency requirements. Medical WRM allows the Air Force to rapidly deploy medical capability to forward operating locations. Adequate deployable medical capability is required for force protection. During the Cold War, the Air Force had large hospitals throughout Europe ready to receive casualties during a conflict with Warsaw Pact countries. New doctrine requires the Air Force to maintain medical readiness assets in CONUS capable of being transported via cargo aircraft to any location in the world; and upon arrival, quickly set up, and be ready to treat casualties. In many cases, typical hospital equipment cannot be used because it is too fragile, too heavy, or incompatible with operating in a cold, humid or contaminated environment. The major function of medical WRM equipment is to provide preventive medicine capabilities; to keep Wounded in Action (WIA) personnel alive until definitive care can be provided; and return less critically injured personnel to their units as quickly as possible.

2 The following WRM equipment items/projects are funded by this program:

a. Chemically Hardened Air Transportable Hospital (CHATH) Multi-Component Equipment Project: As the research about Persian Gulf illnesses continues, the evidence is clear that even a small exposure to chemical and biological agents can cause great bodily harm. Soldiers and airmen in the field usually have some short warning about an incoming missile attack to don their gas mask and other protective gear. WIA in a field air transportable hospital (ATH) may be unconscious, on a respirator, or otherwise unable to take protective measures. Medical personnel may also be involved in surgical procedures. The solution to caring for WIA is to protect the entire ATH by securing an airtight seal, hardened against chemical attacks. The CHATH is an Air Force field hospital consisting of an operating room, wards for 50 beds, a laboratory, and

BUDGET ITEM JUSTIFICATION (EXHIBIT P-40)	DATE: FEBRUARY 1999
APPROP CODE/BA: OPAF/OTHER BASE MAINTENANCE & SUPPORT EQUIPMENT	**P-1 NOMENCLATURE:** MEDICAL/DENTAL EQUIPMENT

Description (cont.):
equipment necessary for resuscitative surgery, postoperative stabilization, support services, general medical care, dental care, and psychiatric care. The CHATH shelter is formed of sections of the Tent, Extendable, Modular, Personnel (TEMPER) in which a chemical/biological protective liner is installed and an over-pressure environment is created. Prior year funding procured four air locks and 30 liner sets. These air locks allow the movement of medicine, food, water, and wastes in/out of the CHATH without compromising hospital cleanliness or compromising chemical/biological protection. No FY00/01 funding is requested.

b. Chemically Hardened Air Management Plants (CHAMPS): CHAMPS are a significant component of the CHATH. The contaminated air going in to the CHATH has to be specially filtered to remove contaminants, and the air must be heated or cooled. CHAMPS protect against chemical and biological agents, and enhance environmental cleanliness. CHAMPS must also be able to operate off generators or other power sources. CHAMPS provides the Air Force with the capability to deploy medical personnel to a chemical/biological threat area while minimizing the impact on medical operations. No FY00/01 funding is requested.

c. Air Transportable Hospital (ATH) Water Distribution System: The water distribution system will allow the ATH to receive potable water and eliminate waste water through the protective liner without compromising protection. Currently, potable water has to be carried in, and personnel (staff and patients) have to leave the CHATH to eliminate waste. This process hampers care whenever the ATH is used, even when a chemical/biological agent is not present. FY98 and FY99 funds will ensure a water system is present that will protect against infection from waste products by removing waste products from the clinical environment. FY98 funding procured the initial ATH Water Distribution System and FY99 will procure 10 units. One entire system includes the following major components: clean bladder, piping, pumps, and various valves, all packed and containerized. FY00 funding buys out the Air Force requirement for this item. No FY01 funding is requested.

d. Civil Reserve Air Fleet (CRAF) Shipsets: During a major contingency, the Air Force does not have enough aircraft in its inventory to dedicate cargo aircraft to the singular mission of transporting WIA from forward locations to CONUS. The solution is to lease commercial airliners (a contract is available), remove the seats, and replace them with litter stations. The litter stations are also called shipsets. The shipsets

BUDGET ITEM JUSTIFICATION (EXHIBIT P-40)	DATE: FEBRUARY 1999
APPROP CODE/BA: OPAF/OTHER BASE MAINTENANCE & SUPPORT EQUIPMENT	**P-1 NOMENCLATURE:** MEDICAL/DENTAL EQUIPMENT

Description (cont.):

are kits that will reconfigure commercial Boeing 767 aircraft into flying ambulances. Commercial airports have jet-ways from which passengers enter and leave the aircraft. At deployed locations, ramps are required to load patients on the B-767s. The current system for loading litter patients is time intensive and requires aircraft maintenance equipment. The Air Force requirement was procured with prior year funding. No FY00/01 funding is requested.

e. Theater Medical Information Program (TMIP): TMIP is an integrated program that consolidates all DoD medical information systems. Wartime medical communication requirements are radically different from peacetime requirements. Commanders require information on WIA--type, numbers, location; reports detailing casualty location and medical status from the front line to rear echelons; logistical data - resource consumption information, supply inventories, data on what is in the logistical pipeline, when it will be available, and what materiel can be diverted to satisfy a higher priority; and medical personnel - matching medical/surgical capability and availability/locations with WIA requirements. Current medical wartime communications infrastructure consists of readily available land lines and radio technology circa 1959. TMIP provides inter/intra unit medical communications systems for ground and Air Force theater medical units, utilizing secure and nonsecure telephone, wireless and satellite media for transport of information. The result will be a deployable, organic medical information infrastructure capable of transmitting voice, electronic mail, data and images, which is interoperable with other services/communications systems. It will integrate new and existing high frequency and ultra high frequency radios, satellite communications and computer systems, and wireless, lightweight intra-crew communication devices for medical crews. FY00/01 funding will include all information management hardware required for the TMIP system. Associated FY99 Research and Development funds to accomplish proof-of-concept testing on existing commercially available systems to ensure compliance with Air Force standards will be accomplished by the Human System Center (HSC), Brooks AFB, Texas. Reference PE 64703 in the Air Force Descriptive Summaries.

f. Modernization and Replacement: This program provides for replacement and modernization of centrally managed and procured equipment items. These equipment items and components are procured, as funds permits, using a mission based priority system. Funding restraints often dictate procuring less than the inventory objective of each item -- necessitating procurement of several single item requirements to ensure overall

BUDGET ITEM JUSTIFICATION (EXHIBIT P-40)	DATE: FEBRUARY 1999
APPROP CODE/BA: OPAF/OTHER BASE MAINTENANCE & SUPPORT EQUIPMENT	**P-1 NOMENCLATURE:** MEDICAL/DENTAL EQUIPMENT

Description (cont.):
maximum deployable readiness. To maximize the number of 100% ready deployable units, some of each of the following requirements are being procured in FY00-01.

(1) Light Weight Temper Tents
(2) Cable Assemblies
(3) In Flight Kits
(4) Generators, Electric Panels
(5) Pulse Oxymeters
(6) Defibrillators
(7) X-ray Film Processors

g. Spinal Cord Injury Transport System (SCITS): Safe transportation of spinal cord injury patients between medical treatment facilities is necessary to prevent further trauma to the patient. The objective of this SCITS procurement is to ensure that patients with spinal cord injuries, burns, or multiple trauma who must be airlifted significant distances receive the same quality of care in transit that would be available from medical treatment facilities. SCITS will incorporate kinetic therapy including manual side-to-side motion for treating and preventing complications of immobility, skeletal traction, and stability for the spine.

There are several operational performance parameters that are unique to the SCITS design and its aeromedical evacuation mission. SCITS must be sufficiently light and portable so a minimum number of individuals can pick up both it, and the patient, for transport into the medical evacuation aircraft, ambulance, or ambus. Furthermore, this device must fit properly into the standard litter stanchion used onboard those evacuation vehicles. Since medical evacuation aircraft impose additional requirements above and beyond those of an ambulance or ambus, the SCITS must be made of lightweight materials and must be extremely durable to withstand the rigors of flight. Medical evacuation aircraft on which SCITS will be used include the C-9, C-17, C-27, C-130, C-141, and the Civil Reserve Air Fleet (CRAF). FY00/01 funding is requested

BUDGET ITEM JUSTIFICATION (EXHIBIT P-40)	DATE: FEBRUARY 1999
APPROP CODE/BA: OPAF/OTHER BASE MAINTENANCE & SUPPORT EQUIPMENT	**P-1 NOMENCLATURE:** MEDICAL/DENTAL EQUIPMENT

Description (cont.):
these units.

	P-1 ITEM NO: 93		PAGE NO: 84		Page 5 of 5

BUDGET ITEM JUSTIFICATION FOR AGGREGATED ITEMS (EXHIBIT P- 40A)	DATE: FEBRUARY 1999
APPROP CODE/BA: OPAF/OTHER BASE MAINTENANCE & SUPPORT EQUIPMENT	**P-1 NOMENCLATURE:** MEDICAL/DENTAL EQUIPMENT

PROCUREMENT ITEMS	ID CODE	FY1998		FY1999		FY2000		FY2001	
		QTY.	COST	QTY.	COST	QTY.	COST	QTY.	COST
A. CHATH MULTI-COMP. EQ PROJ	A		$1,587		$967				
B. CHAMPS	A	37	$3,551	11	$1,083				
C. ATH WATER DISTRIBUTION SYS	A	1	$170	10	$1,000	12	$1,200		
D. CRAF SHIPSETS	A	42	$2,100						
E. TMIP	A						$8,341		$8,677
F. MODERNIZATION & REPLACE.	A		$2,538		$5,631		$3,332		$6,061
G. SCITS	A					67	$1,458	113	$2,455
Totals:			$9,946		$8,681		$14,331		$17,193

Remarks:

	P-1 ITEM NO: 93		PAGE NO: 85		Page 1 of 1

BUDGET PROCUREMENT HISTORY PLANNING (EXHIBIT P- 5A)	DATE: FEBRUARY 1999
APPROP CODE/BA: OPAF/OTHER BASE MAINTENANCE & SUPPORT EQUIPMENT	**P-1 NOMENCLATURE:** MEDICAL/DENTAL EQUIPMENT

ITEM / FISCAL YEAR	QTY.	UNIT COST	LOCATION OF PCO	CONTRACT METHOD & TYPE	CONTRACTOR AND LOCATION	AWD. DATE	DATE FIRST DEL.	SPECS AVAIL NOW	DATE REV. AVAIL
A. CHATH MULTI-COMP									
EQ PROJ									
FY98	N/A	VAR	AFMC/HSC	OPT/FFP	MULTIPLE (1)	APR 98	AUG 98		
FY99	N/A	VAR	AFMC/HSC	OPT/FFP	MULTIPLE (1)	FEB 99	JUN 99	Y	
B. CHAMPS									
FY98	37	95,972	AFMC/HSC	OPT/FFP	ENGINEERING AIR SYSTEMS, INC. (2)	APR 98	AUG 98		
FY99	11	98,454	AFMC/HSC	OPT/FFP	ENGINEERING AIR SYSTEMS, INC. (2)	MAR 99	APR 00	Y	
					ST. LOUIS, MO.				
C. ATH WATER DIST SYS									
FY98	1	170,000	AFMLO	MIPR/FFP	ARMY/TACOM (3)	JUN 98	FEB 99		
FY99	10	100,000	AFMLO	MIPR/FFP	ARMY/TACOM (3)	AUG 99	OCT 99	Y	
FY00	12	100,000	AFMLO	MIPR/FFP	ARMY/TACOM (3)	DEC 99	SEP 00	Y	
D. CRAF SHIPSETS									
FY98	42	50,000	AFMC/HSC	C/FFP	UPRIGHT, INC, SELMA, CA	AUG 98	JUL 99		

BUDGET PROCUREMENT HISTORY PLANNING (EXHIBIT P- 5A)	DATE: FEBRUARY 1999
APPROP CODE/BA: OPAF/OTHER BASE MAINTENANCE & SUPPORT EQUIPMENT	**P-1 NOMENCLATURE:** MEDICAL/DENTAL EQUIPMENT

ITEM / FISCAL YEAR	QTY.	UNIT COST	LOCATION OF PCO	CONTRACT METHOD & TYPE	CONTRACTOR AND LOCATION	AWD. DATE	DATE FIRST DEL.	SPECS AVAIL NOW	DATE REV. AVAIL
E. TMIP									
FY00	N/A	VAR	AFMC/HSC	C/FFP	UNKNOWN	DEC 99	JUL 00	Y	
FY01	N/A	VAR	AFMC/HSC	OPT/FFP	UNKNOWN	DEC 00	MAR 01	Y	
F. MODERN. & REPLACE.									
FY98	N/A	VAR	AFMLO	C/FFP	MULTIPLE (4)	DEC 97	FEB 98		
FY99	N/A	VAR	AFMLO	C/FFP	MULTIPLE (4)	DEC 98	FEB 99		
FY00	N/A	VAR	AFMLO	C/FFP	MULTIPLE (4)	DEC 99	JAN 00	Y	
FY01	N/A	VAR	AFMLO	C/FFP	MULTIPLE (4)	DEC 00	JAN 01	Y	
G. SCITS									
FY00	67	21,761	AFMC/HSC	C/FFP	UNKNOWN	DEC 99	SEP 00	Y	
FY01	113	21,726	AFMC/HSC	C/FFP	UNKNOWN	DEC 00	SEP 01	Y	

REMARKS:
1. HSC/BROOKS AFB, TX, WILL ACT AS THE INTEGRATOR FOR THE CHATH SYSTEM. MULTIPLE CONTRACTORS ARE INVOLVED; INTELLITEC, INC, DELAND, FL, IS THE CONTRACTOR FOR THE LINERS, THE COSTLIEST COMPONENT OF THE CHATH SYSTEM.
2. PRODUCTION OPTION TO R&D CONTRACT WITH ENGINEERING AIR SYSTEMS, INC., AWARDED IN AUG 1995.

BUDGET PROCUREMENT HISTORY PLANNING (EXHIBIT P- 5A)							DATE: FEBRUARY 1999		
APPROP CODE/BA: OPAF/OTHER BASE MAINTENANCE & SUPPORT EQUIPMENT				P-1 NOMENCLATURE: MEDICAL/DENTAL EQUIPMENT					
ITEM / FISCAL YEAR	QTY.	UNIT COST	LOCATION OF PCO	CONTRACT METHOD & TYPE	CONTRACTOR AND LOCATION	AWD. DATE	DATE FIRST DEL.	SPECS AVAIL NOW	DATE REV. AVAIL
3. AFMLO (AIR FORCE MEDICAL LOGISTICS OFFICE) IS MIPRING FUNDS TO ARMY/TACOM WHO WILL ACT AS BOTH THE CONTRACTING OFFICE AND INTEGRATION FACILITY FOR THE AIR FORCE. 4. AFMLO USES VARIOUS CONTRACTS AT MULTIPLE ALC'S TO EXECUTE MODERNIZATION/REPLACEMENT FUNDING. THE AWARD DATE AND DATE OF FIRST DELIVERY REPRESENT THE FIRST AWARD OF FUNDING AND THE INITIAL DELIVERY OF EQUIPMENT.									

BUDGET ITEM JUSTIFICATION (EXHIBIT P-40)	DATE: FEBRUARY 1999
APPROP CODE/BA: OPAF/OTHER BASE MAINTENANCE & SUPPORT EQUIPMENT	**P-1 NOMENCLATURE:** ENVIRONMENTAL PROJECTS

	FY1998	FY1999	FY2000	FY2001	FY2002	FY2003	FY2004	FY2005
QUANTITY								
COST (in Thousands)	$969	$971	$955	$950	$944	$939	$959	$981

Description:

1. The Environmental Projects Program procures equipment necessary to support environmental compliance and pollution prevention laws, executive orders, regulations, and DoD directives. This program provides equipment related to reducing hazardous material use, hazardous waste generation and release of pollutants into the environment. Included in this program is equipment that supports solid and hazardous waste recycling, the elimination of Air Force use of ozone depleting chemicals (ODC), hazardous waste recovery and treatment, and air pollution reduction. Equipment purchases are required for day-to-day operations and support projects that further the Air Force objective of improving management practices in all areas regarding the environment.

2. Following are descriptions of FY98-01 individual projects.

FY98:

a. Hydrolysis of Propellants, Explosives, Pyrotechnics (PEP), Edwards AFB, CA: Disposal of waste propellants is currently accomplished by open burning/open detonation. Equipment procured with FY98 funding treats the waste PEP generated by research and development of rocket propellant with a hydrolysis process.

b. Replacement of Cadmium for Landing Gear Internal Surfaces (Phase I), Hill AFB, UT: Currently cadmium plating is widely used for corrosion protection on alloy steel aircraft parts. Both cadmium metal and its plating solution are highly toxic. FY98 funding replaced cadmium with Ion Vapor Deposition (IVD) aluminum which out-performs cadmium in preventing corrosion in acidic conditions and is an

BUDGET ITEM JUSTIFICATION (EXHIBIT P-40)	DATE: FEBRUARY 1999
APPROP CODE/BA: OPAF/OTHER BASE MAINTENANCE & SUPPORT EQUIPMENT	**P-1 NOMENCLATURE:** ENVIRONMENTAL PROJECTS

Description (cont.):
environmentally compliant material process.

c. Mobile Bomb Renovation Plant, AF Research Labs, Wright-Patterson AFB, OH: This equipment is required to incorporate wire arc spray and other suitable environmentally compliant coating technologies for corrosion protection of munitions in containerized modules that can be shipped to Air Force storage sites worldwide. FY98 funding purchased various pieces of equipment for the modules.

FY99:

d. Decreased Waste Generation from Plating Shop, Robins AFB, GA: Currently the plating shop uses various methods to depaint, clean, remove corrosion, and prepare off-aircraft parts prior to electroplating operations. FY99 funding procures equipment which will provide an aqueous blast process, thereby reducing HazWaste disposal.

e. Replacement of Cadmium for Landing Gear (Internal Surfaces) (Phase II), Hill AFB, UT: Currently cadmium plating is widely used for corrosion protection on ally steel aircraft parts. Both cadmium metal and its plating solution are highly toxic. IVD aluminum out-performs cadmium in preventing corrosion in acidic conditions and is an environmentally compliant material process. FY99 funding provides for Phase II of cadmium replacement to upgrade the laboratory sputter aluminum coater to a production model status for demonstration/validation. Upgrades include increased chamber size, incorporation of inverted cylindrical magnetron capability, and additional "plug and coat" magnetron.

f. Low Particulate Emission Sweepers, Edwards AFB, CA: Current runway sweepers do not meet local air quality regulations. FY99 funds procure new runway sweepers which are capable of containing particulates using a highly efficient filtering system.

FY00:

g. Laser Cured Coating, Robins AFB, GA: FY00 funds will procure equipment required to cure polymer coated aircraft components. This equipment provides a monolithic protective film with no resulting toxic air emissions or hazardous waste generation during application.

BUDGET ITEM JUSTIFICATION (EXHIBIT P-40)	DATE: FEBRUARY 1999
APPROP CODE/BA: OPAF/OTHER BASE MAINTENANCE & SUPPORT EQUIPMENT	**P-1 NOMENCLATURE:** ENVIRONMENTAL PROJECTS

Description (cont.):

h. Metal Process and Coolant System, AF Research Labs, Wright-Patterson AFB, OH: FY00 will provide funding for equipment which collects and recycles cooling fluids and provides re-circulation of filtered air in machining processes. The system reduces current air pollutant emission levels that otherwise conflict with future National Emissions Standards for Hazardous Air Pollutants (NESHAP) and other Clean Air Act requirements.

i. Paint Purification Equipment, Hill AFB, UT: FY00 funding is requested for equipment which purifies paint stripping used in aircraft maintenance processes, reduces purchase and disposal of toxic release inventory reported chemicals, and helps meet Clean Water Act requirements.

FY01:

j. Non-Chemical X-Ray System, Hill AFB, UT: Currently, a chemical x-ray system is used to examine missiles and other specific components for wear and effectiveness. FY01 funding will provide for a new non-chemical x-ray system which will reduce chemicals used, wastewater discharged, and the large amount of x-ray film that must be stored.

k. Supercritical Carbon Dioxide (CO2) Fluid Cleaning Equipment, AF Research Labs, Wright-Patterson AFB, OH: FY01 funding is requested for equipment which will provide an excellent solvent (carbon dioxide at extremely high temperatures and pressures) for treating many organic contaminants. The process will be used to eliminate organic cleaning solvents which generate hazardous waste.

l. Energetic Paint Stripper, AF Research Labs, Wright-Patterson AFB, OH: This equipment removes paint without the use of chemical strippers. FY01 funding will procure portable equipment needed to remove the portion of paint that cannot be removed by larger automated energetic systems due to the configuration of the aircraft. Use of this equipment will reduce hazardous waste generation and help meet Clean Water Act requirements.

BUDGET ITEM JUSTIFICATION FOR AGGREGATED ITEMS (EXHIBIT P- 40A)	DATE: FEBRUARY 1999
APPROP CODE/BA: OPAF/OTHER BASE MAINTENANCE & SUPPORT EQUIPMENT	**P-1 NOMENCLATURE:** ENVIRONMENTAL PROJECTS

PROCUREMENT ITEMS	ID CODE	FY1998		FY1999		FY2000		FY2001	
		QTY.	COST	QTY.	COST	QTY.	COST	QTY.	COST
A. HYDROLYSIS OF PROPELLANTS,									
EXPLOSIVES, PYROTECHNICS	A		$429						
B. REPLACEMENT OF CADMIUM FOR									
LANDING GEAR PH I	A		$235						
C. MOBILE BOMB RENOVATION PLNT	A		$305						
D. DECREASED WASTE GENERATION									
FROM PLATING SHOP	A				$300				
E. REPLACEMENT OF CADMIUM FOR									
LANDING GEAR PH II	A				$400				
F. LOW PARTICULATE EMISSION									
SWEEPERS	A				$271				
G. LASER CURED COATING	A						$450		
H. METAL PROCESS & COOLANT SYS	A						$300		
I. PAINT PURIFICATION EQUIP	A						$205		
J. NON-CHEMICAL X-RAY SYSTEM	A								$275
K. SUPERCRITICAL CO2 FLUID									
CLEANING EQUIP	A								$450
L. ENERGETIC PAINT STRIPPER	A								$225
Totals:			$969		$971		$955		$950

	P-1 ITEM NO: 94		PAGE NO: 92		Page 1 of 2

BUDGET ITEM JUSTIFICATION FOR AGGREGATED ITEMS (EXHIBIT P- 40A)	DATE: FEBRUARY 1999
APPROP CODE/BA: OPAF/OTHER BASE MAINTENANCE & SUPPORT EQUIPMENT	**P-1 NOMENCLATURE:** ENVIRONMENTAL PROJECTS

PROCUREMENT ITEMS	ID CODE	FY1998		FY1999		FY2000		FY2001	
		QTY.	COST	QTY.	COST	QTY.	COST	QTY.	COST

Remarks:

	P-1 ITEM NO: 94		PAGE NO: 93		Page 2 of 2

BUDGET ITEM JUSTIFICATION (EXHIBIT P-40)	DATE: FEBRUARY 1999
APPROP CODE/BA: OPAF/OTHER BASE MAINTENANCE & SUPPORT EQUIPMENT	**P-1 NOMENCLATURE:** AIR BASE OPERABILITY

	FY1998	FY1999	FY2000	FY2001	FY2002	FY2003	FY2004	FY2005
QUANTITY								
COST (in Thousands)	$4,069	$5,350	$4,417	$1,856				

Description:

1. Air Base Operability (ABO) is an ongoing program to provide integrated capabilities needed to establish and maintain air base readiness during contingencies. ABO has the capability to rapidly deploy, defend and sustain airfield operations and command and control activities prerequisite to establishing air superiority. These systems provide beddown for aircraft, support equipment, and forces both at main operating bases and contingency operating locations, which may have only a runway and a water source. ABO offers crucial facilities, utilities, runway repair, fire suppression, explosive ordnance disposal, and reconnaissance capabilities to support aircraft deployment, launch, recovery and regeneration. Lighter weight, rapidly deployable equipment has become essential in supporting numerous and simultaneous global contingencies for force protection, relief efforts, and special operations.

2. The following procurements are programmed in FY00-01:

a. Medium Shelter Systems. This program replaces an existing generation of aging Harvest Falcon/Harvest Eagle (HF/HE) shelters and Environmental Control Units (ECUs) with a new generation portable shelter system that is less airlift intensive while providing improved operational performance. The system includes a shelter, insulation, flooring, utilities interfaces, and ECUs. These shelters serve as maintenance back shops, equipment storage areas and operations support facilities. FY98 funds shelters for preliminary commercial item testing and evaluation; FY99 funds shelters for operational testing, evaluation and training. Follow-on HF/HE funding for this item is programmed in P-1 line #102, Mobility Equipment. No FY00/01 funding requested

BUDGET ITEM JUSTIFICATION (EXHIBIT P-40)	DATE: FEBRUARY 1999
APPROP CODE/BA: OPAF/OTHER BASE MAINTENANCE & SUPPORT EQUIPMENT	**P-1 NOMENCLATURE:** AIR BASE OPERABILITY

Description (cont.):

b. Deployable Power Generation and Distribution System (DPGDS). The DPGDS provides a new family of bare base electric power generation and distribution equipment to improve capability and reduce deployment requirements for HF/HE kits. DPGDS supports bare base prime (high voltage) and tactical (low voltage) power production and delivery including secondary distribution centers, secondary power distribution panels, transformers, controls, cabling, and ancillary support equipment. FY98/99 funding procures hardware for qualification and operational testing. Follow-on HF/HE funding for this item is programmed in P-1 line #102, Mobility Equipment.

c. All purpose Remote Transport System (ARTS). ARTS is a low cost survivable platform capable of remote operations at distances up to three miles. ARTS was designed as a delivery platform for further development of detector, sensor and Explosive Ordnance Disposal (EOD) tools. Air Force Wright Laboratory developed this multi-purpose tool under the direction/funding of the OSD Joint Robotics Program. OSD through Wright Laboratory is working with a vendor to take this tool directly from the laboratory to the field. Reference Program Element 64617 of the Air Force R&D Descriptive Summaries. The Other Procurement ARTS program will be executed in two phases. FY98 Phase I funding procured commercially available systems for proof-of-concept testing. FY99-01 Phase II funding will result in a competitive procurement to acquire the remaining production units and satisfy the Air Force inventory objective.

d. EOD Support Equipment. This equipment dramatically increases response time to neutralize explosive hazards, saving lives and reducing damage at an extremely low cost relative to conducting operations without these tools. The Navy Explosive Ordnance Technology Division (NAVEODTECHDIV) is the OSD Executive Agent for joint service EOD R&D. Production funding is provided by individual services, (Reference PE 64617F). The Air Force requires the following equipment for the safety of deployed personnel and expedient removal of unexploded ordnance hazards.

(1) Explosively Driven Water Charge: A fabricated system that may be pre-positioned on a trailer, skid, or other suitable platform and can be stored in a "ready" configuration for immediate use. The assembled device may be stored for ready immediate employment for up to two years. The purpose of the charge is to produce a low density spatial water jet capable of penetrating and disrupting large objects. Large objects

BUDGET ITEM JUSTIFICATION (EXHIBIT P-40)	DATE: FEBRUARY 1999
APPROP CODE/BA: OPAF/OTHER BASE MAINTENANCE & SUPPORT EQUIPMENT	**P-1 NOMENCLATURE:** AIR BASE OPERABILITY

Description (cont.):
encompass trucks, trailers, sea-land containers and large pallet sized loads. This disruption has proven effective at neutralizing large improvised explosive devices or weapons of mass destruction (WMD).

(2) Citadel: Enhances the EOD operation against IEDs.

(3) 90MM Water Cannon: ARTS attachment which neutralize IEDs in mid-size sedans and vans.

(4) Advanced Radiographic System (ARS): A small portable x-ray machine which displays information real time on a standard lap top computer; the ARS converts x-ray imagery into an electronic picture.

(5) Remote Excavation/Removal System: ARTS attachment which helps ensure safe excavation of buried munitions.

(6) Range Residue Removal System: ARTS attachment which provides capability to remove fragmentation and residue to safe ranges.

(7) Remote Ordnance Neutralization System (RONS): Tele-operated platform and robotic manipulator which allows control by an operator at the operator control station (OCS) up to a distance of 650 meters. Provides capabilities for reconnaissance, access, render safe, Pick Up and Carry Away (PUCA), and disposal during extremely hazardous explosive ordnance missions.

WEAPON SYSTEM COST ANALYSIS (EXHIBIT P- 5)		DATE: FEBRUARY 1999
APPROP CODE/BA: OPAF/OTHER BASE MAINTENANCE & SUPPORT EQUIPMENT	**P-1 NOMENCLATURE:** AIR BASE OPERABILITY	

WEAPON SYSTEM COST ELEMENTS	IDENT CODE	FY1998			FY1999			FY2000			FY2001		
		QTY	UNIT COST	TOTAL COST	QTY	UNIT COST	TOTAL COST	QTY	UNIT COST	TOTAL COST	QTY	UNIT COST	TOTAL COST
A. MEDIUM SHELTER SYS				{200}			{487}						
1. HARDWARE	A	2	70,000	140	5	70,000	350						
2. TRAINING (TYPE I)				20									
3. DATA				30									
4. INIT CONTRACT SPT							60						
5. SPARES KITS							6						
6. PRE-OP SPT				10			10						
7. ECO'S							61						
B. DPGDS													
1. HARDWARE	A	1	2,339,000	2339	1	2,851,000	2,851						
C. ARTS				{1100}			{1802}			{2817}			{819}
1 ARTS PHASE I				{1100}									
(A) HARDWARE	A	5	184,000	920									
(B) WARRANTY				140									
(C) TNG (TYPE I)				15									
(D) TESTING				15									
(E) DATA				10									

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WEAPON SYSTEM COST ANALYSIS (EXHIBIT P- 5)		DATE: FEBRUARY 1999
APPROP CODE/BA: OPAF/OTHER BASE MAINTENANCE & SUPPORT EQUIPMENT	**P-1 NOMENCLATURE:** AIR BASE OPERABILITY	

WEAPON SYSTEM COST ELEMENTS	IDENT CODE	FY1998			FY1999			FY2000			FY2001		
		QTY	UNIT COST	TOTAL COST	QTY	UNIT COST	TOTAL COST	QTY	UNIT COST	TOTAL COST	QTY	UNIT COST	TOTAL COST
2. ARTS PHASE II							{1802}			{2817}			{819}
(A) HARDWARE	A				7	205,000	1,435	11	212,000	2332	3	219,000	657
(B) EXTENDED													
MAINT AGREEMT							210			363			108
(C) TNG (TYPE I)							20			15			10
(D) DATA							25						
(E) TESTING							40			20			20
(G) ECP							72			87			24
D. EOD SUPPORT EQUIP				{430}			{210}			{1600}			{1037}
1. EXPLOSIVELY DRIVEN													
WATER CHARGE													
(A) HARDWARE	A	5	30,000	150	5	30,000	150						
2. CITADEL													
(A) HARDWARE	A	223	1,009	225									
3. 90MM WATER CANNON													

WEAPON SYSTEM COST ANALYSIS (EXHIBIT P- 5)		DATE: FEBRUARY 1999
APPROP CODE/BA: OPAF/OTHER BASE MAINTENANCE & SUPPORT EQUIPMENT	**P-1 NOMENCLATURE:** AIR BASE OPERABILITY	

WEAPON SYSTEM COST ELEMENTS	IDENT CODE	FY1998			FY1999			FY2000			FY2001		
		QTY	UNIT COST	TOTAL COST	QTY	UNIT COST	TOTAL COST	QTY	UNIT COST	TOTAL COST	QTY	UNIT COST	TOTAL COST
(A) HARDWARE	A	10	5,500	55									
4. ARS													
(A) HARDWARE	A				4	15,000	60	16	15,500	248	3	16,000	48
5. REMOTE EXCAVATION/													
REMOVAL SYSTEM										{60}			{20}
(A) HARDWARE	A							3	20,000	60	1	20,000	20
6. RANGE RESIDUE													
REMOVAL SYSTEM													
(A) HARDWARE	A										1	60,000	60
7. RONS										{1292}			{909}
(A) HARDWARE	A							10	100,000	1,000	7	105,714	740
(B) WARRANTY										180			140
(C) DATA										25			
(D) TNG (TYPE I)										25			
(E) TESTING										20			
(F) ECO'S										42			29

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WEAPON SYSTEM COST ANALYSIS (EXHIBIT P- 5)		DATE: FEBRUARY 1999
APPROP CODE/BA: OPAF/OTHER BASE MAINTENANCE & SUPPORT EQUIPMENT	**P-1 NOMENCLATURE:** AIR BASE OPERABILITY	

WEAPON SYSTEM COST ELEMENTS	IDENT CODE	FY1998			FY1999			FY2000			FY2001		
		QTY	UNIT COST	TOTAL COST	QTY	UNIT COST	TOTAL COST	QTY	UNIT COST	TOTAL COST	QTY	UNIT COST	TOTAL COST
TOTALS:				4,069			5,350			4,417			1,856

REMARKS:

BUDGET ITEM JUSTIFICATION (EXHIBIT P-40)	DATE: FEBRUARY 1999
APPROP CODE/BA: OPAF/OTHER BASE MAINTENANCE & SUPPORT EQUIPMENT	**P-1 NOMENCLATURE:** PHOTOGRAPHIC EQUIPMENT

	FY1998	FY1999	FY2000	FY2001	FY2002	FY2003	FY2004	FY2005
QUANTITY								
COST (in Thousands)	$5,854	$5,576	$5,932	$6,037	$5,771	$5,854	$5,983	$6,114

Description:

1. The Photographic Equipment program procures still photographic, motion photography, graphic and multimedia imaging equipment and systems. These equipment items support Air Force reconnaissance and intelligence programs, Air Force test ranges, combat camera still photographic documentation teams and Base Visual Information Service Centers by replacing exhausted, antiquated equipment that has either reached or exceeded maximum useful life or is unable to meet speed and quality of resolution that provides the critical visual information necessary for rapid and accurate command decisions. Visual Information Service Centers support commanders at all levels including the National Command Authority and the Chairman, Joint Chiefs of Staff; education and training; and public and internal information still, graphic and multimedia imaging requirements. Equipment includes conventional and digital still cameras and processors, motion cameras, developing and finishing equipment and video/data projection systems.

a. Photo Projection Equipment (FSC 6730): FY98-01 funding continues procurement of primarily electronic imaging and data projection systems. The program is designed to incorporate the use of electronic imaging systems where appropriate. Electronic presentation eliminates the necessity of transferring images to film or acetate based materials. The transition to electronic presentation is a result of technological growth and a need to reduce film/chemical based systems in the interest of protecting the environment.

b. Photo Equipment and Accessories (FSC 6760): FY98-01 continues to procure specialized film-based photographic systems that cannot be replaced with electronic photography. These newer systems comply with or exceed federal and state environmental regulations and are required because of their ability to provide full resolution capability or rapid high speed imaging that electronic imaging cannot yet meet.

BUDGET ITEM JUSTIFICATION (EXHIBIT P-40)	DATE: FEBRUARY 1999
APPROP CODE/BA: OPAF/OTHER BASE MAINTENANCE & SUPPORT EQUIPMENT	**P-1 NOMENCLATURE:** PHOTOGRAPHIC EQUIPMENT

Description (cont.):

c. Electronic Imaging Center Conversions: The Electronic Imaging Center concept was initiated to integrate and install electronic and digital still and photographic imaging systems in Visual Information Service Centers at all Air Force bases. The purpose was to replace film and chemical based technology with electronic and digital cameras, multimedia systems, digital photographic processing, digital graphic systems, image data banks, image network hubs and presentation systems. The program was also developed to standardize systems to insure inter-operability and to reduce training costs from installation to installation. Digital technology enhances exportability of imagery and is providing commanders with near real-time images from anywhere in the world. All Air Force bases have an initial electronic image system installed. FY98-01 funding continues replacement of the remaining film/chemical systems and as well as replacement of original electronic systems which are rapidly reaching end of useful life.

2. The following P-40a depicts funding associated with categories of photographic equipment.

BUDGET ITEM JUSTIFICATION FOR AGGREGATED ITEMS (EXHIBIT P- 40A) | **DATE:** FEBRUARY 1999

APPROP CODE/BA:
OPAF/OTHER BASE MAINTENANCE & SUPPORT EQUIPMENT

P-1 NOMENCLATURE:
PHOTOGRAPHIC EQUIPMENT

PROCUREMENT ITEMS	ID CODE	FY1998		FY1999		FY2000		FY2001	
		QTY.	COST	QTY.	COST	QTY.	COST	QTY.	COST
A. PHOTO PROJ EQ (FSC 6730)	A		$430		$500		$500		$500
B. PHOTO EQ & ACC (FSC 6760)	A		$2,024		$2,076		$3,000		$3,000
C. ELECTRONIC IMAGING	A		$3,400		$3,000		$2,432		$2,537
CENTER CONVERSIONS									
Totals:			$5,854		$5,576		$5,932		$6,037

Remarks:

	P-1 ITEM NO: 100		PAGE NO: 103		Page 1 of 1

BUDGET ITEM JUSTIFICATION (EXHIBIT P-40)	DATE: FEBRUARY 1999
APPROP CODE/BA: OPAF/OTHER BASE MAINTENANCE & SUPPORT EQUIPMENT	**P-1 NOMENCLATURE:** PRODUCTIVITY INVESTMENTS

	FY1998	FY1999	FY2000	FY2001	FY2002	FY2003	FY2004	FY2005
QUANTITY								
COST (in Thousands)	$16,129	$12,273	$15,093	$8,340	$8,351	$8,415	$0	$0

Description:

1. This P-1 line funds the Air Force Productivity Enhancing Capital Investment (PECI) projects in the Productivity Investment Fund (PIF) and the Fast Payback Capital(FASCAP) investment programs. Investment funds are available to all Air Force organizations to encourage productivity enhancements for more efficient operations and focus on labor cost savings and reduction in unit cost of operations. These programs conserve critical resources, enhance unit capability, and improve combat effectiveness. The users (Major Commands (MAJCOMs)) provide the offsets from projected savings to sustain future investments for these programs. Thus, these programs are funded by the MAJCOMs. FY 98-01 funding continues support for these programs. Elimination of this funding would reduce the capability to implement productivity and quality improvements in the work place.

a. To qualify for the PIF program, projects must cost over $200,000 and amortize in less than four years. Projects are approved by the Air Force based on shortest payback and highest rate of return on investment. To date, projects have yielded life cycle savings of over $17 for every $1 invested.

b. To qualify for the FASCAP program, projects must cost less than $200,000 and amortize in less than two years. Projects are approved by MAJCOMs based on the shortest amortization period and best return on investment. To date, projects have yielded life cycle savings of over $7 for every $1 invested.

2. Individual PIF projects are listed on the P-40a along with contracting information on the P-5a. Individual FASCAP projects are not provided

BUDGET ITEM JUSTIFICATION (EXHIBIT P-40)	DATE: FEBRUARY 1999
APPROP CODE/BA: OPAF/OTHER BASE MAINTENANCE & SUPPORT EQUIPMENT	**P-1 NOMENCLATURE:** PRODUCTIVITY INVESTMENTS

Description (cont.):
because of the large number of projects and contracting actions.

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BUDGET ITEM JUSTIFICATION FOR AGGREGATED ITEMS (EXHIBIT P- 40A)	DATE: FEBRUARY 1999
APPROP CODE/BA: OPAF/OTHER BASE MAINTENANCE & SUPPORT EQUIPMENT	**P-1 NOMENCLATURE:** PRODUCTIVITY INVESTMENTS

PROCUREMENT ITEMS	ID CODE	FY1998		FY1999		FY2000		FY2001	
		QTY.	COST	QTY.	COST	QTY.	COST	QTY.	COST
1. PIF									
A. AUTOMATED DIGITAL WEATHER	A		$380						
SWITCH (AFWA)									
B. MOBILE FIRE TRAINER-KUNSAN	A		$610						
(PACAF)									
C. MOBILE FIRE TRAINER-KADENA	A		$500						
(PACAF)									
D. KITCHEN/CLIPPER TRAILERS-	A		$432						
HICKAM (PACAF)									
E. AIR FORCE PUBLISHING	A		$5,580		$1,960				
SYSTEM (AFCIC)									
F. PERSONNEL ACCESS CONTROL	A				$470				
SYSTEM - ROBINS (AFMC)									
G. GLOBAL INTERNET NEWS &	A						$4,000		
INFORMATION SYSTEM									
(SECY AF/PUBLIC AFFAIRS)									
2. FASCAP	A		$8,627		$9,843		$11,093		$8,340

	P-1 ITEM NO: 101		PAGE NO: 106		Page 1 of 2

BUDGET ITEM JUSTIFICATION FOR AGGREGATED ITEMS (EXHIBIT P- 40A)	DATE: FEBRUARY 1999
APPROP CODE/BA: OPAF/OTHER BASE MAINTENANCE & SUPPORT EQUIPMENT	**P-1 NOMENCLATURE:** PRODUCTIVITY INVESTMENTS

PROCUREMENT ITEMS	ID CODE	FY1998		FY1999		FY2000		FY2001	
		QTY.	COST	QTY.	COST	QTY.	COST	QTY.	COST
Totals:			$16,129		$12,273		$15,093		$8,340

Remarks:

	P-1 ITEM NO: 101		PAGE NO: 107		Page 2 of 2

BUDGET PROCUREMENT HISTORY PLANNING (EXHIBIT P- 5A)	DATE: FEBRUARY 1999
APPROP CODE/BA: OPAF/OTHER BASE MAINTENANCE & SUPPORT EQUIPMENT	**P-1 NOMENCLATURE:** PRODUCTIVITY INVESTMENTS

ITEM / FISCAL YEAR	QTY.	UNIT COST	LOCATION OF PCO	CONTRACT METHOD & TYPE	CONTRACTOR AND LOCATION	AWD. DATE	DATE FIRST DEL.	SPECS AVAIL NOW	DATE REV. AVAIL
1. PIF									
A. AUTOMATED DIGITAL									
WEATHER SWITCH									
(AFWA)									
FY98 (1)	VAR	N/A	HQ AMC	OPT/FP	UNISYS CORPORATION, MCLEAN, VA	OCT 97	DEC 97		
B. MOBILE FIRE TRAINER -									
KUNSAN (PACAF)									
FY98	VAR	N/A	HQ PACAF	SS/FP	PRO-SAFE FIRE TRAINING SYSTEM	MAY 98	OCT 98		
					MARKHAM, ONTARIO, CANADA				
C. MOBILE FIRE TRAINER -									
KADENA (PACAF)									
FY98	VAR	N/A	HQ PACAF	SS/FP	PRO-SAFE FIRE TRAINING SYSTEM	AUG 98	JAN 99		
					MARKHAM, ONTARIO, CANADA				

BUDGET PROCUREMENT HISTORY PLANNING (EXHIBIT P- 5A)	DATE: FEBRUARY 1999
APPROP CODE/BA: OPAF/OTHER BASE MAINTENANCE & SUPPORT EQUIPMENT	**P-1 NOMENCLATURE:** PRODUCTIVITY INVESTMENTS

ITEM / FISCAL YEAR	QTY.	UNIT COST	LOCATION OF PCO	CONTRACT METHOD & TYPE	CONTRACTOR AND LOCATION	AWD. DATE	DATE FIRST DEL.	SPECS AVAIL NOW	DATE REV. AVAIL
D. KITCHEN/CLIPPER									
TRAILERS-HICKAM (PACAF)									
FY98	VAR	N/A	HQ PACAF	SS/FP	CARLIN MANUFACTURING INC.	FEB 98	MAY 98		
					FRESNO, CA				
E. AIR FORCE PUBLISHING									
SYSTEM (AFCIC)									
FY98	VAR	N/A	HQ AFCIC	MIPR/OPT/FPAF	GSA - LOCKHEED MARTIN	AUG 98	JAN 99		
					NEW YORK, NY				
FY99	VAR	N/A	HQ AFCIC	MIPR/OPT/FPAF	GSA - LOCKHEED MARTIN	DEC 98	JUL 99		
					NEW YORK, NY				
F. PERSONNEL ACCESS									
CONTROL SYSTEM-ROBINS									
(AFMC)									
FY99	VAR	N/A	AFMC/WR-ALC	SS/FP	HONEYWELL, ATLANTA, GA	NOV 98	JAN 99		

BUDGET PROCUREMENT HISTORY PLANNING (EXHIBIT P- 5A)	DATE: FEBRUARY 1999
APPROP CODE/BA: OPAF/OTHER BASE MAINTENANCE & SUPPORT EQUIPMENT	**P-1 NOMENCLATURE:** PRODUCTIVITY INVESTMENTS

ITEM / FISCAL YEAR	QTY.	UNIT COST	LOCATION OF PCO	CONTRACT METHOD & TYPE	CONTRACTOR AND LOCATION	AWD. DATE	DATE FIRST DEL.	SPECS AVAIL NOW	DATE REV. AVAIL
G. GLOBAL INTERNET NEWS									
& INFORMATION SYSTEM									
(SECY AF/PUBLIC AFFAIRS)									
FY00	VAR	N/A	11WING	MIPR/OPT/FPAF	DEFENSE TECH INFO CENTER	DEC 99	JUN 00	N	JUN 99
					GENERAL TELEPHONE & ELECTRIC CHANTILLY VA				

REMARKS:
1. OPTION TO FY97 CONTRACT WITH UNISYS CORPORATION.

	P-1 ITEM NO: 101		PAGE NO: 110		Page 3 of 3

BUDGET ITEM JUSTIFICATION (EXHIBIT P-40)	DATE: FEBRUARY 1999
APPROP CODE/BA: OPAF/OTHER BASE MAINTENANCE & SUPPORT EQUIPMENT	**P-1 NOMENCLATURE:** AIR CONDITIONERS

	FY1998	FY1999	FY2000	FY2001	FY2002	FY2003	FY2004	FY2005
QUANTITY								
COST (in Thousands)	$9,627	$10,668	$6,711	$6,217	$7,017	$3,569	$3,648	$3,728

Description:

1. This program provides funding to procure air conditioning systems for Air Force ground-support missions. These assets provide environmental control--both cooling and heating. Old air conditioning systems contain hydrochlorofluorcarbon (HCFC-22) which is a Class II ozone layer depleting substance due to phase out by 2005. New procurement items contain a non-ozone depleting refrigerant required for the Government to comply with the Montreal Protocol Treaty on substances that deplete the ozone layer and the Clean Air Act requiring the elimination of HCFC-22 refrigerant.

2. Prior year funding began procurement for a new Air Force air conditioning system. The A/E32C-39 Field Deployable Environmental Control Unit (FDECU) is an electric-motor driven, vapor cycle, skid-mounted air conditioner with a cooling capacity of 54,000 British Thermal Units per hour using ozone friendly R-134a refrigerant. It provides cooling and heating for US Special Operations Command combat communications units, F-15 and F-16 aircraft avionics maintenance shops, Air Force Flight Test Center test sites, Aerial Port/Combat Control organizations, Civil Engineering Red Horse Squadrons, and Security Police dog kennels. The FDECU is also HQ Air Combat Command's number one priority item for bare base shelter support. Additionally, a nuclear, biological, chemically-hardened version is used to support War Reserve Material (WRM) requirements for field transportable hospitals. Failure to acquire the FDECU will degrade peacetime readiness through premature failure of avionic/electronic equipment and reduce the capability of field deployable shelters. The FDECU will replace assets that have exceeded their service life, are no longer economical to repair or maintain, and which also contain HCFC-22. All new units comply with the Montreal Protocol Treaty and Clean Air Act. FY98-01 funding continues procurement of the FDECU.

BUDGET ITEM JUSTIFICATION FOR AGGREGATED ITEMS (EXHIBIT P- 40A)	DATE: FEBRUARY 1999
APPROP CODE/BA: OPAF/OTHER BASE MAINTENANCE & SUPPORT EQUIPMENT	**P-1 NOMENCLATURE:** AIR CONDITIONERS

PROCUREMENT ITEMS	ID CODE	FY1998		FY1999		FY2000		FY2001	
		QTY.	COST	QTY.	COST	QTY.	COST	QTY.	COST
1. AIR CONDITIONER A/E32C-39	A	499	$5,384	699	$7,541	622	$6,711	559	$6,217
2. AIR CONDITIONER A/E32C-39									
CHEMICALLY HARDENED	A	321	$4,243	235	$3,127				
Totals:			$9,627		$10,668		$6,711		$6,217

Remarks:

	P-1 ITEM NO: 104		PAGE NO: 112		Page 1 of 1

BUDGET PROCUREMENT HISTORY PLANNING (EXHIBIT P- 5A) | **DATE:** FEBRUARY 1999

APPROP CODE/BA:
OPAF/OTHER BASE MAINTENANCE & SUPPORT EQUIPMENT

P-1 NOMENCLATURE:
AIR CONDITIONERS

ITEM / FISCAL YEAR	QTY.	UNIT COST	LOCATION OF PCO	CONTRACT METHOD & TYPE	CONTRACTOR AND LOCATION	AWD. DATE	DATE FIRST DEL.	SPECS AVAIL NOW	DATE REV. AVAIL
AIR CONDITIONER									
A/E32C-39									
FY98	499	10,789	AFMC/SA-ALC	OPT/FFP	KECO INDUSTRIES, FLORENCE, KY	AUG 98	JAN 99	,	
FY99	699	10,789	AFMC/SA-ALC	OPT/FFP	KECO INDUSTRIES, FLORENCE, KY	JAN 99	AUG 99		
FY00	622	10,789	AFMC/SA-ALC	OPT/FFP	KECO INDUSTRIES, FLORENCE, KY	NOV 99	APR 00	Y	
FY01	559	11,121	AFMC/SA-ALC	OPT/FFP	KECO INDUSTRIES, FLORENCE ,KY	NOV 00	APR 01	Y	
AIR CONDITIONER									
A/E32C-39 CHEM HARD									
FY98	321	13,217	AFMC/SA-ALC	OPT/FFP	KECO INDUSTRIES, FLORENCE, KY	AUG 98	JAN 99		
FY99	235	13,307	AFMC/SA-ALC	OPT/FFP	KECO INDUSTRIES, FLORENCE, KY	JAN 99	AUG 99		

REMARKS:
A COMPETITIVE, FIRM FIXED PRICE CONTRACT WAS AWARDED IN JUN 1997 TO KECO INDUSTRIES, FLORENCE, KY, AND THE ABOVE UNIT COSTS ARE IN ACCORDANCE WITH THE NEGOTIATED CONTRACT. THE FDECU CONTRACT IS A THREE YEAR REQUIREMENTS CONTRACT WITH TWO ONE-YEAR OPTIONS.

BUDGET ITEM JUSTIFICATION (EXHIBIT P-40)	DATE: FEBRUARY 1999
APPROP CODE/BA: OPAF/OTHER BASE MAINTENANCE & SUPPORT EQUIPMENT	**P-1 NOMENCLATURE:** ITEMS LESS THAN $5,000,000 (BASE SUPPORT EQUIP)

	FY1998	FY1999	FY2000	FY2001	FY2002	FY2003	FY2004	FY2005
QUANTITY								
COST (in Thousands)	$13,683	$16,850	$22,500	$25,269	$25,547	$27,406	$26,411	$28,608

Description:

1. This program provides a wide variety of base support items with worldwide application. Examples are servicing platforms, aircraft arresting systems, compressors which have various applications, refrigeration units, heaters, pallets, nets, and military working dogs which are used for base and anti-terrorist protection. This equipment is the backbone of all base missions. Lack of funding for these equipment items limits maintenance capabilities, testing functions, communications capabilities, flight operations and the ability of Air Force units to meet deployment requirements.

2. FY00 and FY01 funding procures both initial shortages as well as replacement equipment which is facing obsolescence. All items have an annual procurement value of less than $5,000,000 and are Code A. Items requested for procurement in FY00 and FY01 are identified on the following P-40a.

3. The following items listed on the P-40a were funded in discrete P-1 lines in prior years:

Item	Previously Funded in P-1 Line
Pallet, Air Cargo	Pallet, Air Cargo, P-1 Line #96
Net Assembly 108X88" (Top/Side)	Net Assembly, 108"X88", P-1 Line #97
Containers	Deployment/Employment Containers, P-1 Line #103

BUDGET ITEM JUSTIFICATION FOR AGGREGATED ITEMS (EXHIBIT P- 40A-IL)	DATE: FEBRUARY 1999
APPROP CODE/BA: OPAF/OTHER BASE MAINTENANCE & SUPPORT EQUIPMENT	**P-1 NOMENCLATURE:** ITEMS LESS THAN $5,000,000 (BASE SUPPORT EQUIP)

PROCUREMENT ITEMS	NSN	FY2000 QTY.	FY2000 COST	FY2001 QTY.	FY2001 COST
MOBILE AIRCRAFT ARRESTING SYSTEM (MAAS)	1710012232235	3	$1491	0	$0
BAK-12 AIRCRAFT ARRESTING SYSTEM (AAS)	1710010985024	10	$1965	9	$1,802
BAK-14 AIRCRAFT ARRESTING SYS (AAS)150FT	1710014191561	1	$395	1	$395
SERVICING PLATFORM, 60FT	4940010836052	15	$1,055		
SERVICING PLATFORM, 72FT	4940010890129	6	$615	7	$754
TF-1 FLOODLIGHT	6230010963508	3	$41	150	$2,064
TACTICAL MAINTENANCE SHELTER S530	5411010722517EJ	2	$484	2	$501
PALLET, AIR CARGO	1670008204896CT	2100	$1,949	2000	$1,888
NET ASSEMBLY 108"X88" (1 TOP/2 SIDE NSNS)		4350	$460	3400	$361
MILITARY WORKING DOGS (MULTIPLE NSNS)		304	$1,247	288	$1,182
FSC 1710 - AIRCRAFT ARRESTING SYS			$253		$295
FSC 3695 - MISC SPECIAL INDUSTRY MAT			$66		$299
FSC 3910 - CONVEYORS			$417		$480
FSC 4110 - REFRIGERATION EQUIP			$873		$818
FSC 4130 - REFRIG & A/C PLANTS			$508		$500
FSC 4310 - COMPRESSORS/VAC PUMPS			$802		$884
FSC 4320 - POWER & HAND PUMPS			$580		$464
FSC 4520 - SPACE HEATING/WATER HEATER			$190		$426

BUDGET ITEM JUSTIFICATION FOR AGGREGATED ITEMS (EXHIBIT P- 40A-IL)	DATE: FEBRUARY 1999
APPROP CODE/BA: OPAF/OTHER BASE MAINTENANCE & SUPPORT EQUIPMENT	**P-1 NOMENCLATURE:** ITEMS LESS THAN $5,000,000 (BASE SUPPORT EQUIP)

PROCUREMENT ITEMS	NSN	FY2000 QTY.	FY2000 COST	FY2001 QTY.	FY2001 COST
FSC 4610 - WATER PURIFICATION EQUIP			$884		$782
FSC 4630 - SEWAGE TREATMENT EQUIP			$443		$335
FSC 4910 - MOTOR VEHICLE EQUIP			$1453		$1714
FSC 4930 - LUBRICATION & FUEL EQUIP			$540		$623
FSC 4933 - WEAPONS MAINTENANCE SPECIAL EQUIP			$33		$182
FSC 4940 - MISC MAINTENANCE REPAIR EQUIP			$2,065		$3,075
FSC 5430 - STORAGE TANKS			$733		$782
FSC 5450 - MISC PREFAB STRUCTURES			$187		$410
FSC 6645 - TIME-MEASURING EQUIP			$315		$580
FSC 6630 - FIBER OPTIC DEVICES			$425		$392
FSC 6650 - OPTICAL INSTRUMENTS			$257		$875
FSC 6665 - HAZARD DETECTING EQUIP			$445		$322
FSC 6670 - SCALES & BALANCES			$383		$715
FSC 6675 - DRAFTING, SURVEYING EQUIP			$138		$238
FSC 6685 - PRESSURE & TEMP EQUIP			$310		$693
FSC 7360 - FOOD PREP/SERV MODULES EQUIP			$466		$130
FSC 8145 - DEPLOY/EMPLOY CONTAINERS			$32		$8
FSC 5411 - RIGID WALL SHELTERS					$300
TOTALS:			$22,500		$25,269

	P-1 ITEM NO: 105		PAGE NO: 116		Page 2 of 2

BUDGET ITEM JUSTIFICATION (EXHIBIT P-40)	DATE: FEBRUARY 1999
APPROP CODE/BA: OPAF/OTHER BASE MAINTENANCE & SUPPORT EQUIPMENT	**P-1 NOMENCLATURE:** TECHNICAL SURVEILLANCE COUNTERMEASURES EQUIPMENT

	FY1998	FY1999	FY2000	FY2001	FY2002	FY2003	FY2004	FY2005
QUANTITY								
COST (in Thousands)	$1,928	$2,030	$2,976	$3,004	$2,831	$2,830	$2,890	$2,955

Description:

1. The Technical Surveillance Countermeasures Equipment Program is a continuous program for the acquisition of Technical Surveillance Countermeasures (TSCM), Technical Investigative Equipment (TIE), and Investigative Support Equipment in support of the Air Force Office of Special Investigations (AFOSI). AFOSI-trained technical agent teams located on Air Force installations worldwide conduct specialized technical surveys to detect clandestine intelligence gathering devices in sensitive Department of Defense (DOD) facilities. These devices may be targeted against facilities for purposes of counterintelligence or competitive intelligence collections. These same agents also conduct numerous technical support operations annually in support of criminal, fraud, and counterintelligence investigations.

2. Some equipment items used to support these missions utilize antiquated technology and urgently need to be replaced. TSCM equipment must continually be updated to keep abreast of the technological advances incorporated in the design of current intelligence gathering devices. In addition, the use of technologically advanced equipment saves man-years of labor in extremely complex criminal and fraud investigations. As AFOSI's manpower pool decreases in size to meet DOD force structure levels, AFOSI's dependence on this advanced equipment will increase. Some equipment has also reached a phase in its life cycle when maintenance and repair costs have become excessive, and in some cases parts for those repairs are no longer available. The Air Force TSCM program is in danger of becoming ineffective with the continued use of old equipment. Sensitive Air Force facilities will become highly vulnerable to technical penetration without new/upgraded equipment.

3. This program also includes Investigative Support Equipment that supports the AFOSI specialized investigative services (USAF Polygraph Program, USAF Computer Crime Investigations, and AFOSI specialized evidence collection and analysis activities). Specially trained agents

BUDGET ITEM JUSTIFICATION (EXHIBIT P-40)	DATE: FEBRUARY 1999
APPROP CODE/BA: OPAF/OTHER BASE MAINTENANCE & SUPPORT EQUIPMENT	**P-1 NOMENCLATURE:** TECHNICAL SURVEILLANCE COUNTERMEASURES EQUIPMENT

Description (cont.):
support all types of investigations with state-of-the-art surveillance equipment uniquely designed to monitor illicit activity and provide protection to undercover agents and informants. AFOSI polygraph examiners conduct over 6,000 polygraph examinations annually in support of criminal/fraud/counterintelligence investigations and counterespionage operations. Failure to maintain AFOSI's polygraph equipment will result in the loss of credibility of USAF polygraph exams and result in non-certification of polygraph examiners. Advances in computer technology and the amount of sensitive data maintained in USAF computer systems necessitates the procurement of state-of-the-art equipment to aid in computer intrusion investigations and the analysis of computer media evidence.

4. The following categories of investigative equipment are being procured in FY98-01.

a. TSCM Survey Systems. These systems consist of TSCM equipment/components necessary to detect, exploit, and neutralize clandestine technical surveillance systems employed against sensitive Air Force and DOD facilities. Equipment must be upgraded to counter the threat presented by new and advanced technical surveillance devices. The capabilities of the equipment being procured are constantly reviewed to ensure that the most comprehensive surveys are conducted to disclose the presence of clandestine monitoring devices. These systems have the capability to search for covert transmissions from facilities both from the interior and exterior while not alerting a potential adversary of the TSCM team's presence. These systems include equipment to examine telephone systems to determine their security. Additionally, equipment is needed to conduct non-destructive examinations of walls, furniture, etc. for concealed devices.

b. Specialized Law Enforcement Surveillance Equipment. This specialized equipment is uniquely designed for and utilized during lawfully authorized monitoring of activities and conversations. This visual monitoring often occurs during the hours of darkness, and sophisticated light enhancement equipment must be used. Audio monitoring during meetings between suspected criminals and undercover agents must be accomplished without the possibility of the agent being identified; therefore, updated equipment that is smaller and less susceptible to detection and interception must be procured to ensure the safety of the agents. Video and audio monitoring is often done remotely and specialized

BUDGET ITEM JUSTIFICATION (EXHIBIT P-40)	DATE: FEBRUARY 1999
APPROP CODE/BA: OPAF/OTHER BASE MAINTENANCE & SUPPORT EQUIPMENT	**P-1 NOMENCLATURE:** TECHNICAL SURVEILLANCE COUNTERMEASURES EQUIPMENT

Description (cont.):
equipment to clandestinely transmit the images and audio is used. Advances in telephone systems require continuing improvements and upgrades to AFOSI's telephone monitoring equipment to allow lawfully authorized intercepts. Additionally, the capability to track the movements of suspected individuals and contraband, without revealing law enforcement's presence and utilizing the latest advances in navigation and position systems, must be procured as existing technology in this area is rapidly becoming obsolete. Without maintaining pace with advancements in these areas, AFOSI's ability to detect and solve crimes with lawfully collected evidence from surveillance will be greatly diminished. Lastly, the capability to analyze and enhance audio and video recordings from both law enforcement surveillance and suspected individuals' audio/video equipment requires continuous upgrading to keep pace with advancing technology.

c. Computer Crime/Intrusion Investigation Systems. This system of equipment specifically supports the growing investigative case load resulting from increasing use of computers used in crime, and the explosion of incidences of attempted intrusions into USAF and other DOD computer systems. This system will require continuing updates and enhancements to maintain pace with the criminal element's use of computers.

BUDGET ITEM JUSTIFICATION FOR AGGREGATED ITEMS (EXHIBIT P- 40A)	DATE: FEBRUARY 1999
APPROP CODE/BA: OPAF/OTHER BASE MAINTENANCE & SUPPORT EQUIPMENT	**P-1 NOMENCLATURE:** TECHNICAL SURVEILLANCE COUNTERMEASURES EQUIPMENT

PROCUREMENT ITEMS	ID CODE	FY1998		FY1999		FY2000		FY2001	
		QTY.	COST	QTY.	COST	QTY.	COST	QTY.	COST
A. TSCM SURVEY SYSTEMS									
1. PORTABLE TSCM RECEIVERS	A	6	$960	6	$960	11	$1760	8	$1280
B. SPECIALIZED LAW	A								
ENFORCEMENT SURVEILLANCE									
EQUIPMENT									
1. DIGITAL AUDIO RECORDERS	A	1	$20	2	$40	2	$40	2	$40
2. PAGER INTERCEPTION EQUIP	A	1	$3	1	$3				
3. GPS VEHICLE TRACKING	A	4	$60	3	$40				
4. DISGUISED ANTENNAS	A			300	$63				
5. TELEPHONE ANALYZERS	A					3	$140	7	$327
6. LAN ANALYZERS	A					5	$53	17	$182
7. SPECIAL PURPOSE/TECH	A					3	$220	3	$220
EQUIPMENT									
8. CALLER IDENTIFICATION	A					12	$74		
9. MILLIMETER WAVE/GROUND	A					6	$187	6	$187
PENETRATING RADAR									
10. PORTABLE MINI-LASER	A					9	$120		
11. CCTV	A	26	$100						
C. COMPUTER CRIME/INTRUSION									

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BUDGET ITEM JUSTIFICATION FOR AGGREGATED ITEMS (EXHIBIT P- 40A)	DATE: FEBRUARY 1999
APPROP CODE/BA: OPAF/OTHER BASE MAINTENANCE & SUPPORT EQUIPMENT	**P-1 NOMENCLATURE:** TECHNICAL SURVEILLANCE COUNTERMEASURES EQUIPMENT

PROCUREMENT ITEMS	ID CODE	FY1998		FY1999		FY2000		FY2001	
		QTY.	COST	QTY.	COST	QTY.	COST	QTY.	COST
INVESTIGATION SYSTEM									
1. FIELD MEDIA ANALYSIS		13	$780	13	$824	6	$382	12	$768
EQUIPMENT	A								
2. FORENSIC LAB EQUIPMENT	A	1	$5						
3. INTRUSION ANALYSIS	A			1	$100				
Totals:			$1,928		$2,030		$2,976		$3,004

Remarks:

	P-1 ITEM NO: 107		PAGE NO: 121		Page 2 of 2

BUDGET ITEM JUSTIFICATION (EXHIBIT P-40)	DATE: FEBRUARY 1999
APPROP CODE/BA: OPAF/OTHER BASE MAINTENANCE & SUPPORT EQUIPMENT	**P-1 NOMENCLATURE:** INDUSTRIAL PREPAREDNESS

	FY1998	FY1999	FY2000	FY2001	FY2002	FY2003	FY2004	FY2005
QUANTITY								
COST (in Thousands)	$873	$1,055	$1,151	$1,159	$1,171	$1,179	$1,204	$1,231

Description:

Program funding in Other Procurement,Air Force (OPAF) combines with several other appropriations to form the Air Force Industrial Resources Program. The goal of the Industrial Resources Program is to ensure the defense industry has world-class capability for producing and sustaining reliable, affordable systems to operational users in peacetime and national emergencies. The Industrial Preparedness OPAF activities include Industrial Planning. Industrial Planning efforts assess the critical sectors and industries within the communications and electronics industrial base and provide information on industrial capability issues for consideration during key budget allocation, weapon acquisition, and logistical support decision processes. FY00-01 projects address affordability issues, diminishing manufacturing source/parts obsolescence risks, or manufacturing support to both acquisition and sustainment programs.

BUDGET ITEM JUSTIFICATION (EXHIBIT P-40)	DATE: FEBRUARY 1999
APPROP CODE/BA: OPAF/OTHER BASE MAINTENANCE & SUPPORT EQUIPMENT	**P-1 NOMENCLATURE:** MODIFICATIONS

	FY1998	FY1999	FY2000	FY2001	FY2002	FY2003	FY2004	FY2005
QUANTITY								
COST (in Thousands)	$170	$170	$179	$177	$208	$200	$211	$203

Description:

1. Permanent modifications are configuration changes to in-service systems and equipment which correct material or other deficiencies or add or delete capability. Safety modifications correct deficiencies which would produce hazards to personnel, systems or equipment. This budget line encompasses both new and on-going modification efforts for base maintenance and support equipment.

2. The dollars budgeted in FY00-01 are for "Miscellaneous Low Cost Modifications" to satisfy historically unforeseen modification requirements.

BUDGET ITEM JUSTIFICATION (EXHIBIT P-40)	DATE: FEBRUARY 1999
APPROP CODE/BA: OPAF/OTHER BASE MAINTENANCE & SUPPORT EQUIPMENT	**P-1 NOMENCLATURE:** FIRST DESTINATION TRANSPORTATION

	FY1998	FY1999	FY2000	FY2001	FY2002	FY2003	FY2004	FY2005
QUANTITY								
COST (in Thousands)	$10,674	$15,666	$13,304	$13,896	$15,138	$15,610	$16,121	$17,276

Description:

First Destination Transportation (FDT) is the movement of property from free-on-board (F.O.B.) point of acquisition to the point at which the material is first received for use, storage, or distribution in the military supply system. When it is to the advantage of the government, transportation costs are included in the contractual price of the investment item (F.O.B. destination) and financed as part of their unit cost. This P-1 line program provides for CONUS inland movement of material newly procured by Air Force major commands (MAJCOMs) from contract plants to depot facilities, CONUS Air Force bases, or aerial/water ports for onward movement. FY 98-01 funding provides for shipment of items procured F.O.B. origin from all Air Force procurement appropriations (Aircraft, Missile, Ammunition and Other Procurement). The requirement is based on material buy programs in the procurement appropriations and is computed using a factor relationship of FDT costs to the value of procurement programs.

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BUDGET ITEM JUSTIFICATION (EXHIBIT P-40)	DATE: FEBRUARY 1999
APPROP CODE/BA: OPAF/OTHER BASE MAINTENANCE & SUPPORT EQUIPMENT	**P-1 NOMENCLATURE:** MOBILITY EQUIPMENT

	FY1998	FY1999	FY2000	FY2001	FY2002	FY2003	FY2004	FY2005
QUANTITY								
COST (in Thousands)	$25,267	$35,883	$46,865	$50,513	$27,742	$27,173	$20,461	$19,687

Description:

1. This program supports Air Force (AF) Bare Base Mobility Equipment better known as Harvest Falcon (HF) and Harvest Eagle (HE). Designed and sized to support two nearly simultaneous Major Theater Wars (MTW) the equipment provides theater war fighters billeting, industrial, and air field capability to support a total of 68,200 combat troops and 822 aircraft at 15 austere locations, building complete bases from the ground up. Of the two systems, HF is the newest and has the greatest capability (housekeeping plus air base infrastructures). It is an outgrowth of the FY90-94 Defense Planning Guidance (DPG) that initially tasked the Air Force to support United States Central Command (USCENTCOM) Rapid Deployment forces and save on critical airlift resources through theater prepositioning. Subsequent DPG's have continued this requirement. The outstanding reputation of the AF Bare Base program, established during the Gulf War, has continued in successive Military-Operations-Other-Than-War (MOOTW) throughout the world. These include Operation Southern Watch, Provide Relief, Provide Promise, Provide Comfort, Restore Hope, Sea Signal, Uphold Democracy, Joint Endeavor, Desert Focus, and Desert Fox. Harvest Falcon remains a top priority with the Commander-In-Chief/Central Command.

2. The unparalleled success of the AF Bare Base program and unending demand for the equipment to support MOOTW has taken its toll. As a result the majority of HF and HE sets require comprehensive repair or replacement. Much of the equipment has been used for over three years, well beyond design parameters. Equipment reinvestment funding is a crucial issue. In recognition of increased use of Bare Base equipment and funding shortages in the Bare Base program, OSD, in their FY01/00 Program Decision Memorandum dated 18 August 1998, added $11.8 million in FY00 and $14.6 million in FY01 to procure replacement equipment for HF sets.

BUDGET ITEM JUSTIFICATION (EXHIBIT P-40)	DATE: FEBRUARY 1999
APPROP CODE/BA: OPAF/OTHER BASE MAINTENANCE & SUPPORT EQUIPMENT	**P-1 NOMENCLATURE:** MOBILITY EQUIPMENT

Description (cont.):

3. Associated Research and Development funds for Bare Base Systems Cold Weather Package and the Deployable Waste Management System are through the Aeronautical Systems Center (ASC), Eglin AFB, FL. Reference PE 28031F in the Air Force Descriptive Summaries. Research and Development funds for Bare Base Systems Medium Shelters and the Deployable Power Generation and Distribution Systems (DPGDS) for Falcon, Eagle, and the Secondary Distribution Center (SDC) are also through ASC as part of the Agile Combat Support development effort. Reference PE 64617F in the Air Force Descriptive Summaries.

4. A listing of individual projects is provided on the following P-5.

WEAPON SYSTEM COST ANALYSIS (EXHIBIT P- 5)		DATE: FEBRUARY 1999
APPROP CODE/BA: OPAF/OTHER BASE MAINTENANCE & SUPPORT EQUIPMENT	**P-1 NOMENCLATURE:** MOBILITY EQUIPMENT	

WEAPON SYSTEM COST ELEMENTS	IDENT CODE	FY1998			FY1999			FY2000			FY2001		
		QTY	UNIT COST	TOTAL COST	QTY	UNIT COST	TOTAL COST	QTY	UNIT COST	TOTAL COST	QTY	UNIT COST	TOTAL COST
A. REFUELING SYSTEMS				{2137}			{3824}			{5180}			{3496}
1. R-14 MOBILE HYDRANT	A							22	92274	2030	14	101668	1423
2. 10K FUEL BLADDER	A	54	8122	439	82	8122	666	71	8122	577	57	8122	463
3. 50K FUEL BLADDER	A	152	10126	1539	280	10126	2835	200	10126	2025	159	10126	1610
4. R-22 MOBILE HYDRANT	A	6	26500	159	12	26951	323	20	27401	548			
B. REFRIGERATION EQUIP.				{7265}			{8654}			{4578}			{10060}
1. REFER PANEL, 10KW	A				16	5924	95	60	6225	374	19	6344	121
2. REFER UNIT, 300 CU FT	A				54	25000	1350	84	25000	2100	107	25000	2675
3. FIELD DEPLOYABLE EEVIRONMENTAL CONTROL UNIT (FDECU)	A	690	10529	7265	667	10808	7209	189	11134	2104	652	11141	7264
C. WATER SYSTEMS				{5081}			{6173}			{4650}			{3243}
1. LATRINES	A	16	22941	367	51	22162	1130						
LATRINES	A	51	21781	1111									
2. SHOWER UNITS	A	3	15914	48	53	16423	870						
3. SHAVE UNITS	A				67	13547	908						
4. WATER LOOP SYSTEM	A	3	290709	872	2	290709	581	5	300593	1503	4	306117	1224
5. INITIAL WATER DISTRIBUTION SYSTEM (IWDS)	A	3	141447	424	2	142664	285						

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WEAPON SYSTEM COST ANALYSIS (EXHIBIT P- 5)		DATE: FEBRUARY 1999
APPROP CODE/BA: OPAF/OTHER BASE MAINTENANCE & SUPPORT EQUIPMENT	**P-1 NOMENCLATURE:** MOBILITY EQUIPMENT	

WEAPON SYSTEM COST ELEMENTS	IDENT CODE	FY1998			FY1999			FY2000			FY2001		
		QTY	UNIT COST	TOTAL COST	QTY	UNIT COST	TOTAL COST	QTY	UNIT COST	TOTAL COST	QTY	UNIT COST	TOTAL COST
5A. FIRST ARTICLE		1	290447	290									
5B. DATA				2									
6. SOURCE RUN	A							7	130702	915			
7. 3K WATER BLADDER(ONION)	A	59	2693	159	113	2739	310	104	2739	285	99	2739	271
8. 20K WATER BLADDER	A	136	4998	680	238	4998	1190	16	4998	80	16	4998	80
9. SELF-HELP LAUNDRY	A	43	26227	1128									
10. 9-1 KITCHEN WATER SYS.	A				28	18500	518	11	18500	204	10	18500	185
10A. DATA	A						2						
10B. ECP CHANGES	A						125						
11. 550 KITCHEN WATER SYS.	A				24	10578	254						
12. EAGLE WATER DIST. SYS.	A							3	187450	562	1	196000	196
13. PUMP 170 GPM	A							8	774	6			
14. PUMP MAIN POTABLE	A							82	13350	1095			
15. DEPLOYABLE WASTE MGMT SYSTEM	B										1	1287000	1287
D. RUNWAY SUBSYSTEMS							{2464}			{4920}			
1. REMOTE AREA LIGHT SYST (RALS)	A				76	32426	2464	104	32968	3429			
2. MOBILE AIRCRAFTARRESTING SYSTEM (MAAS)	A							7	213000	1491			

	P-1 ITEM NO: 102		PAGE NO: 128		Page 2 of 4

WEAPON SYSTEM COST ANALYSIS (EXHIBIT P- 5)		DATE: FEBRUARY 1999
APPROP CODE/BA: OPAF/OTHER BASE MAINTENANCE & SUPPORT EQUIPMENT	**P-1 NOMENCLATURE:** MOBILITY EQUIPMENT	

WEAPON SYSTEM COST ELEMENTS	IDENT CODE	FY1998			FY1999			FY2000			FY2001		
		QTY	UNIT COST	TOTAL COST	QTY	UNIT COST	TOTAL COST	QTY	UNIT COST	TOTAL COST	QTY	UNIT COST	TOTAL COST
E. ELECTRICAL SUBSYS.				{2162}			{4914}			{11721}			{16100}
1. SECONDARY DIST CTR (SDC)	A	102	21200	2162	84	21560	1811						
2. 9-1 KITCHEN ELECT. SYS.	A				49	38489	1886						
2A. DATA	A						2						
2B. ECP CHANGES	A						145						
3. 550 KIT ELEC SYST	A				24	28771	691						
4. "B" PANEL ELECTRICAL	A				75	900	68						
5. "A" PANEL ELECTRICAL	A				55	900	50						
6. PRIMARY DIST PANEL (PDP)	A				174	1500	261						
7. DEPLOYABLE POWER GENERATION AND DISTRIBUTION SYST (DPDGS)										{11721}			{16100}
7A. DPDGS FALCON	B							3	3907000	11721	2	4000000	8000
7B. DPGDS EAGLE	B										3	2000000	6000
7C. DPGDS SDC	B										100	21000	2100
F. SHELTERS				{7170}			{9854}			{15366}			{16416}
1. SMALL SHELTER/ECU	A	83	27000	2241	203	26000	5278	290	26010	7543	286	25003	7151
2. MEDIUM SHELTER SYSTEM	B							58	114000	6562	45	114000	5130
3. 4K SQ FT SHELTER (DOME)	A	15	118167	1773	25	120788	3020				20	121464	2429
4K SQ FT SHELTER (DOME)	A	2	120788	242									

WEAPON SYSTEM COST ANALYSIS (EXHIBIT P- 5)		DATE: FEBRUARY 1999
APPROP CODE/BA: OPAF/OTHER BASE MAINTENANCE & SUPPORT EQUIPMENT	**P-1 NOMENCLATURE:** MOBILITY EQUIPMENT	

WEAPON SYSTEM COST ELEMENTS	IDENT CODE	FY1998			FY1999			FY2000			FY2001		
		QTY	UNIT COST	TOTAL COST	QTY	UNIT COST	TOTAL COST	QTY	UNIT COST	TOTAL COST	QTY	UNIT COST	TOTAL COST
4. DOME SHELTER CONTAINER	A	14	7240	101	75	7240	543				58	7257	421
5. INITIAL DEPLOYABLE KITCHEN (IDK)	A	14	168851	2364	6	168851	1013						
5A. ECP CHANGES				449									
6. EXPANDABLE SHELTER/ CONTAINER "A" COMMON	A							20	63073	1261	20	64234	1285
G. MISCELLANEOUS				{1452}						{450}			{1198}
1. COLD WEATHER PACKAGE	B										1	1000000	1000
2. ADDITIVE FUEL INJECTOR	A							13	13884	180	14	14144	198
3. FFU-15E PUMP	A							25	10819	270			
4. SHIP/STORE CONTAINERS	A	188	7240	1361									
5. LIGHT SET (TEMPER TENT)	A	230	397	91									
TOTALS:				25,267			35,883			46,865			50,513

REMARKS:

	P-1 ITEM NO: 102		PAGE NO: 130		Page 4 of 4

BUDGET PROCUREMENT HISTORY PLANNING (EXHIBIT P- 5A)	DATE: FEBRUARY 1999
APPROP CODE/BA: OPAF/OTHER BASE MAINTENANCE & SUPPORT EQUIPMENT	**P-1 NOMENCLATURE:** MOBILITY EQUIPMENT

ITEM / FISCAL YEAR	QTY.	UNIT COST	LOCATION OF PCO	CONTRACT METHOD & TYPE	CONTRACTOR AND LOCATION	AWD. DATE	DATE FIRST DEL.	SPECS AVAIL NOW	DATE REV. AVAIL
A. REFUELING SYSTEMS									
1. R-14 MOBILE HYDRANT									
FY00	22	92274	AFMC/SA-ALC	C/FP	UNKNOWN	JUL 00	MAY 01	Y	
FY01	14	101668	AFMC/SA-ALC	OPT/FP	UNKNOWN	NOV 00	SEP 01	Y	
2. 10K FUEL BLADDER									
FY98[1]	54	8122	AFMC/SA-ALC	OPT/FFP	ARMY/TACOM	MAY 98	AUG 98		
					BELL AVON, PICAYUNE, MS				
FY99[1]	82	8122	AFMC/SA-ALC	OPT/FFP	ARMY/TACOM	FEB 99	JUL 99	Y	
					BELL AVON, PICAYUNE, MS				
FY00[1]	71	8122	AFMC/SA-ALC	OPT/FFP	ARMY/TACOM	FEB 00	JUL 00	Y	
					BELL AVON, PICAYUNE, MS				
FY01[1]	57	8122	AFMC/SA-ALC	OPT/FFP	ARMY/TACOM	FEB 01	JUL 01	Y	
					BELL AVON, PICAYUNE, MS				
3. 50K FUEL BLADDER									
FY98[2]	152	10126	AFMC/SA-ALC	OPT/FFP	RELIANCE AERO, EAST CAMDEM, AR	JAN 98	MAY 99		
FY99[2]	280	10126	AFMC/SA-ALC	OPT/FFP	RELIANCE AERO, EAST CAMDEM, AR	NOV 98	AUG 99		

BUDGET PROCUREMENT HISTORY PLANNING (EXHIBIT P- 5A)	DATE: FEBRUARY 1999
APPROP CODE/BA: OPAF/OTHER BASE MAINTENANCE & SUPPORT EQUIPMENT	**P-1 NOMENCLATURE:** MOBILITY EQUIPMENT

ITEM / FISCAL YEAR	QTY.	UNIT COST	LOCATION OF PCO	CONTRACT METHOD & TYPE	CONTRACTOR AND LOCATION	AWD. DATE	DATE FIRST DEL.	SPECS AVAIL NOW	DATE REV. AVAIL
FY00[2]	200	10126	AFMC/SA-ALC	OPT/FFP	RELIANCE AERO, EAST CAMDEM, AR	NOV 99	MAR 00	Y	
FY01[2]	159	10126	AFMC/SA-ALC	OPT/FFP	RELIANCE AERO, EAST CAMDEM, AR	NOV 00	MAR 01	Y	
4. R-22 MOBILE HYDRANT									
FY98	6	26500	AFMC/WR-ALC	C/FP	REDDY BUFFALO PUMP INC., BAXLEY, GA	JUN 98	DEC 98		
FY99	12	26951	AFMC/WR-ALC	C/FP	UNKNOWN	FEB 99	AUG 99	Y	
FY00	20	27401	AFMC/WR-ALC	OPT/FP	UNKNOWN	DEC 99	JUN 00	Y	
B. REFRIGERATION EQUIP									
1. REFER PANEL, 10KW									
FY99	16	5924	AFMC/SA-ALC	MIPR/FP	ARMY/TACOM	APR 99	SEP 99		
					UNKNOWN				
FY00	60	6225	AFMC/SA-ALC	MIPR/FFP	ARMY/TACOM	NOV 99	APR 00	Y	
					UNKNOWN				
FY01	19	6344	AFMC/SA-ALC	MIPR/FFP	ARMY/TACOM	NOV 00	APR 01	Y	
					UNKNOWN				

BUDGET PROCUREMENT HISTORY PLANNING (EXHIBIT P- 5A)	DATE: FEBRUARY 1999
APPROP CODE/BA: OPAF/OTHER BASE MAINTENANCE & SUPPORT EQUIPMENT	**P-1 NOMENCLATURE:** MOBILITY EQUIPMENT

ITEM / FISCAL YEAR	QTY.	UNIT COST	LOCATION OF PCO	CONTRACT METHOD & TYPE	CONTRACTOR AND LOCATION	AWD. DATE	DATE FIRST DEL.	SPECS AVAIL NOW	DATE REV. AVAIL
2. REFER UNIT, 300 CU FT									
FY99	54	25000	AFMC/WR-ALC	MIPR/FFP	ARMY/SSCOM	FEB 99	MAR 00	Y	
					UNKNOWN				
FY00	84	25000	AFMC/WR-ALC	OPT/FFP	ARMY/SSCOM	NOV 99	AUG 00	Y	
					UNKNOWN				
FY01	107	25000	AFMC/WR-ALC	OPT/FFP	ARMY/SSCOM	NOV 00	APR 01	Y	
					UNKNOWN				
3. FEDCU									
FY98[3]	690	10529	AFMC/SA-ALC	OPT/FFP	KECO INC., FLORENCE, KY	JUN 98	MAY 99		
FY99[3]	667	10808	AFMC/SA-ALC	OPT/FFP	KECO INC., FLORENCE, KY	NOV 98	DEC 99		
FY00[3]	189	11134	AFMC/SA-ALC	OPT/FFP	KECO INC., FLORENCE, KY	NOV 99	AUG 00	Y	
FY01[3]	652	11141	AFMC/SA-ALC	OPT/FFP	KECO INC., FLORENCE, KY	NOV 00	JUN 01	Y	
C. WATER SYSTEMS									
1. LATRINES									
FY98[4]	16	22941	AFMC/WR-ALC	OPT/FP	ENGINEERED AIR SYS., ST.LOUIS, MO	MAY 98	NOV 98		

BUDGET PROCUREMENT HISTORY PLANNING (EXHIBIT P- 5A)	DATE: FEBRUARY 1999
APPROP CODE/BA: OPAF/OTHER BASE MAINTENANCE & SUPPORT EQUIPMENT	**P-1 NOMENCLATURE:** MOBILITY EQUIPMENT

ITEM / FISCAL YEAR	QTY.	UNIT COST	LOCATION OF PCO	CONTRACT METHOD & TYPE	CONTRACTOR AND LOCATION	AWD. DATE	DATE FIRST DEL.	SPECS AVAIL NOW	DATE REV. AVAIL
FY98[4]	51	21781	AFMC/WR-ALC	OPT/FP	ENGINEERED AIR SYS., ST.LOUIS, MO	SEP 98	DEC 98		
FY99[4]	51	22162	AFMC/WR-ALC	OPT/FP	ENGINEERED AIR SYS., ST.LOUIS, MO	JUN 99	DEC 99	Y	
2. SHOWER UNITS									
FY98 [5]	3	15914	AFMC/WR-ALC	OPT/FP	KECO INDUSTRIES INC., FLORENCE, KY	SEP 98	JUN 99		
FY99	53	16423	AFMC/WR-ALC	C/FP	UNKNOWN	MAR 99	SEP 99	Y	
3. SHAVE UNITS									
FY99	67	13547	AFMC/WR-ALC	C/FP	UNKNOWN	MAR 99	SEP 99	Y	
4. WATER LOOP SYSTEM									
FY98[6]	3	290709	AFMC/WR-ALC	OPT/FP	KECO INDUSTRIES INC., FLORENCE KY	FEB 98	OCT 98		
FY99[6]	2	290709	AFMC/WR-ALC	OPT/FP	KECO INDUSTRIES INC., FLORENCE KY	NOV 98	MAY 99		
FY00	5	300593	AFMC/WR-ALC	C/FP	UNKNOWN	JAN 00	MAR 01	Y	
FY01	4	306117	AFMC/WR-ALC	OPT/FP	UNKNOWN	JAN 01	MAY 01	Y	

BUDGET PROCUREMENT HISTORY PLANNING (EXHIBIT P- 5A)	DATE: FEBRUARY 1999
APPROP CODE/BA: OPAF/OTHER BASE MAINTENANCE & SUPPORT EQUIPMENT	**P-1 NOMENCLATURE:** MOBILITY EQUIPMENT

ITEM / FISCAL YEAR	QTY.	UNIT COST	LOCATION OF PCO	CONTRACT METHOD & TYPE	CONTRACTOR AND LOCATION	AWD. DATE	DATE FIRST DEL.	SPECS AVAIL NOW	DATE REV. AVAIL
5. IWDS									
FY98[14]	1	290447	AFMC/WR-ALC	C/FP	JGB ENTERPRISES INC., LIVERPOOL, NY	JUN 98	NOV 99		
FY98[14]	3	141447	AFMC/WR-ALC	C/FP	JGB ENTERPRISES INC., LIVERPOOL, NY	JUN 98	NOV 99		
FY99	2	142664	AFMC/WR-ALC	OPT/FP	JGB ENTERPRISES INC., LIVERPOOL, NY	NOV 98	MAY 99		
6. SOURCE RUN									
FY00	7	130702	AFMC/WR-ALC	C/FP	UNKNOWN	JAN 00	OCT 00	Y	
7. 3K WATER BLADDER (ONION)									
FY98	59	2693	AFMC/WR-ALC	C/FP	JGB ENTERPRISES INC.,	JUN 98	DEC 98		

BUDGET PROCUREMENT HISTORY PLANNING (EXHIBIT P- 5A)	DATE: FEBRUARY 1999
APPROP CODE/BA: OPAF/OTHER BASE MAINTENANCE & SUPPORT EQUIPMENT	**P-1 NOMENCLATURE:** MOBILITY EQUIPMENT

ITEM / FISCAL YEAR	QTY.	UNIT COST	LOCATION OF PCO	CONTRACT METHOD & TYPE	CONTRACTOR AND LOCATION	AWD. DATE	DATE FIRST DEL.	SPECS AVAIL NOW	DATE REV. AVAIL
					LIVERPOOL, NY				
FY99	113	2739	AFMC/SA-ALC	MIPR/FP	ARMY/TACOM	JUL 99	OCT 00	Y	
					UNKNOWN				
FY00	104	2739	AFMC/SA-ALC	OPT/FP	ARMY/TACOM	DEC 99	NOV 00	Y	
					UNKNOWN				
FY01	99	2739	AFMC/SA-ALC	OPT/FP	ARMY/TACOM	DEC 00	JAN 01	Y	
					UNKNOWN				
8. 20K WATER BLADDER									
FY98[7]	136	4998	AFMC/SA-ALC	OPT/FP	ARMY/TACOM	MAY 98	OCT 98		
					AMERICAN FUEL CELL, MAGNOLIA, AR				
FY99[7]	238	4998	AFMC/SA-ALC	OPT/FP	ARMY/TACOM	NOV 98	APR 99		
					AMERICAN FUEL CELL, MAGNOLIA, AR				
FY00[7]	16	4998	AFMC/SA-ALC	OPT/FP	ARMY/TACOM	NOV 99	APR 00	Y	
					AMERICAN FUEL CELL, MAGNOLIA, AR				
FY01[7]	16	4998	AFMC/SA-ALC	OPT/FP	ARMY/TACOM	NOV 00	APR 01	Y	

BUDGET PROCUREMENT HISTORY PLANNING (EXHIBIT P- 5A)	DATE: FEBRUARY 1999
APPROP CODE/BA: OPAF/OTHER BASE MAINTENANCE & SUPPORT EQUIPMENT	**P-1 NOMENCLATURE:** MOBILITY EQUIPMENT

ITEM / FISCAL YEAR	QTY.	UNIT COST	LOCATION OF PCO	CONTRACT METHOD & TYPE	CONTRACTOR AND LOCATION	AWD. DATE	DATE FIRST DEL.	SPECS AVAIL NOW	DATE REV. AVAIL
					AMERICAN FUEL CELL, MAGNOLIA, AR				
9. SELF HELP LAUNDRY									
FY98[8]	43	26227	AFMC/WR-ALC	OPT/FP	PORTER MFG, LUBBOCK TX	APR 98	SEP 98		
10. 9-1 KITCHEN WATER SYS.									
FY99	28	18500	AFMC/WR-ALC	C/FFP	UNKNOWN	FEB 99	OCT 99	Y	
FY00	11	18500	AFMC/WR-ALC	OPT/FP	UNKNOWN	NOV 99	MAR 00	Y	
FY01	10	18500	AFMC/WR-ALC	OPT/FP	UNKNOWN	NOV 00	MAR 01	Y	
11. 550 KITCHEN WATER SYS.									
FY99	24	10578	AFMC/WR-ALC	C/FP	UNKNOWN	FEB 99	OCT 99	Y	
12. EAGLE WATER DIST. SYS.									
FY00	3	187450	AFMC/WR-ALC	C/FP	UNKNOWN	APR 00	APR 01	Y	
FY01	1	196000	AFMC/WR-ALC	OPT/FP	UNKNOWN	NOV 00	APR 01	Y	

BUDGET PROCUREMENT HISTORY PLANNING (EXHIBIT P- 5A)	DATE: FEBRUARY 1999
APPROP CODE/BA: OPAF/OTHER BASE MAINTENANCE & SUPPORT EQUIPMENT	**P-1 NOMENCLATURE:** MOBILITY EQUIPMENT

ITEM / FISCAL YEAR	QTY.	UNIT COST	LOCATION OF PCO	CONTRACT METHOD & TYPE	CONTRACTOR AND LOCATION	AWD. DATE	DATE FIRST DEL.	SPECS AVAIL NOW	DATE REV. AVAIL
13. PUMP 170 GPM									
FY00	8	774	AFMC/WR-ALC	C/FP	UNKNOWN	DEC 99	JUL 00	Y	
14. PUMP MAIN POTABLE									
FY00	82	13350	AFMC/WR-ALC	C/FP	UNKNOWN	JAN 00	AUG 00	Y	
15. DEPLOY WASTE MGMT SYSTEM									
FY01	1	128700	AFMC/ASC	C/FP	UNKNOWN	NOV 00	MAY 01	Y	
D. RUNWAY SUBSYSTEMS									
1. RALS									
FY99	76	32426	AFMC/SA-ALC	SS/FP	UNICOR, LOMPOC, CA	NOV 98	FEB 99		
FY00	104	32968	AFMC/SA-ALC	OPT/FP	UNICOR, LOMPOC, CA	NOV 99	FEB 00	Y	
2. MAAS									

BUDGET PROCUREMENT HISTORY PLANNING (EXHIBIT P- 5A)	DATE: FEBRUARY 1999
APPROP CODE/BA: OPAF/OTHER BASE MAINTENANCE & SUPPORT EQUIPMENT	**P-1 NOMENCLATURE:** MOBILITY EQUIPMENT

ITEM / FISCAL YEAR	QTY.	UNIT COST	LOCATION OF PCO	CONTRACT METHOD & TYPE	CONTRACTOR AND LOCATION	AWD. DATE	DATE FIRST DEL.	SPECS AVAIL NOW	DATE REV. AVAIL
FY00[15]	7	213000	AFMC/SA-ALC	OPT/FP	ENGINEERED SYSTEMS CO, ASTON, PA	NOV 99	MAR 00		
E. ELECTRICAL SUBSYS.									
1. SDC									
FY98[9]	102	21200	AFMC/SM-ALC	OPT/FP	ESSEX, SCHAUNBURG, IL	FEB 98	MAY 01		
FY99	84	21560	AFMC/SM-ALC	C/FP	UNKNOWN	FEB 99	MAY 00	Y	
2. 9-1 KITCHEN ELECT. SYS.									
FY99	49	38489	AFMC/WR-ALC	C/FP	UNKNOWN	APR 99	MAY 00	Y	
3. 550 KIT ELECT SYS									
FY 99	24	28771	AFMC/WR-ALC	C/FP	UNKNOWN	APR 99	MAY 00	Y	
4. "B" PANEL ELECTRICAL									

BUDGET PROCUREMENT HISTORY PLANNING (EXHIBIT P- 5A)	DATE: FEBRUARY 1999
APPROP CODE/BA: OPAF/OTHER BASE MAINTENANCE & SUPPORT EQUIPMENT	**P-1 NOMENCLATURE:** MOBILITY EQUIPMENT

ITEM / FISCAL YEAR	QTY.	UNIT COST	LOCATION OF PCO	CONTRACT METHOD & TYPE	CONTRACTOR AND LOCATION	AWD. DATE	DATE FIRST DEL.	SPECS AVAIL NOW	DATE REV. AVAIL
FY99	75	900	AFMC/SM-ALC	C/FP	UNKNOWN	FEB 99	MAY 00	Y	
5. "A" PANEL ELECTRICAL									
FY99	55	900	AFMC/SM-ALC	C/FP	UNKNOWN	FEB 99	MAY 00	Y	
6. PDP									
FY99	174	1500	AFMC/SM-ALC	C/FP	UNKNOWN	FEB 99	MAY 00	Y	
7. DPGDS									
7A. DPGDS FALCON									
FY00[10]	3	3907000	AFMC/ASC	OPT/FP	RADIAN INC., ALEXANDRIA, VA	NOV 99	MAY 00	Y	
FY01[10]	2	4000000	AFMC/ASC	OPT/FP	RADIAN INC., ALEXANDRIA, VA	NOV 00	MAY 01	Y	
7B. DPGDS EAGLE									
FY01[10]	3	2000000	AFMC/ASC	OPT/FP	RADIAN INC., ALEXANDRIA, VA	NOV 00	MAY 01	Y	

BUDGET PROCUREMENT HISTORY PLANNING (EXHIBIT P- 5A)	DATE: FEBRUARY 1999
APPROP CODE/BA: OPAF/OTHER BASE MAINTENANCE & SUPPORT EQUIPMENT	**P-1 NOMENCLATURE:** MOBILITY EQUIPMENT

ITEM / FISCAL YEAR	QTY.	UNIT COST	LOCATION OF PCO	CONTRACT METHOD & TYPE	CONTRACTOR AND LOCATION	AWD. DATE	DATE FIRST DEL.	SPECS AVAIL NOW	DATE REV. AVAIL
7C. DPGDS SDC									
FY01[10]	100	21000	AFMC/ASC	OPT/FP	RADIAN INC., ALEXANDRIA, VA	NOV 00	MAY 01	Y	
F. SHELTERS									
1. SMALL SHELTER/ECU									
FY98	83	27000	AFMC/ASC	C/FP	ALASKA INDUSTRIES, MONTROSE, CO	NOV 98	JAN 99		
FY99	203	26000	AFMC/ASC	OPT/FP	ALASKA INDUSTRIES, MONTROSE, CO	NOV 98	MAR 99		
FY00	290	26010	AFMC/ASC	OPT/FP	ALASKA INDUSTRIES, MONTROSE, CO	NOV 99	DEC 99	Y	
FY01	286	25003	AFMC/ASC	OPT/FP	ALASKA INDUSTRIES, MONTROSE, CO	NOV 00	DEC 00	Y	
2. MEDIUM SHELTER SYS.									
FY00[16]	58	114000	AFMC/ASC	OPT/FP	CALIFORNIA INDUSTRIES FACILITIES, KIRKLAND, WA	MAR 00	AUG 00	Y	
FY01[16]	45	114000	AFMC/ASC	OPT/FP	CALIFORNIA INDUSTRIES FACILITIES, KIRKLAND, WA	NOV 00	FEB 01	Y	
3. 4K SQ FT SHELTER(DOME)									

BUDGET PROCUREMENT HISTORY PLANNING (EXHIBIT P- 5A)	DATE: FEBRUARY 1999
APPROP CODE/BA: OPAF/OTHER BASE MAINTENANCE & SUPPORT EQUIPMENT	**P-1 NOMENCLATURE:** MOBILITY EQUIPMENT

ITEM / FISCAL YEAR	QTY.	UNIT COST	LOCATION OF PCO	CONTRACT METHOD & TYPE	CONTRACTOR AND LOCATION	AWD. DATE	DATE FIRST DEL.	SPECS AVAIL NOW	DATE REV. AVAIL
FY98[13]	15	118167	AFMC/WR-ALC	OPT/FP	UNIVERSAL FABRIC, QUAKERTOWN, PA	FEB 98	MAY 98		
FY98[13]	2	120788	AFMC/WR-ALC	OPT/FP	UNIVERSAL FABRIC, QUAKERTOWN, PA	SEP 98	DEC 98		
FY99[13]	25	120788	AFMC/WR-ALC	OPT/FP	UNIVERSAL FABRIC, QUAKERTOWN, PA	NOV 98	MAY 99		
FY01[13]	20	121464	AFMC/WR-ALC	OPT/FP	UNIVERSAL FABRIC, QUAKERTOWN, PA	NOV 00	MAY 01	Y	
4. DOME SHELTER CONTAINER									
FY98[11]	14	7240	AFMC/WR-ALC	REQN/FP	AAR CADILLAC, CADILLAC, MI	SEP 98	MAR 99		
FY99[11]	75	7240	AFMC/WR-ALC	REQN/FP	AAR CADILLAC, CADILLAC, MI	NOV 98	MAY 99		
FY01[11]	58	7257	AFMC/WR-ALC	REQN/FP	AAR CADILLAC, CADILLAC, MI	NOV 00	MAY 01	Y	
5. INITIAL DEPLOYABLE									

BUDGET PROCUREMENT HISTORY PLANNING (EXHIBIT P- 5A)	DATE: FEBRUARY 1999
APPROP CODE/BA: OPAF/OTHER BASE MAINTENANCE & SUPPORT EQUIPMENT	**P-1 NOMENCLATURE:** MOBILITY EQUIPMENT

ITEM / FISCAL YEAR	QTY.	UNIT COST	LOCATION OF PCO	CONTRACT METHOD & TYPE	CONTRACTOR AND LOCATION	AWD. DATE	DATE FIRST DEL.	SPECS AVAIL NOW	DATE REV. AVAIL
KITCHEN (IDK)									
FY98[12]	14	168851	AFMC/WR-ALC	OPT/FP	SFA INC., FREDERICK, MD	AUG 98	MAY 99		
FY99[12]	6	168851	AFMC/WR-ALC	OPT/FP	SFA INC., FREDERICK, MD	NOV 98	OCT 99		
6. ES/C "A" COMMON									
FY00	20	63073	AFMC/WR-ALC	C/FP	UNKNOWN	MAY 00	MAY 01	N	JUN 99
FY01	20	64234	AFMC/WR-ALC	OPT/FP	UNKNOWN	NOV 00	SEP 01	N	JUN 99
G. MISCELLANEOUS									
1. COLD WEATHER PACKAGE									
FY01	1	1000000	AFMC/ASC	C/FP	UNKNOWN	MAY 01	AUG 01	N	JUN 00
2. ADDITIVE FUEL INJECTOR									
FY00	13	13884	AFMC/SA-ALC	C/FP	UNKNOWN	JUL 00	MAR 01	Y	
FY01	14	14144	AFMC/SA-ALC	OPT/FP	UNKNOWN	DEC 00	AUG 01	Y	

BUDGET PROCUREMENT HISTORY PLANNING (EXHIBIT P- 5A)	DATE: FEBRUARY 1999
APPROP CODE/BA: OPAF/OTHER BASE MAINTENANCE & SUPPORT EQUIPMENT	**P-1 NOMENCLATURE:** MOBILITY EQUIPMENT

ITEM / FISCAL YEAR	QTY.	UNIT COST	LOCATION OF PCO	CONTRACT METHOD & TYPE	CONTRACTOR AND LOCATION	AWD. DATE	DATE FIRST DEL.	SPECS AVAIL NOW	DATE REV. AVAIL
3. FFU-15E PUMP									
FY00	25	10819	AFMC/SA-ALC	C/FP	UNKNOWN	MAR 00	MAR 01	Y	
4. SHIP/ STORE CONTAINERS									
FY98	188	7240	AFMC/WR-ALC	REQN/FP	AAR CADILLAC, CADILLAC, MI	FEB 98	MAR 98		
5. LIGHT SET (TEMPER TENT)									
FY98	230	397	AFMC/WR-ALC	C/FP	UNICOR, PETERSBURG, VA	FEB 98	DEC 98		

REMARKS:

[1] FY98-01 procurements will be options to Army/TACOM contract, DAAK01-94-D0039.
[2] FY98-01 procurements will be options to contract, F41608-98-D0054.
[3] FY98-01 procurements will be options to contract, F41608-97-D0622.
[4] FY98-99 procurements are options to contract, F09603-97-C0212.
[5] FY98 procurement is an option to contract, F09603-96-C0549.
[6] FY98-99 procurements are options to contract, F09603-97-C0362.
[7] FY98-01 procurements will be options to Army/TACOM contract, DAAK01-94-D0034.
[8] FY98 procurement is an option to contract, F09603-97-C0383.
[9] FY98 procurement is an option to contract, F04606-96-D-0219.
[10] FY00-01 procurements will be options to ASC R&D contract.
[11] FY98-01 procurements will be funded requisitions to DLA/S9G who has an ongoing contract with AAR Cadillac, Cadillac, MI .
[12] FY98-99 procurements are options to contract, F09603-97-C-0385.
[13] FY98-01 procurements will be options to contract, F09603-98-C-0297.
[14] IWDS FY98 procurement for 1 EA. is a first article; FY98 for 3 EA are production items.

BUDGET PROCUREMENT HISTORY PLANNING (EXHIBIT P- 5A)	DATE: FEBRUARY 1999
APPROP CODE/BA: OPAF/OTHER BASE MAINTENANCE & SUPPORT EQUIPMENT	**P-1 NOMENCLATURE:** MOBILITY EQUIPMENT

ITEM / FISCAL YEAR	QTY.	UNIT COST	LOCATION OF PCO	CONTRACT METHOD & TYPE	CONTRACTOR AND LOCATION	AWD. DATE	DATE FIRST DEL.	SPECS AVAIL NOW	DATE REV. AVAIL

[15] MAAS FY00 procurement will be on requirements contract F41608-97-D-0802 with Engineered Systems Co., Aston, PA.
[16]FY00-01 procurements will be options to ASC R&D contract F08929-98-C-0030 with California Industries Facilities, Kirkland, WA.