## DEPARTMENT OF THE AIR FORCE

### COMMITTEE STAFF PROCUREMENT BACKUP BOOK FY 2002 AMENDED BUDGET SUBMISSION JUNE 2001



### **OTHER PROCUREMENT, AIR FORCE**

OFFICE ORIGIN: DIRECTORATE OF SUPPLY COMBAT SUPPORT DIVISION (AF/ILSR)

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6	Armored Vehicle	11
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11	CAP Vehicles	24
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13	HMMWV, Armored	30
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#### **IDENTIFICATION CODES**

Code "A" - Line items of material which have been approved for Air Force service use. Code "B" - Line items of material that have not been approved for Service use

#### **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

FP - Fixed Price FFP - Firm Fixed Price FPIS - Fixed Price Incentive with Successive Targets FPAF - Fixed Price Award Fee FPE - Fixed Price with Escalation FPIF - Fixed Price Incentive Fee CPAF - Cost Plus Award Fee CPFF - Cost Plus Fixed Fee **CPIF** - Cost Plus Incentive Fee ID/IQ - 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

#### Contracted By

11 WING - 11<sup>th</sup> Support Wing, Washington, DC
ACC - Air Combat Command, Langley AFB, VA
AEDC - Arnold Engineering Development Center, Arnold AFB, TN
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, Heath, 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
- 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 AB, GE
- USAFA United States Air Force Academy, Colorado Springs, CO

SSG - Standard Systems Group, Maxwell AFB-Gunter Annex, AL

#### Bases/Organizations

11 WING - 11<sup>th</sup> 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

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

# Agency:DEPARTMENT OF DEFENSE - MILITARYAgency:DEPARTMENT OF DEFENSE - MILITARY

Beruea:	PROCUREMENT
Heading:	Other Procurement, Air Force
FY 2002 Budget Appendix Page:	287
FY 2002 Pending Request:	\$7,806,000,000
Proposed Amendment:	\$353,521,000
Revised Request:	\$8,159,521,000

The amended budget changes or aligns resources to reflect President Bush's defense initiatives, final program cost initiatives, and several initial recommendations from Secretary Rumsfeld's ongoing strategy review.

**VEHICULAR EQUIPMENT** 

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<b>BUDGET ITEM JUSTIFICATION (EXHIBIT P-40)</b>						DATE:	APRIL 2001	
APPROP CODE/BA: OPAF/VEHICULAR EQUIPMENT			_	P-1 NOMENCLATURE: SEDAN 4 DR 4X2				
	FY2000	FY2001	FY2002	FY2003	FY2004	FY2005	FY2006	FY2007
QUANTITY	0	11	54	61	100	38	25	18
COST (in Thousands)	\$0	\$184	\$686	\$989	\$1,585	\$627	\$420	\$318

#### **Description:**

Sedans include the procurement of compact, mid-size, and large sized vehicles. These vehicles are used to transport personnel in performance of official duties. Their use is general in nature, providing transportation for all levels of personnel to attend meetings, functions, make visits and the everyday use of travel from place to place. Each vehicle utilizes a four or six cylinder cost effective gasoline or compressed natural gas (CNG) engine. The Air Force purchases alternative fueled vehicles (AFVs) to be used the sedan fleet in order to meet established AFV goals. The Air Force's policy is to lease general purpose vehicles (sedans, station wagons, etc.), however, it's the Air Force's objective to lease where it makes sense and buy where leasing is not feasible. Some areas determined to be not feasible include overseas locations, Office of Special Investigations (OSI) and high security areas located near missile installations. Failure to provide funds for this program could reduce military and civilian personnel response time in supporting their mission and the capability to transport military and civilian dignitaries and top-level leaders would be diminished. A portion of these vehicles are purchased overseas in the country where they will be used, this makes the vehicles indigenous to their surroundings/environment, enhancing employee safety from terroristic threats.

Items requested in FY02 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.

This administration has not addressed FY2003-2007 requirements. All FY 2003-2007 budget estimates included in this book are notional only and subject to change.

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

APPROP CODE/BA: OPAF/VEHICULAR EQUIPMENT				P-1 NOMEI SEDAN 4 DR 4						
PROCUREMENT ITEMS	ID CODE	FY2000			2001	FY2	Ĩ		FY2003	
		QTY.	COST	QTY.	COST	QTY.	COST	QTY.	COST	
COMPACT UNITED STATES (BPAC 1012)	A					25	\$311			
COMPACT JAPAN (BPAC 1014)	A		_			14	\$144			
COMPACT UNITED KINGDOM (BPAC 1017)	А					2	\$34			
COMPACT KOREA (BPAC 101A)	А					3	\$44			
COMPACT UNITED STATES BI-FUEL (BPAC 101H)	A			4	\$80	6	\$120			
COMPACT SEDAN (BPAC 101M)	А			2	\$37					
MID-SIZE GERMANY (BPAC 101Y)	А			1	\$20					
COMPACT GERMANY (BPAC 101Z)	А			4	\$47	4	\$33			
Totals:				11	\$184	54	\$686			
Remarks:										
P	<b>P-1 ITEM</b>	NO		PAGE N	NO:			Page 1	of 1	

BUDGET ITEM JUS	DATE:	APRIL 2001						
APPROP CODE/BA OPAF/VEHICULAR EQU					<b>IENCLATURE</b> WAGON, 4x2	E:		
	FY2000	FY2001	FY2002	FY2003	FY2004	FY2005	FY2006	FY2007
QUANTITY	0	0	8	39	99	5	8	11
COST (in Thousands)	\$0	\$0	\$124	\$616	\$1,642	\$84	\$137	\$194

#### **Description:**

This vehicle is a compact-size vehicle equipped with a fuel-efficient gasoline engine. Its primary purpose is for the transportation of personnel and light cargo within and between installations and to/from off-base locations in an urban environment. Without these vehicles, cargo and tools would not be delivered to the working units/field in a timely manner and may increase downtime for maintenance/transportation and/or air crews. The Air Force's policy is to lease most general purpose vehicles (sedans, station wagons, etc.), however, it's the Air Force's objective to lease where it makes sense and buy where leasing is not feasible. Some areas determined to be not feasible include some overseas locations, classified compartmentalized programs and some high security areas located near missile installations. The requested replacement vehicles are to fill requirements for these situations. Failure to provide funds for this program could reduce military and civilian personnel response time in supporting their mission. The total Air Force FY02 procurement requirement is 439 against an inventory objective of 692.

Items requested in FY02 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.

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	UNCLASSIFIED		

BUDGET ITEM JUSTIFICATION	FOR AGGI	REGAT	ED ITEMS (EX	(HIBIT P- 40A)				DATE: A	PRIL 2001	
APPROP CODE/BA: OPAF/VEHICULAR EQUIPMENT				P-1 NOME STATION-WA	NCLA GON, 4	TURE	:			
PROCUREMENT ITEMS	ID		FY2000		(2001			2002		2003
	CODE	QTY.	COST	QTY.	CC	DST	QTY.	COST	QTY.	COST
STATION WAGON US (BPAC 1111)	A						5	\$85		
STATION WAGON JA (BPAC 1112)	А						1	\$14		
STATION WAGON SP (BPAC 1115)	А						2	\$25		
Totals:							8	\$124		
	<b>P-1 ITEM</b>	NO		PAGE 4					Page 1	of 1

BUDGET ITEM JUS	DATE:	APRIL 2001						
APPROP CODE/BA: P-1 NOMENCLATURE:								
OPAF/VEHICULAR EQU	JIPMENT			BUSES				
	FY2000	FY2001	FY2002	FY2003	FY2004	FY2005	FY2006	FY2007
QUANTITY	0 68 72 180 166 37					93	101	
COST (in Thousands)	\$0	\$4,867	\$4,307	\$10,338	\$10,273	\$2,571	\$4,889	\$7,207

#### Description:

These commercial buses address a broad range of mission-related mass transit requirements, dictating the procurement of a variety of sizes, ranging from 14-52 passenger (pax) capacity. This program provides 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 support any official base function requiring transport of large groups of personnel. The bus family also offers a 52-pax dedicated Compressed Natural Gas (CNG) vehicle in order to accommodate Executive Order 13149. This vehicle group also provides transportation for protocol requirements and special events (e.g. Congressional, executive and the highest levels of DoD). The various Air Force bands are transported by inter-city buses to appearances across the United States. Failure to fund this program of vehicles will result in restricting the transportation of training groups within Air Education and Training Command (AETC) and transportation of air crews and passengers to and from the flight line. Shuttle bus service for temporary duty personnel within the base would be extremely limited. The non-availability of this vehicle will cause less economical means of transportation to be used. This vehicle is among the top four most critical items within AETC. The total Air Force FY02 procurement requirement is 1,171 vehicles against an inventory objective of 1,649.

Items requested in FY02 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.

This administration has not addressed FY2003-2007 requirements. All FY 2003-2007 budget estimates included in this book are notional only and subject to change.

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BUDGET ITEM JUSTIFICATION	FOR AGG	REGATED	ITEMS (EX	(HIBIT P- 40A)			DATE: A	PRIL 2001	
APPROP CODE/BA: OPAF/VEHICULAR EQUIPMENT				P-1 NOMEN BUSES	NCLATURE	:			
PROCUREMENT ITEMS	ID	F	Y2000	FY	FY2001		2002	FY	2003
	CODE	QTY.	COST	QTY.	COST	QTY.	COST	QTY.	COST
28 PAX US (BPAC 124A)	А			12	\$727	26	\$1,516		
28 PAX US CNG (BPAC 124B)	А					7	\$484		
41 PAX US (BPAC 124C)	А			4	\$1,110				
44 MED US (BPAC 124K)	А			6	\$467				
44 TRANS US (BPAC 124L)	А			32	\$1,884	24	\$1,425		
INTRA BUS US (BPAC 124N)	А					1	\$99		
44 PAX US CNG (BPAC 124P)	А					2	\$165		
28 PAX JAPAN (BPAC 124X)	А					7	\$436		
16 PAX US (BPAC 1243)	А			9	\$362	4	\$157		
16 PAX JAPAN (BPAC 1244)	А			1	\$25	1	\$25		
23 PAX SURREY (BPAC 1245)	А			1	\$57				
16 PAX GERMANY (BPAC 1246)	А			3	\$235				
Totals:				68	\$4,867	72	\$4,307		
Remarks:									
	P-1 ITEM	NO		PAGE N	IO:			Page 1	of 1

BUDGET ITEM JUS	DATE:	APRIL 2001						
APPROP CODE/BA OPAF/VEHICULAR EQU				P-1 NON AMBULAN	<b>IENCLATURE</b> ICES	E:		
	FY2000 FY2001 FY2002 FY2003					FY2005	FY2006	FY2007
QUANTITY	0	1	3	23	43	9	15	17
COST (in Thousands)	\$0	\$65	\$252	\$1,750	\$3,254	\$747	\$1,124	\$1,330

#### **Description:**

Ambulances include both bus ambulances (AMBUS) and modular ambulances. The bus ambulance is a 44-passenger bus converted to accommodate massive patient transport for medical emergency situations. Bus ambulances are used in medical evacuations, including Aerovac support. During peacetime they are primarily used for mass casualty situations during exercises and real world situations such as disaster relief and assistance. They are also used for training such as Combat Medical Readiness Training, contingency exercises such as Red Flag and other official functions. They are used to transport medical personnel to the accident site as well as to transport litter patients from injury sites to hospitals. For some customers such as Pacific Air Force users, the AMBUS is used for War Readiness Material support. The modular ambulances are standard commercial ambulances in both two and four wheel drive configurations. They also perform medical evacuation as well as movement of patients under field conditions, aircraft crash rescue operations, and both emergency and routine transportation of patients to and from field medical facilities and hospitals. Failure to provide sufficient quantities of these vehicles potentially could contribute to the loss of life by not providing the required level of medical support during emergency situations. The total Air Force FY02 procurement requirement is 314 against an inventory objective of 907.

Items requested in FY02 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. This administration has not addressed FY2003-2007 requirements. All FY 2003-2007 budget estimates included in this book are notional only and subject to change.

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	UNCLASSIFIED		

BUDGET ITEM JUSTIFICATION	FOR AGG	REGATE	D ITEMS (EXI	HIBIT P- 40A)			DATE: A	PRIL 2001			
APPROP CODE/BA: OPAF/VEHICULAR EQUIPMENT				P-1 NOMENCLATURE: AMBULANCES							
PROCUREMENT ITEMS	ID		Y2000		2001		2002		2003		
	CODE	QTY.	COST	QTY.	COST	QTY.	COST	QTY.	COST		
BUS, AMB MOD 4X4 (BPAC 1354)	A			1	\$65						
BUS, AMB 44 PX CON US (BPAC 1359)	A					3	\$252				
Totals:				1	\$65	3	\$252				
Remarks:											
	<b>P-1 ITEM</b>	NO		PAGE N 8	10:		Page 1 of 1				

BUDGET ITEM JUS	TIFICATION (E		DATE:	APRIL 2001							
APPROP CODE/BA	:			P-1 NOM	P-1 NOMENCLATURE:						
OPAF/VEHICULAR EQU	JIPMENT			LAW ENF	ORCEMENT VEH	HICLE					
	FY2000	FY2001	FY2002	FY2003	FY2004	FY2005	FY2006	FY2007			
QUANTITY	TITY 53 85 79				47	23	23	23			
COST (in Thousands)	\$1,061	\$1,784	\$1531	\$854	\$875	\$483	\$495	\$499			

#### **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. Failure to provide a sufficient quantity of this type vehicle contributes to the compromise of military and civilian personnel safety. It also would hinder the response time to emergency situations as well as interfere with providing adequate traffic control, patrolling and securing of normal base operations. Force protection is a high priority at all installations Air Force wide. The use and visibility of Law Enforcement sedans is a primary deterrent to potential terrorism and crime. The total Air Force FY02 procurement requirement is 185 law enforcement vehicles against an inventory objective of 627.

Items requested in FY02 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.

This administration has not addressed FY2003-2007 requirements. All FY 2003-2007 budget estimates included in this book are notional only and subject to change.

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UNCLASSIFIED								

BUDGET ITEM JUSTIFICATI	ON FOR AGG	REGATED II	EMS (EXHII	BIT P- 40A)			DATE: APRIL 2001			
APPROP CODE/BA: OPAF/VEHICULAR EQUIPMENT				P-1 NOMENCLATURE: LAW ENFORCEMENT VEHICLE						
PROCUREMENT ITEMS	ID	FY2	000	FY2	001	FY2	2002	FY2003		
	CODE	QTY.	COST	QTY.	COST	QTY.	COST	QTY.	COS	
US BPAC 1601)	А	49	\$999	80	\$1,684	70	\$1,343			
IAPAN (BPAC 1602)	A	4	\$62	5	\$100	9	\$188			
Totals:		53	\$1,061	85	\$1,784	79	\$1,531			
	<b>P-1 ITEM</b> 5	NO		PAGE N 10	O:			Page 1	of 1	

BUDGET ITEM JUS	TIFICATION (	EXHIBIT P-40	)		DATE: APRIL 2001							
APPROP CODE/BA: OPAF/VEHICULAR EQUIPMENT					P-1 NOMENCLATURE:							
			FY2003	FY2003 FY2004 FY2005 FY2006 FY2007								
QUANTITY	0	0	3	2	1	1	1	1				
COST (in Thousands)	\$0	\$0	\$684	\$480	\$250	\$250	\$250	\$250				

#### **Description:**

The Air Force Office of Special Investigations (AFOSI) has responsibility for non-tactical Heavy Armored Vehicles (HAVs). The HAVs are used during Protective Service Operations (PSO) to transport permanent party, visiting senior U.S. military and DoD civilian officials, as well as senior US executive and legislative branch dignitaries, within designated high terrorist threat areas. Examples of persons supported: The President of the US, members of Congress, the Secretary of Defense, Under Secretaries of Defense and AF, Secretary of the Air Force, Secretary of the Army, Chief of Staff of the Air Force, Vice Chief of Staff of the Air Force, Army Chief of Staff, and other US military command officials. During travel, HAVs provide protection to senior US leaders against terrorist attacks involving blasts and bullets.

HAV 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) counterintelligence and anti-terrorism experts. Based on the current threat assessment, AFOSI continues to have a validated global requirement for 13 HAVs. All the vehicles are located in overseas locations. AFOSI has sole responsibility for the Air Force HAV assets and maintains a rapidly aging, less reliable fleet.

Vehicles with factory-installed armor include a strengthened suspension required to hold the weight of armor, as well as a warranty. Purchasing HAVs with factory-installed armoring reduces the risk of mechanical and armoring problems known to occur with after-market HAVs.

Failure to fund this request severely impacts AFOSI's ability to protect senior military and civilian leaders. The total Air Force FY02 procurement requirement is 9 against an inventory objective of 13; fiscal constraints limit the requested FY02 procurement quantity to 3.

<b>P-1 ITEM NO:</b> 6	PAGE NO: 11	Page 1 of 2
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<b>BUDGET ITEM JUSTIFICATION (EXHIBIT P-40)</b>		DATE: APRIL 2001
APPROP CODE/BA:	P-1 NOMENCLATURE:	
OPAF/VEHICULAR EQUIPMENT	ARMORED VEHICLE	
Description (sent):		

#### **Description (cont.):**

Items requested in FY02 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.

This administration has not addressed FY2003-2007 requirements. All FY 2003-2007 budget estimates included in this book are notional only and subject to change.

<b>P-1 ITEM NO</b> :	<b>PAGE NO:</b> 12	Page 2 of 2

BUDGET ITEM JUSTIFICATION FOR AGGREGATED ITEMS (EXHIBIT P- 40A)						DATE: A	DATE: APRIL 2001		
APPROP CODE/BA: OPAF/VEHICULAR EQUIPMENT				P-1 NOME ARMORED VI	MENCLATURE: ED VEHICLE				
PROCUREMENT ITEMS	ID	ID FY2000			(2001		2002	FY2003	
	CODE	QTY.	COST	QTY.	COST	QTY.	COST	QTY.	COST
ARMORED VEHICLE (BPAC 1702) GERMANY	A					3	\$684		
Totals:						3	\$684		
	<b>P-1 ITEM</b> 6	NO		PAGE 13	NO:			Page 1	of 1
	Ŭ Ŭ								

BUDGET ITEM JUS	TIFICATION (	EXHIBIT P-40	)		DATE: APRIL 2001						
APPROP CODE/BA: OPAF/VEHICULAR EQUIPMENT				_	<b>P-1 NOMENCLATURE:</b> TRUCK, CARGO-UTILITY, 3/4T, 4x4						
	FY2000	FY2001	FY2002	FY2003	FY2004	FY2005	FY2006	FY2007			
QUANTITY											
COST (in Thousands)	\$4,996	\$5,080	\$5,733	\$11,409	\$6,242	\$10,087	\$9,341	\$8,756			

#### **Description:**

Truck, Cargo-Utility, 3/4 Ton, 4x4 is a commercial four-door, six passenger cargo truck that equips our forces with a four-wheel-drive, automatic transmission vehicle. It permits crews and large cargo to travel together to off-highway sites. It has the capability for handling the more austere and rugged taskings. Four-wheel-drive capability is critical to off-highway winter operations to isolated missile, communications, weather, and radar sites. It is primarily used by the Mobility Engineering Installation and Combat Communication Squadrons. This vehicle is used in support of worldwide contingency situations as well as training and exercise missions. It is also used in direct operational support of strategic weapons systems (silo crew changes) and fighter and bomber aircraft crews. The Security Forces use it in a force protection role. Failure to fund sufficient quantities of this type vehicle would mean inadequate support for the Missile Maintenance Squadrons whose personnel must travel many unpaved roads to reach their designated sites. It would further lead to a lack of transportation for personnel and equipment necessary to maintain the needed cables between the missile launch and missile alert facilities, ensuring the integrity of the entire missile system. The total Air Force FY02 procurement requirement is 2731 against an inventory objective of 3912. Items requested in FY02 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.

\*FY00/01 funds are included in P-1 Line Item #12, Items Less Than \$5 million, Cargo & Utility Vehicles category.

This administration has not addressed FY2003-2007 requirements. All FY 2003-2007 budget estimates included in this book are notional only and subject to change.

P-1 ITEM NO:	PAGE NO: 14	Page 1 of 1
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#### **BUDGET ITEM JUSTIFICATION FOR AGGREGATED ITEMS (EXHIBIT P- 40A)**

DATE: APRIL 2001

#### **APPROP CODE/BA:**

OPAF/VEHICULAR EQUIPMENT

P-1 NOMENCLATURE: TRUCK, CARGO-UTILITY, 3/4T, 4x4

PROCUREMENT ITEMS	ID	FY2000		FY2001		FY2002		FY2003	
	CODE	QTY.	COST	QTY.	COST	QTY.	COST	QTY.	COST
US GAS/DIESEL (BPAC 2061)	А	184	\$4,996	176	\$4,879	64	\$1,804		
JAPAN GAS (BPAC 2062)	А			3	\$53	13	\$219		
US BIFUEL (BPAC 2064)	А			4	\$148	100	\$3,710		
Totals:		184	\$4,996	183	\$5,080	177	\$5,733		

Remarks:

<b>P-1 ITEM NO</b> 7	<b>PAGE NO:</b> 15	Page 1 of 1

BUDGET PROCUREMENT H	IISTOR	( PLANN	IING (EXHIBIT P- 5/	A)		DATE: APRIL 2001			
APPROP CODE/BA: OPAF/VEHICULAR EQUIPMEN	т			P-1 NOMENCL TRUCK, CARGO-L					
ITEM / FISCAL YEAR	QTY.	UNIT COST	LOCATION OF PCO	CONTRACT METHOD & TYPE	CONTRACTOR AND LOCATION	AWE DAT			DATE REV. AVAIL
US GAS /DIESEL (BPAC 2061)									
FY00	125	26,203	AFMC/WR-ALC	MIPR/OPT/IDIQ		FEB (	0 MAY 00		
FY00	59	29,169	AFMC/WR-ALC	MIPR/IDIQ		AUG	0 DEC 00		
FY01	176	27,722	AFMC/WR-ALC	MIPR/IDIQ		FEB (	1 MAY 01		
FY02	64	28,190	AFMC/WR-ALC	MIPR/IDIQ	GSA (UNKNOWN)	FEB (	2 MAY 02	Y	
JAPAN GAS (BPAC 2062)									
FY01	3	17,530	AFMC/WR-ALC	MIPR/FP		JUN (	1 SEP 01		
FY02	13	16,877	AFMC/WR-ALC	MIPR/FP	NAVY (UNKNOWN)	JUN (	2 SEP 02	Y	
US BIFUEL (BPAC 2064)									
FY01	4	37,104	AFMC/WR-ALC	MIPR/IDIQ		JUN (	1 SEP 01		
FY02	100	37,104	AFMC/WR-ALC	MIPR/IDIQ	GSA (UNKNOWN)	JUN (	2 SEP 02	Y	
REMARKS:									
	P-1	ITEM N 7	0	<b>PAGE NO</b> 16	:		Pag	e 1 of	<sup>:</sup> 1
			UN	CLASSIFI	ED				

BUDGET ITEM JUSTIFICATION (EXHIBIT P-40)						DATE: APRIL 2001			
APPROP CODE/BA				_	IENCLATURE				
	FY2000	FY2001	FY2002	FY2003	FY2004	FY2005	FY2006	FY2007	
QUANTITY									
COST (in Thousands)	\$5,017	\$18,806	\$10,367	\$8,098	\$5,743	\$13,571	\$11,758	\$10,174	

#### **Description:**

This program includes the procurement of a vehicle group consisting of commercial trucks with double rear doors as well as delivery vans with cut-off cabs and full-width rear doors and windows. Defining characteristics include two-wheel drive, automatic transmissions and diesel engines. The primary requirement for this vehicle is to support aircraft sortie generation. It also keeps cargo/supplies out of inclement weather, transports ammunition and weapons for combat training, provides mobile tool crib support for the flight line and serves as transportation for air/flight crew personnel and maintenance crews. Failure to provide this vehicle can diminish the Air Force's capability to support customers' need for repositioning assets for reception of forces supporting Air Expeditionary Forces (AEF).

Items requested in FY02 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. The total Air Force FY02 procurement requirement is 2,709 vehicles against an inventory objective of 5,615.

FY00 funds are included in P-1 line Item # 12, Items Less Than \$5 Million, Cargo & Utility Vehicles category.

This administration has not addressed FY2003-2007 requirements. All FY 2003-2007 budget estimates included in this book are notional only and subject to change.

	<b>P-1 ITEM NO:</b> 8		<b>PAGE NO:</b> 17		Page 1 of 1				
UNCLASSIFIED									

#### **BUDGET ITEM JUSTIFICATION FOR AGGREGATED ITEMS (EXHIBIT P- 40A)**

DATE: APRIL 2001

#### **APPROP CODE/BA:**

OPAF/VEHICULAR EQUIPMENT

**P-1 NOMENCLATURE:** TRUCK, MULTI-STOP, 1T 4x2

PROCUREMENT ITEMS	ID	FY2000		FY2001		FY2002		FY	2003
TROOOREMENT TEMO	CODE	QTY.	COST	QTY.	COST	QTY.	COST	QTY.	COST
DELIVERY VAN GERMANY (BPAC 216A)	А			30	\$920	26	\$819		
DELIVERY VAN JAPAN (BPAC 216C)	А			10	\$230				
DELIVERY VAN ITALY (BPAC 216E)	А			15	\$480	13	\$419		
DELIVERY VAN TURKEY (BPAC 216F)	А			15	\$480				
DELIVERY VAN US (BPAC 2165)	А	159	\$5,017	455	\$16,696	225	\$7,379		
DELIVERY VAN KC-10 (BPAC 2169)	А					1	\$1,750		
Totals:		159	\$5,017	525	\$18,806	265	\$10,367		

Remarks:

<b>P-1 ITEM NO</b> 8	PAGE N 18	0:	Page 1 of 1

BUDGET PROCUREMENT H	IISTOR		IING (EXHIBIT P- 5/	A)		DATE: AP	RIL 20	01			
APPROP CODE/BA: OPAF/VEHICULAR EQUIPMEN	т			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 GERMANY (BPAC 216A)											
FY01	30	30,671	AFMC/WR-ALC	FCA/FFP	USAFE (UNKNOWN) (1)	AUG 01	SEP 01	Y			
FY02	26	31,500	AFMC/WR-ALC	FCA/FFP	USAFE (UNKNOWN) (1)	FEB 02	AUG 02	Y			
DELIVERY VAN JAPAN (BPAC 216C)											
FY01	10	23,046	AFMC/WR-ALC	MIPR/FFP	NAVY (UNKNOWN)	AUG 01	NOV 01	Y			
DELIVERY VAN ITALY (BPAC 216E)											
FY01	15	31,975	AFMC/WR-ALC	FCA/FFP	USAFE (UNKNOWN)	AUG 01	OCT 01	Y			
FY02	13	32,231	AFMC/WR-ALC	FCA/FFP	USAFE (UNKNOWN)	FEB 02	AUG 02	Y			
DELIVERY VAN TURKEY (BPAC 216F)											
FY01	15	31,975	AFMC/WR-ALC	FCA/FFP	USAFE (UNKNOWN)	AUG 01	OCT 01	Y			
	  P-1	ITEM N	0	PAGE NO 19	:		Pag	 e 1 of	2		

BUDGET PROCUREMENT H	BUDGET PROCUREMENT HISTORY PLANNING (EXHIBIT P- 5A)							DATE: APRIL 2001				
APPROP CODE/BA: OPAF/VEHICULAR EQUIPMEN	т			P-1 NOMENCLA TRUCK, MULTI-ST								
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 US (BPAC 2165)												
FY00	159	31,556	AFMC/WR-ALC	MIPR/FFP	GSA CARTER CHEV/OKARCHE	OK FEB 00	AUG 00					
FY01	455	36,695	AFMC/WR-ALC	MIPR/FFP	GSA CARTER CHEV/OKARCHE	OK APR 01	SEP 01					
FY02	225	32,796	AFMC/WR-ALC	MIPR/FFP	GSA (UNKNOWN)	MAR 02	SEP 02	Y				
DELIVERY VAN KC-10 (BPAC 2169)												
FY02	1	1,750	AFMC/WR-ALC	MIPR/FFP	GSA (UNKNOWN)	FEB 02	AUG 02	Y				
REMARKS:												
							1					
	P-1	ITEM N 8	0	<b>PAGE NO</b> 20	:		Page	e 2 of	2			

BUDGET ITEM JUSTIFICATION (EXHIBIT P-40)							APRIL 2001		
APPROP CODE/BA: P-1 NOMENCLATURE:									
OPAF/VEHICULAR EQU	ICULAR EQUIPMENT HIGH MOBILITY VEHICLE								
	FY2000	FY2001	FY2002	FY2003	FY2004	FY2005	FY2006	FY2007	
QUANTITY									
COST (in Thousands)	\$11,059	\$7,571	\$6,390	\$5,876	\$9,275	\$4,135	\$5,191	\$6,175	

#### Description:

This program includes the procurement of High Mobility Multi-Purpose Wheeled Vehicles (HMMWV). These vehicles have the capability to operate under tactical conditions in austere adverse terrain locations. They support security forces/force protection activities, civil engineering (including Red Horse Squadrons), combat communication flights, and Air Force special operation forces (SOF) airlift units. 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 and compatibility of parts, and standardized maintenance and supply support in a joint force environment. These vehicles are used in locations worldwide and in high intensity hostile environments (for example, Bosnia and Kosovo). They are used by Combat Communications Flights, Air Support Operations Squadrons (ASOS) and other tactical direct mission support units throughout Pacific Air Force (PACAF), Air Combat Command (ACC), and United States Air Force Europe (USAFE) as well as other commands in the Air Force. These tactical vehicles are critical to our war fighting capability. Current shortfalls of these vehicles negatively impact Operations Plan execution and has the potential to result in force protection degradation. This vehicle plays a vital role for personnel during deployments. There is not a work-around or suitable substitute item available for this tactical vehicle. Items requested in FY02 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. The total Air Force FY02 procurement requirement is 1,052 vehicles against an inventory objective of 1,935.

This administration has not addressed FY2003-2007 requirements. All FY 2003-2007 budget estimates included in this book are notional only and subject to change.

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BUDGET ITEM JUSTIFICATION	N FOR AGG	REGATED I	TEMS (EXH	IBIT P- 40A)			DATE: A	PRIL 2001		
APPROP CODE/BA: OPAF/VEHICULAR EQUIPMENT				P-1 NOMEN HIGH MOBILIT	NCLATURE Y VEHICLE	:				
PROCUREMENT ITEMS	ID		2000		2001		2002		FY2003	
	CODE	QTY.	COST	QTY.	COST	QTY.	COST	QTY.	COST	
M1097A2 HMMWV BPAC (2261)	A	187	\$11,059	0 116	\$7,571	105	\$6,390			
Totals:		187	\$11,059	116	\$7,571	105	\$6,390			
Remarks:										
	<b>P-1 ITEM</b> 10	NO		PAGE N 22				Page 1	of 1	

BUDGET PROCUREMENT HISTORY PLANNING (EXHIBIT P- 5A)							DATE: APRIL 2001				
APPROP CODE/BA: OPAF/VEHICULAR EQUIPMEN	т			P-1 NOMENCLA							
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)											
FY00	187	59,139	AFMC/WR-ALC	MIPR/CM-5 (Yr5)	ARMY/TACOM AM GENERAL, S BEND, IN	OUTH	MAY 00	FEB 01			
FY01	116	65,267	AFMC/WR-ALC	MIPR/CM-5 (Yr1)	ARMY/TACOM AM GENERAL, S BEND, IN	OUTH	JUN 01	MAR 02			
FY02	105	60,857	AFMC/WR-ALC	MIPR/CM-5 (Yr2)	ARMY/TACOM AM GENERAL, S BEND, IN	OUTH	FEB 02	FEB 03	Y		
REMARKS:											
	P-1	<b>ITEM N</b> 10	0	PAGE NO 23				Page	e 1 of	1	

BUDGET ITEM JUSTIFICATION (EXHIBIT P-40)							DATE: APRIL 2001			
APPROP CODE/BA	:			P-1 NOM	IENCLATURE	:				
OPAF/VEHICULAR EQU	OPAF/VEHICULAR EQUIPMENT CAP VEHICLES									
	FY2000	FY2001	FY2002	FY2003	2003 FY2004 FY2005 FY2006 FY2					
QUANTITY										
COST (in Thousands)	\$751	\$763	\$785	\$792	\$810	\$829	\$845	\$863		
<b>Description:</b> This program includes include command and of of vehicles to support O This administration has and subject to change.	control for search CAP missions.	h and rescue, co	ounter-drug, disa	ster relief, and	training mission	ns. FY02 fundin	ng continues pro	ocurement		

<b>P-1 ITEM NO:</b> 11	<b>PAGE NO:</b> 24	Page 1 of 1

BUDGET ITEM JUSTIFICATION (EXHIBIT P-40)							DATE: APRIL 2001			
APPROP CODE/BA	PPROP CODE/BA: P-1 NON PAF/VEHICULAR EQUIPMENT ITEMS LE						TILITY)			
	FY2000	FY2001	FY2002	FY2003	FY2004	FY2005	FY2006	FY2007		
QUANTITY										
COST (in Thousands)	\$30,409	\$35,478	\$34,320	\$49,745 \$53284 \$130,239 \$94,927						
Description										

#### 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. These vehicles also support mission needs for light to heavy cargo transport, as well as transportation for air/flight crew personnel. In addition, these vehicles support flightline operations (aircraft maintenance) and air base civil engineers performing base and airfield maintenance. Failure to provide this family of vehicles can diminish the Air Force's capability to support customers' need for various flightline/runway operations. The 1,207 vehicles requested for FY02 include alternative fuel vehicles that are required under Executive Order 13149, 21 April 2000. Items requested in FY02 are identified on the following P-40A I/L 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.

This administration has not addressed FY2003-2007 requirements. All FY 2003-2007 budget estimates included in this book are notional only and subject to change.

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	UNCLASSIFIED		

BUDGET ITEM JUSTIFICATION FOR AGGREGATE	ED ITEMS (EXHIBIT P- 40A-IL)		DAT	DATE: APRIL 2001		
APPROP CODE/BA: OPAF/VEHICULAR EQUIPMENT	P-1 NOMENCL ITEMS LESS THAN	ATURE: I \$5,000,000 (CARG	GO-UTILITY)			
		FY2	002		FY2003	
PROCUREMENT ITEMS	NSN	QTY.	COST	QTY.	COST	
TRUCK, PICKUP 3/4 TON (T) 4X4 (BPAC 2992002)	2320008116869	44	\$932			
COMPACT PICKUP 4X4 (BPAC 2992003)	2320010878223	24	\$463			
COMPACT PICKUP 4X2 US (BPAC 2992006)	2320010096194	176	\$2,417			
3/4 TON PICKUP 4X4 US (BPAC 2992011)	2320008116869	12	\$302			
COMPACT PICKUP JAPAN (BPAC 2992015)	2320010096194	20	\$223			
COMPACT PICKUP US BI FUEL (BPAC 2992016)	2320010096194	37	\$617			
COMPACT PICKUP US COMPRESSED NATURAL GAS (BPAC 2992017)	2320010096194	1	\$14			
1/2 T PICKUP TURKEY (BPAC 2992019)	2320005401428	42	\$526			
1/2 T PICKUP GERMANY (BPAC 2992021)	2320005401428	47	\$855			
1/2 T PICKUP UNITED KINGDOM (BPAC 2992022)	2320005401428	22	\$490			
1/2 T PICKUP JAPAN (BPAC 2992023)	2320010096196	5	\$63			
TRAILER, SEMI, LOW BED, 60 TONS (BPAC 2993002)	2330003492572	2	\$60			
TRAILER, SEMI, 20 TONS, 38 FT. (BPAC 2993004)	2330013819477	4	\$122			
TRAILER, SEMI, LOW BED, 35 TONS (BPAC 2993007)	2330010516648	1	\$45			
TRAILER, LOW BED, 50 TONS (BPAC 2993008)	2330010585911	1	\$48			
TRUCK VAN (BAND) 24KGROSS VEHICLE WEIGHT (GVW) US (BPAC 2994002)	2320010397929	1	\$36			
TRUCK VAN (BAND) 24KGVW JA (BPAC 2994014)	2320010397929	2	\$115			
TRAILER, CARGO M-105 1.5 TONS US (BPAC 2996003)	2330005416466	3	\$24			
<b>P-1 ITEM NO</b> 12	PAGE NO: 26			Paç	ge 1 of 4	

BUDGET ITEM JUSTIFICATION FOR AGGREGATED IT	TEMS (EXHIBIT P- 40A-IL)		DATE	DATE: APRIL 2001		
APPROP CODE/BA: OPAF/VEHICULAR EQUIPMENT	P-1 NOMENC ITEMS LESS THA	<b>LATURE:</b> N \$5,000,000 (CARG	O-UTILITY)			
		FY20	02		FY2003	
PROCUREMENT ITEMS	NSN	QTY.	COST	QTY.	COST	
HMMWV, XM1113 US (BPAC 2996020)	2320014120143	31	\$2034			
COMMERCIAL UTILITY CARGO VEHICLE M1009 (BPAC 2996024)	2320011232665	2	\$68			
COMMERCIAL UTILITY CARGO VEHICLE M1008 (BPAC 2996025)	2320011232671	19	\$629			
HMMWV, M1114 (BPAC 2996027)	2320014133739	5	\$784			
TRUCK, WRECKER, MEDIUM TACTICAL VEHICLE (MTV), M1089 (BPAC 2996033)	2320013544528	2	\$663			
TRUCK, CARGO, MTV, M1083, 5T (BPAC 2996034)	2320013543386	16	\$2408			
TRAILER, HIGH MOBILITY, LIGHT (BPAC 2996036)	2330013886662	34	\$397			
TRUCK, TRACTOR SPOTTER (BPAC 2999002)	2320002392944	1	\$69			
TRUCK TRACTOR 24K 4X2 (BPAC 2999003)	2320006112429	6	\$332			
TRUCK, TRACTOR 44.5 GVW (BPAC 2999005)	2320002711432	31	\$2,204			
TRUCK TRACTOR 39.5 GVW JAAPAN (BPAC 2999018)	2320013417627	3	\$251			
TRUCK TRACTOR 39.5 GVW US (BPAC2999007)	2320013417627	7	\$514			
TRUCK, TRACTOR MSL SPT (BPAC 2999009)	2320003444397	26	\$2,475			
TRUCK, TRACTOR 44.5 GVW GERMANY (BPAC 2999015)	2320002711432	5	\$490			
TRAILER, FLAT BED 8T US (BPAC 299A010)	2330000140494	1	\$12			
TRUCK, UTILITY 4K 4X4 (BPAC 299B001)	2320009889120	10	\$284			
TRUCK, UTILITY 4X2 US (BPAC 299B003)	2320012518501	10	\$185			
TRUCK, CARGO 1/2 TON (BPAC 299B004)	2320005802954	120	\$3133			
TRUCK, UTILITY 4X4 US (BPAC 299B005)	2320013386502	12	\$276			
<b>P-1 ITEM NO</b> 12	PAGE NC 27	):		Page	e 2 of 4	

BUDGET ITEM JUSTIFICATION FOR AGGREGATED	D ITEMS (EXHIBIT P- 40A-IL)		DATE	DATE: APRIL 2001		
APPROP CODE/BA: OPAF/VEHICULAR EQUIPMENT	P-1 NOMENC ITEMS LESS THAT	LATURE: N \$5,000,000 (CARG	O-UTILITY)			
		FY20	02		FY2003	
PROCUREMENT ITEMS	NSN	QTY.	COST	QTY. CO		
TRUCK, CARGO 1/2 TON JAPAN (BPAC 299B007)	2320005802954	7	\$94			
TRUCK, UTILITY 4X4 (BPAC 299B023)	2320014416916	36	\$1098			
TRUCK, CARGO 1/2 TON 4X2 TURKEY (BPAC 299B028)	2320005802954	20	\$248			
TRUCK, CARGO 1/2 TON 4X2 GERMANY (BPAC 299B029)	2320005802954	24	\$521			
MINOR REPLACEMENT	299C002	1	\$6			
CARRY-ALL 8 PAX GERMANY (BPAC 299C003)	2320008797662	9	\$210			
TRUCK, CARGO, 2.5T 4X4 (BPAC 299C011)	2320008017593	1	\$142			
TRUCK, PANEL 4X2 US (BPAC 299C018)	2320010132754	23	\$373			
TRUCK, PANEL 4X2 JAPAN (BPAC 299C021)	2320010132754	6	\$76			
CARRY-ALL 4X4 9 PASSENGER (BPAC 299C024)	2320009504238	25	\$861			
1TON STAKE & PLATFORM 4X2 (BPAC 299C026)	2320008518481	63	\$1,355			
TRUCK, STAKE&PLATFORM 10,000 GVW (BPAC 299C027)	2320012507367	56	\$1,470			
CARRY-ALL 8 PASSENGER US (BPAC 299C029)	2320008797662	24	\$476			
CARRY-ALL 15 PASSENGER (BPAC 299C030)	2320010366569	12	\$278			
CARRY-ALL COMPACT (BPAC 299C031)	2320011736113	15	\$336			
CARRY-ALL LOWPRO (BPAC 299C032)	2320004501005	7	\$194			
CARRY-ALL 8 PASSENGER JAPAN (BPAC 299C033)	2320008797662	2	\$35			
CARRY-ALL 15 PASSENGER JAPAN (BPAC 299C036)	2320010366569	2	\$33			
CARRY-ALL 8 PASSENGER US (BPAC 299C037)	2320008797662	3	\$60			
<b>P-1 ITEM NO</b> 12	PAGE NO			Page	e 3 of 4	

BUDGET ITEM JUSTIFICATION FOR AGGREGATED I	DATE	DATE: APRIL 2001						
APPROP CODE/BA: OPAF/VEHICULAR EQUIPMENT	P-1 NOMENCLATURE: ITEMS LESS THAN \$5,000,000 (CARGO-UTILITY)							
		FY20	02		FY2003			
PROCUREMENT ITEMS	NSN	QTY.	COST	QTY.	COST			
TRUCK, PANEL 4X2 (BPAC 299C040)	2320010132754	10	\$255					
CARRY-ALL 15 PASSENGER US (BPAC 299C043)	2320010366569	10	\$261					
CARRY-ALL COMPACT US BIFUEL (BPAC 299C044)	2320011736113	6	\$149					
CARRY-ALL 8 PASSENGER US BIFUEL (BPAC 299C045)	2320008797662	9	\$232					
TRUCK, STAKE&PLATFORM 1TON JAPAN (BPAC 299C048)	2320008518481	2	\$18					
TRUCK, STAKE&PLATFORM 10,000 GVW JAPAN (BPAC 299C050)	2320012507367	7	\$185					
TRUCK, PANEL 4X2 TURKEY (BPAC 299C056)	2320010132754	26	\$422					
TRUCK, STAKE&PLATFORM 1TON GERMANY (BPAC 299C058)	2320008518481	16	\$372					
TOTALS:			\$34,320					
<b>P-1 ITEM NO</b> 12	PAGE NO 29			Page	e 4 of 4			

BUDGET ITEM JUS	TIFICATION (E	XHIBIT P-40)		DATE: APRIL 2001						
APPROP CODE/BA: OPAF/VEHICULAR EQUIPMENT				_	P-1 NOMENCLATURE: HMMWV, ARMORED					
	FY2000	FY2001	FY2002	FY2003	FY2004	FY2005	FY2006	FY2007		
QUANTITY										
COST (in Thousands)	\$859	\$13,701	\$1,000	\$2,638	\$1,862	\$15,874	\$9,377	\$3,621		

#### **Description:**

This program provides funding for armored High Mobility Multipurpose Wheeled Vehicles (HMMWV). These vehicles consist of the standard diesel powered HMMWV utility trucks with armor plating to provide ballistic protection for armament components, crew, and ammunition.

This vehicle is procured by both Army and Air Force satisfying both services' armored vehicle requirements. This vehicle meets Air Force Explosive Ordnance Disposal (EOD), Civil Engineering (CE), Air Base Damage Assessment Team, Base Recovery After Attack Team (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) teamwork platform; CE uses it to support damage assessment and as an Armored Personnel Carrier (APC); and SF requires this vehicle for force protection, nuclear weapon security, and Air Base Defense operations.

In overseas locations (OCONUS), the Up-Armored HMMWV is a must-have asset in meeting SF force protection needs. The diverse environments within Southwest Asia (SWA) require a vehicle that has a 4X4 capability (this vehicle is 4X4 capable) and provides adequate protection from hostile fire in dangerous situations. In stateside (CONUS) locations, the vehicle is used primarily in a nuclear support role to satisfy nuclear weapon security requirements suitable for security vehicles used to enhance mobility and for security force vehicles to meet the highest standards of reliability and maintainability. The Up-Armored HMMWV also satisfies requirements for vehicles capable of cross-country travel over difficult terrain and operable by security force members in operational gear and protective clothing.

Deletion of funding for these vehicles could result in a possible compromise of nuclear safety, reduce vital force protection measures, and most

<b>P-1 ITEM NO:</b> 13	<b>PAGE NO:</b> 30	Page 1 of 2
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BUDGET ITEM JUSTIFICATION (	EXHIBIT P-40)				DATE: APRIL	2001		
APPROP CODE/BA:			P-1 NOME	NCLATURE:				
OPAF/VEHICULAR EQUIPMENT			HMMWV, AF	RMORED				
<b>Description (cont.):</b> importantly affect the safety of SF and procurement requirement is 1356 again	st an inventory obj	ective of 1761.		-	families. The tota	l Air Force FY02		
FY00 funding is included in P-1 Line I Congress added \$8.0M for Up-Armore Report 106-754, 17 July 00, page 205.			-	-	Reference Appropria	ation Conference		
Items requested in FY02 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.								
This administration has not addressed I and subject to change.	FY2003-2007 requ	rements. All Fy	Y 2003-2007 t	oudget estimates in	cluded in this book	are notional only		
	<b>P-1 ITEM NO:</b> 13			<b>PAGE NO:</b> 31		Page 2 of 2		

BUDGET ITEM JUSTIFICATION	FOR AGG		TEMS (EXH	IBIT P- 40A)			DATE: A	PRIL 2001			
APPROP CODE/BA: OPAF/VEHICULAR EQUIPMENT				P-1 NOMENCLATURE: HMMWV, ARMORED							
PROCUREMENT ITEMS	ID	FY2		FY2001			FY2002		FY2003		
	CODE	QTY.	COST	QTY.	COST	QTY.	COST	QTY.	COST		
HMMWV, UP-ARMORED (M1116), (BPAC 3201)	A			48	\$8000						
HMMWV, ARMORED (M1025A2), (BPAC 3202)	A	12	\$859	9 81	\$5,701	14	\$1,000				
Totals:		12	\$859	129	\$13,701	14	\$1,000				
Remarks:											
	<b>P-1 ITEM</b> 13	NO		PAGE N 32	IO:			Page 1	of 1		

BUDGET ITEM JUS	TIFICATION (I	EXHIBIT P-40)	)			DATE:	APRIL 2001	
APPROP CODE/BA: OPAF/VEHICULAR EQUIPMENT				_	IENCLATURE			
	FY2000	FY2001	FY2002	FY2003	FY2004	FY2005	FY2006	FY2007
QUANTITY								
COST (in Thousands)	\$7,723	\$5,593	\$6,035	\$10,224	\$9,893	\$1,378	\$2,267	\$3,086

#### **Description:**

The Flightline Tow Tractor (FLTT) is a diesel engine, two and four-wheel drive tow tractor. The FLTT tows aircraft (i.e., F-15, F-16, small passenger carrying aircraft and helicopters), Aerospace Ground Equipment (AGE), and munitions. The FLTT is the prime mover for powered and non-powered AGE for aircraft launch, recovery, and maintenance actions. The FLTT is essential for day-to-day flightline operations and is absolutely vital to sortie production during contingencies. Major Commands, including the Pacific Air Force, Air Force Materiel Command, United States Air Forces in Europe, Air Combat Command, and Air Mobility Command operate this vehicle in direct mission support roles. Depending on the terrain and the mission requirements, various configurations may be procured (e.g., heavy winterization, four-wheel drive). Items requested in FY02 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. The total Air Force FY02 procurement requirement is 2,718 tractors against an inventory objective of 3,852.

This administration has not addressed FY2003-2007 requirements. All FY 2003-2007 budget estimates included in this book are notional only and subject to change.

<b>P-1 ITEM NO:</b> 14		<b>PAGE NO:</b> 33	Page 1 of 1
	UNCLASSIFIED		

COST

BUDGET ITEM JUSTIFICATION FOR AGGREGATED ITEMS (EXHIBIT P- 40A)								DATE: APRIL 2001		
APPROP CODE/BA: OPAF/VEHICULAR EQUIPMENT				P-1 NOMENCLATURE: TRACTOR, TOW, FLIGHTLINE						
PROCUREMENT ITEMS	ID	FY2	000	FY2	2001	FY2	002	FY2003		
	CODE	QTY.	COST	QTY.	COST	QTY.	COST	QTY.	(	
TRACTOR TOW FLIGHTLINE(BPAC 3332)	А	222	\$7,72	23 169	\$5,593	155	\$5,560			
TRACTOR TOW FLIGHTLINE KC-10 (BPAC 3336)	A					15	\$475			
									_	
									_	
									_	
Totals:		222	\$7,72	23 169	\$5,593	170	\$6,035			
Remarks:										

<b>P-1 ITEM NO</b> 14	<b>PAGE NO:</b> 34	Page 1 of 1

BUDGET PROCUREMENT H	BUDGET PROCUREMENT HISTORY PLANNING (EXHIBIT P- 5A)							DATE: APRIL 2001				
APPROP CODE/BA: OPAF/VEHICULAR EQUIPMEN	т			P-1 NOMENCL								
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 FLIGHTLINE(BPAC 3332)												
FY00	222	34,788	AFMC/WR-ALC	OPT/FFP	STINAR CORP ST.PAUL, MN	AUG 00	JUN 01					
FY01	169	33,095	AFMC/WR-ALC	C/FFP W/OPT	UNKNOWN	AUG 01	DEC 01	Y				
FY02	155	35,871	AFMC/WR-ALC	C/FFP W/OPT	UNKNOWN	DEC 01	APR 02	Y				
TRACTOR TOW FLIGHTLINE KC-10 (BPAC 3336)												
FY02	15	31,666	AFMC/WR-ALC	C/FFP	UNKNOWN	DEC 01	APR 02	Y				
REMARKS:												
	P-1	<b>ITEM N</b> 14	0	PAGE NO	:		Page	e 1 of	1			

BUDGET ITEM JUSTIFICATION (EXHIBIT P-40)						DATE:	APRIL 2001			
APPROP CODE/BA: P-1 NOMENCLATURE:										
OPAF/VEHICULAR EQUIPMENT					TRUCK, HYDRANT FUEL					
	FY2000	FY2001	FY2002	FY2003	FY2004	FY2005	FY2006	FY2007		
QUANTITY										
COST (in Thousands)	\$1,262	\$2,383	\$5,895	\$4,870	\$4,084	\$2,977	\$2,124	\$2,170		

#### **Description:**

The Hydrant Fuel Truck is a truck-mounted piece of equipment designed to control fuel flow from an in-ground installed, pressurized fuel system into an aircraft. Flowing up to 750 gallons of fuel per minute, it permits quicker loading (compared to above-ground R-11 Refueler Truck) of fuel onto large fuel capacity aircraft such as the C-5, C-17, C-141, B-1, B-52, and C-130, supporting military operations worldwide. Without Hydrant Fuel Trucks, the pressurized fuel systems cannot be used, requiring the use of refueling tank vehicles. These vehicles would increase fuel loads and servicing time (compared to Hydrant Fuel Trucks) to load one aircraft with fuel, which could impact or delay the mission. The total Air Force FY02 procurement requirement is 185 against an inventory objective of 272. Items requested in FY02 on the P-5a 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 and FY01 funding is included in P-1 Line Item # 16, Items Less Than \$5 Million (Special Purpose).

This administration has not addressed FY2003-2007 requirements. All FY 2003-2007 budget estimates included in this book are notional only and subject to change.

	<b>P-1 ITEM NO:</b> 15		<b>PAGE NO</b> : 36		Page 1 of 1				
UNCLASSIFIED									

BUDGET ITEM JUSTIFICATION	N FOR AGGI	REGATED		IBIT P- 40A)			DATE: A	PRIL 2001		
APPROP CODE/BA: OPAF/VEHICULAR EQUIPMENT				P-1 NOMENCLATURE: TRUCK, HYDRANT FUEL						
PROCUREMENT ITEMS	ID CODE	FY2000		FY2001			FY2002		2003	
		QTY.	COST	QTY.	COST	QTY.	COST	QTY.	COST	
TRK HYDRANT FUEL (BPAC 3581)	A	10	\$1,262	2 16	\$2,383	39	\$5,895			
Totals:		10	\$1,262	2 16	\$2,383	39	\$5,895			
Remarks:										
	<b>P-1 ITEM</b> 15	NO		PAGE N 37	10:			Page 1	of 1	

BUDGET PROCUREMENT H	SUDGET PROCUREMENT HISTORY PLANNING (EXHIBIT P- 5A)						: AP	RIL 20	01		
APPROP CODE/BA: OPAF/VEHICULAR EQUIPMEN	т			P-1 NOMENCLATURE: TRUCK, HYDRANT FUEL							
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 HYDRANT FUEL (BPAC 3581)											
FY00	10	126,200	AFMC/WR-ALC	C/FP	WR-ALC (KOVATCH, NESQUEH PA)	ONING,	AUG 00	JUL 01			
FY01	16	148,948	AFMC/WR-ALC	OPT/FFP	WR-ALC (KOVATCH, NESQUEH PA)	ONING,	DEC 00	SEP 01			
FY02	39	151,154	AFMC/WR-ALC	OPT/FFP	WR-ALC (KOVATCH, NESQUEH PA)	ONING,	DEC 01	FEB 02	Y		
	P-1	<b>ITEM N</b> 15	0	PAGE NO	:			Page	ə 1 of	1	

BUDGET ITEM JUS	TIFICATION (E	EXHIBIT P-40)				DATE:	APRIL 2001			
APPROP CODE/BA	:			P-1 NOM	IENCLATURE	:				
OPAF/VEHICULAR EQU	JIPMENT			ITEMS LES	SS THAN \$5,000	,000 (SPECIAL I	PURPOSE)			
	FY2000	FY2001	FY2002	FY2003	FY2004	FY2005	FY2005 FY2006 FY			
QUANTITY										
COST (in Thousands)	\$23,409	\$15,031	\$19,818	\$50,413	\$73,690	\$59,914	\$55,948	\$54,292		
Description: This P-1 line includes a maintenance and facilit are representative of its Air Force mission requi Identification Code: A This administration has and subject to change.	ty vehicles essen ems to be procur irements.	tial to base and f ed. Items procur	flying operation red during exect	s. Items reque	sted in FY02 ard ge based on crit	e identified on t ical equipment es included in t	the following P- needed to suppo	ort current		
		<b>P-1 ITEM NO</b> 16	:		PAGE NO	:	Page	1 of 1		

BUDGET ITEM JUSTIFICATION FOR AGGREGAT	IDGET ITEM JUSTIFICATION FOR AGGREGATED ITEMS (EXHIBIT P- 40A-IL)						
APPROP CODE/BA: OPAF/VEHICULAR EQUIPMENT	P-1 NOMEN ITEMS LESS T	ICLATURE: HAN \$5,000,000 (SPE	CIAL PURPOSE)				
		FY	2002	FY20			
PROCUREMENT ITEMS	NSN	QTY.	COST	QTY.	COST		
REFRIGERATOR TRUCK REAR HOIST (BPAC 3991002)	2320008026354	1	\$89				
A24 TANK TRUCK (BPAC 3993001)	2320000898979	4	\$212				
TRUCK TANK 1200 GAL (BPAC 3993008)	2320001776777	7	\$567				
TRUCK TANK WATER 100 (BPAC 3993015)	2320014652737	1	\$104				
TRAILER, SEMI, WATER DIST 5500 GAL (BPAC 3994010)	8325005703417	1	\$85				
TRAILER, SEMI, VAN AIRCONDITIONED, 10 TONS (BPAC 3994017)	2330008359037	1	\$24				
TRAILER, CHASSIS 1TON MB-1 (BPAC 3995001)	2330005403715	5	\$31				
TRAILER, WATER, 400 GAL, M-149 (BPAC 3996003)	2330000606511	15	\$184				
TRAILER, ISO CONTAINER, M872 (BPAC 3996053)	2330011421385	4	\$145				
REFRIGERATOR VAN 19000 GROSS VEH WEIGHT (BPAC 3997001)	2320007704467	4	\$238				
SHOP VAN 4X4 (BPAC 3997005)	2320008562480	1	\$54				
TRUCK MISSILE VAN (BPAC 3997006)	2320013755833	14	\$1,070				
TRUCK HI LIFT 9 TON (BPAC 3999002)	2320005403991	3	\$448				
TRUCK TP MAINTENANCE 6 PAX (BPAC 399A001)	2320004512184	20	\$513				
3/4T 4X4 MAINTENANCE TRUCK BI-FUEL (BPAC 399A005)	2320005411714	2	\$60				
3/4T 4X4 MAINTENANCE TRUCK (BPAC 399A006)	2320005411714	45	\$1,086				
HI REACH 45 FT (BPAC 399A007)	2320009955610YW	2	\$206				
HI REACH 65 FT (BPAC 399A008)	2320009897163YW	2	\$258				
P-1 ITEM NO 16	PAGE 40		<u> </u>	Page	e 1 of 3		

BUDGET ITEM JUSTIFICATION FOR AGGREGATED I	JDGET ITEM JUSTIFICATION FOR AGGREGATED ITEMS (EXHIBIT P- 40A-IL)							
APPROP CODE/BA: OPAF/VEHICULAR EQUIPMENT		P-1 NOMENCLATURE: ITEMS LESS THAN \$5,000,000 (SPECIAL PURPOSE)						
		FY20	02		FY2003			
PROCUREMENT ITEMS	NSN	QTY.	COST	QTY.	COST			
TRUCK TELEPHONE MAINTENANCE STANDARD UTILITY (BPAC 399A010)	2320008019193	14	\$330					
TRUCK TELEPHONE MAINTENANCE COMPACT 4X2 (BPAC 399A011)	2320010939261	8	\$162					
TRUCK, TELEPHONE MAINTENANCE 1TON (BPAC 399A021)	2320013437375	5	\$149					
TRUCK, TELEPHONE MAINTENANCE COMPACT(BPAC 399A023)	2320010939261	5	\$110					
TRUCK, TELEPHONE MAINTENANCE STANDARD UTILITY (BPAC 399A024)	2320008019193	8	\$194					
MINOR REPLACEMENT ITEMS (BPAC 399B013)	MULTIPLE	1	\$182					
MINOR REPLACEMENT ITEMS FOR AETC RECRUITER (BPAC 399B016)	MULTIPLE	1	\$3,252					
CONTRACTOR VEHICLES (BPAC 399B035)	MULTIPLE	1	\$288					
TRUCK TANK FUEL 6000 GAL R11 (BPAC 399B050)	2320004335695	2	\$2,005					
TRACTOR IW40 (BPAC 399C001)	2420001900054	1	\$13					
FLIGHTLINE TOW TRACTOR, U-30 (BPAC 399C003)	1740013679485YW	4	\$838					
FLIGHTLINE TOW TRACTOR, MB-4 (BPAC 399C013)	1740005807990YW	29	\$2,994					
WRECKER TILT BED (BPAC 399E001)	2320013804755	3	\$267					
TRUCK WRECKER 4X2 32 GROSS VEH WEIGHT HYDRAULIC TYPE 1 (BPAC 399E004)	2320013033010	4	\$457					
TRUCK, RETRIEVER, 4X2 (BPAC 399E007)	2320014540723	1	\$82					
TRACTOR, AIRCRAFT TOW, MB-2 (BPAC399C002)	1740001438464YW	27	\$2,326					
TRUCK TANK 1200 GAL (BPAC 3993010)	2320001776778	13	\$795					
<b>P-1 ITEM NO</b> 16	PAGE NO 41	:		Page	e 2 of 3			

APPROP CODE/BA:       P1 NOMENCLATURE:         DYAF/VEHICULAR EQUIPMENT       TEMS LESS THAN \$5,000,000 (SPECIAL PURPOSE)         PROCUREMENT ITEMS       NSN       QTY.         COST       TOTALS:       \$19,818	
PROCUREMENT ITEMS NSN QTY. COST	
	FY2003
TOTALS:         \$19,818	QTY. COST
P-1 ITEM NO 16 PAGE NO: 42	Page 3 of 3

BUDGET ITEM JUS	TIFICATION (I	EXHIBIT P-40)				DATE:	APRIL 2001	
APPROP CODE/BA	:			P-1 NOM	IENCLATURE	:		
OPAF/VEHICULAR EQUIPMENT				ITEMS LES	SS THAN \$5,000	,000 (FIRE FIG	HTING)	
	FY2000	FY2001	FY2002	FY2003	FY2004	FY2005	FY2006	FY2007
QUANTITY								
COST (in Thousands)	\$6185	\$7,123	\$5,029	\$5,034	\$5,039	\$5,044	\$5,044	\$5,054
<b>Description:</b> This P-1 line includes for critical capability in sugnitive of the follow of the foll	fire fighting veh pport of aircraft ving P-40A I/L a led to support cu	icles with a procu crash/recovery, p and are representa arrent Air Force r FY2003-2007 rec	prement value opersonnel rescu ative of items to nission require quirements. Al	of less than \$5,0 le, and hazardou o be procured. I ements.	00,000 and are on the second s	Code A items. aps. Items req luring execution es included in	These vehicles uested in FY02 on may change b	provide are ased on
		<b>P-1 ITEM NO</b> 18	:		PAGE NO	:	Page	e 1 of 1

BUDGET ITEM JUSTIFICATION FOR AGGREGATE	D ITEMS (EXHIBIT P- 40A-IL)		DATE	: APRIL 20	001			
APPROP CODE/BA: OPAF/VEHICULAR EQUIPMENT	P-1 NOMENCL ITEMS LESS THAN	P-1 NOMENCLATURE: ITEMS LESS THAN \$5,000,000 (FIRE FIGHTING)						
		FY20	02		FY2003			
PROCUREMENT ITEMS	NSN	QTY.	COST	QTY.	COST			
P-19 CRASH TRUCK	4210004069615	1	\$477					
P26 WATER TRUCK (499D)	4210013564907	1	\$237					
P22 FIRE TRUCK PUMPER (499F)	4210002244564	2	\$366					
HEAVY RESCUE VEHICLE (499H)	4210013696048	1	\$265					
TRUCK, FIREFIGHTING MEDIUM RESCUE TRUCK (499J)	4210014525121	6	\$1,120					
P23 CRASH TRUCK (4991)	4210007026801	4	\$2,111					
TRUCK FIRE HI-REACH P-21	4210010570696	1	\$453					
TOTALS:			\$5,029					
P-1 ITEM NO	PAGE NO	: ]		Page	e 1 of 1			
18	44							

BUDGET ITEM JUS	BUDGET ITEM JUSTIFICATION (EXHIBIT P-40)						DATE: APRIL 2001				
APPROP CODE/BA	P-1 NOM	P-1 NOMENCLATURE:									
OPAF/VEHICULAR EQUIPMENT				TRUCK, F	TRUCK, F/L 10,000 LB						
	FY2000	FY2001	FY2002	FY2003	FY2003 FY2004 FY2005 FY2006 FY2						
QUANTITY											
COST (in Thousands)	\$1958	\$5,456	\$6,914	\$2716	\$3246	\$5417	\$10,464	\$14,954			
Description:											
•	This family of vehicles consists of commercial 10,000 pound forklifts with diesel engines and pneumatic tires. These vehicles are air										

transportable and nuclear certified. These forklifts constitute the basic 463L air cargo system support vehicles to handle the AF standard 108" X 88" pallets that lock in the flooring of all AF cargo aircraft. They are compatible with and support all strategic and tactical airlift aircraft except the wide-body Civil Reserve Air Fleet (CRAF) aircraft. The standard configuration is the most widely used 463L asset in the fleet and is employed at every base with an air cargo mission. The all-terrain version is utilized in close combat support roles, at bare-base environments and provides support for the Rapid Deployment Force (RDF) and Central Air Force (CENTAF) Areas of Responsibility (AORs). The Air Mobility Command (AMC) and other commands must replace these assets to assure continued support of the airlift mission for all services. Over 50% of the current 10,000 LB forklift fleet is replacement eligible. Lack of these critical vehicles would cause major delays in loading outbound aircraft, particularly intra-theater C-130 re-supply missions. Base operations such as aircraft loading operations, cargo build-up and pre-positioning would be drastically affected by lack of 463L all-terrain forklifts. During a contingency, deploying units would not be able to meet taskings. At many forward operating locations there is no alternative vehicle to accomplish cargo loading. Loading ramps and cargo storage areas are unpaved and the AF has no aircraft loaders that operate in sand or off-road conditions. These all-terrain forklifts are also exclusively used to recover air dropped munitions, supplies and equipment.

<b>P-1 ITEM NO:</b> 19		<b>PAGE NO:</b> 45	Page 1 of 2
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<b>BUDGET ITEM JUSTIFICATION (EXHIBIT P-40)</b>	DATE: APRIL 2001					
APPROP CODE/BA:	P-1 NOMENCLATURE:					
OPAF/VEHICULAR EQUIPMENT	TRUCK, F/L 10,000 LB					
<b>Description (cont.):</b> Items requested in FY02 are identified on the P-40a and are representative change based on critical equipment needed to support current Air Force m	-					

requirement is 1,219 units against an inventory objective of 2,742. This administration has not addressed FY2003-2007 requirements. All FY 2003-2007 budget estimates included in this book are notional only and subject to change.

<b>P-1 ITEM</b> 19	NO: PAGE N 46	O: Page 2 of 2
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BUDGET ITEM JUSTIFICATION F	BUDGET ITEM JUSTIFICATION FOR AGGREGATED ITEMS (EXHIBIT P- 40A)											
APPROP CODE/BA: OPAF/VEHICULAR EQUIPMENT				P-1 NOMENCLATURE: TRUCK, F/L 10,000 LB								
PROCUREMENT ITEMS	ID	FY2	000	FY	2001	FY	2002	FY	FY2003			
	CODE	QTY.	COST	QTY.	COST	QTY.	COST	QTY.	COST			
TRUCK, FORKLIFT 10K ADVERSE TERRAIN (BPAC 5031)	A			37	\$3,528	49	\$5,591					
TRUCK, FORKLIFT 10K STD (BPAC 5032)	A	34	\$195	8 32	\$1,928	17	\$1,323					
Totals:		34	\$1,95	8 69	\$5,456	66	\$6,914					
Remarks:												
F	<b>P-1 ITEM N</b> 19	10		PAGE N 47	IO:			Page 1	of 1			

BUDGET PROCUREMENT H		DATE: AF	RIL 20	01					
APPROP CODE/BA: OPAF/VEHICULAR EQUIPMEN	т			P-1 NOMENCL					
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
TRUCK, FORKLIFT 10K ADVERSE TERRAIN (BPAC 5031)									
FY01	37	95,351	AFMC/WR-ALC	MIPR/IDIQ	DLA/DSCP (UNKNOWN)	AUG 01	FEB 02	Y	
FY02	49	114,102	AFMC/WR-ALC	MIPR/IDIQ	DLA/DSCP (UNKNOWN)	FEB 02	OCT 02	Y	
TRUCK, FORKLIFT 10K STD (BPAC 5032)									
FY00	34	57,588	AFMC/WR-ALC	MIPR/IDIQ	DLA/DSCP (HYSTER, DANVILLE	E, IL) SEP 00	MAR 01		
FY01	32	60,250	AFMC/WR-ALC	MIPR/IDIQ	DLA/DSCP (HYSTER, DANVILLE	E, IL) JUL 01	FEB 02	Y	
FY02	17	77,824	AFMC/WR-ALC	MIPR/IDIQ	DLA/DSCP (HYSTER, DANVILLE	E, IL) JAN 02	OCT 02	Y	
REMARKS:									
	P-1	<b>ITEM N</b> 19	0	PAGE NO	:		Page	e 1 of	f 1

BUDGET ITEM JUS	DATE:	APRIL 2001										
APPROP CODE/BA OPAF/VEHICULAR EQU				_	P-1 NOMENCLATURE: 60K A/C LOADER							
	FY2000 FY2001 FY2002				FY2004	FY2005	FY2006	FY2007				
QUANTITY	48	47	44	0	0	0	0	0				
COST (in Thousands)	\$94,384	\$96,058	\$90,763	\$0	\$0	\$0	\$0	\$0				

#### **Description:**

The Tunner aircraft loader replaces 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. The FY02 request sustains efficient production. Programmed funding provides a total of 280 loaders out of an inventory objective of 318.

This administration has not addressed FY2003-2007 requirements. All FY 2003-2007 budget estimates included in this book are notional only and subject to change.

<b>P-1 ITEM NO:</b> 20	PAGE NO: 49	Page 1 of 1
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WEAPON SYSTEM COST ANAL	WEAPON SYSTEM COST ANALYSIS (EXHIBIT P- 5)								0	DATE:	APRI	L 2001	
APPROP CODE/BA: OPAF/VEHICULAR EQUIPMENT					P-1 NOM		TURE:		·				
	IDENT		FY2000		FY2001			FY2002			FY2003		
WEAPON SYSTEM COST ELEMENTS	CODE	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)	А	48	1,439,147	69,079	9 47	1,501,632	70,577	44	1,516,453	66,724			
1. PROD SUPPORT (BPAC 5122)				{4,590	}		{3,799}			{5,305}			
A. ECO				1,799	9		829			2,555			
B. SPO OPERATIONS/SUPT				2,79	1		2,970			2,750			
2. FLD SUPPLY SUPT (BPAC 5124)				{270	}		{50}						
SPECIAL TOOLS				270	)		50						
3. TUNNER RELB SUPTBLTY PLN (BPAC 5125)	;			20,44	5		21,632			18,734			
TOTALS:		48		94,384	4 47		96,058	44		90,763			
REMARKS:										<u>.</u>			
	<b>P-1 ITEM</b> 20	NO			PAG	<b>E NO:</b> 50				Page 1 of 1			

BUDGET PROCUREMENT H	IISTOR	( PLANN	IING (EXHIBIT P- 5/	A)		DATE: APRIL 2001			
APPROP CODE/BA: OPAF/VEHICULAR EQUIPMEN	т			P-1 NOMENCL	ATURE:				
ITEM / FISCAL YEAR	QTY.	UNIT COST	LOCATION OF PCO	CONTRACT METHOD & TYPE AND LOCATION		AWD. DATE	DATE FIRST DEL.	SPECS AVAIL NOW	DATE REV. AVAIL
60K A/C LOADER(BPAC 5121)									
FY00	48	1439,147	AFMC/WR-ALC	OPT/FFP	SYSTEMS & ELECTRONICS INC LOUIS, MO	c, ST. DEC 99	APR 01		
FY01	43	1501632	AFMC/WR-ALC	OPT/FFP	SYSTEMS & ELECTRONICS INC LOUIS, MO	c, ST. JAN 01	APR 02		
FY01	4	1501632	AFMC/WR-ALC	OPT/FFP	SYSTEMS & ELECTRONICS INC LOUIS,MO	;, ST. MAR 0	AUG 02		
FY02	44	1516453	AFMC/WR-ALC	OPT/FFP	SYSTEMS & ELECTRONICS INC LOUIS, MO	c, ST. DEC 0 <sup>-</sup>	APR 03	Y	
REMARKS:									
	P-1	<b>ITEM N</b> 20	0	<b>PAGE NO</b> 51	:		Page	e 1 of	1

BUDGET ITEM JUS	DATE:	APRIL 2001									
APPROP CODE/BA					P-1 NOMENCLATURE: NEXT GENERATION SMALL LOADER (NGSL)						
	FY2000	FY2001	FY2002	FY2003	FY2004	FY2005	FY2006	FY2007			
QUANTITY	5	42	101	86	30	0	0	0			
COST (in Thousands)	\$9,653	\$23,922	\$53,461	\$49,894	\$20,135	\$0	\$0	\$0			

#### **Description:**

1. The Next Generation Small Loader (NGSL) (Renamed the Halvorsen Loader) - will replace the oldest 25K loaders and remaining Wide Body Elevator Loader (WBEL) fleet. Unlike the Tunner (60K Aircraft Loader), the Halvorsen (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 Halvorsen, in conjunction with the Tunner, 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 Halvorsen Loader 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 Halvorsen Loader 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.

Project #675150, PE 0401214F in the Descriptive Summaries.

This administration has not addressed FY2003-2007 requirements. All FY 2003-2007 budget estimates included in this book are notional only and subject to change.

	<b>P-1 ITEM NO:</b> 21		<b>PAGE NO:</b> 52		Page 1 of 1					
UNCLASSIFIED										

WEAPON SYSTEM COST ANA	LYSIS (EXI	HIBIT P-	5)						C	DATE:	APRIL	2001	
APPROP CODE/BA: OPAF/VEHICULAR EQUIPMENT					P-1 NON NEXT GEN			LOADER	(NGSL)				
	IDENT	FY2000			FY2001				FY2002		FY2003		
WEAPON SYSTEM COST ELEMENTS	CODE	QTY	UNIT COST	TOTAL COST	QTY	UNIT COST	TOTAL COST	QTY	UNIT COST	TOTAL COST	QTY	UNIT COST	TOTAL COST
NGSL (BPAC 5151) (1)	A	5	455,113	2,27	6 42	427,470	17,954	101	409528	41,362			
PRODUCT SUPPORT (BPAC 5152)				6,65	5		5,673			9,092			
DATA (BPAC 5153)				38	5		0			1,275			
SUPPLY SUPPORT AGREEMENT (BPAC 5154)				33	7		295			1,732			
TOTALS:		5		9,65	3 42		23,922	101		53,461			
<b>REMARKS:</b> (1) The FY01 contract award include	es a Low Ra	te Initial I	Production	(LRIP)	buy of 21 u	inits, plus	21 units a	fter the d	ecision to	enter full	rate pro	duction.	
	<b>P-1 ITEM</b> 21	NO			PAG	<b>53 5</b> 3					Pa	age 1 of 1	

BUDGET PROCUREMENT H	IISTOR	Y PLANN	IING (EXHIBIT P- 5/	4)		DATE: APRIL 2001				
APPROP CODE/BA: OPAF/VEHICULAR EQUIPMEN	IT			P-1 NOMENCLA	)					
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	5	455,113	AFMC/ASC	C/FFP	FMC - ORLANDO, FLORIDA		JUN 00	APR 01		
FY01 (1)	21	432,767	AFMC/ASC	OPT/FFP	FMC - ORLANDO, FLORIDA	(	OCT 00	AUG 01		
FY01 (1)	21	422,172	AFMC/ASC	OPT/FFP	FMC - ORLANDO, FLORIDA	,	JUL 01	MAR 02	Y	
FY02	101	409,528	AFMC/ASC	OPT/FFP	FMC - ORLANDO, FLORIDA	(	OCT 01	JUN 02	Y	
<b>REMARKS:</b> (1) The FY01 contract award inclu	udes a Lo	ow Rate I	nitial Production (LRIP	') buy of 21 units, plu	is 21 units after the decision	to enter fu	ull rate p	producti	on.	

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BUDGET ITEM JUS	TIFICATION (I	EXHIBIT P-40)				DATE:	APRIL 2001	
APPROP CODE/BA	:			P-1 NOM	ENCLATURE:			
OPAF/VEHICULAR EQU	IIPMENT			ITEMS LES	SS THAN \$5,000,0	00 (MATERIAI	_S HANDLING E	QUIP)
	FY2000 FY2001 FY2002 FY2003 FY2004 FY2005 FY2006 FY200							
QUANTITY								
COST (in Thousands)	\$5,991	\$4,437	\$4,106	\$5,766	\$3,377	\$6,208	\$19,116	\$29,850
<b>Description:</b> This program includes vehicles consist of liftin requested in FY02 are in based on critical equipt This administration has and subject to change.	ng trucks, seque identified on the ment needed to s	ncing trucks and o P-40a I/L and are support current Air	ther warehous representative Force missio	se equipment cr e of items to be on requirements.	ritical to depot an procured. Items	d base supply procured durin	operations. Itense operations in the second se	ms sy change
		<b>P-1 ITEM NO:</b> 22			<b>PAGE NO:</b> 55		Page	1 of 1

FY2U2PROCUREMENT ITEMSNSNCQTY.COSTQTY.FORKLIFT, 13K ALL TERRAIN (BPAC 5991003)3930011260457CT8\$774FORKLIFT, 15K DEDICATED (BPAC 5991004)3930010136506\$368FORKLIFT, 4K ELECT STANDARD (BPAC 5991005)39300067825801\$19FORKLIFT, ELEC 2K STANDARD (BPAC 5991006)3930010401641\$25FORKLIFT, 500 LB ELEC PNEUMATIC TIRE (BPAC 5991012)39300103967631\$71TRUCK, FORKLIFT DEDICATED 20000 LB (BPAC 5991024)39300103967631\$71TRUCK, FORKLIFT DEDICATED (BPAC 5991024)393001052521946\$1,4814K FORKLIFT DEDICATED (BPAC 5991027)393001013033810\$254TRUCK, FORKLIFT DEDICATED (BPAC 5991027)39300101565301\$27GK FORKLIFT DEDICATED (BPAC 5991029)39300101665301\$27GK FORKLIFT RAUNDARD UNITED KINGDOM39300101656301\$27GRANE WHSE GAS 10000 LB (BPAC 5991029)393000195550211\$87TRUCK, FORKLIFT ROUGH TERRAIN (BPAC 5991029)39300019563051GRANE WHSE GAS 10000 LB (BPAC 5992005)38500055550211\$87TRUCK MTD CONV BELT (BPAC 5993001)390001956305\$100	BUDGET ITEM JUSTIFICATION FOR AGGREGATED APPROP CODE/BA: OPAF/VEHICULAR EQUIPMENT	P-1 NOMENCI				
PROCUREMENT ITEMS         NSN         QTY.         COST         QTY.           FORKLIFT, 13K ALL TERRAIN (BPAC 5991003)         3930011260457CT         8         \$774           FORKLIFT, 13K ALL TERRAIN (BPAC 5991004)         3930010113650         6         \$368           FORKLIFT, 15K DEDICATED (BPAC 5991005)         3930000539175         5         \$163           FORKLIFT, ELEC 2K STANDARD (BPAC 5991005)         3930006782580         1         \$199           FORKLIFT, ELEC 2K STANDARD (BPAC 5991012)         393001040164         1         \$25           FORKLIFT, 2500 LB ELEC PNEUMATIC TIRE (BPAC 5991012)         39300103067633         1         \$71           TRUCK, FORKLIFT DEDICATED 20000 LB (BPAC 5991024)         3930014214083         3         \$329           6K FORKLIFT DEDICATED (BPAC 5991027)         39300103038         10         \$254           TRUCK, FORKLIFT DEDICATED (BPAC 5991027)         393001013038         1         \$27           GK FORKLIFT ROUGH TERRAIN (BPAC 5991029)         3930010165630         1         \$27           GK FORKLIFT ROUGH TERRAIN (BPAC 5991029)         3930008792157         2         \$70           CRANE WHSE GAS 10000 LB (BPAC 5993001)         3930001555021         1         \$87           TRUCK MTD CONV BELT (BPAC 5993001)         393000195630         \$14					3 EQUIP)	
FORKLIFT, 13K ALL TERRAIN (BPAC 5991003)         3930011260457CT         8         \$774           FORKLIFT, 15K DEDICATED (BPAC 5991004)         3930010113650         6         \$368           FORKLIFT, 15K DEDICATED (BPAC 5991005)         393000539175         5         \$163           FORKLIFT, ELEC 2K STANDARD (BPAC 5991005)         3930006782580         1         \$19           FORKLIFT, ELEC 2K STANDARD (BPAC 5991006)         393001040164         1         \$25           TRUCK, FORKLIFT DEDICATED 20000 LB (BPAC 5991012)         3930010396763         1         \$71           TRUCK, FORKLIFT DEDICATED 20000 LB (BPAC 5991024)         3930010396763         1         \$71           TRUCK, FORKLIFT DEDICATED (BPAC 5991026)         3930010525219         46         \$1,481           4K FORKLIFT DEDICATED (BPAC 5991027)         39300103038         10         \$254           TRUCK, FORKLIFT ELEC 4M# STANDARD UNITED KINGDOM (BPAC 5991028)         3930010165630         1         \$27           6K FORKLIFT ROUGH TERRAIN (BPAC 5991029)         3930008792157         2         \$70           CRANE WHSE GAS 10000 LB (BPAC 5992005)         39300015555021         1         \$87           TRUCK MTD CONV BELT (BPAC 5993001)         393000195630         5         \$140		NGN			ΟΤΥ	FY2003 COST
FORKLIFT, 15K DEDICATED (BPAC 5991004)         3930010113650         6         3368           FORKLIFT, 15K DEDICATED (BPAC 5991005)         3930000539175         5         \$163           FORKLIFT, 4K ELECT STANDARD (BPAC 5991005)         3930006782580         1         \$119           FORKLIFT, ELEC 2K STANDARD (BPAC 5991012)         3930011040164         1         \$225           TRUCK, FORKLIFT DEDICATED 20000 LB (BPAC 5991012)         3930010396763         1         \$71           TRUCK, FORKLIFT DEDICATED 20000 LB (BPAC 5991024)         3930010525219         466         \$1,481           KF FORKLIFT DEDICATED (BPAC 5991026)         3930010525219         466         \$1,481           4K FORKLIFT DEDICATED (BPAC 5991027)         393001130338         10         \$254           TRUCK, FORKLIFT ELEC 4M# STANDARD UNITED KINGDOM (BPAC 5991028)         393001165630         1         \$277           GK FORKLIFT ELEC 4M# STANDARD UNITED KINGDOM (BPAC 5991029)         3930008792157         2         \$700           CRANE WHSE GAS 10000 LB (BPAC 5991029)         393000195630         1         \$877           TRUCK MTD CONV BELT (BPAC 5993001)         393000195630         1         \$877					QIT.	031
FORKLIFT, 4K ELECT STANDARD (BPAC 5991005)         3930000539175         5         \$163           FORKLIFT, ELEC 2K STANDARD (BPAC 5991006)         3930006782580         1         \$19           FORKLIFT, ELEC 2K STANDARD (BPAC 5991012)         393001040164         1         \$25           FORKLIFT DEDICATED 20000 LB (BPAC 5991012)         3930010396763         1         \$71           TRUCK, FORKLIFT DEDICATED 20000 LB (BPAC 5991024)         3930010525219         46         \$1,481           6K FORKLIFT DEDICATED (BPAC 5991026)         3930010525219         46         \$1,481           4K FORKLIFT DEDICATED (BPAC 5991027)         3930010130338         10         \$254           TRUCK, FORKLIFT ELEC 4M# STANDARD UNITED KINGDOM (BPAC 5991029)         3930008792157         2         \$70           GK FORKLIFT ROUGH TERRAIN (BPAC 5991029)         3930008792157         2         \$70           CRANE WHSE GAS 10000 LB (BPAC 5991029)         3950005555021         1         \$87           TRUCK MTD CONV BELT (BPAC 5993001)         393000195630         5         \$140						
FORKLIFT, ELEC 2K STANDARD (BPAC 5991006)       3930006782580       1       \$19         FORKLIFT, 2500 LB ELEC PNEUMATIC TIRE (BPAC 5991012)       393001040164       1       \$25         TRUCK, FORKLIFT DEDICATED 20000 LB (BPAC 5991019)       3930010396763       1       \$71         TRUCK, FORKLIFT NARROW AISLE 6K (BPAC 5991024)       3930010525219       46       \$1,481         6K FORKLIFT DEDICATED (BPAC 5991026)       3930010525219       46       \$1,481         4K FORKLIFT DEDICATED (BPAC 5991027)       3930010130338       10       \$254         TRUCK, FORKLIFT ELEC 4M# STANDARD UNITED KINGDOM (BPAC 5991029)       3930010165630       1       \$27         6K FORKLIFT ROUGH TERRAIN (BPAC 5991029)       3930008792157       2       \$70         CRANE WHSE GAS 10000 LB (BPAC 5991029)       393000195630       1       \$87         TRUCK, MTD CONV BELT (BPAC 5993001)       393000195630       5       \$140						
FORKLIFT, 2500 LB ELEC PNEUMATIC TIRE (BPAC 5991012)       3930011040164       1       \$25         TRUCK, FORKLIFT DEDICATED 20000 LB (BPAC 5991019)       393001396763       1       \$71         TRUCK, FORKLIFT NARROW AISLE 6K (BPAC 5991024)       3930014214083       3       \$329         6K FORKLIFT DEDICATED (BPAC 5991026)       393001525219       46       \$1,481         4K FORKLIFT DEDICATED (BPAC 5991027)       393001130338       10       \$254         TRUCK, FORKLIFT ELEC 4M# STANDARD UNITED KINGDOM       393001165630       1       \$270         6K FORKLIFT ROUGH TERRAIN (BPAC 5991029)       3930008792157       2       \$70         CRANE WHSE GAS 10000 LB (BPAC 5993001)       393000195630       5       \$140		3930006782580	1			
TRUCK, FORKLIFT DEDICATED 20000 LB (BPAC 5991019)39300103967631\$71TRUCK, FORKLIFT NARROW AISLE 6K (BPAC 5991024)39300142140833\$3296K FORKLIFT DEDICATED (BPAC 5991026)393001052521946\$1,4814K FORKLIFT DEDICATED (BPAC 5991027)393001013033810\$254TRUCK, FORKLIFT ELEC 4M# STANDARD UNITED KINGDOM (BPAC 5991028)39300101656301\$2776K FORKLIFT ROUGH TERRAIN (BPAC 5991029)39300087921572\$70CRANE WHSE GAS 10000 LB (BPAC 5992005)3930001956305\$140	FORKLIFT, 2500 LB ELEC PNEUMATIC TIRE (BPAC 5991012)	3930011040164	1			
6K FORKLIFT DEDICATED (BPAC 5991026)       3930010525219       46       \$1,481         4K FORKLIFT DEDICATED (BPAC 5991027)       3930010130338       10       \$254         TRUCK, FORKLIFT ELEC 4M# STANDARD UNITED KINGDOM       3930010165630       1       \$27         6K FORKLIFT ROUGH TERRAIN (BPAC 5991029)       3930008792157       2       \$70         CRANE WHSE GAS 10000 LB (BPAC 5992005)       3950005555021       1       \$87         TRUCK MTD CONV BELT (BPAC 5993001)       393000195630       5       \$140	TRUCK, FORKLIFT DEDICATED 20000 LB (BPAC 5991019)	3930010396763	1			
4K FORKLIFT DEDICATED (BPAC 5991027)       3930010130338       10       \$254         TRUCK, FORKLIFT ELEC 4M# STANDARD UNITED KINGDOM       3930010165630       1       \$27         6K FORKLIFT ROUGH TERRAIN (BPAC 5991029)       3930008792157       2       \$70         CRANE WHSE GAS 10000 LB (BPAC 5992005)       3950005555021       1       \$87         TRUCK MTD CONV BELT (BPAC 5993001)       393000195630       5       \$140	TRUCK, FORKLIFT NARROW AISLE 6K (BPAC 5991024)	3930014214083	3	\$329		
TRUCK, FORKLIFT ELEC 4M# STANDARD UNITED KINGDOM       3930010165630       1       \$27         6K FORKLIFT ROUGH TERRAIN (BPAC 5991029)       3930008792157       2       \$70         CRANE WHSE GAS 10000 LB (BPAC 5992005)       3950005555021       1       \$87         TRUCK MTD CONV BELT (BPAC 5993001)       393000195630       5       \$140	6K FORKLIFT DEDICATED (BPAC 5991026)	3930010525219	46	\$1,481		
(BPAC 5991028)       Image: Constraint of the constraint of th	4K FORKLIFT DEDICATED (BPAC 5991027)	3930010130338	10	\$254		
CRANE WHSE GAS 10000 LB (BPAC 5992005)       3950005555021       1       \$87         TRUCK MTD CONV BELT (BPAC 5993001)       393000195630       5       \$140		3930010165630	1	\$27		
TRUCK MTD CONV BELT (BPAC 5993001)         3930000195630         5         \$140	6K FORKLIFT ROUGH TERRAIN (BPAC 5991029)	3930008792157	2	\$70		
	CRANE WHSE GAS 10000 LB (BPAC 5992005)	3950005555021	1	\$87		
WHSE TRACTOR 4K (BPAC 5994007) 3930010070115 11 \$298	TRUCK MTD CONV BELT (BPAC 5993001)	3930000195630	5	\$140		
	WHSE TRACTOR 4K (BPAC 5994007)	3930010070115	11	\$298		
TOTALS: \$4,106	TOTALS:			\$4,106		
	P-1 ITEM NO 22	PAGE NO			Page	e 1 of 1

BUDGET ITEM JUS	TIFICATION (	EXHIBIT P-40	)			DATE:	APRIL 2001	
APPROP CODE/BA OPAF/VEHICULAR EQU				<b>P-1 NON</b> TRUCK, E	MENCLATURE	E:		
	FY2000	FY2001	FY2002	FY2003	FY2004	FY2005	FY2006	FY2007
QUANTITY								
COST (in Thousands)	\$5,298	\$84	\$2,839	\$3,969	\$6500	\$15,163	\$9,469	\$4,938

#### **Description:**

This program includes the procurement of a vehicle group consisting of 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. These trucks are especially crucial to Civil Engineering operations in base maintenance projects as well as mission support operations. The Air National Guard is one of the primary users of these vehicles. They are used to cleanup after natural disasters both for the military and in aiding civilian operations. The Air Combat Command (ACC) and the Air Mobility Command (AMC) also have large requirements as dump trucks are versatile and are widely used at virtually all Air Force installations.

Items requested in FY02 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. FY02 procurement requirement is 1,519 against an inventory objective of 2,247.

This administration has not addressed FY2003-2007 requirements. All FY 2003-2007 budget estimates included in this book are notional only and subject to change.

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

BUDGET ITEM JUSTIFICATION	FOR AGG	REGATED II	FEMS (EXHI	BIT P- 40A)			DATE: A	PRIL 2001	
APPROP CODE/BA: OPAF/VEHICULAR EQUIPMENT			F	P-1 NOMEN RUCK, DUMP	CLATURE	:			
PROCUREMENT ITEMS	ID	FY2		FY2			2002		2003
	CODE	QTY.	COST	QTY.	COST	QTY.	COST	QTY.	COST
TRUCK DUMP 5T 4X2 (BPAC 6131)	А	26	\$1,304	2	\$84	9	\$455		
TRUCK DUMP 5T 4X4 (BPAC 6132)	А	5	\$332			3	\$223		
TRUCK DUMP 44.5G 6X4 (BPAC 6133)	А	52	\$3,283			21	\$1,380		
TRUCK DUMP 55G 6X4 (BPAC 6134)	А	4	\$379			8	\$781		
Totals:		87	\$5,298	2	\$84	41	\$2,839		
	<b>I-</b>				_				
	<b>P-1 ITEM</b> 23	NO		<b>PAGE N</b> 58	D:			Page 1	of 1

BUDGET ITEM JUS	TIFICATION (I	EXHIBIT P-40	)			DATE:	APRIL 2001	
APPROP CODE/BA OPAF/VEHICULAR EQU	_	P-1 NOMENCLATURE: RUNWAY SNOW REMOVAL AND CLEANING EQUIPMENT						
	FY2000	FY2001	FY2002	FY2003	FY2004	FY2005	FY2006	FY2007
QUANTITY								
COST (in Thousands)	\$8,198	\$6,859	\$12,484	\$7,511	\$8107	\$11,888	\$14,762	\$18,558

#### **Description:**

This program includes the procurement of a vehicle group consisting of commercial sweepers and snow removal vehicles that are 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 accidents. These assets are critical to the Air Force mission. They are the primary players in keeping runways safe and usable year round, especially in winter when snow and ice buildup can close down a runway. Failure to fund this request will severely jeopardize our users' ability to carry out any mission that requires the use of aircraft as well as compromise the safety of pilots using a runway that may be contaminated with FOD.

Items requested in FY02 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. The FY02 procurement requirement is 1,214 units against an inventory objective of 1,856.

This administration has not addressed FY2003-2007 requirements. All FY 2003-2007 budget estimates included in this book are notional only and subject to change.

<b>P-1 ITEM NO:</b> 24	<b>PAGE NO:</b> 59	Page 1 of 1
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#### **BUDGET ITEM JUSTIFICATION FOR AGGREGATED ITEMS (EXHIBIT P- 40A)**

DATE: APRIL 2001

#### **APPROP CODE/BA:**

**OPAF/VEHICULAR EQUIPMENT** 

# P-1 NOMENCLATURE: RUNWAY SNOW REMOVAL AND CLEANING EQUIPMENT

PROCUREMENT ITEMS	ID	FY	2000	FY2	2001	FY	2002	FY2003		
	CODE	QTY.	COST	QTY.	COST	QTY.	COST	QTY.	COST	
SNOW SWEEPER TRUCK MOUNTED (BPAC 621B)	A					15	\$2,369			
SWEEPER, ROT (BPAC 621E)	А			1	\$90					
45K REVERSIBLE PLOW (BPAC 621G)	А	9	\$1,769	12	\$2,448					
SNOW BROOM AND BLOWER (621H)	А	10	\$3,336	5	\$1,713					
CLEANER, VAC MULTIPURPOSE (BPAC 6211)	A	37	\$2,973	19	\$1,691	44	\$3,645			
SNOW REMOVAL UNIT 3KTPH (BPAC 6214)	А					3	\$488			
RAPID RUNWAY REPAIR DIRT SWEEPER (BPAC 6215)	A			1	\$50	12	\$637			
DUMP W/SNOW PLOW (BPAC 6218)	А	1	\$120	4	\$475	4	\$482			
54K PLOW (BPAC 6219)	A			2	\$392	24	\$4,863			
Totals:		57	\$8,198	44	\$6,859	102	\$12,484			

<b>P-1 ITEM NO</b> 24	<b>PAGE NO:</b> 60	Page 1 of 1

BUDGET PROCUREMENT	HISTORY	PLANN	IING (EXHIBIT P- 5/	A)		DATE: APRIL 2001					
APPROP CODE/BA: OPAF/VEHICULAR EQUIPME	ENT			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)											
FY02	15	157,933	AFMC/WR-ALC	MIPR/IDIQ	GSA/SWEEPSTER/DEXTER,MI	MAR 02	AUG 02	Y			
SWEEPER, ROT (BPAC 621E)											
FY01	1	90,000	AFMC/WR-ALC	MIPR/IDIQ	GSA/UNKNOWN	AUG 01	DEC 01	Y			
45K REVERSIBLE PLOW (BPAC 621G)											
FY00	9	196,534	AFMC/WR-ALC	MIPR/IDIQ	GSA/OSHKOSH/OSHKOSH, WI	MAR 00	JUN 00				
FY01	12	204,000	AFMC/WR-ALC	MIPR/IDIQ	GSA/OSHKOSH/OSHKOSH, WI	APR 01	JUN 01				
SNOW BROOM AND BLOWER (621H)											
FY00	10	333,600	AFMC/WR-ALC	MIPR/IDIQ	GSA/OSHKOSH/OSHKOSH,WI	AUG 00	JAN 01				
FY01	5	342,600	AFMC/WR-ALC	MIPR/IDIQ	GSA/OSHKOSH/OSHKOSH, WI	JUN 01	NOV 01				
	P-1	<b>ITEM N</b> 24	0	PAGE NO 61	:		Pag	e 1 of	- - 3		

BUDGET PROCUREMENT	HISTORY	PLANN	IING (EXHIBIT P- 5/	A)	DATE: APRIL 2001							
APPROP CODE/BA: OPAF/VEHICULAR EQUIPMENT				P-1 NOMENCLATURE: RUNWAY SNOW REMOVAL AND CLEANING EQUIPMENT								
ITEM / QT FISCAL YEAR		UNIT COST	LOCATION OF PCO	CONTRACT METHOD & TYPE	CONTRACTOR AND LOCATION	AWD. DATE	DATE FIRST DEL.		DATE REV. AVAIL			
CLEANER, VAC MULTIPURPOSE (BPAC 6211)												
FY00	37	80,355	AFMC/WR-ALC	MIPR/IDIQ	DLA/TYMCO/WACO, TX	APR 00	OCT 00					
FY01	19	89,000	AFMC/WR-ALC	MIPR/IDIQ	DLA/TYMCO/WACO, TX	AUG 01	FEB 02	Y				
FY02	44	82,846	AFMC/WR-ALC	MIPR/IDIQ	DLA/TYMCO/WACO, TX	APR 02	OCT 02	Y				
SNOW REMOVAL UNIT 3KTPH (BPAC 6214)												
FY02	3	162,666	AFMC/WR-ALC	MIPR/IDIQ	GSA/OSHKOSH/OSHKOSH,WI	APR 02	OCT 02	Y				
RAPID RUNWAY REPAIR DIRT SWEEPER (BPAC 6215)												
FY01	1	50,000	AFMC/WR-ALC	MIPR/IDIQ	DLA/SMITH EQUIP/LAKELAND, F	L AUG 01	FEB 02	Y				
FY02	12	53,083	AFMC/WR-ALC	MIPR/IDIQ	DLA/SMITH EQUIP/LAKELAND, F	FL APR 02	OCT 02	Y				
	P-1	<b>ITEM N</b> 24	0	PAGE NO	:		Page	e 2 of	3			

BUDGET PROCUREMENT HISTORY PLANNING (EXHIBIT P- 5				<b>DATE:</b> APRIL 2001						
APPROP CODE/BA: OPAF/VEHICULAR EQUI	PMENT			P-1 NOMENCLATURE: RUNWAY SNOW REMOVAL AND CLEANING EQUIPMENT						
ITEM / QTY FISCAL YEAR		UNIT COST	LOCATION OF PCO	ATION OF PCO CONTRACT METHOD & TYPE AND LOCATION		AWD. DATE	DATE FIRST DEL.		DATE REV. AVAIL	
DUMP W/SNOW PLOW (BPAC 6218)										
FY00	1	120,447	AFMC/WR-ALC	MIPR/IDIQ	GSA/FREIGHTLINER	AUG 00	NOV 00			
FY01	4	118,750	AFMC/WR-ALC	MIPR/IDIQ	GSA/UNKNOWN	AUG 01	AUG 01	Y		
FY02	4	120,531	AFMC/WR-ALC	MIPR/IDIQ	GSA/UNKNOWN	APR 02	JUL 02	Y		
54K PLOW (BPAC 6219)										
FY01	2	196,000	AFMC/WR-ALC	MIPR/IDIQ	DLA/OSHKOSH/OSHKOSH, WI	MAR 01	AUG 01			
FY02	24	202,625	AFMC/WR-ALC	MIPR/IDIQ	DLA/OSKOSH/OSKOSH, WI	FEB 02	AUG 02	Y		
REMARKS:										
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BUDGET ITEM JUS	TIFICATION (E	EXHIBIT P-40)				DATE:	APRIL 2001	
APPROP CODE/BA: OPAF/VEHICULAR EQUIPMENT				_	P-1 NOMENCLATURE: MODIFICATIONS			
	FY2000	FY2001	FY2002	FY2003	FY2004	FY2005	FY2006	FY2007
QUANTITY								
COST (in Thousands)	\$112	\$1,149	\$3,360	\$5,359	\$347	\$349	\$625	\$1,276

#### Description:

This program includes permanent modifications that consist of configuration changes to in-service systems and equipment. These modifications correct deficiencies, (material, design, etc.) 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 FY02 are for "P-23 Crash Truck Modification" and "Miscellaneous Low Cost Modifications" to satisfy unforeseen modification requirements generally discovered during extended field use.

The P-23 fire truck hub retrofit modification is required as a result of critical failures in the hub assemblies due to cracks caused by metal fatigue. The modification consists of a redesigned, improved hub assembly and retrofit of the P-23 fleet, of 250 trucks. Lack of funds for this modification will result in increased failures with probable catastrophic results causing injury/bodily harm to life and property. Field level maintenance personnel will remove the old design and replace with the redesigned hub.

Items requested in FY02 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.

This administration has not addressed FY2003-2007 requirements. All FY 2003-2007 budget estimates included in this book are notional only and subject to change.

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BUDGET ITEM JUSTIFICATION F	GET ITEM JUSTIFICATION FOR AGGREGATED ITEMS (EXHIBIT P- 40A)						DATE: A	PRIL 2001	
APPROP CODE/BA: OPAF/VEHICULAR EQUIPMENT				P-1 NOME	NCLATURE	:			
PROCUREMENT ITEMS	ID		(2000		2001		2002		2003
	CODE	QTY.	COST	QTY.	COST	QTY.	COST	QTY.	COST
P-23 CRASH TRUCK MODIFICATION (BPAC 697P)	A						\$3000		
MISC LOW COST MODIFICATIONS (BPAC 6971)	A		\$112		\$1,149		\$360		
Totals:			\$112		\$1,149		\$3,360		
P	25 <b>P-1 ITEM</b>	NO		PAGE 65	NO:			Page 1	of 1

BUDGET ITEM JUS	TIFICATION (E	EXHIBIT P-40)				DATE:	APRIL 2001		
APPROP CODE/BA	:			P-1 NOM	-1 NOMENCLATURE:				
OPAF/VEHICULAR EQUIPMENT			ITEMS LES	SS THAN \$5,000,0	00 (BASE MAI	NTENANCE SPT	)		
	FY2000	FY2001	FY2002	FY2003	FY2004	FY2005	FY2006	FY2007	
QUANTITY									
COST (in Thousands)	\$8,767	\$14,115	\$11,943	\$14,474	\$18,570	\$34,074	\$68,175	\$98,656	
Description: This program includes vehicles provide Civil I foreign object damage i following P-40A-IL and needed to support curre This administration has and subject to change.	various base ma Engineering pers materials, and re d are representat ent Air Force mis	intenance vehic sonnel with the opair and constru- ive of items to b ssion requireme	es with a procur capability to con- ict base physical be procured. Iter nts.	ement value of duct sanitary la plant requirem ns procured du	less than \$5,000, ndfill operations, ents. Items reque ring execution ma	000 and are C improve airfi ested in FY02 ay change bas	Code A items. T eld safety by rei are identified o ed on critical eq	'hese noving n the uipment	
		P-1 ITEM NC 26	:		<b>PAGE NO:</b> 66		Page	1 of 1	

BUDGET ITEM JUSTIFICATION FOR AGGREGATED	ITEMS (EXHIBIT P- 40A-IL)		DATE	DATE: APRIL 2001				
APPROP CODE/BA: OPAF/VEHICULAR EQUIPMENT	P-1 NOMENC ITEMS LESS THA	LATURE: N \$5,000,000 (BASE I	MAINTENANCE	SPT)				
		FY20	02		FY2003			
PROCUREMENT ITEMS	NSN	QTY.	COST	QTY.	COST			
PAVING MACHINE, CRAWLER (BPAC 6992015)	3895001903313	2	\$210					
SNOW REMOVAL UNIT TRACKED VEHICLE	3825010903356	1	\$127					
SCOOP LOADER 2.5 CUBIC YARDS PNEUMATIC TIRE (BPAC 6995002)	3805002601967	6	\$540					
SCOOP LOADER W/BACKHOE (BPAC 6995003)	3805001482169	8	\$452					
SCOOP LOADER FT 2.5 CUBIC YARDS (BPAC 6995005	3805007289718	1	\$149					
SCOOP LOADER 1.5 CUBIC YARDS W/O COUPLER (BPAC 6995007)	3805010748111	12	\$1,121					
SCOOP LOADER 4 CUBIC YARDS PNEUMATIC TIRE (BPAC 6995008)	3805010751816	10	\$2,207					
ROLLER MOTOR PNEUMATIC TIRE SELF PROPELLED 15 TON (BPAC 6997002)	3895000785898	1	\$65					
ROLLER VIBRATOR TYPE II (BPAC 6997006)	3895010715625	4	\$397					
7.5 TON CRANE (BPAC 6998010)	3810010673991	4	\$774					
EXCAVATOR CRAWLER (BPAC 6999002)	3805010583562	2	\$309					
TRENCHER SELF PROPELLED W/TRAILER (BPAC 699B002)	3805010329974	8	\$566					
DRILL PAVEMENT (BPAC 699C004)	3820004775813	1	\$71					
1500 GALLON WATER DISTRIBUTION (BPAC 699C026)	3825005541808	5	\$358					
TRUCK WASTE WATER 2000 (BPAC 699C037)	2320005802819	1	\$206					
TRUCK SEWER CLEANER (BPAC 699C041)	2320013721823	3	\$316					
SHEEPS FOOT COMPACTOR (BPAC 699C045)	3805013597626	1	\$236					
<b>P-1 ITEM NO</b> 26	PAGE NO 67	:		Page	e 1 of 2			

BUDGET ITEM JUSTIFICATION FOR AGGREGATED	ITEMS (EXHIBIT P- 40A-IL)		<b>DATE:</b> APRIL 2001				
APPROP CODE/BA: OPAF/VEHICULAR EQUIPMENT	P-1 NOMENC ITEMS LESS THAT	LATURE: N \$5,000,000 (BASE	MAINTENANCE	ITENANCE SPT)			
		FY20	002		FY2003		
PROCUREMENT ITEMS	NSN	QTY.	COST	QTY.	COST		
INDUSTRIAL WHEELED 90 TRACTOR INDUSTRIAL (BPAC 699E004)	2420014062995	7	\$341				
TRACTOR INDUSTRIAL WHEELED 70 (BPAC 699E005)	2420001138984	28	\$792				
TRACTOR WHEELED 290HP 4 WHEEL DRIVE (BPAC 699E007)	2420012068055	1	\$131				
T4 DOZER (BPAC 699G001)	2410001664176	1	\$80				
T7 DOZER (BPAC 699G002)	2410007561161	3	\$492				
T9 DOZER (BPAC 699G003)	2410008165091	1	\$308				
GRADER, SIZE II TYPE III (BPAC 699J003)	3805013374623	8	\$667				
GRADER, SIZE V, TYPE III (BPAC 699J004)	3805013374624	8	\$1,028				
TOTALS:			\$11,943				
P-1 ITEM NO 26	PAGE NO			Page	e 2 of 2		

#### DEPARTMENT OF THE AIR FORCE OTHER PROCUREMENT APPROPRIATION ESTIMATES FOR FISCAL YEAR 2002

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#### DEPARTMENT OF THE AIR FORCE OTHER PROCUREMENT APPROPRIATION ESTIMATES FOR FISCAL YEAR 2002

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66	TV Equipment (AFRTV)	190
67	CCTV/Audiovisual Equipment	
68	Base Communications Infrastructure	196
71	Items Less Than \$5,000,000 (Organization & Base)	
72	Comm Elect Modifications	

BUDGET ITEM JUS	TIFICATION (E	EXHIBIT P-40)				DATE:	JUNE 2001	
APPROP CODE/BA: OPAF/ELECTRONICS & TELECOMMUNICATION EQUIPMENT				_	P-1 NOMENCLATURE: AIR TRAFFIC CONTROL/LANDING SYSTEM (ATCALS)			
	FY2000	FY2001	FY2002	FY2003	FY2004	FY2005	FY2006	FY2007
QUANTITY								
COST (in Thousands)	\$1,351	\$7,979	\$4,698	\$52,242	\$80,860	\$82,000	\$26,200	\$24,916

#### **Description:**

The Air Traffic Control and Landings Systems (ATCALS) weapons system procures and supports fixed-base and tactical radars, navigational aids, voice communications (radio and telephone), and data processing/automation capabilities to enable USAF air traffic controllers to provide advisory, sequencing, separation, and landing guidance services to all aircraft in USAF-assigned airspace. The weapon system includes operational equipment as well as training systems for air traffic controllers and equipment required to interface USAF systems with systems operated and maintained by other services, the Federal Aviation Administration, or host-nations. In FY01 Congress added \$6.0 million for Air National Guard (ANG) fixed air traffic control radar. Reference Appropriations Conference Report 106-754, July 17, 2000, page 206 and House Appropriations Committee Report 106-644, June 1, 2000, and page 135. This administration has not addressed FY 2003-2007 requirements. All FY 2003-2007 budget estimates included in this book are notional only and subject to change.

1. VOICE COMMUNICATIONS SWITCHING SYSTEM: No FY02 funds requested.

2. RADAR APPROACH CONTROLS (RAPCONs): The RAPCON procurement includes digital airport surveillance radar, digital voice switch, digital controller displays, consoles, automation hardware and software plus associated site surveys and site design. FY01 funds procure a fixed RAPCON tailored for ANG operation of an Air Traffic Control Facility (ATCF) at Cambria Airport, Johnstown, PA. Equipment quantity and configurations will be ordered to meet specific site requirements. Additionally, FY01 funds procure eight GPN-22 precision approach radars (PARs) from the Australian Government. Procurement of these systems provides the USAF Air Traffic Control community the ability to improve spares availability and significantly improve the sustainment of the AN/TPN-25 and AN/GPN-22 radars.

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BUDGET ITEM JUSTIFICATION (EXHIBIT P-40)	<b>DATE:</b> JUNE 2001	
APPROP CODE/BA:	P-1 NOMENCLATURE:	
OPAF/ELECTRONICS & TELECOMMUNICATION EQUIPMENT	AIR TRAFFIC CONTROL/LANDI	NG SYSTEM (ATCALS)

#### **Description (cont.):**

These PARs include pieces and parts that are no longer supplied as a normal buy on the open market. To make repairs, like parts must be found and cannibalized. This practice has been exhausted. Many of the PARs in the field today are in need of overhaul or repairs to avoid failure and jeopardize flying missions. With the influx of these invaluable PARs into the supply system, overhaul and repair time will much improve and expeditious maintenance tasks will occur.

3. INSTRUMENT LANDING SYSTEM (ILS): The ILS consists of two subsystems, a localizer that provides runway centerline information and a glideslope to provide vertical descent angle information. ILS provides horizontal and vertical guidance to allow aircraft to make a precision approach to a runway in inclement weather. The current operational ILS systems are approaching the end of their intended life cycle. FY02 funds will procure and install three ILS.

4. TOWER SIMULATION SYSTEM (TSS): The TSS is a realistic visual control tower simulation tool to train Air Force air traffic controllers at their respective field locations. The TSS will use voice recognition technology to accurately replicate voice communications between the controller and simulated aircraft. An Air Force shortfall of qualified controllers has reduced the operating hours at 30 ATCFs. The TSS will provide a means to accelerate the training of controllers towards a 5/7-level certification. FY02 funds will procure and install four TSSs.

Items requested in FY02 are identified on the following P-40A and are representive 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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		REGATE	D ITEMS (EX	(HIBIT P- 40A	)		DATE: JU	DATE: JUNE 2001			
APPROP CODE/BA: OPAF/ELECTRONICS & TELECOMM	IUNICATIO	ON EQUIP	MENT	<b>P-1 NOM</b> AIR TRAFFI	ENCLATURE C CONTROL/LAN	DING SYST	EM (ATCALS)				
PROCUREMENT ITEMS	ID		FY2000		Y2001		2002		2003		
	CODE	QTY.	COST		COST	QTY.	COST	QTY.	COST		
1. VOICE COMMUNICATIONS SWITCHING SYSTEM	A		\$1,5	351							
2. RADAR APPROACH CONTROL	А				\$7,979						
3. INSTRUMENT LANDING SYSTEM	А						\$1,488				
4. TOWER SIMULATION SYSTEM	А						\$3,210				
Totals:			\$1,3	351	\$7,979		\$4,698				

BUDGET ITEM JUS	TIFICATION (I	DATE:	JUNE 2001					
APPROP CODE/BA		ICATION EQUIP	MENT		<b>IENCLATURE</b>			
	FY2000	FY2001	FY2002	FY2003	FY2004	FY2005	FY2006	FY2007
QUANTITY								
COST (in Thousands)	\$44,992	\$55,340	\$71,930	\$62,661	\$50,820	\$47,884	\$48,690	\$49,778

#### **Description:**

The National Airspace System (NAS) program modernizes the Department of Defense (DoD) Air Traffic Control (ATC) system, in conjunction with the Federal Aviation Administration (FAA) modernization effort. NAS will increase safety of flight; provide systems and facilities interoperable with FAA modernization; replace aging DoD ATC systems; provide identical service to military and civil aircraft; reduce DoD flight cancellations/delays; and reduce maintenance. Equipment procured includes fixed site approach control and control tower automation systems, radars, voice switches, site preparation, installation support, ancillary supplies and direct production support. Use of Non-Developmental Items (NDI) has been maximized. 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 to continue to provide service to the military and the civilian users who depend on DoD's ATC services.

The Air Force was assigned lead service for the NAS program that will modernize 92 DoD sites, with a site-unique array of equipment. Some of these sites include the major range and test facility bases, which may require procurement of non-standard communications and automation equipment through separate contracts. Of these 92 DoD sites, 44 constitute Air Force sites requiring Air Force funding.

This administration has not addressed FY 2003-2007 requirements. All FY 2003-2007 budget estimates included in this book are notional only and subject to change.

1. DOD ADVANCED AUTOMATION SYSTEM (DAAS): The DAAS is comprised of equipment tailored to support the operation of two



BUDGET ITEM JUSTIFICATION (EXHIBIT P-40)	DATE: JUNE 2001	
APPROP CODE/BA:	P-1 NOMENCLATURE:	
OPAF/ELECTRONICS & TELECOMMUNICATION EQUIPMENT	NATIONAL AIRSPACE SYSTEM	I

#### **Description (cont.):**

types of Air Traffic Control (ATC) facilities: Radar Approach Controls (RAPCONs) and military control tower facilities. DAAS provides digital controller displays, consoles, automation hardware and software to replace those systems approaching the end of their life cycle. DAAS replaces the current generation air traffic control automation system in DoD RAPCONs. FY00/01/02 funds procure and install 11 DAAS (3/3/5 respectively) at key Air Force locations. Equipment quantity and configurations will be produced 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 provides aircraft position and other data to the controller displays in the RAPCON and at select control tower locations. DASR replaces the DoD current generation of analog ATC surveillance radars. FY00/01/02 funds procure and install 15 DASRs (2/5/8 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 equipment is tailor-made to support communications in a variety of facilities ranging from low-volume ATC to large radar approach control facilities. VCSS provides the connectivity for controllers to communicate via landlines and radios with requisite aircraft, vehicles, and agencies. VCSS replaces current analog switches with new digital voice switches for DoD RAPCONs and some stand-alone control towers. FY 00/01/02 funds procure and install 85 VCSS (23/30/32 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): No FY02 funds requested.

Items requested in FY02 are identified on the following P-40A and are representive 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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	UNCLASSIFIED	)	

BUDGET ITEM JUSTIFICATION FOR AGGREGATED ITEMS (EXHIBIT P- 40A)DATE: JUNE 2001										
APPROP CODE/BA: OPAF/ELECTRONICS & TELECOMM	UNICATIO	ON EQ	UIPMENT	<b>P-1</b> NAT	NOMENCLA	TURE: E SYSTE	М			
PROCUREMENT ITEMS	ID		FY2000		FY2001		FY2			2003
	CODE	QT				DST	QTY.	COST	QTY.	COST
1. DOD ADVANCED AUTOMATION SYSTEM	А		\$10,	503		\$10,759		\$16,558		
2. DIGITAL AIRPORT SURVEILLANCE RADAR	A		\$11,	443		\$20,174		\$31,471		
3. VOICE COMMUNICATIONS SWITCHING SYSTEM	A		\$21,	271		\$24,407		\$23,901		
4. MILITARY AIRSPACE MANAGEMENT SYSTEM	A		\$1,	775						
Totals:			\$44,9	992		\$55,340		\$71,930		
P	<b>-1 ITEM</b> 34	NO			PAGE NO: 6				Page 1	of 1

BUDGET PROCUREMENT HISTORY PLANNING (EXHIBIT P- 5A)DATE: JU										
APPROP CODE/BA: OPAF/ELECTRONICS & TELE	COMMUI		I EQUIPMENT	P-1 NOMENCLATURE: NATIONAL AIRSPACE SYSTEM						
ITEM / FISCAL YEAR	QTY.	UNIT COST	LOCATION OF PCO	CONTRACT METHOD & TYPE			DATE FIRST DEL.	SPECS AVAIL NOW	DATE REV. AVAIL	
1. DOD ADVANCED AUTOMATION SYSTEM										
FY00 (1)			AFMC/ESC	OPT/FFP(2)	RAYTHEON CORP., MARLBORC	, MA FEB 00	AUG 00			
FY01 (1)			AFMC/ESC	OPT/FFP(2)	RAYTHEON CORP., MARLBORC	, MA DEC 00	JUN 01			
FY02 (1)			AFMC/ESC	OPT/FFP(2)	RAYTHEON CORP., MARLBORC	, MA DEC 01	JUN 02	Y		
2. DIGITAL AIRPORT SURVEILLANCE RADAR										
FY00 (1)			AFMC/ESC	OPT/FFP(3)	RAYTHEON CORP., MARLBORC	, MA FEB 00	JUL 01			
FY01 (1)			AFMC/ESC	OPT/FFP(3)	RAYTHEON CORP., MARLBORC	, MA MAR 01	AUG 02			
FY02 (1)			AFMC/ESC	OPT/FFP(3)	RAYTHEON CORP., MARLBORC	, MA DEC 01	MAY 03	Y		
3. VOICE COMMUNICATIONS SWITCHING SYSTEM										
FY00 (1)			AFMC/ESC	OPT/FFP(4)	LITTON-DENRO, GAITHERSBUR	G, MD JAN 00	JUL 00			
FY01 (1)			AFMC/ESC	OPT/FFP(4)	LITTON-DENRO, GAITHERSBUR	G, MD JAN 01	JUL 01			
FY02 (1)			AFMC/ESC	OPT/FFP(4)	LITTON-DENRO, GAITHERSBUR	G, MD DEC 01	JUN 02	Y		
	P-1	I <b>ITEM N</b> 34	0	PAGE NO	:		Page	e 1 of	2	

BUDGET PROCUREMENT HISTORY PLANNING (EXHIBIT P- 5A)								DATE: JUNE 2001			
APPROP CODE/BA: OPAF/ELECTRONICS & TELEC	OMMU	NICATION	I EQUIPMENT	P-1 NOMENCLATURE: NATIONAL AIRSPACE SYSTEM							
ITEM / FISCAL YEAR	QTY.	UNIT COST	LOCATION OF PCO	CONTRACT METHOD & TYPECONTRACTOR AND LOCATIONAWD. AWD. DATEDATESPECS AVAIL DEL.NOW						DATE REV. AVAIL	
4. MILITARY AIRSPACE MANAGEMENT SYSTEM											
FY00	AFMC/ESC OPT (5)/FFP RAYTHEON ELEC, LONG BEACH, CA DEC 99 MAY 00										
<b>REMARKS:</b> 1. System equipment quantity and 2. Option to the FAA Standard Te 3. Option to the Air Force Digital <i>J</i> 4. Option to the FAA Enhanced T 5. Option to the Military Airspace	erminal A Airport S erminal V	utomated urveillanc /oice Swi	Replacement System e Radar contract award tch contract awarded in	contract awarded in ded in August 1996. n July 1995.		costs in a	all syster	ns.			

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BUDGET ITEM JUS	TIFICATION (E	DATE:	JUNE 2001						
APPROP CODE/BA: OPAF/ELECTRONICS &		CATION EQUIP	MENT	_	P-1 NOMENCLATURE: THEATER AIR CONTROL SYSTEM IMPROVEMENT				
	FY2000	FY2001	FY2002	FY2003	FY2004	FY2005	FY2006	FY2007	
QUANTITY									
COST (in Thousands)	\$28,064	\$14,860	\$15,057	\$16,907	\$36,883	\$42,051	\$61,034	\$62,212	

#### **Description:**

The Theater Air Control System Improvements (TACSI) program acquires state-of-the-art equipment and capabilities essential to the survival and combat effectiveness of tactical air command and control (C2). Collectively, they provide the flexibility, responsiveness, reliability and maintainability necessary for effective C2. Additionally, TACSI provides funding for procurement of the Air Force Mission Support System which provides unit level mission planning systems for pilots and supports all current/future aircraft and associated weapons. This administration has not addressed FY 2003-2007 requirements. All FY 2003-2007 budget estimates included in this book are notional only and subject to change.

1. GROUND THEATER AIR CONTROL SYSTEM (GTACS): The GTACS Control and Reporting Center (CRC) Modular Control Equipment (MCE) 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 one or more major regional conflicts, simultaneously, to support a strategic war. The CRC deploys rapid reaction capability into a theater, then to forward locations within that theater, to establish autonomous and self-sufficient bases of operations. CRC elements accomplish five core competencies: theater air defense, datalink management, surveillance, identification and air battle execution. The CRC program provides the Joint Task Force/Joint Force Air Component Commander a deployable critical Theater Battle Management C2 capability to execute theater air operations with connectivity and interoperability among elements of the Theater Air Control System (TACS) within a designated Area of Interest (AOI) to include United States Air Force, Navy, Marine Corps, Army, and allied/coalition assets.

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<b>BUDGET ITEM JUSTIFICATION (EXHIBIT P-40)</b>	DATE: JUNE 2001
APPROP CODE/BA:	P-1 NOMENCLATURE:
OPAF/ELECTRONICS & TELECOMMUNICATION EQUIPMENT	THEATER AIR CONTROL SYSTEM IMPROVEMENT

#### **Description (cont.):**

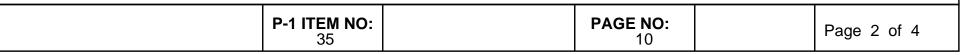
a. MODULAR CONTROL EQUIPMENT (MCE) PRE-PLANNED PRODUCT IMPROVEMENTS (P3I) MCE UPGRADES: No FY02 funding is requested.

b. PROGRAM ENGINEERING SUPPORT: No FY02 funding is requested.

c. AN/TPS-75 EQUIPMENT IMPROVEMENT/UPGRADES: No FY02 funding is requested.

d. INTERIM CONTRACTOR SUPPORT (ICS): No FY02 funding is 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, intelligence information, and imagery; prepare and calculate flight and weapons delivery planning data (e.g., maps, charts, imagery, flight logs, radar predictions); and electronically transfer this information to the aircraft and weapons. These systems increase the combat effectiveness of Air Force (active duty, guard, and reserve 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 Unix-based mission planning workstations as well as engineering support to meet the varied requirements of Combat Air Forces and Air Mobility Command platforms. These systems provide a flexible, configurable, and cost effective range of increasing capability 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 number, type, and deployment of aircraft/weapons require changes in the number and mix of Unix-based and PC-based mission planning computers and their concept of operation. The effects of these changes





BUDGET ITEM JUSTIFICATION (EXHIBIT P-40)	<b>DATE:</b> JUNE 2001	
APPROP CODE/BA:	P-1 NOMENCLATURE:	
OPAF/ELECTRONICS & TELECOMMUNICATION EQUIPMENT	THEATER AIR CONTROL SYST	EM IMPROVEMENT

#### **Description (cont.):**

have been a shift in the mission planning hardware emphasis from a small number of large, complex planning systems to a larger number of smaller, more personal planning devices tailored to the users' needs. Each year, a variety of hardware platforms will be procured to meet the varied needs of the Air Force mission planners. Market surveys and analysis of COTS products support procurement decisions.

a. MPS: MPS consists of transportable UNIX-based workstations integrated with MPS/AFMSS software to provide considerable mission planning functionality, large data storage, and full interoperability with TBM systems. Servers are also incorporated into the MPS workstation to provide enhanced processing capability and a robust network community necessary to meet the needs of the user. Additionally, color laser printers are included with the workstations to allow the user to produce mission-specific strip charts. FY00/01 funding procures these workstations and associated hardware.

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.

c. PFPS-R: The Ruggedized PFPS consists of a rugged laptop personal computer (PC) 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. FY00/01 funding procures these workstations.

d. PFPS-NR: The Non-Ruggedized PFPS consists of a standard PC-based laptop 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 procures these workstations.

e. UNIX-BASED MISSION PLANNING COMPUTER (UMPC): UMPC consists of a transportable, network-capable system integrated with AFMSS MPS software to provide basic mission planning capability as well as mission planning for precision guided munitions, large data

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	UNCLASSIFIED		

APPROP CODE/BA:P-1 NOMENCLATURE:OPAF/ELECTRONICS & TELECOMMUNICATION EQUIPMENTTHEATER AIR CONTROL SYSTEM IMPROVEMENT	<b>BUDGET ITEM JUSTIFICATION (EXHIBIT P-40)</b>	DATE: JUNE 2001	
			EM IMPROVEMENT

#### **Description (cont.):**

storage, and full interoperability with TBM systems. Additionally, color laser printers are included with the system to allow the user to produce charts and other mission-specific products. FY02 funding will procure these systems and associated hardware.

f. PC-BASED MISSION PLANNING COMPUTER (PMPC): PMPC consist of a portable, tailorable, network-capable system integrated with AFMSS PFPS software to provide basic mission planning capability, large data storage, and full interoperability with TBM systems. PMPCs can also be networked with UMPCs to further tailor a platform's mission planning environment. Additionally, color laser printers are included with the system to allow the user to produce charts and other mission-specific products. FY02 funding will procure these systems and associated hardware.

g. PROGRAM/ENGINEERING SUPPORT: FY00-02 funding continues program/engineering support for AFMSS.

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WEAPON SYSTEM COST ANALYSIS (EXHIBIT P- 5)									I	DATE:	JUNE 2	2001	
APPROP CODE/BA: OPAF/ELECTRONICS & TELECOMM	CODE/BA:       P-1 NOMENCLATURE:         CTRONICS & TELECOMMUNICATION EQUIPMENT       THEATER AIR CONTROL SYSTEM IM					IPROVE	MENT						
	IDENT		FY2000			FY2001			FY2002			FY2003	
WEAPON SYSTEM COST ELEMENTS	CODE	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)				{15,710}			{2,030}						
A. MCE P3I/UPGRADES	А			6,148			1,332						
B. PROGRAM ENGINEERING SUPPORT				4,513									
C. AN/TPS-75 EQUIP IMPROVEMENT	А			4,299			698						
D. INTERIM CONTRACTOR SUPPORT (ICS)				750									
2. AIR FORCE MISSION PLANNING SYSTEM (AFMSS)				{12,354}			{12,830}			{15,057}			
A. MISSION PLANNING SYSTEM (MPS)	А			4,800			1,728						
B. MPS UPGRADES	А						287						
C. PORTABLE FLIGHT PLANNING SOFTWARE RUGGEDIZED (PFPS-R)	А			5,818			6,599						
D. PFPS-NON-RUGGEDIZED (NR)	А			660			2,118						
E. UNIX-BASED MISSION PLANNING COMPUTER (UMPC)	А									4,775			
F. PC-BASED MISSION PLANNING COMPUTER (PMPC)	A									7,681			
G. PROGRAM/ENGINEERING SUPPORT				1,076			2,098			2,601			
TOTALS:				28,064			14,860			15,057			
REMARKS:													
Р	-1 ITEM 35	NO			PA	<b>GE NO:</b> 13					Pa	ige 1 of 1	

BUDGET PROCUREMENT HISTORY PLANNING (EXHIBIT P- 5A)						DATE: JU	NE 200	)1		
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	
1. GROUND THEATER AIR CONTROL SYSTEM (GTACS)										
A. MCE P3I/UPGRADES (1)										
FY00			AFMC/ESC	OTH/OTH (2)	MULTIPLE	APR 00	JUN 00			
FY01			AFMC/ESC	OTH/OTH (2)	MULTIPLE	FEB 01	JUL 01			
C. AN/TPS-75 EQUIP IMPROVEMENT /UPGRADES										
FY00			AFMC/OO-ALC	C/FFP	RAYTHEON, FULLERTON, CA	FEB 01	OCT 01			
FY01			AFMC/OO-ALC	C/FFP	RAYTHEON, FULLERTON, CA	APR 01	NOV 01			
2. AIR FORCE MISSION PLANNING SYSTEM (AFMSS)										
A. MISSION PLANNING SYSTEM (1)										
FY00			AFMC/ESC	OPT/FFP	GTSI, CHANTILLY, VA	NOV 99	FEB 00			
FY01			AFMC/ESC	OPT/FFP	MULTIPLE (3)	NOV 00	FEB 01			
B. MPS UPGRADES										
FY01			AFMC/ESC	OPT/FFP	MULTIPLE (3)	NOV 00	FEB 01			
	P-1	ITEM N 35	0	PAGE NO	:		Pag	e 1 of	2	

BUDGET PROCUREMENT HISTORY PLANNING (EXHIBIT P- 5A)							NE 200	)1			
APPROP CODE/BA: OPAF/ELECTRONICS & TELEC	OMMU	NICATION	N 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 RUGGEDIZED (PFPS-R) (1)											
FY00			AFMC/ESC	OPT/FFP	GTSI, CHANTILLY, VA	NOV 99	MAR 00				
FY01			AFMC/ESC	OPT/FFP	MULTIPLE (3)	NOV 00	MAR 01				
D. PFPS-NON-RUGGEDIZED (NR) (1)											
FY00			AFMC/ESC	OPT/FFP	GTSI, CHANTILLY, VA	MAR 00	DEC 00				
FY01			AFMC/ESC	OPT/FFP	MULTIPLE (3)	NOV 00	FEB 01				
E. UNIX-BASED MISSION PLANNING COMPUTER (UMPC) (1)											
FY02			AFMC/ESC	OPT/FFP	MULTIPLE (3)	NOV 01	FEB 02	Y			
F. PC-BASED MISSION PLANNING COMPUTER (PMPC) (1)											
FY02			AFMC/ESC	OPT/FFP	MULTIPLE (3)	NOV 01	MAR 02	Y			
<b>REMARKS:</b> (1) Quantity and unit cost vary be (2) Various contract methods and Falls, ID; Lear Seigler Services, A	d types v Annapoli	will be util s, MD;  a	lized. Examples of cor nd Motorola, Inc., Scot	ntractors include Litto tsdale, AZ Award/de	on Data Systems, Agoura Hill livery dates reflect date of fir	s, CA; Sciented st award and de	h, Inc. Ic livery.				

(3) 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 including Beyond Technology (BTG), Fairfax VA; Government Technology Services, Inc (GTSI), Chantilly Va; and Tracor Enterprise solutions, Reston, VA. Award/delivery dates reflect date of first award and delivery.

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BUDGET ITEM JUS	DATE:	JUNE 2001								
APPROP CODE/BA: P-1 NOMENCLATURE:										
OPAF/ELECTRONICS & TELECOMMUNICATION EQUIPMENT					WEATHER OBSERVATION/FORECAST					
	FY2000	FY2001	FY2002	FY2003	FY2004	FY2005	FY2006	FY2007		
QUANTITY										
COST (in Thousands)	\$34,257	\$26,691	\$33,766	\$28,269	\$22,853	\$23,340	\$23,772	\$24,302		

#### **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 for support of modern air combat operations. These systems enhance the lethality of Air Force weapon systems and precision munitions by accurately predicting weather to provide optimal targeting conditions and to ensure effective bomb damage assessment.

Air Force Weather (AFW) programs are aligned under the five core competency areas of weather data collection, weather data analysis, forecasting, product tailoring/warfighter applications, and dissemination as described in the AFW Mission Support Plan. Through this alignment, AFW will ensure an integrated and systems-oriented approach to program management decisions. [This P-40 retains the Tactical Observing and Forecasting System because the FY00 Emergency Supplemental Appropriations added funds to replace Kosovo damaged/unserviceable equipment procured under this project]. The Air Force Chief of Staff (CSAF) decision to stand-up Operational Weather Squadrons (OWS) in support of AFW Re-engineering created the need to restructure the funding in the Product Tailoring/Warfighter Applications program for FY00/01. Additional FY00 funds were included as a result of the CSAF decision to accelerate Reengineering actions. FY02 funds will continue modernization of weather sensors and the enhancement of weather analysis and operational support capabilities at the strategic, theater, and tactical levels. This administration has not addressed FY 2003-2007 requirements. All FY 2003-2007 budget estimates included in this book are notional only and subject to change.

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BUDGET ITEM JUSTIFICATION (EXHIBIT P-40)	DATE: JUNE 2001	
APPROP CODE/BA:	P-1 NOMENCLATURE:	
OPAF/ELECTRONICS & TELECOMMUNICATION EQUIPMENT	WEATHER OBSERVATION/FOR	RECAST
Description (cont.):		

1. TACTICAL OBSERVING AND FORECASTING SYSTEM (TOFS): No FY02 funding is requested.

2. WEATHER DATA COLLECTION: Combines weather radars and meteorological sensors into an integrated meteorological sensing and instrumentation approach for battlefield and in-garrison operations. Components include the following capabilities:

a. TACTICAL WEATHER RADAR (TWR): No FY02 funding is requested.

b. OBSERVING SYSTEM 21ST CENTURY (OS-21): Provides state-of-the-art life-cycle replacement through off-the-shelf acquisition for weather observing/sensor equipment approaching 20 years old. OS-21 includes five different configurations: fixed, deployable, remote, manual, and upper air. FY00 funding purchased deployable and fixed, in-garrison weather observing/sensor systems. FY01 funding continues the purchase of fixed, in-garrison systems. FY02 funding will continue acquisition of fixed systems and procure prototype remote sensing systems.

c. REMOTE MINIATURE WEATHER SENSORS (RMWS): No FY02 funding is requested.

d. SMALL TACTICAL TERMINAL (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. FY01/02 funding procures these terminals which receive visual/thermal satellite imagery and other non-imagery weather data to support combat forces.

3. WEATHER FORECASTING: 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

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BUDGET ITEM JUSTIFICATION (EXHIBIT P-40)		DATE: JUNE 2001	
APPROP CODE/BA:	P-1 NOMENCLATURE:		
OPAF/ELECTRONICS & TELECOMMUNICATION EQUIPMENT	WEATHER OBSERVATION/FORECAST		

#### **Description (cont.):**

communications and command, control, communications, computers and intelligence (C4I) systems. Components include:

- a. CLOUD DEPICTION AND FORECAST SYSTEM (CDFS) II: No FY02 funding is requested.
- b. GLOBAL THEATER WEATHER ANALYSIS AND PREDICTION SYSTEM (GTWAPS): No FY02 funding is requested.
- c. SPACE WEATHER ANALYSIS AND FORECAST SYSTEM (SWAFS): No FY02 funding is requested.

4. PRODUCT TAILORING/WARFIGHTER APPLICATIONS: Implements AFW Reengineering at the theater and tactical levels. At the theater level, the OWS provides timely, focused, fine-scale weather products and services to support operational commanders within a given Area of Responsibility. At the tactical level, Weather Flight/Detachments (WF/Dets) provide front-line weather information to AF and Army warfighters in support of combat operations. WF/Dets operate at both in-garrison and deployed locations. FY00/01 funding purchases computer workstations, servers and associated peripherals for the stand-up of fixed OWSs and procures desktop client computer systems and associated peripherals for tactical WF/Dets. FY00 funds also support the CSAF-directed acceleration of AF Weather Reengineering. FY02 funding will procure integrated computer hardware and software suites and associated communications interfaces, for operational weather support at fixed and deployed AF and Army locations in the Continental United States and overseas.

5. WEATHER DATA ANALYSIS: Implements AFW Reengineering at the strategic level. AFW Strategic Centers provide global-scale atmospheric data and forecast and analysis products required by regional OWSs and WF/Dets for AF and Army customers worldwide. Other customers for global products include DoD and Department of Commerce agencies and national programs. FY01 funding purchases engineering management services to produce systems specification technical documentation. This documentation is necessary to support development of the Technical Requirements Document and the Request for Proposal. FY02 funding purchases dissemination system upgrades, Enterprise database and data management software, and upgrades to the internal communications network to support modernization of the

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BUDGET ITEM JUSTIFICATION (EXHIBIT P-40)		<b>DATE:</b> JUNE 2001	
APPROP CODE/BA:	P-1 NOMENCLATURE:		
OPAF/ELECTRONICS & TELECOMMUNICATION EQUIPMENT	WEATHER OBSERVATION/FOR	RECAST	

#### **Description (cont.):**

AFWA strategic center communications and data infrastructure. This effort will: 1) incorporate Meteorological Satellite (METSAT) imagery, along with gridded and various other data elements, into the AFW Strategic Center database structure; 2) significantly increase the database warehousing and database capacity; 3) field a robust data and dissemination management system, allowing data distribution to OWS locations and other sites as needed; 4) implement auto processing and distribution functions based on defined criteria at unclassified and classified levels; and 5) expand the four-tiered architecture for efficient data access and processing.

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WEAPON SYSTEM COST ANALYS	SIS (EXH	IIBIT P	- 5)							DATE:	JUNE	2001	
APPROP CODE/BA: OPAF/ELECTRONICS & TELECOMMU	JNICATI	ON EQU	JIPMENT		P-1 NOMENCLATURE: WEATHER OBSERVATION/FORECAST								
			FY2000			FY2001			FY2002	2		FY2003	
WEAPON SYSTEM COST ELEMENTS	IDENT CODE	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)				{600	0}								
PRIME MISSION EQUIPMENT	A			60	00								
2. WEATHER DATA COLLECTION				{10,250	0}		{14,853}			{18,796}			
A. TWR				{4,876	6}		{4,619}						
PRIME MISSION EQUIPMENT (1)	А			4,02	20		3,859						
ENGR/PROGRAM MGT				85	66		760						
B. OS-21				{3,874	4}		{7,534}			{17,496}			
PRIME MISSION EQUIPMENT (1)	А			3,50	)7		5,927			13,429			
ENGR/PROGRAM MGT				36	57		1,607			4,067			
C. REMOTE MINIATURE WEATHER SENSOR (RMWS)				{1,50	0}								
PRIME MISSION EQUIPMENT	A			1,50	00								
D. SMALL TACTICAL TERMINAL (STT)							{2,700}			{1,300}			
PRIME MISSION EQUIPMENT	А						2,405			950			
ENGR/PROGRAM MGT							295			350			
P	-1 ITEM 36	NO			PA	<b>GE NO</b> : 20					Pa	age 1 of 3	<u> </u>

WEAPON SYSTEM COST ANALYSIS (EXHIBIT P- 5)										DATE:	JUNE 2	2001	
APPROP CODE/BA: OPAF/ELECTRONICS & TELECOM	MUNICATI	ON EQU	JIPMENT		P-1 NOMENCLATURE: WEATHER OBSERVATION/FORECAST								
		FY2000		FY2001		FY2002			FY2003				
WEAPON SYSTEM COST ELEMENTS	IDENT CODE	QTY	UNIT COST	TOTAL COST	QTY	UNIT COST	TOTAL COST	QTY	UNIT COST	TOTAL COST	QTY	UNIT COST	TOTAL COST
3. WEATHER FORECASTING				{7,56	3}		{3,981}						
A. CDFS II				{2,17	0}								
PRIME MISSION EQUIPMENT	А			1,57	75								
ENGR/PROGRAM MGT				59	95								
B. GTWAPS				{4,10	0}		{2,000}						
PRIME MISSION EQUIPMENT (1) (2)	A			4,10	00		2,000						
C. SWAFS				{1,293	3}		{1,981}						
PRIME MISSION EQUIPMENT (1)	А			86	57		1,773						
ENGR/PROGRAM MGT				42	26		208						
4. PRODUCT TAILORING & WARFIGHTER APPLICATIONS				{15,84	4}		{6,715}			{6,289}			
PRIME MISSION EQUIPMENT (1)	А			14,40	)5		5,882			4,458			
ENGR/PROGRAM MGT				1,43	39		833			1,831			
5. WEATHER DATA ANALYSIS							{1,142}			{8,681}			
PRIME MISSION EQUIPMENT (1)	А									7,724			
ENGR/PROGRAM MGT							1,142			957			
	<b>P-1 ITEM</b> 36	NO			PA	<b>GE NO:</b> 21			1		Pa	age 2 of 3	

WEAPON SYSTEM COST ANALYS	SIS (EX⊦	IIBIT P-	5)						[	DATE:	JUNE 2	001	
APPROP CODE/BA: OPAF/ELECTRONICS & TELECOMM	APPROP CODE/BA: OPAF/ELECTRONICS & TELECOMMUNICATION EQUIPMENT				P-1 NOMENCLATURE: WEATHER OBSERVATION/FORECAST								
FY2000 FY2001 FY2002 FY2003													
WEAPON SYSTEM COST ELEMENTS	CODE	QTY	UNIT COST	TOTAL COST	QTY	UNIT COST	TOTAL COST	QTY	UNIT COST	TOTAL COST	QTY	UNIT COST	TOTAL COST
TOTALS:				34,25	57		26,691			33,766			
<b>REMARKS:</b> (1) Prime Mission Equipment (PME) lir (2) PME line includes Engineering/Pro													

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		22	Page 3 of 3

BUDGET PROCUREMENT	BUDGET PROCUREMENT HISTORY PLANNING (EXHIBIT P- 5A) DATE: JU								
APPROP CODE/BA: OPAF/ELECTRONICS & TELE	COMMUI		N EQUIPMENT	P-1 NOMENCLA WEATHER OBSER	ATURE: RVATION/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
1. TOFS									
FY00 (1)			AFMC/ESC	OPT/FFP (2)	MULTIPLE	MAR 00	APR 00		
2. WEATHER DATA COLLECTION									
A. TWR (1)									
FY00			AFMC/ESC	MIPR/OTH/OTH (3)	NAVY/RAYTHEON, INDIANAPOLI	S, IN NOV 99	FEB 00		
FY01			AFMC/ESC	MIPR/OTH/OTH (3)	NAVY/RAYTHEON, INDIANAPOLI	S, IN NOV 00	APR 01		
B. OS-21 (1)									
FY00			AFMC/ESC	MIPR/OTH (4)	NAVY/RAYTHEON, INDIANAPOLI	S, IN JUL 00	NOV 00		
FY01			AFMC/ESC	C/FFP (5)	UNKNOWN	JUL 01	DEC 01		
FY02			AFMC/ESC	OPT/FFP (5)	UNKNOWN	NOV 01	FEB 02	Y	
C. RMWS (1)									
FY00			AFMC/ESC	MIPR/OPT/FFP	GSA, KANSAS CITY, MO/MCQ ASSOCIATES, FREDERICKSBUR	.G, VA	DEC 00		
	P-1	ITEM N 36	0	PAGE NO	:		Pag	e 1 of	f 3

BUDGET PROCUREMENT	T HISTOR'	Y PLANN	NING (EXHIBIT P- 54	A)		DATE: JU	NE 200	)1	
APPROP CODE/BA: OPAF/ELECTRONICS & TEL	_ECOMMUI	NICATIO	N EQUIPMENT	P-1 NOMENCLA WEATHER OBSER	ATURE: RVATION/FORECAST				
ITEM / FISCAL YEAR	<b>QTY</b> .	UNIT COST	LOCATION OF PCO	CONTRACT METHOD & TYPE	CONTRACTOR AND LOCATION	AWD. DATE	DATE FIRST DEL.	SPECS AVAIL NOW	DATE REV. AVAIL
D. STT (1)									
FY01			AFMC/SMC	OPT/FFP (6)	HARRIS CORP, MELBOURNE, FL	DEC 00	JUN 01		
FY02			AFMC/SMC	OPT/FFP (6)	HARRIS CORP, MELBOURNE, FL	. DEC 01	JUN 02	Y	
3. WEATHER FORECASTING									
A. CDFS II (1)									
FY00			AFMC/SMC	OPT/CPAF (7)	STERLING CORP, BELLEVUE, N AEROSPACE CORP, EL SEGUNE		SEP 01		
B. GTWAPS (1)									
FY00			AFMC/ESC	OPT/FPIF (8)	TRW, BELLEVUE, NE	FEB 00	MAY 00		
FY01			AFMC/ESC	OPT/FFP (8)	TRW, BELLEVUE, NE	DEC 00	MAR 01		
C. SWAFS (1)									
FY00			AFMC/SMC	MIPR/FP	GSA, KANSAS CITY, MO/AEROS CORP, EL SEGUNDO, CA	PACE APR 00	MAY 00		
FY01			AFMC/SMC	MIPR/FP	GSA, KANSAS CITY, MO/AEROS CORP, EL SEGUNDO, CA	PACE JAN 01	MAY 01		
	P-1	<b>ITEM N</b> 36	0	PAGE NO 24	:		Pag	e 2 of	3

BUDGET PROCUREMENT	BUDGET PROCUREMENT HISTORY PLANNING (EXHIBIT P- 5A)							NE 200	)1	
APPROP CODE/BA: OPAF/ELECTRONICS & TELECOMMUNICATION EQUIPMENT			N EQUIPMENT	P-1 NOMENCLA WEATHER OBSER						
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 (1)										
FY00			AFMC/ESC	OPT/OTH (2)	MULTIPLE		MAR 00	JUN 00		
FY01			AFMC/ESC	OPT/OTH (2)	MULTIPLE		MAR 01	JUN 01		
FY02			AFMC/ESC	OPT/OTH (2)	MULTIPLE		NOV 01	JAN 02	Y	
5. WEATHER DATA ANALYSIS (1)										
FY02			AFMC/ESC	C/FPIF	UNKNOWN		FEB 02	JUN 02	N	SEP 01
		-	-	-	•					

**REMARKS**:

1. Quantity and unit cost vary due to site specific configurations.

2. Multiple contractors: 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. Also Information Technology Contract with General Dynamics through GSA Kansas City, MO. Award and delivery dates reflect first contract award date and delivery date.

3. Delivery order on U. S. Navy contract to Raytheon, Indianapolis, IN. Contract type is Time and Materials.

4. Contract type is Time and Materials.

5. An acquisition strategy must be coordinated for the OS-21 Remote System to determine the contract method, type, and ultimately determine the contractor.

6. Option to Harris contract awarded Jun 94.

7. Option to basic Cloud Depiction and Forecast System (CDFS) II contract for hardware, support and services, awarded Jun 95 to Sterling Corp., Bellevue, NE.

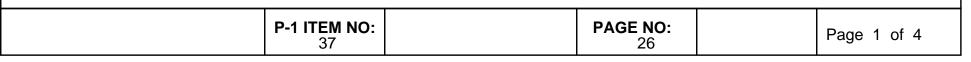
8. TRW, Redondo Beach, CA selected through pre-competed Command and Control Product Line (CCPL) contract vehicle. Contract to TRW was awarded Oct 97. TRW, Redondo Beach, delegated GTWAPS project to TRW, Bellevue, NE

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BUDGET ITEM JUS	TIFICATION (E	XHIBIT P-40)				DATE:	JUNE 2001				
APPROP CODE/BA	:			P-1 NOM	ENCLATURE:						
OPAF/ELECTRONICS &	DPAF/ELECTRONICS & TELECOMMUNICATION EQUIPMENT       STRATEGIC COMMAND AND CONTROL										
	FY2000	FY2001	FY2002	FY2003	FY2004	FY2005	FY2006	FY2007			
QUANTITY											
COST (in Thousands)	\$20,614	\$20,669	\$21,066	\$22,149	\$23,532	\$23,696	\$23,015	\$24,466_			
Description:											
The Strategic Comman	nd and Control p	rogram procures	s mission critical	communicatio	ons and computer	systems requir	red 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. FY03-07 budget numbers do not reflect the DoD strategy review results.

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 transition/post phases of nuclear conflict. The NPES requirement includes both aircraft and non-aircraft applications. This funding covers only the non-aircraft portion. This capability mirrors fixed and ground mobile command centers with the ability to receive, process, and transmit battle staff information during flying operations. FY00 funding began phased procurement of the third suite of equipment. In addition, one suite of equipment was purchased for the National Airborne Operations Center (NAOC) command post facility. FY01 funding completes the procurement and begins the phased procurement of the fourth suite of equipment. Two-way communications processing with the NAOC Message Processing System (MPS) also begins in FY01, allowing NPES to transmit information from the aircraft as opposed to the receive-only limitations that are currently in place. FY02 funds will begin lifecycle replacement and migration to the Single Integrated Operational Plan (SIOP) enterprise database.

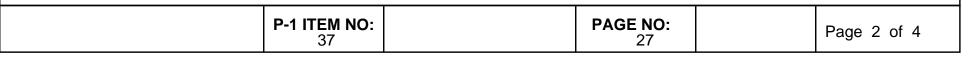


BUDGET ITEM JUSTIFICATION (EXHIBIT P-40)		<b>DATE:</b> JUNE 2001
APPROP CODE/BA:	P-1 NOMENCLATURE:	
OPAF/ELECTRONICS & TELECOMMUNICATION EQUIPMENT	STRATEGIC COMMAND AND C	ONTROL

#### **Description (cont.):**

2. MOBILE CONSOLIDATED COMMAND CENTER (MCCC): The United States Strategic Command (USSTRATCOM) MCCC, Offutt AFB, NE, provides survivable, endurable contingency command and control communications, computers and intelligence (C4I) systems capable of supporting the execution of all CINC command and control, reconstitution, and continuity of operations missions in the event other primary centers become incapacitated. FY00/01 funding supports Radio Frequency (RF) Databus replacement due to obsolescence and logistic unsupportability; Global Command and Control System (GCCS) integration; Global Broadcast System (GBS) integration; and integration of a second MILSTAR Command Post Terminal onto the MCCC platform. FY02 funding will continue the RF Databus replacement. FY02 funding will also support replacement/upgrade of other critical components. These include HF/UHF radios, message switching, GCCS and GCCS-T, GBS, and a second MILSTAR terminal with a trailerized antenna. Improvements to data/message transfer capability will also be funded in FY02.

3. C2 MODERNIZATION: The United States Strategic Command's Command and Control (C2) Modernization is a program for employing a set of underlying information services, technologies, and tools that enable CINCSTRAT to achieve the broad operational warfighting capabilities described in Joint Vision 2020. Visualized as a collection of distributed databases and applications, integrated through a grid of supporting services, C2 Modernization acquires, processes and delivers information, as needed, to enhance decision-making. FY02 funds will support the following C2 Modernization projects: Collaboration Environment, which will acquire hardware to support the installation and evaluation of collaboration tools; Command Enterprise Database (EDB), which will acquire hardware for the prototyping of a synchronized data architecture; Access & Security, which will acquire desktop systems and network switches for Multi Secure Level/Multi Level Secure (MSL/MLS) development; the Fused Battlespace View project, which will acquire development and test servers with storage area network (SAN) storage to develop the Strategic Common Operational Picture (STRATCOP); the Force Status/Readiness project, which will provide test servers and desktops with SAN storage and network equipment for the STRATCOM Integration Lab (SIL) contractors to integrate and interface STRATCOM systems with external databases; and the Decision Support project, which will acquire servers, desktops, SAN storage and network equipment for the next version of the knowledge wall that presents integrated data in the SIL.



BUDGET ITEM JUSTIFICATION (EXHIBIT P-40)		DATE: JUNE 2001
APPROP CODE/BA:	P-1 NOMENCLATURE:	
OPAF/ELECTRONICS & TELECOMMUNICATION EQUIPMENT	STRATEGIC COMMAND AND C	CONTROL
Description (cont.):		

4. STRATEGIC WAR PLANNING SYSTEM (SWPS): 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. USSTRATCOM developed a hardware life-cycle replacement plan to replace servers, storage devices, workstations, PCs and network upgrades over multiple years. This life-cycle replacement plan eliminates the peaks and valleys to better utilize existing manpower to install and configure the replacement hardware.

- Network infrastructure upgrade (routers, hubs, cabling, servers and blades) required to meet Full Operational Capability (FOC) began in FY00 and will continue in FY02
- The server and high availability storage arrays replacement project began in FY01 and will continue in FY02
- A major PC life-cycle refresment began in FY01 and will be completed in FY02
- The next iteration of the life-cycle workstation (UNIX platform) replacement will begin in FY02.

5. B-2 SUPPORT: The B-2 weapon system relies heavily on C2 equipment to meet its operational capability. These funds support the 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. FY00 funds procured new computer aided design (CAD) workstations, upgraded system servers, purchased additional Redundant Array of Inexpensive Disks (RAID) storage capability (data storage devices with multiple disks) and migrated much of the system to Windows NT format. FY01

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# BUDGET ITEM JUSTIFICATION (EXHIBIT P-40) DATE: JUNE 2001 APPROP CODE/BA: P-1 NOMENCLATURE: OPAF/ELECTRONICS & TELECOMMUNICATION EQUIPMENT STRATEGIC COMMAND AND CONTROL

#### **Description (cont.):**

funds upgrade PC workstations and servers to then-current technology. FY02 funds will upgrade EDS servers (total of 12) and peripheral equipment to support Windows 200X 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 will be accomplished and tested with the use of the WSSC's Software Development System (SDS), an integration and test computer laboratory complex, by analyzing and designing fixes to existing aircraft software. FY00 funds began the replacement of obsolete equipment and computers. FY01 funds continue the replacement of obsolete equipment and computers, as well as upgrade existing local area networks (LANs) to current technologies and capabilities. FY02 funds will continue the replacement and upgrades to obsolete computers, equipment and LANs to current technologies and capabilities.

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BUDGET ITEM JUSTIFICATION FO	OR AGGF	REGATE	D ITEMS (EXF	HBIT P- 40A)			<b>DATE:</b> JUNE 2001			
APPROP CODE/BA: OPAF/ELECTRONICS & TELECOMM	IUNICATIC	N EQUII	PMENT	P-1 NOMENCLATURE: STRATEGIC COMMAND AND CONTROL						
PROCUREMENT ITEMS	ID		FY2000	FY2001		FY20			2003	
	CODE	QTY.	COST		COST	QTY.	COST	QTY.	COST	
1. NUCLEAR PLANNING AND EXECUTION SYSTEM (NPES)	A		\$38	39	\$200		\$273			
2. MOBILE CONSOLIDATED COMMAND CENTER (MCCC)	A		\$3,90	14	\$1,547		\$4,609			
3. C2 MODERNIZATION	A						\$2,207			
4. STRATEGIC WAR PLANNING SYSTEM (SWPS)	A		\$11,09	16	\$12,879		\$5,650			
5. B-2 SUPPORT	+		\${5,225	5}	\${6,043}		\${8,327}			
A. ENGINEERING DATA SYSTEMS (EDS)	Α		\$81	2	\$1,471		\$4,398			
B. WEAPON SYSTEM SUPPORT CENTER (WSSC)	A		\$4,41	3	\$4,572		\$3,929			
Totals:			\$20,61	4	\$20,669		\$21,066			
Remarks:										
P	<b>P-1 ITEM</b> I 37	NO		PAGE NO:				Page 1 o	of 1	

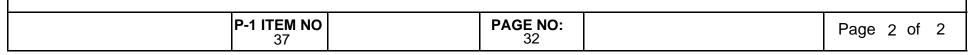
BUDGET PROCUREMENT	HISTOR		IING (EXHIBIT P- 54	A)		DATE: JU	DATE: JUNE 2001					
APPROP CODE/BA: OPAF/ELECTRONICS & TELI	ECOMMUI		N EQUIPMENT	P-1 NOMENCLATURE: STRATEGIC COMMAND AND CONTROL								
ITEM / FISCAL YEAR	QTY.	UNIT COST	LOCATION OF PCO	CONTRACT METHOD & TYPE	CONTRACTOR AND LOCATION	AWD. DATE	DATE FIRST DEL.	SPECS AVAIL NOW	DATE REV. AVAIL			
1. NUCLEAR PLANNING AND EXECUTION SYSTEM (NPES)												
FY00 (1)			USSTRATCOM	C/FP	MULTIPLE (2)	NOV 99	JAN 00					
FY01 (1)			USSTRATCOM	C/FP	MULTIPLE (2)	NOV 00	JAN 01					
FY02 (1)			USSTRATCOM	C/FP	MULTIPLE (2)	NOV 01	JAN 02	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					
FY02 (1)			AFMC/ESC	OPT/CPAF	JAYCOR, ALBUQUERQUE, NM	(3) OCT 01	JAN 02	Y				
3. C2 MODERNIZATION												
FY02 (1)			USSTRATCOM	C/FP	MULTIPLE (2)	JAN 02	FEB 02	Y				
4. STRATEGIC WAR PLANNING SYSTEM (SWPS)												
FY00 (1)			USSTRATCOM	C/FP	MULTIPLE (2)	JAN 00	FEB 00					
FY01 (1)			USSTRATCOM	C/FP	MULTIPLE (2)	JAN 01	FEB 01					
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UDGET PROCUREMENT HISTORY PLANNING (EXHIBIT P- 5A)							DATE: JUNE 2001				
APPROP CODE/BA: OPAF/ELECTRONICS & TELEC			N EQUIPMENT		P-1 NOMENCLATURE: STRATEGIC COMMAND AND CONTROL						
ITEM / FISCAL YEAR	QTY.	UNIT COST	LOCATION OF PCO	CONTRACT METHOD & TYPE	CONTRACTOR AND LOCATION	AWD DATI	EIDET		DATE REV. AVAIL		
FY02 (1)			USSTRATCOM	C/FP	MULTIPLE (2)	JAN 0	2 FEB 02	Ν	DEC 01		
5. B-2 SUPPORT											
A. ENGINEERING DATA SYSTEMS (EDS)											
FY00 (1)			AFMC/OC-ALC	C/FP	MULTIPLE (4)	MAR	0 APR 00				
FY01 (1)			AFMC/OC-ALC	C/FP	MULTIPLE (4)	MAR	1 APR 01				
FY02 (1)			AFMC/OC-ALC	C/FP	MULTIPLE (4)	MAR	2 APR 02	Y			
B. WEAPON SYSTEM SUPPORT CENTER (WSSC)											
FY00 (1)			AFMC/OC-ALC	C/FP	MULTIPLE (4)	MAR	0 JUL 00				
FY01 (1)			AFMC/OC-ALC	C/FP	MULTIPLE (4)	JUL 0	I JUL 01				
FY02 (1)			AFMC/OC-ALC	C/FP	MULTIPLE (4)	MAR	2 JUL 02	Y			

(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 JUS	TIFICATION (E		DATE:	JUNE 2001								
APPROP CODE/BA: OPAF/ELECTRONICS & TELECOMMUNICATION EQUIPMENT					P-1 NOMENCLATURE: CHEYENNE MOUNTAIN COMPLEX							
	FY2000	FY2001	FY2002	FY2002 FY2003		FY2005	FY2006	FY2007				
QUANTITY												
COST (in Thousands)	\$10,339	\$597	\$30,642	\$18,062	\$19,001	\$17,956	\$19,688	\$20,145				

#### **Description:**

This program supports acquisition for the Cheyenne Mountain Complex (CMC). The CMC program provides real-time ballistic missile warning, air defense, force management, battle management and command control and communications for the United States Space Command (USSPACECOM) and North American Air Defense (NORAD) missions. The program also provides Air Force Space Command (AFSPC) with funding needed to acquire communications and computer equipment in Defense Message System and Base Network Control Center; USSPACECOM Mobile Consolidated Command Center and the Cheyenne Mountain Training System.

This administration has not addressed FY 2003-2007 requirements. All FY 2003-2007 budget estimates included in this book are notional only and subject to change.

#### 1. COMMANDER-IN-CHIEF (CINC) MOBILE CONSOLIDATED COMMAND CENTERS (MCCCs):

The CINC MCCC provides contingency reconstitution and continuity of command capabilities to accomplish directed CINC missions in the event primary command and control facilities are incapacitated. FY00-02 funds will upgrade the current messaging capability to keep in pace with the required communication capabilities, replace existing generators with a new power generation structure, upgrade communication systems, and replace mission recovery equipment. These new capabilities will significantly reduce the platform's footprint, enhance operations, and provide a source of an uninterruptable power supply.

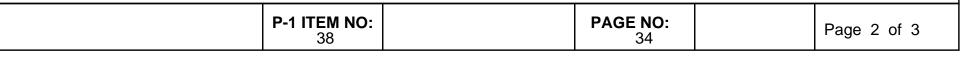
P-1 ITEM NO: 38	PAGE NO: 33	Page 1 of 3
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BUDGET ITEM JUSTIFICATION (EXHIBIT P-40)	<b>DATE:</b> JUNE 2001	
APPROP CODE/BA:	P-1 NOMENCLATURE:	
OPAF/ELECTRONICS & TELECOMMUNICATION EQUIPMENT	CHEYENNE MOUNTAIN COMP	LEX

#### **Description (cont.):**

2. TACTICAL WARNING/ATTACK ASSESSMENT (TW/AA) INTERFACE NETWORK: This program funds Air Force Space Command (AFSPC) support for Integrated Tactical Warning and Attack Assessment (ITW/AA) network communications upgrades at Cheyenne Mountain and sensor sites. FY00-02 funding supports quick turn requirements for servers, routers, hubs, secure voice, and other local area network and wide area network hardware.

3. NORAD CHEYENNE MOUNTAIN COMPLEX-TACTICAL WARNING/ATTACK ASSESSMENT (NCMC-TW/AA) SYSTEMS: Air Force Space Command (AFSPC) approved a new Integrated Master Evolutionary Plan (IMEP) to better manage integrated space command and control (ISC2) hardware and software migration. (a) Integrated Space Command and Control (ISC2) Migration: This project delivers ISC2 hardware and associated software to Cheyenne Mountain operating locations, to include remote interfacing sites essential for support to USSPACECOM and NORAD missions as exercised from the Cheyenne Mountain Operations Center (CMOC). ISC2 Migration includes installation and check out actions for ISC2 components and interfaces within the CMOC, at sensor sites, at forward user sites, and at other command center locations. FY02 funds will procure an application/database server that will be the foundation of the ISC2 Target System enterprise server infrastructure at Cheyenne Mountain, and will initially support a robust air mission capability with approximately 20 Air Mission Evolution (AME) workstations. FY02 funds also will procure client workstations as well as a communications processing system that will process and forward messages from sensor sites. (b) Integrated Test, Training, and Exercise Facility: This project provides for the planning, delivery, installation, and support of commercial off-the-shelf (COTS) hardware and associated software which, together with developed and/or integrated software, will provide AFSPC the capability to conduct system integration and testing as well as operator training and exercises. FY02 funds will procure application/data base servers to support AME integration and testing as well as the migration of additional mission areas to the enterprise infrastructure. FY02 funds will also procure Communications Processing System equipment, to include servers, client workstations, installations and upgrades. (c) Missile Analysis and Reporting System (MARS): FY02 funds will procure this project, which will consist of a single system that provides both strategic and theater warning capabilities to all levels of command. The MARS project will deliver enhanced missile warning functionality by providing multi-source data fusion and correlation, improved situational awareness, and more timely and accurate assessments. This integrated approach to achieving a single integrated missile warning capability will



<b>BUDGET ITEM JUSTIFICATION (EXHIBIT P-40)</b>	DATE: JUNE 2001			
APPROP CODE/BA:	P-1 NOMENCLATURE:			
OPAF/ELECTRONICS & TELECOMMUNICATION EQUIPMENT	CHEYENNE MOUNTAIN COMP	LEX		

#### **Description (cont.):**

extend from sensor to decision-maker, and will result in great efficiencies in assessments during normal operations. MARS will insure accuracy of predicted launch and impact points by fusing infra red spatial observation with radar observations. This fused data will eliminate repetitive or redundant track reports and event messages, and will be distributed to the users faster than is currently accomplished today. The MARS will provide a platform to further integrate Space Based Infrared Sensor, Nuclear Missile Defense and other sensors. It also will replace the current Integrated TW/AA Missile Warning System that is past its planned life cycle.

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BUDGET ITEM JUSTIFICATION F	FOR AGGI	REGA	TED ITEMS (EX	HIBIT P- 40A	.)			DATE: J	JNE 2001		
APPROP CODE/BA: OPAF/ELECTRONICS & TELECOM	MUNICATIO	DN EQL	JIPMENT	P-1 NOMENCLATURE: CHEYENNE MOUNTAIN COMPLEX							
PROCUREMENT ITEMS	ID		FY2000		FY2001		FY2002			FY2003	
	CODE	QTY	r. Cost		CO	ST	QTY.	COST	QTY.	COST	
1. CINC MOBILE CONSOLIDATED COMMAND CENTER (MCCC)	A		\$9,8	350				\$2,982			
2. TW/AA INTERFACE NETWORK	A		\$4	489		\$597		\$605			
3. NORAD CHEYENNE MOUNTAIN COMPLEX -TACTICAL WARNING/ATTACK ASSESSMENT SYSTEMS	A							\$27,055			
Totals:			\$10,3	339		\$597		\$30,642			
	<b>P-1 ITEM</b> 38	NO		PAG	<b>E NO:</b> 36				Page 1	of 1	

BUDGET PROCUREMENT H	ISTOR	Y PLANN	ING (EXHIBIT P- 5A	N)		DATE: JUNE 2001					
APPROP CODE/BA: OPAF/ELECTRONICS & TELEC	OMMU	NICATION	EQUIPMENT	P-1 NOMENCLATURE: CHEYENNE MOUNTAIN COMPLEX							
ITEM / FISCAL YEAR	QTY.	UNIT COST	LOCATION OF PCO	CONTRACT METHOD & TYPE	CONTRACTOR AND LOCATION	AWD DATE		SPECS AVAIL NOW	DATE REV. AVAIL		
1. CINC MOBILE CONSOLIDATED COMMAND CENTERS (MCCC)											
FY 00 (1)			AFMC/ESC	SS/FFP	JAYCOR, ALBUQUERQUE NM	JUN 0	NOV 01				
FY 02 (1)			AFMC/ESC	OPT(2)/CPAF	LOCKHEED MARTIN, COLORAD SPRINGS CO	ОО ОСТ 0	1 FEB 02	Y			
2. TW/AA INTERFACE NETWORK											
FY 00 (1)			HQ AFSPC	ОТН (3)/ОТН	MULTIPLE	AUG 0	о ост оо				
FY 01 (1)			HQ AFSPC	OTH (4)/OTH	MULTIPLE	FEB 0	JUL 01				
FY 02 (1)			HQ AFSPC	C/FP	UNKNOWN	ОСТ 0	1 FEB 02	Y			
3. NCMC-TW/AA SYSTEMS											
FY 02 (1)			AFMC/ESC	OPT(2)/CPAF	LOCKHEED MARTIN, COLORAE SPRINGS CO	ОО ОСТ 0	1 FEB 02	Y			
REMARKS: 1. Various quantities and unit costs due to different site configurations. 2. Option to basic contract awarded Feb 01 to Lockheed Martin, Colorado Springs, CO. 3. Contract method and type consists of a combination of sole source contracts and MIPRs. Representative contractors include: Low Voltage Wiring, Colorado Springs, CO; Zenith Electrical Corp., Glenview, IL; and USAED, Omaha, NE. Award/delivery dates reflect date of first award and delivery. 4. Contract method and type consists of a combination of sole source contracts and MIPRs. Contractors include Compax Federal LLC, Colorado											
	P-1	<b>ITEM N</b> 38	0	PAGE NO			Pag	e 1 of	2		

BUDGET PROCUREMENT H	IISTOR	Y PLANN	NG (EXHIBIT P- 5/	A)		DATE:	JUL	NE 200	)1	
APPROP CODE/BA: OPAF/ELECTRONICS & TELE	COMMU	NICATION	EQUIPMENT	P-1 NOMENCLAT CHEYENNE MOUNT						
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
Springs, CO and SI International	Telecom	munication	ns Corp., Colorado S	prings, CO. Award/deliv	very dates reflect date of fi	rst award	and de	livery.		
	P-1			PAGE NO:				Dec		0
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BUDGET ITEM JUSTIFICATION (EXHIBIT P-40)							JUNE 2001	
APPROP CODE/BA:       P-1 NOMENCLATURE:         OPAF/ELECTRONICS & TELECOMMUNICATION EQUIPMENT       TACTICAL SIGINT SUPPORT								
	FY2000	FY2001	FY2002	FY2003	FY2004	FY2005	FY2006	FY2007
QUANTITY								
COST (in Thousands)	\$1,783	\$1,434	\$976	\$409	\$403	\$404	\$435	\$444

#### **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 FY02 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. This administration has not addressed FY 2003-2007 requirements. All FY 2003-2007 budget estimates included in this book are notional only and subject to change.

1. TACTICAL INFORMATION BROADCAST SERVICE (TIBS) IMPROVEMENTS: No FY02 funding 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 and processing equipment. Without accurate proforma data, situational awareness at all levels of command would degrade to an unacceptable level for security requirements. FY00-02 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

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<b>BUDGET ITEM JUSTIFICATION (EXHIBIT P-40)</b>	DATE: JUNE 2001	
APPROP CODE/BA:	P-1 NOMENCLATURE:	
OPAF/ELECTRONICS & TELECOMMUNICATION EQUIPMENT	TACTICAL SIGINT SUPPORT	

#### **Description (cont.):**

narrate results. Results are reviewed annually by intelligence and operational personnel at nine theater oriented conferences. Conference results affect air crew training, permitting AF forces to emulate adversary tactics at exercises such as Red Flag and Green Flag, and develop and refine counter-tactics. FY01/02 funding will provide technical refreshment and video digitization capability.

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WEAPON SYSTEM COST ANALYSIS (EXHIBIT P- 5)										DATE:	JUNE 2	2001	
APPROP CODE/BA: OPAF/ELECTRONICS & TELECON	MUNICATI	ON EQI	JIPMENT	ļ	<b>P-1 NON</b> FACTICAL	IENCLA	TURE: SUPPORT	Г					
	IDENT		FY2000			FY2001			FY2002	2		FY2003	
WEAPON SYSTEM COST ELEMENTS	CODE	QTY	UNIT COST	TOTAL COST	QTY	UNIT COST	TOTAL COST	QTY	UNIT COST	TOTAL COST	QTY	UNIT COST	TOTAL COST
1. TIBS IMPROVEMENTS				{980	}								
COMPUTER EQUIPMENT	А			59	5								
DOCUMENTATION				16	5								
PROGRAM SUPPORT				220	D								
2. SENSOR ACE IMPROVEMENTS				{803	}		{801}			{485}			
SIGNAL PROCESSORS	А			803	3		801			485			
3. TARP IMPROVEMENTS							{633}			{491}			
VIDEO PROCESSING EQUIPMENT	А						102			168			
COMPUTER EQUIPMENT	А						531			323			
TOTALS:				1,783	3		1,434			976			
<b>REMARKS:</b> Quantity/unit costs vary according to	o the site and	differe	ent types/co	nfiguratio	ns of equi	pment bei	ing procur	ed.					
	<b>P-1 ITEM</b> 39	NO			PAC	<b>GE NO:</b> 41					Pa	ige 1 of 1	

Y2007
\$57,793

#### **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 FY02 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. This administration has not addressed FY 2003-2007 requirements. All FY 2003-2007 budget estimates included in this book are notional only and subject to change.

#### <u>11TH WING (11WG)</u>

1. HEADQUARTERS INFORMATION TECHNOLOGY (IT) INVESTMENT: FY00-02 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. 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

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#### **Description (cont.):**

USAF personnel will also receive centralized 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 FY00-02 funding. Magnetic tape systems will be upgraded to meet increasing data storage requirements and enhance the read/write capability and archival storage capacity. FY00-02 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 to 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): No FY02 funding requested.

4. TRANSPORTATION COORDINATORS-AUTOMATED INFORMATION FOR MOVEMENT SYSTEM II (TC-AIMS II): No FY02 funding requested.

#### AIR COMBAT COMMAND (ACC)

5. BASE OPERATIONS: FY00-02 funds procure 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 non-commercial use training devices.

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BUDGET ITEM JUSTIFICATION (EXHIBIT P-40)	<b>DATE:</b> JUNE 2001		
APPROP CODE/BA:	P-1 NOMENCLATURE:		
OPAF/ELECTRONICS & TELECOMMUNICATION EQUIPMENT	GENERAL INFORMATION TECHNOLOGIES		
Description (cent):			

#### Description (cont.):

#### AIR EDUCATION AND TRAINING COMMAND (AETC)

6. TECHNICAL TRAINING MANAGEMENT SYSTEM (TTMS, formerly ADVANCED TRAINING SYSTEM (ATS)): FY02 funds will provide Automatic Data Processing Equipment modernization systems, to include workstations, servers, software, and secure communications for TTMS between the technical training bases and their respective field training detachments, operating locations, and basic military training organizations. TTMS is a tool for the management of all technical training students and resources, design & development of courses, evaluation of training to include testing and critiques, and management of employee records. This hardware is required to meet advanced technical training requirements for 175,000 trainees per year in 20 different career fields.

#### 7. AIR FORCE INSTITUTE OF TECHNOLOGY (AFIT) EDUCATION AND RESEARCH SYSTEM (EARS): No FY02 funding requested.

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. FY00-02 funds continue procurement of computer training hardware to support technology applications related to distance learning and virtual reality.

9. 333rd TRAINING SQUADRON (TS) TECHNICAL REFRESH/EXPANSION: No FY02 funding requested.

10. GENERAL SKILLS TRAINING (formerly known as Intelligence Training): No FY02 funding requested.

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#### **Description (cont.):**

11. AIR UNIVERSITY (AU): These funds will support efforts to migrate to the Air University (AU) Education Management System (EMS). EMS implements effective and efficient education information management practices at AU. EMS supports federal law, and compliance with Defense Information Infrastructure Common Operating Environment (DIICOE) directives. EMS encompasses the management of an information infrastructure targeting major common business processes (Student Administration-including registrar functions, Curriculum Management and Delivery and Resource Management) employed throughout AU. FY00-02 funds will establish information infrastructure (local networks and associated equipment) to facilitate research, enhance curriculum, conduct modeling and simulation of war games (i.e., Tandem Challenge), and to 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.

12. AIR FORCE RECRUITER INFORMATION SUPPORT SYSTEM (AFRISS): AFRISS is the Air Force's modernization program to replace the legacy system, Procurement Management Information System. FY00-02 funds 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.

#### AIR FORCE COMMUNICATIONS AGENCY (AFCA)

13. KEESLER COMPUTER NETWORK TRAINING: FY00-02 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.

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#### **Description (cont.):**

AIR FORCE MANPOWER & INNOVATION AGENCY (AFMIA) (formerly called the Air Force Center for Quality and Management Innovation (AFCQMI))

14. MANPOWER DATA SYSTEM (MDS): FY01/02 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)

15. COMPREHENSIVE ENGINE TRENDING AND DIAGNOSTICS SYSTEM (CETADS) (formerly COMPREHENSIVE ENGINE MANAGEMENT SYSTEM (CEMS)): CETADS, USAF's Jet Engine Trending and Diagnostics System, supports the engine test software for the Air Forces' On-Condition Maintenance (OCM) Program. CETADS has been designated a mission-critical computer resource. CETADS is a stand-alone computer system, deployed at over 110 bases worldwide (Air Combat Command (ACC), Air Mobility Command (AMC), Air National Guard (ANG), Air Force Reserve Command (AFRC), Pacific Air Forces (PACAF), United States Air Forces in Europe (USAFE), Air Force Materiel Command (AFMC) and AETC) and currently supports 13 different types of jet engines. CETADS information storage and retrieval system manages over 400,000 critical parts in the Air Force's large fleet of 22,000 active turbine engines. CETADS provides an invaluable tool at base level to discover, diagnose, and prevent engine problems. FY00-02 funds provide for continued CETADS upgrades, replacing outdated computers in the field with modern systems appropriate to manage engine analysis.

16. COMPUTER RESOURCES SUPPORT IMPROVEMENT PROGRAM (CRSIP) (formerly EMBEDDED (COMPUTER RESOURCES) SUPPORT IMPROVEMENT PROGRAM (ESIP)): CRSIP 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. CRSIP consists of

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#### **Description (cont.):**

three primary domains or tasks: Applied 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 CRSIP program office at Hill AFB, UT. Standard configuration off-the-shelf hardware does not fulfill the requirements inherent in these functions. FY00-02 funds continues procurement of a wide range of special configurations of mini/macro computers and commercial/peculiar hardware devices essential for weapon system support.

17. F-117A TACTICAL DATA PROCESSOR SUITE (TDPS): No FY02 funding requested.

18. NETWORK SERVICES (Formerly ENTERPRISE DATA INTEGRATION SYSTEM (EDIS)): Network Services expands EDIS' focus to include network infrastructure requirements through standardization, centralization/consolidation, proactive network management and defense in depth. FY00-02 funding provides information assurance software and Consolidated Network Control Center (CNCC) server hardware upgrades at highest priority bases.

19. 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. FY00-02 funds procure computer hardware and associated peripheral equipment for the transition to WSMIS web-enabled capability Readiness Spares Packages (RSP), Computation and Assessment System (RCAS), and the Supportability Analysis Visibility (SAV) while also supporting legacy systems. Funds will satisfy new WSMIS decision support processes, and ensure these implementations maintain the foundation infrastructure to achieve DIICOE/Global Command and Control System (GCCS) compatibility.

20. RDT&E SUPPORT COMPLEX (RSC)/CENTER FOR RESEARCH SUPPORT (CERES) UPGRADES: FY00-02 funding continues RSC/CERES computer and hardware upgrade efforts to improve the consolidated telemetry, tracking, and commanding (TT&C) facilities at Kirtland AFB, NM and Schriever AFB, CO. Additionally, FY00-02 funding supports upgrades to worldwide deployable ground systems which

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#### **Description (cont.):**

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.

21. 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, 8 October 1999, page 198. Congress also added funds to the SPARES program in the FY01 markup of the FY01 Air Force budget. Reference Appropriation Conference Report, 106-644, 1 June 2000, page 135. No FY02 funding requested.

22. NATIONAL AIR AND SPACE MODEL (NASM): NASM is the USAF Modeling and Simulation (M&S) program to develop the Air Force aerospace portion of the Joint Simulation System (JSIMS), allowing customization by other services for their Service-specific requirements. NASM will ensure the full range of AF aerospace roles and missions are accurately represented in JSIMS, including accurate portrayal of 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. FY00-02 funds provide processors, workstations, local network upgrades, simulation security hardware and test stations required at the Software Support Facility (SSF), Orlando, FL and the Command and Control Technology Interoperability Group (C2TIG), Hurlburt Field, FL. FY02 also funds the Warrior Preparation Center (WPC) in Einsiedlerhof, Germany.

23. 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 AFB, Gunter Annex, AL. FY00-02 funding purchases computer hardware, local area networks and servers, and software licenses in support of testing and fielding of IMDS.

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#### **Description (cont.):**

24. EAGLE VISION: Eagle Vision is a family of systems that provide commercial imagery to operational commanders for mission planning, rehearsal, visualization, and intelligence gathering purposes. Eagle Vision is composed of the Data Acquisition System (DAS) and Data Ingest System (DIS). FY02 funds will support Eagle Vision (DAS and DIS) upgrades. These upgrades will support improved processing capability, additional satellite capabilities and baseline upgrades.

#### AIR FORCE OFFICE OF SPECIAL INVESTIGATIONS (AFOSI)

25. AFOSI COMPUTER NETWORK: The Air Force Office of Special Investigations (AFOSI) Communications and Information Directorate is responsible for centralized management of sensitive-but-classified (SBC), classified (CINet), and SCI computer and information management systems necessary to achieve the command's operational objectives in support of the AF and Office of the Secretary of Defense (OSD). FY02 funding will provide for the replacement of vital computer equipment to include servers and mass storage devices. This will enable AFOSI to stay current in IT technology supporting some 2000 agents world-wide and effectively process, track, and disseminate perishable investigative information to affected AF commanders and national level customers.

26. DEFENSE COMPUTER INVESTIGATION TRAINING PROGRAM WORKSTATION: The mission of the DoD Computer Forensic Laboratory (DCFL) is to maintain a joint DoD capability for counterintelligence, criminal, and fraud computer evidence processing. FY02 funds will procure media analysis workstations, peripherals, and software, all of which are essential tools for conducting computer forensics analysis. If new equipment is not funded, a state-of-the-art laboratory and schoolhouse cannot be maintained.

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Description (cont.):		

#### Description (cont.): AIR FORCE PERSONNEL CENTER (AFPC)

27. PERSONNEL DATA SYSTEM (PDS): PDS encompasses personnel data processing from all current Active, Guard, and Reserve units. FY00-02 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 and upgrading core components of the communications network and replacing current data storage architecture with a centralized, redundant storage system.

28. REGIONALIZATION OF CIVILIAN PERSONNEL SUPPORT: FY00-02 funding continues to support PALACE COMPASS regionalization and modernization of 97 worldwide AF Civilian Personnel Operations (CPOs) and one Regional Service Center (RSC) at Randolph AFB, TX. The hardware associated with PALACE COMPASS implementation and the subsequent technology refresh support a variety of AF network applications such as: Personnel Process Improvements (PPIs), Oracle HR (Modern Defense Civilian Personnel Data System), Personnel Automated Records Information System (PARIS), Civilian Personnel Decision Support System (CPDSS), Employee Benefits and Information System (EBIS), Interactive Voice Response System (IVRS) and RESUMIX.

#### AIR INTELLIGENCE AGENCY

29. TAILORED INTELLIGENCE MATERIALS PRODUCTION PROGRAM: This program procures hardware and software necessary to provide aircrews with worldwide virtual intelligence mission planning capabilities. FY00-02 funds will continue expansion of high speed classified data transfer capability for tailored intelligence production at the 20th Intelligence Squadron, Offutt AFB, NE, and the 27th Intelligence Squadron, Langley AFB, VA.

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<b>OPAF/ELECTRONICS &amp; TELECOMMUNICATION EQUIPMENT</b>	GENERAL INFORMATION TEC	HNOLOGIES	
Description (cont.):         US AIR FORCE ACADEMY (USAFA)         30. AIR FORCE ACADEMY COMPUTER SUPPORT: FY00-02 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.         UNITED STATES AIR FORCES EUROPE (USAFE)         31       INTELL IGENCE AUTOMATIC DATA PROCESSING EQUIPMENT (ADPE): This project provides continued equipment upgrades for			
31. INTELLIGENCE AUTOMATIC DATA PROCESSING EQUIPMENT (ADPE): This project provides continued equipment upgrades for USAFE intelligence ADP systems and communications networks. FY00-02 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.			

32. 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. FY00-02 funds continue procurement of simulation workstations, terminal and peripheral equipment to meet USAFE mission needs.

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APPROP CODE/BA:       P1 NOMENCLATURE:         OPAF/ELECTRONICS & TELECOMMUNICATION EQUIPMENT       GENERAL INFORMATION TECHNOLOGIES         Description (cont.):       US SPACE COMMAND (USSPACECOM)         33. PETERSON AFB COMPUTER SUPPORT: FY00-02 funds will procure computer hardware and associated engineering, integration, and installation support for the new USSPACECOM Headquarters facility at Peterson AFB, CO. FY00-02 funds will also provide network servers, command and control consoles, video teleconferencing capabilities, and general automation needs.         US STRATEGIC COMMAND (USSTRATCOM)         34. 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. FY00-02 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 assciated network peripherals.         AIR FORCE WIDE (MULTIPLE COMMANDS)         35. BATTLELAB COLLABORATIVE NETWORK: No FY02 funding requested.         US TRANSPORTATION COMMAND (USTRANSCOM)         36. SCHEDULE DECISION SUPPORT SYSTEM (SDSS): No FY02 funding requested.         US TRANSPORTATION COMMAND (USTRANSCOM)         36. SCHEDULE DECISION SUPPORT SYSTEM (SDSS): No FY02 funding requested.	BUDGET ITEM JUSTIFICATION (E	EXHIBIT P-40)			DATE: JUNE 2	2001				
Description (cont.):         US SPACE COMMAND (USSPACECOM)         33. PETERSON AFB COMPUTER SUPPORT: FY00-02 funds will procure computer hardware and associated engineering, integration, and installation support for the new USSPACECOM Headquarters facility at Peterson AFB, CO. FY00-02 funds will also provide network servers, command and control consoles, video teleconferencing capabilities, and general automation needs.         US STRATEGIC COMMAND (USSTRATCOM)         34. 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. FY00-02 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)         35. BATTLELAB COLLABORATIVE NETWORK: No FY02 funding requested.         US TRANSPORTATION COMMAND (USTRANSCOM)         36. SCHEDULE DECISION SUPPORT SYSTEM (SDSS): No FY02 funding requested.         P-1 ITEM NO:       PAGE NO:         Page 11 of 11	APPROP CODE/BA:		P-1	1 NOMENCLATURE:						
US SPACE COMMAND (USSPACECOM)         33. PETERSON AFB COMPUTER SUPPORT: FY00-02 funds will procure computer hardware and associated engineering, integration, and installation support for the new USSPACECOM Headquarters facility at Peterson AFB, CO. FY00-02 funds will also provide network servers, command and control consoles, video teleconferencing capabilities, and general automation needs.         US STRATEGIC COMMAND (USSTRATCOM)         34. 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. FY00-02 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)         35. BATTLELAB COLLABORATIVE NETWORK: No FY02 funding requested.         US TRANSPORTATION COMMAND (USTRANSCOM)         36. SCHEDULE DECISION SUPPORT SYSTEM (SDSS): No FY02 funding requested.         P-1 ITEM NO:       PAGE NO:	OPAF/ELECTRONICS & TELECOMMUNI	CATION EQUIPMEN	IT GEI	NERAL INFORMATION T	ECHNOLOGIES					
<ul> <li>33. PETERSON AFB COMPUTER SUPPORT: FY00-02 funds will procure computer hardware and associated engineering, integration, and installation support for the new USSPACECOM Headquarters facility at Peterson AFB, CO. FY00-02 funds will also provide network servers, command and control consoles, video teleconferencing capabilities, and general automation needs.</li> <li>US STRATEGIC COMMAND (USSTRATCOM)</li> <li>34. 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. FY00-02 funding continues infrastructure and component upgrades for network file servers, and printer servers; stratus servers and Standard Query Language (SQL) servers; and gateways, hubs, routers and other associated network peripherals.</li> <li>AIR FORCE WIDE (MULTIPLE COMMANDS)</li> <li>35. BATTLELAB COLLABORATIVE NETWORK: No FY02 funding requested.</li> <li>US TRANSPORTATION COMMAND (USTRANSCOM)</li> <li>36. SCHEDULE DECISION SUPPORT SYSTEM (SDSS): No FY02 funding requested.</li> </ul>	Description (cont.):		I							
installation support for the new USSPACECOM Headquarters facility at Peterson AFB, CO. FY00-02 funds will also provide network servers, command and control consoles, video teleconferencing capabilities, and general automation needs. US STRATEGIC COMMAND (USSTRATCOM) 34. 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. FY00-02 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) 35. BATTLELAB COLLABORATIVE NETWORK: No FY02 funding requested. US TRANSPORTATION COMMAND (USTRANSCOM) 36. SCHEDULE DECISION SUPPORT SYSTEM (SDSS): No FY02 funding requested. P-1 ITEM NO: PAGE NO: Page 11 of 11	US SPACE COMMAND (USSPACE)	<u>COM)</u>								
34. 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. FY00-02 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)       35. BATTLELAB COLLABORATIVE NETWORK: No FY02 funding requested.         US TRANSPORTATION COMMAND (USTRANSCOM)       36. SCHEDULE DECISION SUPPORT SYSTEM (SDSS): No FY02 funding requested.         P-1 ITEM NO:       PAGE NO:	installation support for the new USSPA	ACECOM Headqua	rters facility at Peters	son AFB, CO. FY00-02						
Management Local Area Network (CM LAN) provides all HQ USSTRATCOM users a standard suite of software applications. FY00-02         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)         35. BATTLELAB COLLABORATIVE NETWORK: No FY02 funding requested.         US TRANSPORTATION COMMAND (USTRANSCOM)         36. SCHEDULE DECISION SUPPORT SYSTEM (SDSS): No FY02 funding requested.         P-1 ITEM NO:       PAGE NO:         Page 11 of 11	US STRATEGIC COMMAND (USST	<u>'RATCOM)</u>								
35. BATTLELAB COLLABORATIVE NETWORK: No FY02 funding requested. US TRANSPORTATION COMMAND (USTRANSCOM) 36. SCHEDULE DECISION SUPPORT SYSTEM (SDSS): No FY02 funding requested. P-1 ITEM NO: PAGE NO: Page 11 of 11	Management Local Area Network (CM funding continues infrastructure and co	I LAN) provides all omponent upgrades	HQ USSTRATCOM	A users a standard suite ers, mail servers, and pr	of software application	ns. FY00-02				
US TRANSPORTATION COMMAND (USTRANSCOM) 36. SCHEDULE DECISION SUPPORT SYSTEM (SDSS): No FY02 funding requested.  P-1 ITEM NO: PAGE NO: Page 11 of 11	AIR FORCE WIDE (MULTIPLE COM	<u>MMANDS)</u>								
36. SCHEDULE DECISION SUPPORT SYSTEM (SDSS): No FY02 funding requested.           P-1 ITEM NO:         PAGE NO:         Page 11 of 11	35. BATTLELAB COLLABORATIV	E NETWORK: No	FY02 funding reque	ested.						
P-1 ITEM NO: PAGE NO: Page 11 of 11	US TRANSPORTATION COMMAN	D (USTRANSCOM	D							
	36. SCHEDULE DECISION SUPPOR	RT SYSTEM (SDS	S): No FY02 funding	g requested.						
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BUDGET ITEM JUSTIFICATION FO	OR AGGE	REGATE	ED ITEMS (EXH	IIBIT P- 4	0A)			DATE: JU	JNE 2001		
APPROP CODE/BA: OPAF/ELECTRONICS & TELECOMM	UNICATIC	N EQUI	PMENT	P-1 NOMENCLATURE: GENERAL INFORMATION TECHNOLOGIES							
PROCUREMENT ITEMS	ID	FY2000		FY2001		FY2002		FY2003			
	CODE	QTY.	COST		CC	OST	QTY.	COST	QTY.	COST	
11 WG			\${17,535	5}	9	\${23,782}		\${8,447}			
1. HQS IT INVESTMENT	A		\$7,77	5		\$15,003		\$7,419			
2. HQS MAINFRAME SYS SPT	А		\$5,28	2		\$4,497		\$1,028			
3. NMCC	А		\$37	8		\$484					
4. TC-AIMS II	A		\$4,10	0		\$3,798					
ACC			\${512	2}		\${250}		\${261}			
5. BASE OPERATIONS	A		\$51	2		\$250		\$261			
AETC			\${8,292	2}		\${16,549}		\${10,252}			
6. TECHNICAL TRAINING MANAGEMENT SYSTEM (TTMS)	A							\$2,981			
7. AFIT EARS	А		\$60	1		\$608					
8. EDUCATION AND TRAINING TECH APPLICATIONS PRGM	A		\$1,89	1		\$1,878		\$1,876			
9. 333RD TS TECH REFRESH/EXPANSION	А		\$57	3		\$409					
10. GENERAL SKILL TRAINING	А					\$8,817					
11. AU	А		\$1,13	3		\$1,031		\$1,761			
12. AFRISS	A		\$4,09	4		\$3,806		\$3,634			
P	<b>-1 ITEM</b> 41	NO		PA	<b>GE NO:</b> 53				Page 1	of 4	

BUDGET ITEM JUSTIFICATION	FOR AGGI	REGATE	D ITEMS (EXH	IBIT P- 40A)			DATE: JU	JNE 2001	
APPROP CODE/BA: OPAF/ELECTRONICS & TELECOM	MUNICATIO	DN EQUIF	PMENT	P-1 NOME	NCLATURE CORMATION TE	CHNOLOGI	ES		
PROCUREMENT ITEMS	ID	FY2000		FY2001		FY	2002	FY2003	
	CODE	QTY.	COST		COST	QTY.	COST	QTY.	COST
AFCA			\${1,126		\${2,947}		\${1,665}		
13. KEESLER COMPUTER NETWORK TRAINING	A		\$1,12		\$2,947		\$1,665		
AF MANPOWER & INNOVATION AGENCY (AFMIA)					\${717}		\${745}		
14. MDS	А				\$717		\$745		
AFMC			\${22,518	}	\${17,918}		\${12,238}		
15. CETADS	А		\$20	3	\$208		\$169		
16. CRSIP	А		\$2,65	)	\$2,138		\$2,328		
17. F-117A TDPS	А				\$2,242				
18. NETWORK SERVICES (EDIS)	А		\$55	1	\$560		\$310		
19. WSMIS	А		\$62	)	\$557		\$400		
20. RSC/CERES UPGRADES	А		\$19	)	\$200		\$234		
21. SPARES	А		\$6,00	)	\$7,000				
22. NATIONAL AIR AND SPACE MODEL (NASM)	А		\$65	5	\$2,541		\$2,747		
23. INTEGRATED MAINTENCE DATA SYSTEM (IMDS)	А		\$11,63	5	\$2,472		\$2,630		
24. EAGLE VISION	A						\$3,420		
	<b>P-1 ITEM</b> 41	NO		PAGE N	NO:			Page 2	of 4

BUDGET ITEM JUSTIFICATION FO	OR AGGF	REGAT	ED ITEMS (EX	ΗΒΙΊ	P- 40A)			DATE: JU	JNE 2001	
APPROP CODE/BA: OPAF/ELECTRONICS & TELECOMMU	JIPMENT	P-1 NOMENCLATURE: GENERAL INFORMATION TECHNOLOGIES								
PROCUREMENT ITEMS	ID FY2000				FY2001		FY2		FY2003	
AFOSI	CODE	QTY	COST	ST	CC	OST	QTY.	<b>COST</b> \${1,996}	QTY.	COST
25. AFOSI COMPUTER NETWORK	А							\$1,498		
26. DEF COMPUTER INVESTIGATION TRNG PRGM WORKSTATION	A							\$498		
AFPC			\${23,80	0}		\${26,848}		\${21,213}		
27. PDS	А		\$9	79		\$991		\$1,498		
28. REGIONALIZATION OF CIVILIAN PERSONNEL SPT	A		\$7,5	77		\$7,956		\$7,933		
AIR INTELLIGENCE AGENCY			\${59	6}		\${584}		\${629}		
29. TAILORED INTELLIGENCE MATERIALS PRODUCTION PRGM	A		\$5	96		\$584		\$629		
USAFA			\${3,19	9}		\${2,493}		\${2,880}		
30. USAFA COMPUTER SPT	A		\$3,1	99		\$2,493		\$2,880		
USAFE			\${77	6}		\${857}		\${1,101}		
31. INTELLIGENCE ADPE	А		\$2	60		\$318		\$556		
32. WPC	А		\$5	16		\$539		\$545		
USSPACECOM			\${7,34	6}		\${12,512}		\${6,461}		
33. PETERSON AFB COMPUTER SUPPORT	А		\$7,3	46		\$12,512		\$6,461		
P	<b>-1 ITEM</b> 41	NO		1	<b>PAGE NO:</b> 55				Page 3	of 4

BUDGET ITEM JUSTIFICATION	I FOR AGGI	REGATEI	D ITEMS (EXHIE	BIT P- 40A)			DATE: JU	JNE 2001	
APPROP CODE/BA: OPAF/ELECTRONICS & TELECOM	MMUNICATIO	ON EQUIP	MENT G	P-1 NOMENO ENERAL INFO	CLATURE: RMATION TE	CHNOLOGIE	ES		
PROCUREMENT ITEMS	ID		Y2000	FY20	01	FY	2002	FY	2003
	CODE	QTY.	COST		COST	QTY.	COST	QTY.	COST
USSTRATCOM			\${641}		\${551}		\${711}		
34. COMMAND MANAGEMENT LAN NETWORK INFRASTRUCTURE	A		\$641		\$551		\$711		
AF-WIDE (MULTIPLE COMMANDS)			\${2,686}						
35. BATTLELAB COLLABORATIVE NETWORK	A		\$2,686						
USTRANSCOM					\${904}				
36. SCHEDULE DECISION SUPPORT SYSTEM (SDSS)	А				\$904				
Totals:			\$73,783		\$89,011		\$56,817		
Remarks:									
	<b>P-1 ITEM</b> 41	NO		<b>PAGE NC</b> 56	):			Page 4	of 4

BUDGET PROCUREMENT	UDGET PROCUREMENT HISTORY PLANNING (EXHIBIT P- 5A)							)1	
APPROP CODE/BA: OPAF/ELECTRONICS & TELE	ECOMMU	NICATION	I EQUIPMENT	P-1 NOMENCL	ATURE: MATION TECHNOLOGIES				
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
11 WG (1)									
1. HQS IT INVESTMENT									
FY00			11WING	C/FP	MULTIPLE (2)	MAR 00	JUN 00		
FY01			11WING	C/FP	MULTIPLE (2)	MAR 01	JUN 01		
FY02			11WING	C/FP	MULTIPLE (2)	MAR 02	JUN 02	Y	 
2. HQS MAINFRAME SYS SPT	_								
FY00			11WING	C/FP	MULTIPLE (2)	MAR 00	JUL 00		
FY01			11WING	C/FP	MULTIPLE (2)	MAR 01	JUL 01		
FY02			11WING	C/FP	MULTIPLE (2)	MAR 02	JUL 02	Y	 
3. NMCC									
FY00			11WING	C/FP	MULTIPLE (2)	JAN 00	MAY 00		
FY01			11WING	C/FP	MULTIPLE (2)	JAN 01	MAY 01		
4. TC-AIMS II									
FY00			11WING	C/FP	MULTIPLE (2)	JUN 00	AUG 00		
	P-1	<b>ITEM N</b> 41	0	<b>PAGE NO</b> 57		1	Pag	e 1 of	<sup>:</sup> 12

BUDGET PROCUREMENT	DGET PROCUREMENT HISTORY PLANNING (EXHIBIT P- 5A)							DATE: JUNE 2001				
APPROP CODE/BA: OPAF/ELECTRONICS & TELE	ECOMMUI		I EQUIPMENT	P-1 NOMENCL	ATURE: MATION TECHNOLOGIES							
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			
ACC (1)												
5. BASE OPERATIONS												
FY00			HQ ACC	C/FP	MULTIPLE (2)	MAY 00	AUG 00					
FY01			HQ ACC	C/FP	MULTIPLE (2)	MAY 01	AUG 01					
FY02			HQ ACC	C/FP	MULTIPLE (2)	MAY 02	AUG 02	Y				
AETC (1)												
6. TECHNICAL TRAINING MANAGEMENT SYSTEM (TTMS)												
FY02			HQ AETC	C/FP	MULTIPLE (2)	MAR 02	MAY 02	Y				
7. AFIT EARS												
FY00			AFMC/ASC	C/FP	MULTIPLE (2)	FEB 00	APR 00					
FY01			AFMC/ASC	C/FP	MULTIPLE (2)	FEB 01	APR 01					
	P-1	<b>ITEM N</b> 41	0	PAGE NO	:	1	Page	e 2 of	f 12			

BUDGET PROCUREMENT	JDGET PROCUREMENT HISTORY PLANNING (EXHIBIT P- 5A)							)1	
APPROP CODE/BA: OPAF/ELECTRONICS & TELE	ECOMMU		N EQUIPMENT	P-1 NOMENCLA GENERAL INFORM	ATURE: MATION TECHNOLOGIES				
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									
FY00			HQ AETC	C/FP	MULTIPLE (2)	JAN 00	MAR 00		
FY01			HQ AETC	C/FP	MULTIPLE (2)	JAN 01	MAR 01		
FY02			HQ AETC	C/FP	MULTIPLE (2)	JAN 02	MAR 02	Y	
9. 333RD TS TECH REFRESH/EXPANSION									
FY00			HQ AETC	C/FP	MULTIPLE (2)	FEB 00	MAY 00		
FY01			HQ AETC	C/FP	MULTIPLE (2)	FEB 01	MAY 01		
10. GENERAL SKILL TRAINING									
FY01			HQ AETC	C/FP	MULTIPLE (2)	JAN 01	MAR 01		
11. AU									
FY00			HQ AETC	C/FP	MULTIPLE (2)	DEC 99	FEB 00		
FY01			HQ AETC	C/FP	MULTIPLE (2)	NOV 00	JAN 01		
FY02			HQ AETC	C/FP	MULTIPLE (2)	NOV 01	JAN 02	Y	
	P-1	<b>ITEM N</b> 41		PAGE NO 59			Page	e 3 of	<sup>:</sup> 12

BUDGET PROCUREMEN	DGET PROCUREMENT HISTORY PLANNING (EXHIBIT P- 5A)								DATE: JUNE 2001				
APPROP CODE/BA: OPAF/ELECTRONICS & TE	ELECOMMUI		N EQUIPMENT	P-1 NOMENCL	ATURE: MATION TECHNOLOGIES								
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. AFRISS													
FY00			HQ AETC	C/FP	MULTIPLE (2)	JAN 00	MAR 00						
FY01			HQ AETC	C/FP	MULTIPLE (2)	JAN 01	MAR 01						
FY02			HQ AETC	C/FP	MULTIPLE (2)	JAN 02	MAR 02	Y					
AFCA (1)													
13. 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						
FY02			HQ AFCA	C/FP	MULTIPLE (2)	JAN 02	MAR 02	Y					
AFMIA (1)													
14. MDS													
FY01			11WING	C/FP	MULTIPLE (2)	JAN 01	MAR 01						
FY02			11WING	C/FP	MULTIPLE (2)	JAN 02	MAR 02	Y					
	  P-1	   <b>ITEM N</b>   41	  0	PAGE NO 60	:		Page	e 4 of	· 12				

BUDGET PROCUREN	MENT HISTOR		IING (EXHIBIT P- 54	A)		DATE: JU	NE 200	)1	
APPROP CODE/BA OPAF/ELECTRONICS &			N EQUIPMENT	P-1 NOMENCLA GENERAL INFORM	ATURE: MATION TECHNOLOGIES				
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 (1)									
15. CETADS									
FY00			AFMC/SA-ALC	DO/FFP	DELL COMPUTERS, AUSTIN, T>	MAR 00	MAY 00		
FY01			AFMC/OC-ALC	DO/FFP	GSA, SAN ANTONIO, TX	JUN 01	OCT 01		
FY02			AFMC/OC-ALC	DO/FFP	GSA, SAN ANTONIO, TX	DEC 01	MAR 02	Y	
16. CRSIP									
FY00			AFMC/ASC	DO/CPFF	MULTIPLE (3)	MAR 00	AUG 00		
FY01			AFMC/ASC	DO/CPFF	MULTIPLE (3)	MAR 01	AUG 01		
FY02			AFMC/ASC	DO/CPFF	MULTIPLE (3)	MAR 02	AUG 02	Y	
17. F-117A TDPS									
FY01			AFMC/ASC	MIPR/CPFF	ARMY, FT BELVOIR, VA (14)	AUG 01	APR 02	Y	
	P-1	<b>ITEM N</b> 41		<b>PAGE NO</b> 61	:		Page	e 5 of	12

BUDGET PROCUREMENT	HISTOR	Y PLANN	IING (EXHIBIT P- 54	A)		DATE: JU	NE 200	)1	
APPROP CODE/BA: OPAF/ELECTRONICS & TELE		NICATION	I EQUIPMENT	P-1 NOMENCLA GENERAL INFORM	ATURE: MATION TECHNOLOGIES				
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
18. NETWORK SERVICES (EDIS)									
FY00			AFMC/ASC	MIPR/OTH	GSA, DIGITAL CONSULTING SERVICES, NEWBURY PARK, C		NOV 01		
FY01			AFMC/AAC	MIPR/FFP	GSA, DIGITAL CONSULTING SERVICES, NEWBURY PARK, C	JAN 01	FEB 01		
FY02			AFMC/ASC	MIPR/FFP	GSA, DIGITAL CONSULTING SERVICES, NEWBURY PARK, C	JAN 02	FEB 02	Y	
19. WSMIS									
FY00			AFMC/ASC	MIPR/FFP	DECC-D, DAYTON, WPAFB, OH	(4) FEB 00	JUN 00		
FY01			AFMC/ASC	MIPR/FFP	DECC-D, DAYTON, WPAFB, OH	(4) JAN 01	APR 01		
FY02			AFMC/ASC	MIPR/FFP	DECC-D, DAYTON, WPAFB, OH	(4) FEB 02	APR 02	Y	
20. RSC/CERES UPGRADES									
FY00			AFMC/SMC	OPT/CPAF	LMMS, ALBUQUERQUE, NM (5)	OCT 00	OCT 00		
FY01			AFMC/SMC	C/CPFF	LMMS, ALBUQUERQUE, NM	APR 01	APR 01		
FY02			AFMC/SMC	OPT/CPFF	LMMS, ALBUQUERQUE, NM (15	) OCT 01	OCT 01	Y	
		ITEM N	0	PAGE NO	·				
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BUDGET PROCUREMENT	HISTORY	Y PLANN	ING (EXHIBIT P- 54	A)		DATE: JU	NE 200	)1	
APPROP CODE/BA: OPAF/ELECTRONICS & TELE	ECOMMUI	NICATION	I EQUIPMENT	P-1 NOMENCLA GENERAL INFORM	ATURE: MATION TECHNOLOGIES				
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
21. SPARES									
FY00			AFMC/OO-ALC	MIPR/OTH (6)	GSA, ES3, SOLANA BEACH, CA	FEB 01	MAR 01		
FY01			AFMC/OO-ALC	MIPR/OTH (6)	GSA, ES3, SOLANA BEACH, CA	FEB 01	MAR 01		
FY02			AFMC/OO-ALC	MIPR/OTH (6)	GSA, ROCKY MOUNTAIN REGIO	DN FEB 02	MAR 02	Y	
22. NATIONAL AIR AND SPACE MODEL (NASM)									
FY00			AFMC/ESC	OPT/CPFF	RAYTHEON, MARLBOROUGH, M	MA (7) NOV 99	APR 00		
FY01			AFMC/ESC	OPT/CPFF	RAYTHEON, MARLBOROUGH, M	MA (7) OCT 00	DEC 00		
FY02			AFMC/ESC	OPT/CPFF	RAYTHEON, MARLBOROUGH, N	/IA (7) JAN 02	MAR 02	Y	
23. INTEGRATED MAINTENCE DATA SYSTEM (IMDS)									
FY00			AFMC/SSG	OPT/FP	MULTIPLE (2)	NOV 99	APR 00		
FY01			AFMC/SSG	OPT/FP	MULTIPLE (2)	FEB 01	APR 01		
FY02			AFMC/SSG	OPT/FP	MULTIPLE (2)	JAN 02	MAR 02	Y	
	P-1	<b>ITEM N</b> 41	0	PAGE NO	:	ł	Page	e 7 of	12

BUDGET PROCUREMENT	JDGET PROCUREMENT HISTORY PLANNING (EXHIBIT P- 5A)								
APPROP CODE/BA: OPAF/ELECTRONICS & TELE	COMMUI		N EQUIPMENT	P-1 NOMENCLA GENERAL INFORM	ATURE: MATION TECHNOLOGIES				
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
24. EAGLE VISION									
FY02			AFMC/ESC	MIPR/FFP	MULTIPLE(8)	JUL 02	AUG 03	Y	
AFOSI (1)									
25. AFOSI COMPUTER NETWORK									
FY02			11WING	OPT (9)/FP	FEDSIM, ALEXANDRIA, VA	JAN 02	MAY 02	Y	
26. DEF COMPUTER INVESTIGATION TRNG PRGM WORKSTATION									
FY02			11WING	OPT (9)/FP	FEDSIM, ALEXANDRIA, VA	NOV 02	JAN 03	Y	
AFPC (1)									
27. PDS									
FY00			HQ AFPC	OPT/FP	MULTIPLE (10)	NOV 99	APR 00		
FY01			HQ AFPC	OPT/FP	MULTIPLE (10)	NOV 00	APR 01		
FY02			HQ AFPC	OPT/FP	MULTIPLE (10)	NOV 01	APR 02	Y	
	P-1	ITEM N 41	0	PAGE NO	:		Page	e 8 of	<sup>:</sup> 12

BUDGET PROCUREMENT H	DGET PROCUREMENT HISTORY PLANNING (EXHIBIT P- 5A)								DATE: JUNE 2001				
APPROP CODE/BA: OPAF/ELECTRONICS & TELEC	COMMUI	NICATION	I EQUIPMENT	P-1 NOMENCLA GENERAL INFORM	ATURE: MATION TECHNOLOGIES								
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				
28. REGIONALIZATION OF CIVILIAN PERSONNEL SPT													
FY00			HQ AFPC	OPT/FP	MULTIPLE (10)	NOV 99	JAN 00						
FY01			HQ AFPC	OPT/FP	MULTIPLE (10)	NOV 00	JAN 01						
FY02			HQ AFPC	OPT/FP	MULTIPLE (10)	NOV 01	JAN 02	Y					
AIA (1)													
29. TAILORED INTELLIGENCE MATERIALS PRODUCTION PRGM													
FY00			HQ ACC	C/FP	MULTIPLE (11)	MAR 00	APR 00						
FY01			HQ ACC	C/FP	MULTIPLE (11)	JAN 01	MAR 01						
FY02			HQ ACC	C/FP	UNKNOWN	FEB 02	FEB 02	Y					
USAFA (1)													
30. USAFA COMPUTER SPT													
FY00			HQ USAFA	C/FP	MULTIPLE (2)	FEB 00	APR 00						
FY01			HQ USAFA	C/FP	MULTIPLE (2)	FEB 01	APR 01						
FY02			HQ USAFA	C/FP	MULTIPLE (2)	FEB 02	APR 02	Y					
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BUDGET PROCUREMENT	HISTOR	Y PLANN	NING (EXHIBIT P- 54	A)		DATE: JU	NE 200	01	
APPROP CODE/BA: OPAF/ELECTRONICS & TELE	COMMUI	NICATION	N EQUIPMENT	P-1 NOMENCL	ATURE: MATION TECHNOLOGIES				
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)									
31. INTELLIGENCE ADPE									
FY00			HQ USAFE	C/FP	MULTIPLE (2)	FEB 00	MAY 00		
FY01			HQ USAFE	C/FP	MULTIPLE (2)	FEB 01	MAY 01		
FY02			HQ USAFE	C/FP	MULTIPLE (2)	FEB 02	MAY 02	Y	
32. WPC									
FY00			HQ USAFE	OPT/FP	GTE, WARNER-ROBINS AFB, G	A (12) FEB 00	MAY 00		
FY01			HQ USAFE	OPT/FP	GTE, WARNER-ROBINS AFB, G	A (12) FEB 01	MAY 01		
FY02			HQ USAFE	OPT/FP	GTE, WARNER-ROBINS AFB, G	A (12) FEB 02	MAY 02	Y	
USSPACECOM (1)									
33. 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		
FY02			HQ AFSPC	C/FP	MULTIPLE (2)	JAN 02	MAR 02	Y	
	P-1	I ITEM N 41	0	PAGE NO 66	:		Pag	e 10 of	f 12

BUDGET PROCUREMENT H	IISTOR	Y PLANN	ING (EXHIBIT P- 54	A)		DATE: JU	NE 200	)1	
APPROP CODE/BA: OPAF/ELECTRONICS & TELEC	COMMU	NICATION	I EQUIPMENT	P-1 NOMENCL	ATURE: MATION TECHNOLOGIES				
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)									
34. COMMAND MANAGEMENT LAN NETWORK INFRASTRUCTURE									
FY00			USSTRATCOM	C/FP	MULTIPLE (2)	FEB 00	MAR 00		
FY01			USSTRATCOM	C/FP	MULTIPLE (2)	FEB 01	MAR 01		
FY02			USSTRATCOM	C/FP	MULTIPLE (2)	FEB 02	MAR 02	Y	
AF-WIDE (MULTI CMDS) (1)									
35. BATTLELAB COLLABORATIVE NETWORK									
FY00			11WING	OPT/FP	MULTIPLE (13)	MAR 00	APR 00		
USTRANSCOM									
36. SCHEDULE DECISION SUPPORT SYSTEM (SDSS)									
FY01	1	904	HQ AMC	C/FFP	FEDERATED SOFTWARE GROU LOUIS, MO	JP, ST. FEB 01	SEP 01		
<b>REMARKS:</b> 1. Quantities and costs vary for e 2. Multiple GSA schedule contrac McLean, VA; GTE, West Lake, 0	ctors, inc	Juding Ele	ectronic Data Systems	(EDS), Herndon, VA	A; General Analytics Corp, M American, Irvine, CA; FGM Ir	cLean, VA; HS nc, Herndon, VA	F Inc, x; Comp	uter	
	P-1	1 <b>TEM N</b> 41	0	<b>PAGE NO</b> 67	:		Page	e11 of	12

BUDGET PROCUREMENT H	ISTORY	' PLANN	ING (EXHIBIT P- 54	A)		DATE	: JU	NE 200	)1	
APPROP CODE/BA: OPAF/ELECTRONICS & TELEC	OMMUN	ICATION	I EQUIPMENT	P-1 NOMENCLA GENERAL INFORM	ATURE: MATION TECHNOLOGIES					
ITEM / FISCAL YEAR	QTY.	UNIT COST	LOCATION OF PCO	CONTRACT METHOD & TYPE	CONTRACTOR AND LOCATION					
Science Corp (CSC), Hanover, M Shearwater, NJ; Dynamix, Largo Newark Electronics, Bethesda, M 3. Delivery order options to FY97 TRW, Dayton, OH, in May 1999 to 4. AFMC contracts through Defer Washington, DC. 5. Option to 1996 cost plus aware Name changed to Lockheed Mart 6. Time and materials contract. If Systems Solutions (ES3), Solana 7. Cost plus fixed fee options to to 8. Various contract methods and Inc., Ann Arbor, MI; and other as 9. Option to basic contract award 10. Options to multiple standard (SMSCRC). Award/delivery dates 11. Multiple GSA schedule contract General Dynamics Electronics Sy Appliance Inc., Sunnyvale, CA; W 12. Option to basic GTE contract 13. Options to multiple standard of reflect date of first award and deli 14. The Procurement Contract O VA. The contractor will be determ 15. Option to Lockheed Martin M	, MD; Co D; and L cost plu b Boeing nse Infor d fee cor in Missio FY00 cor Beach, ( basic con types of yet unkno ed May ( contracts s reflect of actors ind stems, C (orld Wid awarded contracts very. fficer for nined thro ission Sy	ompstore, ogicon Tr s fixed fea , St. Louis mation Sy atract (CP in System ntract awa CA. Deliv tract awa contracts own. Awa 00. s including date of firs colorado S e Techno d in Feb 9 s with Auto the F-117 ough sour ystems ba	Chantily, VA; Pacific ech, San Pedro, CA. e contracts awarded in s, MO, and in Aug 99 I vstem Agency (DISA)/ AF) awarded to Lockh s (LMMS) in April 199 and was delayed due to ery dates reflect date rded Mar 97. Award/o will be used in to sup ard/delivery date reflect g Desktop IV, Ulana, S at award and delivery. TE Government Syste Springs, CO; Gateway logy Inc., Maryland He 7. ometric, Inc, Springfiel TDPS resides at Ft E ce selection. sic contract awarded	Radio Electronics, H Award/delivery dates of Jun 1997 to Scientif Lockheed Martin, Ft. Defense Mega Center need Martin Western 1 9. of protest actions. Color of first delivery. delivery dates reflect of port Eagle Vision, Ma cts date of first award Super-Mini, Standard ms, Mountainview, C Inc., North Sioux City eights, MO. Award/de d, VA and Concurrent Selvoir, VA. Aeronaut April 01.	ollywood, CA; Professional reflect date of first award an ic Applications Corp (SAIC), Worth, TX. Ir (DMC) to General Services Development Laboratory (LM ntract awarded Feb 01 to En date of first award and delive tra System & Information, V and delivery. Multiuser Small Computer R A; SAG/East Coast Electron 7, SD; Federal Data Corpora elivery dates reflect date of fi t Technology Corp, Johnsto tical System Center (ASC) w	Products d deliver San Die s Admini MWDL), <i>i</i> ngineerin ery. elizy, FR cequirem nics, Nort tion, Bet irst awar wn, PA.	s, Bethe y. ggo, CA, stration Albuqer g and S ; ERIM ents Co h Andov hesda, I d and do Award/	sda, MD in Jul 19 (GSA), que, NM oftware Internati ntract ver, MA; MD; Nette elivery, delivery	997 to onal, work dates	
	P-1	<b>ITEM N</b> 41	0	<b>PAGE NO:</b> 68				Page	e12 of	12
			UN	CLASSIFI	ED					

BUDGET ITEM JUS	TIFICATION (E	EXHIBIT P-40)		<b>DATE:</b> JUNE 2001						
APPROP CODE/BA	:			P-1 NOMENCLATURE:						
OPAF/ELECTRONICS &		ICATION EQUIP	MENT	AIR FORCE GLOBAL COMMAND & CONTROL SYSTEM						
	FY2000	FY2001	FY2002	FY2003	FY2003 FY2004 FY2005 FY20			FY2007		
QUANTITY										
COST (in Thousands)	\$5,593	\$15,187	\$15,151	\$15,446	\$21,760	\$22,179	\$22,179 \$22,619 \$23,120			
Description:										
The Global Command to pass Air Force common components servers y	mand and contro	ol (C2) data amo	ong commands, th	neir componen	ts, and the joint	GCCS. This pr	ogram procures	GCCS		

components, servers, workstations, commercial-off-the-shelf (COTS) software 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. 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 Defense Information Systems Agency (DISA) Secret Internet Protocol Network (SIPRNET). This program provides a flexible open system, distributed C2 architecture necessary to support the client/server-based joint GCCS. GCCS supports Air Force Systems Networking (AFSN) operations by installing and upgrading a site's classified C2 network through extensive use of COTS technology that adheres to the Air Force command, control, communications and computer building codes and standards.

Items for GCCS requested in FY02 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. FY03-07 budget numbers do not reflect the DoD strategy review results.

1. AFSN: FY00/01 funds procured installation upgrades to site classified C2 networks.



BUDGET ITEM JUSTIFICATION (EXHIBIT P-40)		DATE: JUNE 2001
APPROP CODE/BA:	P-1 NOMENCLATURE:	
OPAF/ELECTRONICS & TELECOMMUNICATION EQUIPMENT	AIR FORCE GLOBAL COMMAN	D & CONTROL SYSTEM

#### **Description (cont.):**

AFSN funding as a separate program line will cease after FY01. GCCS-AF will provide for AFSN to support the installation of SIPRNET connections at designated sites starting in FY02 and through the outyears. No FY02 funding requested.

2. GLOBAL COMMAND AND CONTROL SYSTEM AIR FORCE (GCCS-AF) MODERNIZATION: This funding procures, integrates and installs GCCS-AF 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 GCCS-AF improvements. 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.

- FY00 funds procured initial network infrastructure for multiple new sites; fielded GCCS-AF systems hardware at MAJCOM, AFR and ANG locations; expanded the GCCS architecture to include new functional users on each base; and provided initial technical refreshment of fielded hardware. Funds also procure software licenses and outyear software support.

- FY01/02 funds continue to procure initial network infrastructure for multiple new sites and expand the GCCS architecture to include new functional users on each base. FY01/02 funds also continue fielding of GCCS-AF systems (hardware, government-off-the-shelf (GOTS)/COTS software) at MAJCOM, ANG, and AFR locations. This fielding is consistent with the AF's Air Expeditionary Force C2 structure and will allow for the continued integration of evolving C2 capabilities into the AF's operational framework. These funds will also continue to provide technical refreshment of fielded hardware, and procure software licenses and outyear software support. Additionally, GCCS-AF will provide funding for AFSN to support the installation of SIPRNET connections at designated sites beginning in FY02.

<b>P-1 ITEM NO:</b> 42	<b>PAGE NO:</b> 70	Page 2 of 2

BUDGET ITEM JUSTIFICATION FOR AGGREGATED ITEMS (EXHIBIT P- 40A) DATE: JUN						DATE: JU	JNE 2001	
MUNICATIO	ON EQL	JIPMENT	P-1 NOMENCL	ATURE	ND & CONTF	ROL SYSTEM		
ID	OTV	FY2000	FY2001	00T				2003
	QIY				QIY.	COST	QIY.	COST
A				\$14,728		\$15,151		
		\$5,5	93	\$15,187		\$15,151		
<b>P-1 ITEM</b> 42	NO		<b>PAGE NO:</b> 71				Page 1	of 1
		MUNICATION EQU	ID       FY2000         A       \$1,1         A       \$4,4         ID       ID         S5,5	IMUNICATION EQUIPMENT       P-1 NOMENCLA         ID       FY2000       FY2001         A       \$1,114       Indote the second s	Immunication Equipment       P-1 NOMENCLATURE         ID       FY2000       FY2001         CODE       GTY.       COST         A       \$1,114       \$459         A       \$4,479       \$14,728         ID       ID       \$5,593       \$15,187         P-1 ITEM NO       PAGE NO:       ID	Imunication Equipment       P-1 NOMENCLATURE: AIR FORCE GLOBAL COMMAND & CONTR         ID       FY2000       FY2001       FY2         A       \$1,114       \$459       Image: State of the state of th	P-1 NOMENCLATURE: AIR FORCE GLOBAL COMMAND & CONTROL SYSTEM       ID     FY2000     FY2001     FY2002       A     \$1,114     \$459     0       A     \$1,117     \$15,151	Image: P-1 NOMENCLATURE: AR FORCE GLOBAL COMMAND & CONTROL SYSTEM           ID         FY2000         FY2001         FY2002         FY           ID         FY2000         FY2001         FY2002         FY           ID         OST         COST         QTY.         COST         QTY.           A         S1,114         \$459         S15,151         S15,151           A         S4,479         S14,728         S15,151         S15,151           ID         S5,593         S15,187         S15,151         S15,151

BUDGET PROCUREMENT H	IISTOR	STORY PLANNING (EXHIBIT P- 5A)					<b>DATE:</b> JUNE 2001				
APPROP CODE/BA: OPAF/ELECTRONICS & TELEC	COMMU	NICATION	N EQUIPMENT	P-1 NOMENCLA	ATURE: AL COMMAND & CONTROL	ONTROL 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)											
FY00			AFMC/ESC	OPT/FFP	MULTIPLE (2)	OCT 99	DEC 99				
FY01			AFMC/ESC	OPT/FFP	MULTIPLE (2)	OCT 00	DEC 00				
2. GCCS-AF MODERNIZATION(1)											
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				
FY 02			AFMC/ESC	MIPR/IDIQ	GSA, KANSAS CITY, MO (3)	JAN 02	APR 02	Y			
<b>REMARKS:</b> 1. Quantity and unit costs vary d 2. Option to Ulana II contract. C CA. Award/delivery dates reflect 3. Multiple GSA contracts utilized	ontractor date of f	rs are TR irst award	W, Carson, CA; EDS, I and delivery.	Herndon, VA; World	d Wide Technology, St. Louis	-					

Award/delivery dates reflect date of first award and delivery.

<b>P-1 ITEM NO</b> 42	<b>PAGE NO:</b> 72	Page 1 of 1

BUDGET ITEM JUS	TIFICATION (E	XHIBIT P-40)	)		<b>DATE:</b> JUNE 2001				
APPROP CODE/BA	.:			P-1 NOM	IENCLATURE	:			
OPAF/ELECTRONICS & TELECOMMUNICATION EQUIPMENT MOE					COMMAND AND	CONTROL			
	FY2000	FY2001	FY2002	FY2003	FY2004	FY2005	FY2006	FY2007	
QUANTITY									
COST (in Thousands)	\$9,918	\$9,717	\$8,879	\$9,800	\$9,397	\$9,571	\$9,950	\$10,385	

#### **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 provides the fiber optical backbone for base-wide multi-media connectivity to accomplish AMC's strategic missions. Items requested for FY02 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. This administration has not addressed FY 2003-2007 requirements. All FY 2003-2007 budget estimates included in this book are notional only and subject to change.

1. GLOBAL C2 ARCHITECTURE: These funds continue AMC's integrated upgrade of C2 systems. The following are the specific details of FY00-02 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. FY00 funding provided AMACS for two sites and

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#### **BUDGET ITEM JUSTIFICATION (EXHIBIT P-40)**

DATE: JUNE 2001

#### P-1 NOMENCLATURE:

OPAF/ELECTRONICS & TELECOMMUNICATION EQUIPMENT

MOBILITY COMMAND AND CONTROL

#### **Description (cont.):**

**APPROP CODE/BA:** 

two flight line video upgrades. FY01 funds procure CCFVs for two sites. By the end of FY02, all CCFV systems will be installed and fully operational.

b. LOCAL AREA NETWORK (LAN): FY00-02 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. FY00 funding continued hardware platform upgrades to increase processing speeds for increased user loads. FY01/02 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 comunications connectivity. Resources directly support C2 of, and in-transit visibility over, deployed and en-route personnel, aircraft, and cargo. FY00 funds procured Deployable Rapidly Assembled Shelters (DRASH), Very Small Aperture Terminals (VSAT), and high frequency (HF) radio system upgrades for the AMC Mobility Air Reporting Center (MARC). FY01/02 funds will complete Deployable Rapidly Assembled Shelters (DRASH) procurement and continue MARC upgrades as well as acquisition and support of VSAT equipment.

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

P-1 ITEM NO: 43 PAGE NO: 74 Page 2 of 3		<b>P-1 ITEM NO:</b> 43		<b>PAGE NO:</b> 74		Page 2 of 3
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BUDGET ITEM JUSTIFICATION (EXHIBIT P-40)	DATE: JUNE 2001	
APPROP CODE/BA:	P-1 NOMENCLATURE:	
OPAF/ELECTRONICS & TELECOMMUNICATION EQUIPMENT	MOBILITY COMMAND AND CO	NTROL

#### **Description (cont.)**:

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. FY00-02 funds will procure multiple devices to support STT missions: (1) UHF SATCOM radios which meet Joint Chiefs of Staff mandated narrowband and Demand Assigned Multiple Access (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.

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BUDGET ITEM JUSTIFICATIO	ON FOR AGGI	REGATED	ITEMS (EXHIB	BIT P- 40A)			<b>DATE:</b> JUNE 2001			
APPROP CODE/BA: OPAF/ELECTRONICS & TELECO	OMMUNICATIO	ON EQUIPN	IENT M	-1 NOMENCLA	<b>TURE</b> D AND C	ONTROL				
PROCUREMENT ITEMS	ID		Y2000	FY2001	FY2002			FY2003		
	CODE	QTY.	COST	C	OST	QTY.	COST	QTY.	COST	
1. GLOBAL C2 ARCHITECTURE			\${9,768}		\${9,436}		\${8,594}			
A. OWCP	A		\$1,932		\$1,295		\$1,300			
B. LAN	A		\$4,467		\$3,792		\$3,898			
C. ACFP	A		\$903		\$1,684		\$410			
D. DSATCOM	A		\$2,466		\$2,665		\$2,986			
2. AFSOC TAC C2 PROGRAM	A		\$150		\$281		\$285			
Totals:			\$9,918		\$9,717		\$8,879			
Remarks:										
	<b>P-1 ITEM</b> 43	NO		<b>PAGE NO:</b> 76				Page 1	of 1	

BUDGET PROCUREMENT H	IISTOR		IING (EXHIBIT P- 54	A) DATE: JUNE 2001								
APPROP CODE/BA: OPAF/ELECTRONICS & TELEC	COMMUI		N 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			
1. GLOBAL C2 ARCHITECTURE (1)												
A. OWCP												
FY00			HQ AMC	OPT/FFP (2)	SIEMENS ROLM, VIENNA, VA	FEB 00	MAR 00					
FY01			HQ AMC	OPT/FFP (2)	SIEMENS ROLM, VIENNA, VA	FEB 01	MAR 01					
FY02			HQ AMC	OPT/FFP (2)	SIEMENS ROLM, VIENNA, VA	FEB 02	MAR 02	Y				
B. LAN												
FY00			HQ AMC	OPT/FP	MULTIPLE(3)	OCT 99	DEC 99					
FY01			HQ AMC	OPT/FP	MULTIPLE(3)	OCT 00	DEC 00					
FY02			HQ AMC	OPT/FP	MULTIPLE(3)	OCT 01	DEC 01	Y				
C. ACFP												
FY00			HQ AMC	OPT/FFP (4)	COMPAQ, ST LOUIS, MO	JAN 00	MAR 00					
FY01			HQ AMC	OPT/FFP	COMPAQ, ST LOUIS, MO	OCT 00	JAN 01					
FY02			HQ AMC	OPT/FFP	COMPAQ, ST LOUIS, MO	OCT 01	JAN 02	Y				
	P-1	<b>ITEM N</b> 43	0	PAGE NO 77			Page	e 1 of	2			

JDGET PROCUREMENT HISTORY PLANNING (EXHIBIT P- 5A)							DATE: JUNE 2001				
APPROP CODE/BA: OPAF/ELECTRONICS & TELECOMMUNICATION EQUIPMENT		I EQUIPMENT	P-1 NOMENCLATURE: MOBILITY COMMAND AND CONTROL								
QTY.	UNIT COST	LOCATION OF PCO	CONTRACT METHOD & TYPE	AWD. DATE			DATE REV. AVAIL				
		HQ AMC	DO/FFP	MULTIPLE(5)	JAN 00	JUN 00					
		HQ AMC	DO/FFP	MULTIPLE(5)	JAN 01	JUN 01					
		HQ AMC	DO/FFP	MULTIPLE(5)	JAN 02	JUN 02	Y				
		HQ AFSOC	OPT/FFP (6)	MULTIPLE(6)	JAN 00	AUG 00					
		HQ AFSOC	OPT/FFP (6)	MULTIPLE6)	JAN 01	JUN 01					
		HQ AFSOC	OPT/FFP (6)	MULTIPLE(5)	JAN 02	JUN 02	Y				
		QTY. UNIT	QTY.UNIT COSTLOCATION OF PCOII<	OMMUNICATION EQUIPMENT       MOBILITY COMMA         QTY.       UNIT COST       LOCATION OF PCO       CONTRACT METHOD & TYPE         I       I       I       I <td>OMMUNICATION EQUIPMENT       MOBILITY COMMAND AND CONTROL         QTY.       UNIT COST       LOCATION OF PCO       CONTRACT METHOD &amp; TYPE       CONTRACTOR AND LOCATION         I       I       I       I       I         I       I       I       I       I         I       I       I       I       I         I       I       I       I       I         I       I       I       I       I         I       I       I       I       I         I       I       I       I       I         I       I       I       I       I         I       I       I       I       I       I         I       I       AMC       I       IIIIIIIIIIIIIIIIIIIIIIIIIIIIIIIIIIII</td> <td>OMMUNICATION EQUIPMENT       MOBILITY COMMAND AND CONTROL         QTY.       UNIT COST       LOCATION OF PCO       CONTRACT METHOD &amp; TYPE       CONTRACTOR AND LOCATION       AWD. DATE         I</td> <td>OMMUNICATION EQUIPMENT       MOBILITY COMMAND AND CONTROL         QTY.       UNIT COST       LOCATION OF PCO       CONTRACT METHOD &amp; TYPE       CONTRACTOR AND LOCATION       AWD. DATE       DATE FIRST DEL         I       I       I       I       I       I       I         I       I       I       I       I       I       I         I       I       I       I       I       I       I       I         I       I       I       I       I       I       I       I       I         I</td> <td>OMMUNICATION EQUIPMENT       MOBILITY COMMAND AND CONTROL         QTY.       UNIT COST       LOCATION OF PCO       CONTRACT METHOD &amp; TYPE       CONTRACTOR AND LOCATION       AWD. DATE       DATE FIRST       SPECS AVAIL NOV         I       I       I       I       I       I       I       I         I       I       I       I       I       I       I       I         I       I       I       I       I       I       I       I       I         I</td>	OMMUNICATION EQUIPMENT       MOBILITY COMMAND AND CONTROL         QTY.       UNIT COST       LOCATION OF PCO       CONTRACT METHOD & TYPE       CONTRACTOR AND LOCATION         I       I       I       I       I         I       I       I       I       I         I       I       I       I       I         I       I       I       I       I         I       I       I       I       I         I       I       I       I       I         I       I       I       I       I         I       I       I       I       I         I       I       I       I       I       I         I       I       AMC       I       IIIIIIIIIIIIIIIIIIIIIIIIIIIIIIIIIIII	OMMUNICATION EQUIPMENT       MOBILITY COMMAND AND CONTROL         QTY.       UNIT COST       LOCATION OF PCO       CONTRACT METHOD & TYPE       CONTRACTOR AND LOCATION       AWD. DATE         I	OMMUNICATION EQUIPMENT       MOBILITY COMMAND AND CONTROL         QTY.       UNIT COST       LOCATION OF PCO       CONTRACT METHOD & TYPE       CONTRACTOR AND LOCATION       AWD. DATE       DATE FIRST DEL         I       I       I       I       I       I       I         I       I       I       I       I       I       I         I       I       I       I       I       I       I       I         I       I       I       I       I       I       I       I       I         I	OMMUNICATION EQUIPMENT       MOBILITY COMMAND AND CONTROL         QTY.       UNIT COST       LOCATION OF PCO       CONTRACT METHOD & TYPE       CONTRACTOR AND LOCATION       AWD. DATE       DATE FIRST       SPECS AVAIL NOV         I       I       I       I       I       I       I       I         I       I       I       I       I       I       I       I         I       I       I       I       I       I       I       I       I         I			

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 prior year contract awarded Apr 99 to COMPAQ, St Louis, MO.

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.

6. Option to existing AFSOC and US Army contracts. Award/delivery dates reflect dates of first award/delivery.

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BUDGET ITEM JUS	TIFICATION (E	EXHIBIT P-40)	)			DATE:	DATE: JUNE 2001			
APPROP CODE/BA: OPAF/ELECTRONICS & TELECOMMUNICATION EQUIPMENT				_	IENCLATURE		Μ			
	FY2000	FY2001	FY2002	FY2003	FY2004	FY2005	FY2006	FY2007		
QUANTITY										
COST (in Thousands)	\$31,940	\$36,331	\$62,313	\$28,787	\$27,976	\$28,665	\$32,630	\$37,075		

#### **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, provides relocatable sensors for use on Air Force flightlines, responds to transient security threats, and provides tactical sensors, communications equipment, engineering design, installation, allied support, and training for air base defense forces.

Items requested in FY02 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. This administration has not addressed FY 2003-2007 requirements. All FY 2003-2007 budget estimates included in this book are notional only and subject to change.

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 equipment, assessment devices and associated support equipment. FY00-02 funds continue the procurement of mission tailored TASS kits.

2. AIR LAUNCH CRUISE MISSILE (ALCM) SECURITY SYSTEMS: These funds procure intrusion detection sensors, alarm annunciators,

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BUDGET ITEM JUSTIFICATION (EXHIBIT P-40)		DATE: JUNE 2001
APPROP CODE/BA:	P-1 NOMENCLATURE:	
OPAF/ELECTRONICS & TELECOMMUNICATION EQUIPMENT	AIR FORCE PHYSICAL SECUR	ITY SYSTEM

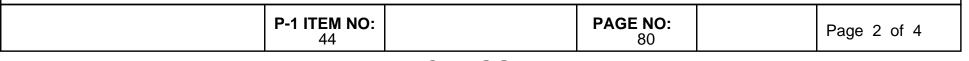
#### **Description (cont.):**

closed circuit television cameras to maintain and replace unsupportable Air Launch Cruise Missile (ALCM) security command and control subsystems. FY00 funding procured equipment integration and upgrades for the intermediate maintenance facilities (IMFs) at Minot AFB, ND. FY01/02 funding provides Initial IMF security upgrade planning and installation at Weapon Storage Area (WSA).

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. FY00 funds procured portable security equipment to be used by Force Protection Expeditionary Forces in response to changing and evolving threat scenarios worldwide. The FY01/02 equipment procurements include portable tactical sensors, thermal imagers, fiber optic sensors, and other state-of-the-art detection and assessment equipment. In addition, the FY01/02 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). Additionally, FY02 funding will begin the process of upgrading the security posture at Air Force Reserve installations.

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 changing world environment and state-of-the-art technology. The current TASS contract enables the Air Force to meet flight line security requirements. FY00 funds procured additional TASS equipment. FY01/02 TASS equipment procurement includes a variety of sensors, assessment devices and communication equipment to meet a broad range of intrusion detection needs (perimeter, tactical, flightline). FY00 funding for the Flightline Security Enhancement Program (FSEP) completed





# BUDGET ITEM JUSTIFICATION (EXHIBIT P-40) DATE: JUNE 2001 APPROP CODE/BA: P-1 NOMENCLATURE: OPAF/ELECTRONICS & TELECOMMUNICATION EQUIPMENT AIR FORCE PHYSICAL SECURITY SYSTEM

#### **Description (cont.):**

installation and equipment procurements for all remaining flightlines (Phase 1) to include Spangdahlem, AB, GE, and Incirlik AB, TK, and began (Phase 2) Intrusion Detection architecture design work and site surveys at RAF Mildenhall, UK. FY01 funds complete Phase 2 design, installation and equipment at RAF Mildenhall, UK. Additionally, FY01/02 funds also begin Phase 2 design and installation activities at Aviano AB, IT, and RAF Lakenheath, UK. The Joint Service Interior Intrusion Detection System (JSIIDS) program requires an Air Force certified annunicator system to replace the existing 20 year-old JSIIDS annunciator. The FY01/02 funding will be used to initiate procurement, integration, and installation of the new system within USAFE. FY02 funding also procures a replacement for the intrusion detection system within the Air Force One/Senior Executive (SENEX) complex at Andrews AFB.

b. FIXED-SITE SECURITY: Fixed-Site Security projects support long-term physical security requirements at permanent Air Force installations worldwide. 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 and access control systems. The upgrades include design, allied support and installation of interior/exterior intrusion detection systems (IDS), video storage system (VSS), annunciators and an access control system (ACS) at WSAs locations which require security upgrades. FY00/01 funds support WSA upgrades at Minot AFB, ND and the Kirtland Underground Munitions Maintenance & Storage Complex (KUMMSC) at Kirtland AFB, NM. Initial nuclear WSA security engineering and upgrade planning at AF locations will commence in FY01. FY02 funding will begin installation at one or more WSA locations ( Nellis AFB, NV, Malmstrom AFB, MT, Barksdale AFB, LA, F.E. Warren AFB, WY and Whiteman AFB, MO). Additionally, the physical security control system at Schriever AFB does not meet AF standards, leaving critical space systems physically vulnerable. FY01/02 funds procure equipment to replace the cable plant and upgrade interior sensors systems, portals, and perimeters sensors at Schriever AFB, CO.

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. FY00 funds purchased an upgrade of equipment for missile security mission at Minot AFB, MT. FY01 funding will complete the Minot and KUMMSC projects. FY02 funding will support upgrade planning and installation for Malmstrom AFB, ND, and

P-1 ITEM NO:         PAGE NO:           44         81	Page 3 of 4
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	<b>DATE:</b> JUNE 2001				
APPROP CODE/BA:	P-1 NOMENCLATURE:				
OPAF/ELECTRONICS & TELECOMMUNICATION EQUIPMENT	AIR FORCE PHYSICAL SECUR	ITY SYSTEM			
<b>Description (cont.):</b> F. E. Warren AFB, WY, as well as other AF Space Command locations.					
P-1 ITEM NO:	PAGE NO:	Page 4 of 4			

BUDGET ITEM JUSTIFICATION	FOR AGGF	REGA	TED ITEMS (EX	HIBIT P	- 40A)			DATE: JU	JNE 2001		
APPROP CODE/BA: OPAF/ELECTRONICS & TELECOMI	MUNICATIC	)N EQ	UIPMENT	P-1 NOMENCLATURE: AIR FORCE PHYSICAL SECURITY SYSTEM							
PROCUREMENT ITEMS	ID		FY2000		FY2001		FY2002		F۱	(2003	
	CODE	QT	Y. COST		CC	DST	QTY.	COST	QTY.	COST	
1. AIR BASE DEFENSE SENSORS	A		\$2,9	47		\$3,403		\$2,800		_	
2. AIR LAUNCH CRUISE MISSILE (ALCM) SECURITY SYSTEMS	A		\$1,4	13		\$1,299		\$1,331		<u> </u>	
3. ANTI-TERRORISM	A		\$1,5	33		\$2,610		\$1,035		+	
4. BASE PHYSICAL SECURITY SYSTEMS			\${25,70	2}	5	\${28,488}		\${56,603}		-	
A. FLIGHTLINE SECURITY	А		\$23,7	39		\$25,239		\$40,438			
B. FIXED-SITE SECURITY	A		\$1,9	13		\$3,249		\$16,165			
5. MINUTEMAN SQUADRON SECURITY	A		\$2	95		\$531		\$544		<u> </u>	
Totals:			\$31,94	40		\$36,331		\$62,313			
Remarks:											
	<b>P-1 ITEM</b>	NO		F	PAGE NO: 83				Page 1	of 1	

BUDGET PROCUREMENT H	IISTOR	Y PLANN	IING (EXHIBIT P- 5A	A)		DATE: JU	NE 200	)1				
APPROP CODE/BA: OPAF/ELECTRONICS & TELEC	COMMUI		N 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 (1) (2)												
FY00			AFMC/ESC	DO/FFP	MULTIPLE (3)	JAN 00	MAR 00					
FY01			AFMC/ESC	DO/FFP	MULTIPLE (3)	JAN 01	AUG 01					
FY02			AFMC/ESC	DO/FFP	MULTIPLE (3)	NOV 01	FEB 02	Y				
2. AIR LAUNCH CRUISE MISSILE (ALCM) SECURITY SYSTEMS (1) (2)												
FY00			AFMC/ESC	OTH/OTH	MULTIPLE (3)	FEB 00	AUG 00					
FY01			AFMC/ESC	OTH/OTH	MULTIPLE (3)	FEB 01	AUG 01					
FY02			AFMC/ESC	ОТН/ОТН	MULTIPLE (3)	DEC 01	MAR 02	Y				
3. ANTI-TERRORISM (1) (2)												
FY00			AFMC/ESC	DO/FFP	MULTIPLE (3)	JAN 00	MAY 00					
FY01			AFMC/ESC	DO/FFP	MULTIPLE (3)	JAN 01	MAY 01					
FY02			AFMC/ESC	DO/FFP	MULTIPLE (3)	JAN 02	MAY 02	Y				
	P-1	ITEM N 44	0	PAGE NO 84			Page	e 1 of	3			

BUDGET PROCUREMENT	HISTOR	Y PLANN	ING (EXHIBIT P- 54	<b>4</b> )			DATE: JUNE 2001					
APPROP CODE/BA: OPAF/ELECTRONICS & TEL	ECOMMU	NICATION	EQUIPMENT	P-1 NOMENCLATURE: AIR FORCE PHYSICAL SECURITY SYSTEM								
ITEM / FISCAL YEAR	QTY.	UNIT COST	LOCATION OF PCO	CONTRAC METHOD & 1		CONTRACTOR AND LOCATION	AWD. DATE	DATE FIRST DEL.	SPECS AVAIL NOW	DATE REV. AVAIL		
4. BASE PHYSICAL SECURITY SYSTEMS (1) (2)												
A. FLIGHTLINE SECURITY												
FY00			AFMC/ESC	OTH/OTH	N	/ULTIPLE (3)	JAN 00	JUL 00				
FY01			AFMC/ESC	DO/FFP	N	/ULTIPLE (3)	FEB 01	JUL 01				
FY02			AFMC/ESC	DO/FFP	N	NULTIPLE (3)	NOV 01	APR 02	Y	 		
B. FIXED-SITE SECURITY												
FY00			AFMC/ESC	OTH/OTH	N	/ULTIPLE (3)	JAN 00	JUL 00				
FY01			AFMC/ESC	OTH/OTH	N	/ULTIPLE (3)	JAN 01	JUL 01				
FY02			AFMC/ESC	OTH/OTH	N	NULTIPLE (3)	JAN 02	JUL 02	Y			
5. MINUTEMAN SQUADRON SECURITY (1) (2)												
FY00			AFMC/ESC	OTH/OTH	N	/ULTIPLE (3)	DEC 99	MAY 00				
FY01			AFMC/ESC	OTH/OTH	N	/ULTIPLE (3)	DEC 00	MAY 01				
FY02			AFMC/ESC	OTH/OTH	N	NULTIPLE (3)	DEC 01	MAY 02	Y			
	 	1 ITEM N 44	0	PAG	E NO: 85		I	Page	l e 2 of	3		

BUDGET PROCUREMENT HISTORY PLANNING (EXHIBIT P- 5A)							: JUI	NE 200	1	
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 FIRST DATE AVAIL DATE NOW						
Instant       Dell       NOW       AVAIL         REMARKS:       1. Unit costs vary due to various types and quantities of physical security equipment procured for each site.       2. Locations of PCO varies from AFMC/ESC, AFMC/38th, AFMC/46TW, GSA, Ft Worth, TX, Department of Energy (DOE) Alburquerque, NM and USAFE, Europe.       3. Multiple contract method and types: Delivery Order/Firm Fixed Price contracts: 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. Task Order/Labor Hour contracts to Kylmar, LTD, Andover, UK, and GSA/Labor Hour/Delivery Order to Horizons Technology, (HTI), Billerica, MA; Gemini Industries, Billerica, MA; System Resources Corp (SRC), Burlington, MA; ACS Defense, Inc, Burlington, MA; MCR, Bedford, MA; and Systems Planning Corp (SPC), Arlington, VA. Other typical contractors include Booz Allen & Hamilton, Ft Worth, TX and Mosler, Northridge, CA. Award/delivery dates represent the date of first award/delivery.										

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P-1 TIEM NO 44 PAGE NO: 86 Page 3 of	3

BUDGET ITEM JUS	DATE:	JUNE 2001										
APPROP CODE/BA: OPAF/ELECTRONICS & TELECOMMUNICATION EQUIPMENT					P-1 NOMENCLATURE: COMBAT TRAINING RANGES							
	FY2000	FY2001	FY2002	FY2002 FY2003		FY2005	FY2006	FY2007				
QUANTITY												
COST (in Thousands)	\$44,345	\$46,233	\$67,585	\$16,578	\$23,828	\$23,854	\$24,803	\$23,071				

#### **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. FY00-02 funding continues the upgrade of these critical training systems. Emphasis 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, Electronic Combat Threats Systems and Air Combat Training Systems Upgrades programs directly support these advancements. FY02 funding also addresses modernization of an aging electronics and telecommunications infrastructure on ranges to ensure compliance with current standards and continued range safety. This administration has not addressed FY 2003-2007 requirements. All FY 2003-2007 budget estimates included in this book are notional only and subject to change.

1. AIR COMBAT TRAINING SYSTEMS (ACTS): In FY01, Congress added \$2.5 million for the Force Operational Readiness and Combat Effectiveness Simulation (FORCES) for the Air National Guard (ANG). Reference Appropriation Conference Report 106-754, July 17, 2000, page 210.

a. ALASKAN AIR COMBAT TRAINING SYSTEM (AACTS): No FY02 funds requested.

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UNCLASSIFIED									

BUDGET ITEM JUSTIFICATION (EXHIBIT P-40)	DATE: JUNE 2001	
APPROP CODE/BA:	P-1 NOMENCLATURE:	
OPAF/ELECTRONICS & TELECOMMUNICATION EQUIPMENT	COMBAT TRAINING RANGES	

#### **Description (cont.):**

b. JOINT ADVANCED WEAPON SCORING SYSTEM (JAWSS): The JAWSS program consists of Navy-developed scoring systems which upgrade the weapon and laser spot scoring on Air Force (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 provides 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. FY00 funds procured upgrades for one ANG and four AF ranges. FY01 funds procure upgrades at four ANG and two AF ranges. FY02 will fund upgrades for two AF ranges.

c. JOINT TACTICAL COMBAT TRAINING SYSTEM (JTCTS): JTCTS is a joint Air Force/Navy program with the Navy as the lead service. The JTCTS program is undergoing an acquisition restructure. No FY02 funds are requested.

d. AIR COMBAT TRAINING SYSTEMS (ACTS) UPGRADES: FY00-02 funds provide a "modular" approach to Air Combat Maneuvering Instrumentation (ACMI) range upgrades, which includes additional security equipment and GPS capability. These funds continue the 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) 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 the need for Advanced Medium-Range Air-to-Air Missile (AMRAAM) training. Security equipment will encrypt the data link needed for AMRAAM training and GPS capability will provide expanded range coverage also needed for AMRAAM training. Additionally, FY01/02 funds will procure ground electronics equipment to support display and debriefing of data from P4 series training pods being upgraded under the P4 Refurbishment Contract (P4RC) program.

e. FORCE OPERATIONAL READINESS AND COMBAT EFFECTIVENESS SIMULATION (FORCES): No FY02 funding is requested.

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UNCLASSIFIED									

BUDGET ITEM JUSTIFICATION (EXHIBIT P-40)	DATE: JUNE 2001	
APPROP CODE/BA:	P-1 NOMENCLATURE:	
OPAF/ELECTRONICS & TELECOMMUNICATION EQUIPMENT	COMBAT TRAINING RANGES	

#### **Description (cont.):**

2. ELECTRONIC COMBAT THREAT SYSTEMS (formerly known as Advanced Threats Upgrade): Congress added \$28.0 million in FY00 for the Unmanned Threat Emitter (UMTE) System. Reference Appropriation Conference Committee Report 106-371, October 8, 1999, page 197. In FY01, Congress added \$21.4 million for the UMTE System. Reference Appropriation Conference Report 106-754, July 17, 2000, page 210.

The Mini-MUTES 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, anti-aircraft artillery (AAA) and acquisition 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. FY00 funds procured 16 remote emitter unit Mini-MUTES (Multiple Threat Emitter System) upgrades. FY01/02 funds will procure advanced threat systems and upgrades. FY02 funds will also procure upgrades for obsolete components in the Modular Threat Emitters (MTEs), MUTES and T3 emitters. These systems simulate former Soviet Union surface-to-air missile threat systems and anti-aircraft artillery systems. In addition, FY02 funds will procure upgrades to the Threat Reaction Analysis Indicator System (TRAINS) which analyzes the accuracy and effectiveness of aircraft electronic combat defense systems. No FY02 funds requested for the Unmanned Threat Emitter (UMTE).

#### 3. RANGE ELECTRONICS AND TELECOMMUNICATIONS INFRASTRUCTURE MODERNIZATION

a. NEVADA TEST AND TRAINING RANGE (NTTR): FY02 funding will complete a high capacity telecommunications fiber optic backbone. Specific items include: encryption devices, fiber optic cable and associated end items, access to commercial power, security alarms, and communications equipment shelters. FY02 funding will also procure a modern digital switch that can handle increased telephone and radio interfaces to support exercise requirements at the Nellis Air Traffic Control Facility. Additionally, FY02 funding will procure radio electronic combat simulators as well as prepare sites with communications and power to accept simulators at the NTTR.

b. UTAH TEST AND TRAINING RANGE (UTTR): FY02 funding will procure a radar system for tracking and range safety, procure

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BUDGET ITEM JUSTIFICATION (EXHIBIT P-40)	DATE: JUNE 2001			
APPROP CODE/BA:	P-1 NOMENCLATURE:			
OPAF/ELECTRONICS & TELECOMMUNICATION EQUIPMENT	COMBAT TRAINING RANGES			

#### **Description (cont.):**

high-speed digital video cameras, and upgrade data readers and infrared cameras at the UTTR. FY02 funding will also upgrade air-to-ground and ground-to-ground radio capabilities. Specific requirements include procurement of land mobile radios and repeater stations, procurement of a Mode-S capability for air traffic control and a radar interface.

c. REALISTIC BOMB TRAINING INITIATIVE (RBTI) MONITORING CAPABILITY: FY02 funding will procure radar feeds and displays and associated radio communications to provide a monitoring capability of the RBTI airspace to insure aircraft safety of flight and threat senario situational awareness for systems located near Dyess AFB, Texas.

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BUDGET ITEM JUSTIFICATION FOR AGGREGATED ITEMS (EXHIBIT P- 40A)									<b>DATE:</b> JUNE 2001			
APPROP CODE/BA: OPAF/ELECTRONICS & TELECOMMUNICATION EQUIPMENT					P-1 NOMENCLATURE: COMBAT TRAINING RANGES							
PROCUREMENT ITEMS	ID		FY2000		FY2001		FY	2002	FY2003			
	CODE	QT	Y. CO	ST		CC	DST	QTY.	COST	QTY.		COST
1. AIR COMBAT TRAINING SYSTEMS (ACTS)			\${1	0,807}		\$	{11,015}		\${7,347}			
A. ALASKAN AIR COMBAT TRAINING SYSTEMS (AACTS)	A			\$775								
B. JOINT ADVANCED WEAPON SCORING SYSTEM (JAWSS)	A			\$6,700			\$4,140		\$3,803			
C. JOINT TACTICAL COMBAT TRAINING SYSTEM (JTCTS)	A			\$574								
D. AIR COMBAT TRAINING SYSTEMS (ACTS) UPGRADES	A			\$2,758			\$4,375		\$3,544			
E. FORCE OPERATIONAL READINESS AND COMBAT EFFECTIVENESS SIMULATION (FORCES)	A						\$2,500					
2. ELECTRONIC COMBAT THREAT SYSTEMS	A		\$	33,538			\$35,218		\$29,338			
P	<b>-1 ITEM</b> 45	NO			PAGE N 91	0:				Pag	e 1 of 2	

BUDGET ITEM JUSTIFICATION F	OR AGGI	REGATE	ED ITEMS (EXH	HIBIT P- 40A)			DATE: JU	NE 2001	
APPROP CODE/BA: OPAF/ELECTRONICS & TELECOMM	IUNICATIO	)N EQUI	PMENT	P-1 NOMEN COMBAT TRAI	ICLATURE NING RANGE	S			
PROCUREMENT ITEMS	ID	ID FY2000		FY2001		FY2002		FY2003	
	CODE	QTY.	COST		COST	QTY.	COST	QTY.	COST
3. RANGE ELECTRONICS AND TELECOMMUNICATIONS INFRASTRUCTURE MODERNIZATION							\${30,900}		
A. NEVADA TEST AND TRAINING RANGE (NTTR)	A						\$13,950		
							\$16,100		
C. UTAH TEST AND TRAINING RANGE (UTTR)	A						\$16,100		
C. REALISTIC BOMB TRAINING INITIATIVE (RBTI) MONITORING CAPABILITY	А						\$850		
Totals:			\$44,34	15	\$46,233		\$67,585		
Remarks:									
F	<b>P-1 ITEM</b> 45	NO		PAGE N 92	0:			Page 2	of 2

BUDGET PROCUREMENT	HISTOR	Y PLANN	NING (EXHIBIT P- 54	A)		DATE: JU	NE 200	)1	
APPROP CODE/BA: OPAF/ELECTRONICS & TELE	ECOMMU	NICATIO	N EQUIPMENT	P-1 NOMENCLA COMBAT TRAININ					
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 (ACTS) (1)									
A. ALASKAN AIR COMBAT TRAINING SYSTEMS (AACTS)									
FY00			AFMC/AAC	OPT (2)/FFP	APPLIED DATA TECHNOLOGY I (ADTI), SAN DIEGO, CA	NC. MAR 00	JUL 00		
B. JOINT ADVANCED WEAPON SCORING SYSTEM (JAWSS)									
FY00			AFMC/AAC	MIPR/OTH	NAVY - MULTIPLE (3)	MAR 00	NOV 00		
FY01			HQ ACC	MIPR/OTH	NAVY - MULTIPLE (3)	MAR 01	NOV 01		
FY02			HQ ACC	MIPR/OTH	NAVY - MULTIPLE (3)	MAR 02	NOV 02	Y	
C. JOINT TACTICAL COMBAT TRAINING SYSTEM (JTCTS)									
FY00			AFMC/AAC	C/CPAF	MULTIPLE (4)	DEC 99	DEC 99		
D. AIR COMBAT TRAINING SYSTEMS (ACTS) UPGRADES									
FY00			AFMC/AAC	MIPR/CPIF	NAVY - CTA INC, RIDGCREST, C	A APR 00	APR 01		
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BUDGET PROCUREMENT H	IISTOR	Y PLAN	NING (EXHIBIT P- 54	A)		DATE: JU	NE 200	01	
APPROP CODE/BA: OPAF/ELECTRONICS & TELEC	COMMUI		N EQUIPMENT	P-1 NOMENCL					
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/AAC	OPT (5)/FFP	NORTHROP GRUMMAN/AMHERS SYSTEMS, BUFFALO, NY	ST MAY 00	SEP 00		
FY00			AFMC/AAC	SS/FFP	METRIC, FORT WALTON BEACH,	FL JUN 00	JAN 01		
FY00			AFMC/AAC	OPT/CPAF	MULTIPLE (4)	APR 00	APR 00		
FY01			AFMC/AAC	C/CPAF	MULTIPLE (4)	APR 01	APR 01		
FY01			AFMC/AAC	C/FFP	UNKNOWN	AUG 01	DEC 01	Y	
FY02			AFMC/AAC	C/FFP	UNKNOWN	FEB 02	DEC 02	Y	
E. FORCE OPERATIONAL READINESS AND COMBAT EFFECTIVENESS SIMULATION (FORCES)									
FY01			HQ AETC	C/FFP	UNKNOWN	SEP 01	OCT 01	Y	
2. ELECTRONIC COMBAT THREAT SYSTEMS (1)									
FY00			AFMC/OO-ALC	OTH (6)/OTH	MULTIPLE	MAR 00	MAR 01		
FY01			AFMC/OO-ALC	OTH (6)/OTH	MULTIPLE	MAR 01	MAR 02		
FY02			AFMC/OO-ALC	ОТН (6)/ОТН	MULTIPLE	JAN 02	JUN 02	Y	
	P-1	<b>ITEM N</b> 45	IO	PAGE NO 94	:		Pag	e 2 of	4

BUDGET PROCUREMENT H	ISTOR	Y PLANN	ING (EXHIBIT P- 54	A)		DATE: JU	NE 200	)1	
APPROP CODE/BA: OPAF/ELECTRONICS & TELEC	OMMU	INICATION	EQUIPMENT	P-1 NOMENCL COMBAT TRAININ					
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. RANGE ELECTRONICS AND TELECOMMUNICATIONS INFRASTRUCTURE MODERNIZATION									
A. NEVADA TEST AND TRAINING RANGE (NTTR)									
FY02			HQ ACC	MIPR/OTH/FFP	UNKNOWN	APR 02	APR 03	N	JAN 02
B. UTAH TEST AND TRAINING RANGE (UTTR) MODERNIZATION									
FY02			HQ ACC	MIPR/OTH/FFP	UNKNOWN	APR 02	APR 03	N	JAN 02
C. REALISTIC BOMBER TRAINING INITIATIVE (RBTI) MONITORING CAPABILITY									
FY02			HQ ACC	OPT(7)/FFP	BERING ECHO TECH, ANCHOR/ AK	AGE, NOV 01	FEB 01	Y	
<b>REMARKS:</b> 1. Quantity and unit cost varies d 2. Option to Applied Data Techno 3. Joint Advanced Weapons Sco	plogy In ring Sys	c. contract a stem (JAW	awarded May 98. SS) procured by Nava	al Warfare Assessme	ent Station, Corona, CA and N	Naval Air Warfa	re Cente	l	
	P-'	<b>1 ITEM NO</b> 45		<b>PAGE NO</b> 95	:		Page	e 3 of	4

BUDGET PROCUREMENT H	ISTOR	Y PLANN	ING (EXHIBIT P- 5/	A)		DATE	: JU	NE 200	)1	
APPROP CODE/BA: OPAF/ELECTRONICS & TELEC	OMMU	NICATION	EQUIPMENT	P-1 NOMENCLA COMBAT TRAININ						
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
Point Mugu, CA. Award dates an 4. Contractors include: Sverdrup, 5. Option to Northrop Grumman// 6. Multiple contract methods and Harris Corp., Melbourne, FL; Sier reflect first award and delivery dat 7. Option to Bering Sea Echo Ter	, Fort Wa Amherst types, to ra Techr te. ch contra	alton Beac Systems ( o include c hologies, Ir act awarde	h, FL and SEMCOR, contract awarded Ma ptions to existing cor nc., Buffalo, NY; and, d May 00.	Shalimar, FL. r 97. htracts, sole source co EW Systems, Colora	ontracts and MIPRs. Repres do Springs, CO. Award date					
	P-1	45		<b>PAGE NO</b> : 96				Page	e 4 of	4

BUDGET ITEM JUS	TIFICATION (E	XHIBIT P-40)				DATE:	JUNE 2001			
APPROP CODE/BA	:			P-1 NOM	IENCLATURE	:				
OPAF/ELECTRONICS &		CATION EQUIPI	MENT	MINIMUM	ESSENTIAL EMI	ERGENCY COM	MUNICATIONS	NETWORK		
	FY2000	FY2001	FY2002	FY2003	FY2004	FY2005	FY2006	FY2007		
QUANTITY										
COST (in Thousands)	\$5,114	\$1,494	\$2,078	\$1,084	\$0	\$0	\$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.										
The Defense Improved (DIRECT) is a strategi	0.	U		•	/ <b>1</b>					

NCA. 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 completed IOT&E in January 01. FY00 funding provided for Engineering Change Orders (ECO), dual autodin interfaces and associated install and checkout, and interim contractor support (ICS). FY01 funding provides for system hardware product improvement and enhancements. FY02 funds will be used to enhance the capabilities of the existing European sites.

This administration has not addressed FY 2003-2007 requirements. All FY 2003-2007 budget estimates included in this book are notional only and subject to change.

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	UNCLASSIFIED		

WEAPON SYSTEM COST ANAL	LYSIS (EXH	HIBIT P	- 5)						[	DATE:	JUNE 2	2001	
APPROP CODE/BA: OPAF/ELECTRONICS & TELECOM	MMUNICATI	ON EQI	JIPMENT			<b>IENCLA</b> ESSENT		RGENCY	COMMU	NICATION	S NETW	ORK	
	IDENT		FY2000		FY2001 FY200			FY2002			FY2003	FY2003	
WEAPON SYSTEM COST ELEMENTS	CODE	QTY	UNIT COST	TOTAL COST	QTY	UNIT COST	TOTAL COST	QTY	UNIT COST	TOTAL COST	QTY	UNIT COST	TOTAL COST
1. DIRECT				{5,114	}		{1,494}			{2,078}			
SYSTEM HARDWARE	А			2,784	4		1,494			2,078			
ECO				403	3								
ICS				1,92	7								
TOTALS:				5,114	1		1,494			2,078			
	<b>P-1 ITEM</b> 46	NO			PAG	<b>GE NO:</b> 98					Ра	ge 1 of 1	

BUDGET ITEM JUS	TIFICATION (E	EXHIBIT P-40)				DATE:	JUNE 2001	
APPROP CODE/BA		CATION EQUIP	MENT	_	<b>IENCLATURE</b> TERMEASURES			
	FY2000	FY2001	FY2002	FY2003	FY2004	FY2005	FY2006	FY2007
QUANTITY								
COST (in Thousands)	\$14,110	\$15,537	\$9,623	\$12,094	\$9,338	\$9,553	\$9,743	\$9,958

#### **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 FY02 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. This administration has not addressed FY

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BUDGET ITEM JUSTIFICATION (EXHIBIT P-40)		DATE: JUNE 2001
APPROP CODE/BA:	P-1 NOMENCLATURE:	
OPAF/ELECTRONICS & TELECOMMUNICATION EQUIPMENT	C3 COUNTERMEASURES	

#### **Description (cont.):**

2003-2007 requirements. All FY 2003-2007 budget estimates included in this book are notional only and subject to change.

1. AF INFORMATION WARFARE CENTER (AFIWC) SUPPORT: AFIWC is the Center of Excellence creating the information warfare advantage for combatant forces through exploring, developing, applying, and transitioning counter-information technology, strategy, tactics, and data to control the information battlespace. Funds procure equipment and tools for the following projects:

a. AUTOMATIC DATA PROCESSING (ADP) UPGRADES: FY00-02 funding continues to replace basic AFIWC internal computer infrastructure and network requirements for administrative and management functions.

b. MODELING AND SIMULATION: FY00-02 funds procure computer equipment and analytical tools to conduct detailed analyses in support of current operations, and the acquisition community (to include test & evaluation). These analyses provide the end user with a means of understanding the performance of their systems in hostile threat environments, directly impacting the survivability of combat-coded USAF aircraft and aircrews. The analyses are routinely used to support operational mission planning; tactics, techniques, and procedures (TTP) development; and acquisition decisions. This analytical capability has been applied in all conflicts since the Vietnam War through the recent Kosovo campaign.

c. COMMAND AND CONTROL WARFARE (C2W) OPERATIONS SUPPORT: FY00-02 funds procure equipment to maintain the C2W Operational Support System (CONSTANT WEB) which is an approved migration database for C2W operations--a proven capability in Desert Storm/Desert Shield and recent operations in southwest Asia, Bosnia, and Kosovo.

d. INFORMATION WARFARE (IW): FY00-02 funds procure computer and computer related equipment to support the integration of IW decision aids into combat planning and execution cycles.

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BUDGET ITEM JUSTIFICATION (EXHIBIT P-40)	DATE: JUNE 2001	
APPROP CODE/BA:	P-1 NOMENCLATURE:	
OPAF/ELECTRONICS & TELECOMMUNICATION EQUIPMENT	C3 COUNTERMEASURES	

#### **Description (cont.):**

e. OFFENSIVE IW: FY00-02 funding continues the procurement of computer, computer related, memory storage, local and long-haul communications, contractor information system specialties, infrastructure, and unique intelligence and analysis equipment required to support IW analysis which delivers timely AF IW capabilities for training (including Distributed Mission Analysis), EW systems capabilities analysis and combat operations. This funding begins a scaled evolution of processing power in an attempt to maintain compatibility with the rest of the Distributed Mission Training (DMT) community and the latest changes in the simulator systems. This process provides sufficient computation capability to perform high-fidelity simulations required by the DMT simulators. The training simulations used by the AFIWC to support large-scale exercises (BLUE FLAG, Roving Sands, Joint Expeditionary Force Experiment, etc.) will also be able to maintain currency with the latest developments in the exercise simulation environment. Additionally, these procurements are vital for the exploration, development and fielding of reach-back capabilities. They also facilitate migration of AF combat capabilities to Numbered Air Forces and IO personnel responsible for the integration and execution of tools necessary to gain, exploit, defend, and attack information and information systems.

2. 67th INFORMATION OPERATIONS WING SUPPORT: The 67th Information Operations 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: FY00-02 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): FY00-02 funding provides systems equipment to monitor digital voice, data, facsimile, and video in an integrated package.

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UNCLASSIFIED										

#### BUDGET ITEM JUSTIFICATION (EXHIBIT P-40)

DATE: JUNE 2001

## APPROP CODE/BA: P-1 NOMENCLATURE: OPAF/ELECTRONICS & TELECOMMUNICATION EQUIPMENT C3 COUNTERMEASURES

#### **Description (cont.):**

3. JOINT INFORMATION OPERATIONS CENTER (JIOC): The JIOC provides joint force commanders (combatant commanders, subordinate unified commanders and joint task force commanders), service component commanders and functional component commanders direct 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, including options for Computer Network Attack/Defense and Defensive IO, 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 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, and 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. FY00-02 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. Workstations, which deploy with CINC support teams and provide on-scene analytical support as well as reach-back capability, are replaced approximately every three years. 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: FY00-02 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.

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UNCLASSIFIED										

BUDGET ITEM JUSTIFICATION (EXHIBIT P-40)	DATE: JUNE 2001	
APPROP CODE/BA:	P-1 NOMENCLATURE:	
OPAF/ELECTRONICS & TELECOMMUNICATION EQUIPMENT	C3 COUNTERMEASURES	

#### **Description (cont.):**

b. COMBAT ANALYSIS SYSTEM: FY00-02 funding provides for field commander support systems including automated support systems for IO training.

c. FIELD COMMANDERS SUPPORT: FY00-02 funding procures workstations which deploy with CINC support teams providing on-scene analytical support as well as reach-back capability (replaced every 3 years).

d. COMPUTER TRAINING SIMULATION: FY00-02 funding provides for computer hardware which hosts the JQUAD training simulation system at training centers worldwide, and must be replaced with computer systems which are compatible with the JSIMS architecture.

e. IO RED TEAM SUPPORT: FY00-02 funding provides for deployable field support systems, equipment, and Type I training for detecting, identifying, locating, targeting, exploiting and signals in support of combatant commanders, national agencies, exercises, and Advanced Concept Technology Demonstration (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): No FY02 funding is requested.

5. INFORMATION WARFARE (IW) FLIGHTS: No FY02 funding is requested.

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BUDGET ITEM JUSTIFICATION F		DATE: JU	JNE 2001						
<b>APPROP CODE/BA:</b> OPAF/ELECTRONICS & TELECOMM	<b>MENT</b>	P-1 NOMENCLATURE: C3 COUNTERMEASURES							
PROCUREMENT ITEMS	ID		Y2000	FY2			2002		2003
	CODE	QTY.	COST		COST	QTY.	COST	QTY.	COST
1. AFIWC SUPPORT (1) (2)			\${6,458}	,	\${8,175}		\${6,197}		
A. ADP UPGRADES	A		\$240		\$237		\$287		
B. MODELING AND SIMULATION	A		\$614	ŀ	\$620		\$636		
C. C2W OPS SUPPORT	A		\$327	7	\$333		\$335		
D. INFORMATION WARFARE	А		\$2,161		\$3,297		\$2,315		
E. OFFENSIVE IW	A		\$3,116	3	\$3,688		\$2,624		
2. 67TH INFO OPS WING SUPPORT (1) (2)			\${1,356}	}	\${1,307}		\${1,080}		
A. COMSEC ASSESSMENT SPT	А		\$396	3	\$404		\$334		
B. TMAP	A		\$960	)	\$903		\$746		
3. JIOC (1) (2)			\${1,743}	}	\${1,621}		\${2,346}		
A. EC ANALYST NETWORK	А		\$334	L .	\$308		\$441		
B. COMBAT ANALYSIS SYSTEM	А		\$1,011		\$936		\$1,370		
C. FIELD COMMANDERS SUPPORT	А		\$104	l l	\$99		\$140		
D. COMPUTER TNG SIM	А		\$190	)	\$179		\$255		
E. IO RED TEST SUPPORT	A		\$104	۱ 	\$99		\$140		
4. SECURE TERMINAL EQUIPMENT (STE) (1) (2)	A		\$2,500	)					
F	<b>P-1 ITEM</b> 47	NO		PAGE N 104	O:			Page 1	of 2

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BUDGET ITEM JUSTIFICATION FOR AGGREGATED ITEMS (EXHIBIT P- 40A)								DATE: JUNE 2001				
APPROP CODE/BA: OPAF/ELECTRONICS & TELEC	COMMUNICATIO	N EQUIP	MENT	P-1 NOME C3 COUNTER	NCLATURE: RMEASURES							
PROCUREMENT ITEMS	ID		FY2000	FY	/2001	FY	2002	FY	2003			
	CODE	QTY.	COST		COST	QTY.	COST	QTY.	COST			
5. IW FLIGHTS (1) (2)	A		\$2,	053	\$4,434							
Totals:			\$14,	110	\$15,537		\$9,623					
Remarks:												
(1) Multiple quantities and/or ur	it agata agagaiat	ad with C	2 Countermos	ouroo oquinmont								
Corp, Camden NJ; and Southv	vest Research ind	C (SVKI),	, San Antonio	1.								

BUDGET ITEM JUS	DATE:	JUNE 2001							
APPROP CODE/BA: OPAF/ELECTRONICS & TELECOMMUNICATION EQUIPMENT					P-1 NOMENCLATURE: BASE LEVEL DATA AUTOMATION PROGRAM				
	FY2000	FY2001	FY2002	FY2003	FY2004	FY2005	FY2006	FY2007	
QUANTITY									
COST (in Thousands)	\$25,623	\$23,258	\$12,895	\$12,879	\$13,170	\$13,425	\$14,612	\$14,937	

#### **Description:**

Base Level Data Automation (BLDA) consists of several standard Air Force-wide base level computer programs. These programs include automation support of base level functions such as 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), the migration to open systems architecture and software standardization at Defense Enterprise Computing Centers (DECC). 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.

Items for BLDA requested in FY02 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. This administration has not addressed FY 2003-2007 requirements. All FY 2003-2007 budget estimates included in this book are notional only and subject to change.

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 base level system for command and control of cargo and passenger movements, but contributes significantly to the Global Transportation Network (GTN), the Department of Defense system for in-transit visibility. FY00-02 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

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# BUDGET ITEM JUSTIFICATION (EXHIBIT P-40) DATE: JUNE 2001 APPROP CODE/BA: P-1 NOMENCLATURE: OPAF/ELECTRONICS & TELECOMMUNICATION EQUIPMENT BASE LEVEL DATA AUTOMATION PROGRAM

#### Description (cont.):

processing.

2. WING AUTOMATIC DATA PROCESSING (ADP) SUPPORT (WAS): This program provides for Life Cycle Management 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 DECCs 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. FY00-02 funding continues to provide hardware upgrades and communications interfaces.

3. 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 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. FY00-02 funding continues the installation of 308 ATG devices and 3,170 ADC/FDS POS devices worldwide.

<b>BUDGET ITEM JUSTIFICATION (EXHIBIT P-</b>	-40)		DATE: JUNE 2	2001
APPROP CODE/BA:		P-1 NOMENCLATURE:		
OPAF/ELECTRONICS & TELECOMMUNICATION EQU	UIPMENT	BASE LEVEL DATA AUTOMATI	ON PROGRAM	
<b>Description (cont.):</b> 4. STANDARD PROCUREMENT SYSTEM (SP	S)/Paperless Contractir	ng: No FY02 funding is requested	d.	
<b>P-1 ITEM</b> 49	NO:	<b>PAGE NO:</b> 108		Page 3 of 3

WEAPON SYSTEM COST ANALYSIS (EXHIBIT P- 5)					DATE: JUNE 2001									
APPROP CODE/BA: OPAF/ELECTRONICS & TELECOMMUNICATION EQUIPMENT					P-1 NOMENCLATURE: BASE LEVEL DATA AUTOMATION PROGRAM									
	IDENT		FY2000			FY2001			FY2002			FY2003		
WEAPON SYSTEM COST ELEMENTS	CODE	QTY	UNIT COST	TOTAL COST	QTY	UNIT COST	TOTAL COST	QTY	UNIT COST	TOTAL COST	QTY	UNIT COST	TOTAL COST	
1. CMOS	А			314			321			475				
2. WING ADP (WAS)	A			3,000			3,169			3,092				
3. FAMS	A			8,995			9,337			9,328				
4. SPS				{13,314]			{10,431}							
SPS COMM INFRASTRUCTURE	A			10,314			7,331							
ICS				3,000	)		3,100							
TOTALS:				25,623			23,258			12,895				
REMARKS:														
	<b>P-1 ITEM</b> 49	NO			PAG	<b>GE NO:</b> 109					Pa	ige 1 of 1		

BUDGET PROCUREMI	ENT HISTOR	Y PLANN	IING (EXHIBIT P- 54	A)		DATE: JU	NE 200	)1		
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)										
FY00			AFMC/SSG	OPT/FP (2)	MULTIPLE	SEP 00	NOV 00			
FY01			AFMC/SSG	OPT/FP (2)	MULTIPLE	JUL 01	OCT 01			
FY02			AFMC/SSG	OPT/FP (2)	MULTIPLE	OCT 01	JAN 02	Y		
2. WING ADP ( WAS) (1)										
FY00			AFMC/SSG	OPT/FP (3)	MULTIPLE	OCT 99	NOV 99			
FY01			AFMC/SSG	OPT/FP (3)	MULTIPLE	OCT 00	NOV 00			
FY02			AFMC/SSG	OPT/FP (3)	MULTIPLE	OCT 01	NOV 01	Y		
3. FAMS (1)										
FY00			AFMC/SA-ALC	OPT/FP (4)	MULTIPLE	NOV 99	JAN 00			
FY01			AFMC/SA-ALC	OPT/FP (4)	MULTIPLE	NOV 00	JAN 01			
FY02			AFMC/SA-ALC	OPT/FP (4)	MULTIPLE	NOV 01	JAN 02	Y		
	 P-1	<b>ITEM N</b> 49	0	PAGE NO 110	:		Pag	e 1 of	i 2	

BUDGET PROCUREMENT H	ISTOR	Y PLANN	ING (EXHIBIT P- 5A	A) DATE: JUNE 2001							
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.		DATE REV. AVAIL		
4. SPS COMM INFRASTRUCTURE (1)											
FY00			AFMC/SSG	OPT/FP (5)	MULTIPLE	DEC 99	APR 00				
FY01			AFMC/SSG	OPT/FP (5)	MULTIPLE	DEC 00	APR 01				
<ol> <li>Quantity/unit costs vary depending on configuration of each site.</li> <li>Options to multiple contracts to include: FY00 Automatic Identification Technology II contract with Symbol Technologies, Inc., Holtsville, New York; Super Mini Contract with PRC Corp., Reston VA; GSA Schedule Contracts. Award/delivery dates represent the date of first award/delivery.</li> <li>Options to multiple GSA Schedule contracts. Award/delivery dates represent the date of first award/and delivery.</li> <li>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.</li> <li>Options to Desk Top V and Ulana standard contracts. Award/delivery dates represent the date of first award/delivery.</li> </ol>											
	P-1	49	0	<b>PAGE NO</b> 111			Page	e 2 of	2		

BUDGET ITEM JUS	DATE:	<b>DATE:</b> JUNE 2001								
APPROP CODE/BA: OPAF/ELECTRONICS &		ICATION EQUIP	MENT		P-1 NOMENCLATURE: THEATER BATTLE MANAGEMENT C2 SYSTEM					
	FY2000	FY2001	FY2002	FY2003	FY2004	FY2005	FY2006	FY2007		
QUANTITY										
COST (in Thousands)	\$47,212	\$54,510	\$47,291	\$56,742	\$58,656	\$59,271	\$60,035	\$61,384		

#### **Description:**

THEATER BATTLE MANAGEMENT CORE SYSTEMS (TBMCS) is an integrated battle management system used to plan, execute and assess 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 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 35, Intelligence Data Handling System (IDHS), through FY00. Beginning in FY01, CIS (IDHS) funding was realigned with the TBMCS P-1 line.

TBMCS funds will procure a full complement of equipment for initial unit level installations at four sites per year in FY00 and FY01 and three in FY02. Currently 19 unit level installations are complete and 8 are in progress. FY00-02 funding will also procure hardware upgrades for fielded force and unit level installations necessary to sustain operations and to support TBMCS software versions. FY00-02 funds also provide

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BUDGET ITEM JUSTIFICATION (EXHIBIT P-40)	DATE: JUNE 2001			
APPROP CODE/BA:	P-1 NOMENCLATURE:			
OPAF/ELECTRONICS & TELECOMMUNICATION EQUIPMENT	THEATER BATTLE MANAGEMENT C2 SYSTEM			

#### **Description (cont.):**

required software licenses, type one training, interim contractor support, engineering support, and system program office support for TBMCS applications. This administration has not addressed FY 2003-2007 requirements. All FY 2003-2007 budget estimates included in this book are notional only and subject to change.

Additionally, FY00/01 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. No FY02 funds requested.

TBMCS is replacing CIS with improved hardware and installation/integration support for intelligence systems required at the air component/force and wing/squadron levels. FY01/02 funding procures commercial-off-the-shelf equipment and government furnished equipment to include user workstations, servers, mass data storage devices, printers, and equipment supporting connectivity to the Defense Information Systems Network (DISN).

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WEAPON SYSTEM COST ANALYSIS (EXHIBIT P- 5)						DATE: JUNE 2001							
APPROP CODE/BA: OPAF/ELECTRONICS & TELECOMMUNICATION EQUIPMENT					P-1 NOMENCLATURE: THEATER BATTLE MANAGEMENT C2 SYSTEM								
	IDENT		FY2000			FY2001			FY2002	2		FY2003	
WEAPON SYSTEM COST ELEMENTS	CODE	QTY	UNIT COST	TOTAL COST	QTY	UNIT COST	TOTAL COST	QTY	UNIT COST	TOTAL COST	QTY	UNIT COST	TOTAL COST
1. TBMCS				{20,939	)}		{24,538}			{21,902}			
A. FORCE	А			8,89	7		10,526			12,319			
B. UNIT	А			7,04	2		9,837			6,514			
C. CIC (TCT)	А			5,00	0		1,200						
D. CIS (INTEL)	A						2,975			3,069			
2. COTS SOFTWARE LICENSES				2,13	2		3,901			7,056			
3. TYPE 1 TRAINING (1)				8,68	6		13,300			7,060			
4. INTERIM CONTRACTOR SUPPORT (ICS	6)			1,50	0		2,197			2,367			
5. SYSTEM ENGINEERING				9,76	9		7,089			6,196			
6. PROGRAM SUPPORT				4,18	6		3,485			2,710			
TOTALS:				47,21	2		54,510			47,291			
	<b>REMARKS:</b> 1. The evolutionary nature of the TBMCS software development results in frequent software releases consistent with spiral development, which manifests an increase for Type 1 training requirements. Type 1 training is also an on-going requirement driven by the TBMCS installation schedule.												
	<b>P-1 ITEM</b> 50	NO			PA	<b>GE NO:</b> 114					Pa	age 1 of 1	

BUDGET PROCUREMENT HISTORY PLANNING (EXHIBIT P- 5A)						DATE: JUNE 2001					
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											
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				
FY02 (1)			AFMC/ESC	OPT/IDIQ	GSA, MULTIPLE (2)	OCT 01	DEC 01	Y			
B. UNIT											
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				
FY02 (1)			AFMC/ESC	OPT/IDIQ	GSA, MULTIPLE (2)	OCT 01	DEC 01	Y			
C. CIC (TCT)											
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				
	P-1	<b>ITEM N</b> 50	10	<b>PAGE NO</b> 115	:		Pag	e 1 of	2		

BUDGET PROCUREMENT H	IISTOR	Y PLANN	ING (EXHIBIT P- 54	A)		DATE: JUNE 2001				
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	
D. CIS (INTEL)										
FY01 (1)			AFMC/ESC	OPT/IDIQ	GSA, MULTIPLE (2)	NOV 00	JAN 01			
FY02 (1)			AFMC/ESC	OPT/IDIQ	GSA, MULTIPLE (2)	NOV 01	JAN 02	Y		
selected, at this time, as an alterr 3. The CIC effort requires two ma Systems, Colorado Springs, CO, Award/Delivery dates reflect date	ajor contr for integ	ractors: G	SA to procure the Gov assembly tasks. Opt	vernment Furnished	Equipment and Lockheed-M	lartin Command				
	P-1	1 ITEM NO 50		<b>PAGE NO</b> 116			Page	e 2 of	2	

BUDGET ITEM JUS	DATE:	DATE: JUNE 2001									
OPAF/ELECTRONICS 8	LELECOMMUN	ICATION EQUIP	MENI	BASE INF	BASE INFORMATION INFRASTRUCTURE						
	FY2000	FY2001	FY2002	FY2003	FY2004	FY2005	FY2006	FY2007			
QUANTITY											
COST (in Thousands)	\$132,491	\$175,657	\$154,097	\$156,409	\$220,709	\$238,092	\$238,594	\$248,411			

#### **Description:**

The Base Information Infrastructure (BII) procurement line funds the Combat Information Transport System (CITS) program, network connectivity, Public Key Infrastructure (PKI), and Global Combat Support System - Air Force (GCSS-AF) Integration Framework fielding and infrastructure.

1. COMBAT INFORMATION TRANSPORT SYSTEM (CITS): CITS is the Air Force component of the National Information Infrastructure (NII) and the Defense Information Infrastructure (DII). 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 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 four product areas which are centrally funded and managed by the CITS Program Office. The product areas are described below:

a. INFORMATION TRANSPORT SYSTEM (ITS): The ITS product area provides and keeps technologically current, a broad-band, fiber-optic digital information transport network to provide near-instantaneous information transfer for each Air Force base and selected geographically separated units (GSUs). The system will have sufficient capacity to meet each base's data, voice, video, imagery, and telemetry

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UNCLASSIFIED								

BUDGET ITEM JUSTIFICATION (EXHIBIT P-40)		DATE: JUNE 2001
APPROP CODE/BA:	P-1 NOMENCLATURE:	
OPAF/ELECTRONICS & TELECOMMUNICATION EQUIPMENT	BASE INFORMATION INFRAST	RUCTURE

#### **Description (cont.):**

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. FY00-02 funds procure the initial phase of ITS installation projects for the highest priority bases. Installs may include: fiber optic backbone, network equipment, encryption devices, voice and video interface, building wiring, training, test and support. 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.

b. NETWORK MANAGEMENT SYSTEM/BASE INFORMATION PROTECT (NMS/BIP): The NMS/BIP product area delivers and keeps technologically current a modern network management system for base Network Control Centers, MAJCOM Network Operations and Security Centers, and the Air Force Network Operations and Security Center. 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 and network management tools for each Air Force base to detect, deter, isolate, contain, reconstitute, and recover from information systems and network security intrusions or attacks and keep these tools current with the threat. The tools enable information integrity, security, and confidentiality to be 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 FY00-02 funds continue the installation and support of critical information equipment capabilities in fixed-based and deployed installations worldwide. Additionally, standard network management and trouble ticketing solutions will be provided for fixed-based installations.

c. VOICE SWITCHING SYSTEM (VSS): The VSS product area, formerly Digital Switch System (DSS), will provide technology upgrades, line expansion 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 this initial capability and plans for new



BUDGET ITEM JUSTIFICATION (EXHIBIT P-40)	DATE: JUNE 2001	
APPROP CODE/BA:	P-1 NOMENCLATURE:	
OPAF/ELECTRONICS & TELECOMMUNICATION EQUIPMENT	BASE INFORMATION INFRAST	RUCTURE

#### Description (cont.):

mission growth and increasing demands for fax machine and secure telephone dial-in connectivity. FY00-02 funds procure upgrades for 201 main base switches plus switch upgrade projects in AF inventory as required, bringing them to the manufacturer's current release.

d. TELECOMMUNICATIONS MANAGEMENT SYSTEM (TMS): This product area acquires, fields and supports 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. FY00-02 funds procure 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. FY01/02 funds will close this gap and provide network routers, hubs, and internal building wiring to connect critical new systems to the fiber optic backbone provided by CITS. In FY02, the network connectivity effort will provide an integrating capability that ensures the Combat Information Transport System (CITS), Public Key Infrastructure, Global Combat Support System, long haul networks, and automated information system infrastructure requirements are molded into a cohesive network-centric environment. One of this effort's most important projects is to evaluate and provide connectivity for downward directed automated programs. Enhancing the situational awareness of our information environment is also increased through direct support to the tiered operational construct of the AF.

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. FY00-02 funds procure infrastructure computers and Air Force-wide public/private key hardware needed to generate, certify, and distribute public/private key pairs for

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UNCLASSIFIED								

BUDGET ITEM JUSTIFICATION (EXHIBIT P-40)	DATE: JUNE 2001	
APPROP CODE/BA:	P-1 NOMENCLATURE:	
OPAF/ELECTRONICS & TELECOMMUNICATION EQUIPMENT	BASE INFORMATION INFRAST	RUCTURE

#### **Description (cont.):**

computer applications requiring information assurance capabilities (digital signatures and data encryption). Funds will support the initial standup and operational support of registration, training and awareness, directories for certificates, and end user hardware and software required to support Air Force's implementation of DoD PKI.

4. GLOBAL COMBAT SUPPORT SYSTEM - AIR FORCE (GCSS-AF): GCSS-AF provides the warfighter with timely, accurate and trusted combat support information executed throughout the full spectrum of Air Force and Joint operations. GCSS-AF is based on web technology with an emphasis on componentization of common capabilities. Componentization reduces the AF cost of developing systems by providing previously established common capabilities. Security using PKI and Directory Services will be integrated into the overall architecture so it will not need to be developed for each system residing on GCSS-AF. Beginning in FY02, funding is necessary for the integration framework (architecture) to be fielded AF wide. The current plan calls for fielding the framework at three Defense Information Systems Agency (DISA) Defense Enterprise Computing Centers, one each in CONUS, Europe and Asia with possible expansion to two or more CONUS sites. Fielding will install application, security, web, messaging, and proxy servers, software and its associated licenses at the chosen sites. Additionally, fielding will provide six "ship sets" of deployable hardware and software.

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BUDGET ITEM JUSTIFICATION FOR AGGREGATED ITEMS (EXHIBIT P- 40A)							DATE: JU	JNE 2001	
APPROP CODE/BA: OPAF/ELECTRONICS & TELECOMMUNICATION EQUIPMENT				P-1 NOMENCLATURE: BASE INFORMATION INFRASTRUCTURE					
PROCUREMENT ITEMS	ID	FY2	2000	FY2	001	FY2	002	FY	2003
	CODE	QTY.	COST		COST	QTY.	COST	QTY.	COST
1. COMBAT INFORMATION TRANSPORT SYSTEM (CITS)			\${131,407	7}	\${157,213}		\${140,827}		
A. INFORMATION TRANSPORT SYSTEM (ITS)	А	29	\$94,89	3 15	\$107,536	14	\$107,511		
B. NETWORK MANAGEMENT SYSTEM/BASE INFORMATION PROTECT (NMS/BIP)	A	75	\$22,13	2 106	\$35,316	106	\$15,566		
C. VOICE SWITCHING SYSTEM (VSS)	А	62	\$13,05	1 203	\$10,568	204	\$15,995		
D. TELECOMMUNICATIONS MANAGEMENT SYSTEM (TMS)	A	4	\$1,33	1 7	\$3,793	13	\$1,755		
2. NETWORK CONNECTIVITY	А				\$5,800		\$3,915		
			• · · ·				<b>.</b>		
3. PUBLIC KEY INFRASTRUCTURE (PKI)	A		\$1,08	4	\$12,644		\$4,599		
4. GLOBAL COMBAT SUPPORT SYSTEM -	А						\$4,756		
AIR FORCE				_					<u> </u>
Totals:			\$132,49	1	\$175,657		\$154,097		
Remarks:									
F	<b>P-1 ITEM</b> 52	NO		<b>PAGE N</b> 121	O:			Page 1	of 1

BUDGET PROCUREMENT HISTORY PLANNING (EXHIBIT P- 5A)						DATE: JUNE 2001				
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)										
FY00 (1) (2) (3)	29		AFMC/ESC	DO/FFP	GENERAL DYNAMICS, NEEDHA LUCENT, GREENSBORO, NC; 38 EIW, TINKER AFB, OK		DEC 99			
FY01 (1) (2) (3)	15		AFMC/ESC	DO/FFP	GENERAL DYNAMICS, NEEDHA AVAYA, WASHINGTON, DC; TRV ANTONIO, TX		DEC 00			
FY02 (1) (2) (3)	14		AFMC/ESC	DO/FFP	GENERAL DYNAMICS, NEEDHA AVAYA, WASHINGTON, DC	M, MA; OCT 01	DEC 01	Y		
B. NETWORK MANAGEMENT SYSTEM/BASE INFORMATION PROTECT (NMS/BIP)										
FY00 (1) (2) (3)	75		AFMC/ESC	DO/FFP	EDS, HERNDON, VA TRW, SAN ANTONIO, TX	NOV 99	JAN 00			
FY01 (1) (2) (3)	106		AFMC/ESC	DO/FFP	EDS, HERNDON, VA TRW, SAN ANTONIO, TX	NOV 00	JAN 01			
FY02 (1) (2) (3)	106		AFMC/ESC	DO/FFP	EDS, HERNDON, VA TRW, SAN ANTONIO, TX	NOV 01	JAN 02	Y		
	P-1	<b>ITEM N</b> 52	0	PAGE NO 122	:		Page	e 1 of	3	

BUDGET PROCUREMENT HISTORY PLANNING (EXHIBIT P- 5A)						DATE: JU	INE 200	01		
APPROP CODE/BA: OPAF/ELECTRONICS & TELECOMMUNICATION EQUIPMENT			N EQUIPMENT	P-1 NOMENCLATURE: BASE INFORMATION INFRASTRUCTURE						
ITEM / FISCAL YEAR	QTY.	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)										
FY00 (1) (2) (3)	2		AFMC/ESC	DO/FFP	LUCENT, GREENSBORO, NC	OCT 99	DEC 99			
FY00 (1) (2) (3)	60		AFMC/ESC	DO/FFP	GENERAL DYNAMICS, NEEDHA	M MA DEC 99	SEP 00			
FY01 (1) (2) (3)	203		AFMC/ESC	DO/FFP	GENERAL DYNAMICS, NEEDHA LUCENT, GREENSBORO, NC	M MA; OCT 00	SEP 01			
FY02 (1) (2) (3)	204		AFMC/ESC	DO/FFP	LUCENT, GREENSBORO, NC	OCT 01	SEP 02	Y		
D. TELECOMMUNICATIONS MANAGEMENT SYSTEM (TMS)										
FY00 (1) (2) (3)	4		AFMC/ESC	DO/FFP	ANSTEC, INC, FAIRFAX, VA	OCT 99	MAY 00			
FY01 (1) (2) (3)	7		AFMC/ESC	DO/FFP	ULANA II CONTRACT, GUNTER	AFB APR 01	OCT 01			
FY02 (1) (2) (3)	13		AFMC/ESC	DO/FFP	ULANA II CONTRACT, GUNTER	AFB OCT 01	MAY 02	Y		
2. NETWORK CONNECTIVITY										
FY01 (2)			HQ AFCA	DO/FFP	MULTIPLE (4)		MAY 01			
FY02 (2)			HQ AFCA	DO/FFP	MULTIPLE (4)	OCT 01	MAY 02	Y		
	P-1	<b>ITEM N</b> 52	0	PAGE NO 123	:		Pag	e 2 of	- 3	

BUDGET PROCUREMENT HISTORY PLANNING (EXHIBIT P- 5A)					DATE	: JUI	NE 200	)1		
<b>APPROP CODE/BA:</b> OPAF/ELECTRONICS & TELECOMMUNICATION EQUIPMENT			I EQUIPMENT	P-1 NOMENCLA BASE INFORMATION	ATURE: ON 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
3. PUBLIC KEY INFRASTRUCTURE (PKI) (5)										
FY00			AFMC/SSG	DO/FFP	MULTIPLE (5)		JAN 00	FEB 00		
FY01			AFMC/SSG	DO/FFP	MULTIPLE (5)		DEC 00	JAN 01		
FY02			AFMC/SSG	DO/FFP	MULTIPLE (5)		DEC 01	JAN 02	Y	
4. GLOBAL COMBAT SUPPORT SYSTEM - AIR FORCE										
FY02			AFMC/SSG	DO/FFP	MULTIPLE (6)		OCT 01	NOV 01	Y	

#### **REMARKS**:

1. Quantities reflect number of fixed-based, deployed installations, or number of installation projects. Quantities may vary based on MAJCOM operational requirement changes.

2. Unit cost varies because of number/types of equipment being procured based upon 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.

6. Multiple contractors via Commercial Information Technology - Product Area Directorate (CIT-PAD). Typical vendors are Sun Microsystems, Palo Alto, CA and Dell, Round Rock, TX. Award/delivery dates reflect date of first award and delivery.

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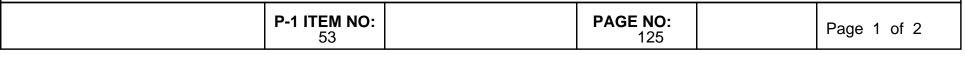
BUDGET ITEM JUS	DATE:	JUNE 2001						
APPROP CODE/BA		ICATION EQUIP	MENT	P-1 NON	<b>IENCLATURE</b>	:		
	FY2000	FY2001	FY2002	FY2003	FY2004	FY2005	FY2006	FY2007
QUANTITY								
COST (in Thousands)	\$5,240	\$6,920	\$10,867	\$7,925	\$6,422	\$6,537	\$6,666	\$6,813

#### **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. Items requested in FY02 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. This administration has not addressed FY 2003-2007 requirements. All FY 2003-2007 budget estimates included in this book are notional only and subject to change.

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. FY00-02 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 equipment, telephone switches, Command Center Demand Assigned Multiple Access-compliant radios, network management equipment and software, coalition interoperability local area networking equipment, information assurance equipment and software, and enterprise software licenses.

2. JOINT COMMUNICATIONS SUPPORT ELEMENT (JCSE): JCSE, assigned under US Joint Forces Command, is the only joint DoD unit



<b>BUDGET ITEM JUSTIFICATION (EXHIBIT P-40)</b>	DATE: JUNE 2001			
APPROP CODE/BA:	P-1 NOMENCLATURE:			
OPAF/ELECTRONICS & TELECOMMUNICATION EQUIPMENT	USCENTCOM			

#### **Description (cont.)**:

specifically formed to provide C4 systems support for Joint Chiefs of Staff (JCS) contingency operations worldwide. FY00-02 funds provide the Air Force's one-third share to procure C4 equipment in support of deployed Joint Task Force Headquarters and deployed Special Operations Command Headquarters. Equipment requirements are approved annually by the JCS and procurement for the AF share is executed by JCSE through the Executive Acquisition Agent (Air Force).

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BUDGET ITEM JUSTIFICATION FOR AGGREGATED ITEMS (EXHIBIT P- 40A)								DATE: JU	DATE: JUNE 2001		
APPROP CODE/BA: OPAF/ELECTRONICS & TELECOMMUNICATION EQUIPMENT					P-1 NOMENCLATURE: USCENTCOM						
PROCUREMENT ITEMS	ID		FY2000	FY2001			FY	FY2002		FY2003	
	CODE	QT	Y. COST	-	C	DST	QTY.	COST	QTY.	COST	
1. USCENTCOM COMMAND AND CONTROL SYSTEMS	А		\$ 2,	232		\$4,035		\$5,791			
2. JOINT COMMUNICATIONS SUPPORT ELEMENT (JCSE)	A		\$3,	008		\$2,885		\$5,076			
Totals:			\$5,	240		\$6,920		\$10,867			
P	-1 ITEM   53	NO			<b>PAGE NO:</b> 127				Page 1	of 1	

BUDGET PROCUREMENT H	UDGET PROCUREMENT HISTORY PLANNING (EXHIBIT P- 5A)								
APPROP CODE/BA: OPAF/ELECTRONICS & TELEC		NICATION	I EQUIPMENT	P-1 NOMENCLA	ATURE:				
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)									
FY00			USCENTCOM	C/FFP	MULTIPLE (2)	FEB 00	MAR 00		
FY01			USCENTCOM	C/FFP	MULTIPLE (2)	DEC 00	FEB 01		
FY02			USCENTCOM	C/FFP	MULTIPLE (2)	DEC 01	JAN 02	Y	
2. JOINT COMMUNICATIONS SUPPORT ELEMENT (JCSE) (1)									
FY00			11WING	C/FFP	MULTIPLE (2)	MAR 00	AUG 00		
FY01			11WING	C/FFP	MULTIPLE (2)	FEB 01	JUL 01		
FY02			11WING	C/FFP	MULTIPLE (2)	FEB 02	JUL 02	Y	
REMARKS:			, <b>,</b> , ,						

1. Quantities and unit costs vary because multiple types of equipment are being procured.

2. Multiple contract awards for small acquisitions through different government contracts and contracting agencies, for example: 6th Contracting Squadron, MacDill AFB, FL; NSA, Ft Meade, MD; PM-MILSATCOM, Ft Monmouth, NJ; and SPAWAR, North Charleston, SC. Contractor/vendor examples: GTE, Needham Heights, MA; Booz-Allen Hamilton, St. Inigoes, MD; MITRE, Fort Monmouth, NJ; SAIC, San Diego, CA; Microsoft, Charlotte, NC; Sun, McLean, VA; Xerox, Tampa, FL; LNR, Hauppauge, NY; and NISE East, Portsmouth, VA. Award/delivery dates reflect date of first award and delivery.

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BUDGET ITEM JUS	TIFICATION (I	DATE:	DATE: JUNE 2001							
APPROP CODE/BA	:		P-1 NOMENCLATURE:							
OPAF/ELECTRONICS &	TELECOMMUN	ICATION EQUIP	MENT	DEFENSE	DEFENSE MESSAGE SYSTEM (DMS)					
	FY2000	FY2001	FY2002	FY2003	FY2004	FY2005	FY2006	FY2007		
QUANTITY										
COST (in Thousands)	\$22,472	\$17,366	\$13,336	\$20,442	\$20,707	\$20,907	\$21,325	\$21,796		

### **Description:**

This program acquires equipment necessary to implement Air Force (AF) email/messaging requirements for the Defense Message System (DMS). Items requested in FY02 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 peacetime missions of the AF in lieu of the base telecommunications centers and Automatic Digital Network (AUTODIN) switches. DMS is an OSD-mandated system that is in the process of replacing AUTODIN, a system which is now completing the first year of a 3-year termination plan. AUTODIN services will terminate in FY03.

Per the Joint Operational Requirements Document, record messaging communicates and documents command and control directives, agreements, financial data, and other mission essential data while providing 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. This 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 30 Jun 01 (90 percent of Air Force users are in this category)

- All SPECAT/SHD users (approximately 5 percent of Air Force users) will transition within 6 months of the version 3.0 fielding decision (expected in FY02)

- Remaining users (intelligence and allied communities) will transition by the end of FY03



<b>BUDGET ITEM JUSTIFICATION (EXHIBIT P-40)</b>	DATE: JUNE 2001		
APPROP CODE/BA:	P-1 NOMENCLATURE:		
OPAF/ELECTRONICS & TELECOMMUNICATION EQUIPMENT	DEFENSE MESSAGE SYSTEM	(DMS)	

#### **Description (cont.):**

Without DMS funding, the AF will not have the capability to support the operational community's message requirements and would have an increased susceptibility to information operations attacks conducted by only a mildly sophisticated adversary. These attacks could easily induce significant confusion into operations, increasing the likelihood of American casualties.

This administration has not addressed FY 2003-2007 requirements. All FY 2003-2007 budget estimates included in this book are notional only and subject to change.

1. DMS Components: FY00-02 funding continues all DMS efforts at 90 Air Force bases and 243 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. User communities are now being transitioned to DMS services. Funding levels must be maintained as DMS transitions to the system of record.

2. DMS Security: No FY02 funds requested.

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. FY00-02 funding continues DMS deployment to 70 percent of the remaining deployable units and adds 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. FY00-02 funding continues DMS deployment to deployable units.

<b>P-1 ITEM NO:</b> 54	<b>PAGE NO:</b> 130	Page 2 of 2
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WEAPON SYSTEM COST ANA	LYSIS (EXH	IIBIT P	· 5)						I	DATE:	JUNE 2	2001	
APPROP CODE/BA: OPAF/ELECTRONICS & TELECO	MMUNICATI	ON EQL	IIPMENT		P-1 NOMENCLATURE: DEFENSE MESSAGE SYSTEM (DMS)								
	IDENT		FY2000			FY2001			FY2002		FY2003		
WEAPON SYSTEM COST ELEMENTS	CODE	QTY	UNIT COST	TOTAL COST	QTY	UNIT COST	TOTAL COST	QTY	UNIT COST	TOTAL COST	QTY	UNIT COST	TOTAL COST
1. DMS COMPONENTS	А			15,82	7		10,659			9,531			
2. DMS SECURITY				{1,200	)}		{1,550}						
A. FORTEZZA	А			50	0		800						
B. GUARDS	А			70	0		750						
3. DEPLOYABLE DMS	А			5,44	5		5,157			3,805			
TOTALS:				22,472	2		17,366			13,336			
REMARKS:													
	<b>P-1 ITEM</b> 54	NO			ΡΑ	<b>GE NO:</b> 131					Pa	age 1 of 1	

BUDGET PROCUREMEN	T HISTOR		IING (EXHIBIT P- 54	A)		DATE: JUNE 2001					
APPROP CODE/BA: OPAF/ELECTRONICS & TE	LECOMMUI	NICATION	N 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)											
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				
FY02			AFMC/SSG	OPT (2)/FFP	LOCKHEED-MARTIN CORP., MANASSAS, VA	DEC 01	FEB 02	Y	 		
2. DMS SECURITY (1) (3)											
A. FORTEZZA											
FY00			AFMC/SSG	MIPR/FFP	NAVY/MYKOTRONX, TORRANCE,	CA APR 00	MAY 00				
FY01			AFMC/SSG	MIPR/FFP	NAVY/MYKOTRONX, TORRANCE,	CA APR 01	MAY 01				
B. GUARDS											
FY00			AFMC/SSG	MIPR/FFP	NSA, FT. MEADE, MD	APR 00	MAY 00				
FY01			AFMC/SSG	MIPR/FFP	NSA, FT. MEADE, MD	APR 01	MAY 01				
	P-1	<b>ITEM N</b> 54	0	<b>PAGE NO</b> 132	:		Pag	e 1 of	2		

BUDGET PROCUREMENT H	BUDGET PROCUREMENT HISTORY PLANNING (EXHIBIT P- 5A)								DATE: JUNE 2001				
APPROP CODE/BA: OPAF/ELECTRONICS & TELEC	COMMUN	NICATION	CATION EQUIPMENT P-1 NOMENCLATURE: DEFENSE MESSAGE SYSTEM (DMS)										
ITEM / FISCAL YEAR	QTY.	UNIT COST	LOCATION OF PCO	CONTRACT METHOD & TYPE	CONTRACTOR AND LOCATION		VD. ATE	DATE FIRST DEL.	SPECS AVAIL NOW	DATE REV. AVAIL			
3. DEPLOYABLE DMS (1) (3)													
FY00			AFMC/SSG	OPT (3)/FFP	TRW, SAN ANTONIO, TX	AP	R 00	MAY 00					
FY01			AFMC/SSG	OPT (3)/FFP	TRW, SAN ANTONIO, TX	AP	R 01	MAY 01					
FY02			AFMC/SSG	OPT (3)/FFP	TRW, SAN ANTONIO, TX	AP	R 02	MAY 02	Y				
2. Option to Lockheed-Martin Co	. Quantities and unit costs vary due to different site configurations. 2. Option to Lockheed-Martin Corp., Manassas VA contract awarded Oct 96.												

P-1 ITEM NO 54	<b>PAGE NO:</b> 133	Page 2 of	2

BUDGET ITEM JUS	TIFICATION (I	DATE:	DATE: JUNE 2001							
APPROP CODE/BA		ICATION EQUIP	MENT	_	P-1 NOMENCLATURE: NAVSTAR GPS SPACE					
	FY2000	FY2001	FY2002	FY2003	FY2004	FY2005	FY2006	FY2007		
QUANTITY										
COST (in Thousands)	\$11,776	\$1,637	\$4,003	\$6,719	\$4,368	\$4,380	\$4,771	\$1,061		

### **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 way points. Air Force UE consists of 5-channel handheld sets, Precision Lightweight GPS Receiver, (funded in Other Procurement, Air Force appropriation), and 5-channel airborne sets (funded in Aircraft Procurement appropriation). This administration has not addressed FY 2003-2007 requirements. All FY 2003-2007 budget estimates included in this book are notional only and subject to change.

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 Disposal 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. FY00-02 funding will extend the PLGR warranties.

2. KEY DATA LOADING INSTALLATION FACILITY (KLIF)/GPS SECURITY DEVICE: FY00-02 funding provides for programming of black key algorithms into Selective Availability Anti-Spoofing Module (SAASM) chips, providing an accurate positioning solution for GPS

	<b>P-1 ITEM NO:</b> 56		<b>PAGE NO:</b> 134		Page 1 of 2					
UNCLASSIFIED										

BUDGET ITEM JUSTIFICATION (E	UDGET ITEM JUSTIFICATION (EXHIBIT P-40)							
APPROP CODE/BA:			P-1 NOME	NCLATURE:				
OPAF/ELECTRONICS & TELECOMMUNI	CATION EQUIPME	NT	NAVSTAR G	PS SPACE				
<ul> <li><b>Description (cont.):</b> users using secure equipment.</li> <li>3. DEFENSE ADVANCED GPS REC with precise positioning using SAASM integration and support capabilities are vehicles, in airborne and air-drop opera</li> <li>4. HANDHELD TESTING SUPPORT as well as the current GPS handheld re- improvements for PLGR and DAGR.</li> <li>5. ALTERNATE MASTER CONTROL</li> </ul>	<ol> <li>It will be interop minimally affected ations, and in weap</li> <li>FY00-02 fundin ceiver (PLGR). T</li> </ol>	berable with the l d. DAGR will b ons integration. g provides testin esting includes e	PLGR existing be primarily us The FY02 fung support for engineering ch	g interfaces and sup sed in the stand alo nding will procure the next-generation ange proposals, ch	oport equipment so ne mode, in wheele the First Article Te n user equipment co	that present ed and tracked est (FAT) units. oncepts (DAGR),		
	<b>P-1 ITEM NO:</b> 56			<b>PAGE NO:</b> 135		Page 2 of 2		

WEAPON SYSTEM COST ANALY	VEAPON SYSTEM COST ANALYSIS (EXHIBIT P- 5)								C	DATE:	JUNE 2	2001	
APPROP CODE/BA: OPAF/ELECTRONICS & TELECOMM	IUNICATI	ON EQI	UIPMENT		P-1 NOMENCLATURE: NAVSTAR GPS SPACE								
			FY2000		FY2001				FY2002			FY2003	
WEAPON SYSTEM COST ELEMENTS	IDENT CODE	QTY	UNIT COST	TOTAL COST	QTY	UNIT COST	TOTAL COST	QTY	UNIT COST	TOTAL COST	QTY	UNIT COST	TOTAL COST
NAVSTAR GPS				{11,776	<b>b</b> }		{1,637}			{4,003}			
1. PLGR WARRANTY EXTENSION				12	7		121			365			
2. KLIF/GPS SECURITY DEVICES				70	8		644			657			
3 DAGR	А							300	9000	2,700			
4 HANDHELD TEST SUPPORT				150	0		872			281			
5 ALTERNATE MASTER CONTROL STATION	A I			944	1								
TOTALS:				11,77	6		1,637			4,003			
F	<b>P-1 ITEM</b> 56	NO			PA	<b>GE NO:</b> 136					Pa	age 1 of 1	

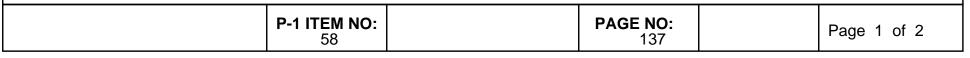
BUDGET ITEM JUS	TIFICATION (E	EXHIBIT P-40)	)			DATE:	JUNE 2001						
APPROP CODE/BA	:			P-1 NOMENCLATURE:									
OPAF/ELECTRONICS &	AF/ELECTRONICS & TELECOMMUNICATION EQUIPMENT					NUDET DETECTION SYSTEM (NDS) SPACE							
	FY2000	FY2001	FY2002	FY2003	FY2004	FY2005	FY2006	FY2007					
QUANTITY													
COST (in Thousands)	\$3,454	\$2,649	\$8,470	\$7,990	\$12,735	\$11,946	\$12,412	\$12,748					

### **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 Air Force Space Command (AFSPC) {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 space and ground mission-processing segments. 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 ground mission processing segment consists of the Integrated Correlation and Display System (ICADS), Ground NDS Terminals (GNT), and the DSP/NDS Advanced Radiation Detection Units (ARDU).

The GNT processes raw NDS sensor data and is the only system that provides 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 US Space Command (USSPACECOM), USSTRATCOM, Air Combat Command (ACC), AFTAC, NCA, and Congress. NUDET reporting is required for the ITW/AA, Nuclear Force Management, and nuclear test ban treaty monitoring missions.

This administration has not addressed FY 2003-2007 requirements. All FY 2003-2007 budget estimates included in this book are notional only and subject to change.



BUDGET ITEM JUSTIFICATION (EXHIBIT P-40)	DATE: JUNE 2001				
APPROP CODE/BA:	P-1 NOMENCLATURE:				
OPAF/ELECTRONICS & TELECOMMUNICATION EQUIPMENT	NUDET DETECTION SYSTEM (NDS) SPACE				
Description (cont.):					
1 ICADS UPGRADES: EY00 funding provided for ICADS upgrades to	enhance compatibility with the	new Block IIF GPS satellites and			

1. ICADS UPGRADES: FY00 funding provided for ICADS upgrades to enhance compatibility with the new Block IIF GPS satellites and specifically to process the detection data of the new Block IIF satellites. FY01 funding continues to upgrade the detection data for the new Block IIF GPS satellites. FY02 funding will provide for the continued life cycle replacement of ICADS computer hardware, receivers, antennas and communication links specifically to process the detection data of the new Block IIF satellites. FY02 funding also begins procurement, integration, and validation of the operational ICADS IIF computing equipment.

2. GNT UPGRADE: FY02 funding for GNT is required for the purchasing, integration, and validation of the operational GNT computing equipment for the Block IIF GPS satellites.

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<b>P-1 ITEM NO:</b> 58		<b>PAGE NO:</b> 138	Page 2 of 2

BUDGET ITEM JUSTIFICATI	ON FOR AGG	REGATE	D ITEMS (EX	(HIBIT P- 40A)			DATE: JU	JNE 2001	
APPROP CODE/BA: OPAF/ELECTRONICS & TELEC	COMMUNICATIO	ON EQUIF	PMENT	P-1 NOME NUDET DETE	ENCLATURE: ECTION SYSTEM	I (NDS) SPA	CE		
ROCUREMENT ITEMS ID FY2000		FY2000	F	Y2001	FY	2002	FY	2003	
	CODE	QTY.	COST		COST	QTY.	COST	QTY.	COST
1. ICADS UPGRADE	A		\$3,4	454	\$2,649		\$4,998		
2. GNT UPGRADE	A						\$3,472		
Totals:			\$3,4	154	\$2,649		\$8,470		

BUDGET PROCUREMENT H	BUDGET PROCUREMENT HISTORY PLANNING (EXHIBIT P- 5A)							DATE: JUNE 2001				
APPROP CODE/BA: OPAF/ELECTRONICS & TELEC	OMMUI	NICATION	EQUIPMENT	P-1 NOMENCLATURE: NUDET DETECTION SYSTEM (NDS) 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. ICADS UPGRADE (1) (2)												
FY00			AFMC/SMC	MIPR/OTH	DOE SANDIA NATIONAL LAB ALBUQUERQUE, NM		DEC 99	DEC 00				
FY01			AFMC/SMC	MIPR/OTH	DOE SANDIA NATIONAL LAB ALBUQUERQUE, NM		DEC 00	DEC 01				
FY02			AFMC/SMC	MIPR/OTH	DOE SANDIA NATIONAL LAB ALBUQUERQUE, NM		DEC 01	DEC 02	Y			
2. GNT UPGRADE (1) (2)												
FY02			AFMC/SMC	MIPR/OPT/OTH	OTHER, DOE SANDIA NATIONA ALBUQUERQUE, NM	L LAB	DEC 01	DEC 02	Y			
<b>REMARKS:</b> 1. Unit costs and quantities vary of 2. The contract type to the Depar	due to m tment of	nultiple type f Energy (D	es of computer hardw OE) Sandia National	are being procured. Laboratory is cost re	eimbursement.							
	P-1	1 ITEM NC 58		<b>PAGE NO</b> 140	:			Page	e 1 of	<sup>-</sup> 1		

BUDGET ITEM JUS	TIFICATION (I	EXHIBIT P-40)				DATE:	JUNE 2001					
APPROP CODE/BA: OPAF/ELECTRONICS & TELECOMMUNICATION EQUIPMENT					P-1 NOMENCLATURE: AIR FORCE SATELLITE CONTROL NETWORK SPACE							
	FY2000	FY2001	FY2002	FY2003	FY2006	FY2007						
QUANTITY												
COST (in Thousands)	\$26,578	\$36,736	\$29,678	\$51,940	\$46,730	\$47,884	\$35,849	\$34,069				

### **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, control, and communications range systems required to support the nation's surveillance, navigation, communications, and weather satellite operations. The AFSCN is the DoD common user network providing 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, control and communications (C3), and range elements of the AFSCN. These technological upgrades will ensure DoD space systems will be operationally ready to support future Commanders-in-Chief (CINC) warfighting requirements. This administration has not addressed FY 2003-2007 requirements. All FY 2003-2007 budget estimates included in this book are notional only and subject to change.

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-shelf (COTS) and COTS-based hardware and software. This new equipment

<b>P-1 ITEM NO:</b> 59	<b>PAGE NO:</b> 141	Page 1 of 3
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### **BUDGET ITEM JUSTIFICATION (EXHIBIT P-40)**

**DATE:** JUNE 2001

### P-1 NOMENCLATURE:

OPAF/ELECTRONICS & TELECOMMUNICATION EQUIPMENT

#### AIR FORCE SATELLITE CONTROL NETWORK SPACE

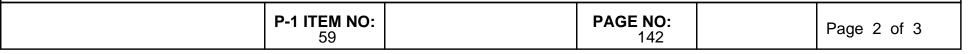
### **Description (cont.):**

**APPROP CODE/BA:** 

will dramatically reduce AFSPC satellite operations hardware/software (HW/SW) maintenance. Principal efforts within AFSCN I&M include:

A. COMMAND & CONTROL SYSTEM UPGRADES (CCSU): These network management upgrades build upon the Electronic Schedule Dissemination (ESD) and Orbital Analysis Subsystem (OAS) which 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 utilize 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. FY02 funds will procure equipment for an Orbital Analysis Service follow-on effort. This effort will upgrade the operational Radio Frequency Interference (RFI) prediction capability and satellite visibility/acquisition functions using COTS microcomputer technology, provide enhanced Collision Avoidance (COLA) functionality to increase the accuracy and speed of COLA deconfliction and reporting, and improve interfaces to resource scheduling systems and satellite operations centers.

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, and will upgrade the aging equipment at the RTSs. Several standardization efforts are being implemented to improve and modernize the communications and range segment elements of the AFSCN, including antenna replacements and equipment upgrades at the RTSs. AFSCN capacity, reliability, data quality, and user access will be significantly improved. FY00 funds procured COTS equipment for demonstrations to facilitate an Automated Remote Tracking Station (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 procured the first of several replacement antennas (the first installed at Oakhanger, England), reducing growing maintenance costs and increasing system reliability. Other FY00 funds procured equipment to transition the current Secure Voice System to a Defense Information Systems Agency (DISA) standard Defense Red Switch Network (DRSN) at Schriever AFB, CO, Onizuka Air Station, CA, and all RTSs. FY01 funds procure a replacement antenna for the RTS located in New Boston, NH and communications cabling and associated equipment to sustain the RTS located in Kaena Point, HI. FY02 funds will procure additional



<b>BUDGET ITEM JUSTIFICATION (EXHIBIT P-40)</b>	DATE: JUNE 2001
APPROP CODE/BA:	P-1 NOMENCLATURE:
OPAF/ELECTRONICS & TELECOMMUNICATION EQUIPMENT	AIR FORCE SATELLITE CONTROL NETWORK SPACE

### **Description (cont.):**

antenna systems, associated equipment to upgrade the RTSs, and equipment for a self-contained transportable resource to augment/replace the TT&C capabilities at an RTS during planned or unplanned outages. These interrelated efforts are now grouped together and will be referred to as the RTS Block Change.

C. SECURITY UPGRADES: No FY02 funding is requested.

<b>P-1 ITEM NO:</b> 59	<b>PAGE NO:</b> 143	Page 3 of 3

BUDGET ITEM JUSTIFICATION	FOR AGG	REGA	TED ITEMS (EX	HIBIT P- 40A)			DATE: JUI	NE 2001	
APPROP CODE/BA: OPAF/ELECTRONICS & TELECOM	IMUNICATIC	ON EQ	UIPMENT	P-1 NOMENCLATURE: AIR FORCE SATELLITE CONTROL NETWORK SPACE					
PROCUREMENT ITEMS	ID		FY2000	FY2001		FY20		FY2003	
	CODE	QT			OST	QTY.	COST	QTY.	COST
AFSCN I&M			\${26,5	78}	\${36,736}		\${29,678}		
A. COMMAND & CONTROL SYSTEM UPGRADES	A						\$6,458		
B. RANGE AND COMMUNICATIONS UPGRADES	A		\$25,0	78	\$36,736		\$23,220		
C. SECURITY UPGRADES	А		\$1,5	00					
Totals:			\$26,5	78	\$36,736		\$29,678		
	<b>P-1 ITEM</b> 59	NO		<b>PAGE NO:</b> 144				Page 1 o	of 1

BUDGET PROCUREMENT H	ISTOR		NNG (EXHIBIT P- 5A	N)		DATE: JUNE 2001					
APPROP CODE/BA: OPAF/ELECTRONICS & TELEC	COMMU	NICATION	N 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 (1)											
FY02			AFMC/SMC	C/CPAF	UNKNOWN(4)	OCT 01	APR 02	Y			
B. RANGE AND COMMUNICATIONS UPGRADES (1)											
FY00			AFMC/SMC	OPT(2)/CPAF	MULTIPLE	MAY 00	JUN 00				
FY01			AFMC/SMC	OPT/CPAF	MULTIPLE (3)	APR 01	SEP 01				
FY02			AFMC/SMC	C/CPAF	UNKNOWN (4)	OCT 01	APR 02	Y			
C. SECURITY UPGRADES (1)											
FY00			AFMC/ESC	OTH/OTH (5)	BRITISH AEROSPACE INDUSTR WALTON BEACH, FL	IES, FT JAN 01	AUG 01				
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 both Honeywell Corp, Colorado, Springs, CO (Jan 95, basic contract award) and Lockheed Martin Mission Systems, Sunnyvale, CA (Mar 96 basic contract award).

3. Multiple contractors include option to contract with Honeywell Corp, Colorado Springs, CO awarded Jan 95 and new satellite control network contract baseline. Award and delivery dates reflect date of first contract award and delivery.

4. New satellite control network contract baseline.

5. Task Order/Labor Hour contract. Award and delivery dates reflect date of first contract award and delivery.

<b>P-1 ITEM NO</b> 59	<b>PAGE NO:</b> 145		Page 1 of 1	1
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BUDGET ITEM JUS	DATE:	JUNE 2001						
APPROP CODE/BA		CATION EQUIPI	MENT		IENCLATURE			
	FY2000	FY2001	FY2002	FY2003	FY2004	FY2005	FY2006	FY2007
QUANTITY								
COST (in Thousands)	\$83,836	\$91,864	\$132,764	\$116,507	\$134,080	\$148,740	\$168,601	\$167,942

### **Description:**

The Eastern Range (ER), at Patrick AFB, FL, and the Western Range (WR), at Vandenberg AFB (VAFB), CA, are the nation's primary 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 are outdated, unreliable, inefficient, and costly to operate and maintain. This administration has not addressed FY 2003-2007 requirements. All FY 2003-2007 budget estimates included in this book are notional only and subject to change. Following are details of the FY00-02 program:

The Air Force (AF) is addressing range shortcomings through modernization and recapitalization efforts under the Spacelift Range System (SLRS) program. 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. Together, these efforts will permit range reconfiguration in hours versus days, reduce operations and maintenance costs, enhance range safety, and standardize logistics support. Funding for the associated RDT&E efforts is in the Air Force Descriptive Summaries, Budget Activity 7, Operational Systems Development, PE 35182F, Project 674137.

The AF is implementing range modernization and recapitalization through three related programs. First, the ongoing Range Standardization and Automation (RSA) Phase IIA program provides the SLRS architecture and modernizes the control/display and communication segments of the ranges. Second, range-specific Improvement and Modernization (I&M) projects continued through FY00 to extend the life of current systems to



BUDGET ITEM JUSTIFICATION (EXHIBIT P-40)	DATE: JUNE 2001			
APPROP CODE/BA:	P-1 NOMENCLATURE:			
OPAF/ELECTRONICS & TELECOMMUNICATION EQUIPMENT	SPACELIFT RANGE SYSTEM (S	SPACE)		

#### **Description (cont.):**

meet operational needs. Third, the new Spacelift Range System Contract (SLRSC) modernizes the instrumentation segment of the ranges, and engineers and executes a proactive recapitalization process in lieu of the reactive I&M program to replace hardware no longer sustainable.

1. RANGE STANDARDIZATION AND AUTOMATION (RSA) Phase IIA: The RSA Phase IIA program provides the SLRS architecture and modernizes the control and display and communications segments, to include: control and display, planning and scheduling, metric tracking, flight operations and analysis, range operations, communications, and weather equipment.

The FY00 funds procured control and display and communication network products. FY00 funds procured the Flight Operations and Analysis (FOA) products that perform the major range safety analysis functions before, during, and after launches. The FOA system integrates the range safety processing control and display functions with pre-mission flight analysis and mission planning capability. FY00 funds also procured the Control and Display (C&D) infrastructure and data format updates that support FOA by providing automated data processing equipment, consoles, and data interfaces, as well as planning and scheduling, weather, and communications network upgrades needed to evolve and deliver operational range capabilities. FY00 funds also procured Interim Contractor Support (ICS). Additionally, FY00 funding provided Interim Supply Support (ISS), to include initial spares and supply services, based on failure rate experience and analysis for delivered systems.

The FY01 funds continue procurement of control and display and communication network products, to include the digital telemetry products that will convert the ranges from slow, expensive wide bandwidth analog telemetry to high-speed, inexpensive low bandwidth digital telemetry. FY01 funds also procure the simulation product, which provides the capability to replay data from prior missions for current mission rehearsal. The FY01 procurements also include upgrades to planning and scheduling, weather, communications, infrastructure, and flight safety products needed to evolve and deliver operational range capabilities. Additionally, FY01 funds continue to provide ICS and ISS.

The FY02 funds will continue procurement of control and display and communication network products, to include the range operations and digital telemetry products. These products provide command generation, simulation, and the final planning and scheduling, infrastructure and

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BUDGET ITEM JUSTIFICATION (EXHIBIT P-40)	DATE: JUNE 2001			
APPROP CODE/BA:	P-1 NOMENCLATURE:			
OPAF/ELECTRONICS & TELECOMMUNICATION EQUIPMENT	SPACELIFT RANGE SYSTEM (S	SPACE)		

#### **Description (cont.):**

data format upgrades which add the ability to automatically commit and manage assets critical to range operations. FY02 funds also procure upgrades to weather, communications, and flight safety products needed to evolve and deliver operational range capabilities. Additionally, FY02 funds will pay for qualification and acceptance testing of RSA IIA products, as well as continuing ICS and ISS until an organic Air Force sustainment capability is established.

2. EASTERN RANGE IMPROVEMENT AND MODERNIZATION (I&M). No FY02 funding is requested.

3. WESTERN RANGE IMPROVEMENT AND MODERNIZATION. No FY02 funding is requested.

4. SPACELIFT RANGE SYSTEM CONTRACT (SLRSC): The SLRSC completes range modernization efforts and implements proactive recapitalization efforts. It procures an integrated suite of automated instrumentation, as well as follow-on control and display and communications systems, to complete the modernization effort. Also, it executes recapitalization projects in place of the I&M program to replace obsolete and unsustainable systems, based on reliability, maintainability, and availability (RMA) data collected and analyzed by HQ Air Force Materiel Command to determine the best overall return on investment. The analysis of RMA data, necessary to support this approach, begins in FY01.

In FY02, SLRSC modernization funds will procure instrumentation to include: fixed and mobile telemetry equipment, fixed and mobile command destruct equipment, fixed and mobile optics and imaging equipment, radars, weather equipment, radio frequency monitoring equipment, and range surveillance equipment. FY02 funds will procure associated test equipment, as well as associated interface equipment necessary to link instrumentation to the network segment and control and display segment, as required to implement the SLRS architecture. FY02 funds will procure assets to enable centralized and local control of range instrumentation. FY02 funds will also procure follow-on modernization of control and display systems and communications systems. Additionally, FY02 funds will pay for qualification and acceptance testing of SLRSC modernization products, as well as ISS to provide initial spares and supply services.

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<b>BUDGET ITEM JUSTIFICATION (EXHIBIT P-40)</b>	DATE: JUNE 2001		
APPROP CODE/BA: OPAF/ELECTRONICS & TELECOMMUNICATION EQUIPMENT	P-1 NOMENCLATURE: SPACELIFT RANGE SYSTEM (SPACE)		
		·	

### **Description (cont.):**

The FY01 recapitalization efforts focus on I&M projects already underway or previously validated. Using RMA data to set prioritization, FY01 funds support a backlog of sustainment actions, to include, but not limited to: continuing integration and testing of the digital intercom system; continuing replacement of command destruct transmitters; replacing analog processors; and integrating and testing replacement telemetry systems.

FY02 recapitalization efforts will focus on correcting equipment deficiencies, replacing aging equipment, controlling obsolescence, eliminating single points of failure, and reducing support costs. Selection and prioritization of efforts will be based on ongoing RMA data collection and analysis, as well as consideration of customer requirements. They will include continuation of prior year programs and initiation of previously deferred efforts. Projects for FY02 will include, but are not limited to: replacing optics site computer systems; converting to digital range communications system; modifying command destruct systems to accommodate frequency changes; replacing down range data switches and radar control systems; replacing video data processing equipment; replacing command transmitter consoles; and replacing radar/telemetry site computers. Additionally, FY02 funds will pay for qualification and acceptance testing of SLRSC modernization products.

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WEAPON SYSTEM COST ANALYSIS (EXHIBIT P- 5)					DATE: JUNE 2001								
APPROP CODE/BA: OPAF/ELECTRONICS & TELECOMMI	JNICATI	ON EQU	IPMENT		P-1 NOMENCLATURE: SPACELIFT RANGE SYSTEM (SPACE)								
	IDENT		FY2000			FY2001			FY2002			FY2003	
WEAPON SYSTEM COST ELEMENTS	CODE	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				{66,231}			{71,726}			{27,299}			
EQUIPMENT/HARDWARE/SOFTWARE	А			58,499			63,881			19,032			
INTERIM SUPPLY SUPPORT (ISS)				5,199			3,801			2,210			
INTERIM CONTRACTOR SUPPORT (ICS)				2,533			4,044			6,057			
TRANSITION PACKAGE										1,105			
2. EASTERN RANGE I&M	A			7,505									
3. WESTERN RANGE I&M	A			10,100									
4. SPACELIFT RANGE SYSTEM CONTRACT (SLRSC)							{20,138}			{104,360}			
EQUIPMENT/HARDWARE/SOFTWARE	А									73,866			
INTERIM SUPPLY SUPPORT (ISS)										494			
RECAPITALIZATION							20,138			30,000			
TOTALS:				83,836			91,864			132,764			
REMARKS:													
Р	<b>-1 ITEM</b> 60	NO			PAC	<b>GE NO:</b> 150					Pa	ge 1 of 1	

BUDGET PROCUREMENT HISTORY PLANNING (EXHIBIT P- 5A)							DATE	DATE: JUNE 2001			
APPROP CODE/BA: OPAF/ELECTRONICS & TELECOMMUNICATION EQUIPMENT					P-1 NOMENCLATURE: SPACELIFT RANGE SYSTEM (SPACE)						
ITEM / FISCAL YEAR	QTY.	UNIT COST	LOCATION OF PCO					AWD. DATE	DATE FIRST DEL.	SPECS AVAIL NOW	DATE REV. AVAIL
1. RSA PHASE IIA (1) (2)											
FY 00			AFMC/SMC	OPT/CF	PAF	LOCKHEED MARTIN, SUNNYVA	LE, CA	NOV 99	FEB 00		
FY 01			AFMC/SMC	OPT/CF	PAF	LOCKHEED MARTIN, SUNNYVA	LE, CA	DEC 00	FEB 01		
FY 02			AFMC/SMC	OPT/CF	PAF	LOCKHEED MARTIN, SUNNYVA	LE, CA	DEC 01	FEB 02	Y	
2. EASTERN RANGE I&M (1)											
FY 00			HQ AFSPC	C/FP		MULTIPLE (3)		JAN 00	APR 00		
3. WESTERN RANGE I&M (1)											
FY 00			HQ AFSPC	C/FP		MULTIPLE (3)		JAN 00	JAN 01		
4. SPACELIFT RANGE SYSTEM CONTRACT (SLRSC) (1) (4)											
FY 01			AFMC/SMC	C/CPAF	=	ITT INDUSTRIES, COLO SPRINO	GS, CO	NOV 00	APR 01		
FY 02			AFMC/SMC	OPT/CF	PAF	ITT INDUSTRIES, COLO SPRINO	GS, CO	DEC 01	FEB 02	Y	
	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.										
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BUDGET PROCUREMENT HISTORY PLANNING (EXHIBIT P- 5A)							: JUI	NE 200	)1		
APPROP CODE/BA: OPAF/ELECTRONICS & TELEC	OMMUN	NICATION	EQUIPMENT	P-1 NOMENCLATURE: SPACELIFT RANGE SYSTEM (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	
<ol> <li>The RSA phase IIA contract way years). Integration and interim corproduct items. Dates shown reflewhile cost plus fixed fee (CPFF) of 3. I&amp;M procurement consisted of integrated by the range technical Vandenberg AFB, California. Corr Orion Systems Inc; FEDSIM; PRO delivery date.</li> <li>SLRSC is similar to RSA phase delivery date for that FY.</li> </ol>	ntractor ct first co contract t numerou services ntractors C, Inc; M	support a ontract op type is for us individu contracto providing icrodyne (	ctivities will carry the option award and deliver materiel. al components to upg rs: Computer Science the components inclu Corp; Alliant Techsyste	contract through FY0 ry date for each FY. grade obsolete and we es/Raytheon at Cape ude: SUMMA, Inc; Orl ems; Xontech; and R	6. The contract has multiple Cost plus award fee (CPAF) orn out equipment currently i Canaveral Air Station, Florid bital Sciences Corp; Reliable aytheon. Dates shown refle	options for contract of in use. Co a, and IT e Systems ct first cor	or varic type is ompone T Fede S Svc C ntract a	ous relate for labor ents are ral Syste orp; NYI ward an	, ems at MA;		
	P-1	<b>ITEM N</b> 60	D	<b>PAGE NO</b> : 152				Page	e 2 of	2	

BUDGET ITEM JUS	DATE:	JUNE 2001							
APPROP CODE/BA	:			P-1 NOM	P-1 NOMENCLATURE:				
OPAF/ELECTRONICS & TELECOMMUNICATION EQUIPMENT					MILSATCOM SPACE				
	FY2000	FY2001	FY2002	FY2003	FY2004	FY2005	FY2006	FY2007	
QUANTITY									
COST (in Thousands)	\$32,443	\$34,803	\$21,367	\$46,123	\$91,995	\$61,420	\$65,881	\$49,401	

### **Description:**

Military Satellite Communications (MILSATCOM) joint-service systems collectively provide a broad range of satellite communication capabilities, including secure, jam-resistant, 24-hour worldwide communications to meet essential strategic, tactical, and general-purpose operational requirements. MILSATCOM Terminals support communication requirements for the National Command Authorities (NCA), Unified and Specified Commanders-in-Chief (CINCs), uniformed services, and defense agencies. Reference prior-year RDT&E Budget Justification Exhibits for Program Element 03030601F for more information on terminal development efforts, except where otherwise noted. This administration has not addressed FY 2003-2007 requirements. All FY 2003-2007 budget estimates included in this book are notional only and subject to change.

1. COMMAND POST TERMINALS (CPTs): No FY02 funds are requested for this effort.

2. SINGLE-CHANNEL ANTI-JAM MAN-PORTABLE (SCAMP) TERMINALS: No FY02 funds are requested for this effort.

3. SECURE MOBILE ANTI-JAM RELIABLE TACTICAL TERMINALS (SMART-T): No FY02 funds are requested for this effort.

4. SCAMP/GROUND WAVE EMERGENCY NETWORK (GWEN): No FY02 funds are requested for this effort.

5. ULTRA HIGH FREQUENCY (UHF) SATELLITE COMMUNICATIONS TERMINALS: Increasing requirements for UHF satellite

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BUDGET ITEM JUSTIFICATION (EXHIBIT P-40)		DATE: JUNE 2001
APPROP CODE/BA:	P-1 NOMENCLATURE:	
OPAF/ELECTRONICS & TELECOMMUNICATION EQUIPMENT	MILSATCOM SPACE	

### **Description (cont.):**

capacity and limited channel availability led the Joint Staff to mandate new UHF interoperability standards to improve satellite access and efficiency via Demand Assigned Multiple Access (DAMA). FY00/01 funds procure UHF ground DAMA terminals for various MAJCOM users and fund system engineering, terminal upgrades, and program support; FY00 funds also support Airborne Integrated Terminal Group (AITG) ground fixed site integration. FY02 funds continue system engineering, terminal upgrades, and program support.

6. SUPER HIGH FREQUENCY (SHF) TERMINALS: SHF terminals operate over the Defense Satellite Communications System (DSCS) to 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 is responsible for procuring terminal equipment for selected locations that form part of the ground segment. FY00-02 funds provide program support and procure equipment for modernizing the Jam-Resistant Secure Communications (JRSC) subnet of DSCS, including sensor sites and DSCS hub stations, to ensure interoperability with the Army, Navy, and Air Force. Procured equipment includes ground terminal modernization kits, fiber optic modems, patch panels, timing sources, and interconnect facility links. The JRSC network provides jam-resistant, secure, nuclear-effects-protected MILSATCOM connectivity between selected Air Force facilities and NCA elements.

7. GLOBAL BROADCAST SERVICE: This Air Force-led joint program implements a worldwide high-capacity satellite broadcast information system to provide a continuous one-way high-speed, high-volume flow of classified and unclassified data and imagery to garrisoned, deployed, or moving forces. GBS reduces DoD reliance on costly leased commercial satellite communications. GBS Receive Suites and Theater Injection Points will provide lower-echelon Air Force users with efficient high-data-rate in-theater and reachback connectivity to many distributed information sources via satellite-hosted GBS packages. See also the RDT&E Budget Item Justification Sheet for Program Element 0603854F.

A. GBS Receive Suites: These link users to information sources via GBS payloads hosted on UHF Follow-on (UFO) satellites offering near-worldwide service. FY00-02 funds procure ground receive suites and provide integration and installation, systems engineering, and program support. The current DoD Low-Rate Initial Production acquisition strategy has approved procurement of 500 receive suites prior to the

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	UNCLASSIFIED		

BUDGET ITEM JUSTIFICATION (E	EXHIBIT P-40)				DATE: JUNE 2	2001
APPROP CODE/BA:			P-1 NOME	NCLATURE:		
OPAF/ELECTRONICS & TELECOMMUNI	CATION EQUIPMEN	т	MILSATCOM	SPACE		
<b>Description (cont.):</b> production decision.						
B. Theater Injection Points (TIPs):	No FY02 funds are	requested for th	nis effort.			
8. COMMAND & CONTROL SYSTE capabilities after the Air Force Satellite launch and on-orbit operations for exist control strings, including computers, ca Item Justification Sheet for Program El	Control Network C ting satellites and sy abling, and cryptolog	CCS sustainmen vstems in develo gic equipment.	nt contract end opment. FY02 See also Budg	s in FY03, providi 2 funds procure CO get Project Activit	ing automated contr CS-C equipment for	rol of satellite
	<b>P-1 ITEM NO:</b> 61			<b>PAGE NO:</b> 155		Page 3 of 3

WEAPON SYSTEM COST ANALYSIS (EXHIBIT P- 5)										DATE:	JUNE 2	2001	
APPROP CODE/BA: OPAF/ELECTRONICS & TELECOM		P-1 NOMENCLATURE: MILSATCOM SPACE											
		FY2000			FY2001				FY2002	2		FY2003	
WEAPON SYSTEM COST ELEMENTS	IDENT CODE	QTY	UNIT COST	TOTAL COST	QTY	UNIT COST	TOTAL COST	QTY	UNIT COST	TOTAL COST	QTY	UNIT COST	TOTAL COST
1. COMMAND POST TERMINALS				{4,32	8}		{7,685}						
TERMINAL ENHANCEMENTS	А			2,40	00		6,242						
INSTALLATION SUPPORT				30	00								
FACTORY REPAIR				50	00								
SYSTEM ENGINEERING				82	20		797						
PROGRAM SUPPORT				3(	)8		646						
2. SCAMP TERMINALS				{32	1}		{101}						
PROGRAM SUPPORT				32	21		101						
3. SMART-T				{3,77	8}		{1,587}						
INTEGRATION AND INSTALLATION				59	93		807						
PROGRAM SUPPORT				2,23	30		780						
EQUIPMENT				9!	55								
4. SCAMP/GWEN				{6,77	6}		{1,017}						
TERMINALS	А	14	4 180,000										
INTEGRATION & INSTALL				3,62		1	964					1	
PROGRAM SUPPORT				63			53						
	<b>P-1 ITEM</b> 61	NO	<u> </u>		PA	<b>GE NO:</b> 156			<u> </u>		Pa	ige 1 of 3	<u> </u>

WEAPON SYSTEM COST ANA							DATE:	JUNE 2	2001				
APPROP CODE/BA: OPAF/ELECTRONICS & TELECO	MMUNICATI	ON EQUI	PMENT		P-1 NOMENCLATURE: MILSATCOM SPACE								
			FY2000			FY2001			FY2002	2	FY2003		
WEAPON SYSTEM COST ELEMENTS	IDENT CODE	QTY	UNIT COST	TOTAL COST	QTY	UNIT COST	TOTAL COST	QTY	UNIT COST	TOTAL COST	QTY	UNIT COST	TOTAL COST
5. UHF SATCOM TERMINALS				{10,88	4}		{9,497}			{6,917}			
DAMA GROUND TERMINALS (1)	А	108		3,59	93 96	28,000	2,688						
INTEGRATION				1,12	20								
PROGRAM SUPPORT				82	20		906			719			
TERMINAL UPGRADES				4,17	19		4,693			5,268			
SYSTEM ENGINEERING				1,17	/2		1,210			930			
6. SHF TERMINALS				{3,49	5}		{1,866}			{1,387}			
DSCS/JRSC	А			3,28	36		1,666			1,022			
PROGRAM SUPPORT				20	)9		200			365			
7. GBS				{2,86	1}		{13,050}			{7,634}			
A. GBS RECEIVE SUITES				{2,86	1}		{13,050}			{7,634}			
RECEIVE SUITES (2)	А	5		74	12 101		10,056	38		3,925			
INTEGRATION & INSTALLATION				73	37		1,542			2,184			
SYSTEM ENGINEERING				94	12		990			1,040			
PROGRAM SUPPORT				44	10		462			485			
	<b>P-1 ITEM</b> 61	NO				<b>E NO:</b> 157					Pa	age 2 of 3	

WEAPON SYSTEM COST ANAL	PON SYSTEM COST ANALYSIS (EXHIBIT P- 5)									DATE:	JUNE 2	2001	
APPROP CODE/BA: OPAF/ELECTRONICS & TELECOM	ROP CODE/BA: ELECTRONICS & TELECOMMUNICATION EQUIPMENT						TURE:						
	IDENT		FY2000			FY2001			FY2002			FY2003	
WEAPON SYSTEM COST ELEMENTS	CODE	QTY	UNIT COST	TOTAL COST	QTY	UNIT COST	TOTAL COST	QTY	UNIT COST	TOTAL COST	QTY	UNIT COST	TOTAL COST
8. CCS-C													
HARDWARE/SOFTWARE STRINGS	В							8	678,625	5,429			
TOTALS:		127		32,443	197		34,803	46		21,367			
variant Airborne Integrated Terminals (2) GBS receive suite unit costs vary	based on o	configurat			rchased.								
	<b>P-1 ITEM</b> 61	NO			PAG	<b>E NO:</b> 158					Pa	ge 3 of 3	

BUDGET PROCUREMENT	HISTORY	( PLANN	IING (EXHIBIT P- 54	A)		DATE: JU	NE 200	)1			
APPROP CODE/BA: OPAF/ELECTRONICS & TELE	COMMUN		I 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											
FY00			AFMC/ESC	OPT/FFP (1)	RAYTHEON, MARLBOROUGH, M	A AUG 00	AUG 01				
FY01			AFMC/ESC	OPT/FFP (1)	RAYTHEON, MARLBOROUGH, MA	A JUL 01	NOV 02				
4. SCAMP/GWEN											
FY00	14	180,000	AFMC/ESC	MIPR/OPT/FFP (2)	ARMY/ROCKWELL, CEDAR RAPI	DS, IA NOV 99	MAY 00				
5. UHF SATCOM TERMINALS											
FY00 (3)	108		AFMC/ESC	MIPR/C/FFP	RAYTHEON, FT. WAYNE, IN AND RAYTHEON, ST PETERSBURG, F		MAR 01				
FY01	96	28,000	AFMC/ESC	MIPR/C/FFP	RAYTHEON, FT. WAYNE, IN	JAN 01	SEP 01				
6. SHF TERMINALS (3)											
FY00			AFMC/ESC	MIPR/C/FFP	MULTIPLE (4)	APR 00	JUN 00				
FY01			AFMC/ESC	MIPR/C/FFP	MULTIPLE (4)	FEB 01	DEC 01				
FY02			AFMC/ESC	MIPR/C/FFP	MULTIPLE (4)	DEC 01	FEB 02	Y			
	P-1	<b>ITEM N</b> 61	0	<b>PAGE NO</b> 159			Pag	e 1 of	2		

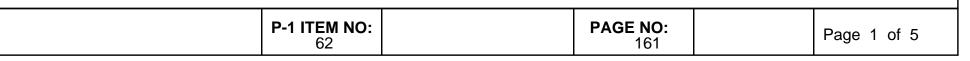
BUDGET PROCUREMENT H	ISTORY	PLANN	ING (EXHIBIT P- 5A	A)		DATE: JU	NE 200	)1	
APPROP CODE/BA: OPAF/ELECTRONICS & TELEC	OMMUN	NICATION	EQUIPMENT	P-1 NOMENCLA MILSATCOM SPAC					
ITEM / FISCAL YEAR	QTY.	UNIT COST	LOCATION OF PCO	CONTRACT METHOD & TYPE	CONTRACTOR AND LOCATION	AWD. DATE	DATE FIRST DEL.	SPECS AVAIL NOW	DATE REV. AVAIL
7. GBS									
A. GBS RECEIVE SUITES (6)									
FY00	5		AFMC/SMC	OPT/CPAF (5)	RAYTHEON, RESTON, VA	AUG 00	JUL 01		
FY01	101		AFMC/ESC	OPT/CPAF (5)	RAYTHEON, RESTON, VA	AUG 01	JUN 02	Y	
FY02	38		AFMC/ESC	OPT/CPAF (5)	RAYTHEON, RESTON, VA	JAN 02	OCT 02	Y	
8. CCS-C									
FY02	5	1085,800	AFMC/SMC	C/FFP	UNKNOWN (7)	FEB 02	AUG 02	Y	
<b>REMARKS:</b> (1) Options to basic Command Pc (2) Air Force option to Army contra- multi-customer production line. (3) Quantities and unit costs vary (4) GSA/Army contracts with multi (5) Options to the basic research at (6) GBS receive suite unit costs vary (7) Contracts for CCS-C RDT&E of these competitors will be awarded	act awar because ple cont and deve ary base demonst I the first	ded Feb mulitple f ractors an elopment d on conf rations we CCS-C e	96. Date for first delive types of equipment are d multiple contract aw contract awarded in N guration and quantity are awarded in Feb 01 equipment procuremen	e being procured. vard/delivery dates. v ov 97. purchased. to TRW, Redondo E nt contract in Feb 02.	Award/delivery dates reflect f Beach, CA, and Integral Syste	irst award and c	lelivery c 1D. One	of	
	P-1	<b>ITEM N</b> 61	0	<b>PAGE NO</b> 160			Page	e 2 of	2

BUDGET ITEM JUS	TIFICATION (I	EXHIBIT P-40	)			DATE:	JUNE 2001	
APPROP CODE/BA		ICATION EQUIP	MENT	_	IENCLATURE			
	FY2000	FY2001	FY2002	FY2003	FY2004	FY2005	FY2006	FY2007
QUANTITY								
COST (in Thousands)	\$2,805	\$27,541	\$31,915	\$11,042	\$12,498	\$13,680	\$17,996	\$30,198

### **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 FY02 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. This administration has not addressed FY 2003-2007 requirements. All FY2003-2007 budget estimates included in this book are notional only and are subject to change.

1. 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.



BUDGET ITEM JUSTIFICATION (EXHIBIT P-40)	DATE: JUNE 2001
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OPAF/ELECTRONICS & TELECOMMUNICATION EQUIPMENT	SPACE MODS SPACE

### **Description (cont.):**

A. MOD #S605133, OPERATIONAL SUPPORT ENVIRONMENT (OSE) (previously Weapon Support System): No FY02 funding requested.

B. MOD #S5005800101, TRANSMITTER/EXCITER REPLACEMENT: No FY02 funding requested.

C. 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 procure the initial kit and required associated software changes at the Master Control Station. FY02 funding will procure additional kits, associated software, and installations.

D. MOD # TBD, Version V Master Control Station (MCS) Upgrade. This modification will upgrade the existing mainframe based legacy system in the GPS Master Control Station (MCS) at Shriever AFB, CO with the new distributed Architecture Evolution Plan (AEP) hardware and software. The MCS must be upgraded to be compatible with the new AEP hardware and software program. The new GPS Block IIF satellite requires the AEP for full operational functionality. FY02 funding will procure hardware and associated software.

2. 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

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BUDGET ITEM JUSTIFICATION (EXHIBIT P-40)		DATE: JUNE 2001
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OPAF/ELECTRONICS & TELECOMMUNICATION EQUIPMENT	SPACE MODS SPACE	

#### **Description (cont.):**

TW/AA data on inter-continental ballistic missiles (ICBMs) penetrating the coverage area. Additionally, PAVE PAWS and PARCS support 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 since 1974.

(1) UPGRADE #S626182, 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 currently costs \$98K each. FY01/02 funds will provide improvements that will allow 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) UPGRADE #S532492, PARCS DISPLAY UPGRADE: FY01/02 funds this upgrade, which replaces unsupportable and unreliable display subsystem equipment. This equipment is composed of unique, custom built components which became 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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<b>OPAF/ELECTRONICS &amp; TELECOMMUNICATION EQUIPMENT</b>	SPACE MODS SPACE	

#### **Description (cont.):**

B. SERVICE LIFE EXTENSION PROGRAM (SLEP):

Segments of the legacy Mission Critical Computer Resources (MCCR) at the SLBM PAVE PAWS sites are obsolete and will become unsustainable beginning in 2001. With increasing age of these 1970's - 80'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 proceed in two phases. In FY01/02, Phase 1 will modify existing subsystems, procure COTS equipment, and install and test same at the Beale AFB, CA and Cape Cod AFS, MA sites. Subsystems modified under Phase 1 are: graphics display system, the radar controller & digital module test set peripherals, the network processing unit, the solid state module test sets, and the training suites. Beginning in FY02, Phase 2 of this modification will upgrade the mission processor hardware at one of the PAVE PAWS sites and rehost the software with a more modern version of the Jovial programming language in current Air Force use. 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 #72, Comm Elect Mods, BMEWS SLEP).

3. 496L SPACETRACK NETWORK: The 496L Spacetrack Network modification is comprised of the AN/FSD-3 (formerly AN/FSQ-114) Ground-based Electro-Optical Deep Space Surveillance System (GEODSS) 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.

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OPAF/ELECTRONICS & TELECOMMUNICATION EQUIPMENT	SPACE MODS SPACE	

#### **Description (cont.):**

A. AN/FSD-3 GROUND-BASED ELECTRO-OPTICAL DEEP SPACE SURVEILLANCE (GEODSS) SYSTEM. GEODSS is a segment of the SPACETRACK Network which provides metric track data and deep space object identification (SOI) to the Cheyenne Mountain Complex (CMC). More specifically, the primary mission of GEODSS is to provide the Space Control Center (SCC) with observational (metric) data on deep-space satellites and optical characteristics information as tasked by the Combined Intelligence Center (CIC). 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 83679D, GEODSS CHARGE-COUPLED DEVICE (CCD) CAMERA: FY01/02 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 Ebsicon tube spares will be exhausted during FY02. Funds also provide for sensor controller hardware and associated software modifications, and Modular Precision Angular Control System (MPACS) replacement, critical to the CCD modification. The 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.

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BUDGET ITEM JUSTIFICATION FO		DATE: JU	JNE 2001							
APPROP CODE/BA: OPAF/ELECTRONICS & TELECOMMU	JNICATIO	ON EQ	UIPMENT	<b>P-1</b> SPA	NOMEN	I <b>CLATURI</b> SPACE	≣:			
PROCUREMENT ITEMS	ID		FY2000		FY2	001	F	(2002	FY	2003
	CODE	QT	Y. COS	Т		COST	QTY.	COST	QTY.	COST
1. NAVSTAR GLOBAL POSITIONING SYSTEM			\${2	,805}		\${7,276}		\${7,901}		
A. OPERATIONAL SUPPORT ENVIRONEMENT (OSE), MOD #S605133			\$.	2,805		\$2,433				
B. TRANSMITTER/EXCITER REPLACEMENT, MOD #S5005800101						\$2,893				
C. MONITOR STATION TIMING SUBSYSTEM ENHANCEMENT (MSTSE), MOD # T7215						\$1,950		\$2,453		
D. VERSION V MASTER CONTROL STATION (MCS) UPGRADE, MOD #TBD								\$5,448		
2. 474N SEA LAUNCHED BALLISTIC MISSILE (SLBM), DETECTION AND WARNING SYSTEM						\${11,583}		\${15,229}		
A. PARCS						\${3,694}		\${3,715}		
(1). IMPROVED TRANSMITTER MONITORING SYSTEM (ITMS) MOD #S626182						\$1,207		\$384		
(2). DISPLAY UPGRADE MOD #S532492						\$2,487		\$3,331		
B. SERVICE LIFE EXTENSION PROGRAM						\$7,889		\$11,514		
								+ +		
P	-1 ITEM 62	NO	I		<b>PAGE N</b> 166	0:	1	I	Page 1	of 2

BUDGET ITEM JUSTIFICATION		REGA	TED ITEMS (EX	(HIBIT P- 4	40A)			DATE: JU	NE 2001			
APPROP CODE/BA: OPAF/ELECTRONICS & TELECOM	IMUNICATIC	DN EQ	UIPMENT	P-1 NOMENCLATURE: SPACE MODS SPACE								
PROCUREMENT ITEMS	ID		FY2000	FY200 <sup>2</sup>		01	FY2	2002	FY	2003		
	CODE	QT	Y. COST			COST	QTY.	COST	QTY.	COST		
3. SPACETRACK NETWORK A. AN/FSD-3 GROUND-BASED ELECTRO-OPTICAL DEEP SPACE SURVEILLANCE (GEODSS) SYSTEM						\${8,682} \${8,682}		\${8,785} \${8,785}				
(1) GEODSS CCD CAMERA/MPACS MOD # 83679D					1	\$8,682	6	\$8,785				
Totals:			\$2,8	305	1	\$27,541	6	\$31,915				
	<b>P-1 ITEM</b> 62	NO		PA	AGE NO 167	:			Page 2	of 2		

#### INDIVIDUAL MODIFICATIONS (EXHIBIT P- 3A)

**DATE: JUNE 2001** 

Modification Title and No: Version V Master Control Station (MCS) Upgrade

Models of Systems Affected:

PARCS Operational Control Segment (OCS)

**Description/Justification:** Upgrades the existing mainframe based legacy system in the GPS Master Control Station (MCS) at Shriever AFB, CO which helps with the constituency for the new distributed Architecture Evolution Plan (AEP) hardware and software and software. The MCS must be upgraded to be compatible with the new AEP hardware and software program. The new GPS Block IIF satellite requires the AEP for full operational functionality.

Development Status/Major Development Milestones: Master Control Station (MCS) needs AEP capability no later than fourth quarter FY03 to support first Block IIF launch in 1QFY06.

Financial Plan \$ (in M	illion	s)	F	γ	F	Y2000	FY2	001	FY	2002		FY200	)3	FY2	004		то	TAL		
			Qty	Cost	Qty	Cos	t Qty	Cost	Qty	Cost	Qty	'	Cost	Qty	Cost		Qty		Cost	
RDT&E																				
Ref. R-1 PE No:																	0			
Procurement:																				
Equipment Kits									1	3.350	)						1			3.4
Equipment Kits Non-re	currin	g															0			
Engineering Change O	rders																0			
Data										0.551							0			0.6
Training Equipment																	0			
Support Equipment																	0			
Software																	0			
Interim Contractor Sup	port																0			
Other										1.547	7						0			1.5
Total Procurement C	osts:		0			0	C		1	5.4	ŀ	0		0			1			5.5
Hardware Installation:																				
(PY) Eqpt ( Kits)																	0			0
(FY00) Eqpt (Kits)																	0			0
(FY01) Eqpt (Kits)																	0			0
(FY02) Eqpt (1 Kits)												1	3.442				1			3.442
(FY03) Eqpt (Kits)																	0			0
(FY04) Eqpt (Kits)																	0			0
Total Installation Cos	ts:		0			0	C		0			1	3.4	0			1			3.4
Total Modification Co	sts:		0			0	C		1	5.4	ŀ	0	3.4	0			1			8.9
Method of Installation:	С	ONTRA	CTOR,		ISTALL		Admir	istrative	Lead-tim	e (After 1	Oct):	4 Mor	nth(s)		Produc	ction Le	ad-time	8 Mon	th(s)	
Contract Date: P	Y			FY200	0		FY2001			FY200	2	FEE	3 02	FY2003	0	OCT 02	FY	2004		
Delivery Date: P	Y			FY200	0		FY2001			FY200	2	OC	Г 02	FY2003	0	CT 02	FY	2004		
Installations: PY		FY2	2000			FY200	1		FY2	002			FY2	2003			FY2	2004		Tota
	1ST	2ND	3RD	4TH	1ST		RD 4TH	1ST	2ND		4TH	1ST	2ND	3RD	4TH	1ST	2ND	3RD	4TH	
Input												1								1
Output																1				1
			F	-1 ITEN 6					PAGE 1	E NO: 68			-			-	Pa	ge 1 of	1	
							UN				<u>.</u>									

#### **INDIVIDUAL MODIFICATIONS (EXHIBIT P-3A)**

#### **DATE: JUNE 2001**

Modification Title and No: Submarine Launched Ballistic Missile (SLBM) Radar Warning System - Models of Systems Affected:

PAVE PAWS Systems: Phase 1 Cape Cod AS, MA and Beale AFB, CA;

Service Life Extension Program Description/Justification: Segments of the legacy Mission Critical Computer Resources at the SLBM warning sites are obsolete and will become unsustainable begining in 2001. This reliability and maintainability modification will upgrade the following unsupportable subsystems as Phase 1: graphics display system (GDS), the radar controllers (RCL) and digital module test set (DMTS) peripherals, the network processing units (NPU), solid state module test sets (SSMTS) and the training suite. Beginning in FY02, Phase 2 will replace the two mission processors at Cape Cod AS and the mission software will be rehosted with the current Jovial programming language release. Initial spares are funded by contracted Interim Supply Support. This modification is concurrent and parallel to the modification of the BMEWS at Clear AS, AK; Thule AB, Greenland; and RAF Flyingdales, U.K. (reference P-1 Line #72, Comm-Electronics Mods - BMEWS SLEP.

Development Status/Major Development Milestones: Phase 1 contract award July 01; 1st article tests at SPA facility Dec01-Jan03 accomplished under BMEWS mod; Cape Cod AS install NPU Mar02, SSMTS May 02, RCL & DMTS periheral, GDC, and trainer Jul 03; Beale AFB install NPU Mar02, SSMTS Jun 02, RCL & DMTS periheral, GDC, and trainer Sep 03. Phase 2: Install MP at Cape Cod AS Oct 03.

Financial Plan \$ (in Millions)		PY	FY	2000	FY2	001	FY	2002	FY2	2003	FY2	004		TO	TAL		
	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	1.470	9	.621						13			2.1
Equipment Kits Non-recurring						3.269		3.617		.057				0			6.9
Engineering Change Orders														0			
Data						.209		.112						0			0.3
Training Equipment						.457		0.071						0			0.5
Support Equipment						.110		.09						0			0.2
Software						1.022		4.503						0			5.5
Interim Contractor Support						.534								0			0.5
Other						.689		.973		.038				0			1.7
Total Procurement Costs:	(	C	(	)	4	7.8	9	10	C	0.1	0			13			17.7
Hardware Installation:																	
(PY) Eqpt ( Kits)														0	-		0
(FY00) Eqpt (Kits)														0	-		0
(FY01) Eqpt (4 Kits)						.078	4	.900						4	_		0.978
(FY02) Eqpt (9 Kits)							8	.564	1	.184			_	9			0.748
(FY03) Eqpt ( Kits)													_	0			0
(FY04) Eqpt (Kits)													_	0			0
Total Installation Costs:	(	C	0	)	0	0.1	12	1.5	1	0.2	0		_	13			1.7
T ( IN IV: A O		-															
Total Modification Costs:	(	C	(	)	4	7.8	9	11.5	C	0.3	0			13			19.4
Method of Installation: CON	RACTOR,	FIELD IN	ISTALL		Admin	istrative I	_ead-tim	e (After 1	<b>Oct):</b> 10	Month(s)		Produc	tion Le	ad-time:	4 Mon	th(s)	
Contract Date: PY		FY2000	C		FY2001		JUL 01	FY2002	2 0	EC 01	FY2003			FY	2004		
Delivery Date: PY		FY2000	C		FY2001	N	OV 01	FY2002	<u>2</u> A	PR 02	FY2003			FY	2004		
Installations: PY	FY2000			FY2001			FY20	)02		FY	2003			FY2	004		Total
1ST 21	ND 3RD	4TH	1ST 2	ND 3F	D 4TH	1ST	2ND	3RD 4	TH 1S	T 2ND	3RD	4TH	1ST	2ND	3RD	4TH	
Input							2	2			8	1					13
Output							2	2				8	1				13
		P-1 ITEN					PAGE 1	E <b>NO:</b> 69					-	Pa	ge 1 of	1	
					UNC				)								

#### INDIVIDUAL MODIFICATIONS (EXHIBIT P- 3A)

#### DATE: JUNE 2001

Modification Title and No: G

Ground-based Electro-Optical Deep Sensor System (GEODSS), MOD

Models of Systems Affected: AN/FSD

AN/FSD-3, CCD Camera/MPACS

**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 AFSPC 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 System (MPACS), critical to the CCD modification. The CCD cameras will ensure GEODSS capability to meet operational requirements. "Other" costs include program office support (PMA). The kit procured in FY03 will remain in the test bed, hence no installation costs.

Development Status/Major Development Milestones: Contract Awd: Mar 00; DR: Aug 00; Exercise Opt: Jan 01; CTE: Jul 01; DTE: Mar 02; OTE: Apr 02; System Acceptance: Aug 03; Sustainment Transfer: Sep 03.

Financial Plan \$ (ir	n Millio	ns)		PY	F	Y2000	FY2	001	FY	2002	F١	(2003	FY2	004		TO	TAL		
			Qty	Cost	Qty	Cos	t Qty	Cost	Qty	Cost	Qty	Cost	Qty	Cost		Qty		Cost	
RDT&E																			
Ref. R-1 PE No:																0			
Procurement:																			
Equipment Kits							1	3.0	6	5.0		1.8				8			8.8
Equipment Kits Non								2.4		.7						0			3.1
Engineering Change	e Ordei	s														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 S	Support															0			
Other								2.4		2.7		.9				0			6
Total Procuremen	t Costs			0		0	1	9	6	8.4		1 1.7	0			8			19.1
Hardware Installatio	n:																		
(PY) Eqpt ( Kits)																0			0
(FY00) Eqpt (Kits)																0			0
(FY01) Eqpt (1 Kits)									1	.4						1			0.4
(FY02) Eqpt (6 Kits)												6.7				6			0.7
(FY03) Eqpt (1 Kits)												1 0				1			0
(FY04) Eqpt (Kits)																0			0
Total Installation (	Costs:			0		0	0		1	0.4		7 0.7	0			8			1.1
Total Modification	Costs:			0		0	1	9	6	8.8		1 2.4	0			8			20.2
Method of Installation	on:	CONTR	RACTOR	, FIELD II	STALL		Admin	istrative	Lead-tim	e (After 1	<b>Oct):</b> 3	Month(s)		Produc	ction Le	ad-time	: 15 Mo	onth(s)	
Contract Date:	ΡY			FY200	0		FY2001		JAN 01	FY200	2	NOV 01	FY2003	N	OV 02	FY	2004		
Delivery Date:	ΡY			FY200	0		FY2001	A	PR 02	FY200	2	FEB 03	FY2003	F	EB 03	FY	2004		
Installations: PY	,	F	Y2000			FY200	)1		FY2	002		FY	2003			FY2	2004		Total
	1ST	2NI	D 3RD	4TH	1ST	2ND 3	BRD 4TH	1ST	2ND	3RD 4	ITH 1	ST 2ND	3RD	4TH	1ST	2ND	3RD	4TH	
Input										1		6							8
Output												1 4	ł	3					8
				P-1 ITEN 6	<b>/ NO:</b> 2				PAGE 1	<b>NO:</b> 70					-	Pa	ge 1 of	1	
							UN(				1								

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APPROP CODE/BA	:			P-1 NOM	IENCLATURE	:					
OPAF/ELECTRONICS &	TELECOMMUN	ICATION EQUIP	MENT	TACTICAI	TACTICAL C-E EQUIPMENT						
	FY2000	FY2001	FY2002	FY2003	FY2004	FY2005	FY2006	FY2007			
QUANTITY											
COST (in Thousands)	\$79,112	\$91,859	\$95,096	\$161,629	\$172,703	\$130,523	\$116,412	\$216,687			

#### **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. This administration has not addressed FY 2003-2007 requirements. All FY 2003-2007 budget estimates included in this book are notional only and subject to change.

1. THEATER DEPLOYABLE COMMUNICATIONS (TDC) PROGRAM: The TDC program 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. 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

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APPROP CODE/BA:	P-1 NOMENCLATURE:	
OPAF/ELECTRONICS & TELECOMMUNICATION EQUIPMENT	TACTICAL C-E EQUIPMENT	

#### **Description (cont.):**

Packages (ICAP), and Network Management System/Base Information Protection (NMS/BIP). Together, these three systems provide the 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), Battlefield Control Center/Radar Control Center (BCC/RCC), 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 and military Ka-bands when available, 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. The LMST has two functional configurations; hub and spoke, as well as two package configurations; trailer and transit case. The hub configuration includes an additional external antenna. The LMST also includes a DISA mandated orderwire system. Funding includes implementation of a spiral upgrade process to incorporate new communications technologies and capabilities into the baseline. FY00-02 funding continues procurement of LMSTs.

b. INTEGRATED COMMUNICATIONS ACCESS PACKAGE (ICAP): The ICAP program provides modular and scaleable packages of hubs/routers, switches, multiplexers, on-base communications (lasers and microwave radios), crypto and timing equipment, secure voice

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UNCLASSIFIED											

#### **BUDGET ITEM JUSTIFICATION (EXHIBIT P-40)**

DATE: JUNE 2001

#### APPROP CODE/BA:

OPAF/ELECTRONICS & TELECOMMUNICATION EQUIPMENT

#### P-1 NOMENCLATURE:

TACTICAL C-E EQUIPMENT

#### **Description (cont.):**

conferencing, secure and non-secure telephones. ICAP packages also include other accessories and configuration kits required to establish and maintain the deployed base infrastructure, 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 the legacy system 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 Legacy System. 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 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 legacy system lacked this flexibility, requiring a large portion (six to seven C-130 loads) to be in-place before the system became operational. Funding includes implementation of a Spiral upgrade process to incorporate new communications technologies and capabilities into the baseline. FY00-02 funds continue the procurement of ICAP.

c. NETWORK MANAGEMENT SYSTEM/BASE INFORMATION PROTECTION (NMS/BIP): NMS/BIP provides the same network management/information protection and network planning capabilities for deployed operations that exist 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. Funding includes implementation of a spiral upgrade process to incorporate new communications technologies and capabilities into the baseline. Additionally, FY00 funding was provided for Joint Expeditionary Forces Experiment (JEFX) efforts. FY00-02 funding continues procurement of NMS/BIP capabilities.

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. TACP's deploy with Army maneuver units and provide the command and control link for Close Air Support (CAS), airlift, and

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UNCLASSIFIED											

<b>BUDGET ITEM JUSTIFICATION (EXHIBIT P-40)</b>	DATE: JUNE 2001	
APPROP CODE/BA:	P-1 NOMENCLATURE:	
OPAF/ELECTRONICS & TELECOMMUNICATION EQUIPMENT	TACTICAL C-E EQUIPMENT	

#### **Description (cont.):**

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 not be interoperable with the US Army's digitized battlefield and processing close air support requests will be delayed, jeopardizing support of ground forces.

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. TACP modernization remedies joint/combined interoperability, inaccurate targeting, lack of automation, limited situational awareness, and size/weight concerns. FY00 funding began 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. FY02 funding will complete procurement of the dismounted computers and begin the transition to vehicular computers in FY02.

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WEAPON SYSTEM COST ANAL	VEAPON SYSTEM COST ANALYSIS (EXHIBIT P- 5)								1	DATE:	JUNE	2001	
APPROP CODE/BA: OPAF/ELECTRONICS & TELECOM	1MUNICATI	ON EQL	JIPMENT		P-1 NOMENCLATURE: TACTICAL C-E EQUIPMENT								
	IDENT		FY2000		FY2001			FY2002	2	FY2003			
WEAPON SYSTEM COST ELEMENTS	CODE	QTY	UNIT COST	TOTAL COST	QTY	UNIT COST	TOTAL COST	QTY	UNIT COST	TOTAL COST	QTY	UNIT COST	TOTAL COST
1. TDC PROGRAM				{67,981	}		{73,487}			{77,014}			
A. LMST	А			19,302	2		18,734			18,644			
B. ICAP	А			43,493	3		47,753			53,370			
C. NMS/BIP	A			5,186	6		7,000			5,000			
2. TACP MODERNIZATION				{11,131	}		{18,372}			{18,082}			
A. LASER RANGE FINDERS	А						4,276			5,367			
B. COMPUTERS	А			3,92	1		1,812			7,532			
C. MANPACK RADIOS	A			7,210	D		12,284			5,183			
TOTALS:				79,112	2		91,859			95,096			
REMARKS:													
	<b>P-1 ITEM</b> 63	NO			PA	<b>GE NO:</b> 175					F	Page 1 of 1	

BUDGET PROCUREM	IENT HISTORY	Y PLANN	NING (EXHIBIT P- 54	A)		DATE: JUNE 2001						
APPROP CODE/BA			N 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												
FY00 (1)(2)			AFMC/ESC	MIPR/FFP	ARMY/CECOM, HARRIS CORP, MELBOURNE, FL	JAN 00	JAN 01					
FY01 (1)(2)			AFMC/ESC	MIPR/FFP	ARMY/CECOM, HARRIS CORP, MELBOURNE, FL	JAN 01	JAN 02					
FY02 (1)(2)			AFMC/ESC	MIPR/FFP	ARMY/CECOM, HARRIS CORP,N	/IELB JAN 02	JAN 03	Y				
B. ICAP												
FY00 (2)			AFMC/ESC	OPT/FFP (3)	MOTOROLA SSTG, SCOTTSDAL	.E, AZ DEC 99	JUN 00					
FY01 (2)			AFMC/ESC	OPT/FFP (3)	MOTOROLA SSTG, SCOTTSDAL	.E, AZ DEC 00	JUN 01					
FY02 (2)			AFMC/ESC	C/FFP	твр	DEC 01	JUN 02	Y				
C. NMS/BIP												
FY00			AFMC/ESC	C/FP	MULTIPLE (4)	FEB 00	JUL 00					
FY01			AFMC/SSG	OPT (5)/IDIQ	TRW, SAN ANTONIO, TX	FEB 01	JUL 01					
FY02			AFMC/SSG	OPT (5)/IDIQ	TRW, SAN ANTONIO, TX	FEB 02	JUL 02	Y				
	P-1	<b>ITEM N</b> 63	IO	PAGE NO 176	:		Page	e 1 of	3			

BUDGET PROCUREMENT H	IISTOR		NING (EXHIBIT P- 5A	A)		<b>DATE:</b> JUNE 2001							
APPROP CODE/BA: OPAF/ELECTRONICS & TELEC				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				
2. TACP MODERNIZATION													
A. LASER RANGE FINDERS													
FY01			AFMC/ESC	SS/FFP	LITTON LASER DIVISION, APOP	PKA, FL NOV 00	NOV 01						
FY02			AFMC/ESC	OPT/FFP	LITTON LASER DIVISION, APOP	PKA, FL NOV 01	NOV 02	Y					
B. COMPUTERS (6)													
FY01			AFMC/ESC	DO/FFP	CIT PAD, SSG, GUNTER ANNEX	, GA NOV 00	DEC 00						
FY02			AFMC/ESC	DO/FFP	CIT PAD, SSG, GUNTER ANNEX	, GA NOV 01	DEC 01	Y					
C. MANPACK RADIOS													
FY00			AFMC/ESC	SS/FFP	ELEC DATA SYS CORP, HERND	ON,VA APR 00	MAY 03						
FY01			AFMC/ESC	C/FFP	HARRIS CORP, ROCHESTER, N	Y NOV 00	MAR 01						
FY02			AFMC/ESC	OPT/FFP	HARRIS CORP, ROCHESTER, N	Y NOV 01	MAR 02	Y					
REMARKS: (1) Option to FY95 C/FFP contra (2) LMST and ICAP unit costs v (3) Option to FY96 ICAP contrac	vary beca ct with M	ause syste	em sizing composition Scottsdale, AZ.	depends on applicat	I		Poor						
		63		177			Page	e 2 of	ა				

BUDGET PROCUREMENT H	ISTOR	Y PLANN	ING (EXHIBIT P- 5/	۹)		DATE: JUNE 2001				
APPROP CODE/BA: OPAF/ELECTRONICS & TELEC	OMMU	NICATION	EQUIPMENT	P-1 NOMENCLAT TACTICAL C-E EQUI						
ITEM / FISCAL YEAR	QTY.	UNIT COST	LOCATION OF PCO	CONTRACT METHOD & TYPE	CONTRACTOR AND LOCATION				SPECS AVAIL NOW	DATE REV. AVAII
are: Harris, Rochester, NY; Rayt (5) Option to basic contract with (6) Quantity and unit cost vary be	TRW, Sa	an Antonio	, TX awarded Aug 97	, -	203, San Diego, CA.					
	P-1	<b>ITEM NO</b> 63	D	<b>PAGE NO:</b> 178				Page	e 3 of	3

BUDGET ITEM JUS	DATE:	DATE: JUNE 2001										
APPROP CODE/BA	:			P-1 NOM	P-1 NOMENCLATURE:							
OPAF/ELECTRONICS &		ICATION EQUIP	MENT	COMBAT	COMBAT SURVIVOR EVADER LOCATOR (CSEL)							
	FY2000	FY2001	FY2002	FY2003	FY2004	FY2005	FY2006	FY2007				
QUANTITY												
COST (in Thousands)	\$835	\$7,628	\$2,222	\$20,623	\$19,557	\$19,685	\$32,611	\$36,846				

#### **Description:**

The Combat Survivor Evader Locator (CSEL) joint program, with the Air Force as lead service, will replace existing PRC-90 and PRC-112 survival radios with current and emerging technologies in a new end-to-end system providing enhanced Combat Search and Rescue (CSAR) capabilities. This system is composed of 1) a user segment featuring a new multi-function, software re-programmable hand-held radio that incorporates near-real-time geopositioning using Global Positioning System capabilities; 2) a satellite communications segment incorporating four UHF Base Stations (UBSs) co-located with Navy command and control facilities to support secure two-way over-the-horizon data messaging and, potentially, integration of commercial satellite systems; and 3) a ground segment containing a Joint Search and Rescue Center (JSRC) software application allowing command and control interfaces with other government systems.

In February 1996, a cost-plus-award-fee Research, Development, Test and Evaluation (RDT&E) contract was awarded for the Engineering and Manufacturing Development of the CSEL system. (Reference the RDT&E Budget Justification Exhibits for Program Element 0305176F.) The first production option was awarded in July 1997, and the first Low Rate Initial Production (LRIP) radios were delivered in the third quarter of FY99. In February 2000 the Joint Requirements Oversight Council approved the updated CSEL Operational Requirements Document (ORD), which established an evolutionary two-block system development/fielding approach. LRIP radio production for Block 1, the current configuration, will begin in the fourth quarter of FY01 after an operational assessment and continue in FY02; full-rate production will begin in FY03. On-going Block 2 development will upgrade the JSRC application to comply with a Defense Information Infrastructure Common Operating Environment (DII COE) Level 7 interoperability requirement, and to add Demand-Assigned Multiple Access compatibility (DAMA-C) to make efficient use of UHF satellite communications resources. Ultimately, the Air Force, Army, and Navy will procure



<b>BUDGET ITEM JUSTIFICATION (EXHIBIT P-40)</b>	<b>DATE:</b> JUNE 2001					
APPROP CODE/BA:	P-1 NOMENCLATURE:					
OPAF/ELECTRONICS & TELECOMMUNICATION EQUIPMENT	COMBAT SURVIVOR EVADER LOCATOR (CSEL)					
<b>Description (cont.):</b> approximately 45,990 CSEL radios, including 16,811 for the Air Force.	The Army and Navy separately fu	and their own CSEL radios.				

This administration has not addressed FY 2003-2007 requirements. All FY 2003-2007 budget estimates included in this book are notional only and subject to change.

A. FY00 funding enabled performance verification of the radios procured in FY99, and was also used to upgrade their GPS modules to the current production configuration.

B. FY01 funding procures a UBS, production engineering, the first Air Force Block 1 radios, and associated support equipment. This FY01 Block 1 procurement supports the Multi-Service Operational Test and Evaluation (MOT&E - referred to as Initial OT&E in last year's procurement budget item justification) in the fourth quarter of FY02 as well as theater CINC use in support of ongoing contingency operations. Procurement of the kit to upgrade an operational UBS to a Demand Assignment Multiple Access Compatibility (DAMA-C) configuration, previously scheduled for FY01, has been deferred as part of the restructuring of the program into two blocks.

C. FY02 funding will fund another UBS, additional Block 1 radios, associated radio support equipment, training aids, and production engineering. Failure to fund this UBS would delay follow-on OT&E and, consequently, achievement of worldwide UHF satellite coverage by one year. Delaying this operational capability will force isolated personnel and rescue forces to be dependent upon today's dated survival radio technology in some regions--equipment that was found to be inadequate in the 1995 search and recovery in Bosnia.

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WEAPON SYSTEM COST ANAL	EAPON SYSTEM COST ANALYSIS (EXHIBIT P- 5)					DATE: JUNE 2001							
APPROP CODE/BA: OPAF/ELECTRONICS & TELECOM	IMUNICATI	ON EQ	UIPMENT		P-1 NOMENCLATURE: COMBAT SURVIVOR EVADER LOCATOR (CSEL)								
	IDENT		FY2000			FY2001			FY2002			FY2003	
WEAPON SYSTEM COST ELEMENTS	CODE	QTY	UNIT COST	TOTAL COST	QTY	UNIT COST	TOTAL COST	QTY	UNIT COST	TOTAL COST	QTY	UNIT COST	TOTAL COST
CSEL SYSTEM				{835}	ł		{7,628}			{2,222}			
CSEL RADIO (1)	В				288	14,557	4,192	6	8,870	53			
PROGRAM SUPPORT EQUIPMENT (2)							548			7			
UHF BASE STATION (UBS)							881			937			
PRODUCTION ENGINEERING				835	5		2,007			1,225			
TOTALS:				835	288		7,628	6		2,222			
<ul> <li>(1) Unit cost is contingent upon the t fiscal year increases the unit cost for (2) Program support equipment cons</li> </ul>	all radios fu	unded i	n that year l	by all serv	rices.					•	nent in a	given	
	<b>P-1 ITEM</b> 64	NO			PAG	<b>E NO:</b> 181					Pa	ge 1 of 1	

BUDGET PROCUREMENT HISTORY PLANNING (EXHIBIT P- 5A)								001		
APPROP CODE/BA: OPAF/ELECTRONICS & TELEC	OMMUN	NICATION	EQUIPMENT	P-1 NOMENCLATURE: COMBAT SURVIVOR EVADER LOCATOR (CSEL)						
ITEM / FISCAL YEAR	QTY.	UNIT COST	LOCATION OF PCO	CONTRACT METHOD & TYPE	CONTRACTOR AND LOCATION	AW DA		T AVAIL	DATE REV. AVAIL	
CSEL RADIO										
FY01 (1)	288	14,557	AFMC/SMC	OTH (3)/FFP	BOEING, ANAHEIM, CA	AUG	01 JAN	)2 Y		
FY02 (2)	6	8,870	AFMC/SMC	OTH (3)/FFP	BOEING, ANAHEIM, CA	NOV	01 DEC	02 Y		
fiscal year increases the unit cost (2) LRIP 2 production mod added 96.					ment contract with Boeing, <i>i</i>	Anaheim, CA	awarde	122 Feb		
	P-1	<b>ITEM N</b> 64	0	<b>PAGE NO</b> : 182			Pa	ige 1 c	f 1	

BUDGET ITEM JUS	DATE:	DATE: JUNE 2001								
APPROP CODE/BA		ICATION EQUIP	MENT		P-1 NOMENCLATURE: RADIO EQUIPMENT					
	FY2000	FY2001	FY2002	FY2003	FY2004	FY2005	FY2006	FY2007		
QUANTITY										
COST (in Thousands)	\$20,224	\$16,477	\$13,926	\$7,673	\$7,983	\$8,067	\$8,221	\$8,394		

#### **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 FY02 are identified on the P5 and are representative of the items to be procured. Items procured during execution may change based on critical equipment needed to support current Air Force mission requirements. This administration has not addressed FY 2003-2007 requirements. All FY 2003-2007 budget estimates included in this book are notional only and subject to change.

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).

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BUDGET ITEM JUSTIFICATION (EXHIBIT P-40)	DATE: JUNE 2001	
APPROP CODE/BA:	P-1 NOMENCLATURE:	
OPAF/ELECTRONICS & TELECOMMUNICATION EQUIPMENT	RADIO EQUIPMENT	

#### **Description (cont.):**

The Scope Command program is divided into three distinct phases and upgrades 14 AF HF Global sites with state-of-the-art, commercial-off-the-shelf (COTS) HF radio equipment. Scope Command is moving to a centralized net control capability with unmanned HF radio facilities (referred to as Lights Out). The increments 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 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, provides for 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. Additionally, HF-Email capability is required to provide the means to send and receive E-mail messages between aircraft and ground stations via the Scope Command HF Global Network. This capability will allow improved command, control and mission safety through the transmission of pilot information, weather updates and general mission information. HF E-mail includes the engineering, integration, equipment and installation for Scope Command ground stations and aircraft interface.

FY00 funding procured Scope Command equipment/installation for four Phase B Full Up HF stations, Phase C equipment/installation, engineering/integration support and HF antennas replacement. FY00 funding also procured HF E-mail engineering, integration, Type 1 training,

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BUDGET ITEM JUSTIFICATION (EXHIBIT P-40)	DATE: JUNE 2001		
APPROP CODE/BA: OPAF/ELECTRONICS & TELECOMMUNICATION EQUIPMENT	P-1 NOMENCLATURE: RADIO EQUIPMENT		

#### Description (cont.):

equipment and installation for Scope Command ground stations and aircraft interface.

FY01 funding procures Scope Command equipment/installation for three Phase B Full Up stations plus an additional Southern Hemisphere Station to improve global coverage, Scope Command/Phase C engineering, integration, Type 1 training, support, and HF antennas replacement.

FY02 funds provide continuation of HF E-mail capabilities as well as software modernization/improvements, engineering, integration, network management and security IAW DoD directives and Type 1 training to meet the users requirements. Additionally, FY02 funding will procure and install Scope Command HF antenna replacements.

2. AIR FORCE OFFICE OF SPECIAL INVESTIGATIONS (AFOSI) TACTICAL RADIO SYSTEM: This program is responsible for planning, acquisition, and implementation of AFOSI's Land Mobile Radios (LMR) command-wide. AFOSI's LMR equipment provides secure, two-way communications between AFOSI personnel conducting counterintelligence and criminal investigative operations, protective service operations, and surveillance detection operations in support of AF commanders and deployed DoD units at more than 170 world-wide locations. The goal of the LMR program is to procure standardized equipment to maximize interoperability throughout the command. FY00-02 funding procures portable LMR equipment with narrowband capability.

3. AIR COMBAT COMMAND (ACC) TRUNKED LAND MOBILE RADIO (LMR) SYSTEM: No FY02 funding requested.

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WEAPON SYSTEM COST ANAL							DATE:	JUNE	2001					
APPROP CODE/BA: OPAF/ELECTRONICS & TELECOM	APPROP CODE/BA: OPAF/ELECTRONICS & TELECOMMUNICATION EQUIPMENT					P-1 NOMENCLATURE: RADIO EQUIPMENT								
	IDENT		FY2000		FY2001				FY2002	2		FY2003		
WEAPON SYSTEM COST ELEMENTS	IDENT CODE	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	1			{19,243	}}		{15,514}			{13,514}				
PHASE B FULL UP	А			8,89	8		10,964							
PHASE C LIGHTS OUT	А			4,41	9		816							
ENGR/INTEGRATION/TNG				77	8		1,185			3,685				
HF-EMAIL	А			3,73	7					2,178				
NETWORK MODERNIZATION/IMPROVEMENTS										3,901				
ANTENNAS	А			1,41	1		2,549			3,750				
2. AFOSI TACTICAL RADIO SYSTEM	А			41	4		408			412				
3. ACC TRUNKED LMR SYSTEM	А			56	7		555							
TOTALS:				20,22	4		16,477			13,926				
REMARKS:														
	<b>P-1 ITEM</b> 65	NO			PA	<b>GE NO:</b> 186					F	Page 1 of 1		

BUDGET PROCUREMENT	HISTOR	Y PLANN	NING (EXHIBIT P- 54	A)		DATE: JU	DATE: JUNE 2001					
APPROP CODE/BA: OPAF/ELECTRONICS & TELE	COMMUI	NICATION	N 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 00 (1)			AFMC/OC-ALC	DO/FFP	ROCKWELL, RICHARDSON TX	JAN 00	JAN 01					
FY 01 (1)			AFMC/OC-ALC	DO/FFP	ROCKWELL, RICHARDSON TX	JAN 01	JAN 02					
PHASE C LIGHTS OUT												
FY 00 (1)			AFMC/OC-ALC	DO (2)/FFP	ROCKWELL, RICHARDSON TX	JAN 00	JUL 00					
FY 01 (1)			AFMC/OC-ALC	DO (2)/FFP	ROCKWELL, RICHARDSON TX	JAN 01	JUL 01					
HF-EMAIL												
FY00 (1)			AFMC/OC-ALC	DO (2)/FFP	ROCKWELL, RICHARDSON TX	NOV 00	MAY 01					
FY02 (1)			AFMC/OC-ALC	DO/FFP	ROCKWELL, RICHARDSON TX	OCT 01	MAR 02	Y				
	P-1	<b>I ITEM N</b> 65	10	<b>PAGE NO</b> 187	:	·	Pag	e 1 of	3			

BUDGET PROCUREMENT	JDGET PROCUREMENT HISTORY PLANNING (EXHIBIT P- 5A)										
APPROP CODE/BA: OPAF/ELECTRONICS & TELE	ECOMMUI	NICATION	I 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		
ANTENNAS											
FY00 (1)			AFMC/OC-ALC	MIPR (5)/FFP	NAVY/SYSTEMS INTEGRATION TECHNOLOGY, INC., SAN DIEG		JAN 01				
FY01 (1)			AFMC/OC-ALC	MIPR (5)/FFP	NAVY/SYSTEMS INTEGRATION TECHNOLOGY, INC., SAN DIEG		AUG 01				
FY02 (1)			AFMC/OC-ALC	MIPR (5)/FFP	NAVY/SYSTEMS INTEGRATION TECHNOLOGY, INC., SAN DIEG			Y			
2. AFOSI TACTICAL RADIO SYSTEM											
FY00			HQ AFOSI	OPT(3)/FP MOTOROLA, INC, HANOVER		IA JAN 00	MAR 00				
FY01			HQ AFOSI	C/FP	FEDSIM, FAIRFAX, VA	OCT 00	OCT 01				
FY02			HQ AFOSI	OPT/FP	FEDSIM, FAIRFAX, VA	OCT 01	SEP 02	Y			
3. ACC TRUNKED LMR SYSTEM											
FY00 (1)			HQ ACC	OPT/FFP	MULTIPLE (4)	MAY 00	DEC 00				
FY01 (1)			HQ ACC	OPT/FFP	MULTIPLE (4)	MAY 01	DEC 01				
	P-1	<b>ITEM N</b> 65	0	<b>PAGE NO</b> 188	:		Pag	e 2 of	3		

BUDGET PROCUREMENT	SUDGET PROCUREMENT HISTORY PLANNING (EXHIBIT P- 5A)									
APPROP CODE/BA: OPAF/ELECTRONICS & TELE	COMMUI	NICATION	EQUIPMENT	P-1 NOMENCLA RADIO EQUIPMEN						
ITEM / FISCAL YEAR	QTY.	UNIT COST	LOCATION OF PCO	CONTRACT METHOD & TYPE						
REMARKS: 1. Quantities and unit costs vary 2. Option to contract with Rockw 3. Option to contract with Motoro 4. Multiple options from existing 5. Contract issued through the N	ell, awar bla, Inc. a ACC, AE	ded Noven warded Jul TC, and G	nber 1997. ly 1997. SA schedule contrac	ts. Award/delivery da rchase Request (MIPI	ates represent dates of first o	contract award a ontract.	and delive	ery.		

BUDGET ITEM JUS	TIFICATION (	EXHIBIT P-40)		DATE:	JUNE 2001					
APPROP CODE/BA		ICATION EQUIP	MENT	_	P-1 NOMENCLATURE: TV EQUIPMENT (AFRTV)					
	FY2000	FY2001	FY2002	FY2003	FY2004	FY2005	FY2006	FY2007		
QUANTITY										
COST (in Thousands)	\$1,981	\$1,986	\$2,640	\$2,638	\$2,685	\$2,726	\$2,774	\$2,822		

#### **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 FY02 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. 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. This administration has not addressed FY 2003-2007 requirements. All FY 2003-2007 budget estimates included in this book are notional only and subject to change.

1. AFRTS EQUIPMENT PROCUREMENT: FY00 funds procured digital video test equipment, radio automation systems, non-linear editing systems and support, AM antenna phasing systems, AM transmitters, lifecycle replacement of electronic news gathering (ENG) camera systems, studio camera conversion packages, television time delay systems, newsroom automation software, and FM transmitter systems for contingency

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BUDGET ITEM JUSTIFICATION (EXHIBIT P-40)	DATE: JUNE 2001	
<b>APPROP CODE/BA:</b> OPAF/ELECTRONICS & TELECOMMUNICATION EQUIPMENT	P-1 NOMENCLATURE: TV EQUIPMENT (AFRTV)	

#### **Description (cont.):**

support.

FY01 funds procure on-air radio studio equipment including consoles, radio remote equipment and distribution equipment, digital video acquisition (as part of camera mounted recorder lifecycle replacement), digital news editing systems and support packages, lifecycle replacement for camera tripods, replacement of AM transmission systems at four locations, replacement of an FM transmission system, and major systems upgrade in insertion, monitoring, and distribution to accommodate AFRTS service expansion to US service members overseas. These requirements are a must to change out equipment that is out of life cycle and to move from technology that is no longer supported by manufacturers.

FY02 funds will procure camera tripods requiring lifecycle replacement, startup equipment for manned service in Southwest Asia, equipment for relocation of an FM transmitter site in Kuwait, establishment of a broadcast wide area network/backhaul system, replacement of two television transmitters with support equipment, radio frequency (RF) test equipment for all on-air facilities, audio remote equipment, lifecycle replacement of ENG camera systems, and conversion of television production to digital news editing systems.

2. AFNEWS PRODUCTION CENTER: FY00 funds procured computer based digital audio/video editing systems, consoles and support, digital ready audio/video/time-code routing switchers, installation and peripheral equipment to a relocated cable head-end and video duplication cell, portable video projectors and lens, and remote control capability for the AFNEWS commander's conference room. FY01 funds procure peripheral equipment for additional digital editing systems, lifecycle replacement of video wall ENG camera systems and production monitors, additional digital video cameras, and digital audio/video test equipment. FY02 funds will procure digital video tape recorders, router audio/video digital frames, audio/video digital distribution amplifiers, analog-to-digital converters, a server for computer based digital editing suites and lifecycle replacement of video tape recorders and tripods. Funding of these items is critical to the support of the Air Force's Internal Information Program and the Army Air Force Hometown News Service.

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BUDGET ITEM JUSTIFICATION FOR AGGREGATED ITEMS (EXHIBIT P- 40A)							DATE: JU	JNE 2001	
APPROP CODE/BA: OPAF/ELECTRONICS & TELECOMMUNICATION EQUIPMENTP-1 NOMENCLATURE: TV EQUIPMENT (AFRTV)						E:			
PROCUREMENT ITEMS	ID		FY2000		FY2001	F	/2002	FY	2003
	CODE	QTY.	COST		COST	QTY.	COST	QTY.	COST
1. AFRTS EQUIPMENT PROCUREMENT	A		\$1,7	700	\$1,70	2	\$2,353		
2. AFNEWS PRODUCTION CTR	A		\$2	281	\$28	4	\$287		
Totals:			\$1,9	981	\$1,98	6	\$2,640		
	P-1 ITEM 66	NO		PAGI 1	<b>E NO</b> : 92			Page 1	of 1

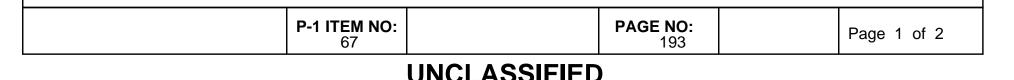
BUDGET ITEM JUS	DATE:	JUNE 2001							
APPROP CODE/BA: OPAF/ELECTRONICS & TELECOMMUNICATION EQUIPMENT					P-1 NOMENCLATURE: CCTV/AUDIOVISUAL EQUIPMENT				
	FY2000	FY2001	FY2002	FY2003	FY2004	FY2005	FY2006	FY2007	
QUANTITY									
COST (in Thousands)	\$3,175	\$1,897	\$3,275	\$3,281	\$3,355	\$3,421	\$3,489	\$3,566	

#### **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 are developed for war fighter operations, readiness training, medical videography, public and internal information, testing and evaluation, and corporate communications. Combat video imagery is used for operational reporting and analysis, battle damage assessment, intelligence and operational analysis, casualty identification, and the historical record. These funds replace older television studio systems with newer and more capable equipment and systems for Air Force television production and combat/contingency documentation. Having recognition that imagery quickly conveys very accurate and unbiased information, commanders are requiring greater 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, as well as to insure full interoperability with all other electronic image acquisition and presentation systems used in the Air Force. FY02 CCTV/AV projects are described below.

Items requested in FY02 are identified on the P40A and are representative for items to be procured. Items procured during execution may change based on critical equipment needed to support current Air Force mission requirements. This administration has not addressed FY 2003-2007 requirements. This administration has not addressed FY 2003-2007 requirements. All FY 2003-2007 budget estimates included in this book are notional only and subject to change.

1. IMAGE ACQUISITION/TELEVISION STUDIO EQUIPMENT: FY00-02 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



BUDGET ITEM JUSTIFICATION (EXHIBIT P-40)	DATE: JUNE 2001	
APPROP CODE/BA:	P-1 NOMENCLATURE:	
OPAF/ELECTRONICS & TELECOMMUNICATION EQUIPMENT	CCTV/AUDIOVISUAL EQUIPME	NT

#### **Description (cont.):**

capture, processing, editing and transmission, enable Air Force 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.

2. COMBAT CAMERA SYSTEMS: The FY00-02 funding continues 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.

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BUDGET ITEM JUSTIFICATION FOR AGGREGATED ITEMS (EXHIBIT P- 40A)							DATE: JU	JNE 2001	
APPROP CODE/BA: OPAF/ELECTRONICS & TELECOMMUNICATION EQUIPMENT		IENT	P-1 NOMENCLATURE: CCTV/AUDIOVISUAL EQUIPMENT						
PROCUREMENT ITEMS	ID	F	Y2000	FY2001		FY	2002	FY	2003
	CODE	QTY.	COST	C	OST	QTY.	COST	QTY.	COST
IMAGE ACQ/TV STUDIO EQUIP	А		\$1,570		\$921		\$1,636		
COMBAT CAMERA SYSTEMS	А		\$1,605		\$976		\$1,639		
Totals:			\$3,175		\$1,897		\$3,275		
	P-1 ITEM	NO		PAGE NO:				Page 1	of 1
	67			195				Ĵ	

BUDGET ITEM JUS	DATE:	JUNE 2001							
APPROP CODE/BA: OPAF/ELECTRONICS & TELECOMMUNICATION EQUIPMENT					P-1 NOMENCLATURE: BASE COMMUNICATIONS INFRASTRUCTURE				
	FY2000	FY2001	FY2002	FY2003	FY2004	FY2005	FY2006	FY2007	
QUANTITY									
COST (in Thousands)	\$42,209	\$76,639	\$76,903	\$78,440	\$84,606	\$91,666	\$83,005	\$81,749	

#### **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 combat support information systems. Requirements are established by Major Command (MAJCOM), Air National Guard (ANG), and/or Air Force Reserve Command (AFRC) components, and interface with the Combat Information Transport Systems infrastructure contained in P-1 Line 52, Base Information Infrastructure.

Items requested in FY02 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. This administration has not addressed FY 2003-2007 requirements. All FY 2003-2007 budget estimates included in this book are notional only and subject to change.

1. HEADQUARTERS AIR FORCE COMMUNICATIONS AGENCY (HQ AFCA): This program procures small-scale communications and information systems equipment supporting the IT mission. FY00-02 funds purchase real-time video systems, satellite terminal upgrades, and high-speed data processing equipment which support models and simulations. Funding also supports AFCA network infrastructure upgrades, providing greater bandwidth to the desktop and increased network access by way of additional network ports.

2. AIR NATIONAL GUARD (ANG): Funding procures new and upgraded digital switching systems (DSS), Private Branch Exchanges

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UNCLASSIFIED						

BUDGET ITEM JUSTIFICATION (EXHIBIT P-40)	DATE: JUNE 2001	
APPROP CODE/BA:	P-1 NOMENCLATURE:	
OPAF/ELECTRONICS & TELECOMMUNICATION EQUIPMENT	BASE COMMUNICATIONS INF	RASTRUCTURE

#### **Description (cont.):**

(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. FY00-02 funding provides base communications infrastructure funding to upgrade communications systems at 89 ANG flying units and over 200 geographically separated units.

3. HEADQUARTERS AIR FORCE SPACE COMMAND (HQ AFSPC): FY00-02 funds support Air Force Space Command base communications command-wide modernization and life cycle replacement of information transmission systems, base information infrastructure, Command Engineering and Installation (E&I) program and base communications infrastructure. Procurements include wide and local area network hardware (servers, routers, hubs and network management systems for information management from central locations) and software, upgrades and replacements for secure/nonsecure telephone switches at main bases and remote geographically separate units, and life cycle replacement of base communications infrastructure. These funds will supplement funding provided by the Air Force Combat Information Transport System (CITS) program by providing critical base-level network connectivity to facilities not funded under the CITS program.

4. HQ US AIR FORCE EUROPE (HQ USAFE): FY00-02 funding supports engineering, procurement, and installation of infrastructure expansion and modernization by purchasing network equipment, network servers, fiber, metallic wiring, fiber optic transceivers, network hubs, and voice and data switching equipment not covered by the CITS program. FY01/02 funding procures telephone switches to replace Siemans switches not maintainable after FY04. FY02 funding also will continue support for expansion and modernization of Air Force maintained portions of the Defense Information Systems Network-Europe (DISN-E). Communication backbone expansions are required at Ramstein AB, GE, Spangdahlem AB, GE, and RAF Croughton, UK due to on-going closure at Rhein Mein AB, GE and closures at RAFs Molesworth, Upwood, and Alconbury, UK. FY02 funding will also support transfer of the Rhein-Main airlift mission to Ramstein and Spangdahlem ABs in Germany. This is a six 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.



BUDGET ITEM JUSTIFICATION (EXHIBIT P-40)	DATE: JUNE 2001		
APPROP CODE/BA:	P-1 NOMENCLATURE:		
OPAF/ELECTRONICS & TELECOMMUNICATION EQUIPMENT	BASE COMMUNICATIONS INFRASTRUCTURE		

#### **Description (cont.):**

5. HEADQUARTERS AIR EDUCATION AND TRAINING COMMAND (HQ AETC): FY00-02 funding supports the AETC education mission by procuring information infrastructure, transmission systems, communications backbone facilities and intrabuilding network wiring. Robust telecommunications facilitate the rapid exchange of data to help instructors provide enhanced curriculums, realistic simulation exercises, remote access to research libraries, and web-enabled distance learning. FY02 funds support communications infrastructure modernization systems required to meet advanced technical training requirements for 175,000 trainees per year in twenty different career fields.

6. HQ AIR FORCE MATERIEL COMMAND (HQ AFMC): FY01/02 funding supports engineering, procurement and installation/upgrades and management/protection of network infrastructure which provides a single high speed connection to the Defense Information Systems Agency (DISA) classified and unclassified networks. These funds will supplement funding provided by the Air Force Systems Networking (AFSN) and Air Force Combat Information Transport System (CITS) programs by providing critical base-level network connectivity to facilities not funded under the AFSN and CITS programs.

7. HQ PACIFIC AIR FORCE (HQ PACAF): FY01/02 funding supports engineering, procurement, and installation of infrastructure expansion and modernization by purchasing network equipment, network servers, fiber, metallic wiring, fiber optic transceivers, network hubs, and voice and data switching equipment not covered by the CITS program. Funds also expand the PACAF-wide secret-level network to improve the warfighters' network access and upgrade switches.

8. HQ AIR COMBAT COMMAND (HQ ACC): FY00-02 funding supports engineering, procurement, and installation of infrastructure expansion and modernization by purchasing network equipment, network servers, fiber, metallic wiring, fiber optic transceivers, network hubs, and voice and data switching equipment not covered by the CITS program.

9. HQ AIR MOBILITY COMMAND (HQ AMC): FY01/02 funding supports engineering, procurement, and installation of infrastructure

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	UNCLASSIFIED		

BUDGET ITEM JUSTIFICATION (EXHIBIT P-40)		DATE: JUNE 2001	
APPROP CODE/BA:	P-1 NOMENCLATURE:		
OPAF/ELECTRONICS & TELECOMMUNICATION EQUIPMENT	BASE COMMUNICATIONS INFRASTRUCTURE		
Description (cont.): expansion and modernization by purchasing network equipment, network and voice and data switching equipment not covered by the CITS program		ber optic transceivers, network hubs,	
<b>P-1 ITEM NO:</b> 68	<b>PAGE NO:</b> 199	Page 4 of 4	

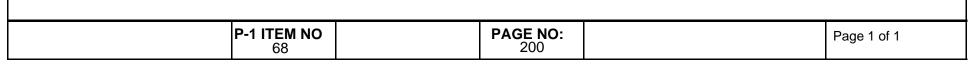
BUDGET ITEM JUSTIFICATION FOR AGGREGATED ITEMS (EXHIBIT P- 40A)							DATE: JUNE 2001		
APPROP CODE/BA: OPAF/ELECTRONICS & TELE	COMMUNICATIC	ON EQUIPME	INT E	P-1 NOMENCLATURE BASE COMMUNICATIONS IN	IFRASTRUCT	URE			
PROCUREMENT ITEMS	ID	FY2	2000	FY2001	FY2	2002	FY2003		
	CODE	QTY.	COST	COST	QTY.	COST	QTY.	COST	
1. HQ AFCA (1) (3)	А		\$647	\$993		\$196			
2. ANG (1) (3)	А		\$23,049	\$23,354		\$24,475			
3. HQ AFSPC (1) (2) (3)	А		\$4,233	\$5,213		\$7,092			
4. HQ USAFE (1) (2) (3)	А		\$3,223	\$12,714		\$18,634			
5. HQ AETC (1) (2) (3)	А		\$9,212	\$19,093		\$4,336			
6. HQ AFMC (1) (2) (3)	А			\$7,129		\$8,944			
7. HQ PACAF (1) (2)	А			\$1,142		\$6,098			
8. HQ ACC (1) (2)	А		\$1,845	\$6,643		\$4,540			
9. HQ AMC (1) (2)	А			\$358		\$2,588			
Totals:			\$42,209	\$76,639		\$76,903			

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 netw (Ulana) II, and Desktop IV contracts.

3. Options to various competitive, fixed price/firm fixed price contracts are available through the following vendors for execution of Base Communications Infrastru AT&T Federal Communications Systems, Silver Spring, MD; AT&T Englewood, CO; Tennmark, Nashville, TN; Sun Micro Systems, Alexandria, VA; GTE Gove and Dichroma, Falls Church, VA; Amerind INC, Alexandria, VA; Presidio, Lanham, MD; Digicom, Bethesda, MD; NORTEL, Richardson, TX; DELL, Dallas, TX VA; and GTSI, Chantilly, VA.



BUDGET ITEM JUSTIFICATION (EXHIBIT P-40)					DATE:	JUNE 2001			
APPROP CODE/BA: OPAF/ELECTRONICS & TELECOMMUNICATION EQUIPMENT					P-1 NOMENCLATURE: ITEMS LESS THAN \$5 MILLION				
	FY2000	FY2001	FY2002	FY2003	FY2004	FY2005	FY2006	FY2007	
QUANTITY									
COST (in Thousands)	\$7,769	\$7,138	\$6,094	\$6,062	\$6,187	\$6,318	\$6,444	\$6,587	

#### **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 FY02 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. This administration has not addressed FY 2003-2007 requirements. All FY 2003-2007 budget estimates included in this book are notional only and subject to change.

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

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<b>BUDGET ITEM JUSTIFICATION (EXHIBIT P-40)</b>	DATE: JUNE 2001	
APPROP CODE/BA:	P-1 NOMENCLATURE:	
OPAF/ELECTRONICS & TELECOMMUNICATION EQUIPMENT	ITEMS LESS THAN \$5 MILLION	

#### **Description (cont.):**

equipment. This equipment is fielded as a complete system and, once installed, provides 100 percent uninterrupted power to critical AF installations. 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.

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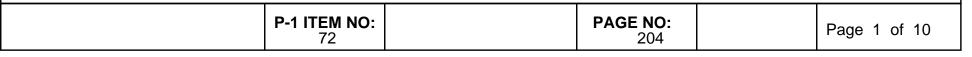
BUDGET ITEM JUSTIFICATION FOR AGGREGATED		DA	TE: JUN	IE 200	01		
APPROP CODE/BA: OPAF/ELECTRONICS & TELECOMMUNICATION EQUIPM	MENT ITEN	NOMENCLA	TURE: 5 MILLION	·			
			FY2	2002			FY2003
PROCUREMENT ITEMS		NSN	QTY.	COST	QT	Υ.	COST
1. ALLOWANCE SOURCES AUTHORIZATIONS				\$3,18	1		
2. POWER CONDITIONING AND CONTINUATION INTERFACING EQUIPMENT				\$2,91	3		
TOTALS:				\$6,09	4		
P-1 ITEM NO 71	I	<b>PAGE NO:</b> 203				Page	1 of 1

BUDGET ITEM JUSTIFICATION (EXHIBIT P-40)					DATE:	JUNE 2001			
APPROP CODE/BA: OPAF/ELECTRONICS & TELECOMMUNICATION EQUIPMENT				_	P-1 NOMENCLATURE: COMM ELECT MODS				
	FY2000	FY2001	FY2002	FY2003	FY2004	FY2005	FY2006	FY2007	
QUANTITY									
COST (in Thousands)	\$47,590	\$49,372	\$66,386	\$52,917	\$37,898	\$34,560	\$37,148	\$36,634	

#### **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 communciations-electronic modification efforts for ground based systems. Modification installation funding is budgeted in the year the installation will be physically done. Modifications requested in FY02 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. This administration has not addressed FY 2003-2007 requirements. All FY 2003-2007 budget estimates included in this book are notional only and subject to change.

1. The Control and Reporting Center (CRC), formerly known as the Ground Theater Air Control System(GTACS) and the Modular Control System (MCS) program, acquires and sustains the state-of-the-art equipment and capabilities essential to the survival and combat effectiveness of tactical air command and control (C2). The GTACS CRC deploys rapid reaction capability into a theater, then to forward locations within that theater, to establish autonomous and self-sufficient bases of operations. CRC elements accomplish five core competencies: theater air defense, datalink management, surveillance, identification and air battle execution. The CRC program provides for connectivity and interoperability among elements of the Theater Air Control System (TACS) within a designated Area of Interest (AOI) to include United States Air Force, Navy, Marine Corps, Army, and allied/coalition assets. It consists of a family of communications-electronics components that provide the battlefield commander with systems and resources to support situational awareness; joint, allied, and combined forces planning; execution of the air tasking order; and all interdiction, close air support, counter air, airlift, air refueling, special operations, electronic



BUDGET ITEM JUSTIFICATION (EXHIBIT P-40)	DATE: JUNE 2001	
APPROP CODE/BA: OPAF/ELECTRONICS & TELECOMMUNICATION EQUIPMENT	P-1 NOMENCLATURE: COMM ELECT MODS	

#### **Description (cont.)**:

protection, surveillance, reconnaissance, and search and rescue missions. The CRC relies on the AN/TPS-75 radar as its primary sensor. The AN/TPS-75 is a mobile, three dimensional (range, azimuth, altitude) surveillance, acquisition, and tracking radar which enables aerospace control in a theater of air operations designated AOI. The AN/TYQ-23 Modular Control Element (MCE), the keystone of the CRC, is an automated computer-based information system operating in a proprietary environment that provides a variety of automated information functions such as aircraft surveillance, flight follow, control, and communication functions, and supports the roles of aerospace control, force application, force enhancement, and force support.

A. MOD #M00016, AN/TPS-75 Radar Shelter Replacement: No FY02 funds are requested.

B. MOD #M00020, Antenna Bearing Redesign: No FY02 funds are requested.

C. MOD # Misc., Miscellaneous Low Cost Mods: FY02 funding provides for the planned correction of deficiencies, functional obsolescence, high failure anomalies and associated parts obsolescence due to diminishing manufacturing sources (DMS) within the CRC.

2. 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 at Thule AB, Greenland; Site II at Clear AFS, AK; and Site III at RAF Fylingdales, UK.

A. Clear Radar Upgrade: No FY02 funds requested.

B. BMEWS Service Life Extension Program (SLEP): Segments of the legacy Mission Critical Computer Resources (MCCR) at the

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### BUDGET ITEM JUSTIFICATION (EXHIBIT P-40)

DATE: JUNE 2001

### APPROP CODE/BA:

OPAF/ELECTRONICS & TELECOMMUNICATION EQUIPMENT

## P-1 NOMENCLATURE:

COMM ELECT MODS

#### **Description (cont.):**

BMEWS sites are obsolete and unsustainable. With increasing age of these 1970's - 80's technology systems, failure rates are increasing and manufacturers are discontinuing production or repair of components. By the end of 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 replace the following subsystems with current commercial off-the-shelf (COTS) subsystems or with re-engineered critical components: graphics display systems, 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 Agency (SPA) systems will also be modified to conform to the modified sub-systems and 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 #62, Space Mods Space, SLBM SLEP).

This modification will proceed in two phases. FY01/02 funding procures Phase 1, which will engineer and test the modifications at the System Program Agency, Centralized Integration Support Facility, Peterson AFB CO. Modification kits will then be produced and installed at selected sites. Modification kits are: the graphics display systems, the network processing units, the digital module test set, the solid state module test set, the disk and tape drives, the radar controller & DMTS peripherals, and the training suite. FY01 funds procure interim supply support. Additionally, FY01/02 funding procures program management support. FY02 funding will begin procurement of Phase 2, which will modify and install the mission data processor components and rehost the existing software using a more modern version of the Jovial language in current AF use.

3. 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 sensor input to National Strategic Response Plan decision-makers at fixed command centers, as well as processors/display systems supporting

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BUDGET ITEM JUSTIFICATION (EXHIBIT P-40)					DATE: JUNE 2	2001
APPROP CODE/BA:			P-1 NOME	NCLATURE:		
OPAF/ELECTRONICS & TELECOMMUNI	CATION EQUIPME	NT	COMM ELEC	CT MODS		
Description (cont.): the CMC Air Defense Operations Center, NORAD Command Center, Resource Center (NORAD Battle Staff) and Weather Support Unit.						
A. MOD# S529382, Comm Infr funding requested.	astructure Upgrade	e (formerly titled	Message Pro	cessing Distributio	n System/Replacen	nent): No FY02
B. MOD# S604628, Visual Display	v System (VDS) M	onitor Replacem	ent (Granite S	Sentry): No FY02	funding requested.	
C. MOD# S7201802203, SPADOC Crimson Work Station Replacement (formerly called Space Work Station Migration): No FY02 funding requested.						
D. MOD# 105-0370-98-308, SPAD	OOC Interface Ada	pter Replacemer	nt Communica	tions Interface: No	o FY02 funding rec	juested.
E. MOD# N/A, Enterprise Database	e Infrastructure: N	lo FY02 funding	requested.			
F. MOD# 010-0001-98, Processing	Display Subsyster	m Migration (PD	SM): No FY	02 funding request	ed.	
G. MOD# MISC, Miscellaneous Low Cost MODs: FY02 funds upgrade the communications backbone in the Test and Development Facility to include the C2 Automated System Local Area Network (CASLAN). This upgrade supports technology associated with the Integrated Space Command and Control (ISC2) efforts detailed in P-1 line #38, Cheyenne Mountain Complex.						
4. 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						
	<b>P-1 ITEM NO:</b> 72			<b>PAGE NO:</b> 207		Page 4 of 10

BUDGET ITEM JUSTIFICATION (EXHIBIT P-40)	DATE: JUNE 2001	
APPROP CODE/BA:	P-1 NOMENCLATURE:	
OPAF/ELECTRONICS & TELECOMMUNICATION EQUIPMENT	COMM ELECT MODS	

#### Description (cont.):

also provides equipment required to ensure interoperability with systems operated by the North Atlantic Treaty Organization, the U.S. National Airspace System and the International Civil Aviation Organization. The following modifications are in support of the ATCALS mission:

A. AN/GRN-30 Instrument Landing System (ILS) Antenna/Distribution Unit: 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. FY01/02 funds procure this modification which 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.

B. AN/GRN-30/31 Meters/Synthesizers Upgrade: No FY02 funds requested.

C. Miscellaneous Low Cost Modifications: FY00-02 funding procures a variety of operations-related modifications, which include the following: (1) Addition of monitoring capabilities to AN/TRN-45 Mobile Microwave Landing System equipment. (2) AN/FRN-45 Facility Central Processing Unit (FCPU) modification, which will enhance operations and reliability by removing the FPCU drawer from the system and rehosting its functions on the PC Input-Output Terminal (IOT). (3) AN/GPN-22 Shelter Grounding which brings the grounding configuration into compliance with National Electric Code. (4) AN/TRN-41 Receiver/Transmitter Upgrade and update to an unsupportable external power source of the only deployable tactical control and navigation (TACAN) in Air Force inventory. (5) Increased capability for the mobile AN/MSN-7 Tower Restoral Vehicle to make proper connections with other operations during periods of time when the system is fielded. (6) Replacement of the existing, now unsupportable, lightening system in the AN/GPN-22 Precision Approach Radar system. (7) And, replacement of the current Automatic Terminal Information Service (ATIS) due to parts obsolescence. Parts for the ATIS are no longer available for

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OPAF/ELECTRONICS & TELECOMMUNICATION EQUIPMENT	COMM ELECT MODS	

#### **Description (cont.)**:

procurement, and the cost to reverse engineer would exceed the unit acquisition cost tenfold.

5. 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, mission-critical support by observing, analyzing, and forecasting terrestrial weather phenomena impacting the warfighter's ability to operate on the ground and in the air. Worldwide weather products are generated and distributed to Air Force and Army forces and other customers. The following modifications are in support of this mission:

(1) MOD# 93-008, Automated Weather Distribution System (AWDS): No FY02 funding required.

(2) MOD# 94-004A, NEXRAD Radar Product Generator (RPG) Migration: The RPG processor converts doppler weather radar data into displayable products. FY00-02 funding will complete replacement of proprietary software and hardware with open systems standards and commercial off-the-shelf products to reduce maintenance costs and facilitate integration of new processing and display systems.

(3) MOD# 94-004B, NEXRAD Principle User Processor (PUP) Group Replacement: The PUP workstation displays doppler weather data for forecaster analysis. FY00-02 funding continues migration of PUP software to open system standards and re-hosts it to commercial off-the-shelf, 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 Operational Weather Squadrons (OWSs), and provide Weather Flight/Detachments software which will allow remote log-in to the OWS server to meet weather radar product needs.

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BUDGET ITEM JUSTIFICATION (EXHIBIT P-40)	DATE: JUNE 2001	
APPROP CODE/BA:	P-1 NOMENCLATURE:	
OPAF/ELECTRONICS & TELECOMMUNICATION EQUIPMENT	COMM ELECT MODS	
Description (cont.):		

(4) MOD# 95-003, Weather Information Processing System (WIPS) Upgrade: No FY02 funding requested.

(5) MOD# 95-011, Tactical Meteorological (TACMET) Observing System Upgrade: No FY02 funding requested.

(6) MOD# 98-001, Air Force Weather Agency (AFWA) Dissemination Subsystem: FY01/02 funding procures the modification to upgrade and replace AFW dissemination subsystem hardware, software, and communications infrastructure, enabling rapid receipt, staging, and transmission of graphics and text-based weather products and data to the warfighter. These modifications will increase the ability of AF Weather Strategic Center, OWSs, and deployed units to provide timely battlespace information to the warfighter.

(7) MOD# 98-002, Product Tailoring/Warfighter Applications: FY02 funding begins the upgrade of hardware, software, and communications infrastructure of OWSs and Weather Flights/Detachments to ingest process, analyze, display, and disseminate target scale meteorological data supporting warfighter operations.

(8) MOD# 98-003, Weather Forecasting: FY02 funding begins this modification, which will upgrade computer workstations and supporting software at the AFW Strategic Center to support fine scale weather and cloud model forecasts. The current infrastructure will only support a limited number of theaters/areas of interest. This modification will allow the current infrastructure to support the AF spatial and temporal weather and cloud model forecast resolution requirements and provide capacity to handle extremely large data files.

(9) MOD# 00-004, Air Force Combat Climatology Center - Replacement Upgrade: FY02 funding will begin upgrade of hardware, software, and communications infrastructure within the AF Combat Climatology Center to support ingest, archiving, and retrieval of fine scale cloud model analysis and forecast data and weather observational data. Upgrade will include network attached storage devices including disk drives, and central processing units for additional data ingest, storage, and retrieval capabilities.

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<b>BUDGET ITEM JUSTIFICATION (EXHIBIT P-40)</b>	DATE: JUNE 2001	
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OPAF/ELECTRONICS & TELECOMMUNICATION EQUIPMENT	COMM ELECT MODS	

#### **Description (cont.):**

(10) MOD# 00-005, Direct Readout Terminal (DRT) Modification: FY02 funding will begin modifications required to permit tactical terminals to receive information from the next generation of meteorological polar and geo-stationary satellites in direct support of the warfighter. Additionally, these modifications will allow integration of meteorological satellite data into warfighter C4I systems.

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). FY00/01 funds procure software and hardware to allow two-way communications between the IMS sites and AFWA. FY02 funding will complete installation of modification kits, improving communications between IMS sites and the AFW Strategic Center.

(2) MOD# 93-004, Ionospheric Measuring System (IMS) Scintillation Modification: This modification was formerly part of the SWICS. FY00/01 funds procure updated hardware and software to allow the IMS computation of ionospheric phase and amplitude scintillation. FY02 funding will complete modification of IMS sites, adding scintillation measurement capability.

(3) MOD# 93-005, Radio Solar Telescope Network (RSTN) Modification for Solar Radio Burst Locator (SRBL): FY00-02 funding procures this modification that improves the warfighters' ability to detect and locate solar flares. This capability mitigates radiation damage to

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<b>BUDGET ITEM JUSTIFICATION (EXHIBIT P-40)</b>	DATE: JUNE 2001	
APPROP CODE/BA: OPAF/ELECTRONICS & TELECOMMUNICATION EQUIPMENT	P-1 NOMENCLATURE: COMM ELECT MODS	

#### **Description (cont.):**

high altitude aircraft, allowing timely planning of manned space activities and satellite operations.

(4) MOD# 96-001, Solar Electro-Optical Network (SEON) Solar Max (SSM): No FY02 funding requested.

(5) MOD# 96-031, Improved Solar Observing Optical Network (ISOON): FY00-02 funding procures this modification, which retrofits the 1960s technology optical telescopes with more capable and reliable solar optical telescopes to keep the system operationally effective. 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.

(6) Mod# N/A, Miscellaneous Low Cost Mods: No FY02 funding requested.

6. JOINT SURVEILLANCE SYSTEM (JSS): The JSS is a combined USAF/Federal Aviation Administration (FAA) network providing air surveillance data through a distributed network of radars around the perimeter of the continental US, Alaska, and Hawaii. The surveillance data supports CINCNORAD's Atmospheric Tactical Warning and Attack Assessment (ATW/AA) mission as well as air traffic control missions of the FAA and multi-national air traffic control agencies. FY02 funds will replace FPS-117 Long Range Radar radar interrogator sets (beacons) and environmental control units throughout the network. These components have become logistically unsupportable in their current configurations.

See corresponding P-3A for detailed cost/schedule.

7. NORTH WARNING SYSTEM (NWS): The NWS is a combined US/Canada effort providing surveillance and ITW/AA of northern approaches to the US and Canada as part of the Atmospheric Early Warning System. The beacon radar and environmental control units (ECU) are at the end of their useful life, and suffer from reliability and supportability problems. The beacon is no longer in production and replacement

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BUDGET ITEM JUSTIFICATION (EXHIBIT P-40)		DATE: JUNE 2001
	P-1 NOMENCLATURE: COMM ELECT MODS	

#### **Description (cont.):**

parts are virtually exhausted. The ECU provides heating and cooling to radar components; however, the units are leaking refrigerant into the atmoshere. Loss of the beacon or ECU will cause the radar to shut down and make it impossible for NORAD to accomplish its air defense mission. FY02 funds will begin a modernization program and prevent any gaps in the North American Defense System.

8. SHARED EARLY WARNING SYSTEM (SEWS): FY02 funds will procure upgrades to SEWS-specific equipment at theater CINCs, Partner Nations, and the Centralized Distribution Facility (CDF) at Peterson AFB, Colorado Springs, CO.

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BUDGET ITEM JUSTIFICATION F	OR AGG	REGA	TED ITEMS	(EXHIBI	EXHIBIT P- 40A) DATE: JUNE 2001					2001		
APPROP CODE/BA: OPAF/ELECTRONICS & TELECOMM	UNICATIO	ON EQ	UIPMENT	<b>P-</b> CC	1 NOMEN DMM ELECT	ICLA MODS	TURE	:				
PROCUREMENT ITEMS	ID		FY2000		FY2	001		FY	2002		FY2	003
	CODE	QT	Y. CO	DST	COS		ST	QTY.	COST	Q	TY.	COST
1. CONTROL & REPORTING CENTER (CRC)				\${1,021}			\${782}		\${793}			
A. MOD# M00016, RADAR SHELTER REPLACEMENT	A			\$385								
B. MOD# M00020, ANTENNA BEARING REDESIGN	A			\$636			\$782					
C. MISCELLANEOUS LOW COST MODS	А								\$793			
				(00.500)			(40.500)		¢(00.474)			
2. BALLISTIC MISSILE EARLY WARNING SYSTEM (BMEWS)			\$1	20,560}		\$	{13,599}		\${23,471}			
A. MOD# N/A CLEAR RADAR UPGRADE (CRU)	A			\$20,560								
B. BMEWS SLEP						\$	{13,599}		\${23,471}			
HARDWARE/SOFTWARE							\$11,674		\$21,636			
INTERIM SUPPLY SUPPORT							\$850					
PROGRAM MANAGEMENT SUPPORT					\$1		\$1,075		\$1,835			
3. CHEYENNE MOUNTAIN COMPLEX				\${4,014}		\$	{16,226}		\${471}			
A. MOD# S529382, COMM INFRASTRUCTURE UPGRADE	А			\$908			\$7,261					
P	<b>-1 ITEM</b> 72	NO			<b>PAGE N</b> 214	0:				F	Page 1 o	f 5

BUDGET ITEM JUSTIFICATION F	EMS (EXHI	BIT P- 40A)				DATE: J	UNE	2001				
APPROP CODE/BA: OPAF/ELECTRONICS & TELECOMM	IUNICATIO	ON EQ	UIPMEN	NT	P-1 NOMEN COMM ELECT	NCLA MODS	TURE	:				
PROCUREMENT ITEMS	ID		FY20	000	FY	2001		FY	2002		FY2	2003
	CODE	QT	Υ.	COST		CC	OST	QTY.	COST	C	QTY.	COST
B. MOD# S604628, VDS MONITOR REPLACEMENT (GRANITE SENTRY)	A						\$1,019					
C. MOD# S7201802203, SPADOC CRIMSON WORKSTATION REPLACEMENT (SPACE WORK STATION MIGRATION)	A						\$3,719					
D. MOD# 105-0370-98-308, SPADOC COMMUNICATIONS INTERFACE	A						\$3,282					
E. MOD# N/A, ENTERPRISE DATABASE INFRASTRUCTURE	A			\$2,384			\$945					
F. MOD# 010-0001-98, PROCESSING DISPLAY SUBSYTEM MIGRATION	А			\$522								
G. MISC, MISCELLANEOUS LOW COST MODS	A			\$200					\$471			
4. AIR TRAFFIC CONTROL LANDING SYSTEM ( ATCALS)				\${8,849}			\${9,189}		\${10,679}			
A. MOD# N/A, AN/GRN-30 INSTRUMENT LANDING SYSTEM ANTENNA/DU	A						\$9,000		\$5,400			
F	<b>P-1 ITEM</b> 72	NO			<b>PAGE N</b> 215	IO:					Page 2 d	of 5

BUDGET ITEM JUSTIFICATION FO	REGATE	D ITEMS (EXI	HIBIT P- 4	DA)		DATE: JU	DATE: JUNE 2001				
APPROP CODE/BA: OPAF/ELECTRONICS & TELECOMM	JNICATIO	DN EQUIP	MENT	P-1 NO COMM EI	MENCLA LECT MODS	STURE:	·				
PROCUREMENT ITEMS	ID	FY2000			FY2001		FY	2002	FY	2003	
	CODE	QTY.	COST		CC	OST	QTY.	COST	QTY.	COST	
B. MOD# N/A, AN/GRN-30/31 METERS/SYNTHESIZERS	A		\$3,10	00							
C. MISCELLANEOUS LOW COST MODS	A		\$5,74	49		\$189		\$5,279			
5. WEATHER OBSERVATION & FORECAST SYSTEM			\${13,14	6}		\${9,554}		\${17,772}			
A. GROUND WEATHER			\${8,61	4}		\${6,091}		\${14,229}			
(1) MOD# 93-008, AUTOMATED WEATHER DISTRIBUTION SYSTEM (AWDS)	A		\$1,82	22							
(2) MOD# 94-004A, NEXRAD RADAR PRODUCT GENERATOR (RPG) MIGRATION	A		\$1,20	00		\$583		\$1,370			
(3) MOD# 94-004B, NEXRAD PRINCIPAL USER PROCESSOR (PUP) GROUP REPLACEMENT	A		\$1,9	70		\$1,540		\$1,162			
(4) MOD# 95-003, WEATHER INFORMATION PROCESSING SYSTEM (WIPS) UPGRADE	A		\$2,7	35							
(5) MOD# 95-011, TACTICAL METEOROLOGICAL (TACMET) OBSERVING SYSTEM UPGRADE	A		\$8	37							
P	-1 ITEM 72	NO		PA	<b>GE NO:</b> 216				Page 3	of 5	

BUDGET ITEM JUSTIFICATION FO	TION FOR AGGREGATED ITEMS				IBIT P- 40A)				DATE: JUNE 2001			
APPROP CODE/BA: OPAF/ELECTRONICS & TELECOMM	UNICATIO	ON EQ	UIPMI	ENT	P-1 NOME	ENCLA T MODS	ATURE	:				
PROCUREMENT ITEMS	ID		FY	2000	F	Y2001		FY	2002		FY2	003
TROCOREMENT TEMS	CODE	QT	Y.	COST		CC	OST	QTY.	COST	QT	Ϋ.	COST
(6) MOD# 98-001, AIR FORCE WEATHER AGENCY (AFWA) DISSEMINATION SUBSYSTEM	A						\$3,968		\$2,100			
(7) MOD# 98-002, PRODUCT TAILORING/WARFIGHTER APPLICATIONS	A								\$3,180			
(8) MOD# 98-003, WEATHER FORECASTING	A								\$4,367			
(9) MOD# 00-004, AIR FORCE COMBAT CLIMATOLOGY CENTER - REPLACEMENT UPGRADE	A								\$750			
(10) MOD# 00-005, DIRECT READOUT TERMINAL MODIFICATION	A								\$1,300			
B. SPACE WEATHER				\${4,532]			\${3,485}		\${3,543}			
(1) MOD# 93-003, IONOSPHERIC MEASURING SYSTEM (IMS) COMMUNICATIONS MODIFICATION	A			\$476			\$162		\$39			
(2) MOD# 93-004, IONOSPHERIC MEASURING SYSTEM (IMS) SCINTILLATION MODIFICATION	A			\$560			\$956		\$61			
											Τ	
Р	<b>-1 ITEM</b> 72	NO			PAGE 21	<b>NO:</b> 7				P	age 4 c	of 5

BUDGET ITEM JUSTIFICATION FO		GATE	D ITEMS (EX	HIBI	T P- 40A)			DATE: JU	INE 2001	
APPROP CODE/BA: OPAF/ELECTRONICS & TELECOMM	UNICATION	EQUIP	MENT	<b>P-</b> CC	1 NOMENCLA MM ELECT MOD	<b>TURE</b>	:			
PROCUREMENT ITEMS	ID	F	FY2000		FY2001		FY20	002	F١	2003
	CODE	QTY.	COST		C	OST	QTY.	COST	QTY.	COST
(3) MOD# 93-005, RADIO SOLAR TELESCOPE NETWORK (RSTN) MOD FOR SOLAR RADIO BURST LOCATOR (SRBL)	A		\$3	348		\$1,807		\$88		
(4) MOD# 96-001, SOLAR ELECTRO-OPTICAL NETWORK (SEON) SOLAR MAX (SSM)	A		\$1,4	151						
(5) MOD# 96-031, IMPROVED SOLAR OBSERVING OPTICAL NETWORK (ISOON)	A		\$1,6	697		\$538		\$3,355		
(6) MOD# N/A, MISCELLANEOUS LOW COST MODS	A					\$22				
6. JOINT SURVEILLANCE SYSTEM	A							\$9,410		
7. NORTH WARNING SYSTEM	A							\$3,590		
8. SHARED EARLY WARNING ACQUISITION	A							\$200		
Totals:			\$47,5	90		\$49,372		\$66,386		
Remarks:	1						1 1			
P	<b>-1 ITEM N</b> 72	0			<b>PAGE NO:</b> 218				Page 5	of 5

#### **INDIVIDUAL MODIFICATIONS (EXHIBIT P-3A)**

#### DATE: JUNE 2001

Modification Title and No: Ballistic Missile Early Warning System (BMEWS) - SLEP Models of Systems Affected:

Ballistic Missile Early Warning Systems: Clear AS, AK, Thule AB,

Greenland, and RAF Flylingdales, UK. Description/Justification: Segments of the legacy Mission Critical Computer Resources at the BMEWS sites are obsolete and will become unsustainable starting in 2001. This reliability and maintainability modification will upgrade the following unsupportable subsystems as Phase 1: graphics display systems (GDS), the radar controllers (RCL), the network processing units (NPU), the disk & tape drives (D&TD), digital module test set (DMTS), and solid state module test sets (SSMTS). The VAFB trainer and site training suites will be modified to conform to the modified GDS. As Phase 2, the BMEWS mission processors (MP) will be replaced over FY02-04 and the mission software rehosted with the latest AF version of Jovial programming language. "Other costs" include program office support (PMA). Initial spares are funded by contracted Interim Supply Support (ISS). This modification is concurrent and parallel to the modification of the SLBM radar systems at Beale AFB and Cape Cod AS (reference P-1 Line for Space Mods Space, SLBM SLEP).

Development Status/Major Development Milestones: Phase 1: award May01; 1st article tests at SPA: SSMTS Dec01, NPU and D&TD Nov01, DMTS & RCL Prohrl Feb02, RCL Prcsr Aug02, GDS and training suite Feb03; Fylingdales installations Jan02-Mar03; Thule installations Feb02-May03; Clear installations Jul03-Dec03; VAFB trainer May03. Phase 2:contract award Nov02; Install MPs Aug03-Sep04.

Financial Plan \$ (in Millions)		PΥ	FY	2000	FY2	001	FY	2002	F١	2003	FY2	2004		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					9	2.429	17	1.266		8 3.300				34		7
Equipment Kits Non-recurring						5.401		6.832		4.404				0		16.6
Engineering Change Orders								.229						0		0.2
Data						.345		.195						0		0.5
Training Equipment						.755		.146		.384				0		1.3
Support Equipment						.182		.183		0.240				0		0.6
Software						1.687		9.256						0		10.9
Interim Contractor Support						.882								0		0.9
Other						1.137		2.373		2.538		0.740	)	0		6.8
Total Procurement Costs:	(	)	(	)	9	12.8	17	20.5		8 10.9	0	0.7	,	34		44.8
Hardware Installation:																
(PY) Eqpt ( Kits)														0		0
(FY00) Eqpt (Kits)														0		0
(FY01) Eqpt (9 Kits)						.130	9	1.491						9		1.621
(FY02) Eqpt (17 Kits)							8	1.500		9 2.331				17		3.831
(FY03) Eqpt (8 Kits)										6 6.500	2	3.375	5	8		9.875
(FY04) Eqpt ( Kits)														0		0
Total Installation Costs:	(	)	(	)	0	0.1	17	3	1	5 8.8	2	3.4	ł	34		15.3
Total Modification Costs:	(	)	(	)	9	12.9	17	23.5		8 19.7	0	4.1		34		60.1
Method of Installation: CONTR	RACTOR,	FIELD IN	ISTALL		Admin	istrative I	_ead-tim	e (After 1	Oct): 7	Month(s)		Produc	tion Lead-ti	ime: 4 Mo	nth(s)	
Contract Date: PY		FY2000	)	-	FY2001		JUL 01	FY2002	2	DEC 01	FY2003	s NC	OV 02	FY2004		
Delivery Date: PY		FY2000	)		FY2001	N	OV 01	FY2002	2	MAR 02	FY2003	6 MA	AR 03	FY2004		
Installations: PY F	Y2000			FY2001			FY20	)02		FY	2003			FY2004		Total
1ST 2NI	D 3RD	4TH	1ST 2	ND 3F	D 4TH	1ST	2ND	3RD 4	TH 1	ST 2ND	3RD	4TH	1ST 2N	ND 3RD	4TH	
Input						4	5	2	6	9 1		4	0	1 1	1	34
Output						2	7	2	2	9 4	1	0	4	1 1	1	34
	F	P-1 ITEN 7					PAGE 2	<b>NO:</b> 19						Page 1 c	f 1	
	- U				UNC								<b>I</b>			

#### INDIVIDUAL MODIFICATIONS (EXHIBIT P- 3A)

#### **DATE: JUNE 2001**

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: Jun 00

Financial Plan \$	6 (in l	Millions	5)	P	Ϋ́Υ	F١	2000		FY20	01	FY	2002		FY200	)3	FY2	2004		то	TAL		
				Qty	Cost	Qty	Co	st	Qty	Cost	Qty	Cost	Qt	у	Cost	Qty	Cost		Qty		Cost	
RDT&E																						
Ref. R-1 PE No:																			0			
Procurement:																						
Equipment Kits						2	0 2	2.45	80	7.46	50	3.6	6						150			13.5
Equipment Kits N			g					.25											0			0.3
Engineering Cha	ange (	Orders																	0			
Data							(	).10											0			0.1
Training Equipm																			0			
Support Equipme	ent																		0			
Software																			0			
Interim Contracto	or Su	pport																	0			
Other																			0			
Total Procuren	nent (	Costs:		0		2	0	2.8	80	7.5	50	3.6	6	0		0			150			13.9
Hardware Install	ation:																					
(PY) Eqpt (Kits)																			0			0
(FY00) Eqpt (20									20	.446									20			0.446
(FY01) Eqpt (80									50	1.114	30								80			1.781
(FY02) Eqpt (50											50	1.11:	3						50			1.113
(FY03) Eqpt ( Kit																			0			0
(FY04) Eqpt ( Kit																			0			0
Total Installation	on Co	sts:		0			0		70	1.6	80	1.8	3	0		0			150			3.3
Total Modificat	ion C	oete:		0		2	0	2.8	80	9	50	5.4	1	0		0			150			17.2
Method of Install					FIELD IN		U	2.0		-		e (After 1			th(a)	0	Broduc	tion Lo		: 6 Mon	th(a)	17.2
Contract Date:	1			STOR,		1				1	AN 01	<u>,</u>			N 02	<b>EV2002</b>	-	AN 03	1		( )	N 04
		γ			FY2000		JUN 00		FY2001			FY200				FY2003		UN 03		2004		
Delivery Date:		Pγ			FY2000	l	DEC 00		FY2001	J	UN 01	FY200	2	JUI	N 02	FY2003	i J	UN 03		2004	JUN	N 04
Installations:	PY	407	FY2		4711	407	FY20		4711	10T	FY2		4711	407	FY2	-	4711	40T		2004	4712	Total
les es est		1ST	2ND	3RD	4TH	-	2ND	3RD	_	1ST	2ND		4TH	1ST	2ND	3RD	4TH	1ST	2ND	3RD	4TH	450
Input						10	10	20		30		30	20			_						150
Output						10	10	20	30	30		30	20						L			150
				P	-1 ITEM 72						PAGE 2	20							Pa	ge 1 of	1	
					12	-						-	-									

#### **INDIVIDUAL MODIFICATIONS (EXHIBIT P-3A) DATE: JUNE 2001** Models of Systems Affected: Modification Title and No: Joint Surveillance System Radar Interrogator Set Upgrade, FPS-117 version 1.4.5 TCT31P6-2FPS117-528, Data Code 31183 Description/Justification: An Air Force/FAA joint project. Funds replace radar interrogator sets (beacons) and environmental control units (ECU). These components for the FPS-117 Long Range Radars have become logistically unsupportable. RDT&E is being funded by the FAA per a previous agreement. The beacons have a higher possibility of failure than do the ECUs, and will be replaced first. Development Status/Major Development Milestones: The FAA funded developmental costs: the Air Force will fund production. There are no required acquisition milestones for this mature system. ΡY TOTAL FY2000 FY2001 FY2002 FY2003 FY2004 Financial Plan \$ (in Millions) Cost Qty Qty Cost Qty Cost Qty Cost Qty Cost Qty Cost Qty Cost RDT&E Ref. R-1 PE No: 0 Procurement: Equipment Kits 11 7.135 11 7.1 Equipment Kits Non-recurring 0 Engineering Change Orders 0 Data 0 Training Equipment .100 0 0.1 Support Equipment 0 Software .055 0.1 0 Interim Contractor Support 0 Other 0 Total Procurement Costs: 11 7.3 11 7.3 0 0 Hardware Installation: (PY) Eqpt (Kits) 0 0 (FY00) Eqpt (Kits) 0 0 (FY01) Eqpt (Kits) 0 0 (FY02) Eqpt (11 Kits) 11 2.200 11 2.2 (FY03) Eqpt (Kits) 0 0 (FY04) Egpt (Kits) 0 0 **Total Installation Costs:** 11 2.2 11 2.2 0 0 0 0 **Total Modification Costs:** 0 11 9.5 0 11 9.5 0 0 Method of Installation: CONTRACTOR, FIELD INSTALL Administrative Lead-time (After 1 Oct): 1 Month(s) Production Lead-time: 3 Month(s) NOV 01 Contract Date: ΡY FY2002 FY2000 FY2001 FY2003 FY2004 **Delivery Date:** ΡY FY2000 FY2001 FY2002 **FEB 02** FY2003 FY2004 ΡY Installations: FY2000 FY2001 FY2002 FY2003 FY2004 Total 1ST 2ND 3RD 4TH Input 3 4 11 4 Output 3 4 4 11 P-1 ITEM NO: PAGE NO: Page 1 of 1 72 221

**OTHER BASE MAINTENANCE & SUPPORT EQUIPMENT** 

#### DEPARTMENT OF THE AIR FORCE OTHER PROCUREMENT APPROPRIATION ESTIMATES FOR FISCAL YEAR 2002

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#### OTHER BASE MAINTENANCE AND SUPPORT EQUIPMENT

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#### DEPARTMENT OF THE AIR FORCE OTHER PROCUREMENT APPROPRIATION ESTIMATES FOR FISCAL YEAR 2002

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#### OTHER BASE MAINTENANCE AND SUPPORT EQUIPMENT

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BUDGET ITEM JUS	TIFICATION (E	EXHIBIT P-40)				DATE:	JUNE 2001	
APPROP CODE/BA	:			P-1 NOM	IENCLATURE	:		
OPAF/OTHER BASE M/	AINTENANCE & S	SUPPORT EQUI	PMENT	BASE/ALC	CALIBRATION	PACKAGE		
	FY2000	FY2001	FY2002	FY2003	FY2004	FY2005	FY2006	FY2007
QUANTITY								
COST (in Thousands)	\$8,857	\$10,013	\$11,974	\$13,809	\$14,430	\$16,059	\$16,379	\$16,742

### **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 links calibration standards between the weapon system, the Air Force Primary Standards Laboratory (AFPSL), and the National Institute of Standards and Technology (NIST). This link helps assure that systems used by the operational forces perform their primary mission of delivering weapons on target. Presently, there are 76 Type II and III PMELs and one Field Assistance Team for Calibration (FASTCALs) worldwide. All major aircraft depend heavily on offensive and defensive avionics that must be calibrated to function properly for mission success in wartime, as well as in a training environment. All aircraft engines and airframes require PMEL calibration support. This budget line also supports space and airborne communications/electronics systems such as MILSATCOM.

2. Each base PMEL requires a group of certified calibration standards to assure accurate traceable measurements of the basic parameters recognized by the NIST. These calibration standards enable each Air Force activity to attain traceable 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 technological advances in metrology. In addition, as new and sophisticated systems enter the Air Force inventory, selected PMELs must be augmented with special calibration standards or auxiliary equipment, critical to the characteristics of systems supported.

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BUDGET ITEM JUS	TIFICATION (E	XHIBIT P-40)				DATE:	JUNE 2001	
APPROP CODE/BA		UPPORT EQUIF	PMENT	_	ENCLATURE			
	FY2000	FY2001	FY2002	FY2003	FY2004	FY2005	FY2006	FY2007
QUANTITY								
COST (in Thousands)	\$8,857	\$10,013	\$11,974	\$13,809	\$14,430	\$16,059	\$16,379	\$16,742

#### **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 links calibration standards between the weapon system, the Air Force Primary Standards Laboratory (AFPSL), and the National Institute of Standards and Technology (NIST). This link helps assure that systems used by the operational forces perform their primary mission of delivering weapons on target. Presently, there are 76 Type II and III PMELs and one Field Assistance Team for Calibration (FASTCALs) worldwide. All major aircraft depend heavily on offensive and defensive avionics that must be calibrated to function properly for mission success in wartime, as well as in a training environment. All aircraft engines and airframes require PMEL calibration support. This budget line also supports space and airborne communications/electronics systems such as MILSATCOM.

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<b>P-1 ITEM NO:</b> 73		PAGE NO: 1	Page 1 of 3
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APPROP CODE/BA: P-1 NOMENCLATURE:	BUDGET ITEM JUSTIFICATION (EXHIBIT P-40)	<b>DATE:</b> JUNE 2001	
OPAF/OTHER BASE MAINTENANCE & SUPPORT EQUIPMENT BASE/ALC CALIBRATION PACKAGE	<b>APPROP CODE/BA:</b> OPAF/OTHER BASE MAINTENANCE & SUPPORT EQUIPMENT		KAGE

**Description (cont.):** 3. The following support is provided by these 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 electro-optical, radio frequency (RF)/microwave, electrical, radiation detection identification and computation technologies, as well as equipment required for precise time and frequency measurement. It supports items such as meter calibrators, automated resistance measurement systems, and peak power meters.

c. Additionally, the Mechanical Package includes standards and ancillary equipment for the mass, dimensional, optical, force, vibration, flow, and environmental measurement areas. This supports items such as humidity generators and hydraulic pressure gauge calibrators.

d. The Systems Package consists of equipment for calibrating common TMDE and automatic test equipment (ATE) outside of a normal PMEL facility. Systems package equipment facilitates 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 of requested funding levels will affect the ability of the Air Force to support current weapon system measurements, thus jeopardizing accuracies of Air Force subsystems that provide navigation, weapons delivery, communication and other mission support requirements. Calibration traceability will also be compromised due to lack of state-of-the-art measurement standards.

5. Items requested in FY02 are identified on the following P-40a and are representative of items to be procured. Items procured during

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<b>BUDGET ITEM JUSTIFICATION (EXHIBIT P-40)</b>	DATE: JUNE 2001				
APPROP CODE/BA:	P-1 NOMENCLATURE:				
OPAF/OTHER BASE MAINTENANCE & SUPPORT EQUIPMENT BASE/ALC CALIBRATION PACKAGE					

**Description (cont.):** execution may change based on the most critical equipment needed to support current Air Force mission requirements.

6. This administration has not addressed FY 2003-2007 requirements. All FY 2003-2007 budget estimates included in this book are notional only and subject to change.

<b>P-1 ITEM NO:</b> 73	PAGE NO: 3	Page 3 of 3

BUDGET ITEM JUSTIFICATION FOR AGGREGATED ITEMS (EXHIBIT P- 40A)								DATE: JUNE 2001		
APPROP CODE/BA: OPAF/OTHER BASE MAINTENANCE	& SUPPO	RT EQUIPMI		P-1 NOMENCLATURE: BASE/ALC CALIBRATION PACKAGE						
PROCUREMENT ITEMS	ID	FY2	2000	FY2	001	FY	2002	FY	2003	
	CODE	QTY.	COST	QTY.	COST	QTY.	COST	QTY.	COST	
1. ELECTRICAL PACKAGE										
A. PHASE NOISE/AMPLITUDE NOISE MEASUREMENT SYSTEM	A	30	\$4,999	25	\$4,618	18	\$3,325			
B. OSCILLOSCOPE CALIBRATION SYSTEM	А					25	\$725			
C. AC MEASUREMENT STANDARD	А			20	\$509	25	\$637			
D. MULTI-PRODUCT CALIBRATOR	А			40	\$846	37	\$783			
E. PROGRAMABLE CAPACITANCE BRIDGE SYSTEM	A					40	\$1,128			
F. PROJECTS LESS THAN \$500K	А		\$1,643	3	\$2,321		\$1770			
2. MECHANICAL PACKAGE										
A. 9610 VIBRATION TRANSDUCER CALIBRATION SYSTEM UPGRADE	A					20	\$500			
B. ENVIROMENTAL MONITORING SYSTEM	А					25	\$1,250			
C. PROJECTS LESS THAN \$500K	А		\$1651		\$1,510		\$1,541			
3. SYSTEMS PACKAGE										
A. PATEC CONTROLLER	А	175	\$564	Ļ						
B. PROJECTS LESS THAN \$500K	А				\$209		\$315			
Totals:			\$8,857		\$10,013		\$11,974			
Remarks:										
P	<b>-1 ITEM</b> 73	NO		PAGE N 4	0:			Page 1	of 1	

BUDGET PROCUREMENT H	HISTORY	PLANN	IING (EXHIBIT P- 5	A)		DATE: JU	NE 200	)1		
APPROP CODE/BA: OPAF/OTHER BASE MAINTEN	IANCE &	SUPPOR	T 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 (1)										
A. PHASE NOISE/AMPLITUDE NOISE MEASUREMENT SYSTEM										
FY00	30	166,665	AFMETCAL	DO/FFP	GSA / AGILENT TECHNOLOGES ENGLEWOOD, CA	S, FEB 00	JUL 00			
FY01	25	184,754	AFMETCAL	DO/FFP	GSA / AGILENT TECHNOLOGES ENGLEWOOD, CA	S, MAR 01	AUG 01			
FY02	18	184,754	AFMETCAL	DO/FFP	GSA / AGILENT TECHNOLOGES ENGLEWOOD, CA	S, MAR 02	AUG 02	Y		
B. OSCILLOSCOPE CALIBRATION SYSTEM										
FY02	25	29,000	AFMETCAL	C/FFP	UNKNOWN	MAY 02	NOV 02	N	MAR 02	
C. AC MEASUREMENT STANDARD										
FY01	20	25,465	AFMETCAL	C/FFP	UNKNOWN	JUL 01	NOV 02	Y		
FY02	25	25,465	AFMETCAL	C/FFP	UNKNOWN	MAR 02	JUL 02	Y		
	  P-1	<b>ITEM N</b> 73	o	PAGE NO	:		Page	e 1 o	f 4	

BUDGET PROCUREMENT H	ISTOR	( PLANN	IING (EXHIBIT P- 5/	A)		DATE: JU	NE 200	01		
APPROP CODE/BA: OPAF/OTHER BASE MAINTEN	ANCE &	SUPPOR	T 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	
D. MULTI-PRODUCT CALIBRATOR										
FY01	40	21,165	AFMETCAL	MIPR/OPT/FFP	NAVY/FLUKE CORP, EVERETT,	WA APR 01	AUG 01			
FY02	37	21,165	AFMETCAL	MIPR/OPT/FFP	NAVY/FLUKE CORP, EVERETT,	WA APR 02	AUG 02	Y		
E. PROGRAMABLE CAPACITANCE BRIDGE SYSTEM										
FY02	40	28,200	AFMETCAL	C/FFP	UNKNOWN	MAY 02	NOV 02	N	MAR 02	
F. PROJECTS LESS THAN \$500K (1)										
FY00			AFMETCAL	C/FFP	MULTIPLE (2)	APR 00	AUG 00			
FY01			AFMETCAL	C/FFP	MULTIPLE (2)	APR 01	AUG 01			
FY02			AFMETCAL	C/FFP	MULTIPLE (2)	APR 02	AUG 02	Y		
									<u> </u>	
									<u> </u>	
	P-1	<b>ITEM N</b> 73	0	PAGE NO	:		Pag	e 2 0	f 4	

BUDGET PROCUREMENT H	BUDGET PROCUREMENT HISTORY PLANNING (EXHIBIT P- 5A)						<b>DATE:</b> JUNE 2001				
APPROP CODE/BA: OPAF/OTHER BASE MAINTEN/	ANCE &	SUPPOR	T EQUIPMENT	P-1 NOMENCLATURE: BASE/ALC CALIBRATION PACKAGE							
ITEM / FISCAL YEAR	QTY.	UNIT COST	LOCATION OF PCO		ONTRACT HOD & TYPE		CONTRACTOR AND LOCATION	AWD. DATE	DATE FIRST DEL.		DATE REV. AVAIL
2. MECHANICAL PACKAGE (1)											
A. 9610 VIBRATION TRANSDUCER CALIBRATION SYSTEM UPGRADE											
FY02	20	25,000	AFMETCAL	C/FFF	)	UNKN	IOWN	MAR 02	AUG 02	N	FEB 02
B. ENVIROMENTAL MONITORING SYSTEM											
FY02	25	50,000	AFMETCAL	C/FFF	)	UNKN	IOWN	MAR 02	OCT 02	N	FEB 02
C. PROJECTS LESS THAN \$500K (1)											
FY00			AFMETCAL	C/FFF	)	MULT	IPLE (2)	APR 00	AUG 00		
FY01			AFMETCAL	C/FFF	)	MULT	IPLE (2)	APR 01	AUG 01		
FY02			AFMETCAL	C/FFF	)	MULT	IPLE (2)	APR 02	AUG 02	Y	
3. SYSTEMS PACKAGE (1)											
A. PATEC CONTROLLER											
FY00	175	3,220	AFMETCAL	DO/FF	P	MULT	IPLE (2)	JUN 00	NOV 00		
	P-1	<b>ITEM N</b> 73	0	-	PAGE NO: 7	:			Page	e 3 of	4

BUDGET PROCUREMENT	BUDGET PROCUREMENT HISTORY PLANNING (EXHIBIT P- 5A)						DATE: JUNE 2001			
APPROP CODE/BA: OPAF/OTHER BASE MAINTEN	IANCE &	SUPPOR	T 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		SPECS AVAIL NOW	DATE REV. AVAIL	
B. PROJECTS LESS THAN \$500K										
FY01			AFMETCAL	C/FFP	MULTIPLE (2)	MAR 0	I MAY 01			
FY02			AFMETCAL	C/FFP	MULTIPLE (2)	MAR 0	2 MAY 02	Y		
WA. Multiple award and delivery					of hist award and derivery.					
	P-1	<b>I ITEM N</b> 73	0	PAGE NO	:		Pag	e 4 of	f 4	

BUDGET ITEM JUS	TIFICATION (E	DATE:	<b>DATE:</b> JUNE 2001						
APPROP CODE/BA		SUPPORT EQUIF	PMENT	_	P-1 NOMENCLATURE: PRIMARY STANDARDS LABORATORY PACKAGE				
	FY2000	FY2001	FY2002	FY2003	FY2004	FY2005	FY2006	FY2007	
QUANTITY									
COST (in Thousands)	\$1,195	\$1,195 \$1,095 \$1,073 \$1,107 \$1,134 \$1,160 \$1,183 \$1						\$1,209	
Immousands)       \$1,195       \$1,095       \$1,073       \$1,107       \$1,134       \$1,160       \$1,183       \$1,209         Description:       I. 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. FY00-02 AFPSL funding supports all Air Force PMELs by providing the master calibration capability traceable to the National Institute of Standards and Technology (NIST) or other approved sources, 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) the Electrical, Photonics and Nucleonics Package, (b) the Mechanical and Physical Package, and (c) the Systems Package.

(a) The Electrical, Photonics and 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.

	<b>P-1 ITEM NO:</b> 74		PAGE NO: 9		Page 1 of 2			
UNCLASSIFIED								

<b>BUDGET ITEM JUSTIFICATION (EXHIBIT P-40)</b>	DATE: JUNE 2001	
APPROP CODE/BA: OPAF/OTHER BASE MAINTENANCE & SUPPORT EQUIPMENT	P-1 NOMENCLATURE: PRIMARY STANDARDS LABOR	ATORY PACKAGE

#### **Description (cont.):**

(c) The Systems Package includes Automatic Test Equipment (ATE) equipment used in calibration software and procedure development projects. No FY02 requirement for this equipment.

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 equipment. 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.

4. Items requested in FY02 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 current Air Force mission requirements.

5. This administration has not addressed FY 2003-2007 requirements. All FY 2003-2007 budget estimates included in this book are notional only and subject to change.

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BUDGET ITEM JUSTIFICATION	FOR AGGI	REGA	TED ITEMS (EX	HIBI	IT P- 40A)			DATE: JU	NE 2001	
APPROP CODE/BA: OPAF/OTHER BASE MAINTENANC	E & SUPPO	ORT EG	QUIPMENT	<b>P-</b> PR	<b>1 NOMENC</b> RIMARY STANE	CLATURE	ORATORY PAC	KAGE		
PROCUREMENT ITEMS	ID		FY2000		FY20		FY20			/2003
	CODE	QT	r. cost		QTY.	COST	QTY.	COST	QTY.	COST
A. ELECTRICAL, PHOTONICS & NUCLEONICS PACKAGE										
ITEMS LESS THAN \$500,000	А		\$9	83		\$856		\$831		
B. MECHANICAL & PHYSICAL PACKAGE										
ITEMS LESS THAN \$500,000	А		\$2	12		\$239		\$242		
Totals:			\$1,1	95		\$1,095		\$1,073		
Remarks:	I		•		<u> </u>		1			
Rellarks.										
	<b>P-1 ITEM</b> 74	NO			PAGE NO	:			Page 1	of 1
					1					

BUDGET ITEM JUS	TIFICATION (I		DATE:	DATE: JUNE 2001							
APPROP CODE/BA	:			P-1 NOM	P-1 NOMENCLATURE:						
OPAF/OTHER BASE MA	AINTENANCE & S	SUPPORT EQUI	PMENT	ITEMS LE	ITEMS LESS THAN \$5,000,000 (TEST EQUIPMENT)						
	FY2000	FY2001	FY2002	FY2003	FY2005	FY2006	FY2007				
QUANTITY											
COST (in Thousands)	\$9,750 \$9,453 \$17,493 \$15,828 \$15,947 \$16,209 \$16,744 \$17,32										
<b>Description:</b> 1. This program includ Precision Measuremen Centralized Radio Shop Intermediate Shop equi maintenance, repair and downtime, and may im 2. There are approxim replacement equipment	t Equipment Lal ps, Radio/Radar pment. Failure d calibration of a pair safety of fli ately 7,500 indiv t which currently	ooratories (PME Repair Shops, a to procure this o state-of-the-art i ght or groundin vidual test items y faces obsolesc	ELs), Avionics In and Maintenance equipment will in measurement de g of aircraft, dir s procured in thi eence. All items	ntegrated Suppo e Shops. This en nhibit performa vices leading to ectly impacting s line. FY02 fu have an annual	ort Facilities (Al quipment also s ance of detailed o increased avious Air Force miss anding procures l procurement v	SFs), Automate upports calibrat analysis investi nics and commu ions. both initial shou alue of less that	ed Test Support ion of aircraft A gations, impair unications equip rtages as well as n \$5,000,000 and	Facilities, vionics the ment d are Code			
A. Items requested in l execution may change	FY02 are identif	fied on the follo	wing P-40a and	are representati	ive of items to b	e procured. Ite	ms procured dur				

3. This administration has not addressed FY 2003-2007 requirements. All FY 2003-2007 budget estimates included in this book are notional only and subject to change.

<b>P-1 ITEM NO:</b> 75		<b>PAGE NO:</b> 12	Page 1 of 1
	UNCLASSIFIED		

BUDGET ITEM JUSTIFICATION FOR AGGREGATED ITE	EMS (E	XHIBIT P- 40A-IL)		DAT	<b>DATE:</b> JUNE 2001			
APPROP CODE/BA: OPAF/OTHER BASE MAINTENANCE & SUPPORT EQUIPMEN	NT	P-1 NOMENCLA		EQUIPMENT)	/IENT)			
			FY20	02		FY2003		
PROCUREMENT ITEMS		NSN	QTY.	COST	QTY	. Cost		
500MHZ OSCILLOSCOPE	662	5014504919	185	\$1,990				
400 MHZ OSCILLOSCOPE	662	5014604372	264	\$995				
COUNTER, ELECTRONIC	662	5014647876	55	\$1,330				
WR-ALC INTEGRATED SUPPORT FACILITY				\$170				
FSC 4920 - AIRCRAFT MAINTENANCE AND REPAIR SHOP SPECIALIZED EQUIPMENT				\$1,438				
FSC 4940 - MISC MAINTENANCE REPAIR SHOP SPECIALIZED EQUIP				\$1,526				
FSC 5860 - COHERENT RADIATION DEVICES, COMPONENTS & ACCESSORIES				\$220				
FSC 5915 - FILTERS AND NETWORKS				\$83				
FSC 5985 - ANTENNAS, WAVE GUIDES AND RELATED EQUIPMENT				\$101				
FSC 5995 - CABLE, CORD AND WIRE ASSEMBLIES				\$171				
FSC 5998 - ELECTRICAL AND ELECTRONIC ASSEMBLIES, BOARDS, CARDS, AND ASSOC HARDWARE				\$1,653				
FSC 6130 - CONVERTERS, ELECTRICAL, NONROTATING				\$91				
FSC 6150 - MISC ELECTRIC POWER & DISTRIBUTION EQUIP				\$50				
FSC 6625 - ELECTRICAL AND ELECTRONIC PROPERTIES MEASURING & TESTING EQUIP				\$5,724				
FSC 6630 - CHEMICAL ANALYSIS INSTRUMENTS				\$1,065				
FSC 6650 - OPTICAL INSTRUMENTS				\$828				
FSC 6680 - LIQUID & GAS FLOW, LIQUID LEVEL, AND MECHANICAL MOTION INSTRUMENTS				\$58				
<b>P-1 ITEM NO</b> 75		<b>PAGE NO:</b> 13				Page 1 of 2		

BUDGET ITEM JUSTIFICATION FOR AGGREG	GATED ITEMS (	EXHIBIT P- 40A-IL)		DAT	<b>E:</b> JUNE 20	001		
APPROP CODE/BA: OPAF/OTHER BASE MAINTENANCE & SUPPORT	EQUIPMENT	P-1 NOMENCLA ITEMS LESS THAN \$	<b>TURE:</b> 5,000,000 (TES	T EQUIPMENT)	MENT)			
			FY	2002		FY2003		
PROCUREMENT ITEMS		NSN	QTY.	COST	QTY.	COST		
TOTALS:				\$17,493				
			-					
P-1 ITEM NO		PAGE NO:			Pag	e 2 of 2		
75		14			~9			

BUDGET ITEM JUS	TIFICATION (	EXHIBIT P-40	)			DATE:	JUNE 2001			
APPROP CODE/BA OPAF/OTHER BASE MA		SUPPORT EQUI	PMENT		P-1 NOMENCLATURE: NIGHT VISION GOGGLES					
	FY2000	FY2001	FY2002	FY2003	FY2004	FY2005	FY2006	FY2007		
QUANTITY										
COST (in Thousands)	\$7,666	\$2,806	\$3,330	\$3,814	\$5,532	\$5,686	\$4,732	\$4,826		

#### **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 Forces (CAF) is extremely limited due to the lack of NVGs. Only approximately 48 percent of CAF fighter and attack aircraft pilots are equipped with NVGs. 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:

	<b>P-1 ITEM NO:</b> 76		<b>PAGE NO:</b> 15		Page 1 of 3				
UNCLASSIFIED									

<b>BUDGET ITEM JUSTIFICATION (EXHIBIT P-40)</b>		DATE: JUNE 2001
APPROP CODE/BA: OPAF/OTHER BASE MAINTENANCE & SUPPORT EQUIPMENT	P-1 NOMENCLATURE: NIGHT VISION GOGGLES	

#### **Description (cont.):**

a. AN/PVS-7D Groundcrew 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. FY02 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. FY02 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. FY02 funding continues procurement of these test sets.

d. Test Set, Infrared Viewer. The ANV-126 NVG Infrared Viewer Test Set is an electro-optical test system which combines high stability silicon detectors, precision optics, and visible and infrared (IR) Light Emitting Diodes (LED's). It provides accurate checks for NVG resolution, gain, power drain, binocular goggle collimation, image quality, and image distortion. FY02 funding continues procurement of these test sets.

4. Items requested in FY02 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 current Air Force mission requirements.

	<b>P-1 ITEM NO:</b> 76		<b>PAGE NO:</b> 16		Page 2 of 3				
UNCLASSIFIED									

BUDGET ITEM JUSTIFICATION (EXHI	BIT P-40)				DATE: JUNE 2	2001
APPROP CODE/BA:			P-1 NOME	NCLATURE:		
OPAF/OTHER BASE MAINTENANCE & SUPPO	ORT EQUIPME	NT	NIGHT VISIC	ON GOGGLES		
<b>Description (cont.):</b> 5. This administration has not addressed FY only and subject to change.	7 2003-2007 re	quirements. Al	1 FY 2003-200	07 budget estimate	s included in this b	ook are notional
P-1	1 <b>TEM NO:</b> 76			<b>PAGE NO:</b> 17		Page 3 of 3

BUDGET ITEM JUSTIFICATION	FOR AGGE	REGATED I	FEMS (EXHIB	IT P- 40A)		DATE: JU	DATE: JUNE 2001		
APPROP CODE/BA: OPAF/OTHER BASE MAINTENANC	CE & SUPPO	RT EQUIPMI	ENT NI	-1 NOMEN GHT VISION	CLATURE GOGGLES	:			
PROCUREMENT ITEMS	ID	FY2	000	FY2	001	FY2	002	FY	2003
	CODE	QTY.	COST	QTY.	COST	QTY.	COST	QTY.	COST
A. GROUNDCREW GOGGLES			\${1,186}		\${504}		\${797}		
AN/PVS-7D GROUND CREW GOGGLE	А	233	\$701	66	\$201	257	\$797		
	A	159	\$485	99	\$303				
B. AIRCREW GOGGLES			\${4,502}		\${2,092}		\${1,966}		
F-4949G AIRCREW GOGGLE	А	346	\$2,342	303	\$2,035	270	\$1,885		
	А	144	\$975						
	А	119	\$806						
F-4949H AIRCREW GOGGLE	А	18	\$118	9	\$57	12	\$81		
	A	40	\$261						
C. TEST SET, INFINITY FOCUS	A	108	\$529	5	\$28	9	\$50		
	A	7	\$35						
	A	1	\$5						
D. TEST SET, INFRARED VIEWER	A	5	\$116	7	\$182	20	\$517		
·	А	50	\$1,155						
	А	3	\$83						
	А	2	\$55						
Totals:			\$7,666		\$2,806		\$3,330		
	<b>P-1 ITEM I</b> 76	NO		PAGE N 18	0:			Page 1	of 2

BUDGET ITEM JUSTIFICATIO	ON FOR AGG	REGATED	ITEMS (EX	(HIBIT P- 40A)			DATE:	JUNE 2001	
APPROP CODE/BA: OPAF/OTHER BASE MAINTENA	ANCE & SUPPC	ORT EQUIPI	MENT	P-1 NOME	NCLATURI N GOGGLES	E:			
PROCUREMENT ITEMS	ID CODE			FY2001		FY2002			2003
Remarks:	<b>~</b>		COST	QTY.	COST	QTY.	COST	QTY.	COST
Remarks.									
	P-1 ITEM	NO		PAGE	NO:			Page 2	of 2
	76			19					

BUDGET ITEM JUS	TIFICATION (I	DATE:	DATE: JUNE 2001						
APPROP CODE/BA	:			P-1 NOM	ENCLATURE:				
OPAF/OTHER BASE MA	AINTENANCE & S	SUPPORT EQUIPI	MENT	ITEMS LES	S THAN \$5,000,0	00 (PERSONA	AL SAFETY & RE	FY2007	
	FY2000	FY2001	FY2002	FY2003	FY2004	FY2005	FY2006	FY2007	
QUANTITY									
COST (in Thousands)	\$5,721	\$13,013	\$7,680	\$9,312	\$6,898	\$3,721	\$5,892	\$6,032	
Lightweight Er	s such as surviv fe preservers, an res initial shorta ess than \$5,000, to be procured. on requirements cts were added 1 y 2000, page 21 pport Heli-Basko	al radio test sets, ad toxic indicators ages as well as rej 000 and are Code Items procured c s. by Congress in th 0:	decontaminations. Personal safe placement equite A. Items requite luring executions e FY01 markup	on units, laser ey oty and rescue ec pment currently lested in FY02 a n may change ba o of the FY01 A	e protection, war juipment is esser approaching obs re identified on t ased on the most ir Force budget.	er desalinato tial for the sa olescence. <i>A</i> he following critical equip Reference A	rs, anti-exposure afety, rescue and all items have and P-40a and are oment needed to	e coveralls, protection annual support	
		<b>P-1 ITEM NO</b> : 77			<b>PAGE NO:</b> 20		Page	1 of 2	

BUDGET ITEM JUSTIFICATION (EXHIBIT P	DATE: JUNE 2	2001		
APPROP CODE/BA:		P-1 NOMENCLATURE:		
OPAF/OTHER BASE MAINTENANCE & SUPPORT E	ITEMS LESS THAN \$5,000,000	(PERSONAL SAFET	TY & RESCUE)	
<b>Description (cont.):</b> 4. This administration has not addressed FY 2003- only and subject to change.	-2007 requirements. Al	I FY 2003-2007 budget estimates	s included in this bo	ook are notional
P-1 ITEN 77		PAGE NO: 21		Page 2 of 2

BUDGET ITEM JUSTIFICATION FOR AGGREGATED ITEN	IS (E)	XHIBIT P- 40A-IL)		DAT	DATE: JUNE 2001						
<b>APPROP CODE/BA:</b> OPAF/OTHER BASE MAINTENANCE & SUPPORT EQUIPMENT	-	P-1 NOMENCLA	<b>TURE:</b> 5,000,000 (PERSO	ONAL SAFETY	SAFETY & RESCUE)						
			FY20	02			FY2003				
PROCUREMENT ITEMS		NSN	QTY.	COST	QT	Y.					
LASER EYE PROTECTION	NSI	L	8163	\$2,800							
LIFE RAFT, 25 MAN	422	20002429192LS	28	\$280							
LIFE RAFT, 20 MAN	422	20005633567LS	300	\$686							
DECONTAMINATION UNIT	423	0001346312	59	\$2,667							
FSC 4220 MARINE LIFESAVING AND DIVING EQUIPMENT				\$496							
FSC 4240 SAFETY AND RESCUE EQUIPMENT				\$315							
FSC 6625 ELECTRICAL AND ELECTRONIC PROPERTIES MEASURING AND TEST INSTRUMENTS				\$436							
TOTALS:				\$7,680							
<b>P-1 ITEM NO</b> 77		PAGE NO:			L	Page	e 1 of 1				

BUDGET ITEM JUS	TIFICATION (E	EXHIBIT P-40)				DATE:	JUNE 2001				
APPROP CODE/BA	:			P-1 NON	P-1 NOMENCLATURE:						
OPAF/OTHER BASE MAINTENANCE & SUPPORT EQUIPMENT					ZED MATERIAL H	HANDLING EQU	IIPMENT				
	FY2000	FY2001	FY2002 FY2003 FY2004 F			FY2005	FY2006	FY2007			
QUANTITY											
COST (in Thousands)	\$27,164	\$22,906	\$14,361	\$16,612	\$14,663	\$14,950	\$15,248	\$15,588			
Description:											
	<ol> <li>The Mechanized Material Handling Equipment P-1 line provides funding for Mechanized Material Handling Systems (MMHS), Storage Aids Systems (SAS), and Automatic Identification Technology (AIT) projects.</li> </ol>										

a. MMHS/SAS PROGRAMS: MMHS and SAS programs provide bases worldwide with automated and static equipment for storing, receiving, and shipping material. MMHS and SAS equipment involves the design and acquisition of mechanized and non-automated material handling systems and storage aids systems for all Air Force supply and transportation facilities. Supply systems generally include equipment such as receiving, storage, and distribution systems (RSDS), automated guided vehicle systems (AGVS) high density storage systems (HDSS), small parts handling systems (SPHS), vertical carousel systems (VCS), conveyor systems (CONV), mezzanines (MEZZ), pneumatic tube systems (PTS), vertical storage and retrieval systems (VSRS), and a variety of SAS equipment including racks, bin shelving, and modular cabinets. Transportation systems generally include equipment such as aircraft passenger loading bridges and/or inbound/outbound (IB/OB) baggage conveyor systems (BCONV) for passenger terminals, heavy duty freight handling conveyors (FCONV), pallet build-up/breakdown stations, elevating transfer vehicles (ETV), cargo storage/retrieval rack structures (CSRS), and overhead bridge cranes (OH CRN) for air freight terminal (AFT) systems; roller conveyor, cranes (CRANE), and hoists (HOIST) 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 involves Air Force capability to respond to crises and threats whenever 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

<b>P-1 ITEM NO</b> : 78	PAGE NO: 23	Page 1 of 3
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BUDGET ITEM JUSTIFICATION (EXHIBIT P-40)		DATE: JUNE 2001
APPROP CODE/BA: OPAF/OTHER BASE MAINTENANCE & SUPPORT EQUIPMENT	P-1 NOMENCLATURE: MECHANIZED MATERIAL HAN	DLING EQUIPMENT

#### Description (cont.):

the flexibility at a minimum investment cost, enhances safe operations, reduces losses due to damage of materials in transport, and reduces congestion and delays in air terminals.

b. AIT PROGRAMS: AIT is a collection of enabling technologies including linear and two-dimensional bar codes, radio frequency identification, 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. AIT management information systems include, but are not limited to: Supply Asset Tracking System (SATS), Bare Base Inventory System (BBIS), Mobility Inventory Control Accountability System (MICAS), Defense Reuse Management System (DRMS), Tool Control Systems (TCS), Egress Equipment Tracking System (EETS), Smart Card System (SMART), Armory Tracking (ARM), Ammunition Control System (ACS), Vehicle Tracking Work Order Generation System (VTS), CRYPTO Inventory Control System (CICS), Combat Ammunition System (CAS), Radio Frequency Tag Tracking System (TAGS), Munitions Data Capture Base Level System (MDCBL), Generic Inventory Management System (GIMS), AF Distance Clearing Center (AFDCC), Bare Base Reconstitution & Management System (BBRMS), Commercial Product Marking (CPM), Munitions Data Capture Depot System (MDCD), Clothing Issue Management System (CIMS), Common Access Card (CAC), Core Automated Management System (CAMS), Integrated Deployment System (IDS), Civil Engineering Integration (CEI), Joint AMS/FMS Receipt Processing (FMS), and H53 Helo project.

SUPPLY ASSET TRACKING SYSTEM (SATS): Funding for this program was added by Congress in FY00 and again in the FY01 markup of the FY01 Air Force Budget. Reference FY01 HAC Report 106-644, June 2000, page 135, and FY01 Appropriations Conference Report 106-754, July 2000, page 208. Supply Asset Tracking System provides total asset visibility and reduces documentation at base level. It is a front-end processing 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

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BUDGET ITEM JUSTIFICATION (EXHIBIT P-40)		DATE: JUNE 2001							
APPROP CODE/BA: OPAF/OTHER BASE MAINTENANCE & SUPPORT EQUIPMENT	P-1 NOMENCLATURE:         ORT EQUIPMENT         MECHANIZED MATERIAL HANDLING EQUIPMENT								
Description (cont.): process.									
<ol> <li>MMHS/SAS/AIT equipment by major command and individual projects are listed on the following P-40a document. Items requested for procurement in FY02 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 current Air Force mission requirements.</li> </ol>									

3. This administration has not addressed FY 2003-2007 requirements. All FY 2003-2007 budget estimates included in this book are notional only and subject to change.

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BUDGET ITEM JUSTIFICATION FOR AGGREGATED ITEMS (EXHIBIT P- 40A)									DATE: J	DATE: JUNE 2001		
APPROP CODE/BA: OPAF/OTHER BASE MAINTENANCE	& SUPP(	ORT EC	QUIPMENT		P-1 NOMENCLATURE: MECHANIZED MATERIAL HANDLING EQUIPMENT							
PROCUREMENT ITEMS	ID		FY2000		FY2001				2002		FY2003	
	CODE	QT	Y. C	OST	QTY.	CC	OST	QTY.	COST	QTY.	COST	
1. AIR COMBAT COMMAND	Α			\${382}			\${900}		\${600}			
SAS				\${382}			\${900}		\${600}			
DYESS AFB, TX				\$199								
MOODY AFB, GA				\$183								
NELLIS AFB, NV							\$200					
TINKER AFB, OK							\$400					
MINOT AFB, ND							\$200					
MT HOME AFB, ID							\$100					
EGLIN AFB, FL									\$400			
HOLLOMAN AFB, NM									\$100			
SEYMOUR JOHNSON AFB, NC									\$100			
RSDS									\${350}			
BARKSDALE AFB, LA									\$350			
DARRODALE AFD, LA									<b>4000</b>			
2. AIR EDUCATION & TRAINING COMMAND	А						\${550}					
RSDS							\${550}					
FAIRCHILD AFB, WA							\$250					
LACKLAND AFB, TX							\$300					
					ļ							
Р	P-1 ITEM NO 78				PAGE N 26	NO:				Page 1 of 11		

BUDGET ITEM JUSTIFICATION FOR AGGREGATED ITEMS (EXHIBIT P- 40A)							DATE: J	DATE: JUNE 2001				
APPROP CODE/BA: OPAF/OTHER BASE MAINTENANC	E & SUPPO	ORT E	QUIPM		P-1 NOMENCLATURE: MECHANIZED MATERIAL HANDLING EQUIPMENT							
PROCUREMENT ITEMS	ID		FY2000		FY2001			FY2002			FY2003	
	CODE	QT	Υ.	COST	QTY.	CC	DST	QTY.	COST	Q	TY.	COST
3. AF CIVIL ENGINEERING & SUPPORT ACTIVITY	A			\${699}			\${180}		\${689}			
SAS				\${611}			\${180}		\${689}			
MALSTROM AFB, IL				\$300								
VANCE AFB, OK				\$200								
CHARLESTON AFB, SC				\$111								
MT HOME AFB, ID							\$75					
ANDERSEN AFB, GU									\$114			
KUNSAN AB, KO									\$200			
CROUGHTON RAF, UK									\$135			
MILDENHALL RAF, UK									\$120			
SPANGDAHLEM AB, GE									\$120			
MINOT AFB, ND							\$105					
RSDS				\${88}								
SCOTT AFB, IL				\$88								
4. AIR FORCE MATERIEL COMMAND	А			\${818}			\${1,450}		\${1,393}			
CONV				\${523}								
HILL AFB, UT				\$523								
	<b>P-1 ITEM</b> 78	-1 ITEM NO 78			PAGE NO: 27				Page 2 of 11			

BUDGET ITEM JUSTIFICATION F	HIBIT P- 4	)A)			DATE: JUNE 2001										
APPROP CODE/BA: OPAF/OTHER BASE MAINTENANCE	E & SUPPO	ORT EQU	PMENT	P-1 NO MECHANI	MENCLA ZED MATE	ATURE Erial Ha	NDLING EQ	UIPMENT		FY2003					
PROCUREMENT ITEMS	ID		FY2000	FY2001		FY	2002	FY2003							
	CODE	QTY.	COST	QTY	. с	OST	QTY.	COST	QTY.	COST					
HDSS			\${29	5}											
ROBINS AFB, GA			\$29	95											
RSDS						\${950}									
HILL AFB, UT						\$800									
ROBINS AFB, GA						\$150									
SAS								\${1,143}							
ROBINS AFB, GA								\$1143							
PALLET HANDLING								\${250}							
WRIGHT PATTERSON AFB, OH								\$250							
PTS						\${500}									
HILL AFB, UT						\$500									
5. AF RESERVE COMMAND	А		\${72	2}											
SAS			\${7	2}											
DOBBINS AFB, GA			\$7	2											
	P-1 ITEM 78	NO		PAG	<b>GE NO:</b> 28				Page	e 3 of 11					

BUDGET ITEM JUSTIFICATION F	OR AGG	REGA	TED ITEMS	EXHIB	BIT P- 40A)				DATE: J	UNE 20	001	
APPROP CODE/BA: OPAF/OTHER BASE MAINTENANCE	& SUPP	ORT EQ	UIPMENT	<b>P</b> M	P-1 NOMENCLATURE: MECHANIZED MATERIAL HANDLING EQUIPMENT							
PROCUREMENT ITEMS	ID		FY2000		FY	2001			2002		FY2	
	CODE	QTY	′. CO	ST	QTY.	CC	DST	QTY.	COST	QTY	-	COST
				¢(000)			¢(000)					
6. AIR FORCE SPACE COMMAND	A			\${808}			\${800}					
HOIST												
F E WARREN AFB, WY				\$751								
SAS												
PATRICK AFB, FL				\$57								
RSDS												
PATRICK AFB, FL							\$650					
AFT												
PATRICK AFB, FL							\$150					
7. AIR MOBILITY COMMAND	А		\$	[8,191}			\${7,083}		\${7,734}			
DOCKS				\${458}								
NORFOLK NAS, VA				\$458								
AFT			\$	[2,868]			\${5,971}		\${6,434}			
KADENA AB, JA				\$2868								
TRAVIS AFB, CA							\$5063					
L F	P-1 ITEM NO 78			PAGE NO: 29			Page 4 of 11					

BUDGET ITEM JUSTIFICATIO APPROP CODE/BA: OPAF/OTHER BASE MAINTENA				P-1 NOME	NCLATURE: MATERIAL HAN	NDLING EQ	DATE: JU		
PROCUREMENT ITEMS	ID	F	Y2000	FY	2001	FY	2002	FY	2003
	CODE	QTY.	COST	QTY.	COST	QTY.	COST	QTY.	COST
NAPLES NAS, IT					\$440				
AVIANO AB, IT					\$100				
HICKAM AFB, HI					\$150				
RAMSTEIN AB, GE					\$218		\$6084		
EIELSON AFB, AK							\$350		
ETV			\${2,594	}					
MCCHORD AFB, WA			\$2,594	1					
SAS			\${613	}	\${512}		\${900}		
CHARLESTON AFB, SC			\$375	5					
MCCHORD AFB, WA			\$35	5	\$150		\$150		
FAIRCHILD AFB, WA			\$167	7					
POPE AFB, NC			\$36	3					
MCCONNELL AFB, KS					\$152				
ANDREWS AFB, MD					\$210				-
DYESS AFB, TX							\$150		
LITTLE ROCK AFB, AR							\$200		
LAJES FIELD, AZORES							\$250		1
DOVER AFB, DE							\$150		
	P-1 ITEM	NO		PAGE				Page 5	of 11

BUDGET ITEM JUSTIFICATION	N FOR AGG	REGATED	ITEMS (EXH	IBIT P- 40A)			DATE: JU	JNE 2001	
APPROP CODE/BA: OPAF/OTHER BASE MAINTENAN	ICE & SUPPC	ORT EQUIP	MENT	P-1 NOME MECHANIZED	NCLATURE MATERIAL HA	NDLING EQ			
PROCUREMENT ITEMS	ID	F	Y2000	FY	2001	F١	(2002	FY	2003
	CODE	QTY.	COST	QTY.	COST	QTY.	COST	QTY.	COST
CRANES			\${750}	}					
MCGUIRE AFB, NJ			\$750	)					
HDSS			\${608}	}	\${600}		\${250}		
MCCHORD AFB, WA			\$608	3					
FAIRCHILD AFB, WA					\$600				
CHARLESTON AFB, SC							\$250		
IB/OB			\${300]	}					
KADENA AB, JA			\$300	)					
BCONV							\${150}		
SPANGDAHLEM AB, GE							\$150		
8. AIR NATIONAL GUARD	A		\${1,660]	}	\${1,673}		\${1,295}		
RSDS			\${1,660}	}	\${1,223}		\${1,065}		
ATLANTIC CITY ANGB, NJ			\$203	3					
SPRINGFIELD ANGB, OH			\$345	5					
TUCSON ANGB, AZ			\$309	)					
FRESNO ANGB, CA			\$325	5					
	<b>P-1 ITEM</b> 78	NO		PAGE I 31	NO:		<u> </u>	Page 6	of 11

BUDGET ITEM JUSTIFICATION F	OR AGG	REGA	TED IT	EMS (EXF	HIBIT I	P- 40A)				DATE: J	UNE 20	001	
APPROP CODE/BA: OPAF/OTHER BASE MAINTENANCE	E & SUPPO	ORT EC	QUIPME	INT	P-1 NOMENCLATURE: MECHANIZED MATERIAL HANDLING EQUIPMENT								
PROCUREMENT ITEMS	ID CODE		FY2				2001			2002			2003
FARGO ANGB, ND	CODE	QT	<i>(</i> .	<b>COST</b> \$47		QTY.	COST		QTY.	COST	QTY	-	COST
SELFRIDGE ANGB, MI					-		\$	198					
HAWAII ANGB, HI								250					
CHARLOTTE ANGB, NC								200					
KINGSTOWN ANGB, RI								225					
ROSLYN ANGB, NY								150					
BARNES ANGB, MA								200					
BURLINGTON ANGB, VT										\$200			
PUERTO RICO ANGB, PR										\$200			
TOLEDO ANGB, OH										\$200			
ELLINGTON ANGB, TX										\$215			
SAVANNAH IAP, GA										\$250			
VSRS							\${1	75}					
JACKSONVILLE ANGB, FL							\$	175					
SAS							\${1	00}					
LITTLE ROCK ANGB, AR							\$	100					
AFT										\${230}			
RENO/TAHOE ANGB, NV										\$230			
		1									I		
F	P-1 ITEM NO 78				<b>PAGE N</b> 32	0:			Page 7 of 11				

BUDGET ITEM JUSTIFICATION F		REGATED	ITEMS (EXH	IIBIT P- 40A)		<b>DATE:</b> JUNE 2001					
<b>APPROP CODE/BA:</b> OPAF/OTHER BASE MAINTENANCE	E & SUPPC	ORT EQUIP	MENT	P-1 NOME MECHANIZED	NCLATURE MATERIAL HA	NDLING EQ	UIPMENT				
PROCUREMENT ITEMS	ID	F	Y2000	FY	2001	FY	2002	FY	2003		
	CODE	QTY.	COST	QTY.	COST	QTY.	COST	QTY.	COST		
MEZZ					\${175}						
GREAT FALLS ANGB, MT					\$175						
9. US AIR FORCES EUROPE	A		\${167	}	\${270}		\${300}				
RSDS			\${167	'}				3(300)			
AVIANO AB, IT			\$16	7							
HDSS					\${270}		\${300}				
LAKENHEATH AB, UK					\$270						
AVIANO AB, IT							\$300				
10. USAF-WIDE/AIT	A		\${4,367	}	\${2,000}		\${2,000}				
MDCBL			\${335	}							
EGLIN AFB, FL			\$33	5							
MICAS			\${734	}							
MACDILL AFB, FL			\$61	4							
MILDENHALL AB, LAKENHEATH AB, UK & SPANGDAHLEM AB, GE			\$12	0							
F	P-1 ITEM 78	NO	<u> </u>	PAGE I	NO:		<u> </u>	Page 8	of 11		

BUDGET ITEM JUSTIFICATION F	OR AGG	REGATED	D ITEMS (EXH	BIT P- 40A)			<b>DATE:</b> JUNE 2001			
APPROP CODE/BA: OPAF/OTHER BASE MAINTENANCE	& SUPPC	ORT EQUIF	PMENT	P-1 NOME MECHANIZED	NCLATUR MATERIAL H	<b>E:</b> IANDLING EQ	UIPMENT			
PROCUREMENT ITEMS	ID		Y2000	FY	2001	FY	2002	FY	2003	
	CODE	QTY.	COST	QTY.	COST	QTY.	COST	QTY.	COST	
VTS			\${400}							
SCOTT AFB, IL			\$400							
CICS			\${48}							
LACKLAND AFB, TX			\$48							
CMOS			\${175}							
EGLIN AFB, FL & SHAW AFB, SC			\$175							
MUNITIONS			\${90}							
FORT BELVOIR, VA			\$90							
CIMS			\${55}							
LACKLAND AFB, TX			\$55							
TCS			\${100}							
MILDENHALL AB, & LAKENHEATH AB, UK			\$100							
BBRMS			\${500}							
RAMSTEIN AB, GE			\$500							
P	-1 ITEM 78	NO		PAGE I 34	NO:	<u> </u>		Page 9	of 11	

BUDGET ITEM JUSTIFICATION F	OR AGG	REGA	TED ITEMS (E	хніві	IT P- 40A)				<b>DATE:</b> JUNE 2001			
APPROP CODE/BA: OPAF/OTHER BASE MAINTENANCE	E & SUPPO	ORT EC	UIPMENT	<b>Р-</b> МЕ	<b>1 NOMEN</b> CHANIZED	NCLA MATE	TURE RIAL HA	NDLING EQ	UIPMENT			
PROCUREMENT ITEMS	ID		FY2000		FY2	2001		FY	2002		FY2	003
	CODE	QTY	r. COST	-	QTY.	CC	OST	QTY.	COST	QT	Y.	COST
SATS			\${1,8	380}								
MILDENHALL AB, UK			\$	627								
LAKENHEATH AB, UK			\$	627								
SPANGDAHLEM AB, GE			\$	626								
FMS			\$	{50}								
FORT BELVOIR, VA				\$50								
CAS							\${1,150}					
EGLIN AFB, FL							\$1150					
H-53 HELO							\${125}					
HURLBERT AFB, FL							\$125					
TAGS							\${500}					
WRIGHT PATTERSON AFB, OH							\$500					
AFDCC	_						\${225}					
MAXWELL AFB, AL							\$225					
	P-1 ITEM NO 78				PAGE N 35	IO:			Page 10 of 11			

BUDGET ITEM JUSTIFICATION	FOR AGGF	REGA	TED ITEMS (EX	HIBIT	P- 40A)				DATE: J	JNE 200	)1	
APPROP CODE/BA: OPAF/OTHER BASE MAINTENANC	E & SUPPO	RT E	QUIPMENT	<b>P-1</b> MEC	NOMEN CHANIZED N	<b>CLATU</b> MATERIAL	RE: HAN	DLING EQ	UIPMENT			
PROCUREMENT ITEMS	ID		FY2000		FY2	001		FY	2002		FY2003	
	CODE	QT	Y. COST		QTY.	COST		QTY.	COST	QTY.	COST	
СРМ									\${800}			
							_					
EGLIN AFB, FL & HILL AFB, UT									\$800			
									\${800}			
EGLIN AFB, FL & HILL AFB, UT									\$800			
									¢(400)			
CAC							_		\${400}			
EGLIN AFB, FL									\$400			
10A. USAF-WIDE/SATS	А		\$10,0	00		\$80	00					
SATS												
Totals:			\$27,1	64		\$22,90	06		\$14,361			
Remarks: Item 10A reflects FY00 (\$10M) and	FY01 (\$8M)	Cong	ressional adds to i	mplen	nent the Sup	oply Asset 1	racki	ng System	(SATS) worldw	de.		
P-1 ITEM NO 78					PAGE NO: 36					Page	Page 11 of 11	

BUDGET ITEM JUS	TIFICATION (E	XHIBIT P-40)	1			DATE:	JUNE 2001		
APPROP CODE/BA OPAF/OTHER BASE MA		UPPORT EQUIF	PMENT	_	IENCLATURE SS THAN \$5,000				
	FY2000	FY2001	FY2002	FY2003	FY2004	FY2005	FY2006	FY2007	
QUANTITY									
COST (in Thousands)	\$11,165	\$9,156	\$9,437	\$12,256	\$12,538	\$12,828	\$13,084	\$13,373	

#### **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. FY02 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 FY02 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 current Air Force mission requirements.

3. This administration has not addressed FY 2003-2007 requirements. All FY 2003-2007 budget estimates included in this book are notional only and subject to change.

<b>P-1 ITEM NO:</b> 79		<b>PAGE NO:</b> 37	Page 1 of 1
	UNCLASSIFIED		

BUDGET ITEM JUSTIFICATION FOR AGGREGATED ITE	MS (EXHI	BIT P- 40A-IL)		DAT	<b>DATE:</b> JUNE 2001					
APPROP CODE/BA: OPAF/OTHER BASE MAINTENANCE & SUPPORT EQUIPMEN	іт <b>Р</b> іт	P-1 NOMENCLATURE: ITEMS LESS THAN \$5,000,000 (BASE INDUSTRIAL SUPPORT EQ)								
			FY	2002		FY2003				
PROCUREMENT ITEMS		NSN	QTY.	COST	QTY	. COST				
BENDING MACHINE	3441009	9384573	2	\$1,182						
FSC 3220 - WOODWORKING MACHINES				\$42						
FSC 3405 - SAWS AND FILING MACHINES				\$582						
FSC 3413 - DRILLING MACHINES				\$72						
FSC 3415 - GRINDING MACHINES				\$540						
FSC 3416 - LATHES				\$447						
FSC 3417 - MILLING MACHINES				\$1,509						
FSC 3419 - MISCELLANEOUS MACHINE TOOLS				\$443						
FSC 3424 - METAL HEAT TREATING EQUIPMENT				\$676						
FSC 3426 - METAL FINISHING EQUIPMENT				\$111						
FSC 3431 - ELECTRIC ARC WELDING EQUIPMENT				\$267						
FSC 3432 - ELECTRIC RESISTANCE WELDING EQUIPMENT				\$696						
FSC 3433 - GAS WELDING, HEAT CUTTING, & METALIZING EQUIPMENT				\$92						
FSC 3441 - BENDING AND FORMING MACHINES				\$1,721						
FSC 3445 - PUNCHING AND SHEARING MACHINES				\$912						
FSC 4430 - INDUSTRIAL FURNACES, KILNS AND OVENS				\$145						
TOTALS:				\$9,437						
<b>P-1 ITEM NO</b> 79		PAGE NO: 38				Page 1 of 1				

BUDGET ITEM JUS	TIFICATION (	EXHIBIT P-40	)		DATE: JUNE 2001							
APPROP CODE/BA		SUPPORT EQUI	PMENT	<b>P-1 NON</b> FLOODLIG	<b>IENCLATURE</b> GHTS	Ξ:						
	FY2000	FY2001	FY2002	FY2003	FY2004	FY2005	FY2006	FY2007				
QUANTITY												
COST (in Thousands)	\$13,403	\$14,782	\$6,946	\$7,023	\$1,644	\$0	\$0	\$0				

#### Description:

1. Floodlights are one of the most valuable and versatile pieces of support equipment in the Air Force inventory. They support many facets of maintenance operations including night maintenance on aircraft, loading and unloading cargo, and providing essential emergency lighting. They play a critical role in perimeter defense, emergency disaster coverage and aircraft accident on-site investigations as well as provide auxillary power for air conditioners and portable x-ray equipment.

2. The Air Force procured the current NF-2 floodlights as early as 1960, some of these earliest units are still in the inventory. As such, all currently fielded NF-2 and unmodified NF-2D floodlights have exceeded their useful service life by approximately 13 years. Spare parts are no longer available through contract sources for repair of the floodlight sets. The FL-1D floodlight replaces these unsupportable models. The FL-1D, consists of a tower for mounting two 1,000 watt floodlights, power distribution equipment, and a diesel engine driven generator set, permanently mounted on a 4-wheel trailer type chasis. By virtue of being 50 percent smaller than previously fielded models, FL-1Ds dramatically reduce airlift requirements assisting in the Air Force's increasing mission role as an expeditionary force. In FY97, a new contract for the FL-1D floodlight was awarded to Unicor (Prison Industries), Big Springs, Texas. FY02 continues funding for procurement of floodlights.

3. The following projects were added by Congress in the FY01 markup of the FY01 Air Force budget. Reference Appropriation Conference Report 106-754, July 17, 2000, page 210:

Mobile Expeditionary Accurate Night Vision Compatible Portable Airfield Lighting System (MEANPALS)

	<b>P-1 ITEM NO:</b> 80		<b>PAGE NO:</b> 39		Page 1 of 2			
UNCLASSIFIED								

BUDGET ITEM JUSTIFICATION (E	BUDGET ITEM JUSTIFICATION (EXHIBIT P-40)								
APPROP CODE/BA:			P-1 NOME	NCLATURE:					
OPAF/OTHER BASE MAINTENANCE & S	UPPORT EQUIPMI	ENT	FLOODLIGH						
Description (cont.): Cold Cathode Landing Lights									
4. Items requested in FY02 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 euipment needed to support current Air Force mission requirements.									
5. This administration has not addressed FY 2003-2007 requirements. All FY 2003-2007 budget estimates included in this book are notional only and subject to change.									
	<b>P-1 ITEM NO:</b> 80			<b>PAGE NO:</b> 40		Page 2 of 2			

BUDGET ITEM JUSTIFICATION FOR AGGREGATED ITEMS (EXHIBIT P- 40A)								DATE: JUNE 2001		
APPROP CODE/BA: OPAF/OTHER BASE MAINTENANC	E & SUPPC	DRT EQUIF	PMENT	<b>P-1</b> FLC	<b>NOMEN</b>	ICLATURE	:			
PROCUREMENT ITEMS	ID CODE		Y2000		FY2		FY20			2003
FL-1D FLOODLIGHTS	A	QTY.	<b>COST</b> \$13,4		QTY.	<b>COST</b> \$10,582	QTY.	<b>COST</b> \$6,946	QTY.	COST
MEANPALS	A		φ10,			\$2,200		\$0,010		
COLD CATHODE LANDING LIGHTS	A					\$2,000				
Totals:			\$13,4	403		\$14,782		\$6,946		
Remarks:										
	<b>P-1 ITEM</b> 80	NO			PAGE N 41	O:			Page 1	of 1
	00									

BUDGET PROCUREMENT H		DATE: JUNE 2001									
APPROP CODE/BA: OPAF/OTHER BASE MAINTEN/	ANCE &	SUPPOR	T EQUIPMENT	P-1 NOMENCLA	ATURE:	-					
ITEM / FISCAL YEAR	QTY.	UNIT COST	LOCATION OF PCO	CONTRACT METHOD & TYPE	CONTRACTOR AND LOCATION	AV DA	/D.     TF	DATE FIRST DEL.	SPECS AVAIL NOW	DATE REV. AVAIL	
FL-1D FLOODLIGHTS											
FY00	960	13,961	AFMC/SA-ALC	MIPR/FFP	UNICOR, BIG SPRINGS, TX	JAN	100 N	MAY 00			
FY01	701	15,095	AFMC/WR-ALC	MIPR/FFP	UNICOR, BIG SPRINGS, TX	JAN	101 N	MAY 01			
FY02	466	14,906	AFMC/WR-ALC	MIPR/FFP	UNICOR, BIG SPRINGS, TX	DEC	C 01 F	FEB 02	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 WHICH INCLUDES THESE FLOODLIGHTS. 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.											

<b>P-1 ITEM NO</b> 80	<b>PAGE NO:</b> 42	Page 1 of 1

BUDGET ITEM JUS	TIFICATION (E	DATE:	JUNE 2001							
APPROP CODE/BA	:			P-1 NOM	IENCLATURE	:				
OPAF/OTHER BASE MAINTENANCE & SUPPORT EQUIPMENT					ITEMS LESS THAN \$5,000,000 (ELECTRICAL EQUIPMENT)					
	FY2000	FY2001	FY2002	2002 FY2003 FY2004 F			FY2006	FY2007		
QUANTITY										
COST (in Thousands)	\$7,026	\$7,121	\$6,061	\$6,201	\$10,375	\$10,526	\$10,525	\$10,547		
Description:										
<b>Description:</b> 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. This equipment supports daily operations as well as contingencies.										

hospitals, maintenance shelters, civil engineering functions and test ranges. This equipment supports daily operations as well as contingencies, natural disasters and requirements for 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. FY02 funding procures initial shortages as well as replacement equipment which is currently approaching obsolescence. All items have an annual procurement value of less than \$5,000,000 and are Code A. Items requested in FY02 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 current Air Force mission requirements.

3. This administration has not addressed FY 2003-2007 requirements. All FY 2003-2007 budget estimates included in this book are notional only and subject to change.

	<b>P-1 ITEM NO:</b> 81		<b>PAGE NO:</b> 43		Page 1 of 1			
UNCLASSIFIED								

BUDGET ITEM JUSTIFICATION F	OR AGGREGATED I	BUDGET ITEM JUSTIFICATION FOR AGGREGATED ITEMS (EXHIBIT P- 40A-IL)								
APPROP CODE/BA: OPAF/OTHER BASE MAINTENANCE	ENT	P-1 NOMENCLATURE: ITEMS LESS THAN \$5,000,000 (ELECTRICAL EQUIPMENT)								
				FY20	02		FY2003			
PROCUREMENT ITEMS			NSN	QTY.	COST	QTY.	COST			
GENERATOR, MEP 805B		61 <sup>-</sup>	15014619335	39	\$874					
GENERATOR, MEP 806B		61	15014620291	50	\$1,292					
GENERATOR, MEP 831A		61 <sup>-</sup>	15012853012	60	\$561					
POWER PLANT, MJQ-37		61	15012996035	12	\$451					
POWER PLANT, MJQ-1632		61	15013640157	19	\$1,881					
MINOR PROJECTS										
FSC 6110 - ELECTRICAL CONTROL EQUIPM	ENT				\$470					
FSC 6115 - GENERATORS - PWR PLANTS					\$532					
TOTALS:					\$6,061					
P	-1 ITEM NO 81	<b>I</b>	PAGE NO: 44			Page	e 1 of 1			

BUDGET ITEM JUS	DATE:	JUNE 2001						
APPROP CODE/BA: OPAF/OTHER BASE MAINTENANCE & SUPPORT EQUIPMENT					IENCLATURE			
	FY2000	FY2001	FY2002	FY2003	FY2004	FY2005	FY2006	FY2007
QUANTITY								
COST (in Thousands)	\$20,245	\$21,192	\$11,957	\$11,555	\$15,055	\$7,422	\$9,189	\$9,393

#### **Description:**

1. To reduce costs, federal policy relieves the services from wholesale management of non-military or commercial items. Bases and units throughout the Air Force acquire authorized equipment of this nature directly from the General Services Administration (GSA), Defense Logistics Agency (DLA), one of the other services, or from commercial sources. Base Procured Equipment (BPE) provides funds for local procurement of equipment costing \$100,000 or more, which is not centrally managed and procured. Typical application for BPE include roads and grounds maintenance; vehicle maintenance shops; vehicle corrosion control facilities; specialized tool kits and test equipment, civil engineering maintenance equipment, electrical and carpenter shops; specialized laboratories; kitchen and dining facilities; printing plants; air conditioning; heating requirements; microfilm and graphics support facilities.

2. The equipment described above is needed for day-to-day maintenance and operation of bases, weapons and support systems assigned to 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; beddown of new weapon systems; reorganizations; natural disasters; new operational methods to increase efficiency and safety; 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.

	<b>P-1 ITEM NO:</b> 82		<b>PAGE NO</b> : 45		Page 1 of 2			
UNCLASSIFIED								

BUDGET ITEM JUSTIFICATION (	BUDGET ITEM JUSTIFICATION (EXHIBIT P-40)							
APPROP CODE/BA:			P-1 NOME	NCLATURE:				
OPAF/OTHER BASE MAINTENANCE & S	SUPPORT EQUIPMI	ENT	BASE PROCURED EQUIPMENT					
Description (cont.):								
<ul> <li>4. The following projects were added be Report 106-754, July 17, 2000, page 21 Hazardous Gas Detection Equip Ultimate Building Machines Master Cranes</li> <li>5. This administration has not addressed only and subject to change.</li> </ul>	l0: pment	-		-				
	<b>P-1 ITEM NO:</b> 82			<b>PAGE NO:</b> 46		Page 2 of 2		

BUDGET ITEM JUSTIFICATIO	BUDGET ITEM JUSTIFICATION FOR AGGREGATED ITEMS (EXHIBIT P- 40A)									
APPROP CODE/BA: OPAF/OTHER BASE MAINTENAN	NCE & SUPPC	ORT EQUI		P-1 NOMENCLATURE: BASE PROCURED EQUIPMENT						
PROCUREMENT ITEMS	ID		FY2000		2001		2002		2003	
	CODE	QTY.	COST	QTY.	COST	QTY.	COST	QTY.	COST	
1. PACIFIC AIR FORCES	А		\$591		\$580		\$587			
2. AF SPEC OPERATIONS CMD	А		\$248		\$595		\$603			
3. AIR COMBAT CMD	А		\$2695		\$2796		\$2936			
4. US AIR FORCES EUROPE	А		\$631		\$625		\$637			
5 . AIR FORCE SPACE CMD	А		\$477		\$1177		\$471			
6. AF COMM SERVICE	А		\$63		\$232		\$234			
7. AIR MOBILITY CMD	А		\$344		\$346		\$0			
8. AIR NATIONAL GUARD	А		\$5275		\$4661		\$0			
9. AIR FORCE RESERVES	А		\$2866		\$2982		\$0			
10. AIR EDUCATION & TRNG CMD	А		\$1035		\$532		\$5089			
11. US AIR FORCE ACADEMY	А		\$939		\$1217		\$1176			
12. AF CIVIL ENGR SPT AGENCY	А		\$1421		\$0		\$224			
13. AFMC	А		\$3660		\$5449		\$0			
Totals:			\$20,245		\$21,192		\$11,957			
Remarks:										
	<b>P-1 ITEM</b> 82	NO		PAGE N 47	10:			Page 1	of 1	

BUDGET ITEM JUS	TIFICATION (E	XHIBIT P-40)	)			DATE:	JUNE 2001	
APPROP CODE/BA: OPAF/OTHER BASE MAINTENANCE & SUPPORT EQUIPMENT					IENCLATURE			
	FY2000	FY2001	FY2002	FY2003	FY2004	FY2005	FY2006	FY2007
QUANTITY								
COST (in Thousands)	\$14,206	\$16,868	\$15,525	\$13,992	\$14,389	\$14,709	\$15,333	\$15,672

#### **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 maintained large hospitals throughout Europe, ready to receive casualties during a conflict with Warsaw Pact countries. Current doctrine and diminished forward basing requires the Air Force to maintain medical readiness assets in CONUS which can be rapidly transported via cargo aircraft to any location in the world, and upon arrival, quickly set up and be prepared 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 medical 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. Theater Medical Information Program (TMIP): The TMIP incorporates all DOD medical information systems that have a theater application. Wartime medical communication requirements differ radically from peacetime requirements. Commanders require real-time information on WIA personnel and their treatment--type, numbers, location; reports detailing casualty location and medical status ranging from the front line to rear echelons; logistical data - resource consumption information, supply inventories, logistical pipeline data, material delivery information, what materiel can be diverted to satisfy a higher priority; and medical personnel - matching medical/surgical capability and

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BUDGET ITEM JUSTIFICATION (EXHIBIT P-40)	DATE: JUNE 2001	
APPROP CODE/BA:	P-1 NOMENCLATURE:	
OPAF/OTHER BASE MAINTENANCE & SUPPORT EQUIPMENT	MEDICAL/DENTAL EQUIPMEN	г

**Description (cont.):** availability/locations with WIA requirements.

The current medical wartime communications infrastructure consists of readily available land lines and radio technology that dates from the late 1950s. TMIP will provide inter/intra unit medical communications systems for ground and Air Force theater medical units through use of secure and non-secure telephone lines, wireless and satellite media. The result will be a deployable, organic medical information infrastructure which is capable of transmitting voice, electronic mail, data and images, and 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. FY00, FY01 and FY02 funding will provide operating capability in the form of information management hardware required for the TMIP system, equipping many of our medical assemblages.

b. Modernization and Replacement: This program provides for replacement and modernization of centrally managed and procured equipment items. This funding procures equipment items and components using a mission-based priority system. Funding constraints often dictate procuring less than the inventory objective of each item -- necessitating multiple procurement activities to eventually achieve maximum deployable readiness. To maximize the number of 100% deployable units, some of each of the following requirements are being procured in FY02:

(1) Alaskan Shelters (New Family of Portable Shelters)

- (2) Communications Equipment
- (3) Environmental Control Units
- (4) Generators, Power Distribution Panels
- (5) Pulse Oxymeters
- (6) Defibrillators
- (7) X-ray Film Processors

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BUDGET ITEM JUSTIFICATION (EXHIBIT P-40)	DATE: JUNE 2001	
<b>APPROP CODE/BA:</b> OPAF/OTHER BASE MAINTENANCE & SUPPORT EQUIPMENT	P-1 NOMENCLATURE: MEDICAL/DENTAL EQUIPMEN	Г

#### **Description (cont.):**

c. 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 SCITS seeks to ensure that patients with spinal cord injuries, burns, or multiple trauma who must be airlifted significant distances receive the same quality care in transit that would be available from medical treatment facilities. SCITS will incorporate kinetic therapy technology for treating and preventing complications of immobility, skeletal traction, and stability for the spine.

Several operational performance parameters are unique to the SCITS design and its aero medical evacuation mission. SCITS must be sufficiently light and portable to permit a minimum number of individuals to pick both it and the patient up for transport into the medical evacuation aircraft, ambulance, or ambus. The device must also 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 extremely durable lightweight materials to withstand the rigors of flight. The medical evacuation aircraft on which SCITS will be used include the C-9, C-17, C-130, UH-60A, and the Civil Reserve Air Fleet (CRAF). Associated Research and Development (R&D) funds will accomplish recent design changes and reach the final IOT&E milestones. Reference PE 64703 in the Air Force Descriptive Summaries. FY02 funding is requested for these units.

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

4. This administration has not addressed FY 2003-2007 requirements. All FY 2003-2007 budget estimates included in this book are notional only and subject to change.

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UNCLASSIFIED							

BUDGET ITEM JUSTIFICATION	FOR AGG	REGAT	ED ITEMS (EX	HIBIT P- 40A)			DATE: JU	JNE 2001	
APPROP CODE/BA: OPAF/OTHER BASE MAINTENANC	IIPMENT	P-1 NOMEN MEDICAL/DEN							
PROCUREMENT ITEMS	ID		FY2000	FY2	2001	FY2	2002	FY	2003
TROCOREMENT TIEMS	CODE	QTY.	COST	QTY.	COST	QTY.	COST	QTY.	COST
A. TMIP	A		\$8,3	41	\$8,520		\$5,800		
B. MODERNIZATION & REPLACEMENT	A		\$5,8	65	\$6,878		\$7,475		
C. SCITS	A			65	\$1,470	95	\$ 2,250		
Totals:			\$14,2	06	\$16,868		\$15,525		
	<b>P-1 ITEM</b> 83	NO		<b>PAGE N</b> 51	0:			Page 1	of 1

BUDGET PROCUREM	BUDGET PROCUREMENT HISTORY PLANNING (EXHIBIT P- 5A)						NE 200	)1		
APPROP CODE/BA: OPAF/OTHER BASE MA		SUPPOR	RT 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. TMIP										
FY00 (1)			AFMLO	C/FFP	MULTIPLE (2)	JAN 00	JUL 00			
FY01 (1)			AFMLO	OPT/FFP	MULTIPLE (2)	JAN 01	MAR 01			
FY02 (1)			AFMLO	OPT/FFP	MULTIPLE (2)	DEC 01	MAR 02	Y		
B. MODERNIZATION & REPLACEMENT										
FY00 (1)			AFMLO	C/FFP	MULTIPLE (3)	DEC 99	JAN 00			
FY01 (1)			AFMLO	C/FFP	MULTIPLE (3)	DEC 00	JAN 01			
FY02 (1)			AFMLO	C/FFP	MULTIPLE (3)	DEC 01	JAN 02	Y		
C. SCITS										
FY01	65	22,615	AFMC/HSC	C/FFP	UNKNOWN	AUG 01	DEC 01	Y		
FY02	95	23,684	AFMC/HSC	OPT/FFP	UNKNOWN	OCT 01	DEC 01	Y		
<u> </u>										
	P-1	ITEM N 83	0	PAGE NO	:		Pag	l e 1 of	2	

BUDGET PROCUREMENT HISTORY PLANNING (EXHIBIT P- 5A)							DATE: JUNE 2001				
APPROP CODE/BA: OPAF/OTHER BASE MAINTEN/	ANCE &	SUPPOR	T EQUIPMENT	P-1 NOMENCLATURE: MEDICAL/DENTAL EQUIPMENT							
ITEM / FISCAL YEAR	QTY. UNIT COST		LOCATION OF PCO	CONTRACT METHOD & TYPE	CONTRACTOR AND LOCATION		VD. DA TE DE	ST AVAIL	DATE REV. AVAIL		
REMARKS: 1. Quantities and unit costs vary 2. AFMLO (Air Force Medical Lo (TMSSC), who will act as the ove Centers (ALCs) to purchase those 3. AFMLO uses various contract and EASI Engineered Air System delivery of equipment.	rsight off e additio s at mul s Inc, Sa	Office, Fort fice and in nal TMIP i tiple ALCs aint Louis,	E Detrick, Maryland) is tegration facility for th tems which do not rec such as RACAL Com MO. The award date	e Air Force. AFMLO quire system integrati munications, Rockvil and date of first deliv	will also use various contra on. lle, MD; Alaska Industrial R very represent the first award	cts to GSA a esources, Ai	nd the Ai	Logistic Alaska;			
	P-1	I <b>ITEM N</b> 83	0	<b>PAGE NO:</b> 53			Pa	ige 2 o	f 2		

BUDGET ITEM JUS	BUDGET ITEM JUSTIFICATION (EXHIBIT P-40)							
APPROP CODE/BA				_				
OPAF/OTHER BASE MAINTENANCE & SUPPORT EQUIPMENT				ENVIRONMENTAL PROJECTS				
	FY2000	FY2001	FY2002	FY2003	FY2004	FY2005	FY2006	FY2007
QUANTITY								
COST (in Thousands)	\$947	\$932	\$938	\$932	\$951	\$972	\$0	\$0

### **Description:**

1. The Air Force Materiel Command (AFMC) Pollution Prevention Environmental Projects Program procures equipment necessary to ensure compliance with environmental laws, executive orders, regulations, and DoD directives. This program provides equipment that reduces the Air Force's environmental compliance burden through hazardous waste minimization, wastewater pretreatment, air pollutant emission reduction, and solid waste recycling. Equipment purchases provide improvements to the day-to-day operations in AF installations and result in increased capability to support the AF.

2. Following are descriptions of FY00-02 individual projects.

### FY00:

a. Pollution Prevention Integrated Snow/Ice Control, Tinker AFB, OK and Hill AFB, UT: Air Force Civil Engineers are required to keep runways and taxiways clear of snow and ice during severe weather to support flying operations. Previous operations used urea and potassium acetate de-icing chemicals to clear the pavements. The de-icing equipment used to apply these chemicals generated excessive urea by-product that is detrimental to plants and wildlife and violates Clean Water Act (CWA) Storm Water criteria discharge standards. FY00 funds bought a new de-icing system that will eliminate the need for the urea chemicals and significantly reduce potassium acetate usage--an ecologically prudent course of action. The equipment uses computer software that precisely applies the proper chemical concentrations within acceptable discharge limits.

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<b>BUDGET ITEM JUSTIFICATION (EXHIBIT P-40)</b>	DATE: JUNE 2001	
APPROP CODE/BA: OPAF/OTHER BASE MAINTENANCE & SUPPORT EQUIPMENT	P-1 NOMENCLATURE: ENVIRONMENTAL PROJECTS	

### **Description (cont.):**

b. High-Velocity Oxygen Fuel (HVOF) Thermal Plating Process for Aircraft Engine Component Repair, Tinker AFB, OK: Wet chrome plating processes are employed to restore/repair worn areas of gas turbine engine components such as engine bearing supports and housings; hubs, drive shafts, and retainment fixtures. The use of the chromium plating solutions generates a considerable environmental compliance burden in terms of Class I carcinogen as well as complying with the Environmental Protection Agency's (EPA) chromium National Emmissions Standards for Hazardous Air Pollutants (NESHAPS), Total Release Inventory (TRI) reporting, National Pollutant Discharge Elimination System (NPDES), maintenance/control of low Occupational Safety and Health Administration (OSHA) Permissible Exposure Limits (PEL) to protect plant operators; and management of Resource Conservation and Recovery Act (RCRA) hazardous wastes. Once operational, the purchase of the HVOF equipment will accomplish the same plating quality and physical characteristics on engine components using a chrome-free compound containing tungsten-cobalt-carbide that is electrolytic sprayed within a totally enclosed environment with little or no waste residues. The HVOF will reduce hazardous material usage, reduce hazardous generation, reduction of hazardous chrome air pollutant emissions and the associated pollution control equipment operational requirements; and reduce hexavalent chromium containing wastewater effluents and sludge treatment requirements.

c. High Velocity Oxygen Fuel Thermal Plating Process for Aircraft Landing Gearing, Hill AFB, UT: High strength landing gear are repaired and/or restored via plating with hexavalent chromium. Hill AFB's workload represents 75% of the Air Force's landing gear assembly. Current environmental impositions incurred by wet hexavalent chrome plating results in high costs in complying with OSHA and EPA regulations, including treatment and disposal costs associated with hexavalent chromium wastes. Once operational, the HVOF applied thermal coatings will meet all requirements defined by the stakeholders of AF landing gear assemblies. HVOF coatings will provide a longer and superior wear characteristics to the present chrome coatings. HVOF operations will result in major reductions in the environmental compliance costs.

BUDGET ITEM JUSTIFICATION (EXHIBIT P-40)	DATE: JUNE 2001	
APPROP CODE/BA:	P-1 NOMENCLATURE:	
OPAF/OTHER BASE MAINTENANCE & SUPPORT EQUIPMENT	ENVIRONMENTAL PROJECTS	
Description (cont.):		

FY01:

d. Robotic Plastic Media Paint Stripping System, Robins AFB, GA: The present use of chemical-based paint strippers for removing coatings from aircraft components and parts results in the generation of regulated air emissions and hazardous waste. The procurement of a robotic plastic media paint stripping system at Robins AFB in FY01 will significantly reduce those emissions and the waste generation.

e. Powder Coating System, Robins AFB, GA: An electrolytically charged powder paint coating process has 40-70% better material transfer than typical spray-gun paint applications; with overspray accumulation having the capability to be recycled. With Robins' conventional hand-gun sprays, application effeciencies only achieve a 20% maximum material transfer to substrate with wasted material overspray going to atmosphere and control process. With environmental compliance regulations, Robins AFB undergoes a number of compliant responsibilities to maintain its present paint spray equipment and booths for their depot mission in aircraft sustainment and aerospace ground support equipment (AGE) maintenance. Replacement via powder coat paint application will significantly reduce disposal of hazardous paint wastes (RCRA), decrease hazardous material coatings usage/purchase, almost complete elimination of paint volatile organic compounds (VOC) emissions (Aerospace NESHAPS), and require no solvent use (TRI) either for mixing nor paint gun cleaning.

f. Ion Vapor Deposition Sputtered Aluminum System, Hill AFB, UT: The external surfaces of landing gear are presently coated with aluminum using the Ion Vapor Deposition process. This has proven to be a great improvement over the previous cadmium plating process by reducing the generation of hazardous waste, the generation of industrial wastewater, and the exposure of workers to highly toxic cadmium. Internal surfaces of the landing gear, however, must still be cadmium plated because conventional Ion Vapor Deposition technology is not capable of putting a coating on internal diameters. The purchase of an Ion Vapor Deposition Sputtered Aluminum System will enable the Hill AFB to put the same aluminum coating on both the external and internal surfaces of the landing gear. This equipment will further reduce the generation of hazardous waste and wastewater and greatly improve working conditions.

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BUDGET ITEM JUSTIFICATION (EXHIBIT P-40)	DATE: JUNE 2001	
APPROP CODE/BA:	P-1 NOMENCLATURE:	
OPAF/OTHER BASE MAINTENANCE & SUPPORT EQUIPMENT	ENVIRONMENTAL PROJECTS	

#### **Description (cont.):**

FY02:

g. Industrial Wastewater Pretreatment, Tinker AFB, OK: FY02 funds will procure equipment to pretreat the concentrated wastewater from the aircraft maintenance area. By pretreating the concentrated wastewater, the loading on the Industrial Wastewater Treament Plant (IWTP) will be more dilute, resulting in reduced chemical usage per gallon and a reduction in the generation of hazardous sludge.

h. A-LIX Treatment System, Robins AFB, GA: FY02 funds will purchase Anion Liquid Ion Exchange (A-LIX) equipment to remove chromium from the chrome plating line wastewater, without generating a sludge. The end product is a concentrate chrome solution that can be reused in the plating shop or sold back to the vendor.

i. Ultrahigh Pressure Water Jet Stripping of Thermal Sprayed Coatings, Tinker AFB, OK: This project will purchase an ultra-high pressure water jet spray system to physically remove thermal-sprayed metallic coatings. The part is mounted on a turntable where a robotic arm directs the nozzle to spray the part with the highly pressurized water in a preprogrammed path. This system will reduce the amount of hazardous waste generated from the present chemical or grit blasting processes, by allowing for the filtering of the removed coating from the water.

j. ElectroSpark Deposition (ESD), Hill AFB, UT: FY02 funds will procure a semi-automated metal deposition system that is designed to provide durable line-of-sight coatings to a wide array of landing gear substrates. The technology is commercially available and currently employed by the Department of Energy for its nuclear reactor components. Current Hill AFB chrome plating practices use wet-chemistry electrolysis. Various landing gear sustainment activities require entire chemical masking of large landing gear assemblies in order to plate relatively minute areas. ESD, with its wide metallurgical coating/plating applications, will eliminate wet-plating practices to coat small landing gear surface areas; hazardous plating waste discharges and sludge disposal; significantly reduce hazardous chemical maskants;

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BUDGET ITEM JUSTIFICATION (E		DATE: JUNE 2	2001							
APPROP CODE/BA:			P-1 NOME	NCLATURE:						
OPAF/OTHER BASE MAINTENANCE & S	SUPPORT EQUIPMI	ENT	ENVIRONM	ENTAL PROJECTS						
<b>Description (cont.):</b> and do away with inefficient wet chrome plating practices.										
3. Items requested in FY 02 are identif execution may change based on the mo						red during				
4. This administration has not addressed FY 2003-2007 requirements. All FY 2003-2007 budget estimates included in this book are notional only and subject to change.										
	<b>P-1 ITEM NO</b> : 84			<b>PAGE NO:</b> 58		Page 5 of 5				

BUDGET ITEM JUSTIFICATION FOR AGGREGATED ITEMS (EXHIBIT P- 40A)								DATE: JUNE 2001			
APPROP CODE/BA: OPAF/OTHER BASE MAINTENANCE & SUPPORT EQUIPMENT				P-1 NOMENCLATURE: ENVIRONMENTAL PROJECTS							
PROCUREMENT ITEMS	ID	FY2	2000	FY	2001	FY	2002	FY	2003		
	CODE	QTY.	COST	QTY.	COST	QTY.	COST	QTY.	COST		
A. POLLUTION PREVENTION INTEGRATED SNOW/ICE CONTROL	A	2	\$409	)							
B. HIGH VELOCITY OXYGEN FUEL THERMAL PLATING SYSTEM FOR AIRCRAFT ENGINE COMPONENT REPAIR, TINKER AFB, OK	A	1	\$221								
C. HIGH VELOCITY OXYGEN FUEL THERMAL PLATING SYSTEM FOR AIRCRAFT LANDING GEARING, HILL AFB, UT	A	1	\$317	,							
D. ROBOTIC PLASTIC MEDIA PAINT STRIPPING SYSTEM, ROBINS AFB, GA	A			1	\$250						
E. POWDER COATING SYSTEM, ROBINS AFB, GA	A			1	\$257						
F. ION VAPOR DEPOSITION SPUTTERED ALUMINUM SYSTEM, HILL AFB, UT	A			1	\$425						
G. INDUSTRIAL WASTEWATER PRETREATMENT, TINKER AFB, OK	A					1	\$285				
H. A-LIX TREATMENT SYSTEM, ROBINS AFB, GA	A					1	\$300				
I. ULTRAHIGH PRESSURE WATER JET STRIPPING OF THERMAL SPRAYED COATINGS, TINKER AFB, OK	A					1	\$233				
J. ELECTROSPARK DEPOSITION (ESD), HILL AFB, UT	A					1	\$120				
Totals:			\$947		\$932		\$938				
Remarks:											
Ρ	<b>-1 ITEM</b> 84	NO		PAGE 1 59	NO:			Page 1	of 1		

BUDGET ITEM JUS	DATE:	JUNE 2001									
APPROP CODE/BA	:			P-1 NOM	P-1 NOMENCLATURE:						
OPAF/OTHER BASE MAINTENANCE & SUPPORT EQUIPMENT				AIR BASE	AIR BASE OPERABILITY						
	FY2000	FY2001	FY2002	FY2003	FY2004	FY2005	FY2006	FY2007			
QUANTITY											
COST (in Thousands)	\$4,378	\$2,921	\$6,000	\$0	\$0	\$0	\$0	\$0			

#### **Description:**

1. Air Base Operability (ABO), a subset of Agile Combat Support, provides integrated capabilities to support aircraft deployment, launch, recovery and regeneration at air bases worldwide. The top ABO and Air Force Civil Engineering Readiness priority is to safely perform reconnaissance, locate and neutralize unexploded ordnance (UXO) and accomplish damage assessment. Force protection capabilities, to include explosive ordnance disposal (EOD) operations, have become increasingly vital in protecting personnel, aircraft and other critical resources both at home and abroad. In addition to wartime operations, EOD supports global contingencies for force protection, relief efforts, and special operations. ABO capabilities provided by robotics programs are crucial in reducing time and danger in investigating and eliminating explosive hazards.

A. All-purpose Remote Transport System (ARTS). 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 64617F of the Air Force Research and Development (R&D) Descriptive Summaries. FY00-02 funding acquires 28 units to complete the AF requirement of 47 systems.

B. ARTS Attachments/EOD Support Equipment. This equipment dramatically improves 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

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UNCLASSIFIED									

BUDGET ITEM JUSTIFICATION (	DATE: JUNE 2	2001								
APPROP CODE/BA:			P-1 NOME	NCLATURE:	ſURE:					
OPAF/OTHER BASE MAINTENANCE & S		ENT	AIR BASE O	PERABILITY						
<ul> <li>Description (cont.): Ordnance Technology Division (NAVEODTECHDIV) is the OSD Executive Agent for joint service EOD R&amp;D. Production funding is provided by individual services (reference PE 64617F of the Air Force R&amp;D Descriptive Summaries). The Air Force requires the following equipment for the safety of deployed personnel and expedient removal of unexploded ordnance hazards. The following procurements are programmed during FY00-02: <ol> <li>90MM Water Cannon: ARTS attachment which neutralizes improvised explosive devices (IEDs) in mid-size sedans and vans. FY00-02 funding procures 20 cannons to complete the AF requirement of 47.</li> <li>Remote Ordnance Neutralization System (RONS): Medium-sized EOD robot which includes a tele-operated platform and robotics manipulator allowing control by an operator at the operator control station (OCS) up to a distance of 650 meters. Remotely performs hazardous/high risk tasks including reconnaissance, access, render safe, pick up and carry away (PUCA), and disposal during extremely hazardous explosive ordnance missions. FY00-02 funding procures 62 to complete the AF requirement of 101 systems.</li> </ol> </li> <li>Items requested in FY 02 are identified on the following P-5 and are representative of items to be procured. Items procured during execution may change based on the most critical equipment needed to support current Air Force mission requirements.</li> <li>This administration has not addressed FY 2003-2007 requirements. All FY 2003-2007 budget estimates included in this book are notional only and subject to change.</li> </ul>										
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WEAPON SYSTEM COST ANALYSIS (EXHIBIT P- 5)					DATE: JUNE 2001								
APPROP CODE/BA: OPAF/OTHER BASE MAINTENANCE & SUPPORT EQUIPMENT					P-1 NOMENCLATURE: AIR BASE OPERABILITY								
	IDENT		FY2000			FY2001			FY2002			FY2003	
WEAPON SYSTEM COST ELEMENTS	CODE	QTY	UNIT COST	TOTAL COST	QTY	UNIT COST	TOTAL COST	QTY	UNIT COST	TOTAL COST	QTY	UNIT COST	TOTAL COST
A. ARTS				{2,917	'}		{854}			{2,610}			
ARTS HARDWARE	А	15	180,267	2,70	4 3	190,333	571	10	195,000	1,950			
INTERIM CONTRACTOR SUPPORT (ICS)							90			116			
DATA				3	3								
CRITICAL ITEM SETS (1)					1	92,000	92	2	92,500	185			
EC0'S				18	0		101			359			
B. ARTS ATTACHMENTS/EOD SUPPORT EQUIPMENT				{1,461	}		{2,067}			{3,390}			
90MM WATER CANNON	А	11	7,000	7	7			9	10,000	90			
RONS	А	13	106,462	1,38	4 19	108,789	2,067	30	110,000	3,300			
TOTALS:				4,37	8		2,921			6,000			
REMARKS: 1. CRITICAL ITEM SETS CONSIST OF A CENTRAL PROCESSOR UNIT, FIXED CAMERA ASSEMBLY, ANTENNA SET, OPERATOR CONTROL STATION, AND BACKHOE ACTUATOR CONTROL NODE.													
	<b>P-1 ITEM</b> 85	NO			PAG	<b>E NO:</b> 62					Pa	ige 1 of 1	

BUDGET PROCUREMENT	BUDGET PROCUREMENT HISTORY PLANNING (EXHIBIT P- 5A)				DATE: JUNE 2001					
APPROP CODE/BA: OPAF/OTHER BASE MAINTE	ENANCE &	SUPPOR	T EQUIPMENT	P-1 NOMENCLATURE: AIR BASE OPERABILITY						
ITEM / FISCAL YEAR	QTY.	UNIT COST	LOCATION OF PCO	CONTRACT METHOD & TYPE	CONTRACTOR AND LOCATION			SPECS AVAIL NOW	DATE REV. AVAIL	
A. ARTS										
ARTS HARDWARE										
FY00	15	180,267	AFMC/AAC	OPT/FFP	APPLIED RESEARCH ASSOCIATE SOUTH ROYALTON, VT	ES, MAY 00	NOV 00			
FY01	3	190,333	AFMC/AAC	OPT/FFP	P APPLIED RESEARCH ASSOCIATES, SOUTH ROYALTON, VT		FEB 02	Y		
FY02	10	195,000	AFMC/AAC	OPT/FFP	APPLIED RESEARCH ASSOCIATE SOUTH ROYALTON, VT	ES, JAN 02	MAY 02	Y		
B. ARTS ATTACHMENTS/EOD SUPPORT EQUIPMENT										
90MM WATER CANNON										
FY00	11	7,000	AFMC/AAC	WP/FFP	NAVY/NAVEODTECHDIV, INDIAN MD	HEAD, FEB 00	AUG 00			
FY02	9	10,000	AFMC/AAC	WP/FFP	NAVY/NAVEODTECHDIV, INDIAN MD	HEAD, JAN 02	APR 02	Y		
	P-1	<b>ITEM N</b> 85	0	PAGE NO	:	I	Page	e 1 of	2	

BUDGET PROCUREMENT HISTORY PLANNING (EXHIBIT P- 5A)				4)		DATE	E: JUI	NE 200	)1	
APPROP CODE/BA: OPAF/OTHER BASE MAINTEN/	ANCE &	SUPPOR	T EQUIPMENT	P-1 NOMENCL						
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
RONS										
FY00	13	106,462	AFMC/AAC	MIPR/FFP	NAVY/NAVEODTECH DIV, REM OAK RIDGE,TN	OTEC,	JAN 00	JUL 00		
FY01	19	108,789	AFMC/AAC	MIPR/FFP	NAVY/NAVEODTECH DIV, REM OAK RIDGE,TN	OTEC,	FEB 01	JUL 01		
FY02	30	110,000	AFMC/AAC	MIPR/FFP	NAVY/NAVEODTECHDIV, INDIA MD	NHEAD,	FEB 02	JUL 02	Y	
	P-1	<b>ITEM N</b> 85	0	<b>PAGE NO</b> 64	:			Page	e 2 of	2

BUDGET ITEM JUS	TIFICATION (I	EXHIBIT P-40)	)			DATE:	JUNE 2001	
APPROP CODE/BA: OPAF/OTHER BASE MAINTENANCE & SUPPORT EQUIPMENT			_	<b>IENCLATURE</b> RAPHIC EQUIPN				
	FY2000	FY2001	FY2002	FY2003	FY2004	FY2005	FY2006	FY2007
QUANTITY								
COST (in Thousands)	\$5,932	\$5,982	\$5,805	\$5,893	\$6,029	\$6,168	\$6,291	\$6,430

#### **Description:**

1. The Photographic Equipment program procures still photography, 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 and deployable image management teams and Base Multimedia Centers by replacing worn out, obsolete equipment that has either reached or exceeded maximum useful life or is unable to meet speed and quality of resolution that provide timely, accurate, and unbiased visual information necessary for rapid and accurate command decisions. Multimedia Centers support requirements for commanders at all levels including the National Command Authority, the Chairman, Joint Chiefs of Staff, and installation commanders. The Multimedia Centers provide: education and training; public and internal information; and still, graphic and multimedia imaging. 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): FY02 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. A major secondary benefit enables those who create, capture and process visual imagery to transmit the imagery to distant locations without requirement to also transport large hard copy documents/files necessary for optical display.

b. Photo Equipment and Accessories (FSC 6760): FY02 continues to procure specialized film-based photographic systems that cannot be

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BUDGET ITEM JUSTIFICATION (EXHIBIT P-40)	DATE: JUNE 2001	
<b>APPROP CODE/BA:</b> OPAF/OTHER BASE MAINTENANCE & SUPPORT EQUIPMENT	P-1 NOMENCLATURE: PHOTOGRAPHIC EQUIPMENT	

#### **Description (cont.):**

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.

c. Electronic Imaging Center Conversions: The Electronic Imaging Center concept was initiated to integrate and install digital still photographic and graphic imaging systems in Multimedia Centers at all Air Force bases. The purpose is 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, accurate, and unbiased images from anywhere in the world. All Air Force bases have an initial electronic image system installed. FY02 funding continues replacement of the remaining film/chemical systems as well as replacement of original electronic systems which are rapidly reaching end of then useful life.

2. The following P-40a depicts funding associated with categories of photographic equipment. Items in these categories procured during execution may change based on the most critical equipment needed to support current Air Force mission requirements.

3. This administration has not addressed FY 2003-2007 requirements. All FY 2003-2007 budget estimates included in this book are notional only and subject to change.

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BUDGET ITEM JUSTIFICATION F	BUDGET ITEM JUSTIFICATION FOR AGGREGATED ITEMS (EXHIBIT P- 40A)				DATE: JU	JNE 2001			
APPROP CODE/BA: OPAF/OTHER BASE MAINTENANCE	& SUPPC	DRT EQUIPM	IENT		NCLATURE: HIC EQUIPMEN		·		
PROCUREMENT ITEMS	ID		2000		2001		/2002		2003
	CODE	QTY.	COST	QTY.	COST	QTY.	COST	QTY.	COST
A. PHOTO PROJ EQ (FSC 6730)	A		\$	500	\$500		\$271		
B. PHOTO EQ AND ACC (FSC 6760)	А		\$28	322	\$2972		\$3017		
C. ELECTRONIC IMAGING CENTER CONVERSIONS	A		\$20	610	\$2510		\$2517		
Totals:			\$5,9	932	\$5,982		\$5,805		

<b>EM NO</b> 86	<b>PAGE NO:</b> 67	Page 1 of 1

BUDGET ITEM JUS	TIFICATION (	EXHIBIT P-40				DATE:	JUNE 2001			
				P-1 NOM	P-1 NOMENCLATURE:					
OPAF/OTHER BASE M/	PAF/OTHER BASE MAINTENANCE & SUPPORT EQUIPMENT			PRODUC	PRODUCTIVITY ENHANCING CAPITAL INVESTMENTS					
	FY2000	FY2001	FY2002	FY2003	FY2004	FY2005	FY2006	FY2007		
QUANTITY										
COST (in Thousands)	\$13,461	\$8,183	\$7,981	\$8,358	\$0	\$0	\$0	\$0		

#### **Description:**

1. This P-1 line (previously called Productivity Investments) 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 which are the Major Commands (MAJCOMs) provide their own offsets from projected savings to sustain future investments for these programs. Elimination of this funding would reduce the capability to implement productivity improvements and enhancements in the work place and throughout the Air Force. FY 00-02 funding provides support for PIF and FASCAP projects.

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 \$9 for every \$3 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 \$10 for every \$2 invested.

2. Items requested on the following P-40a are representative of items to be procured. Items procured during execution may change based on the

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	UNCLASSIFIED	)	

UNCLA	ASSIFIED			
BUDGET ITEM JUSTIFICATION (EXHIBIT P-40)		DATE: JUNE 2001		
APPROP CODE/BA:	P-1 NOMENCLATURE:	P-1 NOMENCLATURE:		
DPAF/OTHER BASE MAINTENANCE & SUPPORT EQUIPMENT	PRODUCTIVITY ENHANCING CAPITAL INVESTMENTS			
<b>Description (cont.):</b> nost critical equipment needed to support current Air Force mission re-	quirements.			
3. This administration has not addressed FY 2003-2007 requirements. only and subject to change.	All FY 2003-2007 budget estimate	es included in this book are notional		

<b>P-1 ITEM NO:</b> 87	<b>PAGE NO:</b> 69	Page 2 of 2
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BUDGET ITEM JUSTIFICATION F	OR AGG	REGATED	ITEMS (EX	HIBIT P- 40A)			DATE: J	UNE 2001					
APPROP CODE/BA: OPAF/OTHER BASE MAINTENANCE	& SUPPC	ORT EQUIP	MENT	P-1 NOMENCLATURE: PRODUCTIVITY ENHANCING CAPITAL INVESTMENTS									
PROCUREMENT ITEMS	ID		Y2000		Y2001		/2002	FY2003					
	CODE	QTY.	COST	QTY.	COST	QTY.	COST	QTY.	COST				
1. PIF					_								
A. DET 7, FUNCTIONAL REALIGNMENT (AWS)	A		\$7,05	59									
B. PURCHASE TUB GRINDER (PACAF)	A		\$26	55									
C. REPLACE SIMS FOOD INVENTORY SOFTWARE (AFSVA)	A		\$1,50	01	\$1,301								
D. OPERATIONAL SPT AIRLIFT (OSA) ACFT SCHEDULING SYSTEM ( HQ USTRANSCOM)	A		\$1,40	00									
2. FASCAP	A		\$3,23	36	\$6,882		\$7,981						
Totals:			\$13,46	51	\$8,183		\$7,981						
Remarks: AWS is the Air Weather Service. AFSVA is the Air Force Services Ager HQ USTRANSCOM is Headquarters I	U.S. Trans		Command.										
P	-1 ITEM 87	NO		PAGE				Page 1	of 1				

BUDGET PROCUREMENT H	ISTOR	PLANN	ING (EXHIBIT P- 54	A)		DATE: JUNE 2001							
APPROP CODE/BA: OPAF/OTHER BASE MAINTEN/	ANCE &	SUPPOR	T EQUIPMENT	P-1 NOMENCLATURE: PRODUCTIVITY ENHANCING CAPITAL INVESTMENTS									
ITEM / FISCAL YEAR	QTY.	UNIT COST	LOCATION OF PCO	CONTRACT METHOD & TYPE AND LOCATION		AWD. DATE	DATE FIRST DEL.	SPECS AVAIL NOW	DATE REV. AVAIL				
1. PIF													
A. DET 7, FUNCTIONAL REALIGNMENT (AWS)													
FY 00 (1)			HQ AWS	MIPR/OPT/FP	COMMAND AND CONTROL PRO LINE (CCPL) OFFUTT AFB,NE	DUCT MAR 00	DEC 01						
B. PURCHASE TUB GRINDER (PACAF)													
FY 00 (1)			HQ PACAF	DO/FFP	FORD TRACTOR COMPANY, GAITHERSBURG, MD	AUG 00	NOV 00						
C. REPLACE SIMS FOOD INVENTORY SOFTWARE (AFSVA)													
FY 00 (1)(3)			11WING	DO/FFP	MULTIPLE (2)	JUL 00	SEP 00						
D. OSA ACFT SCHEDULING SYSTEM (HQ USTRANSCOM)													
FY 01 (1)			HQ AMC	DO/OTH	FEDERATED SOFTWARE GROU LOUIS, MO	IP, ST. APR 01	NOV 01						
REMARKS: (1) Unit costs vary because of different types/configuration of equipment being procured. (2) Four Contractors: Orient Infotech Inc., Edison, NJ; Ibertech Inc., Bedford, TX; Dell Computers, Round Rock, TX; and Secure Info, San Antonio, TX. (3) This is made up of seven procurements. All have been awarded and delivered.													
	P-1	<b>ITEM NO</b> 87	D	<b>PAGE NO</b> 71	:		Page	e 1 of	1				

BUDGET ITEM JUS	BUDGET ITEM JUSTIFICATION (EXHIBIT P-40)												
APPROP CODE/BA	:			P-1 NON	IENCLATURE	i:							
OPAF/OTHER BASE M/	AINTENANCE & S	SUPPORT EQUI	PMENT	MOBILITY	MOBILITY EQUIPMENT								
	FY2000	FY2001	FY2002	FY2003	FY2004	FY2005	FY2006	FY2007					
QUANTITY													
COST (in Thousands)	\$45,405	\$49,563	\$27,581	\$26,990	\$20,304	\$19,518	\$20,680	\$20,924					

### **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 temporary theater warfighters 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 (RDF) and save critical airlift resources by theater prepositioning. Subsequent DPGs have continued this requirement. The outstanding reputation of the AF Bare Base program, established during the Gulf War (Desert Shield and Desert Storm) in 1990-1991, 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, Desert Fox, Noble Anvil and Allied Force. Significant quantities of Harvest Falcon and Harvest Eagle assets were successfully employed during Operations Allied Force and Noble Anvil to support operational and humanitarian requirements in Kosovo, Albania, Italy, and Northern Turkey. Harvest Falcon remains a top priority with the Commander-In-Chief/Central Command, the Commander-In-Chief/Joint Forces Command, and is a critical enabler of the AF's Expeditionary Air Force strategy.

2. The unparalleled success of the AF Bare Base program and unending demand for the equipment to support MOOTW continues to take its toll. As a result, the majority of HF and HE sets require comprehensive repair or replacement. Much of the equipment has been used continuously for over three years, well beyond design parameters. Usage of HF equipment in support of ongoing contingency operations in

P-1 ITEM NO: 88	PAGE NO: 72	Page 1 of 2
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<b>BUDGET ITEM JUSTIFICATION (EXHIBIT P-40)</b>	DATE: JUNE 2001	
APPROP CODE/BA: OPAF/OTHER BASE MAINTENANCE & SUPPORT EQUIPMENT	P-1 NOMENCLATURE: MOBILITY EQUIPMENT	

**Description (cont.):** Southwest Asia has reduced its usable life by more than half and has doubled out-of cycle HF replacement requirements.

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 HF and HE are also through ASC as part of the Agile Combat Support development effort. Reference PE 64617F in the Air Force Descriptive Summaries.

4. Items requested in FY02 are identified on the following P-5 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 requirements.

5. This administration has not addressed FY 2003-2007 requirements. All FY 2003-2007 budget estimates included in this book are notional only and subject to change.

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WEAPON SYSTEM COST ANA	LYSIS (EXH	IIBIT P-	5)						0	DATE:	JUNE	2001		
APPROP CODE/BA: OPAF/OTHER BASE MAINTENAN	ICE & SUPPO	ORT EQU	IPMENT		P-1 NOMENCLATURE: MOBILITY EQUIPMENT									
	IDENT		FY2000		FY2001			FY2002			FY2003			
WEAPON SYSTEM COST ELEMENTS	CODE	QTY	UNIT COST	TOTAL COST	QTY	UNIT COST	TOTAL COST	QTY	UNIT COST	TOTAL COST	QTY	UNIT COST	TOTAL COST	
A. REFUELING SYSTEMS				{6,497	7}		{5,272}			{5,689}				
1. R-14 MOBILE HYDRANT	А	28	104,683	2,93	-	122,534		39	124,460					
2. 10K FUEL BLADDER	А	71	8,276	58	8 70			36	10,526	379				
3. 50K FUEL BLADDER	А	200	10,126	2,02	5 175		1,838	35	10,663	373				
4. R-22 MOBILE HYDRANT	А	18	26,818	48	3 3	27,216	82	3	27,640	83				
5. ADDITIVE FUEL INJECTOR	А	13	14,318	18	6 14	14,318	200							
6. FFU-15E PUMP	А	25	10,577	26	4									
DATA				2	0							_		
B. REFRIGERATION EQUIP (1)				{4,830	)}		{7,109}			{1,738}				
1. REEFER PANEL 10KW	А	79	8,538	67	5									
2. REEFER UNIT 300 CU FT	А	88	17,465	1,53	7 107	17,925	1,918	53	19,034	1,009				
3. FDECU	А	116	10,437	1,21	1 168	10,431	1,752	68	10,725	729				
FDECU	A	131	10,737	1,40	7 333	10,327	3,439							
C. WATER SYSTEMS				{2,557	7}		{2,007}			{665}				
1. LATRINE	А				26	18,782	488							
2. SHOWER UNIT	А	31	13,100	40	6 26	16,800	437							
SHOWER UNIT	А	22	13,100	28	8									
P-1 ITEM NO 88			PAG	<b>E NO:</b> 74					Pa	age 1 of 5	·			

WEAPON SYSTEM COST ANALY	'SIS (EXH	HIBIT P-	5)						ſ	DATE:	JUNE 2	2001		
APPROP CODE/BA: OPAF/OTHER BASE MAINTENANCE	& SUPP	ORT EQU	IIPMENT		P-1 NOMENCLATURE: MOBILITY EQUIPMENT									
	IDENT	FY2000			FY2001			FY2002			FY2003			
WEAPON SYSTEM COST ELEMENTS	CODE	QTY	UNIT COST	TOTAL COST		UNIT COST	TOTAL COST	QTY	UNIT COST	TOTAL COST	QTY	UNIT COST	TOTAL COST	
							{47}							
3. SHAVE UNIT	А				18	9,394	169							
SHAVE UNIT	А				3	12,480	37							
FIRST ARTICLE TEST AND EVALUATION							4							
DATA							10							
4. WATER LOOP SYSTEM	А	5	96,026	48	30 4	96,026	384							
FIRST ARTICLE					3	, , , , , , , , , , , , , , , , , , , ,								
5. SOURCE RUN(SR)	A	1	133,535	13	34									
FIRST ARTICLE TEST AND EVALUATION					3									
DATA					2									
6. 3K WATER BLADDER (ONION)	А	104	1,812	18	38 175	1,812	317	80	1,812	145				
7. 20K WATER BLADDER	А				17	9,488	161	7	9,546	67				
8. 550 KITCHEN WATER	А							5	6,961	35				
8A. 550 KITCHEN MESS KIT	А							8	4,000	32				
9. EAGLE WATER DIST.	А	8	129,151	1,03	33									
FIRST ARTICLE TEST AND EVALUATION					1									
DATA					1									
10.PUMP 125 GPM	А	8	2,267	1	18									
F	<b>P-1 ITEM</b> 88	NO			PAG	<b>E NO:</b> 75					Pa	age 2 of 5		

WEAPON SYSTEM COST ANALY	ÍSIS (EXH	HIBIT P-	5)						[	DATE:	JUNE 2	2001		
APPROP CODE/BA: OPAF/OTHER BASE MAINTENANCE	E & SUPPO	ORT EQU	JIPMENT		P-1 NOMENCLATURE: MOBILITY EQUIPMENT									
	IDENT	FY2000			FY2001			FY2002			FY2003			
WEAPON SYSTEM COST ELEMENTS	CODE	QTY	UNIT COST	TOTAL COST	QTY	UNIT COST	TOTAL COST	QTY	UNIT COST	TOTAL COST	QTY	UNIT COST	TOTAL COST	
11. HYPOCLORINATOR	A							23	16,780	386				
D. RUNWAY SUBSYSTEMS (2)				{4,798	3}		{768}			{1,655}				
1. RALS	А	102	32,426	3,30	07 23	33,400	768							
2. MAAS	А	3	496,872	1,49	01			2	496,872	994				
3. MAAS UPGRADE KIT	A							5	132,292	661				
E. ELECTRICAL SUBSYSTEM				{12,11	1}		{22,449}			{15,252}				
1. 9-1 KIT. UPGR PHASE II	А				50	152,430	7,622							
2. 550 KITCHEN ELECTRIC	А							5	53,965	270				
3. 550 KIT. UPGR PHASE II	А				5	86,790	434	24	83,395	2,001				
4. DEPLOYABLE POWER GENERATION DISTRIBUTION SYSTEM (DPGDS) (3)														
4A. DPGDS/FALCON	В	2	65,000	13	2 2	739,669	1,479	1	4,650,673	4,651				
4B. DPGDS/EAGLE	В	2	65,000	13	2 2	739,669	1,479							
4C.DPGDS/SDC 150KVA	А	300	36,000	10,80	0 120	36,000	4,320	74	45,000	3,330				
4D. DPGDS/PDP 25KW	А	678	1,550	1,05	61 858	1,550	1,330	520	1,550	806				
4E. DPGDS/920KW PPU	А				14	411,724	5,764	10	411,724	4,117				
5. LOAD BANK 5-80	A				4	5,140	21	15	5,140	77				
 I														
	P-1 ITEM NO 88				PAGE NO: 76					Page 3 of 5				

WEAPON SYSTEM COST ANAL	LYSIS (EXI	HIBIT P-	5)						C	DATE:	JUNE 2	2001	
APPROP CODE/BA: OPAF/OTHER BASE MAINTENANO	CE & SUPP	ORT EQU	IIPMENT		P-1 NOMENCLATURE: MOBILITY EQUIPMENT								
	IDENT	FY2000			FY2001			FY2002			FY2003		
WEAPON SYSTEM COST ELEMENTS	CODE	QTY	UNIT COST	TOTAL COST	QTY	UNIT COST	TOTAL COST	QTY	UNIT COST	TOTAL COST	QTY	UNIT COST	TOTAL COST
F. SHELTERS				{14,612	}		{11,958}			{2,372}			
1. SMALL SHELTER (GREEN)	А	345	27,176	9,370	6 188	28,159	5,294						
2. MEDIUM SHELTER SYSTEM	А	56	48,359	2,708	8 51	52,533	2,679	15	55,159	827			
3. 4K SQ FT DOME SHELTER	А	17	120,788	2,053	3 20	127,550	2,551	10	127,550	1,276			
4. DOME SHELTER CONTAINER	А	51	9,305	475	5 46	9,445	434	28	9,593	269			
5. COLD WEATHER PACKAGE	В				8	125,000	1,000					<u> </u>	
G. MISCELLANEOUS										{210}			
1. CONFIGURATION SET AGE	A							13	15,906	207			
DATA										3			
												<u> </u>	
				L							ļ		
TOTALS:				45,405	5		49,563			27,581			
<b>REMARKS:</b> 1. FDECU is Field Deployable Envir 2. RALS is the Remote Area Lightin 3. Normally, the Deployable Power system are being procured. This ac	ng System a Generation	nd MAAS System ([	is the Mo DPDGS) i	s purcha	sed an an	entire sys	stem, howe						

system are being procured. This acquisiton strategy allows the System Manager to purchase only needed items to create full systems, and accounts for the price differences between FY00 and FY02. DPDGS/SDC is Secondary Distribution Center; DPDGS/ PDP is Primary Distribution Panel; and DPDGS/PPU is Prime Power Unit.

WR-ALC is the primary contracting office (PCO) for these mobility items. Award/delivery dates vary based on equipment being procured. Contractors

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UNCLASSIFIED										

WEAPON SYSTEM COST ANAL	EAPON SYSTEM COST ANALYSIS (EXHIBIT P- 5)								[	DATE:	JUNE 2	001	
APPROP CODE/BA: OPAF/OTHER BASE MAINTENANC	CE & SUPP	ORT EQL	JIPMENT	-	P-1 NOMENCLATURE: MOBILITY EQUIPMENT								
	IDENT		FY2000			FY2001			FY2002		FY2003		
WEAPON SYSTEM COST ELEMENTS	CODE	QTY	UNIT COST	TOTAL COST		UNIT COST	TOTAL COST	QTY	UNIT COST	TOTAL COST	QTY	UNIT COST	TOTAL COST
include: Entwhistle Company, Hudso Reidsville, NC; AAR Manufacturing Ir Liverpool, NY; GTA Containers Inc., 3 CA; Engineered Arresting Systems C Montrose, CO; California Industrial F	nc., Cadilla South Benc Company, A	c, MI; Ked J, IN; Pori ston, PA; rkland, W	co Industr ter Manuf ; Radian I	ries, Flore facturing Inc., Alex	ence, KY; H Corporatio andria, VA abric, Qua	lighland E n, Lubboc ; Simplex	Engineerir k, TX; ME Inc., Sprii	ng Inc., Ho ECO, New	owell, MI; / Orleans	JGB Ente , LA; UNIC	erprises In COR, Lom Resources	c., poc, s Inc.,	
	P-1 ITEM 88	NO				<b>SE NO:</b> 78					Pa	ge 5 of 5	

<b>BUDGET ITEM JUSTIFICATION (EXHIBIT P-40)</b>						DATE:	JUNE 2001			
APPROP CODE/BA: OPAF/OTHER BASE MAINTENANCE & SUPPORT EQUIPMENT				_	P-1 NOMENCLATURE: AIR CONDITIONERS					
	FY2000	FY2001	FY2002	FY2003	FY2004	FY2005	FY2006	FY2007		
QUANTITY										
COST (in Thousands)	\$9,894	\$6,159	\$7,058	\$3,593	\$3,676	\$3,761	\$3,836	\$3,921		

#### **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), a Class II ozone layer depleting substance scheduled to be phased 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 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. HQ Air Combat Command rates the FDECU as one of its top priority items for bare base shelter support. Additionally, a nuclear, biological, chemically-hardened version of the FDECU supports War Reserve Material (WRM) requirements for field transportable hospitals. The FDECU will replace assets that have exceeded their service life, can no longer be economically repaired or maintained, and which also utilize HCFC-22 refrigerant. All new units comply with the Montreal Protocol Treaty and Clean Air Act. FY02 funding continues procurement of the FDECU.

3. Items requested in FY02 are identified on the following P-40a and are representative of items to be procured. Items procured during

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UNCLASSIFIED								

<b>BUDGET ITEM JUSTIFICATION (EXHIBIT P-40)</b>	DATE: JUNE 2001	
<b>APPROP CODE/BA:</b> OPAF/OTHER BASE MAINTENANCE & SUPPORT EQUIPMENT	P-1 NOMENCLATURE: AIR CONDITIONERS	

**Description (cont.):** execution may change based on the most critical equipment needed to support current Air Force mission requirements.

4. This administration has not addressed FY 2003-2007 requirements. All FY 2003-2007 budget estimates included in this book are notional only and subject to change.

<b>P-1 ITEM NO:</b> 89	<b>PAGE NO:</b> 80	Page 2 of 2

BUDGET ITEM JUSTIFICATION FOR AGGREGATED ITEMS (EXHIBIT P- 40A)							DATE: JU	JNE 2001		
APPROP CODE/BA: OPAF/OTHER BASE MAINTENANCE & SUPPORT EQUIPMENT				P-1 NOMENCLATURE: AIR CONDITIONERS						
PROCUREMENT ITEMS	ID		2000	FY2001			002	FY	FY2003	
	CODE	QTY.	COST	QTY.	COST	QTY.	COST	QTY.	COST	
AIR CONDITIONERS	А	643	\$6,689	563	\$5,861	664	\$7,058			
	А	182	\$1,895	28	\$298					
	А	5	\$54							
	А	111	\$1,192							
	А	6	\$64							
Totals:			\$9,894		\$6,159		\$7,058			
P-1 ITEM NO 89				PAGE N 81	0:			Page 1	of 1	

ITEM / QTY. UNIT LOCATION OF PCO METHOD & TYPE CONTRACTOR AWD. DATE FIRST AVAIL REV.	<b>BUDGET PROCUREMENT HISTORY PLANNING (EXHIBIT P- 5</b>				A)		DATE: JU	NE 200	)1		
ITEM / YEAR         QTY.         UNIT         LOCATION OF PCO         METHOD & TYPE         LONN RACION AND LOCATION         AWD. DATE         FIRST MOW         AVAIL AVAIL           AIR CONDITIONERS         I <t< td=""><td></td><td>ANCE &amp;</td><td>SUPPOR</td><td>T EQUIPMENT</td><td colspan="7"></td></t<>		ANCE &	SUPPOR	T EQUIPMENT							
FY00       643       10,403       AFMC/SA-ALC       OPT/FFP       KECO INDUSTRIES, FLORENCE, KY       DEC 99       SEP 00       Image: Construct of the constr		QTY.		LOCATION OF PCO	METHOD & TYPE CONTRACTOR AWD.			FIRST	AVAIL	DATE REV. AVAIL	
Product	AIR CONDITIONERS										
P1 ITEM NO       PAGE NO:       PAGE NO:       PAGE NO:       PAGE NO:       PAGE NO:       PAGE NO:	FY00	643	10,403	AFMC/SA-ALC	OPT/FFP	KECO INDUSTRIES, FLORENCE	, KY DEC 99	SEP 00			
111       10.738       AFMC/SA-ALC       OPT/FFP       KECO INDUSTRIES, FLORENCE, KY       JAN 01       FEB 01       ////////////////////////////////////		182	10,412	AFMC/SA-ALC	OPT/FFP	KECO INDUSTRIES, FLORENCE	, KY MAY 00	JAN 01			
P-1 ITEM NO       PAGE NO:       PAGE NO:       Page 1 of 1		5	10,729	AFMC/SA-ALC	OPT/FFP	KECO INDUSTRIES, FLORENCE	, KY MAR 00	AUG 00			
FY01       563       10,411       AFMC/WR-ALC       OPT/FFP       KEC0 INDUSTRIES, FLORENCE, KY       DEC 00       APR 01       Image: Constraint of the second secon		111	10,738	AFMC/SA-ALC	OPT/FFP	KECO INDUSTRIES, FLORENCE	, KY JAN 01	FEB 01			
P-1 ITEM NO       PAGE NO:       DO to the construction of the construction o		6	10,635	AFMC/WR-ALC	OPT/FFP	KECO INDUSTRIES, FLORENCE	, KY JUL 01	SEP 01	Y		
FY02       664       10,629       AFMC/WR-ALC       OPT/FFP       KECO INDUSTRIES, FLORENCE, KY       NOV 01       APR 02       Y         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.       OPT/FFP       VIIII APR 02       Y         P-1 ITEM NO       PAGE NO:       PAGE NO:       Page 1 of 1	FY01	563	10,411	AFMC/WR-ALC	OPT/FFP	KECO INDUSTRIES, FLORENCE	, KY DEC 00	APR 01			
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.         P-1 ITEM NO       PAGE NO:		28	10,634	AFMC/WR-ALC	OPT/FFP	KECO INDUSTRIES, FLORENCE	, KY JUL 01	SEP 01	Y		
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. P-1 ITEM NO PAGE NO: PAGE NO: Page 1 of 1	FY02	664	10,629	AFMC/WR-ALC	OPT/FFP	KECO INDUSTRIES, FLORENCE	, KY NOV 01	APR 02	Y		
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. P-1 ITEM NO PAGE NO: PAGE NO: Page 1 of 1											
	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										
								Page	e 1 of	1	

BUDGET ITEM JUS	TIFICATION (E	XHIBIT P-40)		DATE: JUNE 2001						
APPROP CODE/BA: OPAF/OTHER BASE MAINTENANCE & SUPPORT EQUIPMENT					IENT ITEMS LESS THAN \$5,000,000 (BASE SUPPORT EQUIP)					
	FY2000	FY2001	FY2002	FY2003 FY2004 FY2005 FY2006			FY2007			
QUANTITY										
COST (in Thousands)	\$16,097	\$25,117	\$25,876	\$27,551	\$26,581	\$28,823	\$29,398	\$30,052		
Description:										

1. This program provides a wide variety of base support items with worldwide application. Examples include servicing platforms, aircraft arresting systems, compressors with various applications, refrigeration units, heaters, pallets to support Air Force missions, and military working dogs (used for base and anti-terrorist protection). This equipment provides prime support for all base missions. Lack of funding for these equipment items limits maintenance capabilities, testing functions, anti-terrorism/security missions, communications capabilities, flight operations and the ability of Air Force units to meet deployment requirements.

2. FY02 funding procures initial shortages as well as replacement equipment currently approaching obsolescence. All items have an annual procurement value of less than \$5,000,000 and are Code A. Items requested for procurement in FY02 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 current Air Force mission requirements.

3. This administration has not addressed FY 2003-2007 requirements. All FY 2003-2007 budget estimates included in this book are notional only and subject to change.

<b>P-1 ITEM NO:</b> 90		<b>PAGE NO:</b> 83	Page 1 of 1
	UNCLASSIFIED		

BUDGET ITEM JUSTIFICATION FOR AGGREGATED ITEI	MS (EXHI	BIT P- 40A-IL)		DATE	DATE: JUNE 2001				
APPROP CODE/BA: OPAF/OTHER BASE MAINTENANCE & SUPPORT EQUIPMEN	т Р	P-1 NOMENCLATURE: ITEMS LESS THAN \$5,000,000 (BASE SUPPORT EQUIP)							
			FY20	02		FY2003			
PROCUREMENT ITEMS		NSN	QTY.	COST	QTY.	COST			
BAK-12 AIRCRAFT ARRESTING SYSTEM (AAS)	1710010	0985024	2	\$521					
TF-2 FLOODLIGHT (DEPLOYMENT)	6230014	4665315	115	\$2,013					
SERVICING PLATFORM, 60FT	4940010	0836052	14	\$1,024					
COLLAPSIBLE FABRIC TANK	5430010	0788816	41	\$1,936					
LIGHTWEIGHT FAIRLEND BEAM (LWFB) CONFIGURATION SET	1710013	3703909	18	\$2,381					
TEXTILE BRAKE	1710NC	621601	8	\$767					
MILITARY WORKING DOGS (MULTIPLE NSNS)			295	\$1,103					
FSC 1080 - CAMOUFLAGE AND DECEPTION EQUIPMENT				\$50					
FSC 1710 - AIRCRAFT ARRESTING SYS				\$500					
FSC 3439 - MISC WELDING, SOLDERING, AND BRAZING EQP				\$200					
FSC 3693 - INDUSTRIAL ASSEMBLY MACHINE				\$200					
FSC 3695 - MISCELLANEOUS SPECIAL INDUSTRY MACHINERY				\$183					
FSC 3895 - MISCELLANEOUS CONSTRUCTION EQUIPMENT				\$300					
FSC 3910 - CONVEYORS				\$400					
FSC 3920 - MATERIAL HANDLING EQUIPMENT, NON SELF PROPELLED				\$300					
FSC 3950 - WINCHES, HOISTS, CRANES AND DERRICKS				\$300					
FSC 4110 - REFRIGERATION EQUIP				\$800					
<b>P-1 ITEM NO</b> 90	<u> </u>	PAGE NO: 84			Pa	ge 1 of 3			

BUDGET ITEM JUSTIFICATION FOR AGGREGATED ITEMS	DAT	<b>DATE:</b> JUNE 2001						
<b>APPROP CODE/BA:</b> OPAF/OTHER BASE MAINTENANCE & SUPPORT EQUIPMENT	P-1 NOMENC ITEMS LESS THA	P-1 NOMENCLATURE: ITEMS LESS THAN \$5,000,000 (BASE SUPPORT EQUIP)						
		FY	2002		FY2003			
PROCUREMENT ITEMS	NSN	QTY.	COST	QTY.	COST			
FSC 4130 - REFRIGERATION & AIR CONDITIONING PLANTS & COMPONENTS			\$800					
FSC 4310 - COMPRESSORS/VAC PUMPS			\$800					
FSC 4320 - POWER & HAND PUMPS			\$800					
FSC 4460 - AIR PURIFICATION EQUIPMENT			\$400					
FSC 4520 - SPACE HEATING/WATER HEATER			\$400					
FSC 4610 - WATER PURIFICATION EQUIP			\$800					
FSC 4630 - SEWAGE TREATMENT EQUIP			\$700					
FSC 4910 - MOTOR VEHICLE MAINTENANCE & REPAIR SHOP SPECIALIZED EQP			\$700					
FSC 4920 - AIRCRAFT MAINTENANCE & REPAIR SHOP SPECIALIZED EQP			\$500					
FSC 4930 - LUBRICATION & FUEL EQUIP			\$500					
FSC 4933 - WEAPONS MAINTENANCE & REPAIR SHOP SPECIALIZED EQP			\$300					
FSC 4940 - MISC MAINTENANCE REPAIR EQUIP			\$800					
FSC 5411 - RIGID WALL SHELTERS			\$700					
FSC 5430 - STORAGE TANKS			\$400					
FSC 5440 - SCAFFOLDING EQUIP AND CONCRETE FORMS			\$200					
FSC 5450 - MISC PREFABRICATED STRUCTURES			\$200					
FSC 6230 - ELECTRIC PORTABLE AND HAND LIGHTING EQUIPMENT			\$800					
<b>P-1 ITEM NO</b> 90	PAGE NO			L F	Page 2 of 3			

BUDGET ITEM JUSTIFICATION FOR AGGREGATED ITEMS	(EXHIBIT P- 40A-IL)	XHIBIT P- 40A-IL)				<b>DATE:</b> JUNE 2001			
<b>APPROP CODE/BA:</b> OPAF/OTHER BASE MAINTENANCE & SUPPORT EQUIPMENT	P-1 NOMENCLATURE: ITEMS LESS THAN \$5,000,000 (BASE SUPPORT EQUIP)								
		F١	/2002		FY2003				
PROCUREMENT ITEMS	NSN	QTY.	COST	QT	Y.	COST			
FSC 6350 - ELECTRONIC SECURITY SYS & MISC ALARM/SIGNAL SYS			\$200	D					
FSC 6630 - CHEMICAL ANALYSIS EQUIPMENT			\$20	D					
FSC 6635 - PHYSICAL PROPERTIES TESTING EQUIPMENT			\$12:	2					
FSC 6636 - ENVIRONMENTAL CHAMBERS & RELATED EQUIP			\$12	1					
FSC 6640 - LABORATORY EQUIP AND SUPPLIES			\$112	2					
FSC 6645 - TIME MEASURING INSTRUMENTS			\$30	D					
FSC 6650 - OPTICAL INSTRUMENTS			\$350	D					
FSC 6665 - HAZARD DETECTING EQUIP			\$450	D					
FSC 6670 - SCALES AND BALANCES			\$183	3					
FSC 6675 - DRAFTING, SURVEYING EQUIP			\$160	D					
FSC 6685 - PRESSURE & TEMP EQUIP			\$30	D					
FSC 6695 - COMBINATION AND MISCELLANEOUS INSTRUMENTS			\$30	D					
FSC 7360 - SETS, KITS, AND OUTFITS - FOOD PREPARATION 7 SERVING			\$30	D					
TOTALS:			\$25,87	6					
<b>P-1 ITEM NO</b> 90	PAGE NC	):	1		Page 3	of 3			

BUDGET ITEM JUS	TIFICATION (E	EXHIBIT P-40)		DATE: JUNE 2001				
APPROP CODE/BA: P-1 NOMENCLATURE:								
OPAF/OTHER BASE M	OPAF/OTHER BASE MAINTENANCE & SUPPORT EQUIPMENT			TECHNICAL SURVEILLANCE COUNTERMEASURES EQUI			IPMENT	
	FY2000	FY2001	FY2002	FY2003	FY2003 FY2004 F		FY2006	FY2007
QUANTITY								
COST (in Thousands)	\$4,607	\$2,948	\$4,236	\$4,057	\$4,142	\$4,232	\$4,265	\$4,212

#### **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 specialists 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. Based on rapid technology advancements and the critical need for AFOSI to maintain pace, 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 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

<b>P-1 ITEM NO:</b> 92	PAGE NO: 87	Page 1 of 3
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BUDGET ITEM JUSTIFICATION (EXHIBIT P-40)		DATE: JUNE 2001
	P-1 NOMENCLATURE: TECHNICAL SURVEILLANCE C	OUNTERMEASURES 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. These specialists have continually proved critical to resolving major investigations. AFOSI polygraph examiners conduct over 4,200 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 FY00-02. Project funding by fiscal year is provided on the following P-40a.

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 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

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BUDGET ITEM JUSTIFICATION (EXHIBIT P-40)		<b>DATE:</b> JUNE 2001
APPROP CODE/BA:	P-1 NOMENCLATURE:	
OPAF/OTHER BASE MAINTENANCE & SUPPORT EQUIPMENT	TECHNICAL SURVEILLANCE C	OUNTERMEASURES EQUIPMENT

#### **Description (cont.):**

and interception must be procured to ensure the agents' safety. Video and audio monitoring is often done remotely and specialized 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. 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 and other areas, AFOSI's ability to detect and solve crimes with lawfully collected evidence 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 and Intrusion Investigation Systems. The evolution of a new wave of computer crimes has made AFOSI responsible for the collection, investigative analysis, national level law enforcement coordination, and dissemination of hacker activity and intrusion incidents for the Air Force. AFOSI's computer crime equipment must stay on the leading edge of technology to collect criminal information as well as pursue and apprehend criminals through the global medium. AFOSI must continually update its existing high tech computer surveillance equipment to support ongoing and future investigative operations to identify hackers and hacker groups, as well as potential hostile government activities targeting Air Force communication and control systems. This 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 equipment consists of computer network monitoring systems and computer forensic equipment.

5. This administration has not addressed FY 2003-2007 requirements. All FY 2003-2007 budget estimates included in this book are notional only and subject to change.

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UNCLASSIFIED									

BUDGET ITEM JUSTIFICATION FOR AGGREGATED ITEMS (EXHIBIT P- 40A)								JNE 2001	
APPROP CODE/BA: OPAF/OTHER BASE MAINTENANC	R BASE MAINTENANCE & SUPPORT EQUIPMENT TECHNICAL SURVEILLANCE COUNTERMEASURES EQUIPMEN				JIPMENT				
PROCUREMENT ITEMS	ID		(2000		Y2001		2002		2003
	CODE	QTY.	COST	QTY.	COST	QTY.	COST	QTY.	COST
A. TSCM SURVEY SYSTEMS	А		\$31	20	\$1997		\$1936		
B. SPECIALIZED LAW ENFORCEMENT SURVEILLANCE EQUIPMENT	А		\$12	07	\$487		\$1000		
C. COMPUTER CRIME/INTRUSION INVESTIGATION SYSTEM	А		\$2	280	\$464		\$1300		
Totals:			\$4,6	07	\$2,948		\$4,236		

<b>P-1 ITEM</b> 92	<b>O PAGE NO:</b> 90	Page 1 of 1

BUDGET ITEM JUS	TIFICATION (E	EXHIBIT P-40)				DATE: JUNE 2001		
APPROP CODE/BA	:			P-1 NOME	ENCLATURE:			
OPAF/OTHER BASE MA	INTENANCE & S		1ENT	DARP RC13	35			
	FY2000	FY2001	FY2002	FY2003	FY2004 F	FY2005 FY2	006 FY2007	
QUANTITY								
COST (in Thousands)	\$12,527	\$15,640	\$14,247					
Description:								
FY03-FY07 - Detailed	information for	the DARP-RC 13	5 program rem	nains classified a	nd will be provide	d on a need-to-kno	w basis. For further	
information, please cor	tact USAF/XOI	RC, 614-7317.						
		<b>P-1 ITEM NO:</b> 93			<b>PAGE NO:</b> 91		Page 1 of 1	

BUDGET ITEM JUSTIFICATION (EXHIBIT P-40)						DATE:	DATE: JUNE 2001		
APPROP CODE/BA	APPROP CODE/BA: P-1 NOMENCLATURE:								
OPAF/OTHER BASE MAINTENANCE & SUPPORT EQUIPMENT			DARP, M	RIGS					
	FY2000	FY2001	FY2002	FY2003	FY2004	FY2005	FY2006	FY2007	
QUANTITY									
COST (in Thousands)	\$99,292	\$88,232	\$89,478						
<b>Description:</b> FY03-FY07 - Detailed further information, ple				ains classifie	d and will be provi	ded on a nee	d-to-know basis	. For	

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<b>P-1 ITEM NO:</b> 94	<b>PAGE NO:</b> 92	Page 1 of 1

BUDGET ITEM JUS	TIFICATION (E	XHIBIT P-40)				DATE: 、	JUNE 2001	
APPROP CODE/BA: OPAF/OTHER BASE MAINTENANCE & SUPPORT EQUIPMENT				P-1 NOMENCLATURE: INDUSTRIAL PREPAREDNESS				
	FY2000	FY2001	FY2002	FY2003	FY2004	FY2005	FY2006	FY2007
QUANTITY								
COST (in Thousands)	\$1,141	\$1,137	\$1,134	\$1,138	\$1,159	\$1,183	\$0	\$0
<b>Description:</b> 1. Program Funding in			,					

Resources Program. The Industrial Resources Program helps ensure that our national defense industry maintains world-class capabilities for producing and sustaining reliable, affordable systems to support operational users in peacetime and national emergencies. Industrial Preparedness OPAF activities include Industrial Planning efforts which assess critical technology sectors and industries within the communications and electronics industrial base. These assessments provide information on industrial capability issues for consideration during key budget allocation, weapon acquisition, and logistical support decision processes. FY02 projects address affordability issues, diminishing manufacturing source/parts obsolescence risks, or manufacturing support for both acquisition and sustainment programs.

2. This administration has not addressed FY 2003-2007 requirements. All FY 2003-2007 budget estimates included in this book are notional only and subject to change.

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BUDGET ITEM JUS	BUDGET ITEM JUSTIFICATION (EXHIBIT P-40)							
APPROP CODE/BA:P-1 NOMENCLATURE:OPAF/OTHER BASE MAINTENANCE & SUPPORT EQUIPMENTMODIFICATIONS								
	FY2000	FY2001	FY2002	FY2003	FY2004	FY2005	FY2006	FY2007
QUANTITY								
COST (in Thousands)	\$179	\$176	\$209	\$201	\$213	\$205	\$209	\$213
Description: 1. Permanent modificat delete capability. Safet encompasses both new 2. The dollars budgeter 3. This administration only and subject to char	y modifications and on-going m d in FY02 are fo has not addresse	correct deficienc odification effort or "Miscellaneous	ies which woul s for base mair Low Cost Mo	d produce hazar atenance and sup difications" to sa	rds to personnel, oport equipment atisfy historicall	systems or eq y unforseen m	uipment. This odification requ	budget line iirements.
		<b>P-1 ITEM NO:</b> 99			PAGE NO: 94		Page	e 1 of 1

BUDGET ITEM JUSTIFICATION (EXHIBIT P-40)DATE: JUNE 2001								
APPROP CODE/BA: OPAF/OTHER BASE MA		UPPORT EQUIF	PMENT	P-1 NOMENCLATURE: FIRST DESTINATION TRANSPORTATION				
	FY2000	FY2001	FY2002	FY2003 FY2004 FY2005 FY2006 FY20				FY2007
QUANTITY								
COST (in Thousands)	\$10,079	\$10,479	\$11,822	\$11,151 \$11,351 \$12,111 \$12,509				
Description:								

1. First Destination Transportation (FDT) is the movement of property from the free-on-board (FOB) point of acquisition to the point at which the material is first received for use, storage, or distribution in the military supply system. When advantagous to the government, the contractual price includes the investment item transportation (FOB destination) and finances them as part of their unit cost. This P-1 line program provides for continental United States (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. FY02 funding provides for shipment of items procured FOB 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 the associated procurement programs.

2. This administration has not addressed FY 2003-2007 requirements. All FY 2003-2007 budget estimates included in this book are notional only and subject to change.

<b>P-1 ITEM NO:</b> 100		<b>PAGE NO:</b> 95	Page 1 of 1
	UNCLASSIFIED		

**SPARES & REPAIR PARTS** 

#### DEPARTMENT OF THE AIR FORCE OTHER PROCUREMENT APPROPRIATION ESTIMATES FOR FISCAL YEAR 2002

#### Table of Contents

#### SPARES AND REPAIR PARTS

<u>P-1 Line No.</u>	Item	<u>Page No.</u>
101	Spares & Repair Parts	1

BUDGET ITEM JUSTIFICATION (EXHIBIT P-40)						DATE:	JUNE 2001	
APPROP CODE/BA OPAF/SPARES & REPA				P-1 NOMENCLATURE: SPARES & REPAIR PARTS				
	FY2000	FY2001	FY2002	FY2003	FY2004	FY2005	FY2006	FY2007
QUANTITY								
COST (in Thousands)	\$37,597	\$37,798	\$33,137	\$29,892	\$26,686	\$28,127	\$22,522	\$22,987

#### **Description:**

FY02 funding includes \$16K erroneously depicted in P-1 line #69. Request this \$16K be appropriated in P-1 line #101, (Spares & Repair Parts).

Initial Spares consist of reparable components, assemblies, subassemblies, and consumable items required as initial stockage (including readiness spares package requirements) in support of newly fielded vehicles, communications-electronics and telecommunications equipment, and other base maintenance and support equipment items. Requirements are determined by applying established factors against the acquisition cost of the end items. The factors are based on historical data of similar equipment, employment/deployment concepts, production schedules and other related information. Initial spares are procured using obligation authority in the Air Force Supply Management Activity Group (AFSMAG) of the Air Force Working Capital Fund (AFWCF), with the exception of intelligence and communications security spares which are not managed by the Standard Base Supply System (SBSS). For spares bought through the AFWCF, procurement funds reimburse the AFSMAG as outlays occur and are, therefore, budgeted based on outlay projections. Funds for spares not managed through the SBSS are budgeted in the year of the requirement.

Replenishment Spares consist of components, assemblies, and subassemblies required for follow-on support of end items. Replenishment spares funded in this P-1 line are items which are non-stock listed and not managed through the SBSS, including those in support of intelligence and communications security programs and contractor logistics support (CLS) items. These spares are exempt from the AFWCF and are budgeted in the year of the requirement.

<b>P-1 ITEM NO:</b> 101		PAGE NO: 1	Page 1 of 2
	UNCLASSIFIED		

BUDGET ITEM JUSTIFICATION (	EXHIBIT P-40)			DATE: JUNE 2	2001
APPROP CODE/BA:		P-1 NOME	NCLATURE:		
OPAF/SPARES & REPAIR PARTS		SPARES & F	REPAIR PARTS		
Description (cont.):					
FY 02 funding will procure initial and requirements. All FY 2003-2007 budg					FY 2003-2007
	<b>P-1 ITEM NO:</b> 101		PAGE NO:		Page 2 of 2

BUDGET ITEM JUSTIFICATION												
APPROP CODE/BA: OPAF/SPARES & REPAIR PARTS				P-1 NOMENCLATURE: SPARES & REPAIR PARTS								
PROCUREMENT ITEMS	ID FY2000			F	2001	FY	/2002	FY2003				
	CODE	QTY.	COST	QTY.	COST	QTY.	COST	QTY.	COST			
INITIAL SPARES			\${36,380}		\${36,429}		\${32,966}					
ITEMS LESS \$5M, FIRE FIGHTING EQUIPMENT ( P-1 LINE NO. 26)	A		\$3									
60 A/C LOADER (P-1 LINE 20)	A						\$4,274					
COMSEC EQUIPMENT (P-1 LINE NO. 28)	A		\$503		\$682		\$755					
INTEL COMMUNICATIONS EQUIPMENT (P-1 LINE NO. 32)	A		\$1,708		\$339		\$427					
NATIONAL AIRSPACE SYSTEM (P-1 LINE NO. 34)	A		\$3,637		\$4,907		\$5,289					
THEATER AIR CONTROL SYSTEM IMPROVEMENTS (P-1 LINE NO. 35)	A		\$2,627		\$1,741		\$1,861					
WEATHER OBSERVATION/FORECAST (P-1 LINE NO. 36)	A		\$1,510		\$2,723		\$1,947					
	<b>P-1 ITEM</b> 101	NO		PAGE 3	NO:			Page 1	of 5			

BUDGET ITEM JUSTIFICATION	GET ITEM JUSTIFICATION FOR AGGREGATED ITEMS							<b>DATE:</b> JUNE 2001					
<b>APPROP CODE/BA:</b> OPAF/SPARES & REPAIR PARTS				P-1 NOMENCLATURE: SPARES & REPAIR PARTS									
PROCUREMENT ITEMS	ID FY2000			FY2001				/2002	FY2003				
	CODE	QT		QTY.	C	OST	QTY.	COST	QTY.	COST			
STRATEGIC COMMAND AND CONTROL (P-1 LINE NO. 37)	A		\$1,40					\$586					
CHEYENNE MOUNTAIN COMPLEX (P-1 LINE NO. 38)	A		\$2,38	9		\$921		\$679					
TAC SIGINT SUPPORT (P-1 LINE NO. 39)	A					\$0		\$62					
MOBILITY COMMAND AND CONTROL (P-1 LINE NO. 43)	A		\$3	5		\$21		\$21					
AIR FORCE PHYSICAL SECURITY (P-1 LINE NO. 44)	A		\$10	0									
COMBAT TRAINING RANGES (P-1 LINE NO. 45)	A		\$2,05	5		\$3,772		\$785					
THEATER BATTLE MANAGEMENT C2 SYSTEMS (P-1 LINE NO. 50)	A		\$1,99	14		\$1,969		\$1,906					
NAVSTAR GPS (SPACE) ( P-1 LINE NO. 56)	A		\$1,26	5		\$536		\$469					
	<b>P-1 ITEM</b> 101	NO	I	PAG	E NO:		1		Page 2 of 5				

BUDGET ITEM JUSTIFICATION		<b>DATE:</b> JUNE 2001							
APPROP CODE/BA: OPAF/SPARES & REPAIR PARTS			<b>P</b> S	-1 NOMEI PARES & RE					
PROCUREMENT ITEMS	ID FY2000				FY2001		2002		2003
AF SATELLITE CONTROL NETWORK (P-1 LINE NO. 59)	A	QTY.	\$1,380	QTY.	<b>COST</b> \$1,444	QTY.	<b>COST</b> \$1,623	QTY.	COST
SPACELIFT RANGE SYSTEM (SPACE) (P-1 LINE NO. 60)	A		\$6,750		\$2,185		\$2,300		
MILSATCOM (SPACE) (P-1 LINE NO. 61)	A		\$1,136		\$5,428		\$4,873		
SPACE MODS (SPACE) (P-1 LINE NO. 62)	A		\$3,604		\$600		\$43		
TACTICAL CE EQUIPMENT (P-1 LINE NO. 63)	A		\$1,811		\$6,441		\$3,444		
TV EQUIPMENT (AFRTV) (P-1 LINE NO. 66)	A		\$229		\$243		\$247		
COMM ELECTRONICS MODS (P-1 LINE NO. 72)	A		\$1,121		\$971		\$655		
ITEMS LESS THAN \$5M ELECTRICAL EQUIPMENT ( P-1 LINE NO. 81)	A		\$573		\$356		\$426		
	P-1 ITEM	NO		PAGE	10:			Page 3	of 5

BUDGET ITEM JUSTIFICATION F	OR AGG	REGA	TED I	TEMS (EXHIE	BIT P- 40A)				DATE: J	UNE	2001	
<b>APPROP CODE/BA:</b> OPAF/SPARES & REPAIR PARTS	P S	P-1 NOMENCLATURE: SPARES & REPAIR PARTS										
PROCUREMENT ITEMS	ID			2000	FY2001				2002			2003
	CODE	QT	Υ.	COST	QTY.	CC	DST	QTY.	COST	Q	TY.	COST
AIR BASE OPERABILITY (P-1 LINE NO. 85)	A			\$545			\$1,150		\$294			
WEAPONS STORAGE & SECURITY SYSTEM (P-1 LINE NO. NONE)	A						\$6					
REPLENISHMENT SPARES				\${1,217}			\${1,363}		\${171}			
COMSEC EQUIPMENT (P-1 LINE NO. 28)	A			\$219			\$497		\$81			
INTEL COMMUNICATIONS EQUIPMENT (P-1 LINE NO. 32)	A			\$164								
TAC SIGINT SUPPORT (P-1 LINE NO. 39)	A			\$564			\$574		\$47			
AIR FORCE PHYSICAL SECURITY SYSTEM (P-1 LINE NO. 44)	A			\$120			\$248					
WEAPONS STORAGE & SECURITY SYSTEM (P-1 LINE NO. NONE)	A			\$150			\$44		\$43			
P	<b>-1 ITEM</b> 101	NO	I		PAGE N 6	10:		1	I		Page 4 c	of 5

BUDGET ITEM JUSTIFICATION	TED ITEMS (E)	КНІВІТ І	P- 40A)			DATE: JUN	E 2001						
APPROP CODE/BA: OPAF/SPARES & REPAIR PARTS					P-1 NOMENCLATURE: SPARES & REPAIR PARTS								
PROCUREMENT ITEMS	ID FY2000				FY2001			002	FY2	003			
	CODE	QTY	r. Cost	-	QTY. C	OST	QTY.	COST	QTY.	COST			
Totals:			\$37,	597		\$37,798		\$33,137					
Remarks:													
	<b>P-1 ITEM</b> 101	NO			PAGE NO: 7				Page 5 o	f 5			
	101				1								