Department of the Air Force

Military Construction and Family Housing Program

Fiscal Year (FY) 2002
Amended Budget Submission

Justification Data Submitted to Congress
June 2001

1. COMPONENT	FY 2002 MILITARY CONSTRUCTION PROJECT DATA	2. DATE
AIR FORCE	(computer generated)	

3. INSTALLATION AND LOCATION	4. PROJECT TITLE
GRAND FORKS AIR FORCE BASE, NORTH DAKOTA	KC-1 35 SQ OPS/AMU

5. PROGRAM ELEMENT	6. CATEGORY CODE	7. PROJECT NUMBER	8. PROJECT COST ($000)
41896	141-753	JFSD993500	7,800

9. COST ESTIMATES

ITEM	U/M	QUANTITY	UNIT COST	COST ($000)
KC-135 SQUADRON OPERATIONS/AMU	SM	3,800	1,482	5,632
SQUADRON OPERATIONS FACILITY	SM	3,800	1,475	(5,605)
AT/FP PHYSICAL SECURITY MEASURES	SM	3,800	7	(27:
SUPPORTING FACILITIES				1,370
UTILITIES	LS			(425)
SITE IMPROVEMENTS	LS			(330)
PAVEMENTS	LS			(390)
ELEVATOR	EA	1	125,000	(125)
COMMUNICATIONS SUPPORT	LS			(100)
SUBTOTAL				7,002
CONTINGENCY (5.0%)				350
TOTAL CONTRACT COST				7,352
SUPERVISION, INSPECTION &OVERHEAD (5.7 %)				419
TOTAL REQUEST				7,771
TOTAL REQUEST (ROUNDED)				7,800
EQUIPMENT FROM OTHER APPROPRIATIONS				(500)

IO. Description of Proposed Construction: Two-story facility with concrete foundation, masonry walls with exterior brick veneer, sloped roof system, fire protection system, emergency generator, elevator, site improvements, parking, utilities and necessary support to include communication lines.

11. REQUIREMENT: 15,200 SM ADEQUATE: 11,400 SM SUBSTANDARD: 3,800 SM

PROJECT: Construct a KC-135 Sq Ops/AMU facility. (Current Mission)

REQUIREMENT: This project is required to consolidate Air Mobility Command operational squadrons by collocating aircraft operators with aircraft maintainers. The consolidation relocates flyers and maintainers out of undersized and separated facilities into a functional and adequately sized structure to support the beddown of 26 additional KC-l 35s. All 48 KC-1 35s are already in place at Grand Forks AFB. Space is required for Ops/AMU management support, briefing/debriefing, flight planning, training and testing, flying/ground safety, tool rooms, bench stock, mobility office, technical order/library, standardization/evaluation, life support, locker rooms, and scheduling. In addition, an elevator is required to comply with the Americans with Disabilities Act of 1990. This consolidation is consistent with the Air Mobility Command initiative to bring Sq Ops/AMU facilities up to minimum Air Force standards. These efficiencies are essential to maintain mission tasking rates in the Air Mobility Command.

CURRENT SITUATION: There are not adequate facilities to support all four consolidated KC-135 Sq Ops/AMU operations at Grand Forks AFB. Three squadrons have been provided new facilities with MILCONs funded in FY96, FY97, and FY98. The fourth squadron's operations are conducted in facilities which are substandard, inadequately sized, and not properly configured to consolidate aircraft operators and maintainers. Maintainers are housed in portions of aircraft hangars rather than with their operational counterparts. The widely scattered functions create fragmented lines of communications and authority. Aircrews and aircraft maintainers must spend many hours away from their duty location in an effort to obtain parts, organizational and mobility equipment, and required training.

IMPACT IF NOT PROVIDED

1. COMPONENT	FY 2002 MILITARY CONSTRUCTION PROJECT DATA	2. DATE
AIR FORCE	(computer generated)	

3. INSTALLATION AND LOCATION	4. PROJECT TITLE
GRAND FORKS AIR FORCE BASE, NORTH DAKOTA	KC-1 35 SQ OPS/AMU

5. PROGRAM ELEMENT	6. CATEGORY CODE	7. PROJECT NUMBER	8. PROJECT COST ($000)
41896	141-753	JFSD993500	7,800

IMPACT IF NOT PROVIDED: Operations, maintenance, and support personnel will remain in undersized and physically separated buildings. Full implementation of the more effective objective wing squadron and adequate beddown of the KC-135s will not be possible. Essential squadron operations and logistics functions will continue to require additional work-arounds that will degrade mission performance.

ADDITIONAL: This project meets the criteria/scope specified in Air Force Handbook 32-1084, "Facility Requirements." A preliminary analysis of reasonable options for accomplishing this project (status quo, addition/alteration, and new construction) was done. It indicates new construction is the only option that will meet operational requirements. Because of this, a full economic analysis was not performed. A certificate of exemption has been prepared. BASE CIVIL ENGINEER: LT COL SCHWARZ, (701) 747-4769. KC-135 Sq Ops/AMU: 3,800SM = 40,903SF

1. COMPONENT AIR FORCE	FY 2002 MILITARY CONSTRUCTION PROJECT DATA (computer generated)	2. DATE
3. INSTALLATION AND LOCATION GRAND FORKS AIR FORCE BASE, NORTH DAKOTA		
4. PROJECT TITLE (C-135 SQ OPS/AMU		5. PROJECT NUMBER JFSD993500

12. SUPPLEMENTAL DATA: **Design, Bid, Build**

a. Estimated Design Data:

(1) Status:	
(a) Date Design Started	01 -MAY-O1
(b) Parametric Cost Estimates used to develop costs	YES
• (c) Percent Complete as of Jan 01	100%
• (d) Date 35% Designed.	03-MAY-01
(e) Date Design Complete	09-OCT-01
(f) Energy Study/Life-Cycle analysis was/will be performed	YES
(2) Basis:	
(a) Standard of Definitive Design -	YES
(b) Where Design Was Most Recently Used -	GRAND FORKS
(3) Total Cost (c) = (a) + (b) or (d) + (e):	($000)
(a) Production of Plans and Specifications	**300**
(b) All Other Design Costs	**68**
(c) Total	**368**
(d) Contract	**268**
(e) In-house	100
(4) Construction Contract Award Date	**02** Feb
(5) Construction Start	02 Apr
(6) Construction Completion	**04** Aug

• Indicates completion of Project Definition with Parametric Cost Estimate which is comparable to traditional 35% design to ensure valid scope and cost and executability.

b. Equipment associated with this project will be provided from other appropriations:

EQUIPMENT NOMENCLATURE	PROCURING APPROPRIATION	FISCAL YEAR APPROPRIATED OR REQUESTED	COST ($000)
EQUIPMENT FROM OTHER	**3400**	**2002**	**500**

1. COMPONENT AIR FORCE	FY2002	MILITARY CONSTRUCTION PROGRAM (computer generated)	2. DATE
3. INSTALLATION AND LOCATION WRIGHT PATTERSON AIR FORCE BASE, OHIO	4. COMMAND AIR FORCE MATERIEL COMMAND		5. AREA CONST COST INDEX 0.97

6. PERSONNEL STRENGTH	PERMANENT			STUDENTS			SUPPORTED			TOTAL
	OFF	FNI	CIV	OFF	FNL	CIV	OFF	FNI	CIV	
a. As of 30 Sep 00	2,730	2,490	3,634	5			81	138	4,169	23,247
b. End FY 2005	2,622	2,504	3,184				81	138	4,169	22,698

7. INVENTORY DATA $1000)

a. Total Acreage 8,145	
b. Inventory Totals as of: 30 Sep 00	1.087.074
c. Authorization Not Yet In Inventorv:	101,932
d. Authorization Requested In this Program:	24,850
e. Authorization Included In Following Program: (FY2003)	0
f. Planned in Next Four Program Years:	62,898
a. Remaining Deficiencv:	175,000
h. Grand Total:	1.451.754

8. Projects Requested in this Program: FY2002

CATEGORY CODE	PROJECT TITLE	SCOPE		COST $(000)	DESIGN START	STATUS CMP
141-454	ADAL Special Operations Intelligence Facility	1,235	SM	$3,450		TURN KEY
311-173	Consolidate Acquisition Management Complex, Ph 4B	8,500	SM	$21,400		TURN KEY
			Total	$24,850		

9a. Future Projects: Included in the Following Program: (FY2003) No Projects

9b. Future Projects: Typically Planned Next Four Years

130-142	Consolidated Fire/Crash Rescue Station	2,450	SM	$9,500
171-851	Alter Graduate Education Fac	12,097	SM	$8,000
31 o-933	Consolidate Materials Computational Research Facility	5,813	SM	$21,000
721-312	Dormitory	144	RM	$9,798
822-265	Replace Steam Lines/Tunnels Area B, Ph 1	1	LS	$11,200
851-147	Replace Base Entrance (Gate 1 B)	1	LS	$3,400

9c. Real Property Maintenance Backlog This Installation 112

10. Mission or Major Functions: Air Force Materiel Command headquarters which is responsible for management, control, and direction of research, acquisition and logistics support for air and space weapons systems and related components; Aeronautical Systems Center; Air Force Research Laboratory including directorates for Materials, Sensors, Air Vehicles, Human Effectiveness, and Propulsion; Air Force Institute of Technology; Air Force Museum; Air Force Security Assistance Center; National Aerospace Intelligence Center; National Airborne Operations Center; an air base wing; Air Force Reserve Command airlift wing with two C-141 airlift squadrons; and an AMC airlift flight with C-21 aircraft.

11. Outstandinq pollution and safety (OSHA) deficiencies:

a. Air pollution	0
b. Water pollution	0
c. Occupational Safety and Health	0
d. Other Environmental	0

DD FORM 1390.1 DEC 76 Previous editions are obsolete.

1. COMPONENT	FY 2002 MILITARY CONSTRUCTION PROJECT DATA	2. DATE
AIR FORCE	(computer generated)	

3. INSTALLATION AND LOCATION	4. PROJECT TITLE
WRIGHT PATTERSON AIR FORCE BASE, OHIO	ADAL SPECIAL OPERATIONS INTELLIGENCE FACILITY

5. PROGRAM ELEMENT	6. CATEGORY CODE	7. PROJECT NUMBER	8. PROJECT COST ($000)
28019	141-454	ZHTV003203	3.450

9. COST ESTIMATES

ITEM	U/M	QUANTITY	UNIT COST	COST ($000)
ADD/ALTER SPECIAL OPERATIONS INTELLIGENCE FAC	LS			2,498
ADDITION	SM	1,175	1,456	(1,711
ALTERATIONS	SM	1,175	290	(341
SCIF	SM	1,175	360	(423
ANTITERRORISM/FORCE PROTECTION	SM	1,175	20	(24
SUPPORTING FACILITIES				625
UTILITIES	LS			(325
PAVEMENTS	LS			(200
SITE IMPROVEMENTS	LS			(100
SUBTOTAL				3,123
CONTINGENCY (5.0%)				156
TOTAL CONTRACT COST				3,279
SUPERVISION, INSPECTION & OVERHEAD (5.7 %)				187
TOTAL REQUEST				3,466
TOTAL REQUEST (ROUNDED)				3,450

10. Description of Proposed Construction: Third floor addition to the existing two-story facility. New addition to match existing construction. Includes raised flooring, secure compartmented information facility (SCIF), video teleconference area, emergency power, and alter existing facility to relocate heating, ventilation, and electrical systems. Comply with DoD interim minimum force protection construction standard.

Air Conditioning: 183 KW

11. REQUIREMENT: 3,525 SM ADEQUATE: 1,175 SM SUBSTANDARD: 1,175 SM

PROJECT: Add/alter special operations intelligence facility. (New Mission)

REQUIREMENT: A flexible and secure facility is required for housing signal exploitation, analytical sngineering/administrative functions to support classified intelligence analysis. Capability is needed to support state-of-the-art automated data processing. All areas must be individually secured and configured for maximum 'lexibility to meet the requirements of the continuously evolving, highly specialized, highly automated mission. Continuity with an existing classified SCIF mission is critical to mission operations. Contingency power and HVAC capability must be provided due to direct real-time support with classified field operations. Comply with DoD interim minimum force protection construction standard.

CURRENT SITUATION: The existing mission facilities can not accommodate new mission and growth in current nission tasking. Existing facilities are severely overcrowded with a current occupancy that exceeds design capacity by over 75%. Overcrowding has required personnel to be housed in a Signals Processing Lab which is an equipment environment not suitable for required intelligence engineering and analysis. Future programmed equipment acquisitions supporting critical mission tasking will also force personnel out of the signals Lab and into he external facilities. Continued growth will severely overcrowd the external SCIF facilities security requirements, paper information flow is severely impeded between the multiple non-contiguous secure spaces. Growth in the Signals Exploitation mission continues to force other NAIC missions into facilities and overcrowding sharply mpedes mission operations and strongly impacts employee morale. Furthermore, other NAIC missions have

1. COMPONENT	FY 2002 MILITARY CONSTRUCTION PROJECT DATA	2. DATE
AIR FORCE	(computer generated)	

3. INSTALLATION AND LOCATION	4. PROJECT TITLE
WRIGHT PATTERSON AIR FORCE BASE, OHIO	ADAL SPECIAL OPERATIONS INTELLIGENCE FACILITY

5. PROGRAM ELEMENT	6. CATEGORY CODE	7. PROJECT NUMBER	8. PROJECT COST ($000)
28019	141-454	ZHTV003203	3,450

been forced to consolidate into less than standard areas with negative operational impacts to make room for external facility overflow space. This classified 24 hour/7 days-a-week mission lacks emergency power and critical contingency chiller capacity to maintain required real-time support to operational missions in the field. Power outages longer than 3 hours cuts support to and substantially degrades several operational missions.

IMPACT IF NOT PROVIDED: The mission will be critically impaired by overcrowding and fragmented mission operations. Deficiencies severely curtailing mission effectiveness will worsen as mission growth continues. Loss of critical interaction between analysts isolated in separate secure locations will degrade the quality of mission products and impair mission production capability. Secure communication links and transportation of classified material between secure locations will substantially increase operating cost and compromises security practices. The severe overcrowding will critically limit the ability to process highly classified material and creates a high risk of inadvertent diclosure.

ADDITIONAL: This project meets the criteria/scope specified in Air Force Handbook 32-l 084, "Facility Requirements." All known alternative options were considered during the development of this project. No other option could meet the mission requirements; therefore, no economic analysis was needed or performed. A certificate of exception has been prepared. Base Civil Engineer: Col Jeffrey Charles, (937) 257-6214. Addition: 1,175 SM = 12,643 SF; Alterations: 1 ,175 SM = 12,643 SF. Design Build - Design Cost (4% of Subtotal Cost): $125,000.

1. COMPONENT AIR FORCE	FY 2002 MILITARY CONSTRUCTION PROJECT DATA (computer generated)	2. DATE
3. INSTALLATION AND LOCATION WRIGHT PATTERSON AIR FORCE BASE, OHIO		
4. PROJECT TITLE \DAL SPECIAL OPERATIONS INTELLIGENCE FACILITY		5. PROJECT NUMBER ZHTV003203

12. SUPPLEMENTAL DATA: **Design Build**

a. Estimated Design Data:

(1) Project to be accomplished by design-build procedures	
(2) Basis:	
(a) Standard of Definitive Design -	NO
(b) Where Design Was Most Recently Used -	
(3) Design Allowance	138
(4) Construction Contract Award Date	01 Nov
(5) Construction Start	02 Jan
(6) Construction Completion	03 Jun
(7) Energy Study/Life-Cycle analysis was/will be performed	YES

b. Equipment associated with this project will be provided from other appropriations: **N/A**

1. COMPONENT	FY 2002 MILITARY CONSTRUCTION PROJECT DATA	2. DATE
AIR FORCE	(computer generated)	

3. INSTALLATION AND LOCATION	4. PROJECT TITLE
WRIGHT PATTERSON AIR FORCE BASE, OHIO	CONSOLIDATE ACQUISITION MANAGEMENT COMPLEX, PH-4B

5. PROGRAM ELEMENT	6. CATEGORY CODE	7. PROJECT NUMBER	8. PROJECT COST ($000)
72976	311-173	ZHTV993203	21,400

9. COST ESTIMATES

ITEM	U/M	QUANTITY	UNIT COST	COST ($000)
CONSOLIDATE ACQUISITION MGT COMPLEX, PH-4B	SM	8,500		15,581
ENGINEERING RESEARCH FACILITY	SM	8,500	1,815	(15,428)
ANTITERRORISM FORCE PROTECTION	SM	8,500	18	(153)
SUPPORTING FACILITIES				3,657
UTILITIES	LS			(700)
COMMUNICATIONS SUPPORT	LS			(100)
SITE WORK/PAVEMENTS	LS			(900)
DEMOLITION	SM	9,783	200	(1,957)
SUBTOTAL				19,237
CONTINGENCY (5.0%)				962
TOTAL CONTRACT COST				20,199
SUPERVISION, INSPECTION & OVERHEAD (5.7 %)				1,151
TOTAL REQUEST				21,350
TOTAL REQUEST (ROUNDED)				21,400
EQUIPMENT FROM OTHER APPROPRIATIONS				(5,330)

10. Description of Proposed Construction: Reinforced concrete foundation and floor slab, structural frame, roof system, and secure space. Includes administration space, special purpose space, miscellaneous infrastructure connections, and all necessary support. Demolish one facility (9,783 SM). Comply with DoD interim minimum force protection construction standards.

Air Conditioning: 1,315 KW

11. REQUIREMENT: 115,104 SM ADEQUATE: 60,834 SM SUBSTANDARD: 34,675 SM

PROJECT: Consolidate Acquisition Management Complex, Phase-4B. (Current Mission)

REQUIREMENT: Provide secure, modern, flexible office space to support the Center of Choice for integrated planning and execution activities of Aircraft System Program Offices (SPOs) within the Aeronautical Systems Center (ASC). ASC must provide superior mission area expertise, acquisition management, technical support, personnel support, and system integration support for assigned programs within the Aircraft SPOs. The Aircraft SPOs accomplish this mission by working as a team with the Air Force aircraft users and industry to develop, acquire, field and sustain superior Aerospace Control and Strike Systems. ASC has led strategic planning efforts o align the Center along mission areas to conform with Air Force Doctrine Document (AFDD-1). The Aircraft SPOs require modern facilities equipped with the latest information systems technology for maximum efficiency. This phase (4B) will consolidate the F-16 SPO with the other Aircraft SPOs. Comply with DoD interim minimum force protection construction standards.

CURRENT SITUATION: Most ASC facilities to be upgraded were constructed between 1928-1944 and later modified to accommodate the current mission. Some buildings are structurally sound but have many deficiencies including energy inefficient heating, cooling, and lighting systems, roof leaks, and asbestos ceilings and insulations. These buildings have not adapted well to modern engineering requirements. Numerous interior partitions contribute to inefficient layouts which waste floor space and hamper work force efficiency. Currently, the Aircraft SPOs are located in nine separate facilities. The present layout of facility utilities inhibit vital individual and project team interaction. ASC is consolidating the Aircraft SPOs within the Acquisition Management Complex in three increments: The first increment (Phase-3) was activated in FY97 with the B-l, and B-2 SPOs;

1. COMPONENT	FY 2002 MILITARY CONSTRUCTION PROJECT DATA	2. DATE
AIR FORCE	(computer generated)	

3. INSTALLATION AND LOCATION	4. PROJECT TITLE
WRIGHT PATTERSON AIR FORCE BASE, OHIO	CONSOLIDATE ACQUISITION MANAGEMENT COMPLEX, PH-4B

5. PROGRAM ELEMENT	6. CATEGORY CODE	7. PROJECT NUMBER	8. PROJECT COST ($000)
72976	311-173	ZHTV993203	21,400

the second increment (Phase-4A) incorporates the F-22, F-I 17, F-I 5 SPOs, and the Joint Strike Fighter Support Office in FY01.

IMPACT IF NOT PROVIDED: The Aircraft SPO consolidation supports the Center's alignment with ACC, , USAF/XO, SAF/AQ, and Air Force Doctrine focusing on the Global Power Mission Area. Without this project, the Aircraft SPOs will be severely restricted in their ability to support highly technical programs to develop, acquire, field, and sustain superior Air Control and Strike Systems. Also, complex weapon system integration will be increasingly difficult to attain. Finally, a fragmented workforce will continue to operate in inadequate facilities resulting in decreased operating efficiency and unnecessary operating costs. ASC will retain the burden of supporting inefficient, maintenance intensive excess facilities.

ADDITIONAL: This project meets the criteria/scope specified in Air Force Handbook 32-1084, "Facility Requirements." An economic analysis has been prepared comparing the alternatives of new construction, revitalization, leasing and status quo operation. Based on the net present values and benefits of the respective alternatives, new construction was found to be the most cost efficient over the life of the project. Base Civil Engineer: Mr. Gary Johnson, (937) 257-6214. Consolidate Acquisition Management Complex: 8,500SM = 91,460SF. Design Build - Design Cost (4% of Subtotal Cost): $770,000.

COMPONENT	FY 2002 MILITARY CONSTRUCTION PROJECT DATA	2. DATE
AIR FORCE	(computer generated)	

3. INSTALLATION AND LOCATION

WRIGHT PATTERSON AIR FORCE BASE, OHIO

1. PROJECT TITLE	5. PROJECT NUMBER
CONSOLIDATE ACQUISITION MANAGEMENT COMPLEX, PH-4B	ZHTV993203

12. SUPPLEMENTAL DATA: **Design Build**

a. Estimated Design Data:

(1) Project to be accomplished by design-build procedures

(2) Basis:

(a) Standard of Definitive Design - **NO**

(b) Where Design Was Most Recently Used -

(3) Design Allowance 856

(4) Construction Contract Award Date 01 Dec

(5) Construction Start 02 Feb

(6) Construction Completion 03 Nov

(7) Energy Study/Life-Cycle analysis was/will be performed YES

b. Equipment associated with this project will be provided from other appropriations:

EQUIPMENT NOMENCLATURE	PROCURING APPROPRIATION	FISCAL YEAR APPROPRIATED OR REQUESTED	COST ($000)
PREWIRED WORK STSTIONS	3400	2004	3000
FURNITURE	3460	2004	1000
COMM CABLE/EQUIPMENT	3080	2004	150
COMM SUPPORT EQUIPMENT	3400	2004	1180

1. COMPONENT AIR FORCE	**FY2002** **MILITARY CONSTRUCTION PROGRAM (computer generated)**	2. DATE
3. INSTALLATION AND LOCATION ALTUS AIR FORCE BASE, OKLAHOMA	4. COMMAND AIR EDUCATION AND TRAINING COMMAND	5. AREA CONST COST INDEX 0.96

6. PERSONNEL STRENGTH	PERMANENT			STUDENTS			SUPPORTED			TOTAL
	OFF	FNI	CIV	OFF	FNI	CIV	OFF	FNI	CIV	
a. As of 30 Sep 00	315	1,346	1,694		46		147	152		3,700
b. End FY 2005	319	1,365	1,737		44		147	152		3,764

7. INVENTORY DATA $1000)

a. Total Acreage	5,982	
b. Inventory Totals as of: 30 Sep 00		340.282
c. Authorization Not Yet In Inventory:		19,768
d. Authorization Requested In this Program:		20,200
e. Authorization Included In Following Program: (FY2003)		0
f. Planned in Next Four Program Years:		12,100
a. Remainina Deficiencv:		90,497
h. Grand Total:		482,847

8. Projects Requested in this Program: FY2002

CATEGORY CODE	PROJECT TITLE	SCOPE	COST $(000)	DESIGN START	STATUS CMP
111-111	Repair Airfield Pavements, Ph 1	1 LS	$20,200	AUG 01	APR 01
		Total	$20,200		

9a. Future Projects: Included in the Following Program: (FY2003) No Projects

9b. Future Projects: Typically Planned Next Four Years

219-944	Base Civil Engineer Complex	9,551 SM	$12,100

9c. Real Property Maintenance Backlog This Installation 66

10. Mission or Major Functions: An air mobility wing with one C-5 squadron, one C-17/C-141 squadron, and one KC-135 air refueling squadron -- responsible for training all C-5, C-17, C-141 and KC-135 aircrews in the Air Force.

11. Outstanding pollution and safety (OSHA) deficiencies:

a. Air pollution	0
b. Water pollution	0
c. Occupational Safety and Health	0
d. Other Environmental	0

1. COMPONENT	FY 2002 MILITARY CONSTRUCTION PROJECT DATA	2. DATE
AIR FORCE	(computer generated)	

3. INSTALLATION AND LOCATION	4. PROJECT TITLE
ALTUS AIR FORCE BASE, OKLAHOMA	REPAIR AIRFIELD PAVEMENTS, PH1

5. PROGRAM ELEMENT	6. CATEGORY CODE	7. PROJECT NUMBER	8. PROJECT COST ($000)
85976	111-111	AGGN983005P1	20,200

9. COST ESTIMATES

ITEM	U/M	QUANTITY	UNIT COST	COST ($000)
RUNWAY	LS			18,020
SUPPORTING FACILITIES				180
UTILITIES	LS			(180
PAVEMENTS	LS			(
SITE IMPROVEMENTS	LS			(
SUBTOTAL				18,200
CONTINGENCY (5.0%)				910
TOTAL CONTRACT COST				19,110
SUPERVISION, INSPECTION & OVERHEAD (5.7 %)				1,089
TOTAL REQUEST				20,199
TOTAL REQUEST (ROUNDED)				20,200

10. Description of Proposed Construction: Remove and dispose of existing asphalt shoulders and stressed pavement on Runway 17R/35L and overrun areas, and taxiway areas including shoulders. Replace runway and taxiway edge lighting and threshold lighting. Install ILS support system pads, conduit, and infrastructure.

11. REQUIREMENT: SM ADEQUATE: SM SUBSTANDARD: SM

PROJECT: Repair asphalt shoulders and stressed pavement at main runway 17R/35L, overrun areas, and asphalt taxiway areas including shoulders. Replace runway and taxiway edge lighting, threshold lighting and supporting conduit. Install ILS support.

REQUIREMENT: High quality airfield pavements are required to continue the large number of training flights conducted by student pilots in support of the pilot training mission. Repair of the existing runway and taxiways are required to ensure proper drainage, reduce the potential for expensive mission impact from foreign object damage to aircraft engines and enhance training by providing a quality airfield environment. Obsolete runway and taxiway edge lighting, threshold lighting and conduit needs to be replaced. Provide ILS system pads, conduit, and infrastructure support.

CURRENT SITUATION: Student pilots fly approximately 40 sorties per day on this rapidly deteriorating runway. Asphalt shoulders on the main runway, Taxiways Kilo 1, Charlie, Foxtrot, Delta, and Echo 1 have outlived their designed useful life expectancy. They were constructed in 1956 and have never undergone a major repair. These loadbearing pavements and shoulders are severely cracked and deteriorated and require constant maintenance to prevent froeign object damage to aircraft engines. Poor drainage causes ponding of water on several areas of the airfield, resulting in accerlerated damage and deterioration of the asphalt. In addition, the slurry seal placed on the shoulders several years ago is starting to come up in chunks. In 1987, a runway evaluation was conducted resulting in a failed rating for many features of the primary runway. In 1996, the Corps of Engineers evaluated the airfield and also failed many areas on the airfield. In 1998, the airfield was evaluated by AFCESA and portions of the airfield failed the evaluation. AFCESA further stated that deterioration of the airfield had expanded. Of the 12 million square feet of airfield pavement at Altus AFB, 22% of the existing pavement has been rated poor to failed with 18% being in the failed category. Only 7% was rated fair. The runway edge lights are out of alignment and are approaching the end of their useful life expectancy and will need to be replaced in order to keep within regulation standards. The edge lighting on Taxiways Kilo 1, Charlie, Foxtrot, Delta, and Echo 1 were constructed in the 1950s, therefore, they are obsolete and have to be replaced in order to keep with regulation standards. Installation of an ILS at the outside runway is needed to minimize flying training impacts. This project provides

1. COMPONENT	FY 2002 MILITARY CONSTRUCTION PROJECT DATA	2. DATE
AIR FORCE	(computer generated)	

3. INSTALLATION AND LOCATION	4. PROJECT TITLE
ALTUS AIR FORCE BASE, OKLAHOMA	REPAIR AIRFIELD PAVEMENTS, PH1

5. PROGRAM ELEMENT	6. CATEGORY CODE	7. PROJECT NUMBER	8. PROJECT COST ($000)
85976	111-111	AGGN983005P1	20,200

ILS support to include equipment pads, conduit, and infrastructure.

IMPACT IF NOT PROVIDED: Failure to accomplish this project will result in the continually increasing probability of foreign object damage to aircraft. Maintenance costs to repair foreign object damage will continue to escalate. Student pilots will be subjected to possible hazardous conditions and denied a quality airfield training experience. Airfield regulations will not be followed due to distances of the runway and taxiway edge lighting and threshold lighting. All of these navigational lighting systems are outdated and obsolete. This will continue to impact the ability to repair the systems when parts cannot be found for these obsolete systems.

ADDITIONAL: This project meets the criteria/scope specified in Air Force Handbook 32-1084, "Facility Requirements." All known alternative options were considered during the development of this project. No other option could meet the mission requirements therefore, no economic analysis was needed or performed. A certificate of exemption has been prepared and approved. Base CE POC: LTC Rafferty, (580) 481-6530, Repair Airfield Pavements Phase I.

1. COMPONENT AIR FORCE	FY 2002 MILITARY CONSTRUCTION PROJECT DATA (computer generated)	2. DATE
3. INSTALLATION AND LOCATION ALTUS AIR FORCE BASE, OKLAHOMA		
4. PROJECT TITLE REPAIR AIRFIELD PAVEMENTS, PHI		5. PROJECT NUMBER AGGN983005P1

12. SUPPLEMENTAL DATA: **Design, Bid, Build**

a. Estimated Design Data:

(1) Status:	
(a) Date Design Started	15-AUG-01
(b) Parametric Cost Estimates used to develop costs	YES
• (c) Percent Complete as of Jan 01	1 %
• (d) Date 35% Designed.	08-OCT-01
(e) Date Design Complete	28-APR-02
(f) Energy Study/Life-Cycle analysis was/will be performed	NO
(2) Basis:	
(a) Standard of Definitive Design -	NO
(b) Where Design Was Most Recently Used -	
(3) Total Cost (c) = (a) + (b) or(d) + (e):	($000)
(a) Production of Plans and Specifications	1,212
(b) All Other Design Costs	606
(c) Total	1,818
(d) Contract	1,515
(e) In-house	303
(4) Construction Contract Award Date	02 Jul
(5) Construction Start	02 Sep
(6) Construction Completion	04 Sep

• Indicates completion of Project Definition with Parametric Cost Estimate which is comparable to traditional 35% design to ensure valid scope and cost and executability.

b. Equipment associated with this project will be provided from other appropriations: **N/A**

1. COMPONENT AIR FORCE	FY2002	MILITARY CONSTRUCTION PROGRAM (computer generated)	2. DATE
3. INSTALLATION AND LOCATION TINKER AIR FORCE BASE, OKLAHOMA		4. COMMAND AIR FORCE MATERIEL COMMAND	5. AREA CONST COST INDEX 1.44

6. PERSONNEL STRENGTH	PERMANENT			STUDENTS			SUPPORTED			TOTAL
	OFF	ENL	CIV	OFF	ENL	CIV	OFF	ENL	CIV	
a. As of 30 Sep 00	1,104	**4,899**	2,760					**851**	**620**	**30,234**
b. End FY **2005**	**1,107**	4,898	2,916					**851**	**620**	**30,392**

7. INVENTORY DATA $(000)

a. Total Acreage	**4,886**	
b. Inventory Totals as of: 30 Sep 00		893.851
c. Authorization Not Yet In Inventory:		66,942
d. Authorization Requested In this Program:		10,200
e. Authorization Included In Following Program: (FY2003)		0
f. Planned in Next Four Program Years:		61,670
g. Remaining Deficiency:		796,225
h. Grand Total:		1,828,888

8. Projects Requested in this Program: FY2002

CATEGORY CODE	PROJECT TITLE	SCOPE	COST $(000)	DESIGN START	STATUS CMP
721-312	Dormitory	144 RM	$10,200		TURN KEY
		Total	$10,200		

9a. Future Projects: Included in the Following Program: (FY2003) No Projects

9b. Future Projects: Typically Planned Next Four Years

141-764	Consolidate Integration Support Facility	**2,726** SM	**$7,400**	
141-764	Consolidate Software Support Facility	6,690 SM	$13,500	
211-116	Add/Alter Aircraft Fuel/Defuel	1 LS	**$4,000**	
211-254	Alter Depot Plating Shop	1 LS	$11,200	
217-742	Combat Communication Squadron Operations (31 st)	**3,400** SM	$9,700	
721-312	Dormitory	120 RM	**$7,856**	
721-312	Dormitory	120 RM	$8,014	

9c. Real Property Maintenance Backlog This Installation 97

10. Mission or Major Functions: Oklahoma City Air Logistics Center which is responsible for logistics management, support, and depot-level maintenance, repair and overhaul of B-l, B-2, B-52, KC-l 35 and E-3 aircraft and aircraft engines; an air base wing; an Air Combat Command air control wing with four E-3 airborne air control squadrons supporting 24 E-3 aircraft; an Air Force Reserve Command air refueling wing with one KC-l 35 squadron; an Air Combat Command combat communications group; and an engineering installation wing.

11. Outstanding pollution and safety (OSHA) deficiencies:

a. Air pollution	61,900
b. Water pollution	**4,750**
c. Occupational Safety and Health	0
d. Other Environmental	0

1. COMPONENT	FY 2002 MILITARY CONSTRUCTION PROJECT DATA	2. DATE
AIR FORCE	(computer generated)	

3. INSTALLATION AND LOCATION	4. PROJECT TITLE
TINKER AIR FORCE BASE, OKLAHOMA	DORMITORY

5. PROGRAM ELEMENT	6. CATEGORY CODE	7. PROJECT NUMBER	8. PROJECT COST ($000)
72896	721-312	WWYK023002	10.200

9. COST ESTIMATES

ITEM	U/M	QUANTITY	UNIT COST	COST ($000)
DORMITORY (144 RM)	RM	144		7,097
DORMITORY	SM	4,750	1,480	(7,030
ANTITERRORISM FORCE PROTECTION	SM	4.750	14	(67
SUPPORTING FACILITIES				2,055
UTILITIES/PAVEMENTS	LS			(780
SITE IMPROVEMENTS	LS			(150
STEAM UPGRADES	LS			(630
ELECTRIC UPGRADES	LS			(300
GAS AND WATER UPGRADES	LS			(75
SEWER UPGRADES	LS			(120
SUBTOTAL				9,152
CONTINGENCY (5.0%)				458
TOTAL CONTRACT COST				9,609
SUPERVISION, INSPECTION 8 OVERHEAD (5.7 %)				548
TOTAL REQUEST				10,157
TOTAL REQUEST (ROUNDED)				10,200

IO. Description of Proposed Construction: A three-story facility with reinforced concrete foundation and floor slabs, masonry walls and roof. Includes room-bath/kitchen-room modules, laundry facility, storage, lounge areas, site preparation, siesmic requirements and all supporting utilities. Comply with DoD interim minimum force protection construction standard.

Air Conditioning: 450 KW Grade Mix: 144 El-E4.

11. REQUIREMENT: 1,489 RM ADEQUATE: 1,044 RM SUBSTANDARD: RM

PROJECT: Construct a dormitory. (Current Mission)

REQUIREMENT: A major Air Force objective provides unaccompanied enlisted personnel with housing conducive to their proper rest, relaxation and personal well-being. Properly designed and furnished quarters providing some degree of individual privacy are essential to the successful accomplishment of the increasingly complicated and important jobs these people must perform. Comply with DoD interim minimum force protection construction standard.

CURRENT SITUATION: As verified by the Air Force Dormitory Master Plan, the base has insufficient facilities to adequately accomodate permanent party unaccompanied enlisted personnel required to live on-base per Air Force policy.

MPACT IF NOT PROVIDED: Adequate living quarters will continue to be unavailable and result in degradation of morale, productivity, and career satisfaction for unaccompanied enlisted personnel. Lowered morale will contribute to retention difficulties for the Air Force.

ADDITIONAL: This project meets the criteria/scope specified in the new uniform barracks construction standard, known as “one-plus-one”, established by OSD. No other option could meet the mission requirements;

1. COMPONENT	FY 2002 MILITARY CONSTRUCTION PROJECT DATA	2. DATE
AIR FORCE	(computer generated)	

3. INSTALLATION AND LOCATION	4. PROJECT TITLE
TINKER AIR FORCE BASE, OKLAHOMA	DORMITORY

5. PROGRAM ELEMENT	6. CATEGORY CODE	7. PROJECT NUMBER	8. PROJECT COST ($000)
72896	721-312	WWYK023002	10,200

therefore, no economic analysis was needed or performed. FY1999 Unaccompanied Housing RPM Conducted: $636K. FY2000 Unaccompanied Housing RPM Conducted: $655K. Future Unaccompanied Housing RPM requirements (estimated): FY01 : $766K; FY02: $695K; FY03: $716K. Base Civil Engineer: Mr Dean Holt, (405) 734-3451. Dormitory: 4,750 SM = 51 ,110 SF. Design Build - Design Cost (4% of Subtotal Cost): $356,666.

1. COMPONENT AIR FORCE	FY 2002 MILITARY CONSTRUCTION PROJECT DATA (computer generated)	2. DATE
3. INSTALLATION AND LOCATION TINKER AIR FORCE BASE, OKLAHOMA		
4. PROJECT TITLE DORMITORY		5. PROJECT NUMBEF WWYK023002

12. SUPPLEMENTAL DATA: **Design Build**

a. Estimated Design Data:

(1) Project to be accomplished by design-build procedures	
(2) Basis:	
(a) Standard of Definitive Design -	NO
(b) Where Design Was Most Recently Used -	
(3) Design Allowance	408
(4) Construction Contract Award Date	01 Nov
(5) Construction Start	02 Jan
(6) Construction Completion	03 Jul
(7) Energy Study/Life-Cycle analysis was/will be performed	YES

b. Equipment associated with this project will be provided from other appropriations: **N/A**

1. COMPONENT AIR FORCE	FY2002 MILITARY CONSTRUCTION PROGRAM (computer generated)	2. DATE
3. INSTALLATION AND LOCATION ARNOLD AIR FORCE BASE, TENNESSEE	4. COMMAND AIR FORCE MATERIEL COMMAND	5. AREA CONST COST INDEX 0.88

6. PERSONNEL STRENGTH	PERMANENT			STUDENTS			SUPPORTED			TOTAL
	OFF	ENL	CIV	OFF	ENL	CIV	OFF	ENL	CIV	
a. As of 30 Sep 00	52	43	2,673					1	75	2,844
b. End FY 2005	51	41	2,655					1	75	2,823

7. INVENTORY DATA $(000)

a. Total Acreage 39,081	
b. Inventory Totals as of: 30 Sep 00	1.419.551
c. Authorization Not Yet In Inventory:	18,611
d. Authorization Requested In this Program:	24,400
e. Authorization Included In Following Program: (FY2003)	0
f. Planned in Next Four Program Years:	53,400
a. Remainina Deficiency:	246.600
h. Grand Total:	1,762,562

3. Projects Requested in this Program: FY2002

CATEGORY CODE	PROJECT TITLE	SCOPE	COST $(000)	DESIGN START	STATUS CMP
311-115	Convert To Hypersonic Plant	1 LS	$10,400		TURN KEY
318-612	Upgrade Jet Engine Air Induction System, Phase 4	1 LS	$14,000		TURN KEY
		Total	$24,400		

>a. Future Projects: Included in the Following Program: (FY2003) No Projects

)b. Future Projects: Typically Planned Next Four Years

318-612	Improve Propulsion Altitude Capability	1 LS	$29,000
318-612	Upgrade Jet Eng Air Induc Sys, Phase V	1 LS	$9,400
610-127	Consolidated Civil Engineering Complex	7,850 SM	$15,000

)c. Real Property Maintenance Backlog This Installation 38

10. Mission or Major Functions: The Arnold Engineering Development Center -- a national test center which conducts development, certification, and simulated flight testing of U.S. government, commercial and international aircraft, missile, and space systems. The Center develops critical new test capabilities, facilities, and technologies or future simulated flight-testing.

1. Outstanding pollution and safety (OSHA) deficiencies:

a. Air pollution	5,000
b. Water pollution	2,100
c. Occupational Safety and Health	0
d. Other Environmental	0

1. COMPONENT	FY 2002 MILITARY CONSTRUCTION PROJECT DATA	2. DATE
AIR FORCE	(computer generated)	

3. INSTALLATION AND LOCATION	4. PROJECT TITLE
ARNOLD AIR FORCE BASE, TENNESSEE	CONVERT TO HYPERSONIC PLANT

5. PROGRAM ELEMENT	6. CATEGORY CODE	7. PROJECT NUMBER	8. PROJECT COST ($000)
72976	311-115	ANZY023001	10,400

9. COST ESTIMATES

ITEM	J/M	QUANTITY	UNIT COST	COST ($000)
CONVERT TO HYPERSONIC PLANT	LS			8,300
SUPPORTING FACILITIES				1,100
UTILITIES	LS			(550
SITE IMPROVEMENTS	LS			(350
PAVEMENTS	LS			(200
SUBTOTAL				9,400
CONTINGENCY (5.0 %)				470
TOTAL CONTRACT COST				9,870
SUPERVISION, INSPECTION & OVERHEAD (5.7 %)				563
TOTAL REQUEST				10,433
TOTAL REQUEST (ROUNDED)				10,400

10. Description of Proposed Construction: Modify the Aerodynamic and Propulsion Test Unit (APTU) facility by Increasing the capacity of the high pressure test medium supply system, the air ejector system, building extension, supporting utilities, and site work.

11. REQUIREMENT: LS ADEQUATE: LS SUBSTANDARD: LS

PROJECT: Convert to hypersonic plant. (New Mission)

REQUIREMENT: Project will provide Mach 8 capability (high temperature, pressures and air flows) to test large or full-scale scramjet and ramjet engines and airframe sections in support of hypersonic tactical missile development. This enhanced flight envelope simulation by ground test facilities will provide the opportunity to validate certified hardware for safe operation, durability, reliability and integrity prior to flight. These modifications are needed to support military warfighting capabilities and have been recently validated by the National Academy of Sciences, AF Scientific Advisory Board and Defense Service Board Task Force. A Navy Mission Needs Statement (MNS) has been approved and an USAF MNS is under review, each resulting in programs that require the planned ground test capability. Programs that presently require the planned capability include Arrow II, Navy Area Defense, and THAAD as well as advance space launch and rescue vehicles, hypersonic interceptors, and missiles and munitions.

CURRENT SITUATION: Because the scramjet and ramjet engines and thermal structures are very complex devices, sub-scale tests have been used successfully only for research and advanced development, not for assuring proper operation of flight sized hardware. This requirement is based on a new mission need, which will be met by modifying the existing APTU facility. APTU is the only DoD facility which can be economically modified to support hypersonic conditions at the required altitudes and durations to ensure durability of critical components in the required mission trajectory of hypersonic tactical missiles and other such flight systems. Failure to provide dependable test capability of long enough duration at the proper simulated flight conditions will require continuous workarounds and prevent attaining required economics of time and money to adequately meet program development goals and schedules.

IMPACT IF NOT PROVIDED: The life cycle costs associated with future development of hypersonic engines and airframe sections will significantly increase or even result in program termination if engines and/or structures fail in flight, or cannot meet development schedules due to lack of required test capabilities. There is no capability suitable for development and certification of advanced engines and structures in simulated hypersonic flight conditions to ensure adequate durability, performance, reliability and safety prior to flight.

1. COMPONENT	FY 2002 MILITARY CONSTRUCTION PROJECT DATA	2. DATE
AIR FORCE	(computer generated)	

3. INSTALLATION AND LOCATION	4. PROJECT TITLE
ARNOLD AIR FORCE BASE, TENNESSEE	CONVERT TO HYPERSONIC PLANT

5. PROGRAM ELEMENT	6. CATEGORY CODE	7. PROJECT NUMBER	8. PROJECT COST ($000)
72976	311-115	ANZY02300 1	10,400

ADDITIONAL: There is no criteria/scope for this project in Air Force Handbook 32-1084, "Facility Requirements." All known alternative options were considered during the development of this project. No other option could meet the mission requirements; therefore, no economic analysis was needed or performed. A certificate of exception has been prepared. Base Civil Engineer: Lt Col David Young, (931) 454-7537. Design Build - Design Cost (4% of Subtotal Cost): $376,000.

1. COMPONENT AIR FORCE	FY 2002 MILITARY CONSTRUCTION PROJECT DATA (computer generated)	2. DATE
3. INSTALLATION AND LOCATION ARNOLD AIR FORCE BASE, TENNESSEE		
1. PROJECT TITLE CONVERT TO HYPERSONIC PLANT		5. PROJECT NUMBER ANZY023001

12. SUPPLEMENTAL DATA: **Design Build**

a. Estimated Design Data:

(1) Project to be accomplished by design-build procedures	
(2) Basis:	
(a) Standard of Definitive Design -	NO
(b) Where Design Was Most Recently Used -	
(3) Design Allowance	416
(4) Construction Contract Award Date	02 Apr
(5) Construction Start	02 Jun
(6) Construction Completion	04 Jan
(7) Energy Study/Life-Cycle analysis was/will be performed	YES

b. Equipment associated with this project will be provrded from other appropriations: N/A

1. COMPONENT	FY 2002 MILITARY CONSTRUCTION PROJECT DATA	2. DATE
AIR FORCE	(computer generated)	

3. INSTALLATION AND LOCATION	4. PROJECT TITLE
ARNOLD AIR FORCE BASE, TENNESSEE	UPGRADE JET ENGINE AIR INDUCTION SYSTEM,, PHASE 4

5. PROGRAM ELEMENT	6. CATEGORY CODE	7. PROJECT NUMBER	8. PROJECT COST ($000)
72806	318-612	ANZY003000	14,000

9. COST ESTIMATES

ITEM	J/N	QUANTITY	UNIT COST	COST ($000)
UPGRADE JET ENGINE AIR INDUCTION SYSTEM, PH 4	LS			11,905
TURBINE SUPPLY PROCESS AIR	LS			(7890
HOT SUPPLY	LS			(2140
AMBIENT SUPPLY	LS			(1285
INLET HEADER	LS			(590
SUPPORTING FACILITIES				775
DEMOLITION	LS			(250
LEAD BASE PAINT/ASBESTOS ABATEMENT	LS			(300
TESTING AND VALIDATION	LS			(225,
SUBTOTAL				12.680
CONTINGENCY (5.0 %)				634
TOTAL CONTRACT COST				13,314
SUPERVISION, INSPECTION &OVERHEAD (5.7 %)				759
TOTAL REQUEST				14,073
TOTAL REQUEST (ROUNDED)				14.000

10. Description of Proposed Construction: Upgrade the jet engine air induction system for the Arnold Engineering Development Center (AEDC) Engine Test Facility (ETF) J-cells. Add connecting and process air supply duct from the Aeropropulsion Systems Test Facility (ASTF) plant to provide clean, rust-free air while configuring the ducting to match throughput and simulated altitude flight condition test performance requirements.

11. REQUIREMENT: LS ADEQUATE: LS SUBSTANDARD: LS

PROJECT: Upgrade jet engine air induction system, phase IV. (Current Mission)

REQUIREMENT: This project is required to eliminate contaminants in air supply ducting which provide high pressure, high temperature air to multi-million dollar altitude test facilities at the AEDC ETF. ETF is used to simulate high altitude flight conditions for testing, evaluation, and development of advanced gas turbine engines or F-22, F-I 6, F-I 5, and F-I 8 fighter aircraft.

CURRENT SITUATION: The ETF is the only DOD facility which can test advanced gas turbine engines at conditions throughout their flight envelope. The ETF was constructed in the early 1950s with air supply ducting nade of mild carbon steel. These ducts are now heavily corroded and produce large amounts of iron oxide rust). Current advanced high-temperature gas turbine engines require extremely clean air during testing, and uture engines operating at higher temperatures will require even cleaner air. Increasing transient operability esting, which requires higher airflow and more variance in flow rates through the highly corroded ducting. greatly ncreases the amount of rust produced and carried to the turbine engines being tested. The rust is ingested into he engines, melts, and plates on combustor and turbine surfaces, clogging cooling passages and changing flow characteristics which causes engine performance degradation and damage to hardware (severe cases have caused test termination due to major engine damage). This upgrade is also required to reduce operating costs esulting from high maintenance and greatly decreased reliability caused by use of aging equipment. The complex system of motors, gear drives, compressors, and valves used in the A&B plants has aged to the point hat excessive maintenance is required to keep the equipment operating.

IMPACT IF N

1. COMPONENT	FY 2002 MILITARY CONSTRUCTION PROJECT DATA	2. DATE
AIR FORCE	(computer generated)	

3. INSTALLATION AND LOCATION	4. PROJECT TITLE
ARNOLD AIR FORCE BASE, TENNESSEE	UPGRADE JET ENGINE AIR INDUCTION SYSTEM, PHASE 4

5. PROGRAM ELEMENT	6. CATEGORY CODE	7. PROJECT NUMBER	8. PROJECT COST ($000)
72806	318-612	ANZY003000	14,000

IMPACT IF NOT PROVIDED: Turbine engine damage resulting from contaminated air supply ducting will continue to escalate. Jet engine turbine testing will be adversely affected and accurate test data will be unattainable, adversely impacting the reliability of future aircraft engines. There is no other military or commercial business which can assume this workload. Maintenance costs will continue to increase and reliability will decrease, resulting in higher costs and schedule delays to weapon system development programs.

ADDITIONAL: There is no criteria/scope for this project in Air Force Handbook 32-1084, "Facility Requirements." All known alternative options were considered during the development of this project. No other option could meet the mission requirements; therefore, no economic analysis was needed or performed. A certificate of exception has been prepared. This is the fourth phase of a five-phased effort to remediate ingestion of rust particles into jet engines during testing. Base Civil Engineer: Lt. Col David Young, (931) 454-3550. Design Build - Design Cost (4% of Subtotal Cost): $507,000.

1. COMPONENT	FY 2002 MILITARY CONSTRUCTION PROJECT DATA	2. DATE
AIR FORCE	(computer generated)	

3. INSTALLATION AND LOCATION

ARNOLD AIR FORCE BASE. TENNESSEE

4. PROJECT TITLE	5. PROJECT NUMBER
UPGRADE JET ENGINE AIR INDUCTION SYSTEM, PHASE 4	ANZY003000

12. SUPPLEMENTAL DATA:

	Design	Build
a. Estimated Design Data:		
(1) Project to be accomplished by design-build procedures		
(2) Basis:		
(a) Standard of Definitive Design -		NO
(b) Where Design Was Most Recently Used -		
(3) Design Allowance		560
(4) Construction Contract Award Date		01 Nov
(5) Construction Start		02 Jan
(6) Construction Completion		03 Oct
(7) Energy Study/Life-Cycle analysis was/will be performed		YES

b. Equipment associated with this project will be provided from other appropriations: N/A

1. COMPONENT AIR FORCE	FY2002	MILITARY CONSTRUCTION PROGRAM (computer generated)	2. DATE
3. INSTALLATION AND LOCATION LACKLAND AIR FORCE BASE, TEXAS		4. COMMAND AIR EDUCATION AND TRAINING COMMAND	5. AREA CONST COST INDEX 0.82

6. PERSONNEL STRENGTH	PERMANENT			STUDENTS			SUPPORTED			TOTAL
	OFF	FNL	CIV	OFF	FNI	CIV	OFF	FNI	CIV	
a. As of 30 Sep 00	1,732	4,820	4.923	88	6,395		62	1,756	25	19,801
b. End FY 2005	1,730	4,792	4,920	60	6,226		62	1,756	25	19,571

7. INVENTORY DATA $(000)

a. Total Acreage	2,753	
b. Inventory Totals as of: 30 Sep 00		604.290
c. Authorization Not Yet In Inventow:		22.811
d. Authorization Requested In this Program:		12,800
e. Authorization Included In Following Program: (FY2003)		17,000
f. Planned in Next Four Program Years:		43.31s
g. Remainina Deficiency:		526,510
h. Grand Total:		1,226,730

3. Projects Requested in this Program: FY2002

CATEGORY CODE	PROJECT TITLE	SCOPE		COST $(000)	DESIGN START	STATUS CMP
171-000	Consolidate Joint Advanced Language Training Center	2,175	SM	$4,200	Jun 01	Apr 02
721-312	Dormitory	96	RM	$8,600	MAR 00	SEP 01
			Total	$12,800		

9a. Future Projects: Included in the Following Program: (FY2003)

721-312	Student Dormitory	200	RM	$17,000
			Total	$17,000

9b. Future Projects: Typically Planned Next Four Years

141-456	Information Operations Center	3,315	SM	$8,800
721-312	Dormitory	96	RM	$7,646
721-312	Dormitory	96	RM	$7,016
721-312	Dormitory	96	RM	$6,544
721-312	Dormitory	96	RM	$6,113
730-835	Consolidate Security Forces Operations	3,065	SM	$7.200

9c. Real Property Maintenance Backlog This Installation 78

10. Mission or Major Functions: A training wing which includes Basic Military Training School, Air Force Security Forces Center, and security forces, cryptographic maintenance, recruiting, and Air Force and Navy food service courses; Defense Language Institute English Language Center; Department of Defense Military Working Dog Training Agency; Inter-American Air Forces Academy; an Air Force Reserve contingency hospital and training squadron, and a major Air Force medical center.

11. Outstanding pollution and safety (OSHA) deficiencies:

a. Air pollution	771
b. Water pollution	310
c. Occupational Safety and Health	0
d. Other Environmental	0

1. COMPONENT	FY 2002 MILITARY CONSTRUCTION PROJECT DATA	2. DATE
AIR FORCE	(computer generated)	

3. INSTALLATION AND LOCATION	4. PROJECT TITLE
LACKLAND AIR FORCE BASE, TEXAS	CONSOLIDATE JOINT ADVANCED LANGUAGE TRAINING CENTER

5. PROGRAM ELEMENT	6. CATEGORY CODE	7. PROJECT NUMBER	8. PROJECT COST ($000)
22176	171-621	MPLS023273	4.200

9. COST ESTIMATES

ITEM	U/M	QUANTITY	UNIT COST	COST ($000)
JOINT ADVANCED LANGUAGE TRAINING CENTER	LS			3,054
ADVANCED LANGUAGE TRAINING CENTER	SM	2,175	1,390	(3,023)
ANTITERRORISM FORCE PROTECTION	SM	2,175	14	(30)
SUPPORTING FACILITIES				710
UTILITIES	LS			(250)
SITE IMPROVEMENTS	LS			(100
PAVEMENT	LS			(200
DEMOLITION	SM	1,335	120	(160
SUBTOTAL				3.764
CONTINGENCY (5.0%)				188
TOTAL CONTRACT COST				3,952
SUPERVISION, INSPECTION & OVERHEAD (5.7 %)				225
TOTAL REQUEST				4,177
TOTAL REQUEST (ROUNDED)				4,200

10. Description of Proposed Construction: Single story with concrete foundation/slab, masonry walls, and steel frame/standing seam metal roof. Work to be in compliance with Director of Central Intelligence Directive (DCID) 1/21 for sensitive compartmentalized information facilities (SCIF). Includes demolition of three buildings, totalling 1,335 SM. Comply with DoD interim minimum force protection construction standard.

Air Conditioning: 100 KW

11. REQUIREMENT: 2,175 SM ADEQUATE: SM SUBSTANDARD: 1,335 SM

PROJECT: Construct a joint advanced language training center. (Current Mission)

REQUIREMENT: An adequate facility is required to conduct language and operations training for the Signal Intelligence (SIGINT) community to support the warfighter and national taskings. Training functions must ensure all personnel receive operational mission-specific and advanced language training to expertly perform the mission as operationally executed at this key regional intelligence facility. The training organizations must also continually assess the skill level of the workforce as it relates to the growing and evolving missions, developing and adjusting appropriate training strategies to keep the work force technically fit for the mission. These fluctuating mission needs drive a requirement for highly flexible mission-specific training space. In addition, this project will correct existing individual training space deficiencies by collocating and consolidating all training functions into a single facility. Comply with DoD interim minimum force protection construction standards.

CURRENT SITUATION: Existing training is conducted in multiple facilities located throughout the 23 acre secure compound. The SCIF training is conducted in Bldg 322 which is 45 years old with failing infrastrucure. The Joint Language Center, recently relocated from a building deep within the flood plain, is currently in temporary facilities. The areas currently available for training do not accommodate the number of classrooms and instructors required to develop and maintain the workforce resulting in a training shortfall. Current planned mission increases expect to bring an additional 200 persons to the MRSOC in the near term, exacerbating this situation. The present classrooms are too small and some are not separated from adjacent administrative and operational areas, severely impacting the quality of the learning process as well as the adjacent mission areas. As a result of limited classroom space many classes must be given repeatedly in order to accommodate more

1. COMPONENT	FY 2002 MILITARY CONSTRUCTION PROJECT DATA	2. DATE
AIR FORCE	(computer generated)	

3. INSTALLATION AND LOCATION	4. PROJECT TITLE
LACKLAND AIR FORCE BASE, TEXAS	CONSOLIDATE JOINT ADVANCED LANGUAGE TRAINING CENTER

5. PROGRAM ELEMENT	6. CATEGORY CODE	7. PROJECT NUMBER	8. PROJECT COST ($000)
22176	171-621	MPLS023273	4,200

personnel. 50% of the assigned personnel are fresh out of school and have little or no prior experience, making mission specific on-site training vital. The operational mission requirements at the MRSOC have undergone unprecedented growth over the last five years and the training to support these missions has increased proportionately. The current trend to more sophisticated mission equipment drives a requirement for specialized training spaces capable of demonstrating and utilizing this equipment in a classroom setting. In any given year, approximately 80% of the assigned personnel, or 1280 people, require training at the MRSOC.

IMPACT IF NOT PROVIDED: The MRSOC training required for the continued signal intelligence support to the warfighter and national customers cannot be accomplished in the existing facilities. Lack of adequate, properly configured training spaces will increasingly have a negative impact on both mission effectiveness and morale, ultimately reducing intelligence production.

ADDITIONAL: This project meets the criteria/scope specified in Air Force Handbook 32-1084, "Facility Requirements." All known alternative options were considered during the development of this project. No other option could meet the mission requirements; therefore, no economic analysis was needed or performed. A certificate of exception has been prepared. Base Civil Engineer: Lt Col Gordon Green, (210) 671-2977. Joint Advanced Language Training Center: 2,175 SM = 23,403 SF.

1. COMPONENT AIR FORCE	FY 2002 MILITARY CONSTRUCTION PROJECT DATA (computer generated)	2. DATE
3. INSTALLATION AND LOCATION LACKLAND AIR FORCE BASE, TEXAS		
4. PROJECT TITLE CONSOLIDATE JOINT ADVANCED LANGUAGE TRAINING CENTER		5. PROJECT NUMBER MPLS023273

12. SUPPLEMENTAL DATA: **Design, Bid, Build**

a. Estimated Design Data:

(1) Status:	
(a) Date Design Started	25-Jun-01
(b) Parametric Cost Estimates used to develop costs	YES
. (c) Percent Complete as of Jan 01	1 %
. (d) Date 35% Designed.	08-Oct-01
(e) Date Design Complete	28-Apr-02
(f) Energy Study/Life-Cycle analysis was/will be performed	YES
(2) Basis:	
(a) Standard of Definitive Design -	NO
(b) Where Design Was Most Recently Used -	
(3) Total Cost (c) = (a) + (b) or(d) + (e):	($000)
(a) Production of Plans and Specifications	231
(b) All Other Design Costs	42
(c) Total	273
(d) Contract	210
(e) In-house	63
(4) Construction Contract Award Date	02 Jun
(5) Construction Start	**02** Aug
(6) Construction Completion	**03** Feb

. Indicates completion of Project Definition with Parametric Cost Estimate which is comparable to traditional 35% design to ensure valid scope and cost and executability.

b. Equipment associated with this project will be provided from other appropriations: **N/A**

1. COMPONENT	FY 2002 MILITARY CONSTRUCTION PROJECT DATA	2. DATE
AIR FORCE	(computer generated)	

3. INSTALLATION AND LOCATION	4. PROJECT TITLE
LACKLAND AIR FORCE BASE, TEXAS	DORMITORY

5. PROGRAM ELEMENT	6. CATEGORY CODE	7. PROJECT NUMBER	8. PROJECT COST ($000)
85796	721-312	MPLS033294	8.600

9. COST ESTIMATES

ITEM	U/M	QUANTITY	UNIT COST	COST ($000)
DORMITORY (96 RM)	LS			5,852
DORMITORY	SM	3,168	1,759	(5,573
ANTITERRORISM/FORCE PROTECTION	LS			(279
SUPPORTING FACILITIES				1,930
UTILITIES	LS			(346
PAVEMENTS	LS			(448
SITE IMPROVEMENTS	LS			(330
PIER FOUNDATION	LS			(448
CENTRAL CHILLER PACKAGE	LS			(358
SUBTOTAL				7,782
CONTINGENCY (5.0%)				389
TOTAL CONTRACT COST				8,171
SUPERVISION, INSPECTION 8 OVERHEAD (5.7 %)				466
TOTAL REQUEST				8,636
TOTAL REQUEST (ROUNDED)				8,600

10. Description of Proposed Construction: Three-story with concrete foundation/slab, masonry walls, structural steel frame, and roof. Includes room-bath/kitchen-room modules, laundry rooms, storage, lounge areas, central chiller package with cooling tower, site preparation, and all other supporting facilities. Includes DoD minimum interim standard force protection measures.

Air Conditioning: 300 KW Grade Mix: 96 El-E4.

11. REQUIREMENT: 2,388 SM ADEQUATE: 1,159 SM SUBSTANDARD: 198 SM

PROJECT: Construct a dormitory. (Current Mission)

REQUIREMENT: A major Air Force objective is to provide unaccompanied enlisted personnel with housing conducive to their proper rest, relaxation and personal well-being. Properly designed and furnished quarters providing some degree of individual privacy are essential to the successful accomplishment of the increasingly complicated and important jobs these people must perform. The retention of these highly trained airmen is essential to our readiness posture and continuing world-wide presence. Antiterrorism/force protection measures to comply with the DoD force protection standard for non-collapsable construction.

CURRENT SITUATION: The base has insufficient on-base housing to accomodate the unaccompanied enlisted personnel. This project is in accordance with the Air Force Dormitory Master Plan.

IMPACT IF NOT PROVIDED: Adequate living quarters which provide a level of privacy required for today's airmen will not be available, resulting in degradation of morale, productivity, and career satisfaction for unaccompanied enlisted personnel.

ADDITIONAL: This project meets the criteria/scope specified in the new uniform barracks construction standard, known as "one-plus-one," established by OSD. All known alternatives were considered during the development of this project. No other option could meet mission requirements. Therefore, no economic analysis was needed or performed. Unaccompanied Housing RPM Conducted: FY99=$2,000K. Estimated

1. COMPONENT	FY 2002 MILITARY CONSTRUCTION PROJECT DATA	2. DATE
AIR FORCE	(computer generated)	

3. INSTALLATION AND LOCATION	4. PROJECT TITLE
LACKLAND AIR FORCE BASE, TEXAS	DORMITORY

5. PROGRAM ELEMENT	6. CATEGORY CODE	7. PROJECT NUMBER	8. PROJECT COST ($000)
85796	721-312	MPLS033294	8,600

Unaccompanied Housing RPM: FY00=$2,500K; FY01=$2,500K; FY02=$2,500K; FY03=$2,500K. Base Civil Engineer: Lt Col Gordon Green, (210) 671-2977. Dormitory: 3,168SM = 34,088SF.

1. COMPONENT	FY 2002 MILITARY CONSTRUCTION PROJECT DATA	2. DATE
AIR FORCE	(computer generated)	

3. INSTALLATION AND LOCATION

LACKLAND AIR FORCE BASE, TEXAS

4. PROJECT TITLE	5. PROJECT NUMBER
DORMITORY	MPLS033294

12. SUPPLEMENTAL DATA: **Design, Bid, Build**

a. Estimated Design Data:

(1) Status:	
(a) Date Design Started	31-MAR-00
(b) Parametric Cost Estimates used to develop costs	YES
. (c) Percent Complete as of Jan 01	100%
. (d) Date 35% Designed.	20-SEP-00
(e) Date Design Complete	10-SEP-01
(f) Energy Study/Life-Cycle analysis was/will be performed	YES
(2) Basis:	
(a) Standard of Definitive Design -	YES
(b) Where Design Was Most Recently Used -	LACKLAND
(3) Total Cost (c) = (a) + (b) or(d) + (e):	($000)
(a) Production of Plans and Specifications	516
(b) All Other Design Costs	129
(c) Total	645
(d) Contract	545
(e) In-house	100
(4) Construction Contract Award Date	01 Nov
(5) Construction Start	02 Jan
(6) Construction Completion	03 Apr

. Indicates completion of Project Definition with Parametric Cost Estimate which is comparable to traditional 35% design to ensure valid scope and cost and executability.

b. Equipment associated with this project will be provided from other appropriations: **N/A**

1. COMPONENT AIR FORCE	FY2002	MILITARY CONSTRUCTION PROGRAM (computer generated)	2. DATE
3. INSTALLATION AND LOCATION LAUGHLIN AIR FORCE BASE, TEXAS		4. COMMAND AIR EDUCATION AND TRAINING COMMAND	5. AREA CONST COST INDEX 0.89

6. PERSONNEL STRENGTH	PERMANENT			STUDENTS			SUPPORTED			TOTAL
	OFF	FNL	CIV	OFF	FNI	CIV	OFF	FNL	CIV	
a. As of 30 Sep 00	415	533	1,600	356			76		2	2,982
b. End FY 2005	435	539	1.609	359			76		2	3.020

7. INVENTORY DATA $1000)

a. Total Acreage	4,524	
b. Inventory Totals as of: 30 Sep 00		151.199
c. Authorization Not Yet In Inventorv:		16,856
d. Authorization Requested In this Program:		12,000
e. Authorization Included In Following Program: (FY2003)		0
f. Planned in Next Four Program Years:		6,140
a. Remainina Deficiencv:		57,600
h. Grand Total:		243,795

8. Projects Requested in this Program: FY2002

CATEGORY CODE	PROJECT TITLE	SCOPE	COST $(000)	DESIGN START	STATUS CMP
740-674	Add/Alter Fitness Center	5,051 SM	$12,000	JUN 01	Apr 02
		Total	$12,000		

9a. Future Projects: Included in the Following Program: (FY2003) No Projects

9b. Future Projects: Typically Planned Next Four Years

61 O-249	Consolidated Wing Support Fac	2,700 SM	$6,140

9c. Real Property Maintenance Backlog This Installation 52

10. Mission or Major Functions: A flying training wing which conducts Undergraduate Pilot Training with T-1, T-37, and T-38 aircraft.

11. Outstanding pollution and safety (OSHA) deficiencies:

a. Air pollution	244
b. Water pollution	25
c. Occupational Safety and Health	0
d. Other Environmental	0

1. COMPONENT	FY 2002 MILITARY CONSTRUCTION PROJECT DATA	2. DATE
AIR FORCE	(computer generated)	

3. INSTALLATION AND LOCATION	4. PROJECT TITLE
LAUGHLIN AIR FORCE BASE, TEXAS	ADD/ALTER FITNESS CENTER

5. PROGRAM ELEMENT	6. CATEGORY CODE	7. PROJECT NUMBER	8. PROJECT COST ($000)
85976	740-674	MXDP983004	12.000

9. COST ESTIMATES

ITEM	U/M	QUANTITY	UNIT COST	COST ($000)
PRIMARY FACILITY	LS			9,307
FITNESS CENTER / INDOOR TRACK / POOL	SM	4,692	1,841	(8,638
HAWC	SM	359	1,735	(623
ANTI-TERRORISM / FORCE PROTECTION (.005)	LS			(46.317
SUPPORTING FACILITIES				1,424
UTILITIES	LS			(395
PAVEMENTS	LS			(225
SITE IMPROVEMENTS	LS			(754
DEMOLITION	LS			(50
SUBTOTAL				10,731
CONTINGENCY (5.0%)				537
TOTAL CONTRACT COST				11,268
SUPERVISION, INSPECTION & OVERHEAD (5.7 %)				642
TOTAL REQUEST				11,910
TOTAL REQUEST (ROUNDED)				12,000

IO. Description of Proposed Construction: Construct a fitness center to include site development, all utilities, nterior and exterior finishes to match base standards, weight rooms, aerobic areas, basketball court, locker ooms, racquetball courts, laundry rooms, equipment storage rooms, elevated indoor running track, indoor swimming pool and Health and Wellness Center (HAWC). Project demolishes and abates asbestos at 8360 at 188 SM

11. REQUIREMENT: 5,051 SM ADEQUATE: SM SUBSTANDARD: 2,499 SM

PROJECT: Construct a fitness center with co-located Health and Wellness Center (HAWC), IAW AF Fitness Center Design standards and the AF FY99 Fitness Center Master Plan.

REQUIREMENT: A fitness center that has all of the equipment necessary for the service members to maintain he appropriate level of physical fitness and a centralized location for counseling on nutritional and exercise benefits.

CURRENT SITUATION: The FY99 USAF Fitness Center Master Plan validated that the existing fitness center has inadequate space to support the current and projected military population. The increased emphasis on Air Force weight and physical training requirements has overtaxed the existing facility. There are long waiting times or aerobic/exercise machines, racquetball courts and weight training equipment. This situation is further exacerbated by the fact that the local community has no fully equipped gym available as an off-base alternate. In addition, during the long summer months, when temperatures reach over 100 degrees and stay that way until well after 10PM, jogging becomes hazardous and can result in severe heat stroke or exhaustion. The current Health nd Wellness Center (HAWC) is located in the medical facility and not in the current fitness center. This situation leads to duplication of purchases, equipment that both the HAWC and fitness center require, such as treadmills, rowing machines, stationary bicycles and weight training equipment.

IMPACT IF NOT PROVIDED: Continued use of substandard and inadequate facilities will be detrimental to pilot training and conditioning, as well as having a negative impact on the health, wellness and morale of the base

1. COMPONENT	FY 2002 MILITARY CONSTRUCTION PROJECT DATA	2. DATE
AIR FORCE	(computer generated)	

3. INSTALLATION AND LOCATION	4. PROJECT TITLE
LAUGHLIN AIR FORCE BASE, TEXAS	ADD/ALTER FITNESS CENTER

5. PROGRAM ELEMENT	6. CATEGORY CODE	7. PROJECT NUMBER	8. PROJECT COST ($000)
85976	740-674	MXDP983004	12,000

population and family members. In addition, members forced to use outdoor running tracks will continue to be exposed to the harsh hot temperatures in this area, resulting in associated health risks including heat strokes, heat exhaustion, and sunburns.

ADDITIONAL: This project meets the criteria/scope specified in USAF Fitness Facilities Design Guidance. All known alternative options were considered during the development of this project. No other option could meet the mission requirements. Therefore no economic analysis was needed or performed. A certificate of exemption has been prepared and approved." Base CE POC: Lt Col Al Poerner, (830) 298-5252, Construct Fitness Center 5,051 SM = 54,349 SF"

1. COMPONENT	FY 2002 MILITARY CONSTRUCTION PROJECT DATA	2. DATE
AIR FORCE	(computer generated)	

3. INSTALLATION AND LOCATION

LAUGHLIN AIR FORCE BASE, TEXAS

4. PROJECT TITLE	5. PROJECT NUMBER
ADD/ALTER FITNESS CENTER	MXDP983004

12. SUPPLEMENTAL DATA: **Design, Bid, Build**

a. Estimated Design Data:

(1) Status:	
(a) Date Design Started	25-JUN-01
(b) Parametric Cost Estimates used to develop costs	YES
. (c) Percent Complete as of Jan 01	1 %
. (d) Date 35% Designed.	08-Oct-01
(e) Date Design Complete	28-Apr-02
(f) Energy Study/Life-Cycle analysis was/will be performed	YES
(2) Basis:	
(a) Standard of Definitive Design -	NO
(b) Where Design Was Most Recently Used -	
(3) Total Cost (c) = (a) + (b) or (d) + (e):	($000)
(a) Production of Plans and Specifications	720
(b) All Other Design Costs	360
(c) Total	1,080
(d) Contract	900
(e) In-house	180
(4) Construction Contract Award Date	02 Jul
(5) Construction Start	02 Sep
(6) Construction Completion	04 Aug

. Indicates completion of Project Definition with Parametric Cost Estimate which is comparable to traditional 35% design to ensure valid scope and cost and executability.

b. Equipment associated with this project will be provided from other appropriations: **N/A**

1. COMPONENT AIR FORCE	**FY2002**	**MILITARY CONSTRUCTION PROGRAM (computer generated)**	2. DATE
3. INSTALLATION AND LOCATION SHEPPARD AIR FORCE BASE, TEXAS		4. COMMAND AIR EDUCATION AND TRAINING COMMAND	5. AREA CONST COST INDEX 0.95

6. PERSONNEL STRENGTH	PERMANENT			STUDENTS			SUPPORTED			TOTAL
	OFF	FNI	CIV	OFF	FNI	CIV	OFF	FNI	CIV	
a. As of 30 Sep 00	**588**	**2,696**	**2,653**	**371**	**4,040**		**137**	1,792	129	12,406
b. End FY **2005**	**572**	**2,438**	**2,661**	**380**	3,918		137	1,792	129	12,027

7. INVENTORY DATA $(000)

a. Total Acreage 5,719	
b. Inventory Totals as of: 30 Sep 00	**565.655**
c. Authorization Not Yet In Inventow:	0
d. Authorization Requested In this Program:	**37.000**
e. Authorization Included In Following Program: (FY2003)	0
f. Planned in Next Four Program Years:	39.568
a. Remainina Deficiencv:	**207.684**
h. Grand Total:	849,907

8. Projects Requested in this Program: FY2002

CATEGORY CODE	PROJECT TITLE	SCOPE		COST $(000)	DESIGN START	STATUS CMP
721-312	Replace Student Dormitory/Dining Fac (140 RM)	140	RM	**$16,000**	AUG 01	APR 02
721-312	Student Dormitory/Dining Facility (160 RM)	160	RM	$21,000	AUG 01	APR 02
			Total	$37,000		

9a. Future Projects: Included in the Following Program: (FY2003) No Projects

9b. Future Projects: Typically Planned Next Four Years

149-962	Rapcon/control Tower	**2,366**	SM	$11,500
171-211	ENJPPT Flight Simulator	2,217	SM	**$5,800**
171-627	Trainer Maintenance / Development Facility	7,120	SM	$15,000
721-312	Dormitory	120	RM	**$7,268**

9c. Real Property Maintenance Backlog This Installation **40**

10. Mission or Major Functions: A training wing responsible for aircraft maintenance, civil engineering, comptroller, and health science courses; a flying training wing with T-37/T-38/AT-38 flying training squadrons that train US and NATO pilots under the Euro-NATO Joint Jet Pilot Training (ENJJPT) Program: and an Air Force Reserve Command flying training o n .

11. Outstanding pollution and safety (OSHA) deficiencies:

a. Air pollution	175
b. Water pollution	**350**
c. Occupational Safety and Health	0
d. Other Environmental	0

1. COMPONENT	FY 2002 MILITARY CONSTRUCTION PROJECT DATA	2. DATE
AIR FORCE	(computer generated)	

3. INSTALLATION AND LOCATION	4. PROJECT TITLE
SHEPPARD AIR FORCE BASE, TEXAS	REPLACE STUDENT DORMITORY/DINING FAC (140 RM)

5. PROGRAM ELEMENT	6. CATEGORY CODE	7. PROJECT NUMBER	8. PROJECT COST ($000)
85976	721-312	VNVP003002B	16.000

9. COST ESTIMATES

ITEM	U/M	QUANTITY	UNIT COST	COST ($000)
STUDENT DORM (140 RM)	LS			11,550
DORMITORY (140 ROOMS)	SM	6,825	1.501	(10,244;
DINING FACILITY (500 PN)	SM	465	2,572	(1.196:
ANTITERRORISM FORCE PROTECTION	SM	7,290	15	(109)
SUPPORTING FACILITIES				2,915
UTILITIES	LS			(900)
PAVEMENTS	LS			(1,065)
SITE IMPROVEMENTS	LS			(950)
SUBTOTAL				14,465
CONTINGENCY (5.0 %)				723
TOTAL CONTRACT COST				15,188
SUPERVISION, INSPECTION & OVERHEAD (5.7 %)				866
TOTAL REQUEST				16,054
TOTAL REQUEST (ROUNDED)				16.000

10. Description of Proposed Construction: Four-story facility with reinforced concrete foundation and floor slabs, structural steel frame with brick veneer and roof system. Includes room-bath-room modules (two students per room), laundries, training managers' area, storage, dining space addition, and all necessary support. Comply with DoD interim minimum force protection construction standard.

Air Conditioning: 600 KW

11. REQUIREMENT: 2,459 SM ADEQUATE: 1,448 SM SUBSTANDARD: 1,256 SM

PROJECT: Construct a student dormitory/dining facility. (Current mission)

REQUIREMENT: Properly sized and configured dormitories are required to support training of students. A major Air Force objective is to provide housing conducive to their proper rest, relaxation and personal well-being while providing a suitable study environment. Properly designed and furnished quarters, providing some degree of individual privacy, are essential to the successful accomplishment of vital training requirements. An addition onto an existing centrally located dining facility close to the dormitories is required to insure the most efficient use of training time. This project is in accordance with the Air Force Dormitory Master Plan. Comply with DoD interim minimum force protection construction standard.

CURRENT SITUATION: Four of the eleven student dorms at Sheppard have central latrines and are in deteriorated condition. They are plagued by broken toilets, sinks, sewer, and water lines. Severe moisture and mildew problems are creating health hazards. Frequent electrical power outages cause damage to personal property such as televisions and computers. Severe heat and cooling inconsistencies, exacerbated by the inability to open windows contribute to stifling conditions for personal studies. Currently, four dining facilities located within dormitories serve 200,000 meals per month. Training curricula developed for the most effective use of student time on station are contingent on the efficient use of time for meals provided by the location and capacity of current dining facilities.

IMPACT IF NOT PROVIDED: Adequate living quarters will continue to be unavailable resulting in degradation of morale, productivity, and overall training effectiveness of unaccompanied enlisted personnel. Deplorable

1. COMPONENT	FY 2002 MILITARY CONSTRUCTION PROJECT DATA	2. DATE
AIR FORCE	(computer generated)	

3. INSTALLATION AND LOCATION	4. PROJECT TITLE
SHEPPARD AIR FORCE BASE, TEXAS	REPLACE STUDENT DORMITORY/DINING FAC (140 RM)

5. PROGRAM ELEMENT	6. CATEGORY CODE	7. PROJECT NUMBER	8. PROJECT COST ($000)
85976	721-312	VNVP003002B	16,000

conditions for new members of the Air Force have negative impacts on retention and training. Training requirements will not be satisfied without the simultaneous construction addition of a new student dining facility.

ADDITIONAL: The new OSD dormitory standard does not apply to housing constructed for members receiving entry-level skill training. This project is being designed to the Air Force technical training "pipeline" construction standard. All known alternatives were considered during the development of this project. No other option could meet mission requirements. Therefore, no economic analysis was needed or performed. A certificate of exception was prepared. FY1999 Unaccompanied Housing RPM conducted: $2,184K. FY2000 Unaccompanied Housing RPM conducted: $200K. Future Unaccompanied Housing RPM requirements (estimated): FY01: $207K; FY02: $218K; FY03: $223K. Base Civil Engineer: Col William Martin, (940) 676-2158. Dormitory: 6,825SM = 73,437 SF Dining Facility: 465 SM = 5,003 SF

1. COMPONENT AIR FORCE	FY 2002 MILITARY CONSTRUCTION PROJECT DATA (computer generated)	2. DATE

3. INSTALLATION AND LOCATION

SHEPPARD AIR FORCE BASE, TEXAS

1. PROJECT TITLE	5. PROJECT NUMBER
REPLACE STUDENT DORMITORY/DINING FAC (140 RM)	VNVP003002B

12. SUPPLEMENTAL DATA: **Design, Bid, Build**

a. Estimated Design Data:

(1) Status:	
(a) Date Design Started	01 -AUG-01
(b) Parametric Cost Estimates used to develop costs	YES
. (c) Percent Complete as of Jan 01	**65** %
. (d) Date 35% Designed.	30-NOV-01
(e) Date Design Complete	10-APR-02
(f) Energy Study/Life-Cycle analysis was/will be performed	YES
(2) Basis:	
(a) Standard of Definitive Design -	NO
(b) Where Design Was Most Recently Used -	
(3) Total Cost (c) = (a) + (b) or(d) + (e):	($000)
(a) Production of Plans and Specifications	960
(b) All Other Design Costs	**480**
(c) Total	1,440
(d) Contract	1,200
(e) In-house	**240**
(4) Construction Contract Award Date	**02** Jun
(5) Construction Start	**02** Aug
(6) Construction Completion	**04** Aug

. Indicates completion of Project Definition with Parametric Cost Estimate which is comparable to traditional 35% design to ensure valid scope and cost and executability.

b. Equipment associated with this project will be provided from other appropriations: **N/A**

1. COMPONENT AIR FORCE	FY2002	MILITARY CONSTRUCTION PROGRAM (computer generated)	2. DATE
3. INSTALLATION AND LOCATION SHEPPARD AIR FORCE BASE, TEXAS		4. COMMAND AIR EDUCATION AND TRAINING COMMAND	5. AREA CONST COST INDEX 0.95

6. PERSONNEL STRENGTH	PERMANENT			STUDENTS			SUPPORTED			TOTAL
	OFF	ENI	CIV	OFF	FNI	CIV	OFF	FNI	CIV	
a. As of 30 Sep 00	588	2,696	2,653	371	4,040		137	1,792	129	12,406
b. End FY 2005	572	2,438	2,661	380	3,918		137	1,792	129	12,027

7. INVENTORY DATA $(000)

a. Total Acreage	5,719	
b. Inventory Totals as of: 30 Sep 00		565.655
c. Authorization Not Yet In Inventory:		0
d. Authorization Requested In this Program:		37,000
e. Authorization Included In Following Program: (FY2003)		0
f. Planned in Next Four Program Years:		39,568
a. Remainina Deficiencv:		207.684
h. Grand Total:		849,907

8. Projects Requested in this Program: FY2002

CATEGORY CODE	PROJECT TITLE	SCOPE		COST $(000)	DESIGN START	STATUS CMP
721-312	Replace Student Dormitory/Dining Fac (140 RM)	140	RM	$16,000	AUG 01	APR 02
721-312	Student Dormitory/Dining Facility (160 RM)	160	RM	$21,000	AUG 01	APR 02
			Total	$37,000		

9a. Future Projects: Included in the Following Program: (FY2003) No Projects

9b. Future Projects: Typically Planned Next Four Years

149-962	Rapcon/control Tower	2,366	SM	$11,500
171-211	ENJPPT Flight Simulator	2,217	SM	$5,800
171-627	Trainer Maintenance / Development Facility	7,120	SM	$15,000
721-312	Dormitory	120	RM	$7,268

9c. Real Property Maintenance Backlog This Installation 40

10. Mission or Major Functions: A training wing responsible for aircraft maintenance, civil engineering, comptroller, and health science courses; a flying training wing with T-37/T-38/AT-38 flying training squadrons that train US and NATO pilots under the Euro-NATO Joint Jet Pilot Training (ENJJPT) Program; and an Air Force Reserve Command flying trainino squadron.

1. Outstandinq pollution and safety (OSHA) deficiencies:

a. Air pollution	175
b. Water pollution	350
c. Occupational Safety and Health	0
d. Other Environmental	0

1. COMPONENT	FY 2002 MILITARY CONSTRUCTION PROJECT DATA	2. DATE
AIR FORCE	(computer generated)	

3. INSTALLATION AND LOCATION	4. PROJECT TITLE
SHEPPARD AIR FORCE BASE, TEXAS	STUDENT DORMITORY/DINING FACILITY (160 RM

5. PROGRAM ELEMENT	6. CATEGORY CODE	7. PROJECT NUMBER	8. PROJECT COST ($000)
85796	721-312	VNVP003002	21,000

9. COST ESTIMATES

ITEM	U/M	QUANTITY	UNIT COST	COST ($000)
STUDENT DORMITORY/DINING FACILITY	SM	9,712	1,56	15,196
DORMITORY (160 RM)	SM	7,800	1,429	(11,146
DINING FACILITY (1000 PN)	SM	1,712	2,286	(3,914
ANTITERRORISM FORCE PROTECTION	SM	9,712	14	(136
SUPPORTING FACILITIES				3,600
UTILITIES	LS			(950
PAVEMENTS	LS			(850
SITE IMPROVEMENTS	LS			(1.650:
COMMUNICATIONS	LS			(150
SUBTOTAL				18,796
CONTINGENCY (5.0%)				940
TOTAL CONTRACT COST				19,736
SUPERVISION, INSPECTION & OVERHEAD (5.7 %)				1,125
TOTAL REQUEST				20,861
TOTAL REQUEST (ROUNDED)				21,000
EQUIPMENT FROM OTHER APPROPRIATIONS				(400)

IO. Description of Proposed Construction: Four-story facility with concrete foundation/floor slabs, structural steel rame with brick veneer, and roof system. Includes room-bath-room modules (two students per room), laundries, raining managers area, storage, and all necessary support. Also includes one story detached dining facility. Comply with DoD interim minimum force protection construction standard.

Air Conditioning: 650 KW Grade Mix: 320 El-E4.

11. REQUIREMENT: 10,082 SM ADEQUATE: 370 SM SUBSTANDARD: 2,264 SM

PROJECT: Construct a student dormitory and dining facility. (Current Mission)

REQUIREMENT: Properly sized and configured dormitories are required to support training of students. A major Air Force objective is to provide housing conducive to their proper rest, relaxation and personal well-being while providing a suitable study environment. Properly designed and furnished quarters, providing some degree of individual privacy, are essential to the successful accomplishment of vital training requirements. A centrally located dining facility close to student dormitories is also required to insure the most efficient use of training time. This project is in accordance with the Air Force Dormitory Master Plan. Comply with DoD interim minimum force protection construction standard.

CURRENT SITUATION: Four of the eleven student dormitories at Sheppard have central latrines and are in deteriorated condition. They are plagued by broken toilets, sinks, sewer, and water lines. Severe moisture and mildew problems are creating health hazards. Frequent electrical power outages cause damage to personal property such as televisions and computers. Severe heat and cooling inconsistencies, exacerbated by the nability to open windows contribute to stifling conditions for personal studies. Currently, four dining facilities ocated within dormitories serve 200,000 meals per month. Training curriculums developed for the most effective use of student time on station are contingent on the efficient use of time for meals provided by the location and capacity of current dining facilities.

MPACT IF NOT PROVIDED:

1. COMPONENT	FY 2002 MILITARY CONSTRUCTION PROJECT DATA	2. DATE
AIR FORCE	(computer generated)	

3. INSTALLATION AND LOCATION	4. PROJECT TITLE
SHEPPARD AIR FORCE BASE, TEXAS	STUDENT DORMITORY/DINING FACILITY (160 RM)

5. PROGRAM ELEMENT	6. CATEGORY CODE	7. PROJECT NUMBER	8. PROJECT COST ($000)
85796	721-312	VNVP003002	21,000

Adequate student living quarters will continue to be unavailable resulting in degradation of morale, productivity, and overall training effectiveness of unaccompanied enlisted personnel. Deplorable conditions for new members of the Air Force have negative effects on retention and training. Training requirements will not be satisfied without the simultaneous construction of a new student dining facility to replace the capacity lost by demolition.

ADDITIONAL: The new OSD dormitory standard does not apply to housing constructed for members receiving entry-level skill training. This project is being designed to the Air Force technical training "pipeline" construction standard. All known alternatives were considered during the development of this project. No other option could meet mission requirements. Therefore, no economic analysis was needed or performed. FY1999 Unaccompanied Housing RPM conducted: $2,184K. FY2000 Unaccompanied Housing RPM conducted: $200K. Future Unaccompanied Housing RPM requirements (estimated): FY01: $207K; FY02: $218K; FYo3: $223K. Base Civil Engineer: Col William Martin, (940) 676-2158. Dormitory: 7,800 SM = 83,928 SF; Dining Facility: 1,712 SM = 18,421 SF

1. COMPONENT AIR FORCE	FY 2002 MILITARY CONSTRUCTION PROJECT DATA (computer generated)	2. DATE
3. INSTALLATION AND LOCATION SHEPPARD AIR FORCE BASE, TEXAS		
4. PROJECT TITLE STUDENT DORMITORY/DINING FACILITY (160 RM)		5. PROJECT NUMBER VNVP003002

12. SUPPLEMENTAL DATA: **Design, Bid, Build**

a. Estimated Design Data:

(1) Status:	
(a) Date Design Started	01 -AUG-01
(b) Parametric Cost Estimates used to develop costs	YES
. (c) Percent Complete as of Jan 01	65 %
. (d) Date 35% Designed.	30-NOV-01
(e) Date Design Complete	10-APR-02
(f) Energy Study/Life-Cycle analysis was/will be performed	YES
(2) Basis:	
(a) Standard of Definitive Design -	NO
(b) Where Design Was Most Recently Used -	
(3) Total Cost (c) = (a) + (b) or(d) + (e):	($000)
(a) Production of Plans and Specifications	1,260
(b) All Other Design Costs	630
(c) Total	1,890
(d) Contract	1,690
(e) In-house	200
(4) Construction Contract Award Date	02 Jun
(5) Construction **Stat-l**	02 Aug
(6) Construction Completion	03 Dec

* Indicates completion of Project Definition with Parametric Cost Estimate which is comparable to traditional 35% design to ensure valid scope and cost and executability.

b. Equipment associated with this project will be provided from other appropriations:

EQUIPMENT NOMENCLATURE	**PROCURING** APPROPRIATION	FISCAL YEAR APPROPRIATED OR REQUESTED	COST ($000)
KITCHEN EQUIPMENT	3400	2004	400

1. COMPONENT AIR FORCE	FY2002	MILITARY CONSTRUCTION PROGRAM (computer generated)	2. DATE
3. INSTALLATION AND LOCATION HILL AIR FORCE BASE, UTAH	4. COMMAND AIR FORCE MATERIEL COMMAND		5. AREA CONST COST INDEX 1.03

6. PERSONNEL STRENGTH	PERMANENT			STUDENTS			SUPPORTED			TOTAL
	OFF	FNI	CIV	OFF	FNI	CIV	OFF	FNI	CIV	
a. As of 30 Sep 00	**684**	**4,094**	**3,751**				**3,489**	**4,702**	1,740	**28,460**
b. End FY **2005**	**664**	**4,399**	**3,626**				**3,489**	**4,702**	1,740	**28,620**

7. INVENTORY DATA $(000)

a. Total Acreage	6,973	
b. Inventory Totals as of: 30 Sep 00		701.906
c. Authorization Not Yet In Inventorv:		**6,362**
d. Authorization Requested In this Program:		14,000
e. Authorization Included In Following Program: (FY2003)		0
f. Planned in Next Four Program Years:		**44.200**
a. Remainina Deficiencv:		313.000
h. Grand Total:		1,079,468

8. Projects Requested in this Program: FY2002

CATEGORY CODE	PROJECT TITLE	SCOPE	COST $(000)	DESIGN START	STATUS CMP
21 I-252	Consolidate Hydraulic/Pneudraulic Repair Facility	**4,647** SM	$14,000		**TURN KEY**
		Total	$14,000		

9a. Future Projects: Included in the Following Program: (FY2003) No Projects

9b. Future Projects: Typically Planned Next Four Years

211-116	Depot Maintenance Hangar, Ph 1	9,908 SM	$30,000
422-259	Consolidate Missile Storage Facilities	3,535 SM	$14,200

9c. Real Property Maintenance Backlog This Installation 75

10. Mission or Major Functions: Ogden Air Logistics Center which is responsible for logistics management, support, and depot-level maintenance of tactical missiles, F-16 aircraft, Minuteman and Peacekeeper ICBMs, AN/FPS-117 Radar, Composite (including B-2 Composites), Power Systems, and Software workload; a test squadron with F-16, HH-1, MH-60, and HC/NC-130 aircraft; an air base wing; an Air Combat Command fighter wing with three F-16 squadrons; and an Air Force Reserve fighter wing with one F-16 squadron.

11. Outstanding pollution and safety (OSHA) deficiencies:

a. Air pollution	0
b. Water pollution	0
c. Occupational Safety and Health	0
d. Other Environmental	0

1. COMPONENT	FY 2002 MILITARY CONSTRUCTION PROJECT DATA	2. DATE
AIR FORCE	(computer generated)	

3. INSTALLATION AND LOCATION	4. PROJECT TITLE
HILL AIR FORCE BASE, UTAH	CONSOLIDATE HYDRAULIC/PNEUDRAULIC REPAIR FACILITY

5. PROGRAM ELEMENT	6. CATEGORY CODE	7. PROJECT NUMBER	8. PROJECT COST ($000)
72976	21 I-252	KRSM993100	14,000

9. COST ESTIMATES

ITEM	U/N	QUANTITY	UNIT COST	COST ($000)
CONSOLIDATE HYDRAULIC/PNEUDRAULIC REPAIR FAC	SM	4,647		7,766
TEST/SHOP AREA	SM	2.838	1,165	(3,306
CLEAN ROOMS	SM	1,809	2,450	(4,432
ANTITERRORISM FORCE PROTECTION	SM	4.647	6	(28
SUPPORTING FACILITIES				4,830
PAVEMENTS/SITE IMPROVEMENTS	LS			(870
COMMUNICATIONS SUPPORT	LS			(60
ELECTRICAL SUBSTATION	LS			(1,900
UTILITIES	LS			(760'
DEMOLITION	SM	4,766	150	(715
ASBESTOS REMOVAL	LS			(525
SUBTOTAL				12,596
CONTINGENCY (5.0%)				630
TOTAL CONTRACT COST				13,226
SUPERVISION, INSPECTION & OVERHEAD (5.7 %)				754
TOTAL REQUEST				13,980
TOTAL REQUEST (ROUNDED)				14,000
EQUIPMENT FROM OTHER APPROPRIATIONS				(971)

10. Description of Proposed Construction: Construct a two story addition with concrete foundation, floor slab, masonry walls, and a standing seam metal roof. Includes support shops, test areas, clean rooms, administration area. training areas, and a hazardous waste storage area. Construct electrical substation. Demolish three facilities (4,766 SM). Comply with DoD interim minimum force protection construction standards.

11. REQUIREMENT: 4,647 SM ADEQUATE: SM SUBSTANDARD: 6,014 SM

PROJECT: Consolidate hydraulic/pneudraulic repair facility. (Current Mission)

REQUIREMENT: This base has been designated as the Technical Repair Center (TRC) for the Air Force for all hydraulic/pneudraulic workloads. A facility is required to consolidate and relocate the existing workload to the ndustrial area of the base and provide for the testing, repair, overhaul, and maintenance of hydraulic/pneudraulic components for all active Air Force aircraft systems, as well as Minuteman, Air Launch Cruise Missiles (ALCM), and Advanced Cruise Missiles. The facility will include areas for shipping and receiving, assembly/disassembly, test setup and operation, support shops, clean rooms, training, administration, and hazardous waste storage. Comply with DoD interim minimum force protection construction standards.

CURRENT SITUATION: At present the hydraulic/pneudraulic workload is spreadout in five widely dispersed WWII facilities located seven miles apart on the East and West areas of the base. The existing facilities are composed of numerous small, narrow, isolated cells designed for munitions manufacturing and are poorly configured to accomodate the efficient equipment layout and process flow needed for their current use. Items hat require plating and machining must be routed to the east industrial area, a distance of seven miles, which greatly slows down the flow of parts through the repair process. Existing clean rooms are inadequate to support he repair and assembly of the various close tolerance hydraulic components and an industrial waste system is not available in the west area facilities. The existing hydraulic/pneudraulic work areas are currently utilized to

1. COMPONENT	FY 2002 MILITARY CONSTRUCTION PROJECT DATA	2. DATE
AIR FORCE	(computer generated)	

3. INSTALLATION AND LOCATION	4. PROJECT TITLE
HILL AIR FORCE BASE, UTAH	CONSOLIDATE HYDRAULIC/PNEUDRAULIC REPAIR FACILITY

5. PROGRAM ELEMENT	6. CATEGORY CODE	7. PROJECT NUMBER	8. PROJECT COST ($000)
72976	21 I-252	KRSM993100	14,000

their maximum capacity. The existing on-base capability does not allow for any additional hydraulic/pneudralic taskings to be accomplished at Hill AFB. Also, with the added flow times for maintenance and repair, many hours of overtime are needed to support the current workload.

IMPACT IF NOT PROVIDED: As the TRC for the Air Force hydraulic/pneudraulic repairs, additional workload planned to come to Hill AFB cannot be accommodated on the base. Additional items to be repaired will have to be contracted out at increased costs. The inefficient configuration of the process layout will continue to add additional flow days to the repair process. If the facility is not constructed, the current overtime of approximately 9,500 man-hours will continue at a cost of over $250,000 per year.

ADDITIONAL: This project meets the criteria/scope specified in Air Force Handbook 32-1084, "Facility Requirements." An economic analysis has been prepared comparing the alternatives of new construction, revitalization, leasing and status quo operation. Based on the new present values and benefits of the respective alternatives, new construction was found to be the most cost effective. The requirement for this project was validated by the Joint Service Depot Maintenance Industrial Military Construction Review on 19 May 1999. Base Civil Engineer: Col Per Korslund (801) 777-3071. Test/Shop Area: 2,838 SM = 30.537 SF: Clean Rooms: 1,809 SM = 19,465 SF. Design Build - Design Cost (4% of Subtotal Cost): $504,000.

1. COMPONENT	FY 2002 MILITARY CONSTRUCTION PROJECT DATA	2. DATE
AIR FORCE	(computer generated)	

3. INSTALLATION AND LOCATION

HILL AIR FORCE BASE, UTAH

4. PROJECT TITLE	5. PROJECT NUMBER
CONSOLIDATE HYDRAULIC/PNEUDRAULIC REPAIR FACILITY	KRSM993100

12. SUPPLEMENTAL DATA: **Design Build**

a. Estimated Design Data:

(1) Project to be accomplished by design-build procedures

(2) Basis:

(a) Standard of Definitive Design - NO

(b) Where Design Was Most Recently Used -

(3) Design Allowance **560**

(4) Construction Contract Award Date 01 Dec

(5) Construction Start **02** Feb

(6) Construction Completion **03** Aug

(7) Energy Study/Life-Cycle analysis was/will be performed YES

b. Equipment associated with this project will be provided from other appropriations:

EQUIPMENT NOMENCLATURE	PROCURING APPROPRIATION	FISCAL YEAR APPROPRIATED OR REQUESTED	COST ($000)
INITIAL OUTFITTING EQUIPMENT	**3400**	**2004**	**781**
COMM CABLE/EQUIPMENT	**3080**	**2004**	190

1. COMPONENT AIR FORCE	FY2002	MILITARY CONSTRUCTION PROGRAM (computer generated)	2. DATE
3. INSTALLATION AND LOCATION LANGLEY AIR FORCE BASE, VIRGINIA		4. COMMAND AIR COMBAT COMMAND	5. AREA CONST COST INDEX 0.95

6. PERSONNEL STRENGTH	PERMANENT			STUDENTS			SUPPORTED			TOTAL
	OFF	FNL	CIV	OFF	ENI	CIV	OFF	FNI	CIV	
a. As of 30 Sep 00	1,939	6,555	1,930				32	110	252	10,818
b. End FY 2005	1,951	6,823	1,904				32	110	252	11,072

7. INVENTORY DATA $(000)

a. Total Acreage 3,152	
b. Inventory Totals as of: 30 Sep 00	309.516
c. Authorization Not Yet In Inventorv:	24,548
d. Authorization Requested In this Program:	47,300
e. Authorization Included In Following Program: (FY2003)	38,150
f. Planned in Next Four Program Years:	27.700
a. Remainina Deficiencv:	91.500
h. Grand Total:	538,714

8. Projects Requested in this Program: FY2002

CATEGORY CODE	PROJECT TITLE	SCOPE	COST $(000)	DESIGN START	STATUS CMP
211-152	F-22 Low Observ. Restoration & Comp Rpr Fac	3,945 SM	$16,000	MAR 00	SEP 01
211-175	F-22 Operations and Maintenance Facility	7,867 SM	$19,000	MAR 00	SEP 01
721-312	Dormitory	96 RM	$8,300	MAR 00	SEP 01
845-362	F-22 Upgrade Flightline Infrastructure	1 LS	$4,000	MAR 00	SEP 01
		Total	$47,300		

9a. Future Projects: Included in the Following Program: (FY2003)

171-212	F-22 Flight Simulator	1,625 SM	$8,200
21 l-175	F-22 Squadron Ops/AMU/Hangar	7,779 SM	$19,150
841-000	F-22 Infrastructure and Utilities	1 LS	$10,800
		Total	$38,150

9b. Future Projects: Typically Planned Next Four Years

113-321	Repair Primary Parking Apron/Taxiway	60,892 SM	$10,149
721-312	Dormitory	96 RM	$9,011
721-312	Dormitory	96 RM	$8,540

9c. Real Property Maintenance Backlog This Installation 86

10. Mission or Major Functions: Headquarters Air Combat Command; a fighter wing with three F-l 5 fighter squadrons; an airlift flight: an intelligence group: Aerospace Command and Control Intelligence, Surveillance and Reconnaissance Center (AC2ISRC), Detachment of the USAF Doctrine Center; and the Air Force Rescue Coordination Center.

11. Outstanding pollution and safety (OSHA) deficiencies:

a. Air pollution	0
b. Water pollution	81,000
c. Occupational Safety and Health	3,300
d. Other Environmental	0

1. COMPONENT	FY 2002 MILITARY CONSTRUCTION PROJECT DATA	2. DATE
AIR FORCE	(computer generated)	

3. INSTALLATION AND LOCATION	4. PROJECT TITLE
LANGLEY AIR FORCE BASE, VIRGINIA	DORMITORY

5. PROGRAM ELEMENT	6. CATEGORY CODE	7. PROJECT NUMBER	8. PROJECT COST ($000)
27596	721-312	MUHJ023000	8,300

9. COST ESTIMATES

ITEM	U/M	QUANTITY	UNIT COST	COST ($000)
DORMITORY (96 RM)	LS			5,093
DORMITORY	SM	3,168	1,592	(5,043)
ANTITERRORISM FORCE PROTECTION	LS			(50
SUPPORTING FACILITIES				2,422
UTILITIES	LS			(411
PAVEMENTS	LS			(545
SITE IMPROVEMENTS	LS			(395
DEMOLITION	LS			(100
ACCESS ROAD/COMMUNICATION DUCTS	LS			(396
OTHER SPECIAL REQUIREMENTS	LS			(575
SUBTOTAL				7.515
CONTINGENCY (5.0%)				376
TOTAL CONTRACT COST				7,891
SUPERVISION, INSPECTION & OVERHEAD (5.7 %)				450
TOTAL REQUEST				8,341
TOTAL REQUEST (ROUNDED)				8,300

IO. Description of Proposed Construction: Reinforced concrete foundation and floor slabs, exterior masonry walls, standing seam metal roof, site improvements, utilities, landscaping, fire protection, parking, access road and communication duct leading to site, special foundation, fill to elevate site above flood plain, and remove contaminated soil. Includes DoD minimum interim standard force protection measures.

Air Conditioning: 70 KW Grade Mix: 96 El-E4.

11. REQUIREMENT: 1,297 SM ADEQUATE: 856 SM SUBSTANDARD: SM

PROJECT: Construct Dormitory (Current Mission).

REQUIREMENT: A major Air Force objective provides unaccompanied enlisted personnel with housing conducive to their proper rest, relaxation, and personal well-being. Properly designed and furnished quarters providing some degree of individual privacy are essential to the successful accomplishment of the increasingly complicated and important jobs these people must perform. The retention of these highly trained airmen is essential to our readiness posture and continuing world-wide presence. Antiterrorism/force protection measures to comply with the DoD interim minimum force protection standard.

CURRENT SITUATION: The base has insufficient on-base housing to accommodate the unaccompanied enlisted personnel. This project is in accordance with the Air Force Dormitory Master Plan.

IMPACT IF NOT PROVIDED: Adequate living quarters which provide a level of privacy required for today's airmen will not be available, resulting in degradation of morale, productivity, and career satisfaction for unaccompanied enlisted personnel.

ADDITIONAL: This project meets the criteria/scope specified in the new uniform barracks construction standard known as "one-plus-one," established by OSD. All known alternative options were considered during

1. COMPONENT	FY 2002 MILITARY CONSTRUCTION PROJECT DATA	2. DATE
AIR FORCE	(computer generated)	

3. INSTALLATION AND LOCATION	4. PROJECT TITLE
LANGLEY AIR FORCE BASE, VIRGINIA	DORMITORY

5. PROGRAM ELEMENT	6. CATEGORY CODE	7. PROJECT NUMBER	8. PROJECT COST ($000)
27596	721-312	MUHJ023000	8.300

:he development of this project. No other option could meet the mission requirements; therefore. no economic analysis was needed or performed. FY 99 Unaccompanied Housing RPM Conducted: $0K. FYOO Jnaccompanied Housing RPM Conducted: $130K. Future Unaccompanied Housing RPM requirements 'estimated): FY01: $672K; FY02: $672K. BASE CIVIL ENGINEER: Lt Col Gordon Janiec (757)-764-2025. Dormitory: 3,168 SM = 34,088 SF.

1. COMPONENT	FY 2002 MILITARY CONSTRUCTION PROJECT DATA	2. DATE
AIR FORCE	(computer generated)	

3. INSTALLATION AND LOCATION	
LANGLEY AIR FORCE BASE, VIRGINIA	
4. PROJECT TITLE	5. PROJECT NUMBER
DORMITORY	MUHJ023000

12. SUPPLEMENTAL DATA: **Design, Bid, Build**

a. Estimated Design Data:

(1) Status:	
(a) Date Design Started	21-MAR-00
(b) Parametric Cost Estimates used to develop costs	YES
• (c) Percent Complete as of Jan 01	**35 %**
• (d) Date 35% Designed.	15-DEC-00
(e) Date Design Complete	01 -SEP-01
(f) Energy Study/Life-Cycle analysis was/will be performed	YES
(2) Basis:	
(a) Standard of Definitive Design -	YES
(b) Where Design Was Most Recently Used -	LANGLEY AFB, VA
(3) Total Cost (c) = (a) + (b) or(d) + (e):	($000)
(a) Production of Plans and Specifications	**474**
(b) All Other Design Costs	**237**
(c) Total	711
(d) Contract	592
(e) In-house	119
(4) Construction Contract Award Date	01 Dec
(5) Construction Start	02 Mar
(6) Construction Completion	**03** Sep

• Indicates completion of Project Definition with Parametric Cost Estimate which is comparable to traditional 35% design to ensure valid scope and cost and executability.

b. Equipment associated with this project will be provided from other appropriations: N/A

1. COMPONENT	FY 2002 MILITARY CONSTRUCTION PROJECT DATA	2. DATE
AIR FORCE	(computer generated)	

3. INSTALLATION AND LOCATION	4. PROJECT TITLE
LANGLEY AIR FORCE BASE, VIRGINIA	F-22 LOW OBSERV. RESTORATION & COMP RPR FAC

5. PROGRAM ELEMENT	6. CATEGORY CODE	7. PROJECT NUMBER	8. PROJECT COST ($000)
27219	211-152	HACC023010	16,000

9. COST ESTIMATES

ITEM	U/M	QUANTITY	UNIT COST	COST ($000)
F-22 LOW OBSERV. RESTORATION AND COMPOSITE RP	LS			6,150
SMALL AIRCRAFT HANGAR	SM	3,385	1,515	(5,128
COMPOSITE REPAIR FACILITY	SM	560	1,770	(991
ANTITERORRISM FORCE PROTECTION	LS			(31
SUPPORTING FACILITIES				8.253
UTILITIES AND SITE IMPROVEMENTS	LS			(2,528
PAVEMENTS	LS			(149
PAINT BOOTH (2)	LS			(4,956'
DEMOLITION AND SOIL REMEDIATION	LS			(620
SUBTOTAL				14,403
CONTINGENCY (5.0%)				720
TOTAL CONTRACT COST				15,124
SUPERVISION, INSPECTION & OVERHEAD (5.7 %)				862
TOTAL REQUEST				15,986
TOTAL REQUEST (ROUNDED)				16,000

10. Description of Proposed Construction: Work includes concrete floor slab, special pile foundations, 3-bay steel hangar, standing seam metal roof, steel sheet and masonry siding, security and all utility support. Includes two aircraft paint booths, paint mixing room, composite repair area, special HVAC, contaminated soil abatement, relocation of communication main, and anti-terrorism/force protection measures.

Air Conditioning: 220 KW

11. REQUIREMENT: 3,945 SM ADEQUATE: SM SUBSTANDARD: 2,240 SM

PROJECT: F-22 low observable/composite repair facility. (New Mission)

REQUIREMENT: An adequate facility, properly sized and configured, for the maintenance and repair of low observable and composite materials on the F-22 is required. The F-22 is designed with state-of-the-art technology and composite materials to meet stealth mission requirements. These aircraft composites have unique materials, maintenance procedures and stringent coating application techniques that must be accomplished in a specialized facility. Due to the application techniques and environmental impacts, paint booths and a complex HVAC system is required. In addition, the classification of these materials requires the installation of security systems. This project supports personnel and equipment arrival in Mar 04 to prepare the facility for aircraft delivery in Sep 04. Delivery preparations include establishing maintenance procedures and completing security accreditation. Site requires abatement of contaminated soil. Antiterrorism/force protection measures will meet DoD interim minimum standards.

CURRENT SITUATION: There are no facilities on base that can meet or support the maintenance and repair of stealthy composite materials and the application of low observable coatings associated with the F-22 multi-roled fighter. The facilities currently used for the corrosion control of existing weapon systems are undersized and inadequate for the F-22. The washing, preparation and painting of existing assets are accomplished in three separate facilities that have no support space. In addition, these facilities do not have space to establish the critical composite repair shop. There are no excess hangars that can be converted to meet this requirement.

1. COMPONENT	FY 2002 MILITARY CONSTRUCTION PROJECT DATA	2. DATE
AIR FORCE	(computer generated)	

3. INSTALLATION AND LOCATION	4. PROJECT TITLE
LANGLEY AIR FORCE BASE, VIRGINIA	F-22 LOW OBSERV. RESTORATION & COMP RPR FAC

5. PROGRAM ELEMENT	6. CATEGORY CODE	7. PROJECT NUMBER	8. PROJECT COST ($000)
27219	211-152	HACC023010	16,000

Existing hangars throughout the flightline area are essential aircraft maintenance hangars utilized at their full capacity.

IMPACT IF NOT PROVIDED: Adequate facilities will not be available to perform essential maintenance and repair of F-22 aircraft. There are no known workarounds to maintain the F-22 at full operational capability for Expeditionary Air Force deployments. The operational readiness of the Fighter Wing will be significantly reduced and the wing may not be able to meet mission requirements.

ADDITIONAL: Force protection includes structural reinforcement of exterior walls and tempered insulated glass windows. All known alternative options were considered during the development of this project. No other option could meet the mission requirements; therefore, no economic analysis was needed or performed. A certificate of exception was prepared. This project meets the criteria/scope specified in Air Force Handbook 32-1084, “Facility Requirements.” Base Civil Engineer: Lt Col Edmond B. Keith, (757) 764-2025. Small Aircraft Hanger, 3,385 SM = 36,423 SF; Composite Repair Facility, 560 SM = 6,026 SF.

1. COMPONENT	FY 2002 MILITARY CONSTRUCTION PROJECT DATA	2. DATE
AIR FORCE	(computer generated)	

3. INSTALLATION AND LOCATION

LANGLEY AIR FORCE BASE, VIRGINIA

4. PROJECT TITLE	5. PROJECT NUMBER
'-22 LOW OBSERV. RESTORATION & COMP RPR FAC	HACC023010

12. SUPPLEMENTAL DATA: **Design, Bid, Build**

a. Estimated Design Data:

(1) Status:	
(a) Date Design Started	21-MAR-00
(b) Parametric Cost Estimates used to develop costs	YES
. (c) Percent Complete as of Jan 01	15 %
. (d) Date 35% Designed.	01 -SEP-00
(e) Date Design Complete	01 -SEP-01
(f) Energy Study/Life-Cycle analysis was/will be performed	YES
(2) Basis:	
(a) Standard of Definitive Design -	NO
(b) Where Design Was Most Recently Used -	
(3) Total Cost (c) = (a) + (b) or (d) + (e):	($000)
(a) Production of Plans and Specifications	900
(b) All Other Design Costs	**450**
(c) Total	1,350
(d) Contract	1,125
(e) In-house	**225**
(4) Construction Contract Award Date	01 Dec
(5) Construction Start	02 Mar
(6) Construction Completion	**03** Sep

. Indicates completion of Project Definition with Parametric Cost Estimate which is comparable to traditional 35% design to ensure valid scope and cost and executability.

b. Equipment associated with this project will be provided from other appropriations: **N/A**

1. COMPONENT	FY 2002 MILITARY CONSTRUCTION PROJECT DATA	2. DATE
AIR FORCE	(computer generated)	

3. INSTALLATION AND LOCATION	4. PROJECT TITLE
LANGLEY AIR FORCE BASE, VIRGINIA	F-22 OPERATIONS AND MAINTENANCE FACILITY

5. PROGRAM ELEMENT	6. CATEGORY CODE	7. PROJECT NUMBER	8. PROJECT COST ($000)
27219	211-175	HACC023011	19,000

9. COST ESTIMATES

ITEM	U/M	QUANTITY	UNIT COST	COST ($000)
F-22 SQUADRON OPERATIONS/AMU/ HANGAR	LS			10,783
SMALL ACFT MAINTENANCE DOCK	SM	4,250	1,315	(5,589
SQUADRON OPERATIONS/AMU	SM	2,641	1,389	(3,668
BASE OPERATIONS	SM	976	1,509	(1,473
ANTITERRORISM FORCE PROTECTION	LS			(53
SUPPORTING FACILITIES				6,178
UTILITIES/SITE IMPROVEMENTS/PAVEMENTS	LS			(1,850
RELOCATE AIRFIELD LIGHTING VAULT	LS			(1,200
DEMOLITION	SM	7,325	169	(1,238
REMEDIATION AND OTHER REQUIRED SUPPORT	LS			(1.890
SUBTOTAL				16,961
CONTINGENCY (5.0%)				848
TOTAL CONTRACT COST				17,809
SUPERVISION, INSPECTION & OVERHEAD (5.7 %)				1,015
TOTAL REQUEST				18,824
TOTAL REQUEST (ROUNDED)				19,000

IO. Description of Proposed Construction: Construct special foundation and pilings, brick faced masonry block walls, standing seam metal roof, secure work areas, fire suppression/detection, and HVAC. Complete lead paint/asbestos/contaminated soil abatement, demolish existing facility (7,325 SM) and support utilities. Construct airfield lighting vault. Includes antiterrorism force protection measures such as reinforced walls.

Air Conditioning: 225 KW

11. REQUIREMENT: 7,867 SM ADEQUATE: SM SUBSTANDARD: SM

PROJECT: F-22 squadron operations/AMU/hangar. (New Mission)

REQUIREMENT: A consolidated squadron operations and maintenance facility with an attached aircraft hangar is required to support the beddown of the F-22 Fighter. The F-22 is designed with state-of-the-art technology and composite materials. The F-22 requires specialized maintenance and repair procedures that must be accomplished in a secure, climate controlled work environment. This project supports personnel and equipment arrival in Mar 04 to prepare facility for aircraft delivery in Sep 04. Delivery preparations begin in Mar 04 to establish maintenance procedures, complete security accreditation, install data automation systems, computerized maintenance diagnostic equipment, furniture, phone and other appurtences. The airfield lighting vault, currently in the hangar to be demolished, must be relocated. The project site requires abatement of contaminated soil. Antiterrorism/force protection measures will be incorporated to meet the Department of Defense interim minimum MILCON standard.

CURRENT SITUATION: The base does not have adequate facilities to conduct squadron level maintenance and operations for the F-22 fighter squadron. Over the last ten years the Air Force has experienced significant restructuring of its combat wings. These changes shifted roles and responsibilities for maintaining and operating aircraft. Under the Objective Wing, the majority of aircraft maintenance was realigned from logistics to operations where the maintainers now work for the operational flying squadrons. Under the Expeditionary Air Force concept

1. COMPONENT	FY 2002 MILITARY CONSTRUCTION PROJECT DATA	2. DATE
AIR FORCE	(computer generated)	

3. INSTALLATION AND LOCATION	4. PROJECT TITLE
LANGLEY AIR FORCE BASE, VIRGINIA	F-22 OPERATIONS AND MAINTENANCE FACILITY

5. PROGRAM ELEMENT	6. CATEGORY CODE	7. PROJECT NUMBER	8. PROJECT COST ($000)
27219	211-175	HACC023011	19,000

of operations, operational squadrons are required to work, train, deploy and fight as independent squadrons from home station. Current squadron operations and maintenance facilities are geographically separated, under-sized in poor condition, and are not configured properly to support the high OPSTEMPO demanded of fighter squadrons. The existing hangars are over 70 years old and are also in very poor condition. Hangar doors do not operate properly, roofs leak, lead paint and asbestos are present, lighting is substandard, mechanical and electrical systems are inadequate, exterior masonry walls are deteriorating, and fire protection and security systems are non-existent. In addition to their poor condition, the hangars are inadequately sized and improperly configured to accommodate the wider F-22 without violating safety criteria. The hangars do not comply with required distance clearances of the current aircraft. The wider F-22 only exacerbates this problem.

IMPACT IF NOT PROVIDED: Adequate facilities will not be available to perform essential maintenance and repair of F-22 aircraft. Operational squadrons will be undersized and geographically separated from their maintenance functions creating operational deficiencies. In addition, the potential to compromise security increases with a fragmented operation. Since there are no acceptable work arounds, high **risk solutions will be** implemented that will impact ACC's operational capabilities and violate safety criteria.

ADDITIONAL: Only one alternative exists to meet this operational requirement; therefore, an economic analysis is not required. A certificate of exemption has been prepared. This project meets the criteria and scope outlined in Air Force Handbook 32-1084, "Facility Requirements." Base Civil Engineer: Lt Col Edmond B. Keith. (757) 764-2025. Squadron Operations and Maintenance; 3,059 SM = 32,915 SF; Aircraft Maintenance Hangar; 4,250 SM = 45,712 SF and Base Ops; 558 SM = 6,004 SF.

1. COMPONENT	FY 2002 MILITARY CONSTRUCTION PROJECT DATA	2. DATE
AIR FORCE	(computer generated)	

3. INSTALLATION AND LOCATION

LANGLEY AIR FORCE BASE, VIRGINIA

4. PROJECT TITLE	5. PROJECT NUMBER
F-22 OPERATIONS AND MAINTENANCE FACILITY	HACC023011

12. SUPPLEMENTAL DATA: **Design, Bid, Build**

a. Estimated Design Data:

(1) Status:	
(a) Date Design Started	21-MAR-00
(b) Parametric Cost Estimates used to develop costs	YES
. (c) Percent Complete as of Jan 01	15 %
. (d) Date 35% Designed.	01-SEP-00
(e) Date Design Complete	OI-SEP-01
(f) Energy Study/Life-Cycle analysis was/will be performed	NO
(2) Basis:	
(a) Standard of Definitive Design -	NO
(b) Where Design Was Most Recently Used -	
(3) Total Cost (c) = (a) + (b) or(d) + (e):	($000)
(a) Production of Plans and Specifications	1,080
(b) All Other Design Costs	**540**
(c) Total	1,620
(d) Contract	1,350
(e) in-house	**270**
(4) Construction Contract Award Date	01 Dec
(5) Construction Start	02 Mar
(6) Construction Completion	**03** Sep

. Indicates completion of Project Definition with Parametric Cost Estimate which is comparable to traditional 35% design to ensure valid scope and cost and executability.

b. Equipment associated with this project will be provided from other appropriations: **N/A**

1. COMPONENT	FY 2002 MILITARY CONSTRUCTION PROJECT DATA	2. DATE
AIR FORCE	(computer generated)	

3. INSTALLATION AND LOCATION	4. PROJECT TITLE
LANGLEY AIR FORCE BASE, VIRGINIA	F-22 UPGRADE FLIGHTLINE INFRASTRUCTURE

5. PROGRAM ELEMENT	6. CATEGORY CODE	7. PROJECT NUMBER	8. PROJECT COST ($000)
27219	845-362	HACC023012	4.000

9. COST ESTIMATES

ITEM	U/M	QUANTITY	UNIT COST	COST ($000)
F-22 UPGRADE FLIGHTLINE INFRASTRUCTURE	LS			**0**
SUPPORTING FACILITIES				**3.595**
FIRE PROTECTION	LS			(1.700
SEWER SYSTEM	LS			(220
COMMUNICATION	LS			(295
FLIGHTLINE SECURITY	LS			(298
ELECTRICAL DISTRIBUTION	LS			(228
ROADWAY/PARKING	LS			(346
AIRFIELD PAVEMENTS	LS			(508
SUBTOTAL				3,595
CONTINGENCY (5.0%)				180
TOTAL CONTRACT COST				3,775
SUPERVISION, INSPECTION & OVERHEAD (5.7 %)				215
TOTAL REQUEST				**3,990**
TOTAL REQUEST (ROUNDED)				4,000

10. Description of Proposed Construction: Add to, alter, repair utility systems, pavements. Work includes; new fire pump station with reservoir and distribution systems, concrete encased communication duct banks, flightline security, upgrade electrical distribution grid, roads and parking, airfield pavements, landscaping, test and abatement of contaminated soil in the way of construction.

11. REQUIREMENT: As required

PROJECT: Add to, alter, and repair utilities, pavements and security systems supporting F-22. (New Mission)

REQUIREMENT: Adequate utilities and infrastructure properly sized and configured are required to support the three phase F-22 beddown and associated MILCON projects in FY02/03/04. This beddown increases the demand on existing utility and infrastructure systems beyond current capacity. Upgrades, replacement and/or repairs to existing fire protection, power, water, sewage and flightline security systems are required for the protection, maintenance and operations of the F-22 Weapon System. This project supports FY02/03/04 F-22 MILCON projects, delivery of first aircraft in FY04 and personnel and equipment arrival in Mar 04 to prepare facility for aircraft delivery and establish maintenance procedures. This project is required in the same fiscal year as the two FY02 companion MILCON projects to construct an F-22 LO/Composite Repair Facility and F-22 operations and maintenance facility with attached 6 bay aircraft hangar.

CURRENT SITUATION: Existing fire main and pump systems are not sized to protect mission aircraft in accordance with National Fire Protection Agency (NFPA) and life safety codes. Elements of the utility systems are old and unreliable. The companion MILCON projects are adjacent to Installation Restoration Program sites. Upgrades, replacement and/or extension of utility systems will run through contaminated soil. The project will require testing, removal and abatement of the contaminated soils in way of construction. In addition, access roads and airfield pavements will be cut/trenched to support utility installations.

IMPACT IF NOT PROVIDED: Programmed companion F-22 MILCON projects will not be complete and useabfe and will impact F-22 operational and maintenance procedures. Existing utility systems, infrastructure, flightline

1. COMPONENT	FY 2002 MILITARY CONSTRUCTION PROJECT DATA	2. DATE
AIR FORCE	(computer generated)	

3. INSTALLATION AND LOCATION	4. PROJECT TITLE
LANGLEY AIR FORCE BASE, VIRGINIA	F-22 UPGRADE FLIGHTLINE INFRASTRUCTURE

5. PROGRAM ELEMENT	6. CATEGORY CODE	7. PROJECT NUMBER	8. PROJECT COST ($000)
27219	845-362	HACC023012	4,000

security systems (fences, entry control points and fighting), and fire protection systems will be undersized and unreliable to support sustained operations at the base. Base will be non-compliant in the areas of fire protection, flightline security criteria.

ADDITIONAL: All known alternative options were considered during the development of this project. No other option could meet the mission requirements; therefore, no economic analysis was needed or performed. A certificate of exemption has been prepared. This project meets the criteria/scope specified in Air Force Handbook 32-1084, "Facility Requirements." Base Civil Engineer: Lt Col Edmund B. Keith, Commercial (757) 764-2025.

1. COMPONENT AIR FORCE	FY 2002 MILITARY CONSTRUCTION PROJECT DATA (computer generated)	2. DATE

3. INSTALLATION AND LOCATION

LANGLEY AIR FORCE BASE, VIRGINIA

4. PROJECT TITLE	5. PROJECT NUMBER
F-22 UPGRADE FLIGHTLINE INFRASTRUCTURE	HACC023012

12. SUPPLEMENTAL DATA: Design, Bid, Build

a. Estimated Design Data:

(1) Status:	
(a) Date Design Started	21-MAR-00
(b) Parametric Cost Estimates used to develop costs	YES
. (c) Percent Complete as of Jan 01	15 %
. (d) Date 35% Designed.	15-SEP-00
(e) Date Design Complete	01 -SEP-01
(f) Energy Study/Life-Cycle analysis was/will be performed	YES
(2) Basis:	
(a) Standard of Definitive Design -	NO
(b) Where Design Was Most Recently Used -	
(3) Total Cost (c) = (a) + (b) or(d) + (e):	($000)
(a) Production of Plans and Specifications	228
(b) All Other Design Costs	114
(c) Total	342
(d) Contract	285
(e) In-house	57
(4) Construction Contract Award Date	01 Dec
(5) Construction Start	02 Mar
(6) Construction Completion	03 Jul

. indicates completion of Project Definition with Parametric Cost Estimate which is comparable to traditional 35% design to ensure valid scope and cost and executability.

b. Equipment associated with this project will be provided from other appropriations: N/A

1. COMPONENT AIR FORCE	FY2002	MILITARY CONSTRUCTION PROGRAM (computer generated)	2. DATE
3. INSTALLATION AND LOCATION FAIRCHILD AIR FORCE BASE, WASHINGTON	4. COMMAND AIR COMBAT COMMAND		5. AREA CONST COST INDEX 1.06

6. PERSONNEL STRENGTH	PERMANENT			STUDENTS			SUPPORTED			TOTAL
	OFF	FNI	CIV	OFF	FNI	CIV	OFF	FNI	CIV	
a. As of 30 Sep 00	391	2,941	834				264	332	122	4,884
b. End FY 2005	383	2,947	841				264	332	122	4.889

7. INVENTORY DATA $(000)

a. Total Acreage	5,823	
b. Inventory Totals as of: 30 Sep 00		490.080
c. Authorization Not Yet In Inventory:		50,760
d. Authorization Requested In this Program:		2,800
e. Authorization Included In Following Program: (FY2003)		0
f. Planned in Next Four Program Years:		23.000
a. Remainina Deficiencv:		37,000
h. Grand Total:		603,640

8. Projects Requested in this Program: FY2002

CATEGORY CODE	PROJECT TITLE	SCOPE	COST $(000)	DESIGN STATUS	CMP
610-144	Replace Munitions Maint Admin Facility	1,135 SM	$2,800	START TURN KEY	
		Total	$2,800		

9a. Future Projects: Included in the Following Program: (FY2003) No Projects

9b. Future Projects: Typically Planned Next Four Years

141-785	Consolidated Mobility Facility	8,309 SM	$15,000
61 O-243	Mission Support Complex	3,009 SM	$8,000

9c. Real Property Maintenance Backlog This Installation 70

10. Mission or Major Functions: An air refueling wing with four KC-1 35 squadrons; a UH-1 squadron; a WA ANG KC-135 squadron; home of USAF Survival School.

11. Outstanding pollution and safety (OSHA) deficiencies:

a. Air pollution	0
b. Water pollution	0
c. Occupational Safety and Health	0
d. Other Environmental	0

1. COMPONENT	FY 2002 MILITARY CONSTRUCTION PROJECT DATA	2. DATE
AIR FORCE	(computer generated)	

3. INSTALLATION AND LOCATION	4. PROJECT TITLE
FAIRCHILD AIR FORCE BASE, WASHINGTON	REPLACE MUNITIONS MAINTENANCE ADMIN FACILITY

5. PROGRAM ELEMENT	6. CATEGORY CODE	7. PROJECT NUMBER	8. PROJECT COST ($000)
22176	610-144	GJKZ000040	2,800

9. COST ESTIMATES

ITEM	U/M	QUANTITY	UNIT COST	COST ($000)
MUN MAINT ADMIN FAC	SM	1,135	1,478	1,678
MUN MAINT MAINT ADMIN	SM	1.135	1,471	(1,67(
FORCE PROTECTION	LS			(8
SUPPORTING FACILITIES				844
UTILITIES	LS			(275
PAVEMENTS	LS			(125
SITE IMPROVEMENTS	LS			(175
DEMOLISH BUILDINGS	LS			(269
SUBTOTAL				2,522
CONTINGENCY (5.0%)				126
TOTAL CONTRACT COST				2,648
SUPERVISION, INSPECTION & OVERHEAD (6 %)				159
TOTAL REQUEST				2,807
TOTAL REQUEST (ROUNDED)				2,800

10. Description of Proposed Construction: Concrete foundation, masonry walls, metal roof, environmental, safety and utility systems, site work landscaping, fire detection/protection, demolish three facilities (1,163 SM), and other necessary support.

Air Conditioning: 25 KW

11. REQUIREMENT: 1,135 SM ADEQUATE: SM SUBSTANDARD: 1,163 SM

PROJECT: Construct a Munitions Maintenance Administration (MMA) Facility.

REQUIREMENT: This project will ensure the MMA facility complies with Air Force Manual 91-201, Air Force Explosive Safety Standards, and Department of Defense 6055.9, DoD Explosive Safety Board (DDESB) surveys. Due to the life safety hazard caused by munitions operations, the MMA must be moved outside the explosive clear zone. Force protection will comply with DoD interim minimum force protection standards.

CURRENT SITUATION: The existing MMA facilities were built in 1955 and 1957 and are masonry construction. Both facilities are in the explosive clear zone of the Missile Assembly/Integrated Maintenance facility. This is in violation of Air Force and DoD explosive safety guidance and regulations. Also, during surveys in 1994 and 1997, he DDESB determined the two facilities are unsafe with respect to glass hazard overpressure limits. This project will consolidate functions into a single facility outside the explosive clear zone.

MPACT IF NOT PROVIDED: Personnel will continue to work in a hazardous environment. In the event of a najor explosion in the Missile Assembly Shop/Integrated Maintenance facility, broken glass fragments would ecome airborne projectiles and both MMA facilities would be destroyed.

ADDITIONAL: This project meets the criteria/scope specified in Air Force Handbook 32-1084, "Facility Requirements." Base Civil Engineer: Lt Col Juan Ibanez, (509) 247-2291. (Munitions Maintenance Administration Facility: 1 ,135 SM = 12,213 SF)

1. COMPONENT	FY 2002 MILITARY CONSTRUCTION PROJECT DATA	2. DATE
AIR FORCE	**(computer generated)**	

3. INSTALLATION AND LOCATION

FAIRCHILD AIR FORCE BASE, WASHINGTON

4. PROJECT TITLE	5. PROJECT NUMBER
REPLACE MUNITIONS MAINTENANCE ADMIN FACILITY	GJKZ000040

12. SUPPLEMENTAL DATA: **Design Build**

a. Estimated Design Data:

(1) Project to be accomplished by design-build procedures	
(2) Basis:	
(a) Standard of Definitive Design -	NO
(b) Where Design Was Most Recently Used -	
(3) Design Allowance	112
(4) Construction Contract Award Date	02 May
(5) Construction Start	02 Jul
(6) Construction Completion	03 Oct
(7) Energy Study/Life-Cycle analysis was/will be performed	YES

b. Equipment associated with this project will be provided from other appropriations: **N/A**

1. COMPONENT AIR FORCE	FY2002	MILITARY CONSTRUCTION PROGRAM (computer generated)	2. DATE
3. INSTALLATION AND LOCATION MCCHORD AIR FORCE BASE, WASHINGTON	4. COMMAND AIR MOBILITY COMMAND		5. AREA CONST COST INDEX 1.06

6. PERSONNEL STRENGTH	PERMANENT			STUDENTS			SUPPORTED			TOTAL
	OFF	FNI	CIV	OFF	FNI	CIV	OFF	FNL	CIV	
a. As of 30 Sep 00	475	3,256	1,220				3	6	112	5,072
b. End FY 2005	441	3,158	1.219				3	6	112	4,939

7. INVENTORY DATA $(000)

a. Total Acreage	4,639	
b. Inventory Totals as of: 30 Sep 00		350.004
c. Authorization Not Yet In Inventory:		114,393
d. Authorization Requested In this Program:		20,700
e. Authorization Included In Following Program: (FY2003)		0
f. Planned in Next Four Program Years:		15.144
a. Remainina Deficiencv:		67.400
h. Grand Total:		567,641

8. Projects Requested in this Program: FY2002

CATEGORY CODE	PROJECT TITLE	SCOPE		COST $(000)	DESIGN START	STATUS CMP
211-173	C-I 7 Extend Nose Docks	1,400	SM	$4,900	JAN 01	SEP 01
6 1 O-249	Add/Alter Mission Support Center, Ph 1	11,750	SM	$15,800	JUL 01	MAY 02
			Total	$20,700		

9a. Future Projects: Included in the Following Program: (FY2003) No Projects

9b. Future Projects: Typically Planned Next Four Years

141-785	Mission Support Center, Ph 2	11,272	SM	$15,144

9c. Real Property Maintenance Backlog This Installation 41

10. Mission or Major Functions: An airlift wing with three C-17/C-141 squadrons; an Air Force Reserve Command C-141 associate airlift wing; and the Western Air Defense Sector.

11. Outstanding pollution and safety (OSHA) deficiencies:

a. Air pollution	0
b. Water pollution	0
c. Occupational Safety and Health	0
d. Other Environmental	0

1. COMPONENT	FY 2002 MILITARY CONSTRUCTION PROJECT DATA	2. DATE
AIR FORCE	(computer generated)	

3. INSTALLATION AND LOCATION	4. PROJECT TITLE
MCCHORD AIR FORCE BASE, WASHINGTON	ADD/ALTER MISSION SUPPORT CENTER, PH 1

5. PROGRAM ELEMENT	6. CATEGORY CODE	7. PROJECT NUMBER	8. PROJECT COST ($000)
41976	6 1 O-249	PQWY903001R1	15.800

9. COST ESTIMATES

ITEM	U/M	QUANTITY	UNIT COST	COST ($000)
ADD TO AND ALTER MISSION SUPORT CENTER	LS			7,677
ALTERATION	SM	11,750	624	(7,332
ADDITION	SM	651	339	(221
AT/FP PHYSICAL SECURITY MEASURES	SM	12,401	10	(124
SUPPORTING FACILITIES				6,541
UTILITIES/COMM SUPPORT	LS			(1,600'
SITE IMPROVEMENTS/PAVEMENTS/SEISMIC UP	LS			(2.659:
TEMPORARY FACILITIES	SM	3,253	323	(1,051)
ASBESTOS/LEAD BASE PAINT REMOVAL	SM	11,750	58	(682;
ELEVATORS	EA	2	275,000	(550)
SUBTOTAL				14,218
CONTINGENCY (5.0%)				711
TOTAL CONTRACT COST				14,929
SUPERVISION, INSPECTION & OVERHEAD (5.7 %)				851
TOTAL REQUEST				15,780
TOTAL REQUEST (ROUNDED)				15,800
EQUIPMENT FROM OTHER APPROPRIATIONS				(1,580)

10. Description of Proposed Construction: All architectural, electrical and mechanical work to provide an adequate facility. Includes demo of non-structural interior partitions to provide open space. Install fire supression, detection systems, seismic upgrade, and wiring to accommodate info and communication systems, handicap access and support. Includes physical security (AT/FP) in compliance with DoD minimum construction standards.

11. REQUIREMENT: 23,673 SM ADEQUATE: SM SUBSTANDARD: 23,022 SM

PROJECT: Add to and alter mission support center. (Current Mission)

REQUIREMENT: An adequately configured facility is required to consolidate Wing, Group Headquarters, and community support functions. Repairs are required to correct life safety code violations to maintain optimum facility operations, and to maintain the physical plant and facility standards which are consistent with Air Force facility excellence guidelines.

CURRENT SITUATION: This project alters a facility which was designed and built as a 1,000 person barracks in 1940. Building construction of the 1940s era does not meet energy, seismic, and other building code standards and requirements. Subsequent extension of the side corridors into the open bay rooms of the building has resulted in an excessive and inefficient space allocation for internal circulation with small offices located on either side of the corridors. Additionally, due to the large volume of customers planned for this facility, separate and increased access to the various areas of the building are required for effective space utilization. Due to the change of occupancy from barracks to administrative use, toilets, stairwells, and corridors far exceed space requirements. Facility earthquake resistance does not meet current seismic code requirements, and lead and asbestos abatement are necessary to ensure a hazard-free workplace and customer service environment. The existing infrastructure and deteriorated building systems are ineffective to support minimum administrative facility standards. Many base community support functions such as Accounting and Finance, Family Support, Civilian Personnel and Post Office are currently located in widely dispersed, undersized, functionally inadequate WWII

1. COMPONENT	FY 2002 MILITARY CONSTRUCTION PROJECT DATA	2. DATE
AIR FORCE	(computer generated)	

3. INSTALLATION AND LOCATION	4. PROJECT TITLE
MCCHORD AIR FORCE BASE, WASHINGTON	ADD/ALTER MISSION SUPPORT CENTER, PH 1

5. PROGRAM ELEMENT	6. CATEGORY CODE	7. PROJECT NUMBER	8. PROJECT COST ($000)
41976	61 O-249	PQWY903001 R1	15,800

and Korean War era facilities. Revitalization of the mission support center will allow demolition of six of these buildings totaling 3,984 square meters after the completion of Phase II facility upgrades. The estimated replacement cost of this facility is approximately $50M.

IMPACT IF NOT PROVIDED: Numerous base functions will continue to operate from substandard World War II and Korean War wood facilites. This will result in excessive operations, maintenance, and energy expenditures during a time when these funds are very limited.

ADDITIONAL: There is no criteria/scope for this project in Part II of Military Handbook 1190, "Facility Planning and Design Guide." However, this project does meet the criteria/scope specified in Air Force Handbook 32-1084. "Civil Engineering Facility Requirements." An economic analysis has been prepared comparing all reasonable options for accomplishing this project (status quo, addition/alteration, and new construction). This analysis indicates the add/alter alternative is the most cost effective over the life of the project. Base Civil Engineer: Lt Col Brian J. Gallagher, (253) 984-2294. Mission Support Facility: 12,401 SM = 133,480 SF.

1. COMPONENT	FY 2002 MILITARY CONSTRUCTION PROJECT DATA	2. DATE
AIR FORCE	(computer generated)	

3. INSTALLATION AND LOCATION

MCCHORD AIR FORCE BASE, WASHINGTON

4. PROJECT TITLE	5. PROJECT NUMBER
ADD/ALTER MISSION SUPPORT CENTER, PH 1	PQWY903001 R1

12. SUPPLEMENTAL DATA: **Design, Bid, Build**

a. Estimated Design Data:

(1) Status:	
(a) Date Design Started	10-JUL-01
(b) Parametric Cost Estimates used to develop costs	YES
. (c) Percent Complete as of Jan 01	1 %
. (d) Date 35% Designed.	01 -DEC-01
(e) Date Design Complete	30-MAY-02
(f) Energy Study/Life-Cycle analysis was/will be performed	YES
(2) Basis:	
(a) Standard of Definitive Design -	NO
(b) Where Design Was Most Recently Used -	
(3) Total Cost (c) = (a) + (b) or(d) + (e):	($000)
(a) Production of Plans and Specifications	948
(b) All Other Design Costs	**474**
(c) Total	1,422
(d) Contract	1,185
(e) In-house	**237**
(4) Construction Contract Award Date	**02** Aug
(5) Construction Start	**02** Sep
(6) Construction Completion	**04** Oct

. Indicates completion of Project Definition with Parametric Cost Estimate which is comparable to traditional 35% design to ensure valid scope and cost and executability.

b. Equipment associated with this project will be provided from other appropriations:

EQUIPMENT NOMENCLATURE	PROCURING APPROPRIATION	FISCAL YEAR APPROPRIATED OR REQUESTED	COST ($000)
EQUIPMENT OTHER	**3010**	**2002**	1580

1. COMPONENT	FY 2002 MILITARY CONSTRUCTION PROJECT DATA	2. DATE
AIR FORCE	(computer generated)	

3. INSTALLATION AND LOCATION	4. PROJECT TITLE
MCCHORD AIR FORCE BASE, WASHINGTON	C-I 7 EXTEND NOSE DOCKS

5. PROGRAM ELEMENT	6. CATEGORY CODE	7. PROJECT NUMBER	8. PROJECT COST ($000)
41130	211-173	PQWY023050R1	4.900

9. COST ESTIMATES

ITEM	U/N	QUANTITY	UNIT COST	COST ($000)
C-17 EXTEND NOSE DOCKS	LS			3.49:
LARGE AIRCRAFT MAINTENANCE DOCKS (2)	SM	1,400	2,208	(3,091
APERTURE DOORS	LS			(40(
SUPPORTING FACILITIES				93c
UTILITIES	LS			(39E
PAVEMENTS	LS			(186
SITE IMPROVEMENTS	LS			(219
COMM SUPPORT	LS			(97
DEMOLITION	LS			(30
SUBTOTAL				4,421
CONTINGENCY (5.0 %)				221
TOTAL CONTRACT COST				4.642
SUPERVISION, INSPECTION & OVERHEAD (5.7 %)				265
TOTAL REQUEST				4,907
TOTAL REQUEST (ROUNDED)				4,900

10. Description of Proposed Construction: Reinforced concrete foundation and floor slab. Steel frame with metal panel siding and roof. Extend fire suppression/detection, electrical and mechanical systems and necessary support to include prewiring of communication requirement. Includes utility work, vehicle parking, landscaping, and necessary support. Minor demolition for alteration.

Air Conditioning: 7 KW

11. REQUIREMENT: LS ADEQUATE: LS SUBSTANDARD: LS

PROJECT: C-17 Extend nose docks. (New Mission)

REQUIREMENT: Two adequately sized and configured maintenance facilities are required to support the beddown of 48 C-17 aircraft at McChord AFB. Covered space is required for aircraft jacking, inspection, repair and maintenance of C-17 aircraft.

CURRENT SITUATION: C-17 aircraft and support equipment required to work on the aircraft cannot physically fit into the existing C-141 nose docks. The existing nose docks are too shallow to accommodate the larger C-17 aircraft. An addition is required to allow the doors to be closed behind the aircraft wings. The doors of the facilities must be modified to provide a "soft closure" around the C-17 fuselage.

IMPACT IF NOT PROVIDED: Adequate aircraft maintenance operations cannot be performed on the C-17 aircraft. It will not be possible to meet the aircraft utilization rates of the 48 assigned C-17 aircraft unless this project is accomplished.

ADDITIONAL: This project does meet the criteria/scope specified in Air Force Handbook 32-I 084, "Facility Requirements." A preliminary analysis of reasonable options for accomplishing this project was done. It indicates that adding to existing facilities will meet operational requirements. Because of this a full economic analysis was rrot performed. A certificate of exemption has been prepared. BASE CIVIL ENGINEER: Lt Col Brian Bodner, (253) 984-5209. Maintenance Docks: 1,400 SM = 15,069 SF

1. COMPONENT AIR FORCE	FY 2002 MILITARY CONSTRUCTION PROJECT DATA (computer generated)	2. DATE
3. INSTALLATION AND LOCATION MCCHORD AIR FORCE BASE, WASHINGTON		
4. PROJECT TITLE Z-17 EXTEND NOSE DOCKS		5. PROJECT NUMBER PQWY023050R1

12. SUPPLEMENTAL DATA: **Design, Bid, Build**

a. Estimated Design Data:

(1) Status:	
(a) Date Design Started	1 g-JAN-01
(b) Parametric Cost Estimates used to develop costs	YES
. (c) Percent Complete as of Jan 01	**35 %**
. (d) Date 35% Designed.	15-MAY-01
(e) Date Design Complete	30-SEP-01
(f) Energy Study/Life-Cycle analysis was/will be performed	YES
(2) Basis:	
(a) Standard of Definitive Design -	YES
(b) Where Design Was Most Recently Used -	MCCHORD
(3) Total Cost (c) = (a) + (b) or(d) + (e):	($000)
(a) Production of Plans and Specifications	**270**
(b) All Other Design Costs	49
(c) Total	319
(d) Contract	**245**
(e) In-house	**74**
(4) Construction Contract Award **Date**	**01 Nov**
(5) Construction Start	02 Jan
(6) Construction Completion	03 Jan

***** Indicates completion of Project Definition with Parametric Cost Estimate which is comparable to traditional 35% design to ensure valid scope and cost and executability.

b. Equipment associated with this project will be provided from other appropriations: **N/A**

1. COMPONENT AIR FORCE	FY2002 MILITARY CONSTRUCTION PROGRAM (computer generated)	2. DATE
3. INSTALLATION AND LOCATION FRANCIS E WARREN AIR FORCE BASE, WYOMING	4. COMMAND AIR FORCE SPACE COMMAND	5. AREA CONST COST INDEX 1.01

6. PERSONNEL STRENGTH	PERMANENT			STUDENTS			SUPPORTED			TOTAL
	OFF	ENI	CIV	OFF	FNI	CIV	OFF	FNI	CIV	
a. As of 30 Sep 00	528	2,781	758				1	1	72	4,141
b. End FY 2005	527	2,737	758				1	1	72	4.096

7. INVENTORY DATA $(000)

a. Total Acreage	5,866	
b. Inventory Totals as of: 30 Sep 00		242.488
c. Authorization Not Yet In Inventory:		28,466
d. Authorization Requested In this Program:		10,200
e. Authorization Included In Following Program: (FY2003)		0
f. Planned in Next Four Program Years:		33.581
a. Remainina Deficiency:		117.300
h. Grand Total:		432.035

3. Projects Requested in this Program: FY2002

CATEGORY CODE	PROJECT TITLE	SCOPE	COST $(000)	DESIGN START	STATUS CMP
740-674	Fitness Center	5,051 SM	$10.200		TURN KEY
		Total	$10,200		

)a. Future Projects: Included in the Following Program: (FY2003) No Projects

)b. Future Projects: Typically Planned Next Four Years

141-185	Helicopter Operations Facility	3,078 SM	$11,500
740-443	Renovate Buildings For TLFs	6,700 SM	$7,680
871-183	Upgrade Stormwater Drainage System	1 LS	$14,401

c. Real Property Maintenance Backlog This Installation 105

0. Mission or Major Functions: Headquarters Twentieth Air Force; an Air Force Space Command space wing consisting of one Peacekeeper and three Minuteman III intercontinental ballistic missile squadrons with UH-1 aircraft; and Air National Guard command and control & mobile command and control squadrons.

1. Outstandinq pollution and safety (OSHA) deficiencies:

a. Air pollution	0
b. Water pollution	4,000
c. Occupational Safety and Health	0
d. Other Environmental	2,702

1. COMPONENT	FY 2002 MILITARY CONSTRUCTION PROJECT DATA	2. DATE
AIR FORCE	(computer generated)	

3. INSTALLATION AND LOCATION	4. PROJECT TITLE
FRANCIS E WARREN AIR FORCE BASE, WYOMING	FITNESS CENTER

5. PROGRAM ELEMENT	6. CATEGORY CODE	7. PROJECT NUMBER	8. PROJECT COST ($000)
35996	740-674	GHLN993008	10,200

9. COST ESTIMATES

ITEM	U/M	QUANTITY	UNIT COST	COST ($000)
FITNESS CENTER	SM	1	7,869,000	7,869
(2)FITNESS CENTER	SM	5,051	1,550	(7,829
ANTITERRORISM FORCE PROTECTION	SM	5,051	8	(40
SUPPORTING FACILITIES				1,286
SITE IMPROVEMENTS	LS			(451
UTILITIES	LS			(455
PAVEMENTS	LS			(380
SUBTOTAL				9,155
CONTINGENCY (5.0%)				458
TOTAL CONTRACT COST				9,613
SUPERVISION, INSPECTION &OVERHEAD (5.7 %)				548
TOTAL REQUEST				10,161
TOTAL REQUEST (ROUNDED)				10,200

10. Description of Proposed Construction: Single story with concrete foundation/slab, masonry walls, and steel frame/metal roof. Includes a lobby, administration, locker rooms, gymnasium, group exercise, fitness equipment spaces, racqetball courts, a Health and Wellness Center (HAWC), and all other support. Comply with DoD interim minimum force protection construction standard.

Air Conditioning: 320 KW

11. REQUIREMENT: 5,051 LS ADEQUATE: LS SUBSTANDARD: 4,465 LS

PROJECT: Construct a fitness center. (Current Mission)

REQUIREMENT: A modern fitness facility is required to promote readiness, fitness, morale, and quality of life for military members by providing effective, efficient, and pleasent spaces for exercise, training, sports, and health and wellness testing. Physical well-being and good morale, contribute to developing the self-confidence and physical strength required during contingencies. Comply with DoD interim minimum force protection construction standard.

CURRENT SITUATION: Fitness facilities at F E Warren AFB are old, inefficient and geographically separated. The internal configuration of the facilities are not adequate to accomodate modern fitness and training equipment such as weight and cardio machines. Poor ventilation and the lack of air conditioning allows an atmosphere of thick stale air in workout areas. An awkward layout of spaces causes the fitness centers to feel cramped. Geographic separation of facilities causes members to either move between facilities or not get an optimal workout. This has a negative impact on members who use the facilities considering the weather in Wyoming is often cold and windy.

IMPACT IF NOT PROVIDED: Members will be forced to continue using substandard and inefficient facilities for fitness and sporting activities adversely impacting military fitness requirements. The health, physical well-being, and morale which are essential to the development and retention of personnel will continue to suffer.

ADDITIONAL: This project meets the criteria/scope specified in the USAF Fitness Facilities Design Guide, October 1999. All known alternative options were considered during the development of this project. No other option could meet the mission requirements; therefore, no economic analysis was needed or performed. A

1. COMPONENT	FY 2002 MILITARY CONSTRUCTION PROJECT DATA	2. DATE
AIR FORCE	(computer generated)	

3. INSTALLATION AND LOCATION	4. PROJECT TITLE
FRANCIS E WARREN AIR FORCE BASE, WYOMING	FITNESS CENTER

5. PROGRAM ELEMENT	6. CATEGORY CODE	7. PROJECT NUMBER	8. PROJECT COST ($000)
35996	740-674	GHLN993008	10,200

certificate of exception has been prepared. Base Civil Engineer: Lt Col Carlos Cruz-Gonzalez, (307) 775-3600. Fitness Center: 5,051 SM = 54,369 SF. Design Build - Design Cost (4% of Subtotal Cost): $366,000.

1. COMPONENT AIR FORCE	FY 2002 MILITARY CONSTRUCTION PROJECT DATA (computer generated)	2. DATE
3. INSTALLATION AND LOCATION FRANCIS E WARREN AIR FORCE BASE, WYOMING		
4. PROJECT TITLE FITNESS CENTER		5. PROJECT NUMBER GHLN993008

12. SUPPLEMENTAL DATA: **Design Build**

a. Estimated Design Data:

(1) Project to be accomplished by design-build procedures	
(2) Basis:	
(a) Standard of Definitive Design -	NO
(b) Where Design Was Most Recently Used -	
(3) Design Allowance	408
(4) Construction Contract Award Date	01 Nov
(5) Construction Start	02 Jan
(6) Construction Completion	03 Jun
(7) Energy Study/Life-Cycle analysis was/will be performed	YES

b. Equipment associated with this project will be provided from other appropriations: **N/A**

1. COMPONENT AIR FORCE	FY2002 MILITARY CONSTRUCTION PROGRAM (computer generated)	2. DATE
3. INSTALLATION AND LOCATION CLASSIFIED LOCATION	4. COMMAND	5. AREA CONST COST INDEX 1

6. PERSONNEL STRENGTH	PERMANENT			STUDENTS			SUPPORTED			TOTAL
	OFF	ENI	CIV	OFF	ENI	CIV	OFF	ENI	CIV	
a. As of 30 Sep 00										0
b. End FY 2005										0

7. INVENTORY DATA $(000)

a. Total Acreage	
b. Inventory Totals as of: 30 Sep 00	0
c. Authorization Not Yet In Inventory:	0
d. Authorization Requested In this Program:	4,458
e. Authorization Included In Following Program: (FY2003)	1,993
f. Planned in Next Four Program Years:	3.000
g. Remaining Deficiency:	0
h. Grand Total:	9,451

I. Projects Requested in this Program: FY2002

CATEGORY CODE	PROJECT TITLE	SCOPE		COST $(000)	DESIGN START	STATUS CMP
100-000	Tactical Unit Detachment Facility	1	LS	$4,458	Jun 01	Apr 02
			Total	$4,458		

a. Future Projects: Included in the Following Program: (FY2003)

100-000	Classified MILCON Project	1	LS	$1,993
			Total	$1,993

b. Future Projects: Typically Planned Next Four Years

100-000	Classified	0	$3,000

c. Real Property Maintenance Backlog This Installation 0

1. Outstanding pollution and safety (OSHA) deficiencies:

a. Air pollution	0
b. Water pollution	0
c. Occupational Safety and Health	0
d. Other Environmental	0

1. COMPONENT	FY 2002 MILITARY CONSTRUCTION PROJECT DATA	2. DATE
AIR FORCE	(computer generated)	

3. INSTALLATION AND LOCATION	4. PROJECT TITLE
HQ USAF, UNKNOWN	TACTICAL UNIT DETACHMENT FACILITY

5. PROGRAM ELEMENT	6. CATEGORY CODE	7. PROJECT NUMBER	8. PROJECT COST ($000)
27248	100-000	PAYZ020003	4,458

9. COST ESTIMATES

ITEM	U/M	QUANTITY	UNIT COST	COST ($000)
SPECIAL TACTICAL UNIT DETACHMENT FACILITY	LS			4,458
SUBTOTAL				4,458
TOTAL CONTRACT COST				4,458
TOTAL REQUEST				4,458
TOTAL REQUEST (ROUNDED)				4,468

10. Description of Proposed Construction:

II. REQUIREMENT: LS ADEQUATE: LS SUBSTANDARD: LS

REQUIREMENT: Special Access Required.

1. COMPONENT AIR FORCE	FY 2002 MILITARY CONSTRUCTION PROJECT DATA (computer generated)	2. DATE
3. INSTALLATION AND LOCATION HQ USAF, UNKNOWN		
4. PROJECT TITLE TACTICAL UNIT DETACHMENT FACILITY		5. PROJECT NUMBER PAYZ020003

12. SUPPLEMENTAL DATA: **Design, Bid, Build**

a. Estimated Design Data:

(1) Status:	
(a) Date Design Started	25-Jun-01
(b) Parametric Cost Estimates used to develop costs	
. (c) Percent Complete as of Jan 01	1 %
. (d) Date 35% Designed.	08-Oct-01
(e) Date Design Complete	28-Apr-02
(f) Energy Study/Life-Cycle analysis was/will be performed	YES
(2) Basis:	
(a) Standard of Definitive Design -	NO
(b) Where Design Was Most Recently Used -	
(3) Total Cost (c) = (a) + (b) or(d) + (e):	($000)
(a) Production of Plans and Specifications	**267**
(b) All Other Design Costs	134
(c) Total	401
(d) Contract	**334**
(e) In-house	**67**
(4) Construction Contract Award Date	02 Mar
(5) Construction Start	**02** May
(6) Construction Completion	**03** Aug

. Indicates completion of Project Definition with Parametric Cost Estimate which is comparable to traditional 35% design to ensure valid scope and cost and executability.

b. Equipment associated with this project will be provided from other appropriations: **N/A**