



Department of the Air Force

Military Construction Program

**Fiscal Year (FY) 2022
Budget Estimates**

**Justification Data Submitted to
Congress May 2021**

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(Tab 1) - Table of Contents

**DEPARTMENT OF THE AIR FORCE
MILITARY CONSTRUCTION PROGRAM FISCAL YEAR 2022
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(Tab 2) - Program Summary

**DEPARTMENT OF THE AIR FORCE
MILITARY CONSTRUCTION AND MILITARY FAMILY HOUSING FISCAL YEAR 2022
PROGRAM SUMMARY**

	Authorization Request <u>(\$000s)</u>	Appropriation Request <u>(\$000s)</u>
Military Construction		
Baseline Major Construction	1,408,100	1,814,505
Unspecified Minor Construction (10 USC 2805)	-	58,884
Planning and Design (10 USC 2807)	-	229,301
Total Military Construction	1,749,200	2,102,690
Military Family Housing		
New Construction	-	-
Improvements	105,258	105,258
Planning and Design	10,458	10,458
Subtotal	115,716	115,716
Operations, Utilities and Maintenance	292,650	292,650
Operations	107,228	107,228
Utilities	43,668	43,668
Maintenance	141,754	141,754
Privatization	23,275	23,275
Leasing	9,520	9,520
Subtotal	325,445	325,445
Total Military Family Housing	446,876	446,876
Grand Total Air Force	2,196,076	2,549,566

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(Tab 3) - State Summary

**DEPARTMENT OF THE AIR FORCE
MILITARY CONSTRUCTION PROGRAM FISCAL YEAR 2022
INDEX - INSIDE THE US
(DOLLARS IN THOUSANDS)**

STATE	INSTALLATION	PROJECT	AUTHORIZATION APPROPRIATION		
			REQUEST	REQUEST	
ALASKA	JB Elmendorf-Richardson	Extend Runway 16/34, Inc 1		79,000	
			JB Elmendorf-Richardson TOTAL:	251,000	
			ALASKA TOTAL:	251,000	
ARIZONA	Davis Monthan	South Wilmot Gate		13,400	
			Davis Monthan TOTAL:	13,400	
	Luke	F-35A ADAL AMU Facility Squadron #6 F-35A Squadron Operations Facility #6		28,000	
			Luke TOTAL:	49,000	
			ARIZONA TOTAL:	62,400	
CALIFORNIA	Edwards	Flight Test Engineering Lab Complex		4,000	
			Edwards TOTAL:	4,000	
	Vandenberg	GBSD Re-Entry Vehicle Facility GBSD Stage Processing Facility		48,000	
				19,000	
			Vandenberg TOTAL:	67,000	
			CALIFORNIA TOTAL:	71,000	
DISTRICT OF COLUMBIA	JB Anacostia-Bolling	Joint Air Defense Operations Center Phase II		24,000	
			JB Anacostia-Bolling TOTAL:	24,000	
LOUISIANA	Barksdale	Weapons Generation Facility, Inc 1		40,000	
			Barksdale TOTAL:	272,000	
MARYLAND	JB Andrews	Fire Crash Rescue Station		26,000	
			JB Andrews TOTAL:	26,000	
MASSACHUSETTS	Hanscom	NC3 Acquisitions Management Facility		66,000	
			Hanscom TOTAL:	66,000	
OKLAHOMA	Tinker	KC-46A 3-Bay Depot Maintenance Hangar		160,000	
			Tinker TOTAL:	160,000	
SOUTH DAKOTA	Ellsworth	B-21 2-Bay LO Restoration Facility, Inc 2		91,000	
		B-21 ADAL Flight Simulator	24,000	24,000	
		B-21 Field Training Detachment Facility	47,000	47,000	
		B-21 Formal Training Unit/AMU	70,000	70,000	
		B-21 Mission Operations Planning Facility	36,000	36,000	
		B-21 Washrack & Maintenance Hangar	65,000	65,000	
		Ellsworth TOTAL:	242,000	333,000	
			SOUTH DAKOTA TOTAL:	242,000	
TEXAS	JBSA-Lackland	BMT Recruit Dormitory 8, Inc 3 BMT Recruit Dormitory 7		31,000	
				141,000	
				JBSA-Lackland TOTAL:	172,000
	Sheppard	Child Development Center		20,000	
			Sheppard TOTAL:	20,000	
			TEXAS TOTAL:	192,000	
UTAH	Hill	GBSD Organic Software Sustainment Ctr, Inc 2		31,000	
			Hill TOTAL:	31,000	
			INSIDE THE US TOTAL:	1,331,400	

**DEPARTMENT OF THE AIR FORCE
MILITARY CONSTRUCTION PROGRAM FISCAL YEAR 2022
INDEX - OUTSIDE THE US
(DOLLARS IN THOUSANDS)**

STATE	INSTALLATION	PROJECT	AUTHORIZATION REQUEST	APPROPRIATION REQUEST	
AUSTRALIA	RAAF Darwin	Squadron Operations Facility	7,400	7,400	
			7,400	7,400	
	RAAF Tindal	Aircraft Maintenance Support Facility	6,200	6,200	
		Squadron Operations Facility	8,200	8,200	
		RAAF Tindal TOTAL:	14,400	14,400	
	AUSTRALIA TOTAL:	21,800	21,800		
GERMANY	Spangdahlem	F/A-22 LO/Composite Repair Facility	-	22,625	
			-	22,625	
		Spangdahlem TOTAL:	-	22,625	
	GERMANY TOTAL:	-	22,625		
GUAM	JRM-Andersen	Airfield Damage Repair Warehouse	30,000	30,000	
		Hayman Munitions Storage Igloos, MSA 2	-	9,824	
		Munitions Storage Igloos IV	55,000	55,000	
			JRM-Andersen TOTAL:	85,000	94,824
			GUAM TOTAL:	85,000	94,824
HUNGARY	Keckskemet	ERI: Construct Airfield Upgrades	-	20,564	
		ERI: Construct Parallel Taxiway	-	38,650	
			-	59,214	
		Keckskemet TOTAL:	-	59,214	
		HUNGARY TOTAL:	-	59,214	
JAPAN	Kadena	Airfield Damage Repair Storage Facility	38,000	38,000	
		Replace Munitions Structures	-	26,100	
		Helicopter Rescue Ops Maintenance Hangar	168,000	168,000	
			Kadena TOTAL:	206,000	232,100
	Misawa	Airfield Damage Repair Facility	25,000	25,000	
		Misawa TOTAL:	25,000	25,000	
	Yokota	C-130J Corrosion Control Hangar	-	67,000	
		Construct CATM Facility	-	25,000	
		Yokota TOTAL:	-	92,000	
	JAPAN TOTAL:	231,000	349,100		
SPAIN	Moron	EDI-Hot Cargo Pad	-	8,542	
			-	8,542	
		Moron TOTAL:	-	8,542	
	SPAIN TOTAL:	-	8,542		
UNITED KINGDOM	RAF Fairford	EDI-CONSTRUCT DABS-FEV STORAGE	-	94,000	
			-	94,000	
		RAF Fairford TOTAL:	-	94,000	
	RAF Lakenheath	F-35A Munition Inspection Facility	31,000	31,000	
		F-35A Weapons Load Training Facility	49,000	49,000	
	RAF Lakenheath TOTAL:	80,000	80,000		
	UNITED KINGDOM TOTAL:	80,000	174,000		
	OUTSIDE THE US TOTAL:	417,800	730,105		
WORLDWIDE UNSPECIFIED	Various Locations	EDI: Planning and Design	-	648	
		Planning And Design	-	228,653	
		Unspecified Minor Military Construction	-	58,884	
			-	288,185	
		WORLDWIDE UNSPECIFIED TOTAL:	-	288,185	
	INSIDE THE US TOTAL:	1,331,400	1,084,400		
	OUTSIDE THE US TOTAL:	417,800	730,105		
	WORLDWIDE UNSPECIFIED TOTAL:	-	288,185		
	FY 2022 TOTAL:	1,749,200	2,102,690		

(Tab 4) - New Mission/Current Mission

**DEPARTMENT OF THE AIR FORCE
MILITARY CONSTRUCTION PROGRAM FISCAL YEAR 2022
NEW AND CURRENT MISSION**

DEFINITIONS OF NEW AND CURRENT MISSION

NEW MISSION PROJECTS – New mission projects all support new and additional programs or initiatives that do not revitalize the existing physical plant. These projects support the deployment and bed-down of new weapons systems: new or additional aircraft, missile and space projects; new equipment, e.g. radar, communication, computer satellite tracking and electronic security.

CURRENT MISSION PROJECTS – These projects revitalize the existing facility plant by replacing or upgrading existing facilities and alleviating long-standing deficiencies not generated by new missions or equipment. Included are projects to improve the quality of life, upgrade the workplace, enhance productivity and achieve compliance with environmental, health and safety standards.

<u>FY22</u>	Appropriation Request <u>(\$000)</u>
NEW MISSION	1,409,105
CURRENT MISSION	405,400
PLANNING & DESIGN	229,301
MINOR CONSTRUCTION	58,884
TOTAL:	2,102,690

**DEPARTMENT OF THE AIR FORCE
MILITARY CONSTRUCTION PROGRAM FISCAL YEAR 2022
INDEX - CURRENT/NEW MISSION BREAKOUT
(DOLLARS IN THOUSANDS)**

STATE/COUNTRY	INSTALLATION	PROJECT	APPROPRIATION	TYPE
			REQUEST	
ALASKA	JB Elmendorf-Richardson	Extend Runway 16/34, Inc 1	79,000	CM
ARIZONA	Davis-Monthan	South Wilmot Gate	13,400	CM
CALIFORNIA	Edwards	Flight Test Engineering Lab Complex	4,000	CM
JAPAN	Yokota	Construct CATM Facility	25,000	CM
MARYLAND	JB Andrews	Fire Crash Rescue Station	26,000	CM
MASSACHUSETTS	Hanscom	NC3 Acquisitions Management Facility	66,000	CM
TEXAS	JBSA-Lackland	BMT Recruit Dormitory 7	141,000	CM
TEXAS	JBSA-Lackland	BMT Recruit Dormitory 8, Inc 3	31,000	CM
TEXAS	Sheppard	Child Development Center	20,000	CM
Current Mission TOTAL			405,400	

STATE/COUNTRY	INSTALLATION	PROJECT	APPROPRIATION	TYPE
			REQUEST	
ARIZONA	Luke	F-35A ADAL AMU Facility Squadron #6	28,000	NM
ARIZONA	Luke	F-35A Squadron Operations Facility #6	21,000	NM
AUSTRALIA	RAAF Darwin	Squadron Operations Facility	7,400	NM
AUSTRALIA	RAAF Tindal	Aircraft Maintenance Support Facility	6,200	NM
AUSTRALIA	RAAF Tindal	Squadron Operations Facility	8,200	NM
CALIFORNIA	Vandenberg	GBSD Re-Entry Vehicle Facility	48,000	NM
CALIFORNIA	Vandenberg	GBSD Stage Processing Facility	19,000	NM
DISTRICT OF COLUMBIA	JB Anacostia-Bolling	Joint Air Defense Operations Center Phase II	24,000	NM
GERMANY	Spangdahlem	F/A-22 LO/Composite Repair Facility	22,625	NM
GUAM	JRM-Andersen	Airfield Damage Repair Warehouse	30,000	NM
GUAM	JRM-Andersen	Hayman Munitions Storage Igloos, MSA 2	9,824	NM
GUAM	JRM-Andersen	Munitions Storage Igloos IV	55,000	NM
HUNGARY	Kecskemet	ERI: Construct Airfield Upgrades	20,564	NM
HUNGARY	Kecskemet	ERI: Construct Parallel Taxiway	38,650	NM
JAPAN	Kadena	Airfield Damage Repair Storage Facility	38,000	NM
JAPAN	Kadena	Replace Munitions Structures	26,100	NM
JAPAN	Kadena	Helicopter Rescue Ops Maintenance Hangar	168,000	NM
JAPAN	Misawa	Airfield Damage Repair Facility	25,000	NM
JAPAN	Yokota	C-130J Corrosion Control Hangar	67,000	NM
LOUISIANA	Barksdale	Weapons Generation Facility, Inc 1	40,000	NM
OKLAHOMA	Tinker	KC-46A 3-Bay Depot Maintenance Hangar	160,000	NM
SOUTH DAKOTA	Ellsworth	B-21 2-Bay LO Restoration Facility, Inc 2	91,000	NM
SOUTH DAKOTA	Ellsworth	B-21 ADAL Flight Simulator	24,000	NM
SOUTH DAKOTA	Ellsworth	B-21 Field Training Detachment Facility	47,000	NM
SOUTH DAKOTA	Ellsworth	B-21 Formal Training Unit/AMU	70,000	NM
SOUTH DAKOTA	Ellsworth	B-21 Mission Operations Planning Facility	36,000	NM
SOUTH DAKOTA	Ellsworth	B-21 Washrack & Maintenance Hangar	65,000	NM
SPAIN	Moron	EDI-Hot Cargo Pad	8,542	NM
UNITED KINGDOM	RAF Fairford	EDI-Construct DABS-FEV Storage	94,000	NM
UNITED KINGDOM	RAF Lakenheath	F-35A Munition Inspection Facility	31,000	NM
UNITED KINGDOM	RAF Lakenheath	F-35A Weapons Load Training Facility	49,000	NM
UTAH	Hill	GBSD Organic Software Sustainment Ctr, Inc 2	31,000	NM
New Mission TOTAL:			1,409,105	

WORLDWIDE UNSPECIFIED	Various Locations	EDI: Planning and Design	648	P&D
WORLDWIDE UNSPECIFIED	Various Locations	Planning and Design	228,653	P&D
WORLDWIDE UNSPECIFIED	Various Locations	Unspecified Minor Military Construction	58,884	UMMC
Central Program TOTAL:			288,185	
Active AF Program TOTAL:			2,102,690	

(Tab 5) - Installation Index

**DEPARTMENT OF THE AIR FORCE
MILITARY CONSTRUCTION PROGRAM FISCAL YEAR 2022
INSTALLATION INDEX**

<u>INSTALLATION</u>	<u>COMMAND</u>	<u>STATE/COUNTRY</u>	<u>PAGE</u>
JB ELMENDORF- RICHARDSON	PACAF	ALASKA	17
DAVIS-MONTHAN LUKE	ACC	ARIZONA	25
RAAF DARWIN	AETC	ARIZONA	31
RAAF TINDAL	PACAF	AUSTRALIA	144
EDWARDS	PACAF	AUSTRALIA	149
VANDENBERG	AFMC	CALIFORNIA	41
	AFGSC	CALIFORNIA	46
		DISTRICT OF	
JB ANACOSTIA-BOLLING	AFDW	COLUMBIA	55
SPANGDAHLEM	USAFE	GERMANY	158
KECSKEMET	USAFE	HUNGARY	175
JRM-ANDERSEN	PACAF	GUAM	162
KADENA	PACAF	JAPAN	184
MISAWA	PACAF	JAPAN	201
YOKOTA	PACAF	JAPAN	206
BARKSDALE	AFGSC	LOUISIANA	60
JB ANDREWS	AFDW	MARYLAND	68
HANSCOM	AFMC	MASSACHUSETTS	73
TINKER	AFMC	OKLAHOMA	79
ELLSWORTH	AFGSC	SOUTH DAKOTA	86
MORON	USAFE	SPAIN	214
JBSA-LACKLAND	AETC	TEXAS	114
SHEPPARD	AETC	TEXAS	130
RAF FAIRFORD	USAFE	UNITED KINGDOM	219
RAF LAKENHEATH	USAFE	UNITED KINGDOM	226
HILL	AFMC	UTAH	136

ACC – AIR COMBAT COMMAND

AETC – AIR EDUCATION AND TRAINING COMMAND

AFDW – AIR FORCE DISTRICT OF WASHINGTON

AFGSC – AIR FORCE GLOBAL STRIKE COMMAND

AFMC – AIR FORCE MATERIEL COMMAND

PACAF – PACIFIC AIR FORCES

USAFE – UNITED STATES AIR FORCE – EUROPE

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(Tab 6) - Special Program Consideration Statements

**DEPARTMENT OF THE AIR FORCE
MILITARY CONSTRUCTION PROGRAM FISCAL YEAR 2022
SPECIAL PROGRAM CONSIDERATIONS**

ECONOMIC CONSIDERATIONS

An economic evaluation has been accomplished for all projects costing over 2 million dollars where viable options existed and the results are addressed in the individual DD Forms 1391.

DESIGN FOR ACCESSIBILITY OF PHYSICALLY HANDICAPPED PERSONNEL

In accordance with Public Law 90-480 provisions for physically handicapped personnel will be provided for, where appropriate, in the design of facilities included in this program.

ENVIRONMENTAL STATEMENT

In accordance with Section 102(2)(c) of the National Environmental Policy Act of 1969 (PL 91-190), the environmental impact analysis process (EIAP) has been completed or is actively underway for all projects in the Air Force FY 2022 Military Construction Program.

EVALUATION OF FLOOD PLAINS AND WETLANDS

All projects in the program have been evaluated for compliance with Executive Orders 11988 *Flood Plain Management* and 11990 *Protection of Wetlands* and the Flood Plain Management Guidelines of U.S. Water Resources Council. Projects have been sited to avoid or reduce the risk of flood loss; minimize the impact of floods on human safety, health and welfare; preserve and enhance the natural and beneficial values of wetlands; and minimize the destruction, loss or degradation of wetlands.

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(Tab 7) - Congressional Reporting Requirements

DEPARTMENT OF THE AIR FORCE
MILITARY CONSTRUCTION PROGRAM FISCAL YEAR 2022
CONGRESSIONAL REPORTING REQUIREMENTS

1. STATEMENTS ON NATO ELIGIBILITY

These are in response to the requirement in the FY 1988 Senate Appropriations Committee Report, 100-200, page 13, and are included in the appropriate project justification.

2. NEW AND CURRENT MISSION ACTIVITIES

The FY 1989 Senate Appropriations Committee Report, 100-380, pages 10 and 11, identified a requirement to include an exhibit in the budget justification books that displayed required projects in two separate categories: New Mission and Current Mission. The CM (current mission) or NM (new mission) designation, which follows the project on the listing at page 9, identifies each project as new or current mission. Additionally, each justification in Block 11 of the DD Form 1391 indicates whether the project supports a new or current mission.

3. REAL PROPERTY ADMINISTRATION

The FY 1977 House Appropriations Committee Report, 104-591, page 11, requested the Department to provide the real property maintenance backlog at all installations for which there is a requested construction project. Each DD Form 1390 reflects this information in block 12. In addition, the report requested all troop housing requests to show all real property maintenance conducted in the past two years and all future requirements for unaccompanied housing at that installation. Each DD Form 1391 for troop housing reflects this information in block 11.

4. METRIC CONVERSION

The FY 1999 House Appropriation Committee Report, 105-578, page 11, requested the Department to ensure that any Form 1390/1391, which is presented as justification in metric measurement, shall include parenthetically the English measurement. Each DD Form 1391 reflects the metric and English equivalent in block 11.

**DEPARTMENT OF THE AIR FORCE
MILITARY CONSTRUCTION PROGRAM FISCAL YEAR 2022
NON-MILCON FUNDING**

Research and Development (RDT&E) NONE

(Tab 8) - Appropriation Sought for Previously Authorized Projects

DEPARTMENT OF THE AIR FORCE
MILITARY CONSTRUCTION PROGRAM FISCAL YEAR 2022
APPROPRIATION SOUGHT FOR PREVIOUSLY AUTHORIZED PROJECTS

APPROPRIATIONS SOUGHT FOR FY20 AUTHORIZATIONS

In the FY2022 President's Budget, the Department is requesting appropriation in the amount of \$31.0 million total for one project that was authorized in the National Defense Authorization Act for Fiscal Year 2020 (P.L. 116-92). Basic Military Training (BMT) Recruit Dormitory 8 at Joint Base San Antonio was authorized and the Department is requesting the amounts be appropriated as specified in this budget estimate.

APPROPRIATIONS SOUGHT FOR FY21 AUTHORIZATIONS

In the FY2022 President's Budget, the Department is requesting appropriation in the amount of \$122.0 million total for 2 projects that were authorized in the National Defense Authorization Act for Fiscal Year 2021 (P.L. 116-283). B-21 2-Bay Low Observable (LO) Restoration Facility at Ellsworth Air Force Base and the Ground Based Strategic Deterrent (GBSD) Organic Software Sustainment Center at Hill Air Force Base were authorized and the Department is requesting the amounts be appropriated as specified in this budget estimate.

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(Tab 9) - Direct War and Enduring Costs

**DEPARTMENT OF THE AIR FORCE
MILITARY CONSTRUCTION PROGRAM FISCAL YEAR 2022
DIRECT WAR AND ENDURING COSTS**

Requirement

The Department of the Air Force supports the President's European Deterrence Initiative (EDI) to help increase the capability of U.S. allies and partners. A key enabler for contingency options is sufficiently robust infrastructure at key locations to support military activities.

The FY 2022 Direct War and Enduring Costs accounted for in the base budget are as follows:

- There are no Direct War costs accounted for in the Base Budget
- Enduring costs accounted for in the Base Budget: \$162,404,000: Enduring Requirements are enduring in theater and in CONUS costs that will likely remain after combat operations cease, and have previously been funded in OCO.

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(Tab 10) - Appropriation Language

**DEPARTMENT OF THE AIR FORCE
MILITARY CONSTRUCTION PROGRAM FISCAL YEAR 2022
APPROPRIATION LANGUAGE**

FY2022 MILITARY CONSTRUCTION AIR FORCE

For acquisition, construction, installation and equipment of temporary or permanent public works, military installations, facilities, and real property of the Air Force as currently authorized by law, \$2,102,690,000, to remain available until September 30, 2026: Provided that, of this amount, not to exceed \$229,301,000 shall be available for study, planning, design, and architect and engineer services, as authorized by law, unless the Secretary of the Air Force determines that additional obligations are necessary for such purposes and notifies the Committees on Appropriations of both Houses of Congress of his determination and the reason therefor.

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(Tab 11) - Projects Inside the United States

1. COMPONENT AIR FORCE		FY <u>2022</u> MILITARY CONSTRUCTION PROGRAM					2. DATE (YYYYMMDD) MAY 2021				
3. INSTALLATION AND LOCATION JOINT BASE ELMENDORF-RICHARDSON, ALASKA				4. COMMAND PACIFIC AIR FORCES			5. AREA CONSTRUCTION COST INDEX 1.96				
6. PERSONNEL		(1) PERMANENT			(2) STUDENTS			(3) SUPPORTED			(4) TOTAL
		OFFICER	ENLISTED	CIVILIAN	OFFICER	ENLISTED	CIVILIAN	OFFICER	ENLISTED	CIVILIAN	
a. AS OF	30-SEP-20	792	4,858	1,866	0	0	0	320	1,642	272	9,750
b. END FY		792	4,858	1,867	0	0	0	320	1,640	271	9,748
7. INVENTORY DATA (\$000)											
a. TOTAL ACREAGE										78,697	
b. INVENTORY TOTAL AS OF 30-SEP-20										14,866,526.00	
c. AUTHORIZATION NOT YET IN INVENTORY										29,000.00	
d. AUTHORIZATION REQUESTED IN THIS PROGRAM										251,000.00	
e. AUTHORIZATION INCLUDED IN FOLLOWING PROGRAM										0.00	
f. PLANNED IN NEXT THREE PROGRAM YEARS										0.00	
g. REMAINING DEFICIENCY										133,000.00	
h. GRAND TOTAL										15,279,526.00	
8. PROJECTS REQUESTED IN THIS PROGRAM											
a. CATEGORY				b. COST (\$000)		c. DESIGN STATUS					
(1) CODE	(2) PROJECT TITLE		(3) SCOPE			(1) START	(2) COMPLETE				
111-111	EXTEND RUNWAY 16/34, INC 1		40,481 SM		79,000	06/19	07/21				
9. FUTURE PROJECTS											
111-111 EXTEND RUNWAY 16/34 (40,481 SM / \$172,000)											
10. MISSION OR MAJOR FUNCTIONS											
JBER is home to the 3rd Wing (3WG), HQ Alaskan Command, HQ U.S. Army Alaska, Alaskan NORAD Region, and 11th Air Force. Its mission provides air supremacy, surveillance, worldwide airlift, and agile combat support forces to project global power and global reach and training and readiness oversight responsibilities for Army Force Generation in Alaska. It is host to an operations group with squadrons of E-3B, C-17, F-22A and C-12 aircraft, as well as 15 tenant units including the Air Force Reserve's 477th Fighter Group, among others.											
11. OUTSTANDING POLLUTION AND SAFETY DEFICIENCIES											
N/A											

1. COMPONENT AIR FORCE	FY 2022 MILITARY CONSTRUCTION PROJECT DATA		2. DATE MAY 2021	
3. INSTALLATION, SITE AND LOCATION JOINT BASE ELMENDORF-RICHARDSON, ELMENDORF AIR FORCE BASE SITE #1, ALASKA			4. PROJECT TITLE EXTEND RUNWAY 16/34, Inc 1	
5. PROGRAM ELEMENT 91211F	6. CATEGORY CODE 111-111	7. PROJECT NUMBER FXSB143004	8. PROJECT COST (\$000) AUTH: 251,000 APPR: 79,000	
9. COST ESTIMATES				
ITEM	U/M	QTY	UNIT COST	COST (\$000)
PRIMARY FACILITIES				70,640
RUNWAY (111-111) ADD	SM	40,481	355	(14,371)
TAXIWAY (112-211) ADD	SM	54,219	428	(23,206)
RUNWAY (111-111) ALTER	SM	98,875	94	(9,294)
TAXIWAY (112-211) ALTER	SM	18,471	156	(2,881)
ARMING AND DISARMING PADS (116-661) ALTER	SM	10,904	216	(2,355)
OVERRUN, PAVED (111-115) ADD	SM	13,936	227	(3,163)
OVERRUN, PAVED (111-115) ALTER	SM	8,124	36	(292)
SHOULDER, PAVED (116-642) ADD	SM	62,553	153	(9,571)
SHOULDER, PAVED (116-642) ALTER	SM	66,936	62	(4,150)
AIRFIELD LIGHTING VAULT (136-668)	EA	1		(1,357)
SUPPORTING FACILITIES				154,201
SITE IMPROVEMENTS	LS			(115,511)
FENCING	LS			(949)
UTILITIES	LS			(11,492)
PAVEMENTS - ROAD	LS			(3,256)
AIRFIELD LIGHTING AND SIGNAGE	LS			(12,347)
GENERATORS	KW	540	548	(296)
INSTRUMENT LANDING SYSTEM INFRASTRUCTURE	LS			(1,095)
ENVIRONMENTAL REMEDIATION	LS			(9,255)
SUBTOTAL				224,841
CONTINGENCY (5.0%)				11,242
TOTAL CONTRACT COST				236,083
SUPERVISION, INSPECTION AND OVERHEAD (6.5%)				15,345
TOTAL REQUEST				251,428
TOTAL REQUEST (ROUNDED)				251,000
EQUIPMENT FROM OTHER APPROPRIATIONS (NON-ADD)				(1,255)
10. DESCRIPTION OF PROPOSED CONSTRUCTION: Extend existing Runway 16/34 and add supporting taxiways, as well as provide shoulders, grading, drainage, arm/disarm pad, lighting vault, airfield lighting, and instrument landing system. Runway alteration includes repair of existing runway surface. Site improvements include extensive excavation, hauling, and dumping due to site topography. A portion of the existing runway shall be regraded to raise the centerline profile to reduce earthwork for the runway extension. Site improvements also include removal/re-installation of airfield perimeter				

1. COMPONENT AIR FORCE	FY 2022 MILITARY CONSTRUCTION PROJECT DATA		2. DATE MAY 2021
3. INSTALLATION, SITE AND LOCATION JOINT BASE ELMENDORF-RICHARDSON, ELMENDORF AIR FORCE BASE SITE #1, ALASKA		4. PROJECT TITLE EXTEND RUNWAY 16/34, Inc 1	
5. PROGRAM ELEMENT 91211F	6. CATEGORY CODE 111-111	7. PROJECT NUMBER FXSB143004	8. PROJECT COST (\$000) AUTH: 251,000 APPR: 79,000
<p>fencing and relocation and upgrade of aircraft arresting system. Utility work includes reconfiguring water, electrical, gas, storm water, and communication infrastructure. Road pavement work includes rerouting Airlifter Drive with a new connection to an existing road. Install new airfield lighting vault, airfield lighting, and signs; and upgrade existing lights/signs pursuant to Unified Facilities Criteria 3-535-01 in order for Runway 16 to support precision instrument approach. Lighting and sign upgrade applies to entire length of Runway 16/34, as well as to new taxiways that connect to runway extension. New airfield lighting includes runway centerline lights; touch down zone lights for Runway 16 approach; and visible and infrared assault landing zone lights. Relocate threshold of Runway 34 to allow installation of localizer for instrument landing system. Install generators to provide backup power for airfield lighting and instrument landing system as authorized by Air Force Instruction 32-1062. Environmental remediation includes wetland mitigation of the area in the vicinity of Fish and Triangle Lakes. Facilities will be designed as permanent construction in accordance with the Department of Defense Unified Facilities Criteria 1-200-01. Sustainable principles, to include life-cycle cost-effective practices, will be integrated into the design, development, and construction of the project in accordance with Unified Facilities Criteria 1-200-02. This includes preparation of a life-cycle cost analysis for energy consuming systems, renewable energy generating systems, whenever life-cycle cost effective is selected as the reason any requirement of Unified Facilities Criteria 1-200-02 is partially compliant or not applicable. This project will comply with Department of Defense anti-terrorism/force protection requirements per Unified Facilities Criteria 4-010-01.</p> <p>Air Conditioning: 0 Tons</p>			
<p>11. Requirement: 326,902 SM Adequate: 187,546 SM Substandard: 98,875 SM PROJECT: Extend Runway 16/34</p> <p>REQUIREMENT: This project will extend Runway 16/34 to support an increase in safety and operational capabilities and accommodate the Federal Aviation Agency's increased opposite direction operations restrictions at Joint Base Elmendorf-Richardson. The project will require significant earth movement to extend the runway and comply with Unified Facilities Code 3-260-01 criteria. The runway extension requires the construction of supporting taxiways, shoulders, overrun, and an arm/disarm pad. In addition, the extension involves rerouting Airlifter Drive to the north and updating additional airfield lighting per Unified Facility Code 3-353-01. The proposed action is necessary because there are current safety, operational, and training shortfalls with the existing runways at Joint Base Elmendorf-Richardson.</p>			

1. COMPONENT AIR FORCE	FY 2022 MILITARY CONSTRUCTION PROJECT DATA		2. DATE MAY 2021
3. INSTALLATION, SITE AND LOCATION JOINT BASE ELMENDORF-RICHARDSON, ELMENDORF AIR FORCE BASE SITE #1, ALASKA		4. PROJECT TITLE EXTEND RUNWAY 16/34, Inc 1	
5. PROGRAM ELEMENT 91211F	6. CATEGORY CODE 111-111	7. PROJECT NUMBER FXSB143004	8. PROJECT COST (\$000) AUTH: 251,000 APPR: 79,000
<p>CURRENT SITUATION: Elmendorf Airfield supports permanently assigned F-22, E-3, C-17, and C-12 aircraft, as well as transient C-5, KC-10, and KC-135 aircraft. The north-south runway (Runway 16/34) is 7,500 feet long by 150 feet wide. Due to its short length, large aircraft operating from this runway have a weight restriction that severely limits their ability to carry cargo and fuel. This results in an over-reliance on Runway 06. Therefore, when Runway 06 is closed or unusable for any reason (construction, emergency during takeoff or landing, winds out of limits, etc.), large aircraft operations experience severe mission degradation. On average, Runway 06 is closed one month during the summer for necessary annual repairs due to operating in an arctic location. The current situation imposes serious safety concerns for missions at Joint Base Elmendorf-Richardson. The 2008 Alaska National Airspace System Review identified only one safety concern: conflicts between Elmendorf Runway 06 arrivals and civilian aircraft operating through Ted Stevens Anchorage International Airport. The 2008 Review recommended Elmendorf use Runway 16 as their primary runway; however, this is not possible due to its short length. There have also been a number of near midair collisions, specifically with general aviation traffic from Merrill Field that operates above and below the approach corridor to Runway 06. Without meticulous pre-flight planning, a catastrophic collision could happen. Since January 2016, Air Force pilots have filed 23 Hazardous Air Traffic Reports with the Air Force Safety Center, most of which resulted from getting too close to general aviation traffic while flying approaches to Runway 06. This poses a substantial risk of fatality to military flight crews, civilian pilots, and passengers, in addition to the operational and financial loss from aircraft destruction.</p> <p>IMPACT IF NOT PROVIDED: Without this runway extension, the missions at Joint Base Elmendorf-Richardson will be operating in unsafe conditions, as documented in the 2008 Alaska National Airspace System Review and the 23 Hazardous Air Traffic Reports, which could result in serious crash consequences including human casualties and loss of mission critical aircraft. In addition, whenever Runway 06 is closed, large aircraft operations are severely restricted by the shorter secondary runway limiting Joint Base Elmendorf-Richardson's capacity to project power into the Indo-Pacific Command Area of Responsibility (INDOPACOM AOR). If Runway 06 was to be shut down for any reason during an INDOPACOM AOR contingency, Joint Base Elmendorf-Richardson would not be a reliable logistics gateway to the Pacific. Canceled missions, safety problems, and loss of training will result in operational failure.</p>			

1. COMPONENT AIR FORCE	FY 2022 MILITARY CONSTRUCTION PROJECT DATA		2. DATE MAY 2021
3. INSTALLATION, SITE AND LOCATION JOINT BASE ELMENDORF-RICHARDSON, ELMENDORF AIR FORCE BASE SITE #1, ALASKA		4. PROJECT TITLE EXTEND RUNWAY 16/34, Inc 1	
5. PROGRAM ELEMENT 91211F	6. CATEGORY CODE 111-111	7. PROJECT NUMBER FXSB143004	8. PROJECT COST (\$000) AUTH: 251,000 APPR: 79,000
<p>ADDITIONAL: This project meets the criteria/scope specified in Air Force Manual 32-1084 Facility Requirements and Unified Facilities Criteria 3-260-01 Airfield and Heliport Planning and Design. This project does not fall within or partly within the 100-year flood plain. All reasonable alternatives were considered during the development of this project to include status quo, add/alter, and new construction. An approved Economic Analysis determined new construction as the only viable option to meet this requirement. This design shall conform to criteria established in the Air Force Corporate Facilities Standards, but will not employ a standard facility design because there is no Air Force standard facility design for this project and there is no applicable standard design from Air Force Civil Engineer Center or the United States Army Corps of Engineers. Costs for Supporting Facilities in Block 9 exceed Primary Facilities by more than 25% due to higher terrain elevation at the north end of Runway 16/34; consequently, this site condition necessitates extensive earthwork. Expansion of the runway to the south is not feasible due to existing off-base residential developments, an existing railroad, and protected natural resources. This project was included in the Fiscal Year 2021 future years' defense plan in a future fiscal year. Sustainable principles, to include life-cycle cost-effective practices, will be integrated into the design, development, and construction of the project in accordance with Unified Facilities Criteria 1-200-02. This includes preparation of a life-cycle cost analysis for energy consuming systems, renewable energy generating systems, whenever life-cycle cost effective is selected as the reason any requirement of Unified Facilities Criteria 1-200-02 is partially compliant or not applicable. Facility is sited in accordance with the Installation Development Plan and is within a compatible land use area.</p> <p>673d Air Base Wing Civil Engineer: (907) 552-3007.</p> <p>RUNWAY (111-111) Add: 40,481 SM = 435,734 Square Feet.</p> <p>TAXIWAY (112-211) Add: 54,219 SM = 583,608 Square Feet.</p> <p>RUNWAY (111-111) Alter: 98,875 SM = 1,064,282 Square Feet.</p> <p>TAXIWAY (112-211) Alter: 18,471 SM = 198,820 Square Feet.</p> <p>ARMING AND DISARMING PADS (116-661): 10,904 SM = 117,370 Square Feet.</p> <p>OVERRUN, PAVED (111-115) Add: 13,936 SM = 150,006 Square Feet.</p> <p>OVERRUN, PAVED (111-115) Alter: 8,124 SM = 87,446 Square Feet.</p> <p>SHOULDER, PAVED (116-642) Add: 62,553 SM = 673,315 Square Feet.</p> <p>SHOULDER, PAVED (116-642) Alter: 66,936 SM = 720,493 Square Feet.</p> <p>JOINT USE CERTIFICATION: This facility can be used by other components on an "as available" basis; however, the scope of the project is based on Air Force requirements.</p>			

1. COMPONENT AIR FORCE	FY 2022 MILITARY CONSTRUCTION PROJECT DATA		2. DATE MAY 2021
3. INSTALLATION, SITE AND LOCATION JOINT BASE ELMENDORF-RICHARDSON, ELMENDORF AIR FORCE BASE SITE #1, ALASKA		4. PROJECT TITLE EXTEND RUNWAY 16/34, Inc 1	
5. PROGRAM ELEMENT 91211F	6. CATEGORY CODE 111-111	7. PROJECT NUMBER FXSB143004	8. PROJECT COST (\$000) AUTH: 251,000 APPR: 79,000
12. SUPPLEMENTAL DATA:			
a. Estimated Design Data:			
(1) Status:			
(a) Type of Design	Design-Bid-Build		
(b) Date Design Started	10-JUN-19		
(c) Parametric Cost Estimates Used to develop costs	YES		
(d) Percent Complete as of 01 JAN 2021	65%		
(e) Date 35% Designed	30-MAR-20		
(f) Date Design Complete	29-JUL-21		
(g) Energy Study/Life-Cycle analysis was/will be performed	YES		
(2) Basis:			
(a) Standard or Definitive Design	NO		
(b) Where Design Was Most Recently Used	N/A		
(3) Total Cost (c) = (a) + (b) or (d) + (e) (\$000)			
(a) Production of Plans and Specifications	14,880		
(b) All Other Design Costs	2,310		
(c) Total	17,190		
(d) Contract	11,190		
(e) In-house	6,000		
(4) Construction Contract Award	22-FEB		
(5) Construction Start	22-MAR		
(6) Construction Completion	26-FEB		
b. Equipment associated with this project provided from other appropriations:			
		FISCAL YEAR	
		APPROPRIATED	COST
EQUIPMENT NOMENCLATURE	PROCURING APPROP	OR REQUESTED	(\$000)
INSTRUMENT LANDING SYSTEM	3080	2022	1,255
c. Authorization and Appropriation Summary			
	Authorization	Auth of Approp	Approp
	(\$000)	(\$000)	(\$000)
FY2022 Request	251,000	79,000	79,000
Future Request	0	172,000	172,000
Total	251,000		251,000

Project: Extend Runway 16/34, Inc 1, JB Elmendorf-Richardson (Current Authorization = \$0)

Project Spending Plan
 As of: 4-May-21
 All Cost in thousands (\$000)

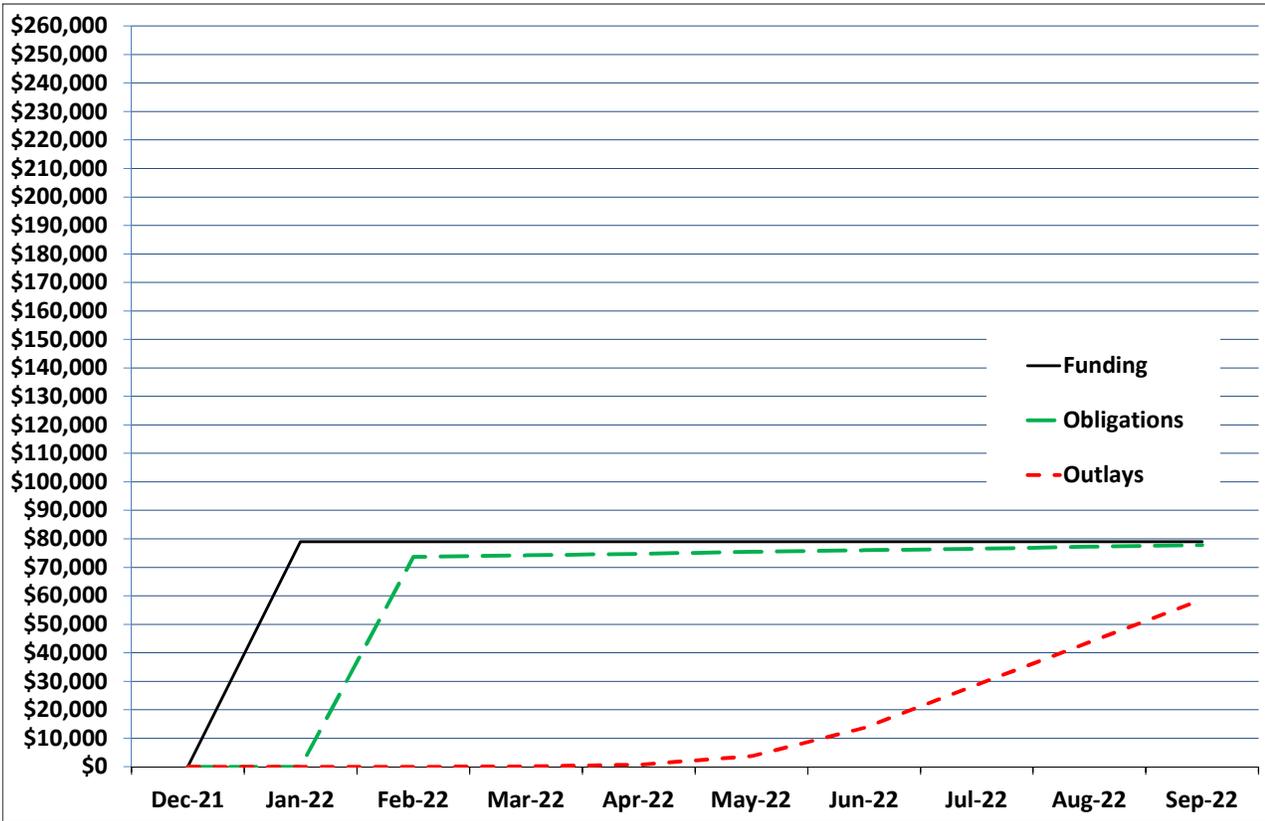
Chart Begin	FUNDING (note 1)		OBLIGATION (note 2)		OUTLAYS (note 3)	
Dec-21	Enacted	Cumulative	Obligated	Cumulative	Monthly	Cumulative
Dec-21	-	-	-	-	-	-
Jan-22	79,000	79,000	-	-	-	-
Feb-22	-	79,000	73,591	73,591	-	-
Mar-22	-	79,000	601	74,192	200	200
Apr-22	-	79,000	601	74,793	500	700
May-22	-	79,000	601	75,394	3,000	3,700
Jun-22	-	79,000	601	75,995	10,000	13,700
Jul-22	-	79,000	601	76,596	15,000	28,700
Aug-22	-	79,000	601	77,197	15,000	43,700
Sep-22	-	79,000	601	77,798	15,000	58,700

Note 1: Assume enactment in January of the execution year. Follow-on increments anticipated October of FY22 and FY23

Note 2: Assumes funds are available for obligation by 31 January of the execution year and by 31 October for subsequent years.

Note 3: Assumes contract award in Feb 2022 and contract completion Feb 2026; duration 48 months. Outlay curve supports extensive purchase of materials and equipment upon award, and seasonal realities of work performance at JBER.

Extend Runway 16/34, Inc 1, JB Elmendorf-Richardson (Current Authorization = \$0)



1. COMPONENT AIR FORCE		FY <u>2022</u> MILITARY CONSTRUCTION PROGRAM					2. DATE (YYYYMMDD) MAY 2021				
3. INSTALLATION AND LOCATION DAVIS-MONTHAN AIR FORCE BASE, ARIZONA				4. COMMAND AIR COMBAT COMMAND			5. AREA CONSTRUCTION COST INDEX 0.96				
6. PERSONNEL		(1) PERMANENT			(2) STUDENTS			(3) SUPPORTED			(4) TOTAL
		OFFICER	ENLISTED	CIVILIAN	OFFICER	ENLISTED	CIVILIAN	OFFICER	ENLISTED	CIVILIAN	
a. AS OF	30-SEP-20	1,068	6,144	1,679	58	78	0	29	1,248	704	11,008
b. END FY		1,064	6,339	1,665	58	78	0	29	373	704	10,310
7. INVENTORY DATA (\$000)											
a. TOTAL ACREAGE										13,474	
b. INVENTORY TOTAL AS OF 30-SEP-20										3,255,306.00	
c. AUTHORIZATION NOT YET IN INVENTORY										82,000.00	
d. AUTHORIZATION REQUESTED IN THIS PROGRAM										13,400.00	
e. AUTHORIZATION INCLUDED IN FOLLOWING PROGRAM										0.00	
f. PLANNED IN NEXT THREE PROGRAM YEARS										0.00	
g. REMAINING DEFICIENCY										386,200.00	
h. GRAND TOTAL										3,736,906.00	
8. PROJECTS REQUESTED IN THIS PROGRAM											
a. CATEGORY				b. COST (\$000)		c. DESIGN STATUS					
(1) CODE	(2) PROJECT TITLE		(3) SCOPE			(1) START	(2) COMPLETE				
730-837	South Wilmot Gate		840 SM		13,400	10/19	11/21				
9. FUTURE PROJECTS											
10. MISSION OR MAJOR FUNCTIONS											
Headquarters 12th Air Force; a wing with two fighter training squadrons responsible for training all A/OA-10 aircrews; a combat-coded A/OA-10 fighter squadron, two EC-130 electronic combat squadrons, Combat Search and Rescue, a tactical air control wing; an Air Force Reserve HH-60 rescue squadron; and Air Force Material Command's Aerospace Maintenance and Regeneration Center. Provides major support to the Tucson Sector Headquarters, Customs and Border Protection.											
11. OUTSTANDING POLLUTION AND SAFETY DEFICIENCIES											
N/A											

1. COMPONENT AIR FORCE	FY 2022 MILITARY CONSTRUCTION PROJECT DATA (computer generated)		2. DATE MAY 2021	
3. INSTALLATION, SITE AND LOCATION DAVIS-MONTHAN AIR FORCE BASE ARIZONA			4. PROJECT TITLE SOUTH WILMOT GATE	
5. PROGRAM ELEMENT 91211F	6. CATEGORY CODE 730-837	7. PROJECT NUMBER FBNV1056980	8. PROJECT COST (\$000) 13,400	
9. COST ESTIMATES				
ITEM	U/M	QUANTITY	UNIT	COST (\$000)
PRIMARY FACILITIES				7,737
SECURITY POLICE ENTRY CONT BUILDING (730-837)	SM	840	3,965	(3,331)
ROAD (851-147)	SM	8,765	230	(2,016)
ACCESS CONTROL FACILITY (730-839)	SM	60	16,050	(963)
SECURITY POLICE DEFENSIVE FIGHT POS (730-834)	SM	7	23,786	(167)
OVERHEAD PROTECTION (145-921)	SM	328	825	(271)
FENCE SECURITY/VEHICLE BARRIERS (872-247)	LM	1,067	600	(640)
FENCE BOUNDARY (872-245)	LM	274	362	(99)
CYBERSECURITY OF FACILITY-RELATED CONTROL	LS			(250)
SUPPORTING FACILITIES				3,894
ARIZONA TRANSACTION PRIVILEGE TAX (6.25%)	LS			(605)
ANTITERRORISM AND FORCE PROTECTION (BARRIERS)	LS			(402)
UTILITIES	LS			(1,100)
SITE IMPROVEMENTS	LS			(347)
DEMOLITION	SM	17	3,220	(55)
PAVEMENTS	LS			(1,135)
COMMUNICATIONS	LS			(250)
SUBTOTAL				11,631
CONTINGENCY (5.0%)				582
TOTAL CONTRACT COST				12,213
SUPERVISION, INSPECTION AND OVERHEAD (5.7%)				696
DESIGN/BUILD - DESIGN COST (4.0% OF SUBTOTAL)				465
TOTAL REQUEST				13,374
TOTAL REQUEST (ROUNDED)				13,400
EQUIPMENT FROM OTHER APPROPRIATIONS (NON-ADD)				(3,190)
10. Description of Proposed Construction: Construct a high-capacity installation entrance and commercial vehicle inspection station at the south entrance to Davis-Monthan AFB to connect on-base Yuma Road directly with off-base South Wilmot Road. Construction includes split-face block buildings with reinforced concrete foundation and floor slab, standing seam metal roof system, fire detection and protection, all utilities, site improvements, site lighting, landscaping, access roads, curbing, sidewalks, asphalt pavement, parking and all other necessary supporting facilities for				

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3. INSTALLATION, SITE AND LOCATION DAVIS-MONTHAN AIR FORCE BASE ARIZONA		4. PROJECT TITLE SOUTH WILMOT GATE	
5. PROGRAM ELEMENT 91211F	6. CATEGORY CODE 730-837	7. PROJECT NUMBER FBNV1056980	8. PROJECT COST (\$000) 13,400
<p>a complete and usable facility. Provide active and passive barriers and fencing as required per US Air Force/Department of Defense Design Guide for Entry Control Facilities. Facilities include an entry control/vehicle inspection facility with visitor center/contractor holding area, gatehouse, overwatch, overhead protection shade canopies for the checkpoint, vehicle inspection area, and additional boundary fencing. Project will demolish Building 30 (17 Square Meters). Facilities will be designed as permanent construction in accordance with the Department of Defense Unified Facilities Criteria 1-200-01, General Building requirements, and Unified Facilities Criteria 4-022-01 Security Engineering: Entry Control Facilities/Access Control Points. This project will comply with Department of Defense antiterrorism/force protection requirements per Unified Facility Criteria 4-010-01.</p> <p>Air Conditioning: 20 Tons</p>			
<p>11. Requirement: 840 SM Adequate: 0 SM Substandard: 17 SM</p> <p>PROJECT: South Wilmot Gate</p> <p>REQUIREMENT: Construct/realign the existing roadway to provide higher capacity/multi-lane entry, as well as vehicle staging/queuing lanes for commercial vehicles. Reconfigure the intersection of Wilmot and Yuma Road such that traffic traveling on/off base has the right-of-way. The new gate will provide access to Interstate-10 and will remove a significant number of large commercial vehicles from main city roadways thus reducing traffic congestion. The location also provides a convenient access point for base personnel commuting from the south and east sections of the Tucson area, which are some of the most rapidly growing areas in the region. The demolition of Building 30 will permit the construction of the new access control point. This is not a tenant or supported service requirement.</p> <p>CURRENT SITUATION: The current commercial vehicle inspection station is located at Swan Gate on the northwest side of the base. The gate is adjacent to the highly congested intersection of Swan Road and Golf Links Road, two major city thoroughfares. The commercial vehicle operations at Swan Gate present a significant security vulnerability because of its close proximity to critical Air Force missions. The vulnerability has been identified as a Core Vulnerability Assessment Management Program observation. Additionally, a Balanced Survivability Assessment Team recommended that the Commercial Vehicle Inspection Station be removed immediately from Swan Gate to protect operations conducted by the nearby 612th Air Operations Center. The current gate causes encroachment concerns with the City of Tucson and Customs and Border Patrol. Configuration does not provide adequate staging lanes for large commercial vehicles entering the base, causing traffic to back up into</p>			

1. COMPONENT AIR FORCE	FY 2022 MILITARY CONSTRUCTION PROJECT DATA (computer generated)		2. DATE MAY 2021
3. INSTALLATION, SITE AND LOCATION DAVIS-MONTHAN AIR FORCE BASE ARIZONA		4. PROJECT TITLE SOUTH WILMOT GATE	
5. PROGRAM ELEMENT 91211F	6. CATEGORY CODE 730-837	7. PROJECT NUMBER FBNV1056980	8. PROJECT COST (\$000) 13,400
<p>the Swan/Golf Links intersection, exacerbating the already-congested area. During peak hours, this impacts the Customs and Border Protection operations at the Tucson Sector Headquarters. The three existing north side gates have insufficient capacity, all connecting to the same arterial street within close proximity to each other.</p> <p>IMPACT IF NOT PROVIDED: Critical Air Force missions will continue to be at significant risk due to their close proximity to high-risk commercial vehicles prior to their vetting through the inspection process. Lack of staging for commercial vehicles will continue to cause significant congestion, traffic backups and safety concerns for the surrounding community, as well as the Headquarters for Customs and Border Protection. A single, major terrorist activity to the north of the installation could restrict all common access locations. An improved high-capacity installation gate and commercial vehicle entrance on the south side of the base would reduce the Antiterrorism/Force Protection vulnerability posture, significantly increase base evacuation options and capability, and better distribute vehicle traffic, reducing congestion at existing gates.</p> <p>ADDITIONAL: This project shall meet all requirements of Air Force Manual 32-1084, Facility Requirements. This design shall conform to criteria established in the Air Force Corporate Facilities Standards, the Installation Facilities Standards, but will not employ a standard facility design because there is no Air Force standard facility design for this project, and there is no applicable standard design from United States Army Corps of Engineers. All reasonable alternatives were considered during the development of this project to include status quo, add/alter, and new construction. New construction is the only viable option to meet this requirement. A waiver to an Economic Analysis has been approved for this project. Sustainable principles, to include life-cycle cost-effective practices, will be integrated into the design, development, and construction of the project in accordance with Unified Facilities Criteria 1-200-02, High Performance and Sustainable Building Requirements. This includes preparation of a life-cycle cost analysis for energy consuming systems, renewable energy generating systems, whenever life-cycle cost effective is selected as the reason any requirement of Unified Facilities Criteria 1-200-02 is partially compliant or not applicable. This project does not fall within or partly within the 100-year flood plain. This project was included in the Fiscal Year 2021 future years' defense plan in Fiscal Year 2022. Facility is sited in accordance with the Installation Development Plan and is within a compatible land use area. The project has been programmed as per the extensive "New Entrance Gate Transportation Engineering Study" prepared by a joint effort of Wilbur Smith Associates</p>			

1. COMPONENT AIR FORCE	FY 2022 MILITARY CONSTRUCTION PROJECT DATA (computer generated)		2. DATE MAY 2021
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5. PROGRAM ELEMENT 91211F	6. CATEGORY CODE 730-837	7. PROJECT NUMBER FBNV1056980	8. PROJECT COST (\$000) 13,400
<p>and Mayes and Associates, June 2007. This study, coordinated with local Governments, projected area development surrounding the installation, and the approved Regional Transportation Authority Planned Roadway Improvements criteria and requirements. Pima County and the City of Tucson have funded off-base improvements to improve access from the installation perimeter to nearby access thoroughfares. Supporting facilities cost exceeds 25% of the primary facility cost due to the additional cost of supporting facility pavements required for the commercial vehicle staging area and lack of utilities in the vicinity of the project area. The amount of pavements and length of utility runs significantly increase the supporting facilities overall total.</p> <p>355 CES Base Civil Engineer: (520) 228-3401</p> <p>SECURITY POLICE ENTRY CONTROL BUILDING: 840 SM = 9,042 Square Feet</p> <p>ROAD: 8,765 SM = 94,346 Square Feet</p> <p>ACCESS CONTROL FACILITY: 60 SM = 646 Square Feet</p> <p>SECURITY POLICE DEFENSIVE FIGHTING POSITION: 7 SM = 75 Square Feet</p> <p>OVERHEAD PROTECTION: 328 SM = 3,531 Square Feet</p> <p>FENCE SECURITY/VEHICLE BARRIERS: 1,067 LM = 3,501 Linear Feet</p> <p>FENCE BOUNDARY: 274 LM = 900 Linear Feet</p> <p>DEMOLITION: 17 SM = 183 Square Feet</p> <p>JOINT USE CERTIFICATION: This is an installation utility/infrastructure project, and does not qualify for joint use at this location. However, all tenants on this installation are benefited by this project.</p>			

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5. PROGRAM ELEMENT 91211F	6. CATEGORY CODE 730-837	7. PROJECT NUMBER FBNV1056980	8. PROJECT COST (\$000) 13,400
12. SUPPLEMENTAL DATA:			
a. Estimated Design Data:			
(1) Status:			
(a) Type of Design			Design-Build
(b) Date Design Started			08-OCT-19
(c) Parametric Cost Estimates Used to develop costs			YES
(d) Percent Complete as of 01 JAN 2021			35%
(e) Date 35% Designed			14-AUG-20
(f) Date Design Complete			06-NOV-21
(g) Energy Study/Life-Cycle analysis was/will be performed			YES
(2) Basis:			
(a) Standard or Definitive Design			NO
(b) Where Design Was Most Recently Used			N/A
(3) Total Cost (c) = (a) + (b) or (d) + (e)			(\$000)
(a) Production of Plans and Specifications			804
(b) All Other Design Costs			402
(c) Total			1,206
(d) Contract			1,005
(e) In-house			201
(4) Construction Contract Award			22-MAR
(5) Construction Start			22-AUG
(6) Construction Completion			24-JAN
b. Equipment associated with this project provided from other appropriations:			
		FISCAL YEAR	
		APPROPRIATED	COST
EQUIPMENT NOMENCLATURE	PROCURING APPROP	OR REQUESTED	(\$000)
FURNITURE FIXTURE & EQUIPMENT	3080	FUTURE REQUEST	300
COMMUNICATIONS	3400	FUTURE REQUEST	190
CCTV/ALARMS	3400	FUTURE REQUEST	200
X-RAY EQUIPMENT	3080	FUTURE REQUEST	2,500

1. COMPONENT AIR FORCE		FY <u>2022</u> MILITARY CONSTRUCTION PROGRAM					2. DATE (YYYYMMDD) MAY 2021				
3. INSTALLATION AND LOCATION LUKE AIR FORCE BASE, ARIZONA				4. COMMAND AIR EDUCATION AND TRAINING COMMAND			5. AREA CONSTRUCTION COST INDEX 0.93				
6. PERSONNEL		(1) PERMANENT			(2) STUDENTS			(3) SUPPORTED			(4) TOTAL
		OFFICER	ENLISTED	CIVILIAN	OFFICER	ENLISTED	CIVILIAN	OFFICER	ENLISTED	CIVILIAN	
a. AS OF	30-SEP-20	382	3,577	722	269	671	0	20	69	361	6,071
b. END FY		415	3,725	737	83	177	0	15	67	36	5,255
7. INVENTORY DATA (\$000)											
a. TOTAL ACREAGE										1,110,379	
b. INVENTORY TOTAL AS OF 30-SEP-20										2,500,248.00	
c. AUTHORIZATION NOT YET IN INVENTORY										20,000.00	
d. AUTHORIZATION REQUESTED IN THIS PROGRAM										49,000.00	
e. AUTHORIZATION INCLUDED IN FOLLOWING PROGRAM										0.00	
f. PLANNED IN NEXT THREE PROGRAM YEARS										0.00	
g. REMAINING DEFICIENCY										44,500.00	
h. GRAND TOTAL										2,613,748.00	
8. PROJECTS REQUESTED IN THIS PROGRAM											
a. CATEGORY				b. COST (\$000)		c. DESIGN STATUS					
(1) CODE	(2) PROJECT TITLE		(3) SCOPE			(1) START	(2) COMPLETE				
211-177	F-35A ADAL AMU Facility Squadron #6		1,875 SM		28,000	06/20	08/21				
141-753	F-35A Squadron Operations Facility #6		2,123 SM		21,000	06/20	08/21				
9. FUTURE PROJECTS											
10. MISSION OR MAJOR FUNCTIONS											
<p>Luke Air Force Base is home to the largest fighter wing in the USAF, and it is the only active-duty F-16/F-35 training base in the world. The host command is the 56 Fighter Wing under Air Education Training Command. The wing comprises four groups, the 56th Range Management Office (RMO), and 24 squadrons, including six flying squadrons (2 F-35 & 4 F-16). There are several tenant units on base, including the 944th Fighter Wing, assigned to 10th Air Force and Air Reserve Command, United States Marine Corps Bulk Fuel Company C, and the United States Navy Reserves.</p>											
11. OUTSTANDING POLLUTION AND SAFETY DEFICIENCIES											
N/A											

1. COMPONENT AIR FORCE	FY 2022 MILITARY CONSTRUCTION PROJECT DATA (computer generated)			2. DATE MAY 2021	
3. INSTALLATION, SITE AND LOCATION LUKE AIR FORCE BASE LUKE AIR FORCE BASE SITE # 1 ARIZONA			4. PROJECT F-35A ADAL AMU FACILITY SQUADRON #6		
5. PROGRAM ELEMENT 27142F	6. CATEGORY CODE 211-177	7. PROJECT NUMBER NUEX201000	8. PROJECT COST(\$000) 28,000		
9. COST ESTIMATES					
ITEM		U/M	QUANTITY	UNIT	COST (\$000)
PRIMARY FACILITIES					18,382
ALTER SMALL AIRCRAFT MAINT DOCK (211-177)		SM	1,875	5,502	(10,316)
ADD SHOP, AIRCRAFT MAINT ORGANIZ (211-154)		SM	415	6,554	(2,720)
ALTER SHOP, AIRCRAFT MAINT ORGANIZ (211-154)		SM	2,230	2,061	(4,596)
ICD 705 PREMIUM		LS			(500)
CYBERSECURITY OF FACILITY-RELATED CONTROL SYS		LS			(250)
SUPPORTING FACILITIES					6,191
UTILITIES		LS			(1,251)
PAVEMENTS		LS			(1,723)
SITE IMPROVEMENTS		LS			(308)
COMMUNICATIONS		LS			(132)
PASSIVE FORCE PROTECTION MEASURES		LS			(146)
DEMOLITION		SM	2,244	524	(1,176)
ARIZONA TRANSACTION PRIVILEGE TAX (6.3%)		LS			(1,455)
SUBTOTAL					24,573
CONTINGENCY (5.0%)					1,229
TOTAL CONTRACT COST					25,802
SUPERVISION, INSPECTION AND OVERHEAD (5.7%)					1,471
DESIGN/BUILD - DESIGN COST (4.0% OF SUBTOTAL)					983
TOTAL REQUEST					28,256
TOTAL REQUEST (ROUNDED)					28,000
EQUIPMENT FROM OTHER APPROPRIATIONS (NON-ADD)					(2,922)
10. Description of Proposed Construction: Construct an addition to and renovate an existing Aircraft Maintenance Unit facility (Building 914) using conventional design and construction methods to accommodate the mission of the facility. Construction will consist of steel-framed structure, concrete slab and foundation system, masonry block exterior walls, and standing seam metal roof to match the existing facility. Alteration work will include upgrading the Aircraft Maintenance Unit space to accommodate the F-35A, to include repair and alteration of the existing roof and hangar space. Portions of the facility must be secure in accordance with Intelligence Community Directive/Intelligence Community Standard 705. Project will include additional access control and facility standoff requirements. The project will include all necessary utilities, site improvements, pavements, communications support infrastructure, and all necessary supporting work for a complete and usable facility. The					

1. COMPONENT AIR FORCE	FY 2022 MILITARY CONSTRUCTION PROJECT DATA (computer generated)		2. DATE MAY 2021
3. INSTALLATION, SITE AND LOCATION LUKE AIR FORCE BASE LUKE AIR FORCE BASE SITE # 1 ARIZONA		4. PROJECT F-35A ADAL AMU FACILITY SQUADRON #6	
5. PROGRAM ELEMENT 27142F	6. CATEGORY CODE 211-177	7. PROJECT NUMBER NUEX201000	8. PROJECT COST(\$000) 28,000
<p>project will demolish Building 917 (994 SM), Building 956 (37 SM), and Building 961 (1,213 SM) (Total of 2,244 SM). The demolition work will include testing/removal of asbestos and lead-based paint and any work needed to mitigate potential hazards. Facilities will be designed as permanent construction in accordance with the Department of Defense Unified Facilities Criteria 1-200-01, General Building Requirements. This project will comply with Department of Defense antiterrorism/force protection requirements per Unified Facility Criteria 4-010-01.</p> <p>Air Conditioning: 60 Tons</p>			
<p>11. Requirement: 1,875 SM Adequate: 0 SM Substandard: 2,244 SM</p> <p>PROJECT: F-35A ADAL Aircraft Maintenance Unit Facility Squadron #6</p> <p>REQUIREMENT: An adequately sized and configured Aircraft Maintenance Unit facility is required to beddown the Joint Strike Fighter F-35A aircraft. The facility will contain a vault for classified parts storage, communications security vault, unclassified maintenance debrief room, larger conference room, more administrative space, upgraded electrical service, and a larger tool crib. Work includes installation of F-35 unique electrical receptacles at each aircraft position and aircraft cooling units at each aircraft position with associated power distribution infrastructure for both aircraft and aircraft cooling units. The facility is required to be operational no later than April 2025 in preparation for sixth F-35A squadron aircraft arrival in November 2025. A period of 12 months is required between construction completion and operational readiness to prepare the facility for aircraft operations. This project is not a tenant/support requirement.</p> <p>CURRENT SITUATION: The current F-16 legacy Aircraft Maintenance Unit facility is in poor condition and does not contain adequate space to house an F-35A Aircraft Maintenance Unit and all associated functions. The existing facility tool crib is undersized and does not contain classified parts storage or adequately sized secure communications vault. The hangar does not have the required aircraft cooling units necessary for maintaining the F-35. The existing electrical system does not provide the required power for proper aircraft maintenance. The existing fire suppression system is out of compliance and requires repairs/upgrades while the existing hangar lighting is deficient and must be replaced. The existing hangar roof is in need of replacement due to age and degradation due to the harsh Arizona weather conditions.</p> <p>IMPACT IF NOT PROVIDED: Maintenance functions and personnel will not be operationally ready to perform required mission without this project.</p>			

1. COMPONENT AIR FORCE	FY 2022 MILITARY CONSTRUCTION PROJECT DATA (computer generated)		2. DATE MAY 2021
3. INSTALLATION, SITE AND LOCATION LUKE AIR FORCE BASE LUKE AIR FORCE BASE SITE # 1 ARIZONA		4. PROJECT F-35A ADAL AMU FACILITY SQUADRON #6	
5. PROGRAM ELEMENT 27142F	6. CATEGORY CODE 211-177	7. PROJECT NUMBER NUEX201000	8. PROJECT COST(\$000) 28,000
<p>Specifically, the current Aircraft Maintenance Unit facility is inadequate, inefficient, and is too outdated to conduct increased maintenance operations procedures, and new aircraft support equipment, that are required for F-35 mission.</p> <p>ADDITIONAL: This project meets the applicable criteria/scope specified in the Air Force Manual 32-1084 Facility Requirements and the Lockheed-Martin Aeronautics Company F-35 Lightning II Facilities Requirement Document. This design shall conform to criteria established in the Air Force Corporate Facilities Standards, the Installation Facilities Standards, but will not employ a standard facility design because there is no Air Force standard facility design for addition/alterations projects and there is no applicable standard design from United States Army Corps of Engineers. An economic analysis was completed comparing status quo, renovation, addition/alteration, and new construction. This analysis indicates that addition/alteration is the most cost effective alternative that meets mission requirements. Sustainable principles, to include life-cycle cost-effective practices, will be integrated into the design, development, and construction of the project in accordance with Unified Facilities Criteria 1-200-02, High Performance and Sustainable Building Requirements. This includes preparation of a life-cycle cost analysis for energy consuming systems, renewable energy generating systems, whenever life-cycle cost effective is selected as the reason any requirement of Unified Facilities Criteria 1-200-02 is partially compliant or not applicable. This project falls within the 100-year flood plain. The addition and alteration of this project is located on a facility already located in a 100-year flood plain. This is a mission-critical facility. The risk will be mitigated by constructing any new flood-susceptible systems at a minimum of three feet above the 100-year flood level, where possible. This project was included in the Fiscal Year 2021 future years defense plan in a future fiscal year. Facility is sited in accordance with the Installation Development Plan and is within compatible land use area. Supporting facility costs exceed 25% of primary facility cost due to the Arizona Transaction Privilege Tax that the State of Arizona charges all construction projects, the demolition and abatement expenses of the facilities within the footprint of the addition work, and utility upgrade to support the alteration and addition scope.</p> <p>56th CES Base Civil Engineer: (623) 856-6135</p> <p>Alter Small Aircraft Maintenance Dock: 1,875 SM = 20,182 SF</p> <p>Add Shop, Aircraft Maintenance, Organizational: 415 SM = 4,467 SF</p>			

1. COMPONENT AIR FORCE	FY 2022 MILITARY CONSTRUCTION PROJECT DATA (computer generated)		2. DATE MAY 2021
3. INSTALLATION, SITE AND LOCATION LUKE AIR FORCE BASE LUKE AIR FORCE BASE SITE # 1 ARIZONA		4. PROJECT F-35A ADAL AMU FACILITY SQUADRON #6	
5. PROGRAM ELEMENT 27142F	6. CATEGORY CODE 211-177	7. PROJECT NUMBER NUEX201000	8. PROJECT COST(\$000) 28,000
<p>Alter Shop, Aircraft Maintenance, Organizational: 2,230 SM = 24,003 SF Demolition: 2,244 SM = 24,154 SF</p> <p>JOINT USE CERTIFICATION: This facility can be used by other components on an "as available" basis; however, the scope of the project is based on Air Force requirements.</p>			

1. COMPONENT AIR FORCE	FY 2022 MILITARY CONSTRUCTION PROJECT DATA (computer generated)		2. DATE MAY 2021
3. INSTALLATION, SITE AND LOCATION LUKE AIR FORCE BASE LUKE AIR FORCE BASE SITE # 1 ARIZONA		4. PROJECT F-35A ADAL AMU FACILITY SQUADRON #6	
5. PROGRAM ELEMENT 27142F	6. CATEGORY CODE 211-177	7. PROJECT NUMBER NUEX201000	8. PROJECT COST(\$000) 28,000
12. SUPPLEMENTAL DATA:			
a. Estimated Design Data:			
(1) Status:			
(a) Type of Design			Design-Build
(b) Date Design Started			01-JUN-20
(c) Parametric Cost Estimates Used to develop costs			YES
(d) Percent Complete as of 01 JAN 2021			35%
(e) Date 35% Designed			01-AUG-20
(f) Date Design Complete			31-AUG-21
(g) Energy Study/Life-Cycle analysis was/will be performed			YES
(2) Basis:			
(a) Standard or Definitive Design			NO
(b) Where Design Was Most Recently Used			N/A
(3) Total Cost (c) = (a) + (b) or (d) + (e)			(\$000)
(a) Production of Plans and Specifications			1,680
(b) All Other Design Costs			840
(c) Total			2,520
(d) Contract			2,100
(e) In-house			420
(4) Construction Contract Award			22-MAR
(5) Construction Start			22-AUG
(6) Construction Completion			24-AUG
b. Equipment associated with this project provided from other appropriations:			
		FISCAL YEAR	
		APPROPRIATED	COST
EQUIPMENT NOMENCLATURE	PROCURING APPROP	OR REQUESTED	(\$000)
COMMUNICATIONS	3400	FUTURE REQUEST	110
AUDIO VISUAL EQUIPMENT	3400	FUTURE REQUEST	75
MECHANIZED MATERIAL HANDLING SYSTEM	3080	FUTURE REQUEST	375
FURNITURE FIXTURES & EQUIP	3080	FUTURE REQUEST	862
AIRCRAFT COOLING UNITS	3080	FUTURE REQUEST	1,500

1. COMPONENT AIR FORCE	FY 2022 MILITARY CONSTRUCTION PROJECT DATA (computer generated)		2. DATE MAY 2021		
3. INSTALLATION, SITE AND LOCATION LUKE AIR FORCE BASE LUKE AIR FORCE BASE SITE # 1 ARIZONA			4. PROJECT F-35A SQUADRON OPERATIONS FACILITY #6		
5. PROGRAM ELEMENT 27142F	6. CATEGORY CODE 141-753	7. PROJECT NUMBER NUEX201001	8. PROJECT COST(\$000) 21,000		
9. COST ESTIMATES					
ITEM		U/M	QUANTITY	UNIT	COST (\$000)
PRIMARY FACILITIES					10,892
SQUADRON OPERATIONS		SM	2,123	4,777	(10,142)
ICD 705 PREMIUM		LS			(500)
CYBERSECURITY OF FACILITY-RELATED CONTROL SYS		LS			(250)
SUPPORTING FACILITIES					7,658
UTILITIES		LS			(1,803)
PAVEMENTS		LS			(191)
SITE IMPROVEMENTS		LS			(431)
COMMUNICATIONS		LS			(289)
DEMOLITION		SM	3,960	971	(3,845)
ARIZONA TRANSACTION PRIVILEGE TAX (6.3%)		LS			(1,099)
SUBTOTAL					18,550
CONTINGENCY (5.0%)					928
TOTAL CONTRACT COST					19,478
SUPERVISION, INSPECTION AND OVERHEAD (5.7%)					1,110
DESIGN/BUILD - DESIGN COST (4.0% OF SUBTOTAL)					742
TOTAL REQUEST					21,330
TOTAL REQUEST (ROUNDED)					21,000
EQUIPMENT FROM OTHER APPROPRIATIONS (NON-ADD)					(1,551)
10. Description of Proposed Construction: Construct an F-35A Squadron Operations Facility using conventional design and construction methods to accommodate the mission of the facility. Construction will include the construction of a steel framed structure, concrete slab and foundation system, masonry block exterior walls, and standing seam metal roof. Portions of the facility must be secure in accordance with Intelligence Community Directive /Intelligence Community Standard 705. The project will include all necessary utilities, site improvements, pavements, communications support infrastructure, and all necessary supporting work for a complete and usable facility. The project will demolish Building 904 (1,968 SM) and Building 983 (1,992 SM) for total of 3,960 SM. The demolition work will include testing/removal of asbestos and lead-based paint and any work needed to mitigate potential hazards. Facilities will be designed as permanent construction in accordance with the Department of Defense Unified Facilities Criteria 1-200-01, General Building Requirements. This project will comply with Department of Defense antiterrorism/force protection requirements per Unified Facility Criteria					

1. COMPONENT AIR FORCE	FY 2022 MILITARY CONSTRUCTION PROJECT DATA (computer generated)		2. DATE MAY 2021
3. INSTALLATION, SITE AND LOCATION LUKE AIR FORCE BASE LUKE AIR FORCE BASE SITE # 1 ARIZONA		4. PROJECT F-35A SQUADRON OPERATIONS FACILITY #6	
5. PROGRAM ELEMENT 27142F	6. CATEGORY CODE 141-753	7. PROJECT NUMBER NUEX201001	8. PROJECT COST(\$000) 21,000
4-010-01. Air Conditioning: 100 Tons			
<p>11. Requirement: 2,123 SM Adequate: 0 SM Substandard: 3,960 SM PROJECT: F-35A Squadron Operations Facility #6</p> <p>REQUIREMENT: An adequately sized and configured Squadron Operations facility is required to support the beddown of the Joint Strike Fighter F-35A aircraft. The facility is required to support the operations of an F-35A squadron and contains the space for flight planning, secure air crew briefing and debriefing areas, and training and administration of the squadron. Space must be provided for the storage, care and issue of flight crew life support system equipment and personal space is required for changing into and out of flight clothing. Work includes installation of F-35 unique computer and security systems for Automated Logistics Information System. The facility is required to be operational no later than April 2025 in preparation for the F-35A squadron arrival in November 2025. A period of 12 months are required between construction completion and operational readiness to prepare the facility for squadron operations. This is not a tenant/support requirement.</p> <p>CURRENT SITUATION: The current F-16 legacy Squadron Operations facilities are in poor condition, do not contain sufficient secure space for pilot briefings and space for fifth generation fighter aircraft Squadron Operating Units kits and are not configured properly for the F-35A training needs.</p> <p>IMPACT IF NOT PROVIDED: Without this project being funded and executed in 2022, the required operations functions and personnel will not be operationally ready to receive a sixth squadron of F-35As in November of 2025. Workarounds would not allow the squadron to efficiently plan missions, assign pilots, and perform required pilot training. This would significantly impact the training mission required to support the F-35A program at the Pilot Training Center.</p> <p>ADDITIONAL: This project meets the applicable criteria/scope specified in the Air Force Manual 32-1084 Facility Requirements and the Lockheed-Martin Aeronautics Company F-35 Lightning II Facilities Requirement Document. This design shall conform to criteria established in the Air Force Corporate Facilities Standards, the Installation Facilities Standards, but will not employ a standard facility design because there is no Air Force standard facility design for this project and there is no applicable standard design from United States Army Corps of Engineers. An economic analysis was</p>			

1. COMPONENT AIR FORCE	FY 2022 MILITARY CONSTRUCTION PROJECT DATA (computer generated)		2. DATE MAY 2021
3. INSTALLATION, SITE AND LOCATION LUKE AIR FORCE BASE LUKE AIR FORCE BASE SITE # 1 ARIZONA		4. PROJECT F-35A SQUADRON OPERATIONS FACILITY #6	
5. PROGRAM ELEMENT 27142F	6. CATEGORY CODE 141-753	7. PROJECT NUMBER NUEX201001	8. PROJECT COST(\$000) 21,000
<p>completed comparing status quo, renovation/reuse, addition/alteration, and new construction. This analysis indicates that new construction is the most economical solution that meets the mission requirements. Sustainable principles, to include life-cycle cost-effective practices, will be integrated into the design, development, and construction of the project in accordance with Unified Facilities Criteria 1-200-02, High Performance and Sustainable Building Requirements. This includes preparation of a life-cycle cost analysis for energy consuming systems, renewable energy generating systems, whenever life-cycle cost effective is selected as the reason any requirement of Unified Facilities Criteria 1-200-02 is partially compliant or not applicable. This project falls within the 100-year flood plain along with other F-35 facilities in the vicinity. The risk will be mitigated by constructing the facility and any flood-susceptible utilities above the 100-year flood level. This is a mission-critical facility. The facility and any flood-susceptible utilities will be constructed a minimum of three feet above the 100-year flood elevation. This project was included in the Fiscal Year 2021 future years' defense plan in a future fiscal year. This facility is sited in accordance with the Installation Development Plan and is within a compatible land use area. Supporting facility costs exceed 25% of primary facility cost due the demolition and abatement expenses of the facilities being replaced and within the footprint of the new construction, utility work, and the Arizona Transaction Privilege Tax that the State of Arizona charges all construction projects.</p> <p>56th CES Base Civil Engineer: (623) 856-6135 Squadron Operations: 2,123 SM = 22,852 SF Demolition: 3,960 SM = 42,625 SF</p> <p>JOINT USE CERTIFICATION: This facility can be used by other components on an "as available" basis; however, the scope of the project is based on Air Force requirements.</p>			

1. COMPONENT AIR FORCE	FY 2022 MILITARY CONSTRUCTION PROJECT DATA (computer generated)		2. DATE MAY 2021
3. INSTALLATION, SITE AND LOCATION LUKE AIR FORCE BASE LUKE AIR FORCE BASE SITE # 1 ARIZONA		4. PROJECT F-35A SQUADRON OPERATIONS FACILITY #6	
5. PROGRAM ELEMENT 27142F	6. CATEGORY CODE 141-753	7. PROJECT NUMBER NUEX201001	8. PROJECT COST(\$000) 21,000
12. SUPPLEMENTAL DATA:			
a. Estimated Design Data:			
(1) Status:			
(a) Type of Design			Design-Build
(b) Date Design Started			01-JUN-20
(c) Parametric Cost Estimates Used to develop costs			YES
(d) Percent Complete as of 01 JAN 2021			35%
(e) Date 35% Designed			01-AUG-20
(f) Date Design Complete			31-AUG-21
(g) Energy Study/Life-Cycle analysis was/will be performed			YES
(2) Basis:			
(a) Standard or Definitive Design			NO
(b) Where Design Was Most Recently Used			N/A
(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			1,575
(e) In-house			315
(4) Construction Contract Award			22-MAR
(5) Construction Start			22-AUG
(6) Construction Completion			24-AUG
b. Equipment associated with this project provided from other appropriations:			
		FISCAL YEAR	
		APPROPRIATED	COST
EQUIPMENT NOMENCLATURE	PROCURING APPROP	OR REQUESTED	(\$000)
COMMUNICATIONS	3080	FUTURE REQUEST	300
FURNITURE FIXTURES & EQUIP	3080	FUTURE REQUEST	1,051
AUDIO VISUAL EQUIPMENT	3400	FUTURE REQUEST	200

1. COMPONENT AIR FORCE		FY <u>2022</u> MILITARY CONSTRUCTION PROGRAM					2. DATE (YYYYMMDD) MAY 2021				
3. INSTALLATION AND LOCATION EDWARDS AIR FORCE BASE, CALIFORNIA				4. COMMAND AIR FORCE MATERIEL COMMAND			5. AREA CONSTRUCTION COST INDEX 1.19				
6. PERSONNEL		(1) PERMANENT			(2) STUDENTS			(3) SUPPORTED			(4) TOTAL
		OFFICER	ENLISTED	CIVILIAN	OFFICER	ENLISTED	CIVILIAN	OFFICER	ENLISTED	CIVILIAN	
a. AS OF 30-Sep-20		571	1,602	3,732	0	0	0	238	340	72	6,555
b. END FY		593	1,630	3,736	0	0	0	240	331	70	6,600
7. INVENTORY DATA (\$000)											
a. TOTAL ACREAGE										307,652	
b. INVENTORY TOTAL AS OF 30-Sep-20										8,265,105.00	
c. AUTHORIZATION NOT YET IN INVENTORY										83,000.00	
d. AUTHORIZATION REQUESTED IN THIS PROGRAM										0.00	
e. AUTHORIZATION INCLUDED IN FOLLOWING PROGRAM										0.00	
f. PLANNED IN NEXT THREE PROGRAM YEARS										0.00	
g. REMAINING DEFICIENCY										524,200.00	
h. GRAND TOTAL										8,872,305.00	
8. PROJECTS REQUESTED IN THIS PROGRAM											
a. CATEGORY				b. COST (\$000)		c. DESIGN STATUS					
(1) CODE	(2) PROJECT TITLE		(3) SCOPE			(1) START	(2) COMPLETE				
311-173	FLIGHT TEST ENGINEERING LAB COMPLEX		6,968 SM		4,000	07/19	12/20				
9. FUTURE PROJECTS											
10. MISSION OR MAJOR FUNCTIONS											
Test, evaluate and develop weapon systems to deliver war winning capability to our nation's combat forces. Air Force Flight Test Center which is responsible for flight test activities for all USAF aircraft and related avionics, flight control, and weapons systems; a test wing; an air base wing; Air Force Test Pilot School; the Propulsion Directorate of the Air Force Research Laboratory; and a space surveillance squadron.											
11. OUTSTANDING POLLUTION AND SAFETY DEFICIENCIES											
N/A											

1. COMPONENT AIR FORCE	FY 2022 MILITARY CONSTRUCTION PROJECT DATA			2. DATE MAY 2021
3. INSTALLATION AND LOCATION EDWARDS AIR FORCE BASE EDWARDS AFB SITE # 1 CALIFORNIA		4. PROJECT TITLE: FLIGHT TEST ENGINEERING LAB COMPLEX		
5. PROGRAM ELEMENT 91211F	6. CATEGORY CODE 311-173	7. PROJECT NUMBER FSPM1075894	8. PROJECT COST (\$000) AUTH:0 APPR:4,000	
9. COST ESTIMATES				
ITEM	U/M	QTY	UNIT COST	COST (\$000)
PRIMARY FACILITIES				28,692
AIRCRAFT RESEARCH ENGINEERING	SM	6,968	3,398	(23,677)
ICD 705 PREMIUM	LS			(4,315)
CYBERSECURITY OF FACILITY-RELATED CONTROL SYS				(700)
SUPPORTING FACILITIES				5,874
DEMOLITION	SM	6,265	287	(1,798)
PAVEMENTS	LS			(964)
SITE IMPROVEMENTS	LS			(1,855)
UTILITIES	LS			(1,257)
SUBTOTAL				34,566
CONTINGENCY (5.0%)				1,728
TOTAL CONTRACT COST				36,295
SUPERVISION, INSPECTION AND OVERHEAD (5.7%)				2,069
DESIGN/BUILD - DESIGN COST (4.0% OF SUBTOTAL)				1,383
TOTAL REQUEST				39,746
TOTAL REQUEST (ROUNDED)				40,000
EQUIPMENT FROM OTHER APPROPRIATIONS (NON-ADD)				(2,400)
10. DESCRIPTION OF PROPOSED CONSTRUCTION:				
<p>Construct a two story laboratory, engineering and office complex with reinforced concrete slab foundation, wall panels, standing seam metal roof, thermal energy storage system, and fire protection. Include raised flooring, earthwork, site drainage, parking, site lighting, sidewalks, curbs, gutters, and utilities. The project will also construct a Sensitive Compartmented Information Facility in accordance with Intelligence Community Directive 705. This project will demolish Building 1400 (6,265 Square Meter). Facilities will be designed as permanent construction in accordance with the Department of Defense Unified Facilities Criteria 1-200-01. Sustainable principles, to include life-cycle cost-effective practices, will be integrated into the design, development, and construction of the project in accordance with Unified Facility Criteria 1-200-02. This includes preparation of a life-cycle cost analysis for energy consuming systems and renewable energy generating systems, whenever life-cycle cost effective is selected as the reason any requirement of Unified Facility Criteria 1-200-02 is partially compliant or not applicable. This project will comply with Department of Defense antiterrorism/force protection requirements per Unified Facility Criteria 4-010-01.</p> <p>Air Conditioning: 200 Tons</p>				
11. Requirement: 6,968 SM Adequate: 0 SM Substandard: 6,265 SM				
PROJECT: FLIGHT TEST ENGINEERING LAB COMPLEX, SUPP				
<p>REQUIREMENT: To maintain United States Air Force superiority, the Test Engineering Group must develop labs that will allow for Special Access Program/Sensitive Compartmented Information level data analysis and flight test operations to support near-peer engagements and sensor advancement for the war on terrorism.</p>				

1. COMPONENT AIR FORCE	FY 2022 MILITARY CONSTRUCTION PROJECT DATA		2. DATE MAY 2021
3. INSTALLATION AND LOCATION EDWARDS AIR FORCE BASE EDWARDS AFB SITE # 1 CALIFORNIA		4. PROJECT TITLE: FLIGHT TEST ENGINEERING LAB COMPLEX	
5. PROGRAM ELEMENT 91211F	6. CATEGORY CODE 311-173	7. PROJECT NUMBER FSPM1075894	8. PROJECT COST (\$000) AUTH:0 APPR:4,000

This facility is required to house the 412 Test Engineering Group management, labs, engineering, and technical library in a flexible, energy-efficient, modern facility that ensures flight test activities are effectively supported today and in the future. Test Engineering Group labs are used both to support test missions and to develop methodologies and equipment needed to test cutting edge weapons systems. A modern, flexible facility is essential to allow Test Engineering Group to rapidly upgrade/modify labs to keep up with the increasing pace of changing technology and agile software updates. A compartmentalized Test Engineering Group Lab and a Sensitive Compartmented Information Facility are needed to support multi Special Access Program Facility and efforts to advance and test 5th & 6th+ generation data link technologies, Command, Control, Communications, Computers, Intelligence, Surveillance and Reconnaissance ground station operations, Joint large force exercise and joint data analysis efforts including Orange Flag events, cyber-attack/weapon testing and hardening, directed energy, laser, electro-optics, and multi & hyper spectral targets. This facility (and test engineering) is critical to the success of the 412 Test Wing's test mission, which currently includes providing test and evaluation of the B-1, B-2, B-52, C-17, C-130, F-16, F-22, F-35, KC-45, Global Hawk, Counter Unmanned Aircraft System, and other manned and unmanned air vehicle systems. Test and evaluation on the ground and in flight is a key capability in the spectrum of tools Air Force Materiel Command uses to manage risk in the acquisition and sustainment of weapons systems.

CURRENT SITUATION: Building 1400 was one of the first buildings built as part of the original main base construction in 1954 and houses the 412th Test Engineering Group. The facility is over 60 years old, does not comply with current fire and life safety codes (Fire Safety Deficiency Code 1 assigned), is in deteriorated condition, is energy inefficient, and does not meet current earthquake safety standards. Original construction material such as asbestos-filled ceilings and glass-paned walls restrict building modifications and pose both day-to-day and long-term occupational safety hazards to employees. In addition to the negative intangibles of working in a dilapidated and unsafe building (a significant negative impact on workforce morale and effectiveness and significantly impacts attracting talented engineers during the interviewing process which occurs in the engineering home office), the Test Engineering Group cannot effectively adapt or upgrade existing labs to develop new test capabilities required to test 5th and 6th generation platforms. Attempts to do even moderate updates to labs through renovations are prohibited by environmental abatement requirements, outdated electrical, communication and mechanical systems, architectural barriers, and life safety and fire safety deficiencies. Additionally, maintenance and repair of these facilities requires extensive effort and resources due to 1954 construction materials.

IMPACT IF NOT PROVIDED: The 412 Test Engineering Group will continue to operate from inadequate facilities and will not be able to develop the capabilities needed to test advanced flight systems. It is highly likely that without a new facility and the associated lab and Special Access Program infrastructure, Air Force and other Department of Defense programs will not be able to complete certain

1. COMPONENT AIR FORCE	FY 2022 MILITARY CONSTRUCTION PROJECT DATA		2. DATE MAY 2021
3. INSTALLATION AND LOCATION EDWARDS AIR FORCE BASE EDWARDS AFB SITE # 1 CALIFORNIA		4. PROJECT TITLE: FLIGHT TEST ENGINEERING LAB COMPLEX	
5. PROGRAM ELEMENT 91211F	6. CATEGORY CODE 311-173	7. PROJECT NUMBER FSPM1075894	8. PROJECT COST (\$000) AUTH:0 APPR:4,000

interoperability evaluations at multi-Special Access Program levels. For example, Test Engineering Group would not be able to consolidate four dispersed tactical data link test and development labs into a multi Special Access Program Facility/ Sensitive Compartmented Information Facility compartmentalized single facility needed to meet joint Command, Control, Communications, Computers, Intelligence, Surveillance and Reconnaissance interoperability needs nor continue to concurrently support Orange Flag (and other Joint large force exercise events) data analysis and data link operations (due to multi classification levels). Similarly, Test Engineering Group would be prevented from creating an Electro-Optical/Infrared/Laser/Directed Energy lab. These complex technologies are accelerating at a very high rate and without a lab, the Air Force Test Center is unprepared for the future of advanced sensors and directed energy weapons. Without modern lab facilities, the ability to efficiently test certain cyber technologies, net-enabled weapons, system of systems, and open systems architecture will be inefficient and/or non-existent. The lab would be used to increase test effectiveness by providing independent ground measurements of system performance/functionality. These measurements will be used to independently find deficiencies on the ground before ever taking off, saving vast amounts of time and money and reducing customer risk. These measurements could also be compared to in-flight performance also saving enormous amounts of flight time after building models to reduce flight time and providing the war fighter with additional invaluable information. Test Engineering Group would also not be able to build labs required to develop test techniques for testing autonomous and classified systems.

ADDITIONAL: This project meets the criteria/scope specified in Air Force Manual 32-1084, "Facility Requirements". Unified Facilities Criteria 4-701-01, Department of Defense Pricing Guide, Parametric Cost Engineering System, and Means were used to develop the estimate for this project. All reasonable alternatives were considered during the development of this project to include status quo, add/alter, and new construction. New construction is the only viable option to meet this requirement. An Economic Analysis was completed and has been signed. This design shall conform to criteria established in the Air Force Corporate Facilities Standards, the Installation Facilities Standards (if applicable), but will not employ a standard facility design because there is no Air Force standard facility design for this project, and there is no applicable standard design from Air Force Civil Engineer Center. This project does not fall within or partly within the 100- year flood plain. This project was included in the Fiscal Year 2020 future years' defense plan in a future fiscal year.

Base Civil Engineer: (661) 277-2910.

Aircraft Research Engineering: 6,968 Square Meters = 75,000 Square Feet

Demolition: 6,265 Square Meters = 67,440 Square Feet

JOINT USE CERTIFICATION: This facility can be used by other components on an "as available" basis; however, the scope of the project is based on Air Force requirements.

1. COMPONENT AIR FORCE	FY 2022 MILITARY CONSTRUCTION PROJECT DATA		2. DATE MAY 2021
3. INSTALLATION AND LOCATION EDWARDS AIR FORCE BASE EDWARDS AFB SITE # 1 CALIFORNIA		4. PROJECT TITLE: FLIGHT TEST ENGINEERING LAB COMPLEX	
5. PROGRAM ELEMENT 91211F	6. CATEGORY CODE 311-173	7. PROJECT NUMBER FSPM1075894	8. PROJECT COST (\$000) AUTH:0 APPR:4,000

12. SUPPLEMENTAL DATA:

a. Estimated Design Data:

(1) Status:	
(a) Type of Design	Design-Build
(b) Date Design Started	01 JUL-19
(c) Parametric Cost Estimates used to develop costs	YES
(d) Percent Complete as of 01 JAN 2021	100%
(e) Date 35% Designed	01-JUL 20
(f) Date Design Complete	18-DEC-20
(g) Energy Study/Life-Cycle analysis was performed	YES
(2) Basis:	
(a) Standard or Definitive Design -	NO
(b) Where Design Was Most Recently Used -	N/A
(3) Total Cost (c) = (a) + (b) or (d) + (e)	(\$000)
(a) Production of Plans and Specifications	2,400
(b) All Other Design Costs	1,200
(c) Total	3,600
(d) Contract	3,000
(e) In-house	600
(4) Construction Contract Award	21-OCT
(5) Construction Start	21-OCT
(6) Construction Completion	23-OCT

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

EQUIPMENT NOMENCLATURE	PROCURING APPRO	FISCAL YEAR APPROPRIATED OR REQUESTED	COST (\$000)
FURNITURE, IT & LAB EQUIPMENT	3080	FUTURE REQUEST	2,400

c. Authorizations and appropriation Summary

	Authorization (\$000)	Auth of Approp (\$000)	Approp (\$000)
FY2021 Enacted	40,000	40,000	40,000
Cost Variation	4,000	-----	-----
FY2022 Request	0	4,000	4,000
Total	44,000		44,000

1. COMPONENT AIR FORCE		FY <u>2022</u> MILITARY CONSTRUCTION PROGRAM					2. DATE (YYYYMMDD) MAY 2021				
3. INSTALLATION AND LOCATION VANDENBERG AIR FORCE BASE, CALIFORNIA				4. COMMAND AIR FORCE GLOBAL STRIKE COMMAND			5. AREA CONSTRUCTION COST INDEX 1.15				
6. PERSONNEL		(1) PERMANENT			(2) STUDENTS			(3) SUPPORTED			(4) TOTAL
		OFFICER	ENLISTED	CIVILIAN	OFFICER	ENLISTED	CIVILIAN	OFFICER	ENLISTED	CIVILIAN	
a. AS OF	30-SEP-20	212	1,155	924	200	75	0	653	1,864	1,413	6,496
b. END FY		195	1,155	920	200	75	0	625	1,851	1,420	6,441
7. INVENTORY DATA (\$000)											
a. TOTAL ACREAGE										119,442	
b. INVENTORY TOTAL AS OF 30-SEP-20										4,969,750.00	
c. AUTHORIZATION NOT YET IN INVENTORY										0.00	
d. AUTHORIZATION REQUESTED IN THIS PROGRAM										67,000.00	
e. AUTHORIZATION INCLUDED IN FOLLOWING PROGRAM										0.00	
f. PLANNED IN NEXT THREE PROGRAM YEARS										0.00	
g. REMAINING DEFICIENCY										169,447.00	
h. GRAND TOTAL										5,206,197.00	
8. PROJECTS REQUESTED IN THIS PROGRAM											
a. CATEGORY				b. COST (\$000)		c. DESIGN STATUS					
(1) CODE	(2) PROJECT TITLE		(3) SCOPE			(1) START	(2) COMPLETE				
141-912	GBSD Re-Entry Vehicle Facility		1,152 SM		48,000	07/20	06/21				
222-222	GBSD Stage Processing Facility		1,186 SM		19,000	07/20	07/21				
9. FUTURE PROJECTS											
10. MISSION OR MAJOR FUNCTIONS											
Vandenberg AFB's host unit, the 30th Space Wing, supports West Coast launch activities for the Air Force, Department of Defense, National Aeronautics and Space Administration, national programs and various private industry contractors. The Wing supports the processing and launch of a variety of expendable vehicles including Atlas V, Delta IV, Delta II, Pegasus, Minotaur, Taurus and Falcon. The Wing also supports Force Development and Evaluation of all intercontinental ballistic missiles, as well as Missile Defense Agency (MDA) test and operations.											
11. OUTSTANDING POLLUTION AND SAFETY DEFICIENCIES											
N/A											

1. COMPONENT AIR FORCE	FY 2022 MILITARY CONSTRUCTION PROJECT DATA			2. Date MAY 2021	
3. INSTALLATION AND LOCATION VANDENBERG MAIN BASE VANDENBERG MAIN BASE SITE 1 CALIFORNIA			4. PROJECT TITLE: GBSD STAGE PROCESSING FACILITY		
5. PROGRAM ELEMENT 11233F	6. CATEGORY CODE 222-222	7. PROJECT NUMBER XUMU193000	8. PROJECT COST (\$000) 19,000		
9. COST ESTIMATES					
Item		U/M	Quantity	Unit Cost (\$)	Cost (\$000)
PRIMARY FACILITIES					9,113
PRODUCTION MISSILES (222-222)		SM	1,186	6,243	(7,404)
SHOP, SURVEILLANCE & INSPECTION (215-582)		SM	333	5,835	(1,943)
CYBERSECURITY OF FACILITY-RELATED CONTROL SYS		LS			(250)
SUPPORTING FACILITIES					6,880
UTILITIES		LS			(2,966)
PAVEMENTS		LS			(938)
SITE IMPROVEMENTS		LS			(1,113)
COMMUNICATIONS		LS			(1,863)
SUBTOTAL					16,477
CONTINGENCY (5%)					824
TOTAL CONTRACT COST					17,301
SUPERVISION, INSPECTION AND OVERHEAD (5.7%)					986
DESIGN-BUILD - DESIGN COST (4.0% OF SUBTOTAL)					659
TOTAL REQUEST					18,946
TOTAL REQUEST (ROUNDED)					19,000
EQUIPMENT FROM OTHER APPROPRIATIONS (NON-ADD)					(1,659)
10. DESCRIPTION OF PROPOSED CONSTRUCTION: Construct a single story Stage Processing Facility at North Base, Vandenberg AFB to support Ground Based Strategic Deterrent test operations. The primary facility will accommodate a missile maintenance crew, a rail system to process Stage 1 and Stage 2/3 combinations or a full booster, and shall be sited for hazardous Division 1.3 explosives. The project will consist of the steel core and corrugated metal shell structure with concrete foundations, electrical/mechanical service and distribution components/systems, water and sewer, fire protection, lightning protection, security and communications systems. A 5 ton bridge crane will operate over the high bay area of the facility where the weapon system transport semi-tractor and trailers will back up to the booster rails. A Safe and Arm Test Chamber Area is required to test Propellant Actuated Device items prior to installation on the missile. This facility will be located within a secure boundary and built to appropriate Anti-terrorism/force protection standards. Site improvements include clearing, grubbing, grading, demolition, as applicable, paving, walks and storm drainage. Facilities will be designed as permanent construction in accordance with the Department of Defense Unified Facilities Criteria 1-200-01. This project will comply with Department of Defense antiterrorism/force protection requirements per Unified Facility Criteria 4-010-01.					

1. COMPONENT AIR FORCE	FY 2022 MILITARY CONSTRUCTION PROJECT DATA		2. Date MAY 2021
3. INSTALLATION AND LOCATION VANDENBERG MAIN BASE VANDENBERG MAIN BASE SITE 1 CALIFORNIA		4. PROJECT TITLE: GBSD STAGE PROCESSING FACILITY	
5. PROGRAM ELEMENT 11233F	6. CATEGORY CODE 222-222	7. PROJECT NUMBER XUMU193000	8. PROJECT COST (\$000) 19,000
Air Conditioning Load: 100 Tons			
<p>11. REQUIREMENT: 1,186 SM ADEQUATE: 0 SM SUBSTANDARD: 0 SM</p> <p>PROJECT: Ground Based Strategic Deterrent Stage Processing Facility</p> <p>REQUIREMENT: A Ground Based Strategic Deterrent processing facility is required to support the Ground Based Strategic Deterrent testing activities scheduled to start in FY23, without interruptions to the Minuteman III test launch schedule. The explosive-sited facility is required to assemble and install critical mission abort equipment in the new Ground Based Strategic Deterrent Intercontinental Ballistic Missiles prior to test launch. This critical facility shall include a stage processing high bay with a new Ground Based Strategic Deterrent rail set for an entire booster along with room to store the Missile Transporter or Transporter Erector vehicles. The facility will have a low bay for equipment storage and administrative/common areas to support the missile handling crew/staff. The following are major functions performed in the facility: Receipt and inspection of stages (I, II, III); Flight termination system explosive components and Propellant Actuated Device installation on solid Stages I, II, III; and end ring/carriage change out for solid stages. This is an AFGSC tenant requirement.</p> <p>CURRENT SITUATION: Minuteman III has a similar facility for processing missiles for test launch and due to the space limitations, the differences in security levels, rails and support equipment, and conflicts with launch schedules for the next ten years, Ground Based Strategic Deterrent cannot use the same facility. The current facility does not have adequate capacity to support the overlap of both missions.</p> <p>IMPACT IF NOT PROVIDED: The Ground Based Strategic Deterrent program is scheduled to start Developmental Test mid-FY23 and Operational Test in mid-FY26 to meet the deployment schedule of FY28. If the facility is not provided on time, then Developmental Test and Operational Test will be delayed, and IOC will not be met.</p> <p>ADDITIONAL: This project meets applicable criteria/scope specified in Air Force Manual 32-1084, Facility Requirements. Scope was determined using the less predominant category code 215-582, because the Air Force Manual 32-1084 does not provide sufficient design requirements for the predominant category code. This design shall conform to criteria established in the Air Force Corporate Facilities Standards, the Installation Facility Standards, but will not employ a standard facility design because there is no AF standard facility design for this project and there is no applicable standard design from the U.S. Army Corps of Engineers. All reasonable alternatives were considered during the development of this project to include status quo, add/alter, and new construction. New construction is the only viable option to meet this requirement. A waiver to an Economic Analysis has been approved for this project. Sustainable principles, to include life-cycle cost-effective practices, will be integrated into the design, development, and construction of the project in accordance with Unified Facility Criteria 1- 200-02, High Performance and Sustainable Building Requirements. This includes preparation of a life-cycle cost analysis for energy consuming systems, renewable energy generating systems, whenever life-cycle cost effective is selected as the reason</p>			

1. COMPONENT AIR FORCE	FY 2022 MILITARY CONSTRUCTION PROJECT DATA		2. Date MAY 2021
3. INSTALLATION AND LOCATION VANDENBERG MAIN BASE VANDENBERG MAIN BASE SITE 1 CALIFORNIA		4. PROJECT TITLE: GBSD STAGE PROCESSING FACILITY	
5. PROGRAM ELEMENT 11233F	6. CATEGORY CODE 222-222	7. PROJECT NUMBER XUMU193000	8. PROJECT COST (\$000) 19,000
<p>any requirement of Unified Facility Criteria 1-200-02 is partially compliant or not applicable. This project does not fall within the 100-year flood plain. This project was included in the Fiscal Year 2021 future years' defense plan in Fiscal Year 2022. Facility is sited in accordance with the Installation Development Plan and is within a compatible land use area. Supporting Facilities exceed 25% of the Primary Facilities total because explosive safety requirements add significant distance for pavement and utility routing to the facility from improved roads and utility tie- ins. In addition pavements must be able to handle large semi-trailer trucks throughout the facility with adequate turn-around capability.</p> <p>30th Space Wing Base Civil Engineer: 805-605-8591.</p> <p>Production Missiles: 1,186 SM = 12,766 Square Feet;</p> <p>Shop, Surveillance and Inspection: 333 SM = 3,584 Square Feet.</p> <p>JOINT USE CERTIFICATION: This facility can be used by other components on an "as available" basis; however, the scope of the project is based on Air Force requirements.</p>			

1. COMPONENT AIR FORCE	FY 2022 MILITARY CONSTRUCTION PROJECT DATA		2. Date MAY 2021
3. INSTALLATION AND LOCATION VANDENBERG MAIN BASE VANDENBERG MAIN BASE SITE 1 CALIFORNIA		4. PROJECT TITLE: GBSD STAGE PROCESSING FACILITY	
5. PROGRAM ELEMENT 11233F	6. CATEGORY CODE 222-222	7. PROJECT NUMBER XUMU193000	8. PROJECT COST (\$000) 19,000
12. SUPPLEMENTAL DATA:			
a. Estimated Design Data:			
(1) Status			
(a) Type of Design			DESIGN-BUILD
(b) Date Design Started			28-JUL-20
(c) Parametric Cost Estimates Used to Develop Costs			YES
(d) Percent Complete as of 01 JAN 2021			35%
(e) Date 35% Designed			13-SEP-20
(f) Date Design Complete			23-JUL-21
(g) Energy Study/Life-Cycle analysis was/will be performed			YES
(2) Basis			
(a) Standard or Definitive Design Used			NO
(b) Where Design Was Previously Used			N/A
(3) Total Cost (c) = (a) + (b) or (d) + (e)			(\$000)
(a) Production of Plans and Specifications			930
(b) All Other Design Costs			465
(c) Total			1,395
(d) Contract			1,163
(e) In-House			232
(4) Construction Contract Award			22-MAR
(5) Construction Start			22-MAY
(6) Construction Completion			23-MAY
b. Equipment associated with this project provided from other appropriations:			
		FISCAL YEAR	
		APPROPRIATED	COST
EQUIPMENT NOMENCLATURE	PROCURING APPRO	OR REQUESTED	(\$000)
COMMUNICATIONS EQUIPMENT	3400	FUTURE REQUEST	100
FURNITURE, FIXTURES, & EQUIPMENT	3400	FUTURE REQUEST	49
IT EQUIPMENT	3400	FUTURE REQUEST	10
WEAPON SYSTEM INSTALLED EQUIPMENT	3600	FUTURE REQUEST	1,500

1. COMPONENT AIR FORCE	FY 2022 MILITARY CONSTRUCTION PROJECT DATA			2. Date MAY 2021	
3. INSTALLATION AND LOCATION VANDENBERG MAIN BASE VANDENBERG MAIN BASE SITE 1 CALIFORNIA		4. PROJECT TITLE: GBSD RE-ENTRY VEHICLE FACILITY			
5. PROGRAM ELEMENT 11233F	6. CATEGORY CODE 141-912	7. PROJECT NUMBER XUMU193001	8. PROJECT COST (\$000) 48,000		
9. COST ESTIMATES					
Item		U/M	Quantity	Unit Cost (\$)	Cost (\$000)
PRIMARY FACILITY					34,487
RE-ENTRY VEHICLE BUILDING (141-912)		SM	1,152	18,305	(21,087)
SHOP, SURVEILLANCE AND INSPECTION (215-582)		SM	743	10,153	(7,544)
MUNITIONS MAINTENANCE ADMINISTRATION (610-144)		SM	427	11,525	(4,921)
GANTRY/BRIDGE CRANE (890-154)		EA	3	106,000	(318)
ICD 705 PREMIUM		LS			(367)
CYBERSECURITY OF FACILITY-RELATED CONTROL SYS		LS			(250)
SUPPORTING FACILITIES					6,894
UTILITIES		LS			(3,612)
SITE IMPROVEMENTS		LS			(1,123)
PAVEMENTS		LS			(580)
COMMUNICATIONS		LS			(1,579)
SUBTOTAL					41,381
CONTINGENCY (5%)					2,069
TOTAL CONTRACT COST					43,450
SUPERVISION, INSPECTION AND OVERHEAD (5.7%)					2,477
DESIGN-BUILD - DESIGN COST (4.0% OF SUBTOTAL)					1,655
TOTAL REQUEST					47,582
TOTAL REQUEST (ROUNDED)					48,000
EQUIPMENT FROM OTHER APPROPRIATIONS (NON-ADD)					(1,114)
10. DESCRIPTION OF PROPOSED CONSTRUCTION: Construct a single story Re-entry Vehicle Maintenance facility at North Base, Vandenberg AFB to support Ground Based Strategic Deterrent operations, and accommodate a missile maintenance crew. The primary facility will be used to house re-entry vehicles, penetration aids, payload mounting platforms and aerodynamic shrouds that are assembled into re-entry system packages for intercontinental ballistic missile. The project will consist of concrete foundations and blast walls, electrical/mechanical service and distribution components/systems, water and sewer, fire protection, lightning protection, security and communications systems, and three five-ton cranes to lift critical hardware. The facility will be located within a secure boundary and built to Anti-terrorism/force protection PL4 standards. The facility will have secure storage rooms that will be built to Intelligence Community Directive 705 standards. Processing bays will be built to explosive standards. Site improvements include clearing, grubbing, grading, demolition, as applicable, paving, walkways, holding tank and storm drainage. Facilities will be designed as permanent construction in accordance with the Department of Defense Unified Facilities Criteria 1-200-01.					

1. COMPONENT AIR FORCE	FY 2022 MILITARY CONSTRUCTION PROJECT DATA			2. Date MAY 2021
3. INSTALLATION AND LOCATION VANDENBERG MAIN BASE VANDENBERG MAIN BASE SITE 1 CALIFORNIA		4. PROJECT TITLE: GBSD RE-ENTRY VEHICLE FACILITY		
5. PROGRAM ELEMENT 11233F	6. CATEGORY CODE 141-912	7. PROJECT NUMBER XUMU193001	8. PROJECT COST (\$000) 48,000	
<p>This project will comply with Department of Defense antiterrorism/force protection requirements per Unified Facility Criteria 4-010-01.</p> <p>Air Conditioning Load: 100 Tons</p>				
<p>11. REQUIREMENT: 1,152 SM ADEQUATE: 0 SM SUBSTANDARD: 0 SM</p> <p>PROJECT: Ground Based Strategic Deterrent Re-Entry Vehicle Maintenance Facility</p> <p>REQUIREMENT: A Ground Based Strategic Deterrent Re-Entry Vehicle Maintenance facility is required to support the Ground Based Strategic Deterrent testing activities scheduled to start in FY23, without interruptions to the Minuteman III test launch schedule. The explosive-sited facility is required to perform mission critical maintenance, and post boost maintenance, for the new Ground Based Strategic Deterrent Intercontinental Ballistic Missiles. The critical facility shall include a Payload Transporter loading/operations bay with a shipping and receiving area. The facility will have calibration and maintenance bays, a storage bay, equipment staging areas to support the operational bay, and administrative/common areas to support the 22 missile maintenance crew/staff. This is an Air Force Global Strike Command tenant requirement.</p> <p>CURRENT SITUATION: Existing Minuteman III re-entry vehicle facility is 100% allocated to the Minuteman III mission. No additional space on the installation exists to support a re-entry vehicle function to support the additional Ground Based Strategic Deterrent mission. The facility is an explosive-sited facility necessary to prepare the missile for launch, maintenance, and storage. Currently any issue that arises for the Propulsion System Rocket Engine results in a bottleneck for the flow of operations. Current crane hook height for Minuteman III operations is deficient, and additional headroom is required to support Ground Based Strategic Deterrent test functions/operations.</p> <p>IMPACT IF NOT PROVIDED: The Ground Based Strategic Deterrent program is scheduled to start Developmental Test mid-FY23 and Operational Test in mid-FY26 to meet the deployment schedule of FY28. If facility is not provided on time, then Developmental Test and Operational Test will be delayed, and initial operational capability will not be met.</p> <p>ADDITIONAL: This project meets applicable criteria/scope specified in Air Force Manual 32-1084, Facility Requirements. Scope was determined using the less predominant category codes 215-582 and 610-144, because the Air Force Manual 32-1084 does not provide sufficient design requirements for the predominant category code. This design shall conform to criteria established in the Air Force Corporate Facilities Standards, the Installation Facility Standards, but will not employ a standard facility design because there is no AF standard facility design for this project, and there is no applicable standard design from the U.S. Army Corps of Engineers. A waiver to an Economic Analysis has been approved for this project. Sustainable principles, to include life-cycle cost-effective practices, will be integrated into the design, development, and construction of the project in accordance with Unified Facility Criteria 1- 200-02, High Performance and Sustainable Building Requirements. This includes preparation of a life-cycle cost</p>				

1. COMPONENT AIR FORCE	FY 2022 MILITARY CONSTRUCTION PROJECT DATA		2. Date MAY 2021
3. INSTALLATION AND LOCATION VANDENBERG MAIN BASE VANDENBERG MAIN BASE SITE 1 CALIFORNIA		4. PROJECT TITLE: GBSD RE-ENTRY VEHICLE FACILITY	
5. PROGRAM ELEMENT 11233F	6. CATEGORY CODE 141-912	7. PROJECT NUMBER XUMU193001	8. PROJECT COST (\$000) 48,000
<p>analysis for energy consuming systems, renewable energy generating systems, whenever life-cycle cost effective is selected as the reason any requirement of Unified Facility Criteria 1-200-02 is partially compliant or not applicable. This project does not fall within the 100-year flood plain. This project was included in the Fiscal Year 2021 future years' defense plan in Fiscal Year 2022. Facility is sited in accordance with the Installation Development Plan and is within a compatible land use area. Supporting Facilities exceed 25% of the Primary Facilities due to the amount of utilities, including tank installation, storm drainage, and site work associated with the project location.</p> <p>30th Space Wing Base Civil Engineer: 805-605-8591</p> <p>Re-Entry Vehicle Building: 1,152 Square Meters = 12,400 Square Feet</p> <p>Shop, Surveillance and Inspection: 743 Square Meters = 7,998 Square Feet</p> <p>Munitions Maintenance Administration: 427 Square Meters = 4,596 Square Feet</p> <p>JOINT USE CERTIFICATION: This facility can be used by other components on an "as available" basis; however, the scope of the project is based on Air Force requirements.</p>			

1. COMPONENT AIR FORCE	FY 2022 MILITARY CONSTRUCTION PROJECT DATA		2. Date MAY 2021
3. INSTALLATION AND LOCATION VANDENBERG MAIN BASE VANDENBERG MAIN BASE SITE 1 CALIFORNIA		4. PROJECT TITLE: GBSD RE-ENTRY VEHICLE FACILITY	
5. PROGRAM ELEMENT 11233F	6. CATEGORY CODE 141-912	7. PROJECT NUMBER XUMU193001	8. PROJECT COST (\$000) 48,000
12. SUPPLEMENTAL DATA:			
a. Estimated Design Data:			
(1) Status			
(a) Type of Design			DESIGN-BUILD
(b) Date Design Started			14-JUL-20
(c) Parametric Cost Estimates Used to Develop Costs			YES
(d) Percent Complete as of 01 JAN 2021			35%
(e) Date 35% Designed			06-AUG-20
(f) Date Design Complete			18-JUN-21
(g) Energy Study/Life-Cycle analysis was/will be performed			YES
(2) Basis			
(a) Standard or Definitive Design Used			NO
(b) Where Design Was Previously Used			N/A
(3) Total Cost (c) = (a) + (b) or (d) + (e)			(\$000)
(a) Production of Plans and Specifications			2,400
(b) All Other Design Costs			1,200
(c) Total			3,600
(d) Contract			3,000
(e) In-House			600
(4) Construction Contract Award			22-APR
(5) Construction Start			22-JUN
(6) Construction Completion			24-JUN
b. Equipment associated with this project provided from other appropriations:			
		FISCAL YEAR	
		APPROPRIATED	COST
EQUIPMENT NOMENCLATURE	PROCURING APPRO	OR REQUESTED	(\$000)
COMMUNICATIONS & IT EQUIPMENT	3080	FUTURE REQUEST	350
FURNITURE, FIXTURES, & EQUIPMENT	3080	FUTURE REQUEST	264
SECURITY EQUIPMENT	3080	FUTURE REQUEST	500

1. COMPONENT AIR FORCE		FY <u>2022</u> MILITARY CONSTRUCTION PROGRAM					2. DATE (YYYYMMDD) MAY 2021				
3. INSTALLATION AND LOCATION JB ANACOSTIA-BOLLING, DISTRICT OF COLUMBIA					4. COMMAND AIR FORCE DISTRICT OF WASHINGTON					5. AREA CONSTRUCTION COST INDEX 0.99	
6. PERSONNEL		(1) PERMANENT			(2) STUDENTS			(3) SUPPORTED			(4) TOTAL
		OFFICER	ENLISTED	CIVILIAN	OFFICER	ENLISTED	CIVILIAN	OFFICER	ENLISTED	CIVILIAN	
a. AS OF	30-SEP-20	323	1,143	823	0	0	0	649	1,610	836	5,384
b. END FY		323	1,143	823	0	0	0	649	1,610	836	5,384
7. INVENTORY DATA (\$000)											
a. TOTAL ACREAGE										607	
b. INVENTORY TOTAL AS OF 30-SEP-20										0.00	
c. AUTHORIZATION NOT YET IN INVENTORY										0.00	
d. AUTHORIZATION REQUESTED IN THIS PROGRAM										24,000.00	
e. AUTHORIZATION INCLUDED IN FOLLOWING PROGRAM										0.00	
f. PLANNED IN NEXT THREE PROGRAM YEARS										0.00	
g. REMAINING DEFICIENCY										20,000.00	
h. GRAND TOTAL										44,000.00	
8. PROJECTS REQUESTED IN THIS PROGRAM											
a. CATEGORY				b. COST (\$000)		c. DESIGN STATUS					
(1) CODE	(2) PROJECT TITLE		(3) SCOPE			(1) START	(2) COMPLETE				
141-446	JOINT AIR DEFENSE OPERATIONS CENTER PHASE II		2,509 SM		24,000	03/20	08/21				
9. FUTURE PROJECTS N/A											
10. MISSION OR MAJOR FUNCTIONS Organizes, trains, equips, and deploys expeditionary combat forces for the American Expeditionary Forces. Provides comprehensive wartime base operating support to all Air Force personnel in the National Capital Region, as well as MAJCOM-level, programming and comptroller support, and Uniform Code of Military Justice authority for Headquarters Air Force and Air Force elements worldwide. Produces ceremonial and musical effects worldwide to boost troop morale, improve community relations, bolster recruiting support, and represent the Air Force for Chief of Staff of the Air Force, Headquarters Air Force, Joint Staff, and Office of the Secretary of Defense.											
11. OUTSTANDING POLLUTION AND SAFETY DEFICIENCIES N/A											

1. COMPONENT AIR FORCE	FY 2022 MILITARY CONSTRUCTION PROJECT DATA			2. DATE MAY 2021
3. INSTALLATION, SITE AND LOCATION JOINT BASE ANACOSTIA-BOLLING BOLLING AIR FORCE BASE SITE # 1 DISTRICT OF COLUMBIA		4. PROJECT TITLE JOINT AIR DEFENSE OPERATIONS CENTER PHASE II		
5. PROGRAM ELEMENT 91211F	6. CATEGORY CODE 141-446	7. PROJECT NUMBER BXUR125001	8. PROJECT COST (\$000) 24,000	
9. COST ESTIMATES				
ITEM	U/M	QUANTITY	UNIT COST (\$)	COST (\$000)
PRIMARY FACILITIES				16,910
COMBAT CENTER BUILDING	SM	2,509	5,389	(13,521)
ICD 705 PREMIUM	LS			(3,139)
CYBERSECURITY OF FACILITY-RELATED CONTROL SYS	LS			(250)
SUPPORTING FACILITIES				4,782
PAVEMENTS	LS			(363)
UTILITIES	LS			(1,045)
SITE IMPROVEMENTS	LS			(99)
PASSIVE FORCE PROTECTION MEASURES	LS			(887)
COMMUNICATIONS	LS			(2,188)
UTILITIES CONNECTION FEE	LS			(200)
SUBTOTAL				21,692
CONTINGENCY (5.0%)				1,085
TOTAL CONTRACT COST				22,777
SUPERVISION, INSPECTION AND OVERHEAD (5.7%)				1,298
TOTAL REQUEST				24,075
TOTAL REQUEST (ROUNDED)				24,000
EQUIPMENT FROM OTHER APPROPRIATIONS (NON-ADD)				(2,000)
<p>10. Description of Proposed Construction: Complete the Joint Air Defense Operations Center permanent facility by providing the second phase of the Military Construction: Construct a two-story Joint Air Defense Operations Center. Construction includes concrete slab-on-grade foundation with concrete spread footings under steel columns, structural steel frame, concrete masonry unit shear walls, and roofing system with sloping roof deck. Includes pavements, all utilities, site improvements, passive force protection measures, security fencing, and diverse communication routing to eliminate single points of failure and ensure constant connectivity. Special Construction Requirements include Controlled Space in accordance with Intelligence Community Directive/Intelligence Community Standard 705 and use of special exterior finishes to meet Joint Base Anacostia Bolling's architectural design requirements. The facility shall be compatible with applicable Department of Defense, Air Force, and Joint Base design standards. In addition, local materials and construction techniques shall be used where cost effective. Facilities will be designed as permanent construction in accordance with the Department of Defense Unified Facilities Criteria 1-200-01. This project will comply with Department of Defense antiterrorism/force protection requirements per Unified Facility Criteria 4-010-01.</p> <p>Air Conditioning: 250 Tons</p>				

1. COMPONENT AIR FORCE	FY 2022 MILITARY CONSTRUCTION PROJECT DATA			2. DATE MAY 2021
3. INSTALLATION, SITE AND LOCATION JOINT BASE ANACOSTIA-BOLLING BOLLING AIR FORCE BASE SITE # 1 DISTRICT OF COLUMBIA		4. PROJECT TITLE JOINT AIR DEFENSE OPERATIONS CENTER PHASE II		
5. PROGRAM ELEMENT 91211F	6. CATEGORY CODE 141-446	7. PROJECT NUMBER BXUR125001	8. PROJECT COST (\$000) 24,000	
<p>11. Requirement: 2,509 SM Adequate: 0 SM Substandard: 0 SM</p> <p>PROJECT: Joint Air Defense Operations Center Phase II.</p> <p>REQUIREMENT: In October, 2003, the Secretary of Defense directed the stand-up of the National Capital Region Integrated Air Defense System. The Joint Air Defense Operations Center is the command and control center for the National Capital Region Integrated Air Defense System and employs sensors, aircraft warning systems, ground-based air defense systems, and necessary communications. This enduring mission requires a permanent facility including adequate space for an operations center and related mission systems that was provided in Phase I. Phase II will provide necessary facility space to sustain operations and includes technical training rooms; planning room; Controlled Space and Top Secret space; ground-based air defense systems and related electronic, laser and optical equipment maintenance; test and integration space; secure climate controlled equipment and spares storage for systems located throughout the National Capital Region; office and administrative space for assigned and rotational personnel; arms vault and arms maintenance shop; strengthened roof area for mounting mission equipment; and a diverse communications route. Perimeter security for both Phase I and II facilities is required. This is an Air Force requirement but shared with the Army and is a joint supported service requirement.</p> <p>CURRENT SITUATION: The first phase of the Joint Air Defense Operations Center was completed in 2014. This 2,100 SM facility houses the Air Defense Operations Facility, operations personnel, mission equipment/server room, communications security equipment, and the entry security/vestibule/elevator designed to serve both Phase I and II. Functions that were not included in Phase I currently reside in temporarily loaned substandard facilities on the installation, including 2,115 SM in Building 400 and 962 SM in Building 1, temporary laboratory structures, and mobile containers on and off base. Lack of training space drives crew training and simulations on operational systems interrupting real-world operations multiple times each day. Furthermore, lack of diverse communications routing has been a finding of two independent mission assessments from the Defense Threat Reduction Agency and the U.S. Northern Command Cyber Protection Team.</p> <p>Temporarily loaned facilities are not secure and do not offer proper acclimatized and classified warehouse space for sensitive equipment. Phase II will complete the Joint Air Defense Operations Center facility requirement to sustain continuous operations resulting in decreased down-time of operational systems and improved mission assurance.</p> <p>IMPACT IF NOT PROVIDED: Continued use of temporary facilities that do not meet necessary standards for function and security result in decreased mission effectiveness and increased risk to the National Capital Region. Training will continue to take operational systems offline multiple times each day and training will remain degraded. Academic training will continue to disrupt daily battle rhythm and remain disjointed as space is unavailable or remote. Hours will continue to be wasted in transit to and from required intelligence services sourced at external agencies. Lack of on-site maintenance capability causing</p>				

1. COMPONENT AIR FORCE	FY 2022 MILITARY CONSTRUCTION PROJECT DATA			2. DATE MAY 2021
3. INSTALLATION, SITE AND LOCATION JOINT BASE ANACOSTIA-BOLLING BOLLING AIR FORCE BASE SITE # 1 DISTRICT OF COLUMBIA		4. PROJECT TITLE JOINT AIR DEFENSE OPERATIONS CENTER PHASE II		
5. PROGRAM ELEMENT 91211F	6. CATEGORY CODE 141-446	7. PROJECT NUMBER BXUR125001	8. PROJECT COST (\$000) 24,000	
<p>delays to assess and repair surveillance, notification, and command, control, communication, and computer systems resulting in increased down-times. Maintenance across all mission systems will remain inefficiently distributed and conducted in substandard spaces. The inadequate storage will continue to place high end equipment at risk from damage.</p> <p>ADDITIONAL: This project meets the criteria/scope specified in the Air Force Manual 32-1084, "Facility Requirements." This design shall conform to criteria established in the Air Force Corporate Facilities Standards, the Installation Facilities Standards, but will not employ a standard facility design because there is no AF standard facility design for this project and there is no applicable standard design from the Naval Facilities Engineering Command. An analysis of reasonable options for accomplishing this project was performed prior to Phase I and reviewed in consideration of Phase II. There is only one option that will meet operational requirements: new construction. A waiver to an Economic Analysis is in progress with an expected completion in June 2021. Sustainable principles, to include life-cycle cost-effective practices, will be integrated into the design, development, and construction of the project in accordance with Unified Facility Criteria 1-200-02, High Performance and Sustainable Building Requirements. This includes preparation of a life-cycle cost analysis for energy consuming systems, renewable energy generating systems, whenever life-cycle cost effective is selected as the reason any requirement of Unified Facility Criteria 1-200-02 is partially compliant or not applicable. This project does not fall within or partly within the 100-year flood plain. This project was included in the Fiscal Year 2021 future years' defense plan in a future fiscal year. Facility is sited in accordance with the Installation Development Plan and is within a compatible land use area. Phase I of this project was authorized and completed. Supporting Facilities exceeds 25% of Primary Facilities total due to the amount of communication support infrastructure required because existing infrastructure is at capacity.</p> <p>Public Works Officer: 202-767-5565</p> <p>Combat Center Building: 2,509 SM = 27,007 Square Feet.</p> <p>JOINT USE CERTIFICATION: This facility is programmed for joint use with Army; however, it is fully funded by the Air Force.</p>				

1. COMPONENT AIR FORCE	FY 2022 MILITARY CONSTRUCTION PROJECT DATA		2. DATE MAY 2021
3. INSTALLATION, SITE AND LOCATION JOINT BASE ANACOSTIA-BOLLING BOLLING AIR FORCE BASE SITE # 1 DISTRICT OF COLUMBIA		4. PROJECT TITLE JOINT AIR DEFENSE OPERATIONS CENTER PHASE II	
5. PROGRAM ELEMENT 91211F	6. CATEGORY CODE 141-446	7. PROJECT NUMBER BXUR125001	8. PROJECT COST (\$000) 24,000
12. SUPPLEMENTAL DATA:			
a. Estimated Design Data:			
(1) Status:			
(a) Type of Design	DESIGN-BID-BUILD		
(b) Date Design Started	16-MAR-20		
(c) Parametric Cost Estimates used to develop costs	YES		
(d) Percent Complete as of 01 JAN 2021	65 %		
(e) Date 35% Designed	15-AUG-20		
(f) Date Design Complete	01-AUG-21		
(g) Energy Study/Life-Cycle analysis was/will be performed	YES		
(2) Basis:			
(a) Standard or Definitive Design -	NO		
(b) Where Design Was Most Recently Used -	N/A		
(3) Total Cost (c) = (a) + (b) or (d) + (e):	(\$000)		
(a) Production of Plans and Specifications	1,440		
(b) All Other Design Costs	720		
(c) Total	2,160		
(d) Contract	1,800		
(e) In-house	360		
(4) Construction Contract Award	22 MAR		
(5) Construction Start	22 MAY		
(6) Construction Completion	23 NOV		
b. Equipment associated with this project provided from other appropriations:			
EQUIPMENT NOMENCLATURE	PROCURING APPROPRIATION	FISCAL YEAR APPROPRIATED OR REQUESTED	COST (\$000)
FURNISHINGS FIXTURES AND EQPT	3080	Future Request	2,000

1. COMPONENT AIR FORCE		FY 2022 MILITARY CONSTRUCTION PROGRAM					2. DATE (YYYYMMDD) MAY 2021				
3. INSTALLATION AND LOCATION BARKSDALE AFB, LOUISIANA				4. COMMAND AIR FORCE GLOBAL STRIKE COMMAND			5. AREA CONSTRUCTION COST INDEX 0.83				
6. PERSONNEL		(1) PERMANENT			(2) STUDENTS			(3) SUPPORTED			(4) TOTAL
		OFFICER	ENLISTED	CIVILIAN	OFFICER	ENLISTED	CIVILIAN	OFFICER	ENLISTED	CIVILIAN	
a. AS OF 30-SEP-20		1,097	6,745	1,324	49	6	1	3	6	9	9,240
b. END FY		1,097	6,745	1,324	49	6	1	3	6	9	9,240
7. INVENTORY DATA (\$000)											
a. TOTAL ACREAGE										60,638	
b. INVENTORY TOTAL AS OF 30-SEP-20										1,992,003.00	
c. AUTHORIZATION NOT YET IN INVENTORY										69,000.00	
d. AUTHORIZATION REQUESTED IN THIS PROGRAM										272,000.00	
e. AUTHORIZATION INCLUDED IN FOLLOWING PROGRAM										0.00	
f. PLANNED IN NEXT THREE PROGRAM YEARS										0.00	
g. REMAINING DEFICIENCY										100,200.00	
h. GRAND TOTAL										2,438,203.00	
8. PROJECTS REQUESTED IN THIS PROGRAM											
a. CATEGORY				b. COST (\$000)		c. DESIGN STATUS					
(1) CODE	(2) PROJECT TITLE		(3) SCOPE			(1) START	(2) COMPLETE				
215-582	WEAPONS GENERATION FACILITY, Inc 1		8,884 SM		40,000	03/17	11/22				
9. FUTURE PROJECTS 215-582 WEAPONS GENERATION FACILITY (8,884 SM / \$237,000)											
10. MISSION OR MAJOR FUNCTIONS Barksdale Air Force Base is home to the 2d Bomb Wing. The 2nd Bomb Wing conducts the primary mission with three squadrons of B-52H Stratofortress bombers - the 11th Bomb Squadron, which is the training squadron, the 20th Bomb Squadron and the 96th Bomb Squadron. Together they ensure the 2nd Bomb Wing provides flexible, responsive, global combat capability, autonomously or in concert with other forces, and trains all Air Force Global Strike Command and Air Force Reserve B-52 crews. The 2nd Bomb Wing provides our nation with strategic deterrence capabilities and devastating global combat air power, anytime, anywhere.											
11. OUTSTANDING POLLUTION AND SAFETY DEFICIENCIES N/A											

1. COMPONENT AIR FORCE		FY 2022 MILITARY CONSTRUCTION PROJECT DATA			2. DATE MAY 2021		
3. INSTALLATION AND LOCATION BARKSDALE AFB BARKSDALE AIR FORCE BASE SITE 1 LOUISIANA				4. PROJECT TITLE: WEAPONS GENERATION FACILITY, INC 1			
5. PROGRAM ELEMENT 91211F		6. CATEGORY CODE 215-582	7. PROJECT NUMBER AWUB145001		8. PROJECT COST (\$000) AUTH: 272,000 APPR: 40,000		
9. COST ESTIMATES							
ITEM				U/M	QUANTITY	UNIT COST (\$)	COST (\$000)
PRIMARY FACILITIES							187,147
SHOP, SURVEILLANCE AND INSPECTION (215-582)				SM	8,884	15,830	(140,634)
RESERVE FIRE TEAM FACILITY (730-836)				SM	512	11,588	(5,933)
SECURITY POLICE ENTRY CONTR BUILDING (730-837)				SM	776	18,315	(14,212)
EMER ELECTRIC POWER GENERATION PLANT (811-147)				KW	2,000	1,405	(2,810)
WATER FIRE PUMPING STATION (843-316)				SM	283	25,423	(7,195)
MISCELLANEOUS PERSONNEL SHELTER (738-499)				SM	14	2,877	(40)
SECURITY DEFENSIVE FIGHTING POSITION (730-834)				SM	75	38,267	(2,870)
GANTRY/BRIDGE CRANE (890-154)				EA	3	72,800	(218)
FENCE INTERIOR (872-248)				LM	1,524	438	(668)
RENOVATE SHOP, MISSILE ASSEMBLY (212-212)				SM	6,474	1,236	(8,002)
CYBERSECURITY OF FACILITY-RELATED CONTROL SYS				LS			(4,565)
SUPPORTING FACILITIES							58,376
SITE PREPARATION				LS			(17,300)
SITE IMPROVEMENTS				LS			(1,483)
UTILITIES				LS			(13,500)
PAVEMENTS				LS			(6,464)
COMMUNICATIONS				LS			(2,970)
PASSIVE FORCE PROTECTION				LS			(8,561)
MEASURES ENVIRONMENTAL				LS			(3,184)
REMEDICATION UNEXPLODED ORDNANCE				LS			(4,000)
REMEDICATION DEMOLITION				SM	1,711	534	(914)
SUBTOTAL							245,523
CONTINGENCY (5%)							12,276
TOTAL CONTRACT COST							257,799
SUPERVISION, INSPECTION AND OVERHEAD (5.7%)							14,695
TOTAL REQUEST							272,494
TOTAL REQUEST (ROUNDED)							272,000
EQUIPMENT FROM OTHER APPROPRIATIONS (NON-ADD)							(35,696)
10. DESCRIPTION OF PROPOSED CONSTRUCTION: Construct a Weapon Generation Facility that is a hardened facility, within a protective zone, with consolidated storage, maintenance, inspection, and administrative functions using best practices from similar Department of the Navy and Department of Energy							

1. COMPONENT AIR FORCE	FY 2022 MILITARY CONSTRUCTION PROJECT DATA			2. DATE MAY 2021
3. INSTALLATION AND LOCATION BARKSDALE AFB BARKSDALE AIR FORCE BASE SITE 1 LOUISIANA			4. PROJECT TITLE: WEAPONS GENERATION FACILITY, INC 1	
5. PROGRAM ELEMENT 91211F	6. CATEGORY CODE 215-582	7. PROJECT NUMBER AWUB145001	8. PROJECT COST (\$000) AUTH: 272,000 APPR: 40,000	
<p>facilities currently in use. All construction will meet requirements for essential facility system nuclear design certification. An overhead bridge crane is required for maintenance purposes in each of the three (3) Maintenance Bays. Generation staging area will be required for unloading transit vehicles. Project will include an independent fire suppression system, all utilities, pavements, communications, site improvements, security forces fire team facility, Remote Target Engagement System tower structure, Entry Control Point/Shelter, personnel shelter to protect from weather elements, and associated support facilities to provide a complete and useable facility. Project includes renovation of the Integrated Maintenance Facility, Building 7710 (6,474 Square Meters), because this facility already contains unique maintenance functions that this project will not duplicate, but is a requirement of the overall weapons generation functions. Project will include an emergency back-up generator, as authorized per Air Force Instruction 32-1062, and is included as part of the emergency electric power generation plant facility. Project will demolish Building 7318 (1,711 Square Meters). Facilities will be designed as permanent construction in accordance with the Department of Defense Unified Facilities Criteria 1-200-01, General Building requirements. This project will comply with Department of Defense Antiterrorism/Force Protection requirements per Unified Facilities Criteria 4-010-01.</p> <p>Air Conditioning: 100 Tons</p>				
<p>11. REQUIREMENT: 8,884 SM ADEQUATE: 6,474 SM SUBSTANDARD: 1,711 SM PROJECT: Construct Weapons Generation Facility</p> <p>REQUIREMENT: Project is required to construct a Weapons Generation Facility to reconstitute nuclear capability at Barksdale Air Force Base, Louisiana. A reinforced concrete facility that places all nuclear maintenance and storage operations in a single facility is required to eliminate security deviations. Weapons Generation Facilities are single hardened facilities within a protective zone, with consolidated storage, maintenance, inspection, and administrative functions. Emergency generator is required for the critical operations in the facility and is included as part of the emergency electric power generation plant facility. Nuclear certified hoists and cranes are also required to perform asset handling and maintenance functions. Remediation of Unexploded Ordnance and wetlands are required as a critical task prior to initial site construction.</p> <p>CURRENT SITUATION: The Barksdale Air Force Base Weapons Generation Facility initiative is an important element of a broader Weapons Generation Facility Investment Strategy that will recapitalize five Air Force Global Strike Command Weapons Storage Areas. Existing Weapons Storage Areas (and the Barksdale Munitions Storage Area) contain numerous function-specific deficiencies, inflexible design based on the prevailing nuclear weapons storage standards of the 1950s and 1960s. The current facilities do not meet the security requirements mandated in Department of Defense security directives. The aging infrastructure requires workarounds to meet mission requirements and the current facilities systems are inadequate to support ongoing weapons maintenance. The existing facilities have outlived their design life.</p>				

1. COMPONENT AIR FORCE	FY 2022 MILITARY CONSTRUCTION PROJECT DATA			2. DATE MAY 2021
3. INSTALLATION AND LOCATION BARKSDALE AFB BARKSDALE AIR FORCE BASE SITE 1 LOUISIANA			4. PROJECT TITLE: WEAPONS GENERATION FACILITY, INC 1	
5. PROGRAM ELEMENT 91211F	6. CATEGORY CODE 215-582	7. PROJECT NUMBER AWUB145001	8. PROJECT COST (\$000) AUTH: 272,000 APPR: 40,000	
<p>IMPACT IF NOT PROVIDED: The stand-up of a nuclear capable mission at Barksdale is a strategic based decision. If this project is not funded, the storage and maintenance of weapons will not be feasible at Barksdale Air Force Base. Lack of adequate weapons storage and maintenance facilities at Barksdale Air Force Base will prevent diversification of the Air Force's nuclear mission, placing continued strain on the nuclear bomber force. All areas of the facility are required for it to operate as a nuclear certified facility. It is not possible to separate the facility into complete and useable phases.</p> <p>ADDITIONAL: This project meets applicable criteria/scope specified in Air Force Manual 32-1084, Facility Requirements. This design shall conform to criteria established in the Air Force Corporate Facilities Standards, the Installation Facilities Standards (if applicable), but will not employ a standard facility design because there is no Air Force standard facility design for this project, and there is no applicable standard design from NAVFAC. A waiver to an Economic Analysis has been approved for this project. Sustainable principles, to include life-cycle cost- effective practices, will be integrated into the design, development, and construction of the project in accordance with Unified Facility Criteria 1- 200-02, High Performance and Sustainable Building Requirements. This includes preparation of a life-cycle cost analysis for energy consuming systems, renewable energy generating systems, whenever life-cycle cost effective is selected as the reason any requirement of Unified Facility Criteria 1-200-02 is partially compliant or not applicable. This project does not fall within or partly within the 100-year flood plain. This project was included in the Fiscal Year 2021 future years' defense plan in a future fiscal year. Facility is sited in accordance with the Installation Development Plan and is within a compatible land use area.</p> <p>Supporting Facilities total exceeds 25% of the Primary Facilities total due to extensive amount of earthwork associated with preparing the site.</p> <p>Base Civil Engineer: (318) 456-4586.</p> <p>Shop, Surveillance and Inspection: 8,884 SM = 95,627 Square Feet;</p> <p>Reserve Fire Team Facility: 512 SM = 5,511 Square Feet;</p> <p>Security Police Entry Control Building: 776 SM = 8,353 Square Feet;</p> <p>Water Fire Pumping Station: 283 SM = 3,046 Square Feet;</p> <p>Miscellaneous Personnel Shelter: 14 SM = 151 Square Feet;</p> <p>Security Defensive Fighting Position: 75 SM = 807 Square Feet;</p> <p>Fence Interior: 1,524 LM = 5,000 Linear Feet;</p> <p>Renovate Shop, Missile Assembly: 6,474 SM = 69,686 Square Feet;</p> <p>Demolition: 1,711 SM = 18,417 Square Feet.</p> <p>JOINT USE CERTIFICATION: This facility can be used by other components on an "as available" basis; however, the scope of the project is based on Air Force requirements.</p>				

1. COMPONENT AIR FORCE	FY 2022 MILITARY CONSTRUCTION PROJECT DATA		2. DATE MAY 2021
3. INSTALLATION AND LOCATION BARKSDALE AFB BARKSDALE AIR FORCE BASE SITE 1 LOUISIANA		4. PROJECT TITLE: WEAPONS GENERATION FACILITY, INC 1	
5. PROGRAM ELEMENT 91211F	6. CATEGORY CODE 215-582	7. PROJECT NUMBER AWUB145001	8. PROJECT COST (\$000) AUTH: 272,000 APPR: 40,000
12. SUPPLEMENTAL DATA:			
a. Estimated Design Data:			
(1) Status:			
(a) Type of Design			Design-Bid-Build
(b) Date Design Started			20-MAR-17
(b) Parametric Cost Estimates used to develop costs			YES
(c) Percent Complete as of 01 JAN 2021			35%
(d) Date 35% Designed			14-AUG-20
(e) Date Design Complete			22-NOV-22
(f) Energy Study/Life-Cycle analysis was/will be performed			YES
(2) Basis:			
(a) Standard or Definitive Design			NO
(b) Where Design Was Most Recently Used			N/A
(3) Total Cost (c) = (a) + (b) or (d) + (e): (\$000)			
(a) Production of Plans and Specifications			18,000
(b) All Other Design Costs			9,000
(c) Total			27,000
(d) Contract			22,500
(e) In-house			4,500
(4) Construction Contract Award			22-FEB
(5) Construction Start			22-MAR
(6) Construction Completion			26-FEB
b. Equipment associated with this project provided from other appropriations:			
		FISCAL YEAR	COST
	PROCURING	APPROPRIATED OR	
EQUIPMENT NOMENCLATURE	APPROPRIATION	REQUESTED	(\$000)
FURNITURE, FIXTURES, & EQUIPMENT	3080	FUTURE REQUEST	1,813
UNINTERRUPTED POWER SUPPLY	3080	FUTURE REQUEST	2,577
HOISTING EQUIPMENT	3080	FUTURE REQUEST	292
SECURITY EQUIPMENT	3080	FUTURE REQEUST	30,000
AIR COMPRESSORS	3080	FUTURE REQUEST	1,014

1. COMPONENT AIR FORCE	FY 2022 MILITARY CONSTRUCTION PROJECT DATA		2. DATE MAY 2021
3. INSTALLATION AND LOCATION BARKSDALE AFB BARKSDALE AIR FORCE BASE SITE 1 LOUISIANA		4. PROJECT TITLE: WEAPONS GENERATION FACILITY, INC 1	
5. PROGRAM ELEMENT 91211F	6. CATEGORY CODE 215-582	7. PROJECT NUMBER AWUB145001	8. PROJECT COST (\$000) AUTH: 272,000 APPR: 40,000
c. Authorization and Appropriation Summary:			
	Authorization (\$000)	Auth of Approp (\$000)	Approp (\$000)
FY2022 Request	272,000	40,000	40,000
Future Request	0	232,000	232,000
Total	272,000		272,000

Project: Weapons Generation Facility, Barksdale AFB Louisiana (Current Authorization = \$0)

All Cost in thousands

Project Spending Plan

As of: 17-Mar-21

All Cost in thousands

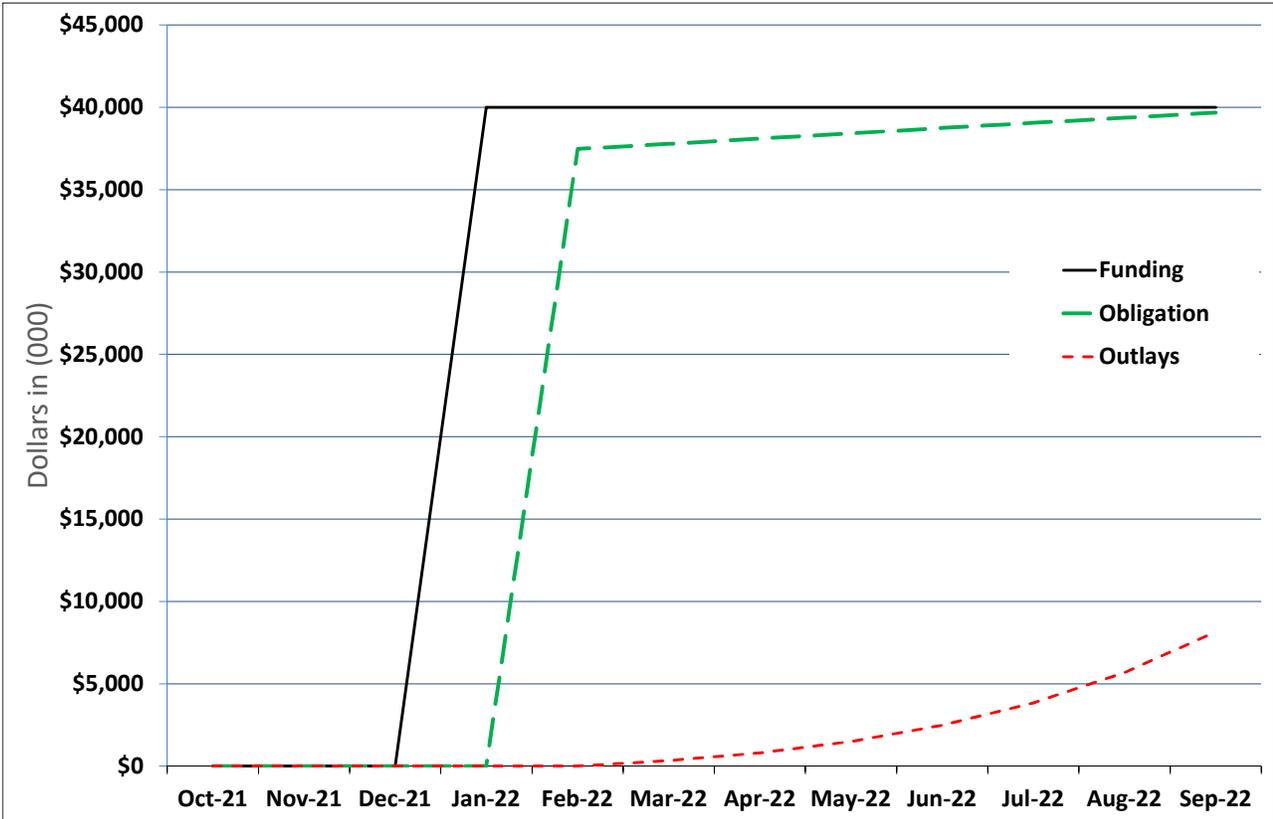
Chart Begin Oct-21	FUNDING (note 1)		OBLIGATION (note 2)		OUTLAYS (note 3)	
Month	Enacted	Cumulative	Obligated	Cumulative	Monthly	Cumulative
Oct-21	-	-	-	-	-	-
Nov-21	-	-	-	-	-	-
Dec-21	-	-	-	-	-	-
Jan-22	40,000	40,000	-	-	-	-
Feb-22	-	40,000	37,472	37,472	-	-
Mar-22	-	40,000	316	37,788	326	326
Apr-22	-	40,000	316	38,104	480	806
May-22	-	40,000	316	38,420	694	1,500
Jun-22	-	40,000	316	38,736	981	2,481
Jul-22	-	40,000	316	39,052	1,360	3,842
Aug-22	-	40,000	316	39,368	1,847	5,689
Sep-22	-	40,000	316	39,684	2,458	8,147

Note 1: Assume enactment in January of the execution year. Follow-on increments anticipated October of FY23 and FY24

Note 2: Assumes funds are available for obligation by 31 January of the execution year and by 31 October for subsequent years.

Note 3: Assumes contract award in FEB 2022 and contract completion Feb 2026; duration 48 months.

Weapons Generation Facility, Barksdale AFB Louisiana (Current Authorization = \$0)



1. COMPONENT AIR FORCE		FY <u>2022</u> MILITARY CONSTRUCTION PROGRAM					2. DATE (YYYYMMDD) MAY 2021				
3. INSTALLATION AND LOCATION JOINT BASE ANDREWS, MARYLAND				4. COMMAND AIR FORCE DISTRICT OF WASHINGTON			5. AREA CONSTRUCTION COST INDEX .95				
6. PERSONNEL		(1) PERMANENT			(2) STUDENTS			(3) SUPPORTED			(4) TOTAL
		OFFICER	ENLISTED	CIVILIAN	OFFICER	ENLISTED	CIVILIAN	OFFICER	ENLISTED	CIVILIAN	
a. AS OF	30-SEP-20	440	2,009	1,001	0	448	0	2,078	1,859	0	7,835
b. END FY		442	2,017	979	0	448	0	2,078	1,859	0	7,823
7. INVENTORY DATA (\$000)											
a. TOTAL ACREAGE										7,426	
b. INVENTORY TOTAL AS OF 30-SEP-20										2,450,026.00	
c. AUTHORIZATION NOT YET IN INVENTORY										411,000.00	
d. AUTHORIZATION REQUESTED IN THIS PROGRAM										26,000.00	
e. AUTHORIZATION INCLUDED IN FOLLOWING PROGRAM										0.00	
f. PLANNED IN NEXT THREE PROGRAM YEARS										0.00	
g. REMAINING DEFICIENCY										109,525.00	
h. GRAND TOTAL										2,996,551.00	
8. PROJECTS REQUESTED IN THIS PROGRAM											
a. CATEGORY				b. COST (\$000)		c. DESIGN STATUS					
(1) CODE	(2) PROJECT TITLE		(3) SCOPE			(1) START	(2) COMPLETE				
130-142	FIRE CRASH RESCUE STATION		3,365 SM		26,000	01/20	03/21				
9. FUTURE PROJECTS											
10. MISSION OR MAJOR FUNCTIONS											
<p>Joint Base Andrews is home to Air Force District of Washington's 316th Wing, host wing, providing security, personnel, contracting, finance, and infrastructure support for six wings, two headquarters, and more than 80 tenant organizations. Partner units on base including Air Mobility Command's 89th Airlift Wing, Air Force Reserve Command's 459th Air Refueling Wing, D.C. Air National Guard's 113th Wing, the Naval Air Facility, and Army and Marine Corps detachments. The 89th Airlift Wing is responsible for worldwide special air mission airlift, logistics and communications support for the president, vice president and other senior military and elected leaders. The installation provides contingency response capability critical to National Security to include emergency reaction rotary-wing airlift for the National Capital Region, combat-ready Airmen to Air and Space Expeditionary Forces, and to secure installation and robust infrastructure to support base operations.</p>											
11. OUTSTANDING POLLUTION AND SAFETY DEFICIENCIES											
N/A											

1. COMPONENT AIR FORCE	FY 2022 MILITARY CONSTRUCTION PROJECT DATA			2. DATE MAY 2021
3. INSTALLATION AND LOCATION JOINT BASE ANDREWS ANDREWS SITE 1 MARYLAND			4. PROJECT TITLE: FIRE CRASH RESCUE STATION	
5. PROGRAM ELEMENT 91211F	6. CATEGORY CODE 130-142	7. PROJECT NUMBER AJXF1076490	8. PROJECT COST (\$000) 26,000	
9. COST ESTIMATES				
ITEM	U/M	QUANTITY	UNIT COST (\$)	COST (\$000)
PRIMARY FACILITIES				18,488
FIRE CRASH/RESCUE STATION	SM	3,365	5,420	(18,238)
CYBERSECURITY OF FACILITY-RELATED CONTROL SYS	LS			(250)
SUPPORTING FACILITIES				4,129
UTILITIES	LS			(728)
UTILITIES CONNECTION FEE	LS			(99)
PAVEMENTS	LS			(1,362)
COMMUNICATIONS SUPPORT	LS			(120)
SOIL REMEDIATION	LS			(81)
SITE IMPROVEMENTS	LS			(1,150)
DEMOLITION	SM	1,775	236	(419)
EMERGENCY GENERATOR	KW	500	340	(170)
SUBTOTAL				22,617
CONTINGENCY COST (5%)				1,131
TOTAL CONTRACT COST				23,748
SUPERVISION, INSPECTION & OVERHEAD (5.7%)				1,354
DESIGN/BUILD - DESIGN COST (4.0% OF SUBTOTAL)				905
TOTAL REQUEST				26,007
TOTAL REQUEST (ROUNDED)				26,000
EQUIPMENT FROM OTHER APPROPRIATIONS (NON-ADD)				(220)
10. Description of Proposed Construction: Construct a Crash Rescue Station utilizing economical design and construction methods in accordance with Joint Base Andrews' Architectural Compatibility to accommodate the mission of the facility. Construction consists of reinforced concrete foundation, structural steel frame, split-face concrete masonry unit veneer, and standing seam metal roof. In addition, local materials and construction techniques shall be used where cost effective. Project scope includes Combined Emergency Communication Center, apparatus equipment/maintenance bays, administration/management offices, training rooms, residential & living space, an alternate Emergency Operations Center, clean/dirty rooms for special equipment, logistics warehouse, response trailer storage and necessary recreation (television room/lounge/dining/kitchen) space, heating ventilation and air conditioning, electrical, communication, fire detection/suppression and mass notification/intercom systems, site preparations, parking lot, landscaping, storm water management, utilities and utilities connection fees, emergency generator with fuel tank and automatic transfer switch, and all other necessary work associated				

1. COMPONENT AIR FORCE	FY 2022 MILITARY CONSTRUCTION PROJECT DATA		2. DATE MAY 2021
3. INSTALLATION AND LOCATION JOINT BASE ANDREWS ANDREWS SITE 1 MARYLAND		4. PROJECT TITLE: FIRE CRASH RESCUE STATION	
5. PROGRAM ELEMENT 91211F	6. CATEGORY CODE 130-142	7. PROJECT NUMBER AJXF1076490	8. PROJECT COST (\$000) 26,000
<p>with this project to provide a complete and useful facility. Emergency Generator is authorized per Air Force Instruction 32-1062. The project will demolish buildings 1287 (1,673 Square Meter), and 819 (102 Square Meter) for a total of 1,775 Square Meters. Facilities will be designed as permanent construction in accordance with the DoD Unified Facilities Criteria 1-200-01. This project will comply with Department of Defense antiterrorism/force protection requirements per Unified Facility Criteria 4-010-01.</p> <p>Air Conditioning: 100 Tons</p>			
<p>11. REQUIREMENT: 3,365 SM Adequate: 0 SM Substandard: 1,775 SM</p> <p>PROJECT: Fire Crash Rescue Station</p> <p>REQUIREMENT: An adequately sized and configured fire crash rescue station is required to support current and future flying missions at Joint Base Andrews. Facility shall have space for a total of fourteen Aircraft Rescue Fire Fighting apparatus, bunk rooms, training areas, gym, conference rooms, administration and management offices. This is not a tenant supported requirement.</p> <p>CURRENT SITUATION: Crash Rescue Station 1 was constructed in 1976 to support a much smaller aircraft mission set and base population. The facility is severely deficit in space and inadequately configured for current fire fighting vehicles/ equipment and personnel required to support the mission. It has numerous life-safety code discrepancies and does not comply with National Fire Protection Association 1500: Standard on Fire Department Occupational Safety and Health Program. In 2011, Joint Base Andrews' crash rescue mission received major findings during a unit inspection identifying several shortfalls in meeting Unified Facility Criteria 4-730-10, Fire Station.</p> <p>IMPACT IF NOT PROVIDED: Without a new Crash Rescue Station, fire fighters and response crew will continue working out of severely undersized and substandard existing facility. Tight spacing hinders safe operations for the fire fighters and response crew and put no-fail high visibility missions on risk. High risk of injuries to the fire fighters and airmen due to the tight space around the apparatus as well as slower response time. Lack of training and clean-dirty space will continue to impact the readiness of response crew. Inadequate ventilation for exhaust fumes and water leaks throughout the sleeping and living quarter areas will keep causing health risks to responders. Additionally, National Fire Protection Association 1500: Standard on Fire Department Occupational Safety and Health Program will not be met.</p> <p>ADDITIONAL: This project meets the criteria/scope specified in Air Force Manual 32-1084, "Facilities Requirements" and Unified Facility Criteria 4-730-10, Fire Stations. Sustainable principles, to include life-cycle cost-effective practices, will be integrated into the design, development, and construction of the project in accordance with Unified Facility Criteria 1-200-02. This includes preparation of a life-cycle cost analysis for energy consuming systems, renewable energy generating systems, whenever life-cycle cost effective is selected as the reason any requirement of Unified Facility Criteria 1-200-02 is partially compliant or not applicable. An economic analysis of reasonable alternatives (status quo, add/alter,</p>			

1. COMPONENT AIR FORCE	FY 2022 MILITARY CONSTRUCTION PROJECT DATA		2. DATE MAY 2021
3. INSTALLATION AND LOCATION JOINT BASE ANDREWS ANDREWS SITE 1 MARYLAND		4. PROJECT TITLE: FIRE CRASH RESCUE STATION	
5. PROGRAM ELEMENT 91211F	6. CATEGORY CODE 130-142	7. PROJECT NUMBER AJXF1076490	8. PROJECT COST (\$000) 26,000
<p>and new construction) was completed during the development of this project. This analysis indicated that new construction is the most cost effective, which meets mission requirements. This design shall conform to criteria established in the Air Force Corporate Facilities Standards, the Installation Facilities Standards, and will employ a standard facility design. This project was included in the Fiscal Year 2021 future years' defense plan in a future fiscal year. This project does not fall within or partly within the 100-year flood plain. This project is in compliance with the installation development plan.</p> <p>Base Civil Engineer: 301-981-7281.</p> <p>Fire Crash Rescue Station: 3,365 Square Meter = 36,221 Square Feet</p> <p>Demolition: 1,775 Square Meter = 19,106 Square Feet</p> <p>JOINT USE CERTIFICATION: This facility can be used by other components on an "as available" basis; however, the scope of the project is based on Air Force requirements.</p>			

1. COMPONENT AIR FORCE	FY 2022 MILITARY CONSTRUCTION PROJECT DATA		2. DATE MAY 2021
3. INSTALLATION AND LOCATION JOINT BASE ANDREWS ANDREWS SITE 1 MARYLAND		4. PROJECT TITLE: FIRE CRASH RESCUE STATION	
5. PROGRAM ELEMENT 91211F	6. CATEGORY CODE 130-142	7. PROJECT NUMBER AJXF1076490	8. PROJECT COST (\$000) 26,000
12. SUPPLEMENTAL DATA:			
a. Estimated Design Data:			
(1) Status			
(a) Type of Design			DESIGN-BUILD
(b) Date Design Started			23-JAN-20
(c) Parametric Cost Estimates Used to Develop Costs			YES
(d) Percent Complete as of 01-JAN-2021			35%
(e) Date Design 35% Complete			20-AUG-20
(f) Date Design Complete			01-MAR-21
(g) Energy Study and Life Cycle analysis was performed			YES
(2) Basis			
(a) Standard or Definitive Design Used			YES
(b) Where Design Was Most Recently Used			FY17/EDWARDS AFB
(3) Total Cost (c) = (a) + (b) or (d) + (e) (\$000)			
(a) Production of Plans and Specifications			1,560
(b) All Other Design Costs			780
(c) Total			2,340
(d) Contract			1,950
(e) In-House			390
(4) Construction Contract Award			21-DEC
(5) Construction Start			22-JAN
(6) Construction Completion			23-JUN
b. Equipment associated with this project provided from other appropriations:			
		FISCAL YEAR	
		APPROPRIATED	COST
EQUIPMENT NOMENCLATURE	PROCURING APPRO	OR REQUESTED	(\$000)
FURNISHINGS, FIXTURES, & EQUIPMENT	3400	FUTURE REQUEST	220

1. COMPONENT AIR FORCE		FY 2022 MILITARY CONSTRUCTION PROGRAM					2. DATE (YYYYMMDD) MAY 2021				
3. INSTALLATION AND LOCATION HANSCOM AIR FORCE BASE, MASSACHUSETTS				4. COMMAND AIR FORCE MATERIEL COMMAND			5. AREA CONSTRUCTION COST INDEX 1.21				
6. PERSONNEL		(1) PERMANENT			(2) STUDENTS			(3) SUPPORTED			(4) TOTAL
		OFFICER	ENLISTED	CIVILIAN	OFFICER	ENLISTED	CIVILIAN	OFFICER	ENLISTED	CIVILIAN	
a. AS OF 30-Sep-20		455	264	1,698	0	0	0	48	92	480	3,037
b. END FY		462	270	1,680	0	0	0	48	95	485	3,040
7. INVENTORY DATA (\$000)											
a. TOTAL ACREAGE										2,331	
b. INVENTORY TOTAL AS OF 30-Sep-20										1,618,197.00	
c. AUTHORIZATION NOT YET IN INVENTORY										256,000.00	
d. AUTHORIZATION REQUESTED IN THIS PROGRAM										66,000.00	
e. AUTHORIZATION INCLUDED IN FOLLOWING PROGRAM										0.00	
f. PLANNED IN NEXT THREE PROGRAM YEARS										0.00	
g. REMAINING DEFICIENCY										490,200.00	
h. GRAND TOTAL										2,430,397.00	
8. PROJECTS REQUESTED IN THIS PROGRAM											
a. CATEGORY				b. COST (\$000)		c. DESIGN STATUS					
(1) CODE	(2) PROJECT TITLE		(3) SCOPE			(1) START	(2) COMPLETE				
317-315	NC3 ACQUISITIONS MANAGEMENT FACILITY		5,375 SM		66,000	12/19	08/20				
9. FUTURE PROJECTS											
10. MISSION OR MAJOR FUNCTIONS											
AFLCMC provides the latest in command and control and information systems for various weapons platforms including the E-3 AWACS and E-8 Joint STARS; an Air Force Research Laboratory research site location for the space vehicles directorate; an air base group and recruiting group.											
11. OUTSTANDING POLLUTION AND SAFETY DEFICIENCIES											

1. COMPONENT AIR FORCE		FY 2022 MILITARY CONSTRUCTION PROJECT DATA			2. DATE MAY 2021		
3. INSTALLATION AND LOCATION HANSCOM AIR FORCE BASE MASSACHUSETTS				4. PROJECT TITLE: NC3 ACQUISITIONS MANAGEMENT FACILITY			
5. PROGRAM ELEMENT 91211F	6. CATEGORY CODE 317-315	7. PROJECT NUMBER MXRD163002		8. PROJECT COST (\$000) 66,000			
9. COST ESTIMATE							
ITEM				U/M	QUANTITY	UNIT COST	COST (\$000)
PRIMARY FACILITIES							51,657
ELECTRONIC RESEARCH AND ENGINEERING (317-315)				SM	5,375	5,113	(27,482)
ICD 705 PREMIUM				LS			(15,625)
WAREHOUSE SUPPLY AND EQUIPMENT BASE (442-758)				SM	1,687	4,321	(7,290)
CYBERSECURITY OF FACILITY-RELATED CONTROL SYS				LS			(1,260)
SUPPORTING FACILITIES							6,138
UTILITIES				LS			(1,558)
SITE IMPROVEMENTS				LS			(1,385)
PAVEMENT				LS			(1,614)
COMMUNICATIONS				LS			(162)
DEMOLITION				SM	3,092	459	(1,419)
SUBTOTAL							57,795
CONTINGENCY (5.0%)							2,890
TOTAL CONTRACT COST							60,685
SUPERVISION, INSPECTION AND OVERHEAD (5.7%)							3,459
DESIGN/BUILD - DESIGN COST (4.0% OF SUBTOTAL)							2,312
TOTAL REQUEST							66,456
TOTAL REQUEST (ROUNDED)							66,000
EQUIPMENT FROM OTHER APPROPRIATIONS (NON-ADD)							(4,428)
10. DESCRIPTION OF PROPOSED WORK: Construct an Acquisitions Management Facility and replace the Central Shipping/Receiving/Hazardous Materials facility. The acquisition facility will be a multi-story secure facility constructed with a concrete foundation and partial basement, steel framing, masonry infill walls and an energy efficient roof. Site improvements will include parking, utilities, landscaping, sidewalks and all other work necessary to make this a complete and usable facility. The entire Acquisitions Management Facility will be secured and be constructed in accordance with Intelligence Community Directive 705. The Central Shipping/Receiving/Hazardous Materials facility will be a 1-story high-bay warehouse facility with an administration section constructed with a concrete foundation, steel framing and masonry block/insulated metal panel walls. Site improvements will include parking, utilities, landscaping, sidewalks, loading dock and access road and all other work necessary to make this a complete and usable facility. New utilities will be installed for water, sanitary sewer,							

1. COMPONENT AIR FORCE	FY 2022 MILITARY CONSTRUCTION PROJECT DATA			2. DATE MAY 2021
3. INSTALLATION AND LOCATION HANSCOM AIR FORCE BASE MASSACHUSETTS			4. PROJECT TITLE: NC3 ACQUISITIONS MANAGEMENT FACILITY	
5. PROGRAM ELEMENT 91211F	6. CATEGORY CODE 317-315	7. PROJECT NUMBER MXRD163002	8. PROJECT COST (\$000) 66,000	
<p>electrical, communications, storm water, and natural gas for this warehouse facility. Existing duct banks and chases for communication and electrical service will be used to the extent possible. The project will also demolish building 1110 (1,858 SM), and 1152 (1,234 SM) (total 3,092 SM). Facilities will be designed as permanent construction in accordance with the Department of Defense Unified Facilities Criteria 1-200-01. This project will comply with Department of Defense Antiterrorism/Force Protection requirements per Unified Facility Criteria 4-010-01 and Unified Facilities Criteria 1-200-02, High Performance and Sustainable Building Requirements.</p> <p>Air conditioning: 160 tons</p>				
<p>11. REQUIREMENT: 5,375 SM ADEQUATE: 0 SM SUBSTANDARD: 3,092 SM PROJECT: NC3 Acquisitions Management Facility</p> <p>REQUIREMENT: This project will construct a facility that will provide space for Air Force personnel associated with the Air Force Nuclear Weapons Center programs that are currently located in off-base leased facilities. This facility is to include parking, office, conference rooms, and laboratory spaces. The proposed location for this facility is adjacent to related programs in building 1102 and have organizational relationships with the Air Force Logistics Life Cycle Management Center and Air Force Nuclear Weapons Center. Due to the limited developable space in this district and the requirement to be adjacent to building 1102, this project will require replacing the existing Shipping and Receiving Hazardous Materials facilities, which will be constructed at a location more compatible to its use. This is not a tenant supported requirement.</p> <p>CURRENT SITUATION: Air Force Nuclear Weapons Center has approx. 248 Air Force personnel currently off-base at a location in Burlington, Massachusetts (7 miles from Hanscom). The facility owner had originally requested that the Air Force vacate Nuclear Weapons Center Personnel by 2021. Hanscom AFB had developed courses of action to relocate personnel via a facility renovation project and through the use of modular facilities. The facility renovation project is scheduled to be completed in late 2021, however, the use of modular facilities has been deemed no longer feasible. As a result personnel will need to remain off-site until the completion of this MILCON project. The facility owner has been notified and requests that Air Force personnel be relocated as soon as possible. 66 Air Base Group shipping and receiving currently resides in Buildings 1110 and 1152, which support 20 personnel and contains shipping, receiving, material handling, and administrative spaces. Building 1110 was built as a temporary structure and lacks adequate space, fire systems, and secure storage.</p> <p>IMPACT IF NOT PROVIDED: When Building 1110 and 1152 were initially used for a central shipping/receiving and materials handling facility, the district</p>				

1. COMPONENT AIR FORCE	FY 2022 MILITARY CONSTRUCTION PROJECT DATA			2. DATE MAY 2021
3. INSTALLATION AND LOCATION HANSCOM AIR FORCE BASE MASSACHUSETTS			4. PROJECT TITLE: NC3 ACQUISITIONS MANAGEMENT FACILITY	
5. PROGRAM ELEMENT 91211F	6. CATEGORY CODE 317-315	7. PROJECT NUMBER MXRD163002	8. PROJECT COST (\$000) 66,000	

was mainly research/laboratory with far fewer personnel and vehicular traffic. The facilities in this district are now being renovated to high occupancy administrative buildings that will result in over 1,200 personnel and increased vehicular traffic. There are pedestrian and vehicular safety concerns with having over 400 personnel directly adjacent to the functions in Building 1110 and 1152. These concerns are mainly related to an increased volume of delivery vehicles traversing the area; but also, are related to proximity with potential hazardous/dangerous materials being delivered to the facilities.

ADDITIONAL: This project meets applicable criteria/scope specified in Air Force Manual 32-1084, Facility Requirements. This design shall conform to criteria established in the Air Force Corporate Facilities Standards, the Installation Facilities Standards, but will not employ a standard facility design because there are no Air Force standard facility designs for this project. The local Design Construction Agent will be consulted to see if a standard design exists. All reasonable alternatives were considered during the development of this project to include status quo, add/alter, and new construction. An approved Economic Analysis determined new construction as the only viable option to meet this requirement. The Unified Facilities Criteria 4-701-01, Department of Defense Pricing Guide, Parametric Cost Estimating System, and Means were used to develop the estimate for this project. Force protection measures are considered in accordance with United States Air Force Installation Protection Guide. Sustainable principles, to include life-cycle cost-effective practices, will be integrated into the design, development, and construction of the project in accordance with Unified Facility Criteria 1-200-02. This includes preparation of a life-cycle cost analysis for energy consuming systems, renewable energy generating systems, whenever life-cycle cost effective is selected as the reason any requirement of Unified Facility Criteria 1-200-02 is partially compliant or not applicable. This project does not fall within or partly within the 100-year flood plain. This project was not included in the Fiscal Year 2021 Future Years Defense Program. Facility is sited in accordance with the Installation Development Plan and is within a compatible land use area.

1. COMPONENT AIR FORCE	FY 2022 MILITARY CONSTRUCTION PROJECT DATA			2. DATE MAY 2021
3. INSTALLATION AND LOCATION HANSCOM AIR FORCE BASE MASSACHUSETTS			4. PROJECT TITLE: NC3 ACQUISITIONS MANAGEMENT FACILITY	
5. PROGRAM ELEMENT 91211F	6. CATEGORY CODE 317-315	7. PROJECT NUMBER MXRD163002	8. PROJECT COST (\$000) 66,000	
<p>66th Air Base Group Base Civil Engineer: (781) 225-2999</p> <p>Electronic Research/Engineering: 5,375 SM = 57,856 SF</p> <p>Warehouse Supply/Equipment Base: 1,687 SM = 18,159 SF</p> <p>Demolition: 3,092 SM = 33,282 SF</p> <p>JOINT USE CERTIFICATION: This facility can be used by other components on an "as available" basis; however, the scope of the project is based on Air Force requirements.</p>				

1. COMPONENT AIR FORCE	FY 2022 MILITARY CONSTRUCTION PROJECT DATA		2. DATE MAY 2021
3. INSTALLATION AND LOCATION HANSCOM AIR FORCE BASE MASSACHUSETTS		4. PROJECT TITLE: NC3 ACQUISITIONS MANAGEMENT FACILITY	
5. PROGRAM ELEMENT 91211F	6. CATEGORY CODE 317-315	7. PROJECT NUMBER MXRD163002	8. PROJECT COST (\$000) 66,000
12. SUPPLEMENTAL DATA:			
a. Estimated Design Data:			
(1) Status			
(a) Type of Design	Design-Build		
(b) Date Design Started	13-DEC-19		
(c) Parametric Cost Estimates used to develop costs	YES		
(d) Percent Complete as of 01 Jan 2021	100%		
(e) Date 35% Designed	30-MAR-20		
(f) Date Design Complete	30-AUG-20		
(g) Energy Study/Life-Cycle cost analysis was/will be performed	YES		
(2) Basis:			
(a) Standard or Definitive Design	NO		
(b) Where Design Was Most Recently Used	N/A		
(3) Total Cost (c) = (a) + (b) or (d) + (e)	(\$000)		
(a) Production of Plans and Specifications	3,960		
(b) All Other Design Costs	1,980		
(c) Total	5,940		
(d) Contract	4,950		
(e) In-house	990		
(4) Construction Contract Award	22-FEB		
(5) Construction Start	22-APR		
(6) Construction Completion	24-DEC		
b. Equipment associated with this project provided from other appropriations:			
		FISCAL YEAR	
		APPROPRIATED	COST
EQUIPMENT NOMENCLATURE	PROCURING APPROP	OR REQUESTED	(\$000)
COMMUNICATIONS/DATA/SECURITY	3080	FUTURE REQUEST	1,400
FURNITURE/FIXTURES	3080	FUTURE REQUEST	1,850
COPY/AUDIO VISUAL EQUIPMENT	3400	FUTURE REQUEST	180
CONSTRUCTION SURVEILLANCE TECHNICIANS	3400	FUTURE REQUEST	998

1. COMPONENT AIR FORCE		FY <u>2022</u> MILITARY CONSTRUCTION PROGRAM					2. DATE (YYYYMMDD) MAY 2021				
3. INSTALLATION AND LOCATION TINKER AIR FORCE BASE, OKLAHOMA				4. COMMAND AIR FORCE MATERIEL COMMAND			5. AREA CONSTRUCTION COST INDEX 0.92				
6. PERSONNEL		(1) PERMANENT			(2) STUDENTS			(3) SUPPORTED			(4) TOTAL
		OFFICER	ENLISTED	CIVILIAN	OFFICER	ENLISTED	CIVILIAN	OFFICER	ENLISTED	CIVILIAN	
a. AS OF 30-Sep-20		259	808	14,398	0	0	0	983	4,462	537	21,447
b. END FY		275	875	14,498	0	0	0	1,015	4,475	560	21,698
7. INVENTORY DATA (\$000)											
a. TOTAL ACREAGE								5,604			
b. INVENTORY TOTAL AS OF 30-Sep-20								6,787,684.00			
c. AUTHORIZATION NOT YET IN INVENTORY								166,000.00			
d. AUTHORIZATION REQUESTED IN THIS PROGRAM								160,000.00			
e. AUTHORIZATION INCLUDED IN FOLLOWING PROGRAM								0.00			
f. PLANNED IN NEXT THREE PROGRAM YEARS								0.00			
g. REMAINING DEFICIENCY								376,470.00			
h. GRAND TOTAL								7,490,154.00			
8. PROJECTS REQUESTED IN THIS PROGRAM											
a. CATEGORY				b. COST (\$000)		c. DESIGN STATUS					
(1) CODE	(2) PROJECT TITLE		(3) SCOPE			(1) START	(2) COMPLETE				
211-116	KC-46A 3-BAY DEPOT MAINTENANCE HANGAR		13,842 SM		160,000	04/20	08/21				
9. FUTURE PROJECTS											
10. MISSION OR MAJOR FUNCTIONS											
Tinker Air Force Base combined mission includes operations, supply, maintenance and management in support of the 76th Maintenance Wing, 552nd ACW, 327th Air Sustainment Wing, 448th Combat Sustainment Wing, 3rd Combat Comm, Air Force Reserves, Navy Stratcomm Wing One, 72nd Air Base Wing, Defense Logistics Agency and Defense Information Systems Agency.											
11. OUTSTANDING POLLUTION AND SAFETY DEFICIENCIES											

1. COMPONENT AIR FORCE		FY 2022 MILITARY CONSTRUCTION PROJECT DATA			2. DATE MAY 2021	
2. INSTALLATION AND LOCATION TINKER AIR FORCE BASE TINKER AFB SITE # 1 OKLAHOMA				3. PROJECT TITLE: KC-46A 3-BAY DEPOT MAINTENANCE HANGAR		
4. PROGRAM ELEMENT 41221F	5. CATEGORY CODE 211-116	7. PROJECT NUMBER WWYK213001		8. PROJECT COST (\$000) 160,000		
9. COST ESTIMATE						
ITEM				U/M	QTY	COST (\$000)
PRIMARY FACILITIES						122,158
HANGAR, MAINTENANCE DEPOT (211-116)				SM	13,842	(80,699)
SHOP, AIRCRAFT GENERAL PURPOSE (211-152)				SM	3,716	(9,918)
APRON (113-321)				SM	33,187	(13,607)
SHOULDER, PAVED (116-642)				SM	560	(100)
PAD, WARMUP, HOLDING (116-666)				SM	30,621	(9,370)
VEHICLE PARKING NON ORGANIZATIONAL (852-262)				SM	10,156	(1,625)
HYDRANT FUELING SYSTEM (121-122)				OL	4	965,000 (3,860)
CYBERSECURITY OF FACILITY-RELATED CONTROL SYS				LS		(2,979)
SUPPORTING FACILITIES						17,267
BUREAU OF RECLAMATION WATER LINE RELOCATION				LS		(6,985)
UTILITIES				LS		(2,758)
STORM DRAINAGE				LS		(1,152)
COMMUNICATIONS				LS		(701)
SITE IMPROVEMENTS				LS		(4,860)
PASSIVE FORCE PROTECTION MEASURES				LS		(234)
REAL PROPERTY INSTALLED EQUIPMENT (CRANE)				LS		(577)
SUBTOTAL						139,425
CONTINGENCY (5.0%)						6,971
TOTAL CONTRACT COST						146,396
SUPERVISION, INSPECTION AND OVERHEAD (5.7%)						8,345
DESIGN/BUILD - DESIGN COST (4.0% OF SUBTOTAL)						5,577
TOTAL REQUEST						160,318
TOTAL REQUEST (ROUNDED)						160,000
EQUIPMENT FROM OTHER APPROPRIATIONS (NON-ADD)						(9,450)
10. DESCRIPTION OF PROPOSED WORK: Construct a high bay depot maintenance hangar for the KC-46A Pegasus Aerial Refueling Aircraft. The facility consists of three hangar docks sized to enclose the KC-46A aircraft and required clearances. Within the facility, there is a central area that houses the metal shop, kitting area, tool room, break room, and administrative offices. Additionally, there are utility rooms, communications rooms and other support spaces located within the hangar. The hangar bays will accommodate the aircraft in both nose-in and tail-in configuration. Overhead cranes and fall protection will be integrated into this facility. The						

1. COMPONENT AIR FORCE	FY 2022 MILITARY CONSTRUCTION PROJECT DATA			2. DATE MAY 2021
2. INSTALLATION AND LOCATION TINKER AIR FORCE BASE TINKER AFB SITE # 1 OKLAHOMA		3. PROJECT TITLE: KC-46A 3-BAY DEPOT MAINTENANCE HANGAR		
4. PROGRAM ELEMENT 41221F	5. CATEGORY CODE 211-116	7. PROJECT NUMBER WWYK213001	8. PROJECT COST (\$000) 160,000	
<p>exterior facility envelope will be metal panels on girts with brick wainscot and large sliding hangar door. Construct a general purpose aircraft shop as a standalone facility with an exterior facility envelope similar to the maintenance hangar. The facility will consist of a panel shop, kitting build up area, kitting repair area, kitting system area, inventory area, drop off area, administrative area, restrooms, and utility rooms. The exterior facility envelope will be similar to the maintenance hangar. This project also includes clearing and grading site, storm drainage, aircraft parking/movement area, utility infrastructure systems, and other supporting facilities. Demolish existing Bureau of Reclamation water main and reroute around Tinker Air Force Base. No acquisition of real estate will be required to reroute the water main. Facility will be designed as permanent construction in accordance with Department of Defense Unified Facilities Criteria 1-200-01. This project will comply with Department of Defense antiterrorism/force protection requirements per United Facilities Criteria 4-010-01 and Unified Facilities Criteria 1-200-02, High Performance and Sustainable Requirements.</p> <p>Air Conditioning: 67 Tons</p>				
<p>11. REQUIREMENT: 13,842 SM ADEQUATE: 0 SM SUBSTANDARD: 0 SM PROJECT: KC-46A 3-BAY DEPOT MAINTENANCE HANGAR</p> <p>REQUIREMENT: Tinker Air Force Base currently supports depot maintenance for multiple United States Air Force aircraft. In keeping with this mission, the base will host the depot maintenance for the new KC-46A aircraft. The depot maintenance complex is required to provide a reliable and responsive infrastructure for this weapons system in order to provide timely/efficient repair and maintenance. Specifically, this three bay hangar dock will perform required programmed depot maintenance for the KC-46A. The aircraft general purpose shop will provide aircraft kits required for depot maintenance. The first aircraft will arrive at Tinker for depot maintenance in Mid-2020. Full production will average 90 aircraft per year. This is not a tenant or supported service requirement.</p> <p>CURRENT SITUATION: The facilities and supporting infrastructure is a critical requirement to support the success of the new KC-46A mission. Depot maintenance ensures aircraft are properly/efficiently maintained & repaired to safeguard the pilots and longevity of the aircraft. Existing facilities and infrastructure within Tinker Air Force Base will not support the required maintenance of this aircraft due to its size and workload amount. The KC-46A has a wing span of 165 feet.</p>				

1. COMPONENT AIR FORCE	FY 2022 MILITARY CONSTRUCTION PROJECT DATA			2. DATE MAY 2021
2. INSTALLATION AND LOCATION TINKER AIR FORCE BASE TINKER AFB SITE # 1 OKLAHOMA		3. PROJECT TITLE: KC-46A 3-BAY DEPOT MAINTENANCE HANGAR		
4. PROGRAM ELEMENT 41221F	5. CATEGORY CODE 211-116	7. PROJECT NUMBER WWYK213001	8. PROJECT COST (\$000) 160,000	
<p>IMPACT IF NOT PROVIDED: Failure to construct this program depot maintenance hangar would critically impact the Air Force's ability to repair and maintain the KC-46A aircraft. Depot maintenance is critical to the KC-46A mission.</p> <p>ADDITIONAL: This project meets the criteria/scope specified in the Air Force Manual 32-1084, "Facility Requirements". This design shall conform to criteria established in the Air Force Corporate Facilities Standards, the Installation Facilities Standards, but will not employ a standard facility design because there is no Air Force standard facility design for this project and there is no applicable standard design from from the Air Force Civil Engineer Center nor the Army Corps of Engineers. All reasonable alternatives were considered during the development of this project to include status quo, add/alter, and new construction. An approved Economic Analysis determined new construction as the only viable option to meet this requirement. Sustainable principles, to include life-cycle cost-effective practices, will be integrated into the design, development and construction of the project in accordance with UFC 1-200-02: High Performance and Sustainable Building Requirements. This project does not fall within or partly within the 100-year flood plain. This project was included in the Fiscal Year 2021 Future Years Defense Program in Fiscal Year 2022. Facility is sited in accordance with the Installation Development Plan and is within a compatible land use area.</p> <p>72nd Air Base Wing Base Civil Engineer: (405) 734-3451.</p> <p>Hangar, Maintenance Depot: 13,842 SM = 148,994 SF</p> <p>Shop, Aircraft General Purpose: 3,716 SM = 39,999 SF</p> <p>Apron: 560 SM = 6,028 SF</p> <p>Pad, Warmup, Holding: 30,621 SM = 329,602 SF</p> <p>Vehicle Parking Non Organizational: 10,156 SM = 109,314 SF</p> <p>JOINT USE CERTIFICATION: This facility can be used by other components on an "as available" basis; however, the scope of the project is based on Air Force requirements.</p>				

1. COMPONENT AIR FORCE	FY 2022 MILITARY CONSTRUCTION PROJECT DATA		2. DATE MAY 2021
2. INSTALLATION AND LOCATION TINKER AIR FORCE BASE TINKER AFB SITE # 1 OKLAHOMA		3. PROJECT TITLE: KC-46A 3-BAY DEPOT MAINTENANCE HANGAR	
4. PROGRAM ELEMENT 41221F	5. CATEGORY CODE 211-116	7. PROJECT NUMBER WWYK213001	8. PROJECT COST (\$000) 160,000
12. SUPPLEMENTAL DATA			
a. Estimated Design Data:			
(1) Status			
(a) Type of Design			Design-Build
(b) Date Design Started			13-APR-20
(c) Parametric Cost Estimates used to develop costs			YES
(d) Percent Complete as of 01 JAN 2021			35%
(e) Date 35% Designed			15-AUG-20
(f) Date Design Complete			1-AUG-21
(g) Energy Study/Life-Cycle cost analysis was/will be performed			YES
(2) Basis:			
(a) Standard or Definitive Design			NO
(b) Where Design Was Most Recently Used			N/A
(3) Total Cost (c) = (a) + (b) or (d) + (e)			(\$000)
(a) Production of Plans and Specifications			9,600
(b) All Other Design Costs			4,800
(c) Total			14,400
(d) Contract			12,000
(e) In-house			2,400
(4) Construction Contract Award			22-APR
(5) Construction Start			22-MAY
(6) Construction Completion			25-MAY
b. Equipment associated with this project provided from other appropriations:			
		FISCAL YEAR APPROPRIATED	COST
EQUIPMENT NOMENCLATURE	PROCURING APPROP	OR REQUESTED	(\$000)
COMPUTERS	3400	FUTURE REQUEST	100
COMMUNICATIONS	3080	FUTURE REQUEST	600
FURNISHINGS	3080	FUTURE REQUEST	400
AGE & SUPPORT EQUIPMENT	3080	FUTURE REQUEST	4,425
MX & TEST STANDS/TESTERS	3080	FUTURE REQUEST	3,925

Project: KC-46A 3-Bay Depot Maintenance Hangar, Tinker AFB, OK (Current Authorization = \$0)

Project Spending Plan

As of: 4-May-21

All Cost in thousands (\$000)

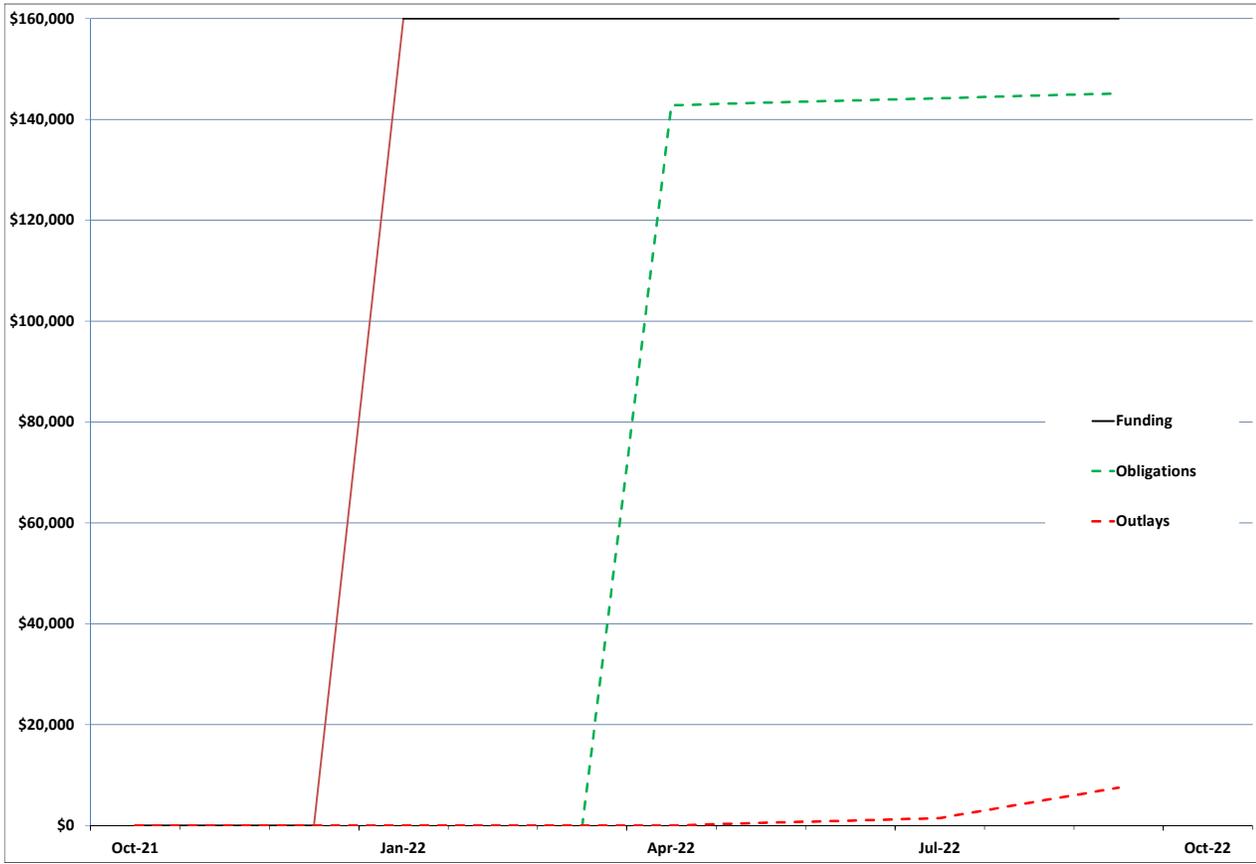
Chart Begin	FUNDING (note 1)		OBLIGATION (note 2)		OUTLAYS (note 3)	
Oct-21	Enacted	Cumulative	Obligated	Cumulative	Outlays	Cumulative
Oct-21	-	-	-	-	-	-
Nov-21	-	-	-	-	-	-
Dec-21	-	-	-	-	-	-
Jan-22	160,000	160,000	-	-	-	-
Feb-22	-	160,000	-	-	-	-
Mar-22	-	160,000	-	-	-	-
Apr-22	-	160,000	142,832	142,832	-	-
May-22	-	160,000	464	143,296	500	500
Jun-22	-	160,000	464	143,760	500	1,000
Jul-22	-	160,000	464	144,224	500	1,500
Aug-22	-	160,000	464	144,688	3,000	4,500
Sep-22	-	160,000	464	145,152	3,000	7,500

Note 1: Assumes initial appropriation is enacted by Congress Jan FY 2022.

Note 2: Assumes funds are available for obligation by 31 January of the execution year and by 31 October for subsequent years.

Note 3: Assumes contract award date of APR 2022, Contract completion: May 2025, Duration 36 months

KC-46A 3-Bay Depot Maintenance Hangar, Tinker AFB, OK (Current Authorization = \$0)



1. COMPONENT AIR FORCE		FY <u>2022</u> MILITARY CONSTRUCTION PROGRAM					2. DATE (YYYYMMDD) MAY 2021				
3. INSTALLATION AND LOCATION ELLSWORTH AIR FORCE BASE, SOUTH DAKOTA					4. COMMAND AIR FORCE GLOBAL STRIKE COMMAND					5. AREA CONSTRUCTION COST INDEX .98	
6. PERSONNEL		(1) PERMANENT			(2) STUDENTS			(3) SUPPORTED			(4) TOTAL
		OFFICER	ENLISTED	CIVILIAN	OFFICER	ENLISTED	CIVILIAN	OFFICER	ENLISTED	CIVILIAN	
a. AS OF 30-SEP-20		356	2,953	556	0	0	0	11	13	0	3,889
b. END FY		356	2,953	567	0	0	0	11	13	0	3,900
7. INVENTORY DATA (\$000)											
a. TOTAL ACREAGE										7,813	
b. INVENTORY TOTAL AS OF 30-SEP-20										1,917,095.00	
c. AUTHORIZATION NOT YET IN INVENTORY										96,000.00	
d. AUTHORIZATION REQUESTED IN THIS PROGRAM										242,000.00	
e. AUTHORIZATION INCLUDED IN FOLLOWING PROGRAM										0.00	
f. PLANNED IN NEXT THREE PROGRAM YEARS										0.00	
g. REMAINING DEFICIENCY										297,830.00	
h. GRAND TOTAL										2,461,925.00	
8. PROJECTS REQUESTED IN THIS PROGRAM											
a. CATEGORY				b. COST (\$000)		c. DESIGN STATUS					
(1) CODE	(2) PROJECT TITLE		(3) SCOPE			(1) START		(2) COMPLETE			
211-111	B-21 2-BAY LO RESTORATION FAC, INC 2		8,890 SM		91,000	07/19		12/20			
211-154	B-21 FORMAL TRAINING UNIT/AMU		4,133 SM		70,000	05/20		09/21			
171-618	B-21 FIELD TRAINING DETACHMENT FACILITY		5,326 SM		47,000	05/20		09/21			
141-753	B-21 MISSION OPERATIONS PLANNING FACILITY		4,377 SM		36,000	04/20		09/21			
171-212	B-21 ADAL FLIGHT SIMULATOR		2,815 SM		24,000	05/20		09/21			
211-159	B-21 WASHRACK & MAINTENANCE HANGAR		5,278 SM		65,000	04/20		08/21			
9. FUTURE PROJECTS											
10. MISSION OR MAJOR FUNCTIONS											
Ellsworth AFB consists of the 28th Bomb Wing assigned to the 8th Air Force under Air Force Global Strike Command. The mission of the 28th Bomb Wing is to put bombs on target. The 28th Bomb Wing is home to 27 B-1B Lancers, and in 2012 began flying MQ-9 Reaper missions. The 28th Bomb Wing is divided into the 28th Operations Group, the 28th Maintenance Group, the 28th Mission Support Group and the 28th Medical Group. The 89th Attack Squadron is a tenant unit at Ellsworth Air Force Base assigned to Air Combat Command.											
11. OUTSTANDING POLLUTION AND SAFETY DEFICIENCIES											
N/A											

1. COMPONENT AIR FORCE		FY 2022 MILITARY CONSTRUCTION PROJECT DATA		2. DATE MAY 2021	
3. INSTALLATION AND LOCATION ELLSWORTH AIR FORCE BASE SOUTH DAKOTA			4. PROJECT TITLE: B-21 2-BAY LO RESTORATION FACILITY, INC 2		
5. PROGRAM ELEMENT 64015F		6. CATEGORY CODE 211-111	7. PROJECT NUMBER FXBM1081508	8. PROJECT COST (\$000) AUTH: 0 APPR: 91,000	
9. COST ESTIMATES					
ITEM		U/M	QUANTITY	UNIT COST (\$)	COST (\$000)
PRIMARY FACILITIES					75,180
HANGAR, MAINTENANCE (211-111)		SM	8,890	7,007	(62,292)
APRON (113-321)		SM	21,586	460	(9,951)
SHOULDER, PAVED (116-642)		SM	3,293	335	(1,103)
CYBERSECURITY OF FACILITY-RELATED CONTROL SYS		LS			(1,834)
SUPPORTING FACILITIES					11,732
SITE IMPROVEMENTS		LS			(2,418)
UTILITIES		LS			(883)
COMMUNICATIONS		LS			(736)
PASSIVE FORCE PROTECTION		LS			(255)
PAVEMENTS		LS			(4,500)
AGE REFUELING		LS			(750)
GENERATOR		KW	150	900	(135)
DEMOLITION		SM	2,655	774	(2,055)
SUBTOTAL					86,912
CONTINGENCY COST (5%)					4,346
TOTAL CONTRACT COST					91,258
SUPERVISION, INSPECTION & OVERHEAD (5.7%)					5,202
TOTAL REQUEST					96,459
TOTAL REQUEST (ROUNDED)					96,000
EQUIPMENT FROM OTHER APPROPRIATIONS (NON-ADD)					(2,220)
10. DESCRIPTION OF PROPOSED CONSTRUCTION: Construct a high bay special maintenance hangar with two segregated aircraft positions and all associated back shop, unique climatically controlled material storage with uninterrupted power supply system, administrative and facility support spaces. This project includes clearing and grading site, storm drainage, aircraft parking and movement area, utility infrastructure systems and all other supporting facilities. Construction includes reinforced concrete foundation, steel frame structure, with metal roof. Include two-bay hangar spaces, powered hangar doors, fire protection, ground points, temperature & humidity control, filtration & ventilation, back-up power to accommodate material storage, painting and surface prep. Include edge lighting in support of apron area and aircraft electrical power to accommodate maintenance. Due to existing expansive clay soils, excavation for reinforced concrete foundation will require over-excavation of approximately four (4) feet of depth and backfill with stabilized materials. Construction will include a full depth replacement of the apron and support pavements in the area designated next to the Low Observable Facility. The sub-base, base course and concrete or asphalt are to be					

1. COMPONENT AIR FORCE	FY 2022 MILITARY CONSTRUCTION PROJECT DATA		2. DATE MAY 2021
3. INSTALLATION AND LOCATION ELLSWORTH AIR FORCE BASE SOUTH DAKOTA		4. PROJECT TITLE: B-21 2-BAY LO RESTORATION FACILITY, INC 2	
5. PROGRAM ELEMENT 64015F	6. CATEGORY CODE 211-111	7. PROJECT NUMBER FXBM1081508	8. PROJECT COST (\$000) AUTH: 0 APPR: 91,000
<p>replaced for the new pavement. Project will include the demolition of Dock 60/Building 7262 (2,625 Square Meters), Building 7275 (15 Square Meters), and Building 7276 (15 Square Meters) (Total: 2,655 Square Meters), in addition to an existing pavements. The demolition of the Aircraft Ground Equipment facilities shall include removal and disposal of an underground fuel tank, piping, and refueling point. Contaminated soil may be encountered during demolition and site work and must be properly disposed of. Construction of the Low Observable Facility will cause displacement of the existing Aircraft Ground Equipment. The Aircraft Ground Equipment facilities will be relocated and replaced with an above ground tank. Pavements will be designed in accordance to Unified Facilities Criteria 2-260-01 and Unified Facilities Criteria 2-260-02. Facility will be designed as permanent construction in accordance with Department of Defense Unified Facilities Criteria 1-200-01. This project will comply with DoD antiterrorism/force protection requirements per Unified Facilities Criteria 4-010-01.</p> <p>Air Conditioning: 500 Tons</p>			
<p>11. REQUIREMENT: 8,890 SM ADEQUATE: 0 SM SUBSTANDARD: 0 SM PROJECT: Construct a B-21 2-bay Low Observable Restoration Facility</p> <p>REQUIREMENT: Two restoration spaces (two bays) are required for B-21 aircraft undergoing repair and restoration of low observable characteristics. This will include the application of materials via spraying. The aircraft must undergo this restoration after scheduled and unscheduled maintenance work. This facility needs to be equipped with an environmental control system to provide temperature and humidity conditions for low observable maintenance. The facility will include an air ventilation, filtration system and clean/dirty locker room space to meet appropriate codes and requirements for the protection of workers and to control air emissions. Secured storage and support space is required for Composite Tool Kits, Low Observable Restoration Materials and war readiness material support kits. The facility will also have a Low Observable Task Trainer integrated into the building. This facility will require an uninterrupted power supply system. Office and training spaces are needed to facilitate operational support. The facility must also be secured to prevent unauthorized access. Mission demands and life-cycle sustainment costs indicate that the reinforced concrete floor be able to sustain the weight of a fully fueled aircraft. The apron and support pavements are required for the Low Observable Restoration Facility to provide aircraft access to Taxiway A and into either bay of the facility. This is not a tenant or supported service requirement.</p> <p>CURRENT SITUATION: This is a new requirement to support the B-21. There are no facilities that meet this requirement, nor are there existing facilities can be modified to meet the requirement. There are no hangars that can accept the B-21 Airframe wingspan without heavy modification to existing facilities and/or impacting current missions from the B-1B. Current pavement in the area has been rated as Poor or</p>			

1. COMPONENT AIR FORCE	FY 2022 MILITARY CONSTRUCTION PROJECT DATA		2. DATE MAY 2021
3. INSTALLATION AND LOCATION ELLSWORTH AIR FORCE BASE SOUTH DAKOTA		4. PROJECT TITLE: B-21 2-BAY LO RESTORATION FACILITY, INC 2	
5. PROGRAM ELEMENT 64015F	6. CATEGORY CODE 211-111	7. PROJECT NUMBER FXBM1081508	8. PROJECT COST (\$000) AUTH: 0 APPR: 91,000

Very Poor according to the Pavement Condition Index from the Airfield Pavement Evaluation Report for Ellsworth AFB conducted in September 2015. In addition, the existing aprons and pavements do not line up with the new path needed for the intended aircraft. In current situation, aircraft would have to taxi over 2.25 inches of asphalt which has high levels of longitudinal distressed cracking. The apron area cannot support any aircraft movement and pavements have significant structural deficiencies.

IMPACT IF NOT PROVIDED: No facilities currently exist to handle the B-21 low observable maintenance requirements. The Wing will not be able to provide combat capable aircraft to support all mission targeting requirements. The aircraft Low Observable signature would be compromised in combat. Without this maintenance capability, aircraft will almost immediately become inoperable and bomber readiness will fall short of its intended goal. For the pavement, aircraft would not be able to move along the 60 Row to and/or from the Low Observable Restoration Facility and will therefore be unusable without proper apron and pavement replacement.

ADDITIONAL: This project meets applicable criteria/scope specified in Air Force Manual 32-1084, Facility Requirements. Sustainable principles, to include life-cycle cost-effective practices, will be integrated into the design, development and construction of the project in accordance with UFC 1-200-02. This includes preparation of a life-cycle cost analysis for energy consuming systems, renewable energy generating systems, whenever life cycle cost effective is selected as the reason any requirement of Unified Facilities Criteria 1-200-02 is partially compliant or not applicable. All reasonable alternatives were considered during the development of this project to include status quo, add/alter, and new construction. A formal economic analysis has been approved and new construction was the only viable option to meet this requirement. This design shall conform to criteria established in the Air Force Corporate Facilities Standards, the Installation facilities Standards, but will not employ a standard facility design because there is no Air Force standard facility design for this project, and there is no applicable standard design from Air Force Civil Engineer Center. This project does not fall within or partly within the 100-year flood plain. Facility is sited in accordance with the Installation Development Plan and is within a compatible land use area. Base Civil Engineer: (605) 385-2658.

Hangar: 8,890 Square Meters = 95,691 Square Feet; Apron: 21,586 Square Meters = 232,350 Square Feet; Shoulder, Paved: 3,293 Square Meters = 35,446 Square Feet; Demolition: 2,655 Square Meters = 28,578 Square Feet.

JOINT USE CERTIFICATION: Mission requirements, operational consideration, and location are incompatible with use by other components.

1. COMPONENT AIR FORCE	FY 2022 MILITARY CONSTRUCTION PROJECT DATA		2. DATE MAY 2021
3. INSTALLATION AND LOCATION ELLSWORTH AIR FORCE BASE SOUTH DAKOTA		4. PROJECT TITLE: B-21 2-BAY LO RESTORATION FACILITY, INC 2	
5. PROGRAM ELEMENT 64015F	6. CATEGORY CODE 211-111	7. PROJECT NUMBER FXBM1081508	8. PROJECT COST (\$000) AUTH: 0 APPR: 91,000

12. SUPPLEMENTAL DATA:

a. Estimated Design Data:

(1) Status

(a) Type of Design	DESIGN-BID-BUILD
(b) Date Design Started	01-JUL-19
(c) Parametric Cost Estimates Used to Develop Costs	YES
(d) Percent Complete as of 01-JAN-2021	100%
(e) Date Design 35% Complete	01-APR-20
(f) Date Design 100% Complete	01-DEC-20
(g) Energy Study and Life Cycle analysis was performed	YES

(2) Basis

(a) Standard or Definitive Design Used	NO
(b) Where Design Was Most Recently Used	N/A
(3) Total Cost (c) = (a) + (b) or (d) + (e)	(\$000)
(a) Production of Plans and Specifications	1,620
(b) All Other Design Costs	810
(c) Total	2,430
(d) Contract	2,025
(e) In-House	405

(4) Construction Contract Award	21-OCT
(5) Construction Start	21-DEC
(6) Construction Completion	24-NOV

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

EQUIPMENT NOMENCLATURE	PROCURING APPRO	FISCAL YEAR	
		APPROPRIATED OR REQUESTED	COST (\$000)
FURNISHINGS, FIXTURES, & EQUIPMENT	3080	FUTURE REQUEST	890
COMMUNICATIONS	3080	FUTURE REQUEST	553
UNINTERRUPTED POWER SUPPLY	3080	FUTURE REQUEST	327
SECURITY SYSTEM	3080	FUTURE REQUEST	450

1. COMPONENT AIR FORCE	FY 2022 MILITARY CONSTRUCTION PROJECT DATA	2. DATE MAY 2021	
3. INSTALLATION AND LOCATION ELLSWORTH AIR FORCE BASE SOUTH DAKOTA		4. PROJECT TITLE: B-21 2-BAY LO RESTORATION FACILITY, INC 2	
5. PROGRAM ELEMENT 64015F	6. CATEGORY CODE 211-111	7. PROJECT NUMBER FXBM1081508	8. PROJECT COST (\$000) AUTH: 0 APPR: 91,000

c. Authorization and Appropriation Summary:

	Authorization (\$000)	Auth of Approp (\$000)	Approp (\$000)
FY2021 Enacted	96,000	10,000	10,000
Cost Variation	5,000	----	----
FY2022 Request	0	91,000	91,000
Total	101,000		101,000

Project: B-21 2-BAY LO Restoration Fac, Inc 2, ELLSWORTH AFB, SD (Current Authorization = \$96M)

Project Spending Plan

As of: 4-May-21

All Cost in thousands (\$000) 101,000

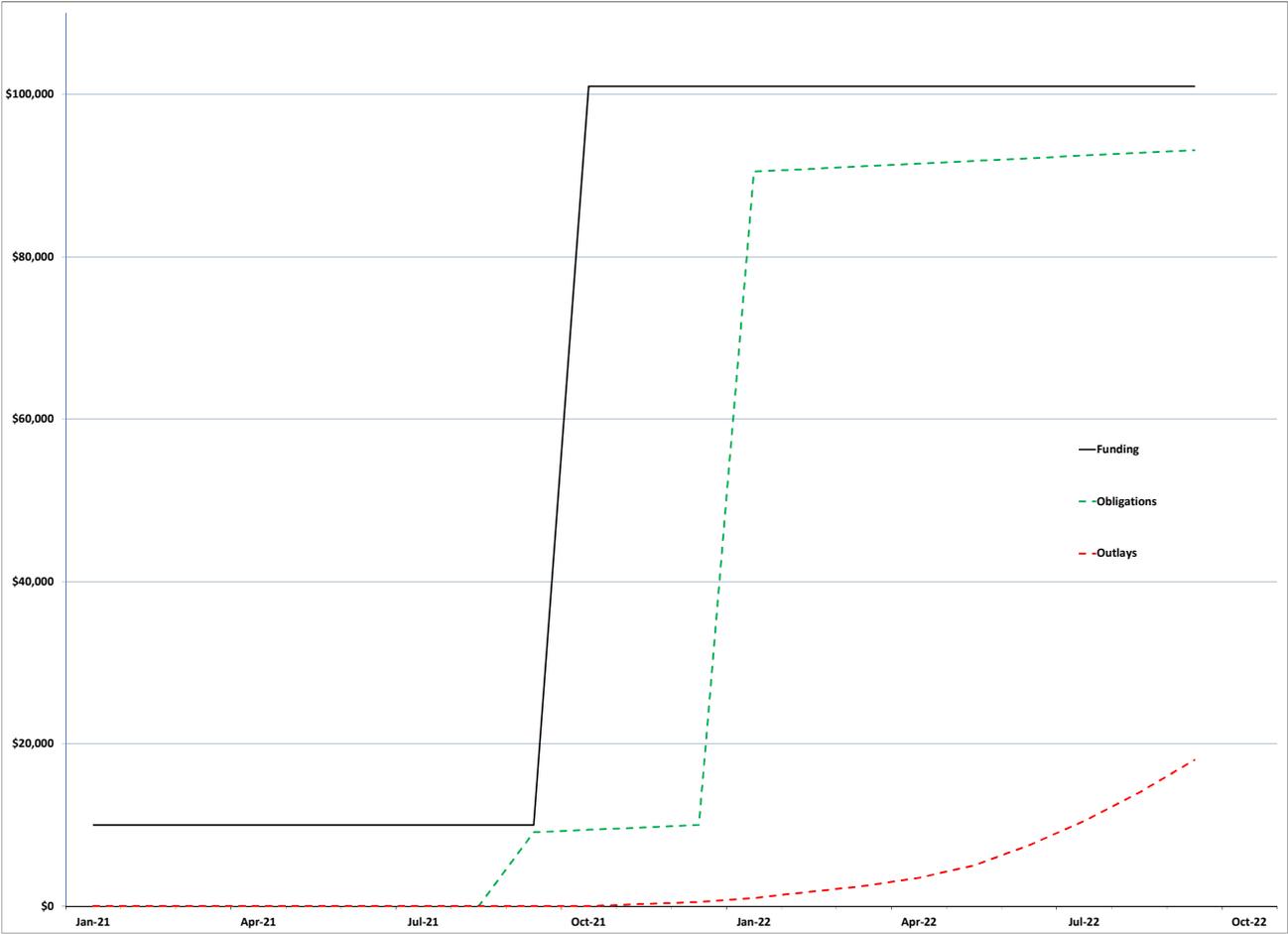
Chart Begin Jan-21	FUNDING (note 1)		OBLIGATION (note 2)		OUTLAYS (note 3)	
	Enacted	Cumulative	Obligated	Cumulative	Monthly	Cumulative
Jan-21	10,000	10,000	-	-	-	-
Feb-21	-	10,000	-	-	-	-
Mar-21	-	10,000	-	-	-	-
Apr-21	-	10,000	-	-	-	-
May-21	-	10,000	-	-	-	-
Jun-21	-	10,000	-	-	-	-
Jul-21	-	10,000	-	-	-	-
Aug-21	-	10,000	-	-	-	-
Sep-21	-	10,000	9,107	9,107	-	-
Oct-21	91,000	101,000	295	9,402	-	-
Nov-21	-	101,000	295	9,697	250	250
Dec-21	-	101,000	295	9,992	250	500
Jan-22	-	101,000	80,513	90,505	500	1,000
Feb-22	-	101,000	325	90,830	750	1,750
Mar-22	-	101,000	325	91,155	750	2,500
Apr-22	-	101,000	330	91,485	1,000	3,500
May-22	-	101,000	330	91,815	1,500	5,000
Jun-22	-	101,000	330	92,145	2,500	7,500
Jul-22	-	101,000	330	92,475	3,000	10,500
Aug-22	-	101,000	330	92,805	3,500	14,000
Sep-22	-	101,000	330	93,135	4,000	18,000

Note 1: Assumes initial appropriation is enacted by Congress Jan FY22.

Note 2: Assumes funds are available for obligation by 31 January of the execution year and by 31 October for subsequent years.

Note 3: Assumes contract award date of Sep 2021, Contract completion: Oct 2024, Duration 36 months from NTP.

B-21 2-BAY LO Restoration Fac, Inc 2, ELLSWORTH AFB, SD (Current Authorization = \$96M)



1. COMPONENT AIR FORCE	FY 2022 MILITARY CONSTRUCTION PROJECT DATA			2. DATE MAY 2021
3. INSTALLATION AND LOCATION ELLSWORTH AFB ELLSWORTH AFB SITE 1 SOUTH DAKOTA		4. PROJECT TITLE: B-21 FIELD TRAINING DETACHMENT FACILITY		
5. PROGRAM ELEMENT 64015F	6. CATEGORY CODE 171-618	7. PROJECT NUMBER FXBM1088018	8. PROJECT COST (\$000) 47,000	
9. COST ESTIMATES				
ITEM	U/M	QUANTITY	UNIT COST (\$)	COST (\$000)
PRIMARY FACILITIES				36,456
FIELD TRAINING FACILITY	SM	5,326	6,825	(36,350)
CYBERSECURITY OF FACILITY-RELATED CONTROL SYS	LS			(909)
SUPPORTING FACILITIES				5,266
SITE IMPROVEMENTS	LS			(86)
SITE PREPARATION	LS			(1,236)
COMMUNICATIONS	LS			(372)
PAVEMENT	LS			(1,819)
UTILITIES	LS			(1,753)
SUBTOTAL				42,525
CONTINGENCY COST (5.0%)				2,126
TOTAL CONTRACT COST				44,651
SUPERVISION, INSPECTION & OVERHEAD (5.7%)				2,545
TOTAL REQUEST				47,196
TOTAL REQUEST (ROUNDED)				47,000
EQUIPMENT FROM OTHER APPROPRIATIONS (NON-ADD)				(1,039)
10. DESCRIPTION OF PROPOSED CONSTRUCTION: Construct new maintenance two-story Field Training Detachment facility for B-21 maintenance training. Construction includes reinforced concrete foundations and concrete floor slab, structural steel frame with split faced concrete masonry unit facade and a standing seam metal roof to match the current facilities. Project includes communication and fire protection requirements, Heating, Ventilation, and Air Conditioning systems, and all other necessary support for a complete a usable facility. The existing road and parking lot on the proposed site will be removed and replaced as needed to provide space for proper siting of the building and new parking. Ellsworth Air Force Base has a history of expansive clay soils. This necessitates special considerations in the foundation design of facilities by utilizing special engineered fill and over-excavation. This project also includes all utilities, site improvements, pavements, detection/protection features, security enhancements, and other supporting work necessary to make a complete and useable facility. The facility must be able to withstand seismic effects as prescribed in applicable codes and design guides. Facilities will be designed as permanent construction in accordance with the Department of Defense Unified Facilities Criteria 1-200-01. This project will comply with Department of Defense antiterrorism/force protection requirements per Unified Facility Criteria 4-010-01.				

1. COMPONENT AIR FORCE	FY 2022 MILITARY CONSTRUCTION PROJECT DATA		2. DATE MAY 2021
3. INSTALLATION AND LOCATION ELLSWORTH AFB ELLSWORTH AFB SITE 1 SOUTH DAKOTA		4. PROJECT TITLE: B-21 FIELD TRAINING DETACHMENT FACILITY	
5. PROGRAM ELEMENT 64015F	6. CATEGORY CODE 171-618	7. PROJECT NUMBER FXBM1088018	8. PROJECT COST (\$000) 47,000
<p>cost analysis for energy consuming systems, renewable energy generating systems, whenever life-cycle cost effective is selected as the reason any requirement of Unified Facility Criteria 1-200-02 is partially compliant or not applicable. This project does not fall within or partly within the 100 year flood plain. This project was not included in the Fiscal Year 2021 future-years defense plan. Facility is sited in accordance with the Installation Development Plan and is within a compatible land use area. This design shall conform to criteria established in the Air Force Corporate Facilities Standards, the Installation Facilities Standards, but will not employ a standard facility design because there is no Air Force standard facility design for this project, and there is no applicable standard design from the U.S. Army Corps of Engineers. Base Civil Engineer: (605) 385-2658.</p> <p>Field Training Facility: 5,326 SM = 57,329 Square Feet.</p> <p>JOINT USE CERTIFICATION: The facility can be used by other components on an "as available" basis; however, the scope of the project is based on Air Force requirements.</p>			

1. COMPONENT AIR FORCE	FY 2022 MILITARY CONSTRUCTION PROJECT DATA		2. DATE MAY 2021
3. INSTALLATION AND LOCATION ELLSWORTH AFB ELLSWORTH AFB SITE 1 SOUTH DAKOTA		4. PROJECT TITLE: B-21 FIELD TRAINING DETACHMENT FACILITY	
5. PROGRAM ELEMENT 64015F	6. CATEGORY CODE 171-618	7. PROJECT NUMBER FXBM1088018	8. PROJECT COST (\$000) 47,000
12. SUPPLEMENTAL DATA:			
a. Estimated Design Data:			
(1) Status			
(a) Type of Design	DESIGN-BID-BUILD		
(b) Date Design Started	22-MAY-20		
(c) Parametric Cost Estimates Used to Develop Costs	YES		
(d) Percent Complete as of 01 Jan 2021	65%		
(e) Date 35% Designed	20-JUL-20		
(e) Date Design Complete	16-SEP-21		
(f) Energy Study/Life Cycle analysis was/will be performed	YES		
(2) Basis			
(a) Standard or Definitive Design Used	NO		
(b) Where Design Was Previously Used	N/A		
(3) Total Cost (c) = (a) + (b) or (d) + (e) (\$000)			
(a) Production of Plans and Specifications	2,580		
(b) All Other Design Costs	1,290		
(c) Total	3,870		
(d) Contract	3,225		
(e) In-House	645		
(4) Construction Contract Award	22-MAR		
(5) Construction Start	22-APR		
(6) Construction Completion	24-JAN		
b. Equipment associated with this project provided from other appropriations:			
		FISCAL YEAR	
		APPROPRIATED	COST
EQUIPMENT NOMENCLATURE	PROCURING APPRO	OR REQUESTED	(\$000)
FURNISHINGS, FIXTURES, & EQUIPMENT	3080	FUTURE REQUEST	770
COMMUNICATION	3080	FUTURE REQUEST	269

1. COMPONENT AIR FORCE	FY 2022 MILITARY CONSTRUCTION PROJECT DATA			2. DATE MAY 2021
3. INSTALLATION, SITE AND LOCATION ELLSWORTH AFB ELLSWORTH AFB SITE 1 SOUTH DAKOTA		4. PROJECT TITLE: B-21 MISSION OPERATIONS PLANNING FACILITY		
5. PROGRAM ELEMENT 64015F	6. CATEGORY CODE 141-753	7. PROJECT NUMBER FXBM1088037	8. PROJECT COST (\$000) 36,000	
9. COST ESTIMATES				
ITEM	U/M	QUANTITY	UNIT COST (\$)	COST (\$000)
PRIMARY FACILITIES				28,129
SQUADRON OPERATIONS	SM	4,377	5,232	(22,900)
ICD 705 PREMIUM	LS			(4,542)
CYBERSECURITY OF FACILITY-RELATED CONTROL SYS	LS			(686)
SUPPORTING FACILITIES				4,281
SITE PREPARATION	LS			(1,114)
ROADS, SIDEWALKS, AND PARKING	LS			(1,426)
UTILITIES	LS			(634)
COMMUNICATIONS	LS			(832)
EMERGENCY GENERATOR	KW	500	550	(275)
SUBTOTAL				32,410
CONTINGENCY (5.0%)				1,621
TOTAL CONTRACT COST				34,031
SUPERVISION, INSPECTION & OVERHEAD (5.7%)				1,940
DESIGN DURING CONSTRUCTION				216
TOTAL REQUEST				36,187
TOTAL REQUEST (ROUNDED)				36,000
EQUIPMENT FROM OTHER APPROPRIATIONS (NON-ADD)				(1,396)
10. DESCRIPTION OF PROPOSED CONSTRUCTION: Construct a Mission Operations Planning Facility using conventional design and construction methods. Construction will include the construction of a steel framed structure, concrete slab and foundation system, masonry block exterior walls, and standing seam metal roof. The project will include all necessary utilities, site improvements, pavements, communications support infrastructure, and all necessary supporting work for a complete and usable facility, to include mission critical system redundancies. The existing road and parking lot on the proposed site will be removed and replaced as needed to provide space for proper siting of the building and new parking. As applicable, demolition includes the existing pavements, sidewalks, and removing utilities to the nearest valve, manhole, or structure. Backup generator is authorized in accordance with Air Force Instruction 32-1062 for this facility type. The project will be designed as permanent construction in accordance with Department of Defense Unified Facilities Criteria 1-200-01. This project will comply with DoD antiterrorism/ force protection requirements per Unified Facilities Criteria 4-010-01. Air Conditioning: 150 Tons				

1. COMPONENT AIR FORCE	FY 2022 MILITARY CONSTRUCTION PROJECT DATA		2. DATE MAY 2021
3. INSTALLATION, SITE AND LOCATION ELLSWORTH AFB ELLSWORTH AFB SITE 1 SOUTH DAKOTA		4. PROJECT TITLE: B-21 MISSION OPERATIONS PLANNING FACILITY	
5. PROGRAM ELEMENT 64015F	6. CATEGORY CODE 141-753	7. PROJECT NUMBER FXBM1088037	8. PROJECT COST (\$000) 36,000
<p>11. REQUIREMENT: 4,377 SM ADEQUATE: 0 SM SUBSTANDARD: 0 SM</p> <p>PROJECT: Construct a B-21 Mission Operations Planning Facility.</p> <p>REQUIREMENT: This project constructs a Mission Operations Planning Facility which includes the Mission Planning Cell as well as the functional offices, specialties and communications equipment that supports it. This requirement is for the B-21 program to add a planning facility as there is no suitable space that can be used to support the incoming B-21 personnel and equipment. In addition to operations activities, maintenance group activities will be supported from this building. It will be almost entirely a controlled area and must be built to comply with the Intelligence Community Directive (ICD) 705 criteria. It will include office space for mission planners, survivability subject matter experts, weapons and tactics, Intel, crew communications, security, mission planning rooms, briefing rooms, computer server room, and an auditorium suitable for large classified briefings. This is not a tenant or supported service requirement.</p> <p>CURRENT SITUATION: This is a new requirement to support the B-21. There are no facilities that meet this requirement, nor are there existing facilities that can be modified to meet the requirement. B-1B operations are currently running on the Ellsworth airfield and all related facilities cannot support the bed down for the B-21 new acquisition. The B-1B planning facilities are still being occupied for B-1B missions and will not be able to accommodate the additional personnel to run concurrent mission with the B-21 as it phases in. No buildings exist that can support a new mission planning facility without heavy mission degradation due to overcrowding and severe efficiency degradation of shared resources.</p> <p>IMPACT IF NOT PROVIDED: If this project is not provided, B-21 mission planning functions will be spread across multiple buildings and areas on the base. This will also require new construction, but will no longer function as a co-located integrated system adding time, complexity, risk, and duplicity to the mission required activities. Additionally, aircraft maintenance activities will be adversely impacted as the maintenance management system will also be located in this building. Without providing a new building to support the operations planning for the B-21, the standing missions planning facilities that the B-1B uses will have to be shared which would no doubt exceed occupant capacity causing multiple safety hazards. With shared facilities, each bomber squadron will have to plan around each other which would severely impact mission readiness of both units.</p> <p>ADDITIONAL: This project meets applicable criteria/scope specified in Air Force Manual 32-1084 - Facility Requirements. Project found only one option that will meet operational requirements. A waiver to an Economic Analysis has been approved for this project. Sustainable principles, to include life-cycle cost- effective practices, will be integrated into the design, development, and construction of the project in accordance with Unified Facility Criteria 1-200-02, High Performance and Sustainable Building Requirements. This includes preparation of a life-cycle cost analysis for energy consuming systems, renewable energy generating systems, whenever life-cycle cost effective is selected as the reason</p>			

1. COMPONENT AIR FORCE	FY 2022 MILITARY CONSTRUCTION PROJECT DATA		2. DATE MAY 2021
3. INSTALLATION, SITE AND LOCATION ELLSWORTH AFB ELLSWORTH AFB SITE 1 SOUTH DAKOTA		4. PROJECT TITLE: B-21 MISSION OPERATIONS PLANNING FACILITY	
5. PROGRAM ELEMENT 64015F	6. CATEGORY CODE 141-753	7. PROJECT NUMBER FXBM1088037	8. PROJECT COST (\$000) 36,000
<p>any requirement of Unified Facility Criteria 1-200-02 is partially compliant or not applicable. This project does not fall within or partly within the 100 year flood plain. This project was not included in the Fiscal Year 2021 future years' defense plan. Facility is sited in accordance with the Installation Development Plan and is within a compatible land use area. This design shall conform to criteria established in the Air Force Corporate Facilities Standards, the Installation Facilities Standards, but will not employ a standard facility design because there is no Air Force standard facility design for this project, and there is no applicable standard design from the U.S. Army Corps of Engineers.</p> <p>Base Civil Engineer: (605) 385-2658.</p> <p>Mission Planning Complex: 4,377 SM = 47,114 Square Feet.</p> <p>JOINT USE CERTIFICATION: This facility can be used by other components on an "as available" basis; however, the scope of the project is based on Air Force requirements.</p>			

1. COMPONENT AIR FORCE	FY 2022 MILITARY CONSTRUCTION PROJECT DATA		2. DATE MAY 2021
3. INSTALLATION, SITE AND LOCATION ELLSWORTH AFB ELLSWORTH AFB SITE 1 SOUTH DAKOTA		4. PROJECT TITLE: B-21 MISSION OPERATIONS PLANNING FACILITY	
5. PROGRAM ELEMENT 64015F	6. CATEGORY CODE 141-753	7. PROJECT NUMBER FXBM1088037	8. PROJECT COST (\$000) 36,000
12. SUPPLEMENTAL DATA:			
a. Estimated Design Data:			
(1) Status			
(a) Type of Design	DESIGN-BID-BUILD		
(b) Date Design Started	23-APR-20		
(c) Parametric Cost Estimates Used to Develop Costs	YES		
(d) Percent Complete as of 01 Jan 2021	65%		
(e) Date 35% Designed	14-JUL-20		
(f) Date Design Complete	30-SEP-21		
(g) Energy Study/Life-Cycle analysis was/will be performed	YES		
(2) Basis			
(a) Standard or Definitive Design Used	NO		
(b) Where Design Was Previously Used	N/A		
(3) Total Cost (c) = (a) + (b) or (d) + (e) (\$000)			
(a) Production of Plans and Specifications	2,160		
(b) All Other Design Costs	1,080		
(c) Total	3,240		
(d) Contract	2,700		
(e) In-House	540		
(4) Construction Contract Award	22-MAR		
(5) Construction Start	22-MAY		
(6) Construction Completion	24-JAN		
b. Equipment associated with this project provided from other appropriations:			
		FISCAL YEAR	
		APPROPRIATED	COST
EQUIPMENT NOMENCLATURE	PROCURING APPRO	OR REQUESTED	(\$000)
FURNISHINGS, FIXTURES, & EQUIPMENT	3080	FUTURE REQUEST	1,050
COMMUNICATION	3080	FUTURE REQUEST	346

1. COMPONENT AIR FORCE	FY 2022 MILITARY CONSTRUCTION PROJECT DATA			2. DATE MAY 2021
3. INSTALLATION AND LOCATION ELLSWORTH AFB ELLSWORTH AFB SITE 1 SOUTH DAKOTA		4. PROJECT TITLE: B-21 WASHRACK & MAINTENANCE HANGAR		
5. PROGRAM ELEMENT 64015F	6. CATEGORY CODE 211-159	7. PROJECT NUMBER FXBM1090404	8. PROJECT COST (\$000) 65,000	
9. COST ESTIMATES				
ITEM	U/M	QUANTITY	UNIT COST (\$)	COST (\$000)
PRIMARY FACILITIES				46,857
AIRCRAFT CORROSION CONTROL (211-159)	SM	5,278	6,905	(36,445)
APRON (113-321)	SM	22,776	407	(9,270)
CYBERSECURITY OF FACILITY-RELATED CONTROL SYS	LS			(1,143)
SUPPORTING FACILITIES				11,331
SITE PREPARATION	LS			(1,168)
SITE IMPROVEMENTS	LS			(125)
PAVEMENTS	LS			(4,081)
COMMUNICATIONS	LS			(180)
UTILITIES	LS			(540)
DEMOLITION	SM	5,437	848	(4,611)
SOIL REMEDIATION	LS			(626)
SUBTOTAL				58,188
CONTINGENCY (5.0%)				2,909
TOTAL CONTRACT COST				61,097
SUPERVISION, INSPECTION AND OVERHEAD (5.7%)				3,483
DESIGN DURING CONSTRUCTION (0.6%)				387
TOTAL REQUEST				64,967
TOTAL REQUEST (ROUNDED)				65,000
EQUIPMENT FROM OTHER APPROPRIATIONS (NON-ADD)				(489)
10. DESCRIPTION OF PROPOSED CONSTRUCTION: Construct a hangar facility for dual-bay corrosion control and wash rack functions utilizing conventional design and construction methods. Construction includes reinforced concrete foundation, steel frame structure, with metal roof. Project includes two-bay hangar spaces, powered hangar doors, fire protection, grounding points both inside and outside the facility, temperature & humidity control, water filtration & ventilation, heated floor for winter months, and aircraft electrical power & conditioned air to accommodate maintenance. This project includes clearing and grading the site, storm drainage, aircraft parking and movement area, utility infrastructure systems, and all other supporting facilities to meet classified requirements. Area lighting will be provided for night operations in front and back of the facility by fixtures mounted to the facility. Due to existing expansive clay soils, excavation for reinforced concrete foundation and floor slabs will require over-excavation of approximately four (4) feet of depth and backfill with stabilized materials. Construction will include a full depth replacement of the taxiway, apron and support pavements and will tie into the new apron being built by the Low Observable hangar to the west and a future hangar being built east of the facility. Project				

1. COMPONENT AIR FORCE	FY 2022 MILITARY CONSTRUCTION PROJECT DATA			2. DATE MAY 2021
3. INSTALLATION AND LOCATION ELLSWORTH AFB ELLSWORTH AFB SITE 1 SOUTH DAKOTA		4. PROJECT TITLE: B-21 WASHRACK & MAINTENANCE HANGAR		
5. PROGRAM ELEMENT 64015F	6. CATEGORY CODE 211-159	7. PROJECT NUMBER FXBM1090404	8. PROJECT COST (\$000) 65,000	
<p>will include the demolition of building 7258 (2,818 square meters) and building 7260 (2,619 square meters) for a total of 5,437 square meters. Contaminated soil may be encountered during demolition of facilities and must be properly disposed of. Project includes design during construction cost to account for post-award engineering and Title II services. Pavements will be designed in accordance with Unified Facilities Criteria 2-260-01 and Unified Facilities Criteria 2-260-02. Facilities will be designed as permanent construction in accordance with the Department of Defense Unified Facilities Criteria 1-200-01. This project will comply with Department of Defense antiterrorism/force protection requirements per Unified Facility Criteria 4-010-01.</p> <p>Air Conditioning: 500 Tons</p>				
<p>11. REQUIREMENT: 5,278 SM ADEQUATE: 0 SM SUBSTANDARD: 5,437 SM</p> <p>PROJECT: Construct a 2-bay B-21 Washrack & Maintenance Hangar.</p> <p>REQUIREMENT: The project constructs an aircraft wash facility in support of the new B-21 weapons system to clean aircraft in conjunction with periodic maintenance. This project is a requirement for full function of Aircraft Maintenance Squadrons to be able to comply with monthly Airframe washes and corrosion control. Functional areas consist of two hangar bays sized to fit B-21 aircraft with adjacent soap room and a central administrative/support component. Areas for soap and wash equipment is needed as well as a pump/foam room for fire protection. Facility will have a full fall protection system in each bay as well as temperature controlled hangar bays due to wash temperature constraints. Without this facility, corrosion control cannot be accomplished which is essential for any and all aircraft maintenance units to preserve the longevity of airframe and airframe components. This is not a tenant or supported service requirement.</p> <p>CURRENT SITUATION: This is a new requirement to support the B-21. There are no facilities that meet this requirement, nor are there existing facilities that can be modified to meet the requirement. Current wash hangar facilities on Ellsworth AFB are designed and used by/for the existing B-1B mission and cannot house the B-21 as the facilities do not be meet the requirements to accept the size of the B-21 airframe. Modification of the existing wash hangars would cause severe mission degradation for the B-1B's as they will still have concurrent missions with the B-21 as it rolls out its bed down. Corrosion control actives cannot be conducted outside of a designated hangars as no supporting equipment is available or can be available outside of designated areas in order to comply with related technical orders.</p> <p>IMPACT IF NOT PROVIDED: If this project is not provided, corrosion control will be conducted outside permitting temperatures. Outdoor corrosion control activities require a temperature above 40 degrees Fahrenheit. Ellsworth AFB averages 110 days a year below the required temperature. The B-1B corrosion control will continue to be operated in its current facility. No facilities will be available for corrosion control, for the B-21 as no building meets size requirements. With no way to conduct corrosion control outside the current facilities, the B-21 airframes would be highly susceptible to environmental corrosion which would endanger the lives of the aircrew and equipment longevity. Existing facilities will be modified for another requirement to meet B-21 mission needs after the B-1B phases out of</p>				

1. COMPONENT AIR FORCE	FY 2022 MILITARY CONSTRUCTION PROJECT DATA		2. DATE MAY 2021
3. INSTALLATION AND LOCATION ELLSWORTH AFB ELLSWORTH AFB SITE 1 SOUTH DAKOTA		4. PROJECT TITLE: B-21 WASHRACK & MAINTENANCE HANGAR	
5. PROGRAM ELEMENT 64015F	6. CATEGORY CODE 211-159	7. PROJECT NUMBER FXBM1090404	8. PROJECT COST (\$000) 65,000
<p>Ellsworth AFB.</p> <p>ADDITIONAL: This project meets applicable criteria/scope specified in Air Force Manual 32-1084 - Facility Requirements. This design shall conform to criteria established in the Air Force Corporate Facilities Standards, the Installation Facilities Standards, but will not employ a standard facility design because there is no Air Force standard facility design for this project, and there is no applicable standard design from the U.S. Army Corp of Engineers. Project found only one option that will meet operational requirements. A waiver to an Economic Analysis has been approved for this project. Sustainable principles, to include life-cycle cost- effective practices, will be integrated into the design, development, and construction of the project in accordance with Unified Facility Criteria 1-200-02, High Performance and Sustainable Building Requirements. This includes preparation of a life-cycle cost analysis for energy consuming systems, renewable energy generating systems, whenever life-cycle cost effective is selected as the reason any requirement of Unified Facility Criteria 1-200-02 is partially compliant or notapplicable. This project does not fall within or partly within the 100 year flood plain. This project was not included in the Fiscal Year 2021 future-years defense plan. Facility is sited in accordance with the Installation Development Plan and is within a compatible land use area.</p> <p>Base Civil Engineer: (605) 385-2658.</p> <p>Aircraft Corrosion Control: 5,278 SM = 56,812 Square Feet;</p> <p>Apron: 22,776 SM = 245,159 Square Feet;</p> <p>Demolition: 5,437 SM = 58,523 Square Feet.</p> <p>JOINT USE CERTIFICATION: This facility can be used by other components on an as "available basis"; however, the scope of the project is based on Air Force requirements.</p>			

1. COMPONENT AIR FORCE	FY 2022 MILITARY CONSTRUCTION PROJECT DATA		2. DATE MAY 2021
3. INSTALLATION AND LOCATION ELLSWORTH AFB ELLSWORTH AFB SITE 1 SOUTH DAKOTA		4. PROJECT TITLE: B-21 WASHRACK & MAINTENANCE HANGAR	
5. PROGRAM ELEMENT 64015F	6. CATEGORY CODE 211-159	7. PROJECT NUMBER FXBM1090404	8. PROJECT COST (\$000) 65,000
12. SUPPLEMENTAL DATA:			
a. Estimated Design Data:			
(1) Status			
(a) Type of Design		DESIGN-BID-BUILD	
(b) Date Design Started		23-APR-20	
(c) Parametric Cost Estimates Used to Develop Costs		YES	
(d) Percent Complete as of 01 Jan 2021		65%	
(e) Date 35% Designed		01-AUG-20	
(f) Date Design Complete		04-AUG-21	
(g) Energy Study/Life-Cycle analysis was/will be performed		YES	
(2) Basis			
(a) Standard or Definitive Design Used		NO	
(b) Where Design Was Previously Used		N/A	
(3) Total Cost (c) = (a) + (b) or (d) + (e)			(\$000)
(a) Production of Plans and Specifications			3,900
(b) All Other Design Costs			1,950
(c) Total			5,850
(d) Contract			4,875
(e) In-House			975
(4) Construction Contract Award			22-MAR
(5) Construction Start			22-APR
(6) Construction Completion			24-SEP
b. Equipment associated with this project provided from other appropriations:			
		FISCAL YEAR	
		APPROPRIATED	COST
EQUIPMENT NOMENCLATURE	PROCURING APPRO	OR REQUESTED	(\$000)
FALL PROTECTION SYSTEM	3400	FUTURE REQUEST	134
FURNISHINGS, FIXTURES, & EQUIPMENT	3080	FUTURE REQUEST	300
COMMUNICATION	3080	FUTURE REQUEST	55

1. COMPONENT AIR FORCE	FY 2022 MILITARY CONSTRUCTION PROJECT DATA			2. DATE MAY 2021
3. INSTALLATION AND LOCATION ELLSWORTH AFB ELLSWORTH AFB SITE 1 SOUTH DAKOTA		4. PROJECT TITLE: B-21 ADAL FLIGHT SIMULATOR		
5. PROGRAM ELEMENT 64015F	6. CATEGORY CODE 171-212	7. PROJECT NUMBER FXBM1093407	8. PROJECT COST (\$000) 24,000	
9. COST ESTIMATES				
ITEM	U/M	QUANTITY	UNIT COST (\$)	COST (\$000)
PRIMARY FACILITIES				19,232
ADD FLIGHT SIMULATOR TRAINING	SM	2,815	6,150	(17,312)
ICD 705 PREMIUM	LS			(1,670)
CYBERSECURITY OF FACILITY-RELATED CONTROL SYS	LS			(250)
SUPPORTING FACILITIES				2,760
SITE PREPARATION	LS			(865)
SITE IMPROVEMENTS	LS			(257)
ROADS, SIDEWALKS, AND PARKING	LS			(906)
UTILITIES	LS			(595)
COMMUNICATIONS	LS			(137)
SUBTOTAL				21,992
CONTINGENCY COST (5.0%)				1,100
TOTAL CONTRACT COST				23,092
SUPERVISION, INSPECTION & OVERHEAD (5.7%)				1,316
TOTAL REQUEST				24,408
TOTAL REQUEST (ROUNDED)				24,000
EQUIPMENT FROM OTHER APPROPRIATIONS (NON-ADD)				(32,533)
<p>10. DESCRIPTION OF PROPOSED CONSTRUCTION: Construct addition to building 8205 to support transition of the facility from a B-1 simulator facility into a B-21 simulator facility. Construction includes reinforced concrete foundations and concrete floor slab, structural steel frame with split faced concrete masonry unit facade and a standing seam metal roof to match the current facility. The project includes two high-bays which shall include power for each flight training device. It also includes all utilities, site improvements, pavements, detection/ protection features, security enhancements, and other supporting work necessary to make a complete and useable facility. The facility must be able to withstand seismic effects as prescribed in applicable codes and design guides. Pavements will be designed in accordance to Unified Facilities Criteria 2-260-01 and Unified Facilities Criteria 2-260-02. Facilities will be designed as permanent construction in accordance with the Department of Defense Unified Facilities Criteria 1-200-01. This project will comply with Department of Defense antiterrorism/force protection requirements per Unified Facility Criteria 4-010- 01.</p> <p>Air Conditioning: 300 Tons</p>				

1. COMPONENT AIR FORCE	FY 2022 MILITARY CONSTRUCTION PROJECT DATA			2. DATE MAY 2021
3. INSTALLATION AND LOCATION ELLSWORTH AFB ELLSWORTH AFB SITE 1 SOUTH DAKOTA			4. PROJECT TITLE: B-21 ADAL FLIGHT SIMULATOR	
5. PROGRAM ELEMENT 64015F	6. CATEGORY CODE 171-212	7. PROJECT NUMBER FXBM1093407	8. PROJECT COST (\$000) 24,000	
<p>11. REQUIREMENT: 2,815 SMADEQUATE: 0 SM SUBSTANDARD: 0 SM</p> <p>PROJECT: Construct a B-21 Flight Simulator.</p> <p>REQUIREMENT: The Air Force has designated Ellsworth AFB, SD as the preferred Main Operating Base to receive the first operational squadron for the B-21 bomber aircraft. This facility will enable enterprise training and bed down of B-21 flying squadrons at Ellsworth Air Force Base. The space will support installation of six flight training devices that will occupy an area of 46 feet by 50 feet. A 298 SM high bay flight training facility, adequately configured for B-21 operations training is required. A configured and conditioned simulator facility is required to support flight training, mission planning, flight operations in a secure environment, aircrew mission briefs and debriefs, and communications. The simulator facility addition will be sized to accommodate 74 full-time personnel. All B-1B personnel, and mission assets, are planned to relocate out of Ellsworth Air Force Base, which means that the simulator equipment in the current facility will be vacated. At the time of the B-1B departure, the B-21 program will capitalize and alter the existing space for B-21 simulation use with a future project. The simulation facility is an essential requirement that is needed in the B-21 program. This is not a tenant or supported service requirement.</p> <p>CURRENT SITUATION: The B-21 is a new aircraft and there are no existing facilities that can support the simulator equipment required for training for this weapon system. B-1 and B-21 operations will occur concurrently. The existing B-1 simulator facility, which does not have the required space to, simultaneously, to support B-21 training and equipment, will eventually be phased out in favor of the B-21, as the B-1 relocates to Dyess Air Force Base.</p> <p>IMPACT IF NOT PROVIDED: This project must be executed in Fiscal Year 2022 or the Air Force will be unable to provide timely aircrew training necessary to begin initial operation of the B-21 aircraft at Ellsworth AFB. The Air Force will not meet the Initial Operational Capability of the B-21 and the required weapon system certifications in accordance with Congressionally mandated timelines.</p> <p>ADDITIONAL: This project meets applicable criteria/scope specified in Air Force Manual 32-1084 - Facility Requirements. Project found only one option that will meet operational requirements. A waiver to an Economic Analysis has been approved for this project. Sustainable principles, to include life-cycle cost-effective practices, will be integrated into the design, development, and construction of the project in accordance with Unified Facility Criteria 1-200-02. This includes preparation of a life-cycle cost analysis for energy consuming systems, renewable energy generating systems, whenever life-cycle cost effective is selected as the reason any requirement of Unified Facility Criteria 1-200-02 is partially compliant or not applicable. This project does not fall within or partly within the 100 year flood plain. This project was not included in the Fiscal Year 2021 future-years defense plan. Facility is sited in accordance with the Installation Development Plan and is within a compatible land use area. This design shall conform to criteria established in the Air Force Corporate Facilities Standards,</p>				

1. COMPONENT AIR FORCE	FY 2022 MILITARY CONSTRUCTION PROJECT DATA		2. DATE MAY 2021
3. INSTALLATION AND LOCATION ELLSWORTH AFB ELLSWORTH AFB SITE 1 SOUTH DAKOTA		4. PROJECT TITLE: B-21 ADAL FLIGHT SIMULATOR	
5. PROGRAM ELEMENT 64015F	6. CATEGORY CODE 171-212	7. PROJECT NUMBER FXBM1093407	8. PROJECT COST (\$000) 24,000
<p>the Installation Facilities Standards, but will not employ a standard facility design because there is no Air Force standard facility design for this project, and there is no applicable standard design from the U.S. Army Corps of Engineers.</p> <p>Base Civil Engineer: (605) 385-2658.</p> <p>ADD Flight Simulator: 2,815 SM = 30,300 Square Feet</p> <p>JOINT USE CERTIFICATION: Mission Requirements, operational considerations, and location are incompatible with use by other components.</p>			

1. COMPONENT AIR FORCE	FY 2022 MILITARY CONSTRUCTION PROJECT DATA		2. DATE MAY 2021
3. INSTALLATION AND LOCATION ELLSWORTH AFB ELLSWORTH AFB SITE 1 SOUTH DAKOTA		4. PROJECT TITLE: B-21 ADAL FLIGHT SIMULATOR	
5. PROGRAM ELEMENT 64015F	6. CATEGORY CODE 171-212	7. PROJECT NUMBER FXBM1093407	8. PROJECT COST (\$000) 24,000
12. SUPPLEMENTAL DATA:			
a. Estimated Design Data:			
(1) Status			
(a) Type of Design	DESIGN-BID-BUILD		
(b) Date Design Started	21-MAY-20		
(c) Parametric Cost Estimates Used to Develop Costs	YES		
(d) Percent Complete as of 01 Jan 2021	65%		
(e) Date 35% Designed	20-JUL-20		
(f) Date Design Complete	16-SEP-21		
(g) Energy Study/Life-Cycle analysis was/will be performed	YES		
(2) Basis			
(a) Standard or Definitive Design Used	NO		
(b) Where Design Was Previously Used	N/A		
(3) Total Cost (c) = (a) + (b) or (d) + (e)	(\$000)		
(a) Production of Plans and Specifications	1,380		
(b) All Other Design Costs	1,050		
(c) Total	2,430		
(d) Contract	2,025		
(e) In-House	405		
(4) Construction Contract Award	22-MAR		
(5) Construction Start	22-MAY		
(6) Construction Completion	24-JAN		
b. Equipment associated with this project provided from other appropriations:			
		FISCAL YEAR	
		APPROPRIATED	COST
EQUIPMENT NOMENCLATURE	PROCURING APPRO	OR REQUESTED	(\$000)
FURNISHINGS, FIXTURES, & EQUIPMENT	3080	FUTURE REQUEST	410
COMMUNICATION	3400	FUTURE REQUEST	123
SIMULATOR EQUIPMENT	3080	FUTURE REQUEST	32,000

1. COMPONENT AIR FORCE	FY 2022 MILITARY CONSTRUCTION PROJECT DATA			2. DATE MAY 2021
3. INSTALLATION AND LOCATION ELLSWORTH AFB ELLSWORTH AFB SITE # 1 SOUTH DAKOTA			4. PROJECT TITLE: B-21 FORMAL TRAINING UNIT/AMU	
5. PROGRAM ELEMENT 64015F	6. CATEGORY CODE 211-154	7. PROJECT NUMBER FXBML093477	8. PROJECT COST (\$000) 70,000	
9. COST ESTIMATES				
ITEM	U/M	QUANTITY	UNIT COST (\$)	COST (\$000)
PRIMARY FACILITIES				52,479
SHOP, AIRCRAFT MAINTENANCE, ORGANIZ. (211-154)	SM	4,133	6,624	(27,377)
SQUADRON OPERATIONS (141-753)	SM	4,067	5,051	(20,542)
FLIGHT KITCHEN (723-388)	SM	465	3,742	(1,740)
ICD 705 PREMIUM	LS			(1,540)
CYBERSECURITY OF FACILITY-RELATED CONTROL SYS	LS			(1,280)
SUPPORTING FACILITIES				10,968
SITE PREPARATION	LS			(2,157)
SITE IMPROVMENTS	LS			(444)
PAVEMENTS	LS			(5,733)
UTILITIES	LS			(2,463)
COMMUNICATIONS	LS			(171)
SUBTOTAL				63,447
CONTINGENCY COST (5%)				3,172
TOTAL CONTRACT COST				66,619
SUPERVISION, INSPECTION & OVERHEAD (5.7%)				3,797
TOTAL REQUEST				70,416
TOTAL REQUEST (ROUNDED)				70,000
EQUIPMENT FROM OTHER APPROPRIATIONS (NON-ADD)				(2,094)
10. DESCRIPTION OF PROPOSED CONSTRUCTION: Construct a Formal Training Unit/Aircraft Maintenance Unit Facility using conventional design and construction methods. Construction will include the construction of a two story, steel framed structure, concrete slab and foundation system, masonry block exterior walls, and standing seam metal roof. The project will include all necessary utilities, site improvements, pavements, communications support infrastructure, and all necessary supporting work for a complete and usable facility. The existing road and parking lot on the proposed site will be removed and replaced as needed to provide space for proper siting of the building and new parking. As applicable, demolition includes the existing pavements, sidewalks, and removing utilities to the nearest valve, manhole, or structure. Pavements will be designed in accordance to Unified Facilities Criteria 2-260-01 and Unified Facilities Criteria 2-260-02. Facilities will be designed as permanent construction in accordance with the Department of Defense Unified Facilities Criteria 1-200-01. This project will comply with Department of Defense antiterrorism/force protection requirements per Unified Facility Criteria 4-010-01.				

1. COMPONENT AIR FORCE	FY 2022 MILITARY CONSTRUCTION PROJECT DATA			2. DATE MAY 2021
3. INSTALLATION AND LOCATION ELLSWORTH AFB ELLSWORTH AFB SITE # 1 SOUTH DAKOTA			4. PROJECT TITLE: B-21 FORMAL TRAINING UNIT/AMU	
5. PROGRAM ELEMENT 64015F	6. CATEGORY CODE 211-154	7. PROJECT NUMBER FXBML093477	8. PROJECT COST (\$000) 70,000	
Air Conditioning: 200 Tons				
<p>11. REQUIREMENT: 4,133 SM ADEQUATE: 0 SM SUBSTANDARD: 0 SM</p> <p>PROJECT: Construct a B-21 Formal Training Unit/Aircraft Maintenance Unit.</p> <p>REQUIREMENT: This project constructs a two story Formal Training Unit which includes the Aircraft Maintenance Unit (211-154) and a Flight Kitchen on the first floor (723-388), a Squadron Operations Building (141-753) which comprises the entirety of the second floor, as well as the functional offices, specialties and communications equipment that supports it. The aviation operations function will require a controlled space to perform mission functions that will comply with the Intelligence Community Directive (ICD) 705 criteria. The flight kitchen is required to serve the facility and all other B-21 squadron meal requirements. The aviation operations will include private and open office areas for Intelligence Formalized Training Unit, contractor instructors, training and scheduling personnel, mobility and safety personnel, director of weapons, weapons and tactics director of intel, and computer support personnel. It will also include office space for mission planners and planning rooms, security, classified and unclassified briefing rooms, computer server room, a secure safe room, and an auditorium suitable for large classified briefings. The Aircraft maintenance unit will include private and open offices, debriefing rooms, conference room, training areas, and support areas. The flight kitchen will include showers for both the aircraft maintenance unit and the aviation operations as well as utility rooms to serve the facility. This is a unique requirement for the B-21 program as it centralizes aircraft maintenance, operations, and a flight kitchen in one building. This triad of units is located right at an entry control point which will streamline foot traffic onto the flight-line. This is not a tenant or supported service requirement.</p> <p>CURRENT SITUATION: This is a new requirement to support the B-21. There are no facilities that meet this requirement, nor are there existing facilities can be modified to meet the requirement. B-1B operations are currently running on the Ellsworth airfield and all related facilities cannot support the bed down for the B-21 new acquisition. B-1B operations are currently in place and at capacity. Only a new facility can support this bed down requirement for the new mission. The B-1B aircraft maintenance shops and the squadron operations facilities are currently being run out of separate buildings and will not be able to handle an increased load in personnel and security. The buildings will still be conducting B-1B missions and will not be able to run concurrent missions with the B-21 as it phases in. Furthermore, there are no facilities with the flight kitchen (723-388) category code on Ellsworth Air Force Base that can support the Formal training Unit requirement for a flight kitchen.</p> <p>IMPACT IF NOT PROVIDED: If this project is not provided, B-21 aircraft maintenance shop and aviation operations will be run out of current B-1B mission related buildings which will no doubt exceed occupant capacity. This will create multiple safety hazards due to the personnel requirements needed to support the B-21.</p> <p>Without a new building to support the unique functions of the Formal Training Unit, the current B-1B buildings will have to be shared meaning each bomber squadron will</p>				

1. COMPONENT AIR FORCE	FY 2022 MILITARY CONSTRUCTION PROJECT DATA		2. DATE MAY 2021
3. INSTALLATION AND LOCATION ELLSWORTH AFB ELLSWORTH AFB SITE # 1 SOUTH DAKOTA		4. PROJECT TITLE: B-21 FORMAL TRAINING UNIT/AMU	
5. PROGRAM ELEMENT 64015F	6. CATEGORY CODE 211-154	7. PROJECT NUMBER FXBML093477	8. PROJECT COST (\$000) 70,000
<p>have to plan around each other, severely impacting mission readiness of both units. There are no other buildings that can be utilized for the B-21 Formal Training Units unique functions.</p> <p>ADDITIONAL: This project meets applicable criteria/scope specified in Air Force Manual 32-1084 - Facility Requirements. Project found only one option that will meet operational requirements. A waiver to an Economic Analysis has been completed. Sustainable principles, to include life-cycle cost- effective practices, will be integrated into the design, development, and construction of the project in accordance with Unified Facility Criteria 1-200-02, High Performance and Sustainable Building Requirements. This includes preparation of a life-cycle cost analysis for energy consuming systems, renewable energy generating systems, whenever life-cycle cost effective is selected as the reason any requirement of Unified Facility Criteria 1-200-02 is partially compliant or not applicable. This project does not fall within or partly within the 100 year flood plain. This project was not included in the Fiscal Year 2021 future-years defense plan. Facility is sited in accordance with the Installation Development Plan and is within a compatible land use area. This design shall conform to criteria established in the Air Force Corporate Facilities Standards, the Installation Facilities Standards, but will not employ a standard facility design because there is no Air Force standard facility design for this project, and there is no applicable standard design from the U.S. Army Corps of Engineers.</p> <p>Base Civil Engineer: (605) 385-2658.</p> <p>Shop, Aircraft Maintenance, Organizational: 4,133 SM = 44,487 Square Feet; Squadron Operations: 4,067 SM = 43,777 Square Feet; Flight Kitchen: 465 SM = 5,005 Square Feet.</p> <p>JOINT USE CERTIFICATION: Mission Requirements, operational considerations, and location are incompatible with use by other components.</p>			

1. COMPONENT AIR FORCE	FY 2022 MILITARY CONSTRUCTION PROJECT DATA		2. DATE MAY 2021
3. INSTALLATION AND LOCATION ELLSWORTH AFB ELLSWORTH AFB SITE # 1 SOUTH DAKOTA		4. PROJECT TITLE: B-21 FORMAL TRAINING UNIT/AMU	
5. PROGRAM ELEMENT 64015F	6. CATEGORY CODE 211-154	7. PROJECT NUMBER FXBML093477	8. PROJECT COST (\$000) 70,000
12. SUPPLEMENTAL DATA:			
a. Estimated Design Data:			
(1) Status			
(a) Type of Design	DESIGN-BID-BUILD		
(b) Date Design Started	20-MAY-20		
(c) Parametric Cost Estimates Used to Develop Costs	YES		
(d) Percent Complete as of 01 JAN 2021	65%		
(e) Date 35% Designed	23-JUL-20		
(f) Date Design Complete	16-SEP-21		
(g) Energy Study/Life Cycle analysis was/will be performed	YES		
(2) Basis			
(a) Standard or Definitive Design Used	NO		
(b) Where Design Was Previously Used	N/A		
(3) Total Cost (c) = (a) + (b) or (d) + (e)	(\$000)		
(a) Production of Plans and Specifications	4,140		
(b) All Other Design Costs	2,070		
(c) Total	6,210		
(d) Contract	5,175		
(e) In-House	1,035		
(4) Construction Contract Award	22-MAR		
(5) Construction Start	22-MAY		
(6) Construction Completion	24-JAN		
b. Equipment associated with this project provided from other appropriations:			
		FISCAL YEAR	
		APPROPRIATED	COST
EQUIPMENT NOMENCLATURE	PROCURING APPRO	OR REQUESTED	(\$000)
FURNISHINGS, FIXTURES, & EQUIPMENT	3080	FUTURE REQUEST	1,700
COMMUNICATION	3080	FUTURE REQUEST	394

1. COMPONENT AIR FORCE		FY <u>2022</u> MILITARY CONSTRUCTION PROGRAM					2. DATE (YYYYMMDD) MAY 2021				
3. INSTALLATION AND LOCATION JOINT BASE SAN ANTONIO, TEXAS				4. COMMAND AIR EDUCATION AND TRAINING COMMAND			5. AREA CONSTRUCTION COST INDEX 0.92				
6. PERSONNEL		(1) PERMANENT			(2) STUDENTS			(3) SUPPORTED			(4) TOTAL
		OFFICER	ENLISTED	CIVILIAN	OFFICER	ENLISTED	CIVILIAN	OFFICER	ENLISTED	CIVILIAN	
a. AS OF	30-SEP-20	3,115	9,362	15,892	914	7,561	49	3,323	12,625	8,271	61,112
b. END FY		3,060	9,357	16,277	790	8,063	39	3,117	13,032	7,657	61,392
7. INVENTORY DATA (\$000)											
a. TOTAL ACREAGE										45,360	
b. INVENTORY TOTAL AS OF 30-SEP-20										12,169,489.00	
c. AUTHORIZATION NOT YET IN INVENTORY										431,066.00	
d. AUTHORIZATION REQUESTED IN THIS PROGRAM										141,000.00	
e. AUTHORIZATION INCLUDED IN FOLLOWING PROGRAM										0.00	
f. PLANNED IN NEXT THREE PROGRAM YEARS										0.00	
g. REMAINING DEFICIENCY										523,400.00	
h. GRAND TOTAL										13,264,955.00	
8. PROJECTS REQUESTED IN THIS PROGRAM											
a. CATEGORY				b. COST (\$000)		c. DESIGN STATUS					
(1) CODE	(2) PROJECT TITLE		(3) SCOPE			(1) START	(2) COMPLETE				
721-311	BMT Recruit Dormitory 8, Inc 3		20,221 SM		31,000	03/20	12/20				
721-311	BMT Recruit Dormitory 7		20,221 SM		141,000	03/20	12/20				
9. FUTURE PROJECTS											
10. MISSION OR MAJOR FUNCTIONS											
<p>The 502nd Air Base Wing (ABW) is the host wing for Joint Base San Antonio (JBSA) which is comprised of three primary locations; JBSA-Lackland, JBSA-Randolph, JBSA-Fort Sam Houston as well as eight other operating locations. The 502 ABW provides installation support services to more than 41 Air Force Mission Partners, 30 US Army Mission Partners, 6 US Navy Mission Partners, US Marine Corps Mission Partners, US Coast Guard, and 15 US Governmental Organizations Mission Partners, that accomplish diverse training, flying, cyber, intelligence, medical and installations missions every day.</p>											
11. OUTSTANDING POLLUTION AND SAFETY DEFICIENCIES											
N/A											

1. COMPONENT AIR FORCE	FY 2022 MILITARY CONSTRUCTION PROJECT DATA (computer generated)		2. DATE MAY 2021	
3. INSTALLATION, SITE AND LOCATION JOINT BASE SAN ANTONIO - LACKLAND LACKLAND AIR FORCE BASE SITE # 1 TEXAS			4. PROJECT TITLE BMT RECRUIT DORMITORY 8, INC 3	
5. PROGRAM ELEMENT 91211F	6. CATEGORY CODE 721-311	7. PROJECT NUMBER MPLS083737R8	8. PROJECT COST(\$000) AUTH: 0 APP: 31,000	
9. COST ESTIMATES				
ITEM	U/M	QUANTITY	UNIT	COST (\$000)
PRIMARY FACILITIES				72,925
DORMITORY, RECRUIT (721-311)	SM	20,221	2,725	(55,093)
AETC TECHNICAL TRAINING SUPPORT (171-627)	SM	2,987	2,924	(8,733)
MISC TRNG FAC/FORMATION OPEN SPACE (179-371)	SM	2,354	1,849	(4,353)
WEAPONS CLEANING PAVILION (145-921)	SM	465	3,455	(1,606)
SUSTAINABILITY AND ENERGY MEASURES	LS			(1,396)
CYBERSECURITY OF FACILITY-RELATED CONTROL SYS	LS			(1,745)
SUPPORTING FACILITIES				26,502
EXERCISE/DRILL PAD AND RUNNING TRACK	LS			(3,762)
QUADRANGLE	LS			(4,375)
SPECIAL DRILLED PIER FOUNDATION	LS			(800)
SITE IMPROVEMENTS	LS			(2,734)
UTILITIES	LS			(6,707)
PRIVATIZED UTILITY CONNECTION FEE	LS			(500)
PAVEMENTS	LS			(3,137)
COMMUNICATIONS INFRASTRUCTURE	LS			(211)
DEMOLITION	SM	24,508	175	(4,277)
SUBTOTAL				99,427
CONTINGENCY (5.0%)				4,971
TOTAL CONTRACT COST				104,398
SUPERVISION, INSPECTION AND OVERHEAD (5.7%)				5,951
TOTAL REQUEST				110,349
TOTAL REQUEST (ROUNDED)				110,000
EQUIPMENT FROM OTHER APPROPRIATIONS (NON-ADD)				(2,750)
10. Description of Proposed Construction: Construct a Basic Military Training (BMT) Recruit Dormitory utilizing conventional design and construction methods to accommodate the mission of the facility. The facility will be multistory and will include a drilled pier foundation, concrete floor slabs, concrete structure, masonry walls, standing seam metal roof, and elevators. Areas include administrative support, open-bay dormitories, central latrines, drill pad, weapons cleaning pavilion, physical training areas, quadrangle, and storage. Completes West Campus items that earlier projects didn't finish, removes all construction roadways, trailers, and fence. Demolishes buildings 146 (8,118 SM/87,387 SF), 7357 (1,286 SM/13,839 SF), 7364 (1,754 SM/18,883 SF), 7366 (1,267 SM/13,643 SF), 7368 (1,754 SM/18,883 SF), 7475 (1,202 SM/12,931 SF), 7481				

1. COMPONENT AIR FORCE	FY 2022 MILITARY CONSTRUCTION PROJECT DATA (computer generated)		2. DATE MAY 2021
3. INSTALLATION, SITE AND LOCATION JOINT BASE SAN ANTONIO - LACKLAND LACKLAND AIR FORCE BASE SITE # 1 TEXAS		4. PROJECT TITLE BMT RECRUIT DORMITORY 8, INC 3	
5. PROGRAM ELEMENT 91211F	6. CATEGORY CODE 721-311	7. PROJECT NUMBER MPLS083737R8	8. PROJECT COST(\$000) AUTH: 0 APP: 31,000
<p>(1,201 SM/12,929 SF) , 2015 (2,669 SM/28,728 SF) , 2018 (2,671 SM/28,743 SF) and 2020 (2,669 SM/28,727 SF) totaling 24,591 SM (264,690 SF). Facilities will be designed as permanent construction in accordance with the Unified Facilities Criteria (UFC) 1-200-01. Sustainable principles, to include Life Cycle cost-effective practices, will be integrated into the design, development and construction of the project in accordance with UFC 1-200-02. This project will comply with Department of Defense (DoD) Antiterrorism/Force Protection requirements per UFC 4-010-01.</p> <p>Air Conditioning: 450 Tons</p>			
<p>11. Requirement: 219884 SF Adequate: 118629 SF Substandard: 135023 SF PROJECT: Construct BMT Recruit Dormitory 8</p> <p>REQUIREMENT: A major Air Force objective is to provide recruits with facilities conducive to their proper housing, dining, and training. Properly sized, sited, designed, and furnished facilities are essential to successfully train future Air Force enlisted personnel. To support current accession rates, a total of 8 Recruit Housing & Training (RH&T) facilities are required to accomplish the Basic Military Training (BMT) mission at Lackland AFB. This ATC facility will house a Basic Military Training Squadron and a Training Support Squadron (TRSS) including dormitory and administrative space. This project is designed to accommodate 1248 recruits; 48 recruits per flight, 24 flights per squadron with 4 reserve bed spaces per flight in order to address surges, gender separation and injured recruits.</p> <p>CURRENT SITUATION: RH&T facilities, the BMT program, and Lackland AFB form an initial, but lasting impression of the Air Force to all new recruits. Existing 220,000 SF RH&T facilities, originally constructed in the 1960's and 1970's, were designed to provide housing, dining, classrooms, and other training space in one facility in order to develop teamwork, discipline, and esprit de corps among the recruits. These facilities are outdated and inadequate to support current and planned accessions of Air Force Active Duty, Reserve, and Air National Guard personnel considering future force structure and strength. Due to deterioration, age, and exceeding their useful life, the RH&Ts require significant O&M capital to keep them operational -- an estimated annual average of \$2.1M per RH&T for the next 28 years according to the facility assessment study and detailed Economic Analysis. Available training hours, training quality, cohesiveness, and esprit de corps are degraded as a direct result of decentralized BMT facilities and functions. A centralized, master planned, BMT campus does not exist. BMT has difficulty accommodating summer recruit surges while</p>			

1. COMPONENT AIR FORCE	FY 2022 MILITARY CONSTRUCTION PROJECT DATA (computer generated)		2. DATE MAY 2021
3. INSTALLATION, SITE AND LOCATION JOINT BASE SAN ANTONIO - LACKLAND LACKLAND AIR FORCE BASE SITE # 1 TEXAS		4. PROJECT TITLE BMT RECRUIT DORMITORY 8, INC 3	
5. PROGRAM ELEMENT 91211F	6. CATEGORY CODE 721-311	7. PROJECT NUMBER MPLS083737R8	8. PROJECT COST(\$000) AUTH: 0 APP: 31,000
<p>accomplishing maintenance, repair and renovation projects of the aging, inadequate, and substandard RH&Ts. Recruits do not have the minimum standard square footage during surge and overhaul periods forcing as many as 65 recruits per flight in facilities designed for 50 recruits per flight. This further stresses infrastructure systems and accelerates deterioration. The fire protection system is inadequate and obsolete. The mechanical, electrical, and lighting systems and interior finishes are at the end of their useful lives and require replacement.</p> <p>IMPACT IF NOT PROVIDED: One of Lackland Air Force Base's primary missions is to educate and train every Basic Military Training (BMT) enlisted recruit when entering military service in the U.S. Air Force. Without quality BMT programs and state-of-the-art, master-planned facilities, the Air Force will have difficulty recruiting, training, and retaining new recruits. BMT schedules will continue to be stretched to critical levels that risk mission loss. Facilities will continue to age and will require increasingly more capital to keep them operational. During surge periods, or when existing RH&Ts are being repaired, maintained, or overhauled, flight sizes will increase and recruits will continue to live in space with less than the minimum standard square footage per recruit. Significant capital must be spent to convert the existing RH&T facilities to current Anti- Terrorism/Force Protection (AT/FP) criteria.</p> <p>ADDITIONAL: This project meets the criteria/scope specified in Air Force Manual 32-1084, "Facility Requirements." This design shall conform to criteria established in the Air Force Corporate Facilities Standards (AFCEFS), but will not employ a standard facility design because there is no AF standard facility design for this project and there is no applicable standard design from Air Force Civil Engineer Center (AFCEC). However, this project will be a modified site adapt of MPLS083737R7 BMT RECRUIT DORMITORY 7. This project does not fall within or partly within the 100-year flood plain. The Economic Analysis is complete and supports new construction. Supporting facility costs exceed 25% of primary facility cost due to removal of the haul roads and temporary gate for the ATC projects, included in site improvements, the quadrangle for the west campus dorms, privatized utility connection and required special foundations.</p> <p>BASE CIVIL ENGINEER: (210) 671-2977</p> <p>721-311 Dormitory, Recruit: 20,221 SM = 217,657 SF</p> <p>171-627 AETC Technical Training Support: 2,354 SM = 25,338 SF</p>			

1. COMPONENT AIR FORCE	FY 2022 MILITARY CONSTRUCTION PROJECT DATA (computer generated)		2. DATE MAY 2021
3. INSTALLATION, SITE AND LOCATION JOINT BASE SAN ANTONIO - LACKLAND LACKLAND AIR FORCE BASE SITE # 1 TEXAS		4. PROJECT TITLE BMT RECRUIT DORMITORY 8, INC 3	
5. PROGRAM ELEMENT 91211F	6. CATEGORY CODE 721-311	7. PROJECT NUMBER MPLS083737R8	8. PROJECT COST(\$000) AUTH: 0 APP: 31,000
<p>179-371 Misc Training Facility/Formation Open Space: 1,741 SM = 18,803 SF</p> <p>145-921 Weapons Cleaning Pavilion: 456 SM = 4,908 SF</p>			
<p>JOINT USE CERTIFICATION: This facility can be used by other components on an "as available" basis; however, the scope of the project is based on Air Force requirements.</p>			

1. COMPONENT AIR FORCE	FY 2022 MILITARY CONSTRUCTION PROJECT DATA (computer generated)		2. DATE MAY 2021
3. INSTALLATION, SITE AND LOCATION JOINT BASE SAN ANTONIO - LACKLAND LACKLAND AIR FORCE BASE SITE # 1 TEXAS		4. PROJECT TITLE BMT RECRUIT DORMITORY 8, INC 3	
5. PROGRAM ELEMENT 91211F	6. CATEGORY CODE 721-311	7. PROJECT NUMBER MPLS083737R8	8. PROJECT COST(\$000) AUTH: 0 APP: 31,000
12. SUPPLEMENTAL DATA:			
a. Estimated Design Data:			
(1) Status:			
(a) Type of Design	Design-Bid-Build		
(b) Date Design Started	03-MAR-20		
(c) Parametric Cost Estimates Used to develop costs	YES		
(d) Percent Complete as of 01 JAN 2021	100%		
(e) Date 35% Designed	20-APR-20		
(f) Date Design Complete	10-DEC-20		
(g) Energy Study/Life-Cycle analysis was/will be performed	YES		
(2) Basis:			
(a) Standard or 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	6,600		
(b) All Other Design Costs	3,300		
(c) Total	9,900		
(d) Contract	8,250		
(e) In-house	1,650		
(4) Construction Contract Award	21-NOV		
(5) Construction Start	21-DEC		
(6) Construction Completion	24-JUL		
b. Equipment associated with this project provided from other appropriations:			
		FISCAL YEAR	
	PROCURING	APPROPRIATED	COST
EQUIPMENT NOMENCLATURE	APPROPRIATION	OR REQUESTED	(\$000)
WALL LOCKERS AND FURNISHINGS	3080	FUTURE REQUEST	2,560
AUTOMATED DATA PROCESSING	3080	FUTURE REQUEST	190

1. COMPONENT AIR FORCE	FY 2022 MILITARY CONSTRUCTION PROJECT DATA (computer generated)		2. DATE MAY 2021
3. INSTALLATION, SITE AND LOCATION JOINT BASE SAN ANTONIO - LACKLAND LACKLAND AIR FORCE BASE SITE # 1 TEXAS		4. PROJECT TITLE BMT RECRUIT DORMITORY 8, INC 3	
5. PROGRAM ELEMENT 91211F	6. CATEGORY CODE 721-311	7. PROJECT NUMBER MPLS083737R8	8. PROJECT COST(\$000) AUTH: 0 APP: 31,000
c. Authorization and Appropriation Summary:			
	Authorization (\$000)	Auth of Approp (\$000)	Approp (\$000)
FY2020 Enacted	110,000	74,000	74,000
FY2021 Enacted	0	36,000	36,000
Cost Variation*	31,000	-----	-----
FY2022 Request	0	31,000	31,000
Total	141,000		141,000
*10 USC 2853 Cost Variation Notification will be submitted on or before 31 OCT 2021			

Project: BMT Recruit Dorm 8, Inc 3, JBSA Lackland AFB, TX (Current Authorization = \$110M)

Project Spending Plan

As of: 4-May-21

All Cost in thousands (\$000)

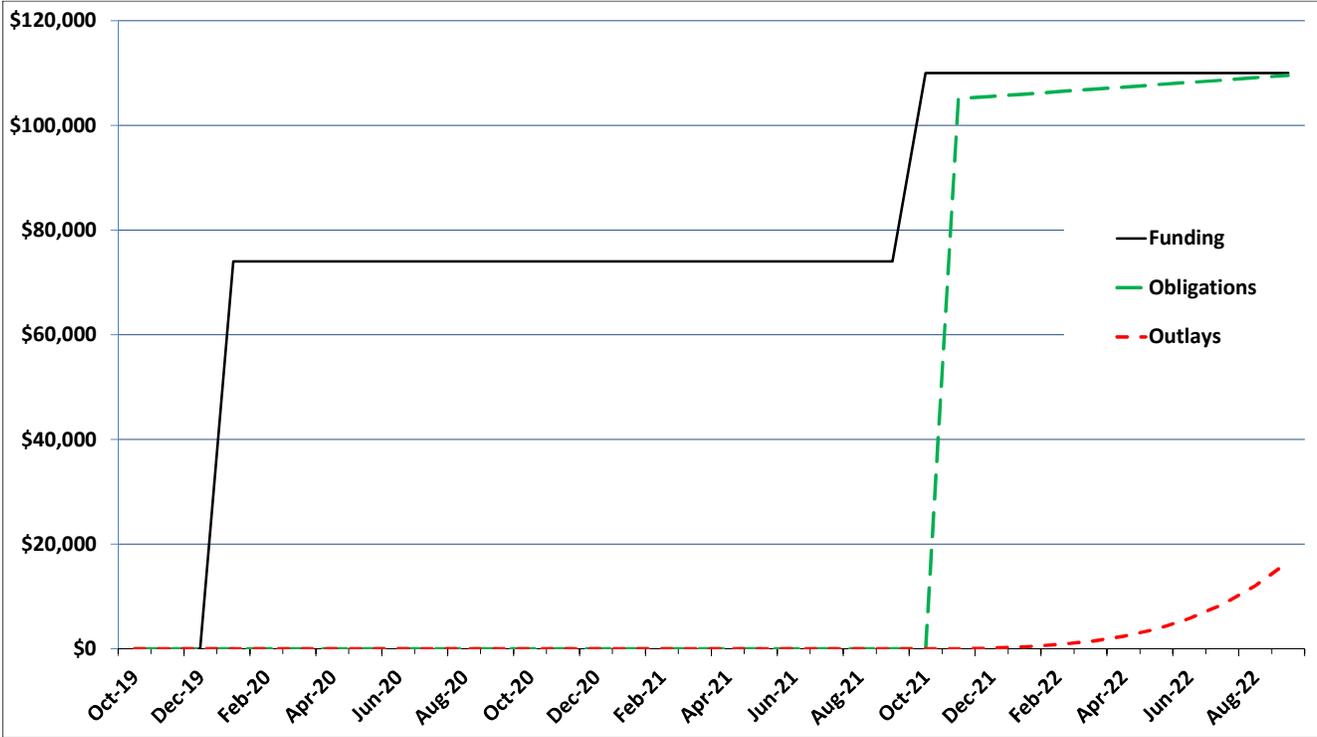
Chart Begin	FUNDING (note 1)		OBLIGATION (note 2)		OUTLAYS (note 3)	
Month	Enacted	Cumulative	Obligated	Cumulative	Monthly	Cumulative
Oct-19	-	-	-	-	-	-
Nov-19	-	-	-	-	-	-
Dec-19	-	-	-	-	-	-
Jan-20	74,000	74,000	-	-	-	-
Feb-20	-	74,000	-	-	-	-
Mar-20	-	74,000	-	-	-	-
Apr-20	-	74,000	-	-	-	-
May-20	-	74,000	-	-	-	-
Jun-20	-	74,000	-	-	-	-
Jul-20	-	74,000	-	-	-	-
Aug-20	-	74,000	-	-	-	-
Sep-20	-	74,000	-	-	-	-
Oct-20	-	74,000	-	-	-	-
Nov-20	-	74,000	-	-	-	-
Dec-20	-	74,000	-	-	-	-
Jan-21	-	74,000	-	-	-	-
Feb-21	-	74,000	-	-	-	-
Mar-21	-	74,000	-	-	-	-
Apr-21	-	74,000	-	-	-	-
May-21	-	74,000	-	-	-	-
Jun-21	-	74,000	-	-	-	-
Jul-21	-	74,000	-	-	-	-
Aug-21	-	74,000	-	-	-	-
Sep-21	-	74,000	-	-	-	-
Oct-21	36,000	110,000	-	-	-	-
Nov-21	-	110,000	105,105	105,105	-	-
Dec-21	-	110,000	445	105,550	153	153
Jan-22	-	110,000	445	105,995	254	406
Feb-22	-	110,000	445	106,440	409	815
Mar-22	-	110,000	445	106,885	636	1,451
Apr-22	-	110,000	445	107,330	959	2,410
May-22	-	110,000	445	107,775	1,399	3,809
Jun-22	-	110,000	445	108,220	1,975	5,784
Jul-22	-	110,000	445	108,665	2,697	8,481
Aug-22	-	110,000	445	109,110	3,565	12,046
Sep-22	-	110,000	445	109,555	4,560	16,606

Note 1: Assumes initial appropriation is enacted by Congress Jan FY 2020.

Note 2: Assumes funds are available for obligation by 31 January of the execution year and by 31 October for subsequent years.

Note 3: Assumes contract award date of Nov 2021, Contract completion: Jul 2024, Duration 32 months

BMT Recruit Dorm 8, Inc 3, JBSA Lackland AFB, TX (Current Authorization = \$110M)



1. COMPONENT AIR FORCE	FY 2022 MILITARY CONSTRUCTION PROJECT DATA (computer generated)		2. DATE MAY 2021	
3. INSTALLATION, SITE AND LOCATION JOINT BASE SAN ANTONIO - LACKLAND LACKLAND AIR FORCE BASE SITE # 1 TEXAS			4. PROJECT TITLE BMT RECRUIT DORMITORY 7	
5. PROGRAM ELEMENT 91211F	6. CATEGORY CODE 721-311	7. PROJECT NUMBER MPLS200361R7	8. PROJECT COST (\$000) 141,000	
9. COST ESTIMATES				
ITEM	U/M	QUANTITY	UNIT	COST (\$000)
PRIMARY FACILITIES				101,774
DORMITORY, RECRUITS (721-311)	SM	20,221	4,032	(81,531)
AETC TECHNICAL TRAINING SUPPORT (171-627)	SM	1,261	3,738	(4,714)
TRAINING AIDS (179-371)	EA	1	7,467,000	(7,467)
ATHLETIC FIELD, TRACK (750-177)	EA	1	4,241,000	(4,241)
OVERHEAD PROTECTION (145-921)	SM	465	3,101	(1,442)
CYBERSECURITY OF FACILITY-RELATED CONTROL SYS	LS			(2,379)
SUPPORTING FACILITIES				24,919
SPECIAL DRILLED PIER FOUNDATION	LS			(2,421)
SITE IMPROVEMENTS	LS			(2,432)
UTILITIES	LS			(3,543)
PRIVATIZED UTILITY CONNECTION FEE	LS			(559)
PAVEMENTS	LS			(3,802)
COMMUNICATIONS SUPPORT	LS			(341)
QUADRANGLE	LS			(5,304)
DEMOLITION	SM	20,051	325	(6,517)
SUBTOTAL				126,693
CONTINGENCY (5.0%)				6,335
TOTAL CONTRACT COST				133,028
SUPERVISION, INSPECTION AND OVERHEAD (5.7%)				7,583
TOTAL REQUEST				140,611
TOTAL REQUEST (ROUNDED)				141,000
EQUIPMENT FROM OTHER APPROPRIATIONS (NON-ADD)				(2,805)
10. Description of Proposed Construction: Construct a Basic Military Training Recruit Dormitory complex utilizing conventional design and construction methods to accommodate the mission of the facility. The facility will be multi-story and will include a drilled pier foundation, concrete floor slabs, structural steel frame, masonry walls, standing seam metal roof, and an elevator. Areas include administrative support, open-bay dormitories, central latrines, drill pad, physical training areas, weapons cleaning pavilion, quadrangle, and storage. The project will include all necessary utilities, site improvements, pavements, communications support infrastructure, and all necessary supporting work for a complete and usable facility. The project demolishes building 9210 (20,051 square meters). The demolition work will include testing/removal of asbestos and lead-based paint and any work needed to mitigate potential hazards. Facilities will be				

1. COMPONENT AIR FORCE	FY 2022 MILITARY CONSTRUCTION PROJECT DATA (computer generated)		2. DATE MAY 2021
3. INSTALLATION, SITE AND LOCATION JOINT BASE SAN ANTONIO - LACKLAND LACKLAND AIR FORCE BASE SITE # 1 TEXAS		4. PROJECT TITLE BMT RECRUIT DORMITORY 7	
5. PROGRAM ELEMENT 91211F	6. CATEGORY CODE 721-311	7. PROJECT NUMBER MPLS200361R7	8. PROJECT COST(\$000) 141,000
<p>designed as permanent construction in accordance with the Department of Defense Unified Facilities Criteria 1-200-01 General Building Requirements. This project will comply with Department of Defense antiterrorism/force protection requirements per Unified Facility Criteria 4-010-01.</p> <p>Air Conditioning: 450 Tons</p>			
<p>11. Requirement: 20,221 SM Adequate: 0 SM Substandard: 20,051 SM PROJECT: BMT Recruit Dormitory 7</p> <p>REQUIREMENT: A major Air Force objective is to provide recruits with facilities conducive to their proper housing, dining, and training. Properly sized, sited, designed, and furnished facilities are essential to successfully train future Air Force enlisted personnel. To support current accession rates, a total of 8 Recruit Housing & Training facilities are required to accomplish the Basic Military Training mission at Lackland Air Force Base. This project provides the seventh Airmen Training Complex dormitory building in the "Recruit, House, and Train" Replacement program. This facility will house a Basic Military Training Squadron including dormitory and administrative space. This project is designed to accommodate 1,248 recruits; 48 recruits per flight, 24 flights per squadron with 4 reserve bed spaces per flight in order to address surges, gender separation and injured recruits. This project will also construct a new drill pad, running track, exercise areas, training aids, and a pavilion for weapons cleaning, storage, and latrines. The requirement is a 37th Training Wing tenant driven project.</p> <p>CURRENT SITUATION: The Basic Military Training program, and Lackland Air Force Base form an initial, but lasting impression of the Air Force to all new recruits. Existing 20,051 square meters Recruit, House, and Train facility, originally constructed in the 1969, was designed to provide housing, dining, classrooms, and other training space in one facility in order to develop teamwork, discipline, and esprit de corps among the recruits. The facility is outdated and is inadequate to support current and planned accessions of Air Force Active Duty, Reserve, and Air National Guard personnel considering future force structure and strength. Due to deterioration, age, and exceeding its useful life, the facility requires significant Operation and Maintenance capital to keep them operational. Available training hours, training quality, cohesiveness, and esprit de corps are degraded as a direct result of decentralized Basic Military Training facilities and functions. Basic Military Training has difficulty accommodating summer recruit surges while accomplishing maintenance, repair and renovation projects of the aging, inadequate, and substandard facility. Recruits do not have the minimum standard square footage during surge and</p>			

1. COMPONENT AIR FORCE	FY 2022 MILITARY CONSTRUCTION PROJECT DATA (computer generated)		2. DATE MAY 2021
3. INSTALLATION, SITE AND LOCATION JOINT BASE SAN ANTONIO - LACKLAND LACKLAND AIR FORCE BASE SITE # 1 TEXAS		4. PROJECT TITLE BMT RECRUIT DORMITORY 7	
5. PROGRAM ELEMENT 91211F	6. CATEGORY CODE 721-311	7. PROJECT NUMBER MPLS200361R7	8. PROJECT COST(\$000) 141,000
<p>overhaul periods forcing as many as 65 recruits per flight in facilities designed for 50 recruits per flight. This further stresses infrastructure systems and accelerates deterioration. The fire protection system is inadequate and obsolete. The mechanical, electrical, and lighting systems and interior finishes are at the end of their useful lives and require replacement.</p> <p>IMPACT IF NOT PROVIDED: One of Lackland Air Force Base's primary missions is to educate and train every Basic Military Training enlisted recruit when entering military service in the United States Air Force. Without quality Basic Military Training programs and state-of-the-art, master-planned facilities, the Air Force will have difficulty recruiting, training, and retaining new recruits. Basic Military Training schedules will continue to be stretched to critical levels that risk mission loss. The facility will continue to age and will require increasingly more capital to keep it operational. During surge periods, or when the existing facility is being repaired, maintained, or overhauled, flight sizes will increase and recruits will continue to live in space with less than the minimum standard square footage per recruit. Significant capital must be spent to convert the existing facility to meet current antiterrorism/force protection criteria.</p> <p>ADDITIONAL: This project meets the criteria/scope specified in Air Force Manual 32-1084, Facility Requirements. This design shall conform to criteria established in the Air Force Corporate Facilities Standards, but will not employ a standard facility design because there is no Air Force standard facility design for this project and there is no applicable standard design from United States Army Corps of Engineers. However, this project will be a modified site adapt of the Basic Military Training Dormitory design internal to Joint Base San Antonio. All reasonable alternatives were considered during the development of this project to include: add/alter and new construction. An approved Economic Analysis determined that New Construction is the only viable option to meet this requirement. Sustainable principles, to include life-cycle cost-effective practices, will be integrated into the design, development, and construction of the project in accordance with Unified Facility Criteria 1-200-02, High Performance and Sustainable Building Requirements. This includes preparation of a life-cycle cost analysis for energy consuming systems, renewable energy generating systems, whenever life-cycle cost effective is selected as the reason any requirement of Unified Facility Criteria 1-200-02 is partially compliant or not applicable. Facility is sited in accordance with the Installation Development Plan and is within a</p>			

1. COMPONENT AIR FORCE	FY 2022 MILITARY CONSTRUCTION PROJECT DATA (computer generated)		2. DATE MAY 2021
3. INSTALLATION, SITE AND LOCATION JOINT BASE SAN ANTONIO - LACKLAND LACKLAND AIR FORCE BASE SITE # 1 TEXAS		4. PROJECT TITLE BMT RECRUIT DORMITORY 7	
5. PROGRAM ELEMENT 91211F	6. CATEGORY CODE 721-311	7. PROJECT NUMBER MPLS200361R7	8. PROJECT COST(\$000) 141,000
<p>compatible land use area. Supporting facility costs exceed 25% of primary facility cost due to required special foundations, privatized utilities and the demolition of two Vietnam War era Recruit, House, and Train facilities. This project does not fall within or partly within the 100-year flood plain. This project was included in the Fiscal Year 2021 Future Years Defense Plan in Fiscal Year 2022.</p> <p>502d Civil Engineer Group, Base Civil Engineer: (210) 671-2977</p> <p>Dormitory, Recruits: 20,221 SM = 217,657 Square Feet</p> <p>AETC Technical Training Support: 1,261 SM = 13,573 Square Feet</p> <p>Overhead Protection: 465 SM = 5,005 Square Feet</p> <p>Demolition: 20,051 SM = 215,827 Square Feet</p> <p>JOINT USE CERTIFICATION: This facility can be used by other components on an "as available" basis; however, the scope of the project is based on Air Force requirements.</p>			

1. COMPONENT AIR FORCE	FY 2022 MILITARY CONSTRUCTION PROJECT DATA (computer generated)		2. DATE MAY 2021
3. INSTALLATION, SITE AND LOCATION JOINT BASE SAN ANTONIO - LACKLAND LACKLAND AIR FORCE BASE SITE # 1 TEXAS		4. PROJECT TITLE BMT RECRUIT DORMITORY 7	
5. PROGRAM ELEMENT 91211F	6. CATEGORY CODE 721-311	7. PROJECT NUMBER MPLS200361R7	8. PROJECT COST (\$000) 141,000
12. SUPPLEMENTAL DATA:			
a. Estimated Design Data:			
(1) Status:			
(a) Type of Design	Design-Bid-Build		
(b) Date Design Started	30-MAR-20		
(c) Parametric Cost Estimates Used to develop costs	YES		
(d) Percent Complete as of 01 JAN 2021	100%		
(e) Date 35% Designed	30-APR-20		
(f) Date Design Complete	11-DEC-20		
(g) Energy Study/Life-Cycle analysis was/will be performed	YES		
(2) Basis:			
(a) Standard or Definitive Design	NO		
(b) Where Design Was Most Recently Used	N/A		
(3) Total Cost (c) = (a) + (b) or (d) + (e)	(\$000)		
(a) Production of Plans and Specifications	8,460		
(b) All Other Design Costs	4,230		
(c) Total	12,690		
(d) Contract	10,575		
(e) In-house	2,115		
(4) Construction Contract Award	22-FEB		
(5) Construction Start	22-MAR		
(6) Construction Completion	24-JUL		
b. Equipment associated with this project provided from other appropriations:			
		FISCAL YEAR	
		APPROPRIATED	COST
EQUIPMENT NOMENCLATURE	PROCURING APPROP	OR REQUESTED	(\$000)
WALL LOCKERS AND FURNISHINGS	3080	FUTURE REQUEST	2,611
AUTOMATED DATA PROCESSING	3080	FUTURE REQUEST	194

Project: BMT Recruit Dormitory 7, JBSA Lackland AFB, TX (Current Authorization = \$0)

Project Spending Plan

As of: 4-May-21

All Cost in thousands (\$000)

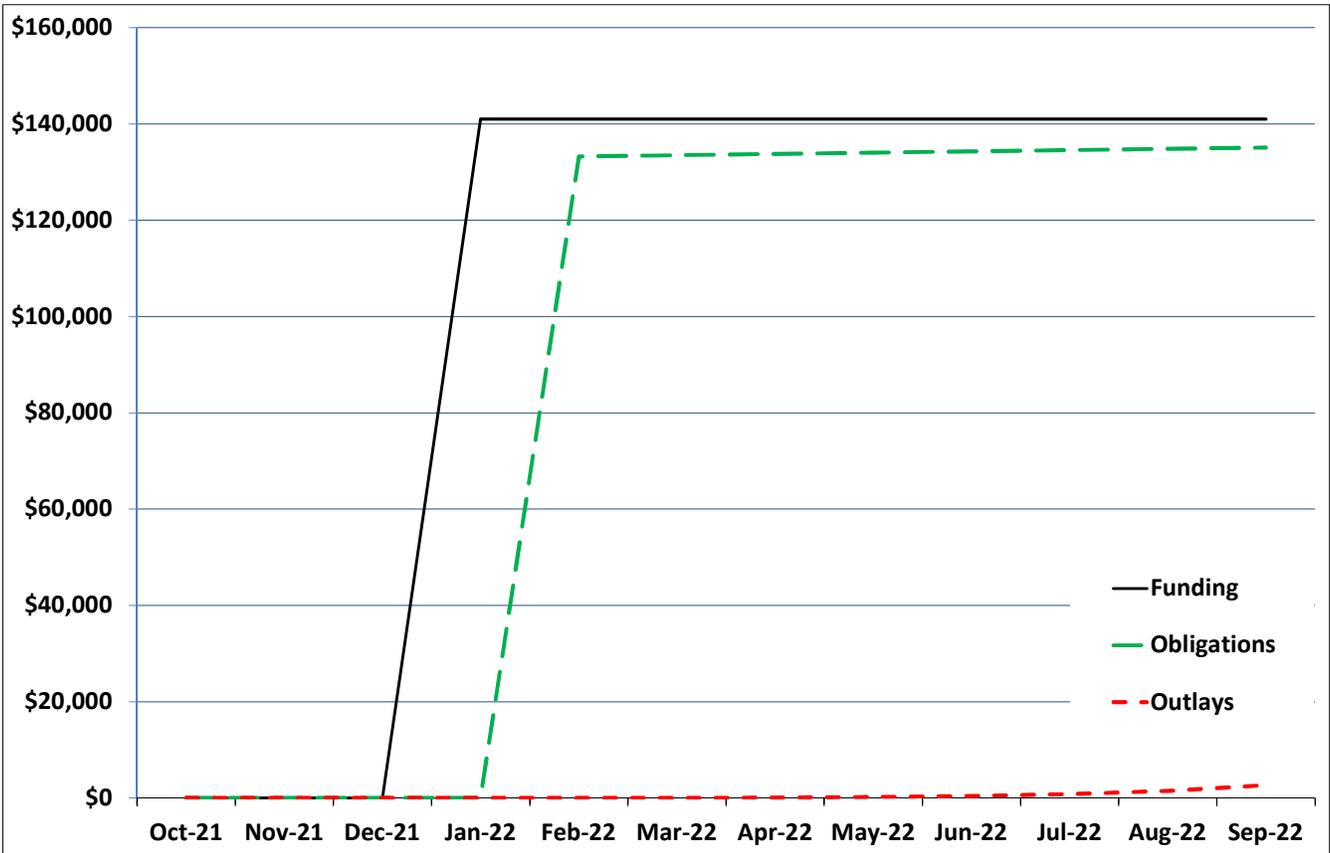
Chart Begin	FUNDING (note 1)		OBLIGATION (note 2)		OUTLAYS (note 3)	
Oct-21	Enacted	Cumulative	Obligated	Cumulative	Monthly	Cumulative
Oct-21	-	-	-	-	-	-
Nov-21	-	-	-	-	-	-
Dec-21	-	-	-	-	-	-
Jan-22	141,000	141,000	-	-	-	-
Feb-22	-	141,000	133,228	133,228	-	-
Mar-22	-	141,000	268	133,496	22	22
Apr-22	-	141,000	268	133,764	49	71
May-22	-	141,000	268	134,032	103	175
Jun-22	-	141,000	268	134,300	206	381
Jul-22	-	141,000	268	134,568	389	770
Aug-22	-	141,000	268	134,836	697	1,467
Sep-22	-	141,000	268	135,104	1,184	2,651

Note 1: Assumes initial appropriation is enacted by Congress Jan FY 2022.

Note 2: Assumes funds are available for obligation by 31 January of the execution year and by 31 October for subsequent years.

Note 3: Assumes contract award date of Feb 2022, Contract completion: Jul 2024, Duration 30 months

BMT Recruit Dormitory 7, JBSA Lackland AFB, TX (Current Authorization = \$0)



1. COMPONENT AIR FORCE		FY <u>2022</u> MILITARY CONSTRUCTION PROGRAM					2. DATE (YYYYMMDD) MAY 2021				
3. INSTALLATION AND LOCATION SHEPPARD AIR FORCE BASE, TEXAS				4. COMMAND AIR EDUCATION AND TRAINING COMMAND			5. AREA CONSTRUCTION COST INDEX 1.00				
6. PERSONNEL		(1) PERMANENT			(2) STUDENTS			(3) SUPPORTED			(4) TOTAL
		OFFICER	ENLISTED	CIVILIAN	OFFICER	ENLISTED	CIVILIAN	OFFICER	ENLISTED	CIVILIAN	
a. AS OF	30-SEP-20	270	1,540	1,485	242	3,894	0	0	0	0	7,431
b. END FY		285	1,622	1,565	255	4,102	0	0	0	0	7,829
7. INVENTORY DATA (\$000)											
a. TOTAL ACREAGE										5,777	
b. INVENTORY TOTAL AS OF 30-SEP-20										3,042,926.00	
c. AUTHORIZATION NOT YET IN INVENTORY										0.00	
d. AUTHORIZATION REQUESTED IN THIS PROGRAM										20,000.00	
e. AUTHORIZATION INCLUDED IN FOLLOWING PROGRAM										0.00	
f. PLANNED IN NEXT THREE PROGRAM YEARS										0.00	
g. REMAINING DEFICIENCY										74,000.00	
h. GRAND TOTAL										3,136,926.00	
8. PROJECTS REQUESTED IN THIS PROGRAM											
a. CATEGORY				b. COST (\$000)		c. DESIGN STATUS					
(1) CODE	(2) PROJECT TITLE		(3) SCOPE			(1) START	(2) COMPLETE				
740-884	Child Development Center		2,679 SM		20,000	05/20	05/21				
9. FUTURE PROJECTS											
10. MISSION OR MAJOR FUNCTIONS											
<p>Sheppard Air Force Base is the largest and most diverse training base in Air Education and Training Command and the only Air Force base that is home to both technical and flying training. The 82nd Training Wing (TRW)'s mission is to "Train and inspire warriors." The 82d TRW's vision is "Combat capability starts here." The 82d, 782d, and 982d training groups administer the 82d Training Wing's training programs. Major base support is provided by the 82d Mission Support Group and the 82d Medical Group. The 80th Flying Training Wing is the home of the Euro-NATO Joint Jet Pilot Training program, the free world's only internationally manned and managed undergraduate pilot training program. Sheppard trains pilots and maintainers as well as the propulsion, avionics maintenance, flight equipment, fuels, munitions and aerospace ground equipment specialists needed to keep planes in the air, and the civil engineers, plumbers, telecommunications specialists and electricians needed to keep our bases running.</p>											
11. OUTSTANDING POLLUTION AND SAFETY DEFICIENCIES											
N/A											

1. COMPONENT AIR FORCE	FY 2022 MILITARY CONSTRUCTION PROJECT DATA		2. DATE MAY 2021	
3. INSTALLATION, SITE AND LOCATION SHEPPARD AIR FORCE BASE TEXAS			4. PROJECT TITLE CHILD DEVELOPMENT CENTER	
5. PROGRAM ELEMENT 91211F	6. CATEGORY CODE 740-884	7. PROJECT NUMBER VNVP063002	8. PROJECT COST (\$000) 20,000	
9. COST ESTIMATES				
ITEM	U/M	QTY	UNIT COST	COST (\$000)
PRIMARY FACILITIES				13,358
CHILD DEVELOPMENT CENTER	SM	2,679	4,893	(13,108)
CYBERSECURITY OF FACILITY-RELATED CONTROL SYS	LS			(250)
SUPPORTING FACILITIES				3,859
UTILITIES	LS			(591)
SITE PREPERATION	LS			(75)
PAVEMENTS	LS			(746)
SITE IMPROVEMENTS	LS			(682)
COMMUNICATIONS	LS			(102)
OUTDOOR PLAY AREA	LS			(979)
DEMOLITION	SM	2,049	334	(684)
SUBTOTAL				17,217
CONTINGENCY (5.0%)				861
TOTAL CONTRACT COST				18,078
SUPERVISION, INSPECTION AND OVERHEAD (5.7%)				1,030
DESIGN/BUILD - DESIGN COST (4.0% OF SUBTOTAL)				689
TOTAL REQUEST				19,797
TOTAL REQUEST (ROUNDED)				20,000
EQUIPMENT FROM OTHER APPROPRIATIONS (NON-ADD)				(1,911)
10. Description of Proposed Construction: Construct a new Child Development Center that will include child-learning space, play space, sleeping space, administrative support area, kitchen area, active shooter/safe rooms, exterior storage facility, outdoor play areas and supporting infrastructure for non-Real Property items provided from other appropriations. This project will demolish the existing child development center, Building 195 (2,049 Square Meters). The construction will consist of reinforced concrete foundations, concrete floor slab, a structural steel frame, split faced concrete masonry unit façade, and a standing seam metal roof. The project includes all utilities, site improvements, pavements, detection/protection features, security enhancements and other supporting work necessary to make a complete and useable facility. The facility will be designed as permanent construction in accordance with Department of Defense Unified Facilities Criteria (UFC) 1-200-01, General Building Requirements. This project will comply with Department of Defense antiterrorism/force protection requirements per UFC 4-010-01.				

1. COMPONENT AIR FORCE	FY 2022 MILITARY CONSTRUCTION PROJECT DATA		2. DATE MAY 2021
3. INSTALLATION, SITE AND LOCATION SHEPPARD AIR FORCE BASE TEXAS		4. PROJECT TITLE CHILD DEVELOPMENT CENTER	
5. PROGRAM ELEMENT 91211F	6. CATEGORY CODE 740-884	7. PROJECT NUMBER VNVP063002	8. PROJECT COST (\$000) 20,000
Air Conditioning: 30 Tons			
11. Requirement: 2679 SM Adequate: 0 SM Substandard: 2049 SM			
PROJECT: Child Development Center			
<p>REQUIREMENT: Demolish the existing child development center and construct a medium sized child development center with a playground configured accordingly to Facilities Criteria (FC) 4-740-14F, Design: AF Child Development Centers. The medium standard design facility will be constructed using conventional construction methods and will accommodate up to 200 dependent infant and children ages 6 weeks through 5 years old. The new child development center is required to replace the existing non-compliant child development center. The Air Force is required to meet Department of Defense goals and common operating standards, to provide day-care for 100% of priority 1 children within 90 days of application for enrollment by the authorized member. This is not a tenant or support service requirement.</p>			
<p>CURRENT SITUATION: The Department of Defense has set a goal for every military installation to provide child care service to all authorized personnel that apply for it. Current projections show that without the proposed construction, Sheppard AFB will not meet the requirement and will have a child care capacity deficit of ~40 children. This deficiency is a detriment to the quality of life of Sheppard personnel. The child development center currently facilitates 140 children and houses 3.5 infant classroom. The facility does not provide enough capacity to meet the demand of 25 to 40 additional infants per year. Additionally, the Air Force Service Agency spends ~100K/yearly in appropriated funding to maintain sustainable operational status in the existing facility and prevent further degradation. This consequences of this limited space are that many families are forced to use the off-base child day care facilities that are inconvenient, more expensive, and sometimes unreliable. The Sheppard AFB strategy to meet the Department of Defense goal and improve quality of life is to construct this 200 space child development center and acquire the additional 40 spaces through expansion of the on-base Family Child Care program. The Family Child Care program is one in which licensed, base housing families provide day care for base personnel. The existing facility was constructed in 1973 as a military detainment facility and renovated in the 1980s as a Child Development Center. Facility renovations have been completed to meet regulatory standards. However, the existing structure is rated in poor condition thus hindering our ability to provide the desired service to the community. Primary families consist of mid-level Non-</p>			

1. COMPONENT AIR FORCE	FY 2022 MILITARY CONSTRUCTION PROJECT DATA		2. DATE MAY 2021
3. INSTALLATION, SITE AND LOCATION SHEPPARD AIR FORCE BASE TEXAS		4. PROJECT TITLE CHILD DEVELOPMENT CENTER	
5. PROGRAM ELEMENT 91211F	6. CATEGORY CODE 740-884	7. PROJECT NUMBER VNVP063002	8. PROJECT COST (\$000) 20,000
<p>Commissioned Officers with young youths. Per Air Force Common Operating Standards, Child Development Centers must place 100% of priority 1 children within 90 days of application for enrollment by the service member. Sheppard does not meet Air Force standards and without increasing capacity cannot support the continual mission growth. The facility condition standards are inadequate and cannot support the mission and community quality of life Standards.</p> <p>IMPACT IF NOT PROVIDED: The deficit will not be corrected and the Department of Defense goals will not be met. Childcare at Sheppard AFB will remain substandard and will force many base families into the difficult situation of leaving their children with the off-base child care institutions. This will have a significant impact on the quality of life provided by Sheppard Air Force Base. Sheppard's airfield is the second busiest, non-combat, joint-use airfield in the United States Air Force and this facility directly supports the 82 Training Wing Technical Training Mission and the 80th Flying Training Wing.</p> <p>ADDITIONAL: This project meets the applicable criteria/scope specified in Air Force Manual 32-1084, Facility Requirements and the Child Development Center Facility Requirements Plan. Facility and playground areas must comply with current safety standards and the Consumer Product Safety Guidelines for Playgrounds. This design shall conform to criteria established in the Air Force Corporate Facilities Standards, the Installation Facilities Standards, and shall employ a standard facility design (FC 4-740-14F, Design: AF Child development Centers). All reasonable alternatives were considered during the development of this project to include new construction. An approved Economic Analysis determined that new construction is the only viable option to meet this requirement. Sustainable principles, to include life cycle cost effective practices, will be integrated into the design, development, and construction of the project in accordance with UFC 1-200-02, High Performance and Sustainable Building Requirements. This includes preparation of a life-cycle cost analysis for energy consuming systems, renewable energy generating systems, or when life-cycle cost effective is selected as the reason any requirement of Unified Facilities Criteria 1-200-02 is partially compliant or not applicable. The project does not fall within or partly within the 100-year floodplain. This project was not included in the Fiscal Year 2021 future-years defense plan. Facility is sited in accordance with the Installation Development Plan and is within a compatible land use area. Supporting facility costs exceed 25% of primary facility cost due to additional infrastructure support for outdoor play areas.</p>			

1. COMPONENT AIR FORCE	FY 2022 MILITARY CONSTRUCTION PROJECT DATA		2. DATE MAY 2021
3. INSTALLATION, SITE AND LOCATION SHEPPARD AIR FORCE BASE TEXAS		4. PROJECT TITLE CHILD DEVELOPMENT CENTER	
5. PROGRAM ELEMENT 91211F	6. CATEGORY CODE 740-884	7. PROJECT NUMBER VNVP063002	8. PROJECT COST (\$000) 20,000
<p>Child Development Center: 2,679 SM = 28,837 Square Feet</p> <p>Demolition: 2,049 SM = 22,055 Square Feet</p> <p>82d Civil Engineer Squadron, Base Civil Engineer: 940-676-5658</p> <p><u>JOINT USE CERTIFICATION:</u> This facility can be used by other components on an "as available" basis; however, the scope of the project is based on Air Force requirements.</p>			

1. COMPONENT AIR FORCE	FY 2022 MILITARY CONSTRUCTION PROJECT DATA		2. DATE MAY 2021
3. INSTALLATION, SITE AND LOCATION SHEPPARD AIR FORCE BASE TEXAS		4. PROJECT TITLE CHILD DEVELOPMENT CENTER	
5. PROGRAM ELEMENT 91211F	6. CATEGORY CODE 740-884	7. PROJECT NUMBER VNVP063002	8. PROJECT COST (\$000) 20,000
12. SUPPLEMENTAL DATA:			
a. Estimated Design Data:			
(1) Status:			
(a) Type of Design			Design-Build
(b) Date Design Started			14-MAY-20
(c) Parametric Cost Estimates Used to develop costs			YES
(d) Percent Complete as of 01 JAN 2021			35%
(e) Date 35% Designed			02-SEP-20
(f) Date Design Complete			01-MAY-21
(g) Energy Study/Life-Cycle analysis was/will be performed			YES
(2) Basis:			
(a) Standard or Definitive Design			YES
(b) Where Design Was Most Recently Used			2019 & Tyndall AFB
(3) Total Cost (c) = (a) + (b) or (d) + (e)			(\$000)
(a) Production of Plans and Specifications			733
(b) All Other Design Costs			378
(c) Total			1,111
(d) Contract			833
(e) In-house			278
(4) Construction Contract Award			22-FEB
(5) Construction Start			22-JUN
(6) Construction Completion			24-JUN
b. Equipment associated with this project provided from other appropriations:			
		FISCAL YEAR	
		APPROPRIATED	COST
EQUIPMENT NOMENCLATURE	PROCURING APPROP	OR REQUESTED	(\$000)
Communications	3400	FUTURE REQUEST	16
FURNITURE FIXTURES & EQUIP	3080	FUTURE REQUEST	954
PLAYGROUND EQUIPMENT	3080	FUTURE REQUEST	941

1. COMPONENT AIR FORCE		FY <u>2022</u> MILITARY CONSTRUCTION PROGRAM					2. DATE (YYYYMMDD) MAY 2021				
3. INSTALLATION AND LOCATION HILL AIR FORCE BASE, UTAH				4. COMMAND AIR FORCE MATERIEL COMMAND			5. AREA CONSTRUCTION COST INDEX 1.08				
6. PERSONNEL		(1) PERMANENT			(2) STUDENTS			(3) SUPPORTED			(4) TOTAL
		OFFICER	ENLISTED	CIVILIAN	OFFICER	ENLISTED	CIVILIAN	OFFICER	ENLISTED	CIVILIAN	
a. AS OF 30-SEP-20		530	3,345	11,803	0	0	0	156	1,241	397	17,472
b. END FY		535	3,350	11,679	0	0	0	155	1,240	375	17,334
7. INVENTORY DATA (\$000)											
a. TOTAL ACREAGE								962,090			
b. INVENTORY TOTAL AS OF 30-SEP-20								5,196,190.00			
c. AUTHORIZATION NOT YET IN INVENTORY								187,000.00			
d. AUTHORIZATION REQUESTED IN THIS PROGRAM								0.00			
e. AUTHORIZATION INCLUDED IN FOLLOWING PROGRAM								0.00			
f. PLANNED IN NEXT THREE PROGRAM YEARS								0.00			
g. REMAINING DEFICIENCY								999,000.00			
h. GRAND TOTAL								6,382,190.00			
8. PROJECTS REQUESTED IN THIS PROGRAM											
a. CATEGORY				b. COST (\$000)		c. DESIGN STATUS					
(1) CODE	(2) PROJECT TITLE		(3) SCOPE			(1) START	(2) COMPLETE				
141-762	GBSD ORG SOFTWARE SUSTAINMENT CTR, INC 2		16,986 SM		31,000	03/20	10/20				
9. FUTURE PROJECTS											
141-762 GBSD Org Software Sustainment Ctr (16,986 SM / \$95,000)											
10. MISSION OR MAJOR FUNCTIONS											
Hill Air Force Base is home to Air Force Materiel Command's 75th Air Base Wing, host wing, providing installation support for the Ogden Air Logistics Complex, Air Force Life Cycle Management Center, Air Force Nuclear Weapons Center, Air Force active duty 388th Fighter Wing (F-35A) and Reserve 419th Fighter Wing with more than 50 mission partners. Air Force Life Cycle Management Center provides the latest in command and control and information systems for various weapons platforms including the F-16, F-35, HH-60, E-3 Airborne Warning and Control System and E-8 Joint Surveillance Target Attack Radar System; an Air Force Research Laboratory research site location for the space vehicles directorate; an air base group and recruiting group. The installation has support responsibility for the operation of the Utah Test and Training Range.											
11. OUTSTANDING POLLUTION AND SAFETY DEFICIENCIES											
N/A											

1. COMPONENT AIR FORCE	FY 2022 MILITARY CONSTRUCTION PROJECT DATA			2. DATE MAY 2021	
3. INSTALLATION, SITE AND LOCATION HILL AIR FORCE BASE HILL AFB SITE # 1 UTAH		4. PROJECT TITLE GBSD ORGANIC SOFTWARE SUSTAINMENT CTR, INC 2			
5. PROGRAM ELEMENT 11233F	6. CATEGORY CODE 141-762	7. PROJECT NUMBER KRSM1071882	8. PROJECT COST (\$000) AUTH: 0 APPR: 31,000		
9. COST ESTIMATES					
ITEM		U/M	QUANTITY	UNIT	COST (\$000)
PRIMARY FACILITIES					109,156
EMBEDDED SOFTWARE INTEGRATION FAC (141-762)		SM	16,986	4,193	(71,222)
ICD 705 SCIF PREMIUM		LS			(18,931)
VEHICLE PARKING GARAGE (853-101)		SM	13,434	1,157	(15,543)
STORAGE IGLOO (422-264)		SM	336	2,375	(798)
CYBERSECURITY OF FACILITY-RELATED CONTROL SYS		LS			(2,662)
SUPPORTING FACILITIES					6,057
SITE IMPROVEMENTS		LS			(311)
PASSIVE FORCE PROTECTION MEASURES		LS			(289)
PAVEMENTS		LS			(1,450)
COMMUNICATIONS		LS			(507)
UTILITIES		LS			(1,500)
ELECTRICAL		LS			(400)
GENERATOR		KW	1,500	700	(1,050)
DEMOLITION		SM	759	725	(550)
SUBTOTAL					115,213
CONTINGENCY (5.0%)					5,761
TOTAL CONTRACT COST					120,974
SUPERVISION, INSPECTION AND OVERHEAD (5.7%)					6,896
DESIGN/BUILD - DESIGN COST (4.0% OF SUBTOTAL)					4,609
TOTAL REQUEST					132,478
TOTAL REQUEST (ROUNDED)					132,000
EQUIPMENT FROM OTHER APPROPRIATIONS (NON-ADD)					(2,823)
10. Description of Proposed Construction: Construct a multi-story secure core facility with steel reinforced concrete footings, foundation, and floor slab. Provide steel frame with insulated masonry walls and insulated roof. Project includes administrative areas and computer labs with raised floors, specialized heating, ventilation, & air condition systems, and emergency back-up power system. Provide for engineering work stations, conference rooms, and required isolated communications rooms. Facility requires Intelligence Community Technical Specification for Intelligence Community Directive/Intelligence Community Standard 705 security construction in most areas. Provide fire detection/suppression, intrusion detection, and all other supporting facilities for a complete and usable software sustainment facility including utilities, pavements, area lighting, site improvements, and security fencing. Construct a multi-level covered parking structure, complete with ramps, stairs, and adequate					

1. COMPONENT AIR FORCE	FY 2022 MILITARY CONSTRUCTION PROJECT DATA		2. DATE MAY 2021
3. INSTALLATION, SITE AND LOCATION HILL AIR FORCE BASE HILL AFB SITE # 1 UTAH		4. PROJECT TITLE GBSD ORGANIC SOFTWARE SUSTAINMENT CTR, INC 2	
5. PROGRAM ELEMENT 11233F	6. CATEGORY CODE 141-762	7. PROJECT NUMBER KRSM1071882	8. PROJECT COST (\$000) AUTH: 0 APPR: 31,000
<p>lighting, in accordance with Air Force Manual 32-1084, Standard Facility Requirements. Additionally, project will relocate munitions storage magazines to clear the construction site, widen a section of Georgia Street, extend/improve Jonquil Street, remove portion of railroad tracks, relocate overhead power line and include an emergency back-up generator, as authorized per Air Force Instruction 32-1062. Project will demolish Building 1566 (423 Square Meters), and two munitions storage igloos, Building 1432 (168 Square Meters) and Building 1411 (168 Square Meters) (Total: 759 Square Meters). Facilities will be designed as permanent construction in accordance with the DoD Unified Facilities Criteria 1-200-01. This project will comply with Department of Defense antiterrorism/force protection requirements per Unified Facility Criteria 4-010-01.</p> <p>Air Conditioning: 750 Tons</p>			
<p>11. Requirement: 16,986 SM Adequate: 0 SM Substandard: 0 SM</p> <p>PROJECT: GBSD Organic Software Sustainment Center</p> <p>REQUIREMENT: An adequately sized and configured secure multi-story mixed use organic software sustainment depot facility is required to provide laboratory and administrative support space for the integration, testing, development, and sustainment of highly classified workloads associated with the next generation Intercontinental Ballistic Missile system known as Ground Based Strategic Deterrent. The proposed facility will house approximately 560 military, civilian, and contractor personnel in support of software sustainment.</p> <p>CURRENT SITUATION: Assigned software personnel are currently housed in a temporary facility classified at the secret level. The current facility does not have the capacity to accommodate the growth of the assigned team, is not suitable to be modified for proper security classification, and lacks the infrastructure and space necessary for required laboratory support. There is currently no facility on Hill Air Force Base with adequate vacant space at the correct security classification to serve as the required secure location for all planned software sustainment activities.</p> <p>IMPACT IF NOT PROVIDED: Without this project, the deployment of a new weapon system vital to the defense and security of the United States and its allies could be delayed. Assigned software personnel will not be able to support the planned sustainment activities. Failure to effectively own the technical baseline for the Ground Based Strategic Deterrent intercontinental ballistic missile will significantly drive life-cycle software sustainment costs for the program well above affordability levels.</p> <p>ADDITIONAL: This project meets the critical scope specified in Air Force Manual 32-1084, Facility Requirements. All reasonable alternatives were considered</p>			

1. COMPONENT AIR FORCE	FY 2022 MILITARY CONSTRUCTION PROJECT DATA		2. DATE MAY 2021
3. INSTALLATION, SITE AND LOCATION HILL AIR FORCE BASE HILL AFB SITE # 1 UTAH		4. PROJECT TITLE GBSD ORGANIC SOFTWARE SUSTAINMENT CTR, INC 2	
5. PROGRAM ELEMENT 11233F	6. CATEGORY CODE 141-762	7. PROJECT NUMBER KRSM1071882	8. PROJECT COST (\$000) AUTH: 0 APPR: 31,000
<p>during the development of this project to include status quo, repair/renovation, and new construction. New construction is the only viable option to meet this requirement. An economic analysis waiver has been approved. This project does not fall within or partly within the 100-year flood plain. This design shall conform to criteria established in the Air Force Corporate Facilities Standards, the Installation Facilities Standards (if applicable), but will not employ a standard facility design because there is no Air Force standard facility design for this project, and there is no applicable standard design from Air Force Civil Engineer Center. Sustainable principles, to include life-cycle cost-effective practices, will be integrated into the design, development, and construction of the project in accordance with Unified Facility Criteria 1-200-02. This includes preparation of a life-cycle cost analysis for energy consuming systems, renewable energy generating systems, whenever life-cycle cost effective is selected as the reason any requirement of Unified Facility Criteria 1-200-02 is partially compliant or not applicable. Base Civil Engineer: (801) 777-7505.</p> <p>Embedded Software Integration Fac: 16,986 Square Meters = 182,836 Square Feet; Vehicle Parking Garage: 13,434 SM = 144,602 SF; Storage Igloos: 336 Square Meters = 3,617 Square Feet; Demolition: 759 Square Meters = 8,170 Square Feet.</p> <p>JOINT USE CERTIFICATION: Mission requirements, operational considerations, and location are incompatible with use by other organizations.</p>			

1. COMPONENT AIR FORCE	FY 2022 MILITARY CONSTRUCTION PROJECT DATA		2. DATE MAY 2021
3. INSTALLATION, SITE AND LOCATION HILL AIR FORCE BASE HILL AFB SITE # 1 UTAH		4. PROJECT TITLE GBSD ORGANIC SOFTWARE SUSTAINMENT CTR, INC 2	
5. PROGRAM ELEMENT 11233F	6. CATEGORY CODE 141-762	7. PROJECT NUMBER KRSM1071882	8. PROJECT COST (\$000) AUTH: 0 APPR: 31,000
12. SUPPLEMENTAL DATA:			
13. Estimated Design Data:			
(1) Status:			
(a) Type of Design			Design-Build
(b) Date Design Started			18-MAR-20
(c) Parametric Cost Estimates used to develop costs			YES
(d) Percent Complete as of 01 JAN 2021			100%
(e) Date 35% Designed			17-JUL-20
(f) Date Design Complete			19-OCT-20
(g) Energy Study/Life-Cycle analysis was performed			YES
(2) Basis:			
(a) Standard or Definitive Design			NO
(b) Where Design Was Most Recently Used			N/A
(3) Total Cost (c) = (a) + (b) or (d) + (e)			(\$000)
(a) Production of Plans and Specifications			7,920
(b) All Other Design Costs			3,960
		(c) Total	11,880
		(d) Contract	9,900
		(e) In-house	1,980
(4) Construction Contract Award			21-DEC
(5) Construction Start			22-JAN
(6) Construction Completion			23-DEC
b. Equipment associated with this project provided from other appropriations:			
		FISCAL YEAR APPROPRIATED OR REQUESTED	COST (\$000)
EQUIPMENT NOMENCLATURE	PROCURING APPRO		
FURNITURE	3800	FUTURE REQUEST	1,581
COMMUNICATION EQUIPMENT	3080	FUTURE REQUEST	612
VTC/SVTC	3400	FUTURE REQUEST	180
TELEPHONE EQUIPMENT	3080	FUTURE REQUEST	291
IT EQUIPMENT	3400	FUTURE REQUEST	159

1. COMPONENT AIR FORCE	FY 2022 MILITARY CONSTRUCTION PROJECT DATA		2. DATE MAY 2021
3. INSTALLATION, SITE AND LOCATION HILL AIR FORCE BASE HILL AFB SITE # 1 UTAH		4. PROJECT TITLE GBSD ORGANIC SOFTWARE SUSTAINMENT CTR, INC 2	
5. PROGRAM ELEMENT 11233F	6. CATEGORY CODE 141-762	7. PROJECT NUMBER KRSM1071882	8. PROJECT COST (\$000) AUTH: 0 APPR: 31,000

c. Authorization and Appropriation Summary:

	Authorization (\$000)	Auth of Approp (\$000)	Approp (\$000)
FY2021 Enacted	132,000	18,800	10,000
Cost Variation	4,000	----	----
FY2022 Request	0	31,000	31,000
Future Request	0	95,000	95,000
Total	136,000		136,000

GBSD Org Software Sustainment Ctr, Inc 2, Hill AFB, UT (Current Authorization = \$132M)

Project Spending Plan

As of: 4-May-21

All Cost in thousands (\$000)

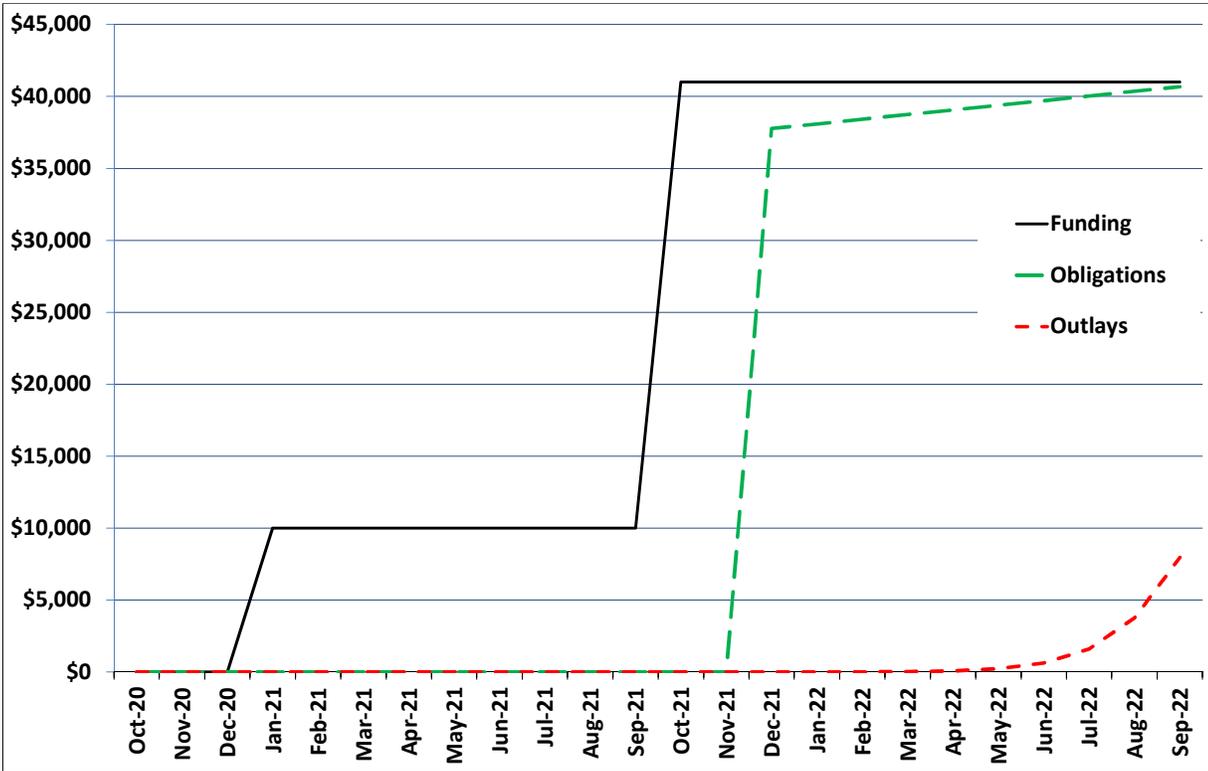
Chart Begin Oct-20	FUNDING (note 1)		OBLIGATION (note 2)		OUTLAYS (note 3)	
Month	Enacted	Cumulative	Obligated	Cumulative	Monthly	Cumulative
Oct-20	-	-	-	-	-	-
Nov-20	-	-	-	-	-	-
Dec-20	-	-	-	-	-	-
Jan-21	10,000	10,000	-	-	-	-
Feb-21	-	10,000	-	-	-	-
Mar-21	-	10,000	-	-	-	-
Apr-21	-	10,000	-	-	-	-
May-21	-	10,000	-	-	-	-
Jun-21	-	10,000	-	-	-	-
Jul-21	-	10,000	-	-	-	-
Aug-21	-	10,000	-	-	-	-
Sep-21	-	10,000	-	-	-	-
Oct-21	31,000	41,000	-	-	-	-
Nov-21	-	41,000	-	-	-	-
Dec-21	-	41,000	37,770	37,770	-	-
Jan-22	-	41,000	323	38,093	1	1
Feb-22	-	41,000	323	38,416	3	4
Mar-22	-	41,000	323	38,739	13	17
Apr-22	-	41,000	323	39,062	46	63
May-22	-	41,000	323	39,385	145	208
Jun-22	-	41,000	323	39,708	402	610
Jul-22	-	41,000	323	40,031	990	1,600
Aug-22	-	41,000	323	40,354	2,162	3,761
Sep-22	-	41,000	323	40,677	4,187	7,948

Note 1: Assumes initial appropriation is enacted by Congress Jan FY 2022.

Note 2: Assumes funds are available for obligation by 31 January of the execution year and by 31 October for subsequent years.

Note 3: Assumes contract award date of Dec 2021, Contract completion: Dec 2023, Duration 24 months

GBSD Org Software Sustainment Ctr, Inc 2, Hill AFB, UT (Current Authorization = \$132M)



(Tab 12) - Projects Outside the United States

1. COMPONENT AIR FORCE		FY <u>2022</u> MILITARY CONSTRUCTION PROGRAM					2. DATE (YYYYMMDD) MAY 2021				
3. INSTALLATION AND LOCATION RAAF BASE DARWIN, AUSTRALIA					4. COMMAND PACIFIC AIR FORCES			5. AREA CONSTRUCTION COST INDEX 1.19			
6. PERSONNEL		(1) PERMANENT			(2) STUDENTS			(3) SUPPORTED			(4) TOTAL
		OFFICER	ENLISTED	CIVILIAN	OFFICER	ENLISTED	CIVILIAN	OFFICER	ENLISTED	CIVILIAN	
a. AS OF 30-SEP-20		0	0	0	0	0	0	0	0	0	0
b. END FY		0	0	0	0	0	0	0	0	0	0
7. INVENTORY DATA (\$000)											
a. TOTAL ACREAGE										0	
b. INVENTORY TOTAL AS OF 30-SEP-20										0.00	
c. AUTHORIZATION NOT YET IN INVENTORY										106,400.00	
d. AUTHORIZATION REQUESTED IN THIS PROGRAM										7,400.00	
e. AUTHORIZATION INCLUDED IN FOLLOWING PROGRAM										0.00	
f. PLANNED IN NEXT THREE PROGRAM YEARS										0.00	
g. REMAINING DEFICIENCY										0.00	
h. GRAND TOTAL										113,800.00	
8. PROJECTS REQUESTED IN THIS PROGRAM											
a. CATEGORY						b. COST (\$000)		c. DESIGN STATUS			
(1) CODE	(2) PROJECT TITLE			(3) SCOPE				(1) START		(2) COMPLETE	
141-753	SQUADRON OPERATIONS FACILITY			648 SM				7,400		10/19	
9. FUTURE PROJECTS											
10. MISSION OR MAJOR FUNCTIONS											
The USAF proposes to improve an existing airport by expanding the parking apron, adding bulk fuel storage tanks, and building an aircraft maintenance support facility to increase mil-to-mil cooperation between US-AUS via combined military exercise and limited USAF presence.											
Note 1: No personnel will be permanently assigned to this location.											
11. OUTSTANDING POLLUTION AND SAFETY DEFICIENCIES											

1. COMPONENT AIR FORCE	FY 2022 MILITARY CONSTRUCTION PROJECT DATA (computer generated)			2. DATE MAY 2021	
3. INSTALLATION, SITE AND LOCATION ROYAL AUSTRALIAN AIR FORCE BASE DARWIN, AUSTRALIA		4. PROJECT TITLE SQUADRON OPERATIONS FACILITY			
5. PROGRAM ELEMENT 91211F	6. CATEGORY CODE 141-753	7. PROJECT NUMBER PAF160700	8. PROJECT COST (\$000) 7,400		
9. COST ESTIMATES					
ITEM		U/M	QUANTITY	UNIT	COST (\$000)
PRIMARY FACILITIES					3,819
SQUADRON OPERATIONS		SM	648	5,508	(3,569)
CYBERSECURITY OF FACILITY-RELATED CONTROL SYSTEMS		LS			(250)
SUPPORTING FACILITIES					2,690
SITE IMPROVEMENTS		LS			(1,290)
UTILITIES		LS			(669)
PAVEMENTS		LS			(377)
COMMUNICATIONS		LS			(74)
ENVIRONMENTAL REMEDIATION		LS			(100)
FACILITY COMMISSIONING		LS			(180)
SUBTOTAL					6,509
CONTINGENCY (5.0%)					325
TOTAL CONTRACT COST					6,834
SUPERVISION, INSPECTION AND OVERHEAD (6.2%)					424
POST CONSTRUCTION AWARD SERVICES (PCAS)					137
TOTAL REQUEST					7,395
TOTAL REQUEST (ROUNDED)					7,400
EQUIPMENT FROM OTHER APPROPRIATIONS (NON-ADD)					(350)
10. Description of Proposed Construction: Construct a squadron operations facility with reinforced concrete slab on grade and steel rigid frames with metal purlins and girts to frame the exterior roof and walls. The facility should be compatible with applicable Department of Defense, Air Force, and base design standards, and include all supporting facilities necessary for a complete and usable facility. In addition, local materials and construction techniques shall be used where cost effective. The facility must also be able to withstand wind loads and seismic effects as prescribed in applicable codes and design guides. Facility design shall comply with Australian Building Code requirements and the Unified Facilities Criteria 1-202-01, Host Nation Facilities in Support of Military Operations, which is required to ensure Host Nation acceptance and support in accordance with Article 14 of the 2014 United States-Australian Force Posture Agreement. In accordance with Unified Facilities Code 1-202-01 para 4.1, Unified Facilities Code 1-200-01 does not apply to this project. The Building Code of Australia and Manual of Fire Protection will be applied for fire protection requirements to ensure local fire services can utilize fire protection infrastructure. Environmental testing and facility commissioning by the Australian Air Force is required. This project will comply with Department of Defense antiterrorism/force protection requirements per Unified Facilities Criteria 4-010-01, Department of Defense Minimum Antiterrorism Standards for Buildings. Air Conditioning: 17 Tons					

1. COMPONENT AIR FORCE	FY 2022 MILITARY CONSTRUCTION PROJECT DATA (computer generated)			2. DATE MAY 2021
3. INSTALLATION, SITE AND LOCATION ROYAL AUSTRALIAN AIR FORCE BASE DARWIN, AUSTRALIA			4. PROJECT TITLE SQUADRON OPERATIONS FACILITY	
5. PROGRAM ELEMENT 91211F	6. CATEGORY CODE 141-753	7. PROJECT NUMBER PAF160700	8. PROJECT COST (\$000) 7,400	
<p>11. Requirement: 648 SM Adequate: 0 SM Substandard: 0 SM</p> <p>PROJECT: Squadron Operations Facility</p> <p>REQUIREMENT: Provide the United States Air Force with an adequately sized and configured expeditionary squadron operations facility to support Enhanced Air Cooperation missions at Royal Australian Air Force Base Darwin. Multiple exercises will occur during the Northern Territory dry season (May-October). Space is required for aircrew flight equipment maintenance and care, mission planning, intelligence, crew briefings, and crew readiness to support eight KC-10 aircraft. The Air Force Air Mobility Command Squadron Operations Facilities Design Guide was used in the planning for this expeditionary facility. This is an Indo-Pacific Command supported service requirement.</p> <p>CURRENT SITUATION: Royal Australian Air Force Base Darwin is designed to accommodate fighter aircraft and limited cargo aircraft. There are no available facilities at Royal Australian Air Force Base Darwin that can be used by United States Air Force squadrons during bilateral training exercises. Existing squadron operations facilities at Royal Australian Air Force Base Darwin have been considered but are fully utilized and unavailable.</p> <p>IMPACT IF NOT PROVIDED: If this project is not provided, the United States Air Force will not have operations space at Royal Australian Air Force Base Darwin to plan and execute missions. Lack of this facility would significantly reduce readiness and result in decreased operational capability. The inability to provide tanker capability decreases power projection and global reach of United States-Australia bilateral exercises and theater security operations in the Asia-Pacific region.</p> <p>ADDITIONAL: This project meets the criteria/scope specified in Air Force Manual 32-1084, Facility Requirements. This design shall conform to criteria established in the Air Force Corporate Facilities Standards, the Installation Facilities Standards (if available), but will not employ a standard facility design because there is no standard design from the Air Force Civil Engineer Center nor the Naval Facilities Engineering Command. The expeditionary nature of the mission to support United States personnel during exercises, contingencies, or other brief mission durations at RAAF Darwin enables efficiencies and smaller project scope compared to a standard squadron operations facility. A Waiver to an Economic Analysis has been approved for this project. Sustainable principles, to include life-cycle cost-effective practices, will be integrated into the design, development, and construction of the project in accordance with Unified Facilities Criteria 1-200-02, High Performance and Sustainable Building Requirements. This includes preparation of a life-cycle cost analysis for energy consuming systems, renewable energy generating systems, whenever life-cycle cost effective is selected as the reason any requirement of Unified Facilities Criteria 1-200-02, High Performance and Sustainable Building Requirements is partially compliant or not applicable. The cost of Supporting Facilities exceeds 25% of the total project cost as the facility is sited in a remote location relative to existing utilities due to Quantity-Distance explosive criteria requirements. While this project does not fall within or partly within the 100-year flood plain, the site requires extensive preparation to manage storm water during the wet season. Facility</p>				

1. COMPONENT AIR FORCE	FY 2022 MILITARY CONSTRUCTION PROJECT DATA (computer generated)			2. DATE MAY 2021
3. INSTALLATION, SITE AND LOCATION ROYAL AUSTRALIAN AIR FORCE BASE DARWIN, AUSTRALIA			4. PROJECT TITLE SQUADRON OPERATIONS FACILITY	
5. PROGRAM ELEMENT 91211F	6. CATEGORY CODE 141-753	7. PROJECT NUMBER PAF160700	8. PROJECT COST (\$000) 7,400	
<p>is sited in accordance with the Installation Development Plan and is within a compatible land use area. Cost estimate is inline with the Department of Defense Pricing Guide (Unified Facilities Criteria 3-701-01). Project is not eligible for Host Nation funding. This project was included in the Fiscal Year 2021 future-years defense plan in Fiscal Year 2022.</p> <p>BASE CIVIL ENGINEER EQUIVALENT: 808-449-3810 (in Hawaii)</p> <p>Squadron Operations Facility: 648 square meters = 6,975 square feet</p> <p>JOINT USE CERTIFICATION: This facility can be used by other components on an "as available" basis; however, the scope of the project is based on Air Force requirements.</p>				

1. COMPONENT AIR FORCE	FY 2022 MILITARY CONSTRUCTION PROJECT DATA (computer generated)		2. DATE MAY 2021
3. INSTALLATION AND LOCATION ROYAL AUSTRALIAN AIR FORCE BASE DARWIN, AUSTRALIA		4. PROJECT TITLE SQUADRON OPERATIONS FACILITY	
5. PROGRAM ELEMENT 91211F	6. CATEGORY CODE 141-753	7. PROJECT NUMBER PAF160700	8. PROJECT COST (\$000) 7,400
12. SUPPLEMENTAL DATA:			
a. Estimated Design Data:			
(1) Status:			
(a) Type of Design		Design-Bid-Build	
(b) Date Design Started		01-OCT-19	
(c) Parametric Cost Estimates used to develop costs		YES	
(d) Percent Complete as of 01 JAN 2021		100 %	
(e) Date 35% Designed		15-JAN-20	
(f) Date Design Complete		15-JUN-20	
(g) Energy Study/Life-Cycle analysis was/will be performed		YES	
(2) Basis:			
(a) Standard or Definitive Design -		NO	
(b) Where Design Was Most Recently Used -		N/A	
(3) Total Cost (c) = (a) + (b) or (d) + (e):			(\$000)
(a) Production of Plans and Specifications			438
(b) All Other Design Costs			219
(c) Total			657
(d) Contract			547
(e) In-house			110
(4) Construction Contract Award			22-FEB
(5) Construction Start			22-APR
(6) Construction Completion			23-JUN
b. Equipment associated with this project provided from other appropriations:			
EQUIPMENT NOMENCLATURE	PROCURING APPROPRIATION	FISCAL YEAR APPROPRIATED OR REQUESTED	COST (\$000)
FURNITURE	3080	Future Request	350

1. COMPONENT AIR FORCE		FY <u>2022</u> MILITARY CONSTRUCTION PROGRAM					2. DATE (YYYYMMDD) MAY 2021				
3. INSTALLATION AND LOCATION RAAF BASE TINDAL, AUSTRALIA				4. COMMAND PACIFIC AIR FORCES			5. AREA CONSTRUCTION COST INDEX 1.59				
6. PERSONNEL		(1) PERMANENT			(2) STUDENTS			(3) SUPPORTED			(4) TOTAL
		OFFICER	ENLISTED	CIVILIAN	OFFICER	ENLISTED	CIVILIAN	OFFICER	ENLISTED	CIVILIAN	
a. AS OF 30-SEP-20		0	0	0	0	0	0	0	0	0	0
b. END FY		0	0	0	0	0	0	0	0	0	0
7. INVENTORY DATA (\$000)											
a. TOTAL ACREAGE										0	
b. INVENTORY TOTAL AS OF 30-SEP-20										0.00	
c. AUTHORIZATION NOT YET IN INVENTORY										70,600.00	
d. AUTHORIZATION REQUESTED IN THIS PROGRAM										14,400.00	
e. AUTHORIZATION INCLUDED IN FOLLOWING PROGRAM										0.00	
f. PLANNED IN NEXT THREE PROGRAM YEARS										0.00	
g. REMAINING DEFICIENCY										92,000.00	
h. GRAND TOTAL										177,000.00	
8. PROJECTS REQUESTED IN THIS PROGRAM											
a. CATEGORY				b. COST (\$000)		c. DESIGN STATUS					
(1) CODE	(2) PROJECT TITLE		(3) SCOPE			(1) START	(2) COMPLETE				
141-753	SQUADRON OPERATIONS FACILITY		648 SM		8,200	07/20	04/21				
211-154	AIRCRAFT MAINTENANCE SUPPORT FACILITY		226 SM		6,200	07/20	03/21				
9. FUTURE PROJECTS											
10. MISSION OR MAJOR FUNCTIONS											
Royal Australian Air Force Base Tindal (RAAF Tindal) is home to No. 75 Squadron and a number of non-flying units and hosts the Katherine Tindal Civilian Airport. Additionally, RAAF Tindal is a force multiplier, encompassing key bilateral training operations in the Asia-Pacific Rim.											
11. OUTSTANDING POLLUTION AND SAFETY DEFICIENCIES											
N/A											

1. COMPONENT AIR FORCE	FY 2022 MILITARY CONSTRUCTION PROJECT DATA			2. DATE MAY 2021	
3. INSTALLATION, SITE AND LOCATION ROYAL AUSTRALIAN AIR FORCE BASE TINDAL, AUSTRALIA			4. PROJECT TITLE AIRCRAFT MAINTENANCE SUPPORT FACILITY		
5. PROGRAM ELEMENT 91211F	6. CATEGORY CODE 211-154	7. PROJECT NUMBER PAF180400	8. PROJECT COST (\$000) 6,200		
9. COST ESTIMATES					
ITEM		U/M	QUANTITY	UNIT	COST (\$000)
PRIMARY FACILITIES					3,664
AIRCRAFT MAINTENANCE SHOP (211-154)		SM	226	7,796	(1,762)
AIRCRAFT SUPPORT EQUIPMENT SHOP (218-712)		SM	464	3,561	(1,652)
CYBERSECURITY OF FACILITY-RELATED CONTROL SYSTEMS		LS			(250)
SUPPORTING FACILITIES					1,756
SITE IMPROVEMENTS		LS			(329)
UTILITIES		LS			(371)
PAVEMENTS		LS			(705)
COMMUNICATIONS		LS			(71)
ENVIRONMENTAL REMEDIATION		LS			(100)
FACILITY COMMISSIONING		LS			(180)
SUBTOTAL					5,420
CONTINGENCY (5.0%)					271
TOTAL CONTRACT COST					5,691
SUPERVISION, INSPECTION AND OVERHEAD (6.2%)					353
POST CONSTRUCTION AWARD SERVICES					114
TOTAL REQUEST					6,158
TOTAL REQUEST (ROUNDED)					6,200
EQUIPMENT FROM OTHER APPROPRIATIONS (NON-ADD)					(120)
10. Description of Proposed Construction: Construct aircraft maintenance support and storage facility using conventional design and construction methods to accommodate the United States Air Force bomber mission at Royal Australian Air Force Base Tindal. The facilities should be compatible with applicable Department of Defense, Air Force, and base design standards, and include all supporting facilities necessary for a complete and usable facility. Local materials and construction techniques shall be used where cost effective. The facility must also be able to withstand wind loads and seismic effects as prescribed in applicable codes and design guides. Facility design shall comply with Australian Building Code requirements and the Department of Defense Unified Facilities Criteria 1-200-02, High Performance and Sustainable Building Requirements. The Building Code of Australia and Manual of Fire Protection will be applied for fire protection requirements to ensure local fire services can use fire protection infrastructure. Environmental testing and facility commissioning by the Australian Air Force is required. This project will comply with Department of Defense antiterrorism/force protection requirements per Unified Facility Criteria 4-010-01, Department of Defense Minimum Antiterrorism Standards for Buildings.					
The Maintenance Storage facility includes a high bay open storage area and administrative offices and support space for maintainers. Work includes, but is not limited to construction of a slab-on-grade concrete foundation, pre-engineered steel frame, girt, insulation, and metal panels, and metal roof. The high-bay storage space					

1. COMPONENT AIR FORCE	FY 2022 MILITARY CONSTRUCTION PROJECT DATA			2. DATE MAY 2021
3. INSTALLATION, SITE AND LOCATION ROYAL AUSTRALIAN AIR FORCE BASE TINDAL, AUSTRALIA			4. PROJECT TITLE AIRCRAFT MAINTENANCE SUPPORT FACILITY	
5. PROGRAM ELEMENT 91211F	6. CATEGORY CODE 211-154	7. PROJECT NUMBER PAF180400	8. PROJECT COST (\$000) 6,200	
<p>will have natural ventilation and will not be conditioned. The building will include electrical outlets; lighting fixtures; panel boards; plumbing with energy and water efficient fixtures; communication systems; mechanical ventilation system in the administrative areas; and all necessary utility connections to base infrastructure. Supporting facilities include a concrete pad to maneuver and stage aircraft ground equipment, asphalt access drive for emergency vehicles, and storm water drainage system required.</p> <p>Air Conditioning: 4 Tons</p> <p>11. Requirement: 690 SM Adequate: 0 SM Substandard: 0 SM PROJECT: Aircraft Maintenance Support Facility REQUIREMENT: This project provides an adequately sized and configured maintenance and storage facility required to support flightline maintenance operations and storage for aircraft support equipment for up to six B-52/bomber aircraft. The building is required to store pre-deployed aerospace-ground equipment during inactive periods and to serve as a hub for flightline aircraft maintenance during exercises. Deployed aircraft maintainers will use the building to store and maintain their tool kits and Mission Readiness Spares Packages. The facility will provide weather protection for maintenance personnel, equipment, and aircraft spares. This is an Indo-Pacific Command supported service requirement.</p> <p>CURRENT SITUATION: The base at Tindal is designed to accommodate fighter aircraft and limited cargo aircraft. Currently, there are no available facilities at the base that can be used to support the maintenance and storage requirements of United States Air Force deployed bomber aircraft during bilateral training exercises. Existing warehouse and maintenance facilities near the flightline are used by Australian base personnel and unavailable for non-Australia forces.</p> <p>IMPACT IF NOT PROVIDED: The base at Tindal does not have the required aircraft ground equipment maintenance and storage capacity to operate and sustain bomber operations. If this project is not provided, the equipment needed by deployed aircraft will have to be deployed to Tindal, incurring significant time and funding costs due to strict Australian quarantine requirements. In addition, the deployed aircraft maintenance personnel will not have a location from which to base their operations and set up their tool kits and Mission Readiness Spare Packages. Without the maintenance facility, equipment, aircraft spares, and personnel will lack the protection needed from potentially severe weather. If the facility is not provided, there will be a reduction in readiness and decreased operational capability to meet the bilateral training exercise mission requirements. The inability to provide bomber capability drastically decreases power projection and global reach capabilities to support United States-Australia bilateral theater security operations and exercises in the Asia-Pacific region.</p> <p>ADDITIONAL: This project meets the criteria/scope specified in Air Force Manual 32-1084, Facility Requirements. This design shall conform to criteria established in the Air Force Corporate Facilities Standards, the Installation Facilities Standards, but will not employ a standard facility design because there is no standard design from the Air Force Civil Engineer Center and the expeditionary</p>				

1. COMPONENT AIR FORCE	FY 2022 MILITARY CONSTRUCTION PROJECT DATA			2. DATE MAY 2021
3. INSTALLATION, SITE AND LOCATION ROYAL AUSTRALIAN AIR FORCE BASE TINDAL, AUSTRALIA			4. PROJECT TITLE AIRCRAFT MAINTENANCE SUPPORT FACILITY	
5. PROGRAM ELEMENT 91211F	6. CATEGORY CODE 211-154	7. PROJECT NUMBER PAF180400	8. PROJECT COST (\$000) 6,200	
<p>nature of requirements for this facility do not require a standard Aircraft Maintenance Support Facility. Since the project is located in a foreign military installation, constructing a Maintenance Support Facility for the United States Air Force use is the only viable option to meet operational requirements, therefore a Waiver to an Economic Analysis has been approved for this project. The cost estimate for this project is in line with Department of Defense Pricing Guide parameters modified to account for the higher area cost factor at Tindal, Northern Territory, Australia. The cost of Supporting Facilities exceeds 25% of the cost of Primary Facilities due to the large concrete pad for maneuvering aircraft ground equipment, and the distance of this facility from existing facilities requiring longer utility runs and road access. Sustainable principles, to include life-cycle cost-effective practices, will be integrated into the design, development, and construction of the project in accordance with Unified Facilities Criteria 1-200-01, High Performance and Sustainable Building Requirements. This includes preparation of a life-cycle cost analysis for energy consuming systems, renewable energy generating systems, whenever life-cycle cost effective is selected as the reason any requirement of Unified Facilities Criteria 1-200-01, High Performance and Sustainable Building Requirements is partially compliant or not applicable. This project does not fall within or partly within the 100-year flood plain. Facility is sited in accordance with the Installation Development Plan and is within a compatible land use area. This project is part of a bilateral agreement and not eligible for host nation funding. This project was included in the Fiscal Year 2021 future years defense plan in Fiscal Year 2022.</p> <p>BASE CIVIL ENGINEER EQUIVALENT: 808-449-3810.</p> <p>AIRCRAFT MAINTENANCE SHOP (211-154): 226 SM = 2,433 Square Feet AIRCRAFT SUPPORT EQUIPMENT SHOP (218-712): 464 SM = 4,994 Square Feet</p> <p>JOINT USE CERTIFICATION: This facility can be used by other components on an "as available" basis; however, the scope of the project is based on Air Force requirements.</p>				

1. COMPONENT AIR FORCE	FY 2022 MILITARY CONSTRUCTION PROJECT DATA		2. DATE MAY 2021
3. INSTALLATION AND LOCATION ROYAL AUSTRALIAN AIR FORCE BASE TINDAL, AUSTRALIA		4. PROJECT TITLE AIRCRAFT MAINTENANCE SUPPORT FACILITY	
5. PROGRAM ELEMENT 91211F	6. CATEGORY CODE 211-154	7. PROJECT NUMBER PAF180400	8. PROJECT COST (\$000) 6,200
12. SUPPLEMENTAL DATA:			
a. Estimated Design Data:			
(1) Status:		Design-Bid-Build	
(a) Type of Design			10-JUL-20
(b) Date Design Started			
(c) Parametric Cost Estimates used to develop costs			YES
(d) Percent Complete as of 01 JAN 2021			65%
(e) Date 35% Designed			20-NOV-20
(f) Date Design Complete			26-MAR-21
(g) Energy Study/Life-Cycle analysis was/will be performed			YES
(2) Basis:			
(a) Standard or Definitive Design -			NO
(b) Where Design Was Most Recently Used -			N/A
(3) Total Cost (c) = (a) + (b) or (d) + (e):			(\$000)
(a) Production of Plans and Specifications			366
(b) All Other Design Costs			183
(c) Total			549
(d) Contract			458
(e) In-house			91
(4) Construction Contract Award			22-FEB
(5) Construction Start			22-APR
(6) Construction Completion			23-JUN
b. Equipment associated with this project provided from other appropriation			
EQUIPMENT NOMENCLATURE	PROCURING APPROPRIATION	FISCAL YEAR APPROPRIATED OR REQUESTED	COST (\$000)
FURNITURE	3400	Future Request	120

1. COMPONENT AIR FORCE	FY 2022 MILITARY CONSTRUCTION PROJECT DATA			2. DATE MAY 2021	
3. INSTALLATION, SITE AND LOCATION ROYAL AUSTRALIAN AIR FORCE BASE TINDAL, AUSTRALIA			4. PROJECT TITLE SQUADRON OPERATIONS FACILITY		
5. PROGRAM ELEMENT 91211F	6. CATEGORY CODE 141-753	7. PROJECT NUMBER PAF180700	8. PROJECT COST (\$000) 8,200		
9. COST ESTIMATES					
ITEM		U/M	QUANTITY	UNIT	COST (\$000)
PRIMARY FACILITIES					3,964
SQUADRON OPERATIONS		SM	648	5,732	(3,714)
CYBERSECURITY OF FACILITY-RELATED CONTROL SYSTEMS		LS			(250)
SUPPORTING FACILITIES					3,237
SITE IMPROVEMENTS		LS			(1,467)
UTILITIES		LS			(481)
PAVEMENTS		LS			(320)
COMMUNICATIONS		LS			(689)
ENVIRONMENTAL REMEDIATION		LS			(100)
FACILITY COMMISSIONING		LS			(180)
SUBTOTAL					7,201
CONTINGENCY (5.0%)					360
TOTAL CONTRACT COST					7,561
SUPERVISION, INSPECTION AND OVERHEAD (6.2%)					469
POST CONSTRUCTION AWARD SERVICES					151
TOTAL REQUEST					8,181
TOTAL REQUEST (ROUNDED)					8,200
EQUIPMENT FROM OTHER APPROPRIATIONS (NON-ADD)					(350)
<p>10. Description of Proposed Construction: Construct an operations facility for B-52 expeditionary squadrons utilizing conventional design and construction methods to accommodate the mission of the facility. The facility should be compatible with applicable Department of Defense, Air Force, and base design standards. In addition, local materials and construction techniques shall be used where cost effective. The facility must also be able to withstand wind loads and seismic effects as prescribed in applicable codes and design guides. Facility design shall comply with Australian Building Code requirements and the Department of Defense Unified Facilities Criteria 1-200-02, High Performance and Sustainable Building Requirements. The Building Code of Australia and Manual of Fire Protection will be applied for fire protection requirements to ensure local fire services can use fire protection infrastructure. Environmental testing and facility commissioning by the Australian Air Force is required. This project will comply with Department of Defense antiterrorism/force protection requirements per Unified Facility Criteria 4-010-01, Department of Defense Minimum Antiterrorism Standards for Buildings.</p> <p>Air Conditioning: 17 Tons</p>					
<p>11. Requirement: 648 SM Adequate: 0 SM Substandard: 0 SM</p> <p>PROJECT: Squadron Operations Facility</p> <p>REQUIREMENT: This project provides the United States Air Force with an adequately sized and configured squadron operations facility to support Enhanced Air Cooperation missions at Royal Australian Air Force Base Tindal. Multiple 15-day</p>					

1. COMPONENT AIR FORCE	FY 2022 MILITARY CONSTRUCTION PROJECT DATA			2. DATE MAY 2021
3. INSTALLATION, SITE AND LOCATION ROYAL AUSTRALIAN AIR FORCE BASE TINDAL, AUSTRALIA			4. PROJECT TITLE SQUADRON OPERATIONS FACILITY	
5. PROGRAM ELEMENT 91211F	6. CATEGORY CODE 141-753	7. PROJECT NUMBER PAF180700	8. PROJECT COST (\$000) 8,200	
<p>training events or exercises are planned during the Northern Territory's dry season (May-October). Space is required for aircrew flight equipment maintenance and care, mission planning, intelligence, briefing, and crew readiness to support six B-52s. The Air Force Squadron Operations Facilities Design Guide was used in the planning for this expeditionary facility. Work includes, but is not limited to construction of a slab-on-grade concrete foundation, pre-engineered steel frame, girt, insulation, and metal panels, and metal roof. The building will include electrical outlets; lighting fixtures; panel boards; plumbing with energy and water efficient fixtures; communication systems; mechanical ventilation system; and all necessary utility connections to base infrastructure. This is an Indo-Pacific Command supported service requirement.</p> <p>CURRENT SITUATION: Currently, there are no available facilities at Royal Australian Air Force Base Tindal that can be used by United States Air Force bomber squadrons to support deployed B-52 aircraft during bilateral training exercises. Existing squadron operations facilities at Tindal have been considered but are used by Australian Air Force personnel and are unavailable for non-Australia forces.</p> <p>IMPACT IF NOT PROVIDED: If this project is not provided, the United States Air Force will not have adequate operations space at Tindal to plan and execute missions. Lack of this facility would significantly reduce readiness and result in decreased operational capability. The inability to provide bomber capability drastically decreases power projection and global reach capabilities to support United States-Australia bilateral theater security operations and exercises in the Asia-Pacific region.</p> <p>ADDITIONAL: This project meets the criteria/scope specified in Air Force Manual 32-1084, Facility Requirements. This design shall conform to criteria established in the Air Force Corporate Facilities Standards, the Installation Facilities Standards, but will not employ a standard facility design because there is no standard design from the Air Force Civil Engineer Center nor the Naval Facilities Engineering Command (NAVFAC). The design used for the RAAF Darwin squadron operations building will be site-adapted to suit the RAAF Tindal facility functions and mission requirements. Since the project is located on a foreign military installation, constructing a new United States Air Force operations facility is the only viable option to meet operational requirements, therefore a Waiver to an Economic Analysis has been approved for this project. The cost estimate for this project is in line with Department of Defense Pricing Guide parameters modified to account for the higher area cost factor at Tindal, Northern Territory, Australia. The cost of Supporting Facilities exceeds 25% of the total project cost as the facility is sited in a remote location relative to existing utilities due to explosive ordnance safety distance requirements. Additionally, the site requires extensive preparation to manage stormwater during the wet season. Sustainable principles, to include life-cycle cost-effective practices, will be integrated into the design, development, and construction of the project in accordance with Unified Facilities Criteria 1-200-01, High Performance and Sustainable Building Requirements. This includes preparation of</p>				

1. COMPONENT AIR FORCE	FY 2022 MILITARY CONSTRUCTION PROJECT DATA			2. DATE MAY 2021
3. INSTALLATION, SITE AND LOCATION ROYAL AUSTRALIAN AIR FORCE BASE TINDAL, AUSTRALIA			4. PROJECT TITLE SQUADRON OPERATIONS FACILITY	
5. PROGRAM ELEMENT 91211F	6. CATEGORY CODE 141-753	7. PROJECT NUMBER PAF180700	8. PROJECT COST (\$000) 8,200	
<p>a life-cycle cost analysis for energy consuming systems, renewable energy generating systems, whenever life-cycle cost effective is selected as the reason any requirement of Unified Facilities Criteria 1-200-01, High Performance and Sustainable Building Requirements is partially compliant or not applicable. This project does not fall within or partly within the 100-year flood plain. Facility is sited in accordance with the Installation Development Plan and is within a compatible land use area. This project is part of a bilateral agreement is not eligible for host nation funding. This project was included in the Fiscal Year 2021 future years defense plan in Fiscal Year 2022.</p> <p>BASE CIVIL ENGINEER EQUIVALENT: 808-449-3810. Squadron Operations Facility (141-753): 648 SM = 6,975 Square Feet</p> <p>JOINT USE CERTIFICATION: This facility can be used by other components on an "as available" basis; however, the scope of the project is based on Air Force requirements.</p>				

1. COMPONENT AIR FORCE	FY 2022 MILITARY CONSTRUCTION PROJECT DATA		2. DATE MAY 2021
3. INSTALLATION AND LOCATION ROYAL AUSTRALIAN AIR FORCE BASE TINDAL, AUSTRALIA		4. PROJECT TITLE SQUADRON OPERATIONS FACILITY	
5. PROGRAM ELEMENT 91211F	6. CATEGORY CODE 141-753	7. PROJECT NUMBER PAF180700	8. PROJECT COST (\$000) 8,200
12. SUPPLEMENTAL DATA:			
a. Estimated Design Data:			
(1) Status:			
(a) Type of Design	Design-Bid-Build		
(b) Date Design Started	10-JUL-20		
(c) Parametric Cost Estimates used to develop costs	YES		
(d) Percent Complete as of 01 JAN 2021	65%		
(e) Date 35% Designed	20-NOV-20		
(f) Date Design Complete	15-APR-21		
(g) Energy Study/Life-Cycle analysis was/will be performed	YES		
(2) Basis:			
(a) Standard or Definitive Design -	NO		
(b) Where Design Was Most Recently Used -	N/A		
(3) Total Cost (c) = (a) + (b) or (d) + (e): (\$000)			
(a) Production of Plans and Specifications	486		
(b) All Other Design Costs	243		
(c) Total	729		
(d) Contract	607		
(e) In-house	122		
(4) Construction Contract Award	22-FEB		
(5) Construction Start	22-APR		
(6) Construction Completion	23-MAY		
b. Equipment associated with this project provided from other appropriation			
EQUIPMENT NOMENCLATURE	PROCURING APPROPRIATION	FISCAL YEAR APPROPRIATED OR REQUESTED	COST (\$000)
FURNITURE	3080	Future Request	350

1. COMPONENT AIR FORCE		FY <u>2022</u> MILITARY CONSTRUCTION PROGRAM					2. DATE (YYYYMMDD) MAY 2021				
3. INSTALLATION AND LOCATION SPANGDAHLEM AIR BASE, GERMANY				4. COMMAND UNITED STATES AIR FORCES IN EUROPE			5. AREA CONSTRUCTION COST INDEX 1.14				
6. PERSONNEL		(1) PERMANENT			(2) STUDENTS			(3) SUPPORTED			(4) TOTAL
		OFFICER	ENLISTED	CIVILIAN	OFFICER	ENLISTED	CIVILIAN	OFFICER	ENLISTED	CIVILIAN	
a. AS OF	30- Sep-20	228	2,518	745	0	0	0	0	0	5,200	8,691
b. END FY		226	2,515	740	0	0	0	0	0	6,150	9,631
7. INVENTORY DATA (\$000)											
a. TOTAL ACREAGE										1,654	
b. INVENTORY TOTAL AS OF 30- Sep-20										3,087,889.00	
c. AUTHORIZATION NOT YET IN INVENTORY										27,325.00	
d. AUTHORIZATION REQUESTED IN THIS PROGRAM										0.00	
e. AUTHORIZATION INCLUDED IN FOLLOWING PROGRAM										0.00	
f. PLANNED IN NEXT THREE PROGRAM YEARS										0.00	
g. REMAINING DEFICIENCY										304,000.00	
h. GRAND TOTAL										3,419,214.00	
8. PROJECTS REQUESTED IN THIS PROGRAM											
a. CATEGORY				b. COST (\$000)		c. DESIGN STATUS					
(1) CODE	(2) PROJECT TITLE		(3) SCOPE			(1) START	(2) COMPLETE				
211-111	F/A-22 LO/Composite Repair Facility		2,326 SM		22,625	12/17	04/21				
9. FUTURE PROJECTS											
10. MISSION OR MAJOR FUNCTIONS											
An United States Air Forces Europe installation that is home to the largest fighter operation in Germany. In addition, Spangdahlem Air Base is the home of the 726 Air Mobility Squadron. A host Fighter Wing commands one Fighter Squadron flying F-16 C&Ds, an Air Control Squadron and an Air Mobility Squadron flying C-17 and other large cargo planes.											
11. OUTSTANDING POLLUTION AND SAFETY DEFICIENCIES											
N/A											

1. COMPONENT AIR FORCE	FY 2022 MILITARY CONSTRUCTION PROJECT DATA			2. DATE MAY 2021
3. INSTALLATION, SITE AND LOCATION SPANGDAHLEM AIR BASE SPANGDAHLEM SITE # 1 GERMANY			4. PROJECT TITLE F/A-22 LO/COMPOSITE REPAIR FACILITY	
5. PROGRAM ELEMENT 91211F	6. CATEGORY CODE 211-111	7. PROJECT NUMBER VYHK170004	8. PROJECT COST (\$000) AUTH: 0 APPR: 22,625	
9. COST ESTIMATES				
ITEM	U/M	QUANTITY	UNIT	COST (\$000)
PRIMARY FACILITIES				12,520
HANGAR, MAINTENANCE	SM	2,326	5,275	(12,270)
SUSTAINABILITY AND ENERGY MEASURES (2%)	LS			(250)
SUPPORTING FACILITIES				7,014
UTILITIES	LS			(815)
SITE IMPROVEMENTS	LS			(1,120)
PAVEMENTS	LS			(450)
COMMUNICATIONS	LS			(188)
DEMOLITION	SM	408	655	(267)
ENVIRONMENTAL DAMAGE STUDY	LS			(3,500)
ENVIRONMENTAL NEW FACILITY	LS			(416)
ENVIRONMENTAL NEW PAVEMENT	LS			(258)
SUBTOTAL				19,534
CONTINGENCY (5.0%)				977
TOTAL CONTRACT COST				20,511
SUPERVISION, INSPECTION AND OVERHEAD (6.5%)				1,333
DESIGN/BUILD - DESIGN COST (4.0% OF SUBTOTAL)				781
TOTAL REQUEST				22,625
TOTAL REQUEST (ROUNDED)				22,625
EQUIPMENT FROM OTHER APPROPRIATIONS (NON-ADD)				(114)
10. Description of Proposed Construction: Construct a new Low Observable (L/O) Composite Repair Facility at Spangdahlem Air Base (AB), Germany utilizing conventional design and construction methods to accommodate the mission of the facility. Facilities will be designed and constructed as permanent construction in accordance with Department of Defense (DoD) Unified Facilities Criteria (UFC) 1-200-01, General Building Requirements, UFC 1-200-02, High Performance and Sustainable Building Requirements, and UFC 4-211-01 Aircraft Maintenance Hangars: Type I and Type II, which is currently in update, as applicable. Construction of the new facility is cast-in-place concrete. Low-sloped roofs will enclose high-, medium-, and low-bay interior clearances. The high-bay area will include a coatings bay with paint booth structure and mechanical platform, the medium-bay includes shop space and storage areas and the low-bay section includes administrative functions, communications and server equipment, and rest rooms. Security enhancements include blast load resistant walls facing parking areas and a 10-meter (33-foot) stand-off distance. In addition, local materials and construction techniques shall be used where cost effective. This project will comply with DoD antiterrorism/force protection requirements per UFC 4-010-01.				

1. COMPONENT AIR FORCE	FY 2022 MILITARY CONSTRUCTION PROJECT DATA			2. DATE MAY 2021
3. INSTALLATION, SITE AND LOCATION SPANGDAHLEM AIR BASE SPANGDAHLEM SITE # 1 GERMANY		4. PROJECT TITLE F/A-22 LO/COMPOSITE REPAIR FACILITY		
5. PROGRAM ELEMENT 91211F	6. CATEGORY CODE 211-111	7. PROJECT NUMBER VYHK170004	8. PROJECT COST (\$000) AUTH: 0 APPR: 22,625	
11. Requirement: 2326 SM Adequate: 0 SM Substandard: 0 SM				
<p>PROJECT: F/A-22 LO/COMPOSITE REPAIR FACILITY</p> <p>REQUIREMENT: Construct a new L/O Composite Repair Facility for maintenance of F/A-22 aircraft. This project is necessary to support future United States Air Forces Europe (USAFE) contingency missions at Spangdahlem AB, Germany in support of Operation Atlantic Resolve to increase support and commitment to North Atlantic Treaty Organization (NATO) allies in Central and Eastern Europe and to address a more dynamic security situation in Europe. Spangdahlem's geographic location and available ramp space make it an ideal location as a 5th Generation fighter rotational hub. Building 5th Gen capability at Spangdahlem supports future interoperability training as well as demonstrates the capacity to generate 5th Gen operations if required, in order to deter potential adversaries by increasing the presence of U.S. forces in Europe through additional rotations. Twelve F/A-22 aircraft and associated operations are planned for a contingency mission at Spangdahlem AB to increase military presence in central Europe.</p> <p>CURRENT SITUATION: Spangdahlem AB currently supports A-10 and F-16 missions for USAFE. Existing facilities do not have either the capacity, or the proper configuration to support maintenance on the larger F/A-22 aircraft and its composite coating system.</p> <p>IMPACT IF NOT PROVIDED: If not provided, the twelve F/A-22 aircraft will not be adequately accommodated for critical L/O composite coatings maintenance and other repairs to be provided in this facility. Maintenance on these aircraft cannot be performed at facilities designed and tooled for F-16 and A-10 aircraft.</p> <p>ADDITIONAL: This project meets applicable criteria/scope specified in Air Force Manual 32-1084, Facility Requirements. A preliminary analysis of reasonable options for satisfying this requirement indicates only one option will meet mission needs, new construction. Therefore, a complete economic analysis was not performed. The UFC 3- 701-01, DoD Pricing Guide and RS Means were used to develop the estimate for this project. This project will be submitted for NATO pre-financing.</p> <p>FOREIGN CURRENCY: FCF Budget Rate Used: EURO-DOLLAR .8703</p> <p>Base Civil Engineer: DSN 452-6040.</p> <p>HANGAR, MAINTENANCE: 2,326 SM = 25,037 SF; Demolition: 408 SM = 4,392 SF.</p> <p>JOINT USE CERTIFICATION: This facility can be used by other components on an "as available" basis; however, the scope of the project is based on Air Force requirements.</p>				

1. COMPONENT AIR FORCE	FY 2022 MILITARY CONSTRUCTION PROJECT DATA		2. DATE MAY 2021
3. INSTALLATION AND LOCATION SPANGDAHLEM AIR BASE SPANGDAHLEM SITE # 1 GERMANY		4. PROJECT TITLE F/A-22 LO/COMPOSITE REPAIR FACILITY	
5. PROGRAM ELEMENT 91211F	6. CATEGORY CODE 211-111	7. PROJECT NUMBER VYHK170004	8. PROJECT COST (\$000) AUTH: 0 APPR: 22,625
12. SUPPLEMENTAL DATA:			
a. Estimated Design Data:			
(1) Status:			
(a) Type of Design			Design-Build
(b) Date Design Started			12-DEC-17
(c) Parametric Cost Estimates Used to develop costs			YES
(d) Percent Complete as of 01 JAN 2021			35%
(e) Date 35% Designed			19-FEB-19
(f) Date Design Complete			20-APR-21
(g) Energy Study/Life-Cycle analysis was/will be performed			YES
(2) Basis:			
(a) Standard or Definitive Design			NO
(b) Where Design Was Most Recently Used			N/A
(3) Total Cost (c) = (a) + (b) or (d) + (e)			(\$000)
(a) Production of Plans and Specifications			1,358
(b) All Other Design Costs			679
(c) Total			2,037
(d) Contract			1,698
(e) In-house			339
(4) Construction Contract Award			22-FEB
(5) Construction Start			22-JUL
(6) Construction Completion			24-JUN
b. Equipment associated with this project provided from other appropriations:			
	PROCURING APPRO	FISCAL YEAR APPROPRIATED OR REQUESTED	COST (\$000)
EQUIPMENT NOMENCLATURE			
FURNISHINGS	3400	FUTURE REQUEST	114
c. AUTHORIZATIONS AND APPROPRIATIONS:			
	Authorization (\$000)	Auth of Approp (\$000)	Approp (\$000)
FY2017 Enacted	22,000	22,000	22,000
Reallocated to 10 USC 2808 Projects	-----	-----	(22,000)
Cost Variation	625	-----	-----
FY2022 Request	0	22,625	22,625
Total	22,625		22,625

1. COMPONENT AIR FORCE		FY <u>2022</u> MILITARY CONSTRUCTION PROGRAM					2. DATE (YYYYMMDD) MAY 2021				
3. INSTALLATION AND LOCATION ANDERSEN AIR FORCE BASE, GUAM				4. COMMAND PACIFIC AIR FORCES			5. AREA CONSTRUCTION COST INDEX 2.45				
6. PERSONNEL		(1) PERMANENT			(2) STUDENTS			(3) SUPPORTED			(4) TOTAL
		OFFICER	ENLISTED	CIVILIAN	OFFICER	ENLISTED	CIVILIAN	OFFICER	ENLISTED	CIVILIAN	
a. AS OF	30-SEP-20	158	1,595	376	0	0	0	0	0	0	2,129
b. END FY		158	1,643	383	0	0	0	0	0	0	2,184
7. INVENTORY DATA (\$000)											
a. TOTAL ACREAGE										20,720	
b. INVENTORY TOTAL AS OF 30-SEP-20										1,917,095.00	
c. AUTHORIZATION NOT YET IN INVENTORY										262,158.00	
d. AUTHORIZATION REQUESTED IN THIS PROGRAM										85,000.00	
e. AUTHORIZATION INCLUDED IN FOLLOWING PROGRAM										0.00	
f. PLANNED IN NEXT THREE PROGRAM YEARS										0.00	
g. REMAINING DEFICIENCY										1,033,000.00	
h. GRAND TOTAL										3,297,253.00	
8. PROJECTS REQUESTED IN THIS PROGRAM											
a. CATEGORY				b. COST (\$000)		c. DESIGN STATUS					
(1) CODE	(2) PROJECT TITLE		(3) SCOPE			(1) START	(2) COMPLETE				
422-264	MUNITIONS STORAGE IGLOOS IV		3,303 SM		55,000	08/19	08/20				
442-758	AIRFIELD DAMAGE REPAIR WAREHOUSE		6,839 SM		30,000	08/19	05/20				
422-264	HAYMAN MUNITIONS STORAGE IGLOOS, MSA 2		621 SM		9,824	03/18	03/19				
9. FUTURE PROJECTS											
10. MISSION OR MAJOR FUNCTIONS											
Joint Region Marianas-Andersen is home to the 36th Wing with the primary mission to employ, deploy, integrate, and enable air and space forces from the most forward US sovereign Air Force base in the Pacific. Provides continuous bomber presence 365 days per year to support US Indo-Pacific Command. Provides a Contingency Response Group with a "911 force" capability to quickly deploy to any hot spot in the region rapidly opening and operating an air base for both combat and humanitarian assistance missions.											
11. OUTSTANDING POLLUTION AND SAFETY DEFICIENCIES											
N/A											

1. COMPONENT AIR FORCE	FY 2022 MILITARY CONSTRUCTION PROJECT DATA			2. DATE MAY 2021	
3. INSTALLATION, SITE AND LOCATION JOINT REGION MARIANAS - ANDERSEN ANDERSEN AF BASE SITE MSA1 GUAM			4. PROJECT TITLE MUNITIONS STORAGE IGLOOS IV		
5. PROGRAM ELEMENT 91211F	6. CATEGORY CODE 422-264	7. PROJECT NUMBER AJJY073105P4	8. PROJECT COST (\$000) 55,000		
9. COST ESTIMATES					
ITEM		U/M	QUANTITY	UNIT	COST (\$000)
PRIMARY FACILITIES					26,740
STORAGE IGLOO		SM	3,303	8,020	(26,490)
CYBERSECURITY OF FACILITY-RELATED CONTROL SYS		LS			(250)
SUPPORTING FACILITIES					21,890
UTILITIES		LS			(2,670)
PAVEMENT		LS			(800)
SITE IMPROVEMENTS		LS			(11,520)
MUNITIONS AND EXPLOSIVES OF CONCERN CLEARANCE		LS			(4,200)
ARCHEOLOGICAL MITIGATION REQUIREMENTS		LS			(700)
ENVIRONMENTAL PROTECTION AND COMPLIANCE		LS			(2,000)
SUBTOTAL					48,630
CONTINGENCY (5.0%)					2,432
TOTAL CONTRACT COST					51,062
SUPERVISION, INSPECTION AND OVERHEAD (6.2%)					3,166
POST CONSTRUCTION AWARD SERVICES (PCAS)					766
TOTAL REQUEST					54,994
TOTAL REQUEST (ROUNDED)					55,000
EQUIPMENT FROM OTHER APPROPRIATIONS (NON-ADD)					(500.0)
10. Description of Proposed Construction: Construct Munitions Igloos to support current missions at Andersen Air Force Base. Igloos will be Hayman 7-bar design modified for local seismic requirements and siting. Project will include electrical power, aprons, and roads, lighting, intrusion detection infrastructure, communications infrastructure, and lightning protection system. In addition, project will need to address natural and cultural resource requirements and munitions and explosives of concern clearance requirements. Project will include all necessary supporting facilities for a complete and usable facility, and will be designed as permanent construction in accordance with Department of Defense Unified Facilities Criteria 1-200-01, General Building Requirments. This project will comply with Department of Defense anti-terrorism/force protection requirements per Unified Facility Criteria 4-010-01, Department of Defense Minimum Anti-terrorism Standards for Buildings. Air Conditioning: 0 Tons					
11. Requirement: 3,303 SM Adequate: 0 SM Substandard: 0 SM					
PROJECT: PDI: Munitions Storage Igloos IV					
REQUIREMENT: Construction of 16 adequately sized, configured, sited and protected munitions storage igloos is required to support forward-positioned munitions at Andersen Air Force Base. A joint Pacific Air Forces/36 Wing munitions squadron assessment of the munitions storage capability was conducted. The assessment					

1. COMPONENT AIR FORCE	FY 2022 MILITARY CONSTRUCTION PROJECT DATA			2. DATE MAY 2021
3. INSTALLATION, SITE AND LOCATION JOINT REGION MARIANAS - ANDERSEN ANDERSEN AF BASE SITE MSA1 GUAM			4. PROJECT TITLE MUNITIONS STORAGE IGLOOS IV	
5. PROGRAM ELEMENT 91211F	6. CATEGORY CODE 422-264	7. PROJECT NUMBER AJJY073105P4	8. PROJECT COST (\$000) 55,000	
<p>identified a shortfall of 60 munitions storage igloos. These igloos are needed to meet modern munitions mission requirements in accordance with War Consumables Distribution Objectives document, Defense Planning Guidance, and Pacific Air Forces Operations Plans. The site includes sensitive environmental, cultural, and natural resources that will need to be managed in accordance with agreements and plans. This is not a tenant or supported service requirement; the 36 Wing owns/manages the airfield and Munitions facilities.</p> <p>CURRENT SITUATION: In April 2002, the Air Force Safety Center classified 132 existing 1950s munitions igloos as "undefined" due to faulty door design, thus downgrading these facilities to non-standard type operations. This, compounded by deterioration of the facilities and their loss of earth cover caused by super typhoons, caused the Net Explosive Weight to be reduced from 49.5 million pounds to 37.5 million pounds for a total reduction of 12 million pounds--a 24% reduction in capacity. Andersen has 144 igloos (126 in munitions storage area I and 18 in area II). The 114 igloos downgraded are used for nonstandard munitions storage; 12 Hayman igloos were constructed in Fiscal Year 2008; numerous exterior storage pads and designated open storage areas; 10 aboveground magazines; and several maintenance, operations, and storage facilities.</p> <p>IMPACT IF NOT PROVIDED: Lack of adequate munitions storage will continue to limit essential forward-positioned munitions storage capability. Future requirements are anticipated to result in a deficit of 280,000 square feet, which will deprive the Pacific Air Forces of immediate access to selected munitions to meet changing taskings and bomber sortie generation. If this project is not provided, the current inadequate facilities will not support future missions that directly support the Indo-Pacific Command's operational plans.</p> <p>ADDITIONAL: This design shall conform to criteria established in the Air Force Corporate Facilities Standards and employ the standard facility design for 7-Bar RC box earth covered magazines. This project meets the criteria/scope specified in Air Force Manual 32-1084, "Facility Requirements." An analysis of reasonable options for accomplishing this project (status quo, renovation, new construction) indicated there is only one option that will meet operational requirements, new construction. Therefore, a waiver from economic analysis requirement was approved. The supporting facilities cost exceeds 25% of the primary facility cost due to the size of the project site which requires utilities and roads. Additionally, the project site improvements must address natural and cultural resource issues. Facility is sited in accordance with the Installation Development Plan and is within a compatible land use area. Sustainable principles, to include life-cycle cost-effective practices, will be integrated into the design, development, and construction of the project in accordance with Unified Facilities Criteria 1-200-02, High Performance and Sustainable Building Requirements. This includes preparation of a life-cycle cost analysis for energy consuming systems, renewable energy generating systems, whenever life-cycle cost effective is selected as the reason any requirement of Unified Facilities Criteria 1-200-02, High Performance and Sustainable Building Requirements is partially compliant or not applicable. This project does not fall within or partly within the 100-year flood plain. This project was included in the Fiscal Year 2021 future-years defense plan in Fiscal Year 2022.</p>				

1. COMPONENT AIR FORCE	FY 2022 MILITARY CONSTRUCTION PROJECT DATA			2. DATE MAY 2021
3. INSTALLATION, SITE AND LOCATION JOINT REGION MARIANAS - ANDERSEN ANDERSEN AF BASE SITE # 1 GUAM			4. PROJECT TITLE MUNITIONS STORAGE IGLOOS IV	
5. PROGRAM ELEMENT 91211F	6. CATEGORY CODE 422-264	7. PROJECT NUMBER AJJY073105P4	8. PROJECT COST (\$000) 55,000	
<p>Base Civil Engineer: 671-366-2530</p> <p>Storage Igloo: 3,303 SM = 35,553 square feet</p> <p>JOINT USE CERTIFICATION: This facility will be used by other components on an "as available" basis; however, the scope of the project is based on Air Force requirements.</p>				

1. COMPONENT AIR FORCE	FY 2022 MILITARY CONSTRUCTION PROJECT DATA (computer generated)		2. DATE MAY 2021
3. INSTALLATION AND LOCATION JOINT REGION MARIANAS - ANDERSEN ANDERSEN AF BASE SITE # 1 GUAM		4. PROJECT TITLE MUNITIONS STORAGE IGLOOS IV	
5. PROGRAM ELEMENT 91211F	6. CATEGORY CODE 422-264	7. PROJECT NUMBER AJJY073105P4	8. PROJECT COST (\$000) 55,000
12. SUPPLEMENTAL DATA:			
a. Estimated Design Data:			
(1) Status:			
(a) Type of Design	Design-Bid-Build		
(b) Date Design Started	28-AUG-19		
(c) Parametric Cost Estimates Used to develop costs	YES		
(d) Percent Complete as of 01 JAN 2021	100%		
(e) Date 35% Designed	22-OCT-19		
(f) Date Design Complete	25-AUG-20		
(g) Energy Study/Life-Cycle analysis was/will be performed	YES		
(2) Basis:			
(a) Standard or Definitive Design	YES		
(b) Where Design Was Most Recently Used Andersen Air Force Base, 2012			
(3) Total Cost (c) = (a) + (b) or (d) + (e)	(\$000)		
(a) Production of Plans and Specifications	3,300		
(b) All Other Design Costs	1,650		
(c) Total	4,950		
(d) Contract	4,125		
(e) In-house	825		
(4) Construction Contract Award	22 FEB		
(5) Construction Start	22 APR		
(6) Construction Completion	24 FEB		
b. Equipment associated with this project provided from other appropriations:			
EQUIPMENT NOMENCLATURE	PROCURING APPROPRIATION	FISCAL YEAR APPROPRIATED OR REQUESTED	COST (\$000)
ALARM SYSTEMS	3080	FUTURE REQUEST	500

1. COMPONENT AIR FORCE		FY 2022 MILITARY CONSTRUCTION PROJECT DATA			2. DATE MAY 2021	
3. INSTALLATION, SITE AND LOCATION JOINT REGION MARIANAS ANDERSEN AF BASE SITE #1 GUAM				4. PROJECT TITLE AIRFIELD DAMAGE REPAIR WAREHOUSE		
5. PROGRAM ELEMENT 91211F		6. CATEGORY CODE 442-758	7. PROJECT NUMBER AJJY163000		8. PROJECT COST (\$000) 30,000	
9. COST ESTIMATES						
ITEM				U/M	QUANTITY	COST (\$000)
PRIMARY FACILITIES						17,539
WAREHOUSE SUPPLY AND EQUIPMENT BASE				SM	6,839	(17,289)
CYBERSECURITY OF FACILITY-RELATED CONTROL SYS				LS		(250)
SUPPORTING FACILITIES						8,962
UTILITES				LS		(1,717)
SITE IMPROVEMENTS				LS		(1,342)
PAVEMENTS				LS		(3,736)
COMMUNICATIONS				LS		(145)
MUNITIONS AND EXPLOSIVE OF CONCERN CLEARANCE				LS		(1,800)
ENVIRONMENTAL MITIGATION				LS		(150)
ARCHAEOLOGICAL MONITORING				LS		(72)
SUBTOTAL						26,501
CONTINGENCY (5.0%)						1,325
TOTAL CONTRACT COST						27,826
SUPERVISION, INSPECTION AND OVERHEAD (6.2%)						1,725
POST CONSTRUCTION AWARD SERVICES (PCAS)						418
TOTAL REQUEST						29,969
TOTAL REQUEST (ROUNDED)						30,000
10. Description of Proposed Construction: Construct an airfield damage repair storage facility at Andersen Air Force Base. The facility will be a tilt-up, pre-cast, or cast-in-place concrete construction. The project will include supporting facilities such as utilities, pavements, and site improvements to provide a complete and usable facility. Facilities will be designed as permanent construction in accordance with the Department of Defense United Facilities Criteria 1-200-01 General Building Requirements and Andersen Air Force Base Architectural Compatibility and Base Design Standards. This project will comply with Department of Defense Anti-terrorism/force protection requirements per United Facilities Criteria 4-010-01.						
Air Conditioning: 0 Tons						
11. Requirement: 6839 SM Adequate: 0 SM Substandard: 0 SM						
PROJECT: Airfield Damage Repair Storage Facilities						
REQUIREMENT: An adequately sized and configured Airfield Damage Repair Warehouse is required to preposition airfield repair equipment and materiel to facilitate the rapid repair of airfield pavements during emergencies and contingency situations. The storage facility will have open areas with minimal structural obstruction for equipment parking and storage, along with overhead roll-up doors to allow equipment to be moved onto the exterior concrete paving for staging. The facilities will include electrical utilities and lighting, data and telephone line (not connected to the facility), fire alarm, and a wet pipe fire protection system.						

1. COMPONENT AIR FORCE	FY 2022 MILITARY CONSTRUCTION PROJECT DATA			2. DATE MAY 2021
3. INSTALLATION, SITE AND LOCATION JOINT REGION MARIANAS ANDERSEN AF BASE SITE #1 GUAM			4. PROJECT TITLE AIRFIELD DAMAGE REPAIR WAREHOUSE	
5. PROGRAM ELEMENT 91211F	6. CATEGORY CODE 442-758	7. PROJECT NUMBER AJJY163000	8. PROJECT COST (\$000) 30,000	
<p>CURRENT SITUATION: The Air Force Civil Engineer Center has mandated the fielding of the new Airfield Damage Repair capability concept at Andersen Air Force Base. The 36th Civil Engineer Squadron received 245 pieces of heavy construction equipment and 100 sea van containers with consumable materiel to support this initiative. The value of this fleet of equipment is millions of dollars. Without adequate indoor storage, this equipment will be partially re-capitalized or fully replaced within 8-12 years due to the harsh weather conditions corroding the equipment. The cost benefit of investing in storage facilities far outweighs fleet re-capitalization and enhances overall Airfield Damage Repair program readiness and effectiveness. Furthermore, Andersen Air Force Base does not have existing facilities to store the equipment and materiel. This is not a tenant or supported service requirement.</p>				
<p>IMPACT IF NOT PROVIDED: Without these facilities, millions of dollars of modernized Airfield Damage Repair equipment will be directly exposed to Guam's harsh sub-tropical environment and will rapidly deteriorate to the point of not being mission capable. Not having this equipment jeopardizes 36 Wing's ability to recover the airfield and continue flight operations after an attack. Storage facilities are required to protect equipment and materiel from the effects of the environment. If not provided, the Air Force initiative to field the Airfield Damage Repair concept at Andersen will be severely hampered and will have an adverse effect on readiness and the base's capability to adequately support the flying mission in the Pacific theater.</p>				
<p>ADDITIONAL: This project meets the criteria/scope specified in Air Force Manual 32-1084, "Facility Requirements". The parametric cost estimate for this project is consistent with the Department of Defense Pricing Guide Parameters. This design shall conform to criteria established in the Air Force Corporate Facilities Standards, the Installation Facilities Standards, but will not employ a standard facility design because there is no Air Force standard facility design for this project and there is no applicable standard design from Air Force Civil Engineer Center nor the Navy Facilities Engineering Systems Command. A Waiver to an Economic Analysis has been approved for this project.</p>				
<p>Due to the requirement for Airfield Damage Repair equipment to be quickly moved out of the facility and dispersed, a large amount of site improvements and paving is required around the facility, in addition to munitions clearing and environmental mitigation, which results in the supporting facilities yielding a cost greater than 25% of the primary facility cost. Sustainable principles, to include life-cycle cost-effective practices, will be integrated into the design, development, and construction of the project in accordance with Unified Facilities Criteria 1-200-02, High Performance and Sustainable Building Requirements. This includes preparation of a life-cycle cost analysis for energy consuming systems, renewable energy generating systems, whenever life-cycle cost effective is selected as the reason any requirement of Unified Facilities Criteria 1-200-02, High Performance and Sustainable Building Requirements. is partially compliant or not applicable. Facility is sited in accordance with the Installation Development Plan and is within a compatible land use area. This project does not fall within or partly within the 100-year flood plain. This project was included in the Fiscal Year 2021 future-years defense plan in FY22.</p>				

1. COMPONENT AIR FORCE	FY 2022 MILITARY CONSTRUCTION PROJECT DATA		2. DATE MAY 2021
3. INSTALLATION, SITE AND LOCATION JOINT REGION MARIANAS ANDERSEN AF BASE SITE #1 GUAM		4. PROJECT TITLE AIRFIELD DAMAGE REPAIR WAREHOUSE	
5. PROGRAM ELEMENT 91211F	6. CATEGORY CODE 442-758	7. PROJECT NUMBER AJJY163000	8. PROJECT COST (\$000) 30,000
<p>36th Wing Base Civil Engineer: 671-366-2530.</p> <p>Warehouse Supply and Equipment Base: 6,839 SM = 73,614 Square Feet.</p> <p>JOINT USE CERTIFICATION: This facility can be used by other components on an "as available" basis; however, the scope of the project is based on Air Force requirements.</p>			

1. COMPONENT AIR FORCE	FY 2022 MILITARY CONSTRUCTION PROJECT DATA		2. DATE MAY 2021																												
3. INSTALLATION AND LOCATION JOINT REGION MARIANAS ANDERSEN AF BASE SITE #1 GUAM		4. PROJECT TITLE AIRFIELD DAMAGE REPAIR WAREHOUSE																													
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<p>12. SUPPLEMENTAL DATA:</p> <p>a. Estimated Design Data:</p> <p>(1) Status:</p> <table border="0"> <tr> <td>(a) Type of Design</td> <td>Design-Bid-Build</td> </tr> <tr> <td>(b) Date Design Started</td> <td>07-AUG-19</td> </tr> <tr> <td>(c) Parametric Cost Estimates Used to develop costs</td> <td>YES</td> </tr> <tr> <td>(d) Percent Complete as of 01 JAN 2021</td> <td>100%</td> </tr> <tr> <td>(e) Date 35% Designed</td> <td>15-OCT-19</td> </tr> <tr> <td>(f) Date Design Complete</td> <td>15-MAY-20</td> </tr> <tr> <td>(g) Energy Study/Life-Cycle analysis was/will be performed</td> <td>YES</td> </tr> </table> <p>(2) Basis:</p> <table border="0"> <tr> <td>(a) Standard or Definitive Design</td> <td>NO</td> </tr> <tr> <td>(b) Where Design Was Most Recently Used</td> <td>N/A</td> </tr> </table> <p>(3) Total Cost (c) = (a) + (b) or (d) + (e) (\$000)</p> <table border="0"> <tr> <td>(a) Production of Plans and Specifications</td> <td>1,800</td> </tr> <tr> <td>(b) All Other Design Costs</td> <td>900</td> </tr> <tr> <td>(c) Total</td> <td>2,700</td> </tr> <tr> <td>(d) Contract</td> <td>2,250</td> </tr> <tr> <td>(e) In-house</td> <td>450</td> </tr> </table> <p>(4) Construction Contract Award 22-FEB (5) Construction Start 22-APR (6) Construction Completion 24-JAN</p> <p>b. Equipment associated with this project provided from other appropriations: N/A</p>				(a) Type of Design	Design-Bid-Build	(b) Date Design Started	07-AUG-19	(c) Parametric Cost Estimates Used to develop costs	YES	(d) Percent Complete as of 01 JAN 2021	100%	(e) Date 35% Designed	15-OCT-19	(f) Date Design Complete	15-MAY-20	(g) Energy Study/Life-Cycle analysis was/will be performed	YES	(a) Standard or Definitive Design	NO	(b) Where Design Was Most Recently Used	N/A	(a) Production of Plans and Specifications	1,800	(b) All Other Design Costs	900	(c) Total	2,700	(d) Contract	2,250	(e) In-house	450
(a) Type of Design	Design-Bid-Build																														
(b) Date Design Started	07-AUG-19																														
(c) Parametric Cost Estimates Used to develop costs	YES																														
(d) Percent Complete as of 01 JAN 2021	100%																														
(e) Date 35% Designed	15-OCT-19																														
(f) Date Design Complete	15-MAY-20																														
(g) Energy Study/Life-Cycle analysis was/will be performed	YES																														
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1. COMPONENT AIR FORCE	FY 2022 MILITARY CONSTRUCTION PROJECT DATA (computer generated)			2. DATE MAY 2021
3. INSTALLATION, SITE AND LOCATION JOINT REGION MARIANAS - ANDERSEN ANDERSEN AF BASE SITE #1 GUAM			4. PROJECT HAYMAN MUNITIONS STORAGE IGLOOS, MSA 2	
5. PROGRAM ELEMENT 91211F	6. CATEGORY CODE 422-264	7. PROJECT NUMBER AJJY183003	8. PROJECT COST (\$000) AUTH: 0 APPR: 9,824	
9. COST ESTIMATES				
ITEM	U/M	QUANTITY	UNIT	COST (\$000)
PRIMARY FACILITIES				5,027
MUNITIONS STORAGE IGLOOS				
CONSTRUCT 3 HAYMAN STORAGE MAGAZINES	SM	621	7,970	(4,949)
SUSTAINABILITY AND ENERGY MEASURES (2%)	LS			(78)
SUPPORTING FACILITIES				3,782
UTILITIES	LS			(797)
SITE PREPERATION/IMPROVEMENTS	LS			(414)
COMMUNICATIONS	LS			(334)
ENVIRONMENTAL REMEDIATION (ESS) MEC/UXO	LS			(400)
ARCHEOLOGICAL MONITORING	LS			(100)
PAVEMENTS (ACCESS ROAD & LOADING APRONS)	SM	3,000	435	(1,305)
CYBERSECURITY COMMISSIONING	LS			(157)
DEMOLITION	SM	580	474	(275)
SUBTOTAL				8,809
CONTINGENCY (5.0%)				440
TOTAL CONTRACT COST				9,249
SUPERVISION, INSPECTION AND OVERHEAD (6.2%)				573
TOTAL REQUEST				9,822
TOTAL REQUEST (ROUNDED)				9,824
EQUIPMENT FROM OTHER APPROPRIATIONS (NON-ADD)				(1,332)
10. Description of Proposed Construction: Construct three new Hayman munitions storage igloos utilizing conventional design and construction methods to accommodate the mission. Demolish three substandard earth covered munitions storage igloos, B-51260, B-51261, and B-51261 for a total of 580 SM located in Munitions Storage Area 2. The facilities will include reinforced concrete foundations, rated 7-bar construction, floor slabs, columns, beams, lighting and electrical support, fire protection systems, lightning protection systems, intruder detection systems, and all necessary supporting utilities for complete and usable facilities. The facility must also be able to withstand wind loads and seismic effects as prescribed in applicable codes and design guides and comply with Air Force Munitions Facilities Standards Guide. Facilities will be designed as permanent construction in accordance with the Department of Defense Unified Facilities Criteria 1-200-01, General Building requirements. This project will comply with Department of Defense Antiterrorism /Force Protection requirements per Unified Facilities Criteria 4-010-01, Department of Defense Minimum Anti-terrorism Standards for Buildings.				

1. COMPONENT AIR FORCE	FY 2022 MILITARY CONSTRUCTION PROJECT DATA (computer generated)		2. DATE MAY 2021
3. INSTALLATION, SITE AND LOCATION JOINT REGION MARIANAS - ANDERSEN ANDERSEN AF BASE SITE #1 GUAM		4. PROJECT HAYMAN MUNITIONS STORAGE IGLOOS, MSA 2	
5. PROGRAM ELEMENT 91211F	6. CATEGORY CODE 422-264	7. PROJECT NUMBER AJJY183003	8. PROJECT COST (\$000) AUTH: 0 APPR: 9,824
Air Conditioning: 0 Tons			
<p>11. Requirement: 35,437 SM Adequate: 8,401 SM Substandard: 30,132 SM PROJECT: Hayman Munitions Storage Igloos, MSA2</p> <p>REQUIREMENT: This project will demolish three antiquated munitions storage igloos adjacent to the flight line and construct three adequately sized, configured, protected, and sited munitions storage igloos required to support the bed-down requirement (and/or transition) of munitions assets in the Pacific Area of Operations. Supporting facilities include site development, utilities and connections, road construction, and loading aprons. Project will utilize economical design and construction methods to accommodate the mission of the facility. Facilities will be designed as permanent construction in accordance with the Unified Facilities Criteria 1-200-02, High Performance and Sustainable Building Requirements. This project will comply with antiterrorism/force protection requirements per Unified Facilities Criteria 4-010-01, Department of Defense Minimum Anti-terrorism Standards for Buildings.</p> <p>CURRENT SITUATION: Faulty door design, downgrading these facilities to non-standard type operations, compounded by deterioration of the facilities and their loss of earth cover caused by super typhoons, caused the Net Explosive Weight to be reduced from 49.5 million pounds to 37.5 million pounds for a total reduction of 12 million pounds--a 24% reduction in capacity. A joint Pacific Air Forces/wing munitions squadron assessment of the munitions storage capability was conducted. The assessment identified a shortfall of 60 munitions storage igloos. The new igloos will provide an increase in Net Explosive Weight for some of the igloos replaced and replace many of the most degraded existing igloos. These igloos are needed to meet the munitions mission required by the War Consumables Distribution Objectives document, Defense Planning Guidance, and Indo-Pacific Command Operations Plans. Overall, the existing facilities cannot accommodate future operational requirements and will not adequately support the mission of the 36th Munitions Squadron.</p> <p>IMPACT IF NOT PROVIDED: Failure to provide this project will prevent the Pacific Air Forces Command from increasing its force presence and/or transitioning aircraft within the AOR to support operations in Pacific Command. Lack of adequate munitions storage will continue to adversely impact essential forward-positioned munitions storage capability needed to support operations. The inability to properly store the new state of the art weapons systems at Andersen Air Force Base will deprive Pacific Air Force of immediate access to critical munitions necessary to meet changing taskings and bomber sortie generation. These munitions support on-going operations. If this project is not provided, the current inadequate facilities will not support future missions that directly support Indo-Pacific Command's theater stability and positioning for contingency objectives.</p>			

1. COMPONENT AIR FORCE	FY 2022 MILITARY CONSTRUCTION PROJECT DATA (computer generated)		2. DATE MAY 2021
3. INSTALLATION, SITE AND LOCATION JOINT REGION MARIANAS - ANDERSEN ANDERSEN AF BASE SITE #1 GUAM		4. PROJECT HAYMAN MUNITIONS STORAGE IGLOOS, MSA 2	
5. PROGRAM ELEMENT 91211F	6. CATEGORY CODE 422-264	7. PROJECT NUMBER AJJY183003	8. PROJECT COST (\$000) AUTH: 0 APPR: 9,824
<p>ADDITIONAL: This design shall conform to criteria established in the Air Force Corporate Facilities Standards, the Munitions Facilities Standards Guides Volumes 1 and 2 and shall employ the standard facility design for 7-Bar RC box earth covered magazines. This project meets the criteria/scope specified in Air Force Manual 32-1084, "Facility Requirements." A Waiver to an Economic Analysis has been approved for this project. The supporting facilities cost exceeds 25% of the primary facility cost due to long utility runs, extensive pavements, demolition and site work, and environmental remediation. Facility is sited in accordance with the Installation Development Plan and is within a compatible land use area. Sustainable principles, to include life-cycle cost-effective practices, will be integrated into the design, development, and construction of the project in accordance with Unified Facilities Criteria 1-200-02, High Performance and Sustainable Building Requirements. This includes preparation of a life-cycle cost analysis for energy consuming systems, renewable energy generating systems, whenever life-cycle cost effective is selected as the reason any requirement of Unified Facilities Criteria 1-200-02, High Performance and Sustainable Building Requirements is partially compliant or not applicable. This project does not fall within or partly within the 100-year flood plain. This project was appropriated in the Fiscal Year 2019 future years' defense plan but was deferred to support 10 USC 2808 construction.</p> <p>Wing Base Civil Engineer: COMM. (671) 366-7101.</p> <p>MUNITIONS IGLOOS: 621 SM = 6684 Square Feet.</p> <p>DEMOLITION: 580 SM = 6243 Square Feet.</p> <p>JOINT USE CERTIFICATION: Mission requirements, operational considerations, and location are incompatible with use by other components.</p>			

1. COMPONENT AIR FORCE	FY 2022 MILITARY CONSTRUCTION PROJECT DATA (computer generated)		2. DATE MAY 2021
3. INSTALLATION, SITE AND LOCATION JOINT REGION MARIANAS - ANDERSEN ANDERSEN AF BASE SITE #1 GUAM		4. PROJECT HAYMAN MUNITIONS STORAGE IGLOOS, MSA 2	
5. PROGRAM ELEMENT 91211F	6. CATEGORY CODE 422-264	7. PROJECT NUMBER AJJY183003	8. PROJECT COST (\$000) AUTH: 0 APPR: 9,824
12. SUPPLEMENTAL DATA:			
a. Estimated Design Data:			
(1) Status:			
(a) Type of Design	Design-Bid-Build		
(b) Date Design Started	10-MAR-18		
(c) Parametric Cost Estimates Used to develop costs	YES		
(d) Percent Complete as of 01 JAN 2020	100%		
(e) Date 35% Designed	06-JUN-18		
(f) Date Design Complete	28-MAR-19		
(g) Energy Study/Life-Cycle analysis was/will be performed	YES		
(2) Basis:			
(a) Standard or Definitive Design	YES		
(b) Where Design Was Most Recently Used	ANDERSEN AIR FORCE BASE		
(3) Total Cost (c) = (a) + (b) or (d) + (e)	(\$000)		
(a) Production of Plans and Specifications	612		
(b) All Other Design Costs	306		
(c) Total	918		
(d) Contract	765		
(e) In-house	153		
(4) Construction Contract Award	22-FEB		
(5) Construction Start	22-APR		
(6) Construction Completion	23-NOV		
b. Equipment associated with this project provided from other appropriations:			
		FISCAL YEAR	
		APPROPRIATED	COST
EQUIPMENT NOMENCLATURE	PROCURING APPROP	OR REQUESTED	(\$000)
INTRUSION DETECTION SYS (IDS)	3080	FUTURE REQUEST	1,330
COMMUNICATIONS (TELEPHONE)	3400	FUTURE REQUEST	2
c. Authorization and Appropriation Summary			
	Authorization (\$000)	Auth of Approp (\$000)	Approp (\$000)
FY2019 Enacted	9,800	9,800	9,800
Reallocated to 10 USC 2808 Projects	-----	-----	(9,800)
Cost Variation	24	-----	-----
FY2022 Request	0	9,824	9,824
Total	9,824		9,824

1. COMPONENT AIR FORCE		FY <u>2022</u> MILITARY CONSTRUCTION PROGRAM					2. DATE (YYYYMMDD) MAY 2021				
3. INSTALLATION AND LOCATION KECSKEMET AIR BASE, HUNGARY				4. COMMAND UNITED STATES AIR FORCES IN EUROPE			5. AREA CONSTRUCTION COST INDEX 1.10				
6. PERSONNEL		(1) PERMANENT			(2) STUDENTS			(3) SUPPORTED			(4) TOTAL
		OFFICER	ENLISTED	CIVILIAN	OFFICER	ENLISTED	CIVILIAN	OFFICER	ENLISTED	CIVILIAN	
a. AS OF 30- Sep-20		0	0	0	0	0	0	5	50	0	55
b. END FY		0	0	0	0	0	0	5	50	0	55
7. INVENTORY DATA (\$000)											
a. TOTAL ACREAGE										0	
b. INVENTORY TOTAL AS OF 30- Sep-20										0.00	
c. AUTHORIZATION NOT YET IN INVENTORY										0.00	
d. AUTHORIZATION REQUESTED IN THIS PROGRAM										0.00	
e. AUTHORIZATION INCLUDED IN FOLLOWING PROGRAM										0.00	
f. PLANNED IN NEXT THREE PROGRAM YEARS										0.00	
g. REMAINING DEFICIENCY										45,000.00	
h. GRAND TOTAL										45,000.00	
8. PROJECTS REQUESTED IN THIS PROGRAM											
a. CATEGORY				b. COST (\$000)		c. DESIGN STATUS					
(1) CODE	(2) PROJECT TITLE		(3) SCOPE			(1) START		(2) COMPLETE			
112-211	ERI: CONSTRUCT PARALLEL TAXIWAY		137,221 SM		38,650	06/17		10/18			
113-321	ERI: CONSTRUCT AIRFIELD UPGRADES		35,381 SM		20,564	06/17		10/18			
9. FUTURE PROJECTS											
10. MISSION OR MAJOR FUNCTIONS											
The mission of Kecskemet Air Base is to defend the integrity of the airspace, territory and forces of the Republic of Hungary and of NATO allies in cooperation with NATO and the HDF Air Forces. Its main tasks are to maintain a permanent state of readiness to detect aircraft violating the airspace and the aviation regulations and to assist air crew in distress and the defense of the Republic of Hungary and NATO member states and their units against enemy air attacks by providing visual reconnaissance and air support.											
11. OUTSTANDING POLLUTION AND SAFETY DEFICIENCIES											
N/A											

1. COMPONENT AIR FORCE	FY 2022 MILITARY CONSTRUCTION PROJECT DATA		2. DATE MAY 2021	
3. INSTALLATION, SITE AND LOCATION KECSKEMET AIR BASE HUNGARY		4. PROJECT TITLE ERI: CONSTRUCT PARALLEL TAXIWAY		
5. PROGRAM ELEMENT 91211F	6. CATEGORY CODE 112-211	7. PROJECT NUMBER LHKE180002	8. PROJECT COST (\$000) AUTH: 0 APPR: 38,650	
9. COST ESTIMATES				
ITEM	U/M	QTY	UNIT COST	COST (\$000)
PRIMARY FACILITIES				32,644
TAXIWAY (112-211)	SM	114,948	240	(27,588)
TAXIWAY (112-211)	SM	22,273	227	(5,056)
SUPPORTING FACILITIES				726
UTILITIES	LS			(259)
SITE IMPROVEMENTS	LS			(218)
PAVEMENTS	LS			(249)
SUBTOTAL				33,370
CONTINGENCY (5.0%)				1,669
TOTAL CONTRACT COST				35,039
SUPERVISION, INSPECTION AND OVERHEAD (6.5%)				2,278
DESIGN/BUILD - DESIGN COST (4.0% OF SUBTOTAL)				1,335
TOTAL REQUEST				38,652
TOTAL REQUEST (ROUNDED)				38,650
EQUIPMENT FROM OTHER APPROPRIATIONS (NON-ADD)				(0)
<p>10. Description of Proposed Construction: Construct a Parallel Taxiway using conventional design and construction methods to accommodate North Atlantic Treaty Organization (NATO)-equivalent Tactical Fighter Aircraft (TFA) and Strategic Transport Aircraft (STA). Design aircraft include the F-15 Eagle, A-10 Warthog, and C-5 Galaxy. Airfield upgrades are in support of the European Reassurance Initiative (ERI), Improve Airfield Infrastructure. Construction includes taxiway pavement using medium-load design, 650-pounds-per-square-inch (psi) portland cement concrete (PCC), asphalt shoulders, a separation layer, a drainage layer, a drainage system, edge lighting, pavement markings, and earthwork and grading. The lighting vault will be improved with upsized regulators. Design and construction efforts will be executed in accordance with host-nation agreements for the ERI and Standard NATO Agreements (STANAGs) to include construction and environmental permits. Facilities will be designed as permanent construction and will be in accordance with United States Air Forces in Europe Instruction (USAFEI), International Civil Aviation Organization (ICAO) Annex 14, and host nation airfield/airspace siting requirements. In addition, local materials and construction techniques shall be used where cost-effective. This project will comply with DoD antiterrorism requirements per UFC 4-010-01.requirements per UFC 4-010-01.</p>				

1. COMPONENT AIR FORCE	FY 2022 MILITARY CONSTRUCTION PROJECT DATA		2. DATE MAY 2021
3. INSTALLATION, SITE AND LOCATION KECSKEMET AIR BASE HUNGARY		4. PROJECT TITLE ERI: CONSTRUCT PARALLEL TAXIWAY	
5. PROGRAM ELEMENT 91211F	6. CATEGORY CODE 112-211	7. PROJECT NUMBER LHKE180002	8. PROJECT COST (\$000) AUTH: 0 APPR: 38,650
<p>11. Requirement: 137,221 SM Adequate: 0 SM Substandard: 0 SM</p> <p>PROJECT: ERI: CONSTRUCT PARALLEL TAXIWAY</p> <p>REQUIREMENT: This project is required to achieve compliance with the ERI, part of the Consolidated and Further Continuing Appropriations Act of 2015 in support of Operation Atlantic Resolve, which includes military exercises and training on land, in the air, and at sea while sustaining a rotational presence throughout Europe. A key enabler for training and combat operations is substantial infrastructure at key locations to support military activities. To support this operation at Kecskemét Air Base (AB), Hungary, a Parallel Taxiway, associated runway ladder taxiways, and taxiway lighting are required to permit safe and expeditious movement of NATO-equivalent TFA and STA aircraft. Facilities will improve runway capacity and access efficiency while heightening airfield presence and improving airfield readiness, as well as improving safe operations in support of Operation Atlantic Resolve, bolstering the security of our NATO allies and partners in Europe. Hungary is a NATO member state and, as such, has a requirement to host deployed U.S. forces. This facility will be capable of supporting bilateral and multilateral exercises and training with allies and partners.</p> <p>CURRENT SITUATION: Existing taxiway facilities at Kecskemét AB are not adequately configured or designed to meet anticipated sortie generation. Pavement geometrics are inadequate to support the overall dimensions and weight of STA, limiting airfield capability in support of the ERI. Existing taxiway alterations are impeded by existing structures (i.e., air traffic control tower, aircraft maintenance hangars, aircraft arm/disarm pad, and aircraft parking aprons/shelters) and cannot be modified to meet Air Force, DoD, and NATO criteria.</p> <p>IMPACT IF NOT PROVIDED: If this project is not provided, build out of the airfield with a connection to a related project requesting a TFA Parking Apron and Dangerous Cargo Pad with Open Storage for cargo staging and marshalling capable of supporting weapon systems such as the F-15 Eagle, A-10 Warthog, and C-5 Galaxy will not be available to the DoD or its allies and partners. Therefore, responsiveness for bilateral and multilateral exercises and training missions would be compromised. This limitation will impede sortie generation, and restrict flying schedules, directly limiting theater presence and impairing mission capability and readiness and contingency support to Operation Atlantic Resolve within Europe, Africa, and the Middle East.</p> <p>ADDITIONAL: This project meets applicable criteria/scope specified in Air Force Manual 32-1084, Facility Requirements, Bi-SC Directive 85-5 NATO Approved Criteria and Standards for Airfields. Sustainable principles, to include Life Cycle cost-effective practices, will be integrated into the design, development, and construction of the project and will follow the</p>			

1. COMPONENT AIR FORCE	FY 2022 MILITARY CONSTRUCTION PROJECT DATA		2. DATE MAY 2021
3. INSTALLATION, SITE AND LOCATION KECSKEMET AIR BASE HUNGARY		4. PROJECT TITLE ERI: CONSTRUCT PARALLEL TAXIWAY	
5. PROGRAM ELEMENT 91211F	6. CATEGORY CODE 112-211	7. PROJECT NUMBER LHKE180002	8. PROJECT COST (\$000) AUTH: 0 APPR: 38,650

guidance detailed in the Air Force (AF) Sustainable Design and Development Implementing Guidance Memorandum (dated June 2, 2011) in accordance with applicable laws and Executive Orders. The UFC 4-701-01, DoD Pricing Guide, PACES, and RSMeans were used to develop the estimate for this project. An Economic Analysis (EA) was not performed because there is only one method possible to accomplish the objective (IAW AFI 65-501, 1.2.2.2).

JOINT USE CERTIFICATION: These facilities can be used by other components on an 'as available' basis; however, the scope of the project is based on Air Force requirements. Elements of this program are not currently eligible for NATO Security Investment Program (NSIP) funding. This project will be submitted for NATO pre-financing.

1. COMPONENT AIR FORCE	FY 2022 MILITARY CONSTRUCTION PROJECT DATA		2. DATE MAY 2021
3. INSTALLATION, SITE AND LOCATION KECSKEMET AIR BASE HUNGARY		4. PROJECT TITLE ERI: CONSTRUCT PARALLEL TAXIWAY	
5. PROGRAM ELEMENT 91211F	6. CATEGORY CODE 112-211	7. PROJECT NUMBER LHKE180002	8. PROJECT COST (\$000) AUTH: 0 APPR: 38,650
12. SUPPLEMENTAL DATA:			
a. Estimated Design Data:			
(1) Status:			
(a) Type of Design			Design-Build
(b) Date Design Started			10-JUN-17
(c) Parametric Cost Estimates Used to develop costs			YES
(d) Percent Complete as of 01 JAN 2021			100%
(e) Date 35% Designed			15-MAR-18
(f) Date Design Complete			30-OCT-18
(g) Energy Study/Life-Cycle analysis was/will be performed			YES
(2) Basis:			
(a) Standard or Definitive Design			NO
(b) Where Design Was Most Recently Used			N/A
(3) Total Cost (c) = (a) + (b) or (d) + (e)			(\$000)
(a) Production of Plans and Specifications			1,800
(b) All Other Design Costs			900
(c) Total			2,700
(d) Contract			2,250
(e) In-house			450
(4) Construction Contract Award			22-SEP
(5) Construction Start			23-APR
(6) Construction Completion			25-APR
b. Equipment associated with this project provided from other appropriations:			
		FISCAL YEAR	
	PROCURING	APPROPRIATED	COST
EQUIPMENT NOMENCLATURE	APPROP	OR REQUESTED	(\$000)
N/A			
c. AUTHORIZATIONS AND APPROPRIATIONS:			
	Authorization (\$000)	Auth of Approp (\$000)	Approp (\$000)
FY2018 Enacted	30,000	30,000	30,000
Reallocated to 10 USC 2808 Projects	-----	-----	(30,000)
Cost Variation	8,650	-----	-----
FY2022 Request	0	38,650	38,650
Total	38,650		38,650

1. COMPONENT AIR FORCE	FY 2022 MILITARY CONSTRUCTION PROJECT DATA		2. DATE MAY 2021	
3. INSTALLATION, SITE AND LOCATION KECSKEMET AIR BASE HUNGARY			4. PROJECT TITLE ERI: CONSTRUCT AIRFIELD UPGRADES	
5. PROGRAM ELEMENT 91211F	6. CATEGORY CODE 113-321	7. PROJECT NUMBER LHKE180003	8. PROJECT COST (\$000) AUTH: 0 APPR: 20,564	
9. COST ESTIMATES				
ITEM	U/M	QTY	UNIT COST	COST (\$000)
PRIMARY FACILITIES				17,235
APRON (113-321)	SM	35,381	285	(10,084)
PAD, DANGEROUS CARGO, LOAD/UNLOAD (116-662)	SM	22,133	227	(5,024)
ROAD (851-147)	SM	20,483	75	(1,536)
OPEN STORAGE BASE SUPPLY (452-252)	SM	920	72	(66)
EXTERIOR AREA LIGHTING (812-926)	EA	25	21,000	(525)
SUPPORTING FACILITIES				519
UTILITIES	LS			(251)
SITE IMPROVEMENTS	LS			(268)
SUBTOTAL				17,754
CONTINGENCY (5.0%)				888
TOTAL CONTRACT COST				18,642
SUPERVISION, INSPECTION AND OVERHEAD (6.5%)				1,212
DESIGN/BUILD - DESIGN COST (4.0% OF SUBTOTAL)				710
TOTAL REQUEST				20,564
TOTAL REQUEST (ROUNDED)				20,564
EQUIPMENT FROM OTHER APPROPRIATIONS (NON-ADD)				(0)
<p>10. Construct airfield upgrades using conventional design and construction methods to accommodate North Atlantic Treaty Organization (NATO)-equivalent Tactical Fighter Aircraft (TFA) and Strategic Transport Aircraft (STA). Design aircraft include the F-15 Eagle, A-10 Warthog, and C-5 Galaxy. Airfield upgrades are in support of European Reassurance Initiative (ERI), Improve Airfield Infrastructure. Primary facilities include a TFA Parking Apron, Dangerous Cargo Pad, Cargo Road, Open Storage for marshalling cargo, and mast lighting. Construction includes apron pavement using medium-load design, 650-pounds-per-square-inch (psi) portland cement concrete (PCC), asphalt shoulders, a separation layer, a drainage layer, a drainage system, edge lighting, pavement markings, and earthwork and grading. Design and construction efforts will be executed in accordance with host-nation agreements for the ERI and Standard NATO Agreements (STANAGs) to include construction and environmental permits. Facilities will be designed as permanent construction in accordance with Bi-Strategic Commands (Bi-SC) Directive 85-5, NATO Approved Criteria and Standards for Airfields, and DoD Unified Facilities Criteria (UFC) 3-260-01, Airfield and Heliport Planning and Design. In addition, local materials and construction techniques shall be used where cost effective. This project will comply with DoD antiterrorism (AT) requirements per UFC 4-010-01.</p> <p>Air Conditioning: 0 Tons</p>				

1. COMPONENT AIR FORCE	FY 2022 MILITARY CONSTRUCTION PROJECT DATA		2. DATE MAY 2021
3. INSTALLATION, SITE AND LOCATION KECSKEMET AIR BASE HUNGARY		4. PROJECT TITLE ERI: CONSTRUCT AIRFIELD UPGRADES	
5. PROGRAM ELEMENT 91211F	6. CATEGORY CODE 113-321	7. PROJECT NUMBER LHKE180003	8. PROJECT COST (\$000) AUTH: 0 APPR: 20,564
<p>11. Requirement: 57,514 SM Adequate: 0 SM Substandard: 0 SM</p> <p>PROJECT: ERI: CONSTRUCT AIRFIELD UPGRADES</p> <p>REQUIREMENT: This project is required to achieve compliance with ERI, part of the Consolidated and Further Continuing Appropriations Act of 2015 in support of Operation Atlantic Resolve. This initiative includes military exercises and training on land, in the air, and at sea while sustaining a rotational presence throughout Europe. A key enabler for training and combat operations is substantial infrastructure at key locations to support military activities. To support this operation, Kecskemét Air Base (AB), requires a TFA Parking Apron programmed to support one NATO-equivalent TFA squadron for a total of 12 aircraft with provisions, such as adequate entrance taxi and apron shoulders, to support STA parking when required. Wingtip separation distance is planned at 3.1 meters (10 feet) for TFA. In order to provide flexibility for the various types of TFA that may park on the apron, the length of an F-15 Eagle and the wingspan of an A-10 Warthog (the longest and widest TFA in the U.S. inventory, respectively) have been utilized during planning and programming efforts. Additionally, a Dangerous Cargo Pad with Open Storage for cargo marshalling and staging is required to support STA. Parking aprons and pads will include Exterior Area Lighting. The design aircraft for this pad is the C-5 Galaxy. Aircraft will be able to enter, turn around, and exit under their own power. These facilities will increase maintenance and aircrew accessibility. Required facilities will improve sortie generation and efficiency while heightening airfield presence and improving airfield readiness and safe operations in support of Operation Atlantic Resolve, bolstering the security of our NATO allies and partners in Europe. Hungary is a NATO member state and, as such, has a requirement to host deployed U.S. forces. These facilities will be capable of supporting bilateral and multilateral exercises and training with allies and partners.</p> <p>CURRENT SITUATION: An adequate TFA Parking Apron capable of supporting the F-15 Eagle and A-10 Warthog weapon systems and a dangerous cargo apron to support the C-5 Galaxy are not available at Kecskemét AB. Existing aircraft parking is assigned to, and regularly used for host-nation TFA and NATO commitments. U.S. aircraft can use the existing two aprons subject to host-nation coordination and approval prior to use. These parking aprons are not illuminated. PCC thickness for the active aprons is unknown. Additionally, a Dangerous Cargo Pad with Open Storage for marshalling cargo is not available at Kecskemét AB. Use of the airfield for the movement of dangerous cargo requires the runway be shut down and violation of explosive safety quantity distance (ESQD) arcs, potentially placing personnel and property at risk, and severely degrading sortie generation capability.</p> <p>IMPACT IF NOT PROVIDED: If this project is not provided, an adequate TFA Parking Apron and Dangerous Cargo Pad with Open Storage for cargo staging and</p>			

1. COMPONENT AIR FORCE	FY 2022 MILITARY CONSTRUCTION PROJECT DATA		2. DATE MAY 2021
3. INSTALLATION, SITE AND LOCATION KECSKEMET AIR BASE HUNGARY		4. PROJECT TITLE ERI: CONSTRUCT AIRFIELD UPGRADES	
5. PROGRAM ELEMENT 91211F	6. CATEGORY CODE 113-321	7. PROJECT NUMBER LHKE180003	8. PROJECT COST (\$000) AUTH: 0 APPR: 20,564
<p>marshalling capable of supporting weapon systems such as the F-15 Eagle, A-10 Warthog, and C-5 Galaxy will not be available to the DoD or its allies and partners. Therefore, responsiveness for bilateral and multilateral exercises and training missions would be compromised. This limitation will impede sortie generation and restrict flying schedules, directly limiting theater presence and impairing mission capability and readiness and contingency support to Operation Atlantic Resolve within Europe, Africa, and the Middle East.</p>			
<p>ADDITIONAL: This project meets applicable criteria/scope specified in Air Force Manual 32-1084, Facility Requirements, Bi-SC Directive 85-5 NATO Approved Criteria and Standards for Airfields. Sustainable principles, to include Life Cycle cost-effective practices, will be integrated into the design, development, and construction of the project and will follow the guidance detailed in the AF Sustainable Design and Development Implementing Guidance Memorandum (dated June 2, 2011) in accordance with applicable laws and Executive Orders. The UFC 4-701-01, DoD Pricing Guide, PACES, and RSMeans were used to develop the estimate for this project. An Economic Analysis (EA) was not performed because there is only one method possible to accomplish the objective (IAW AFI 65-501, 1.2.2.2).</p>			
<p>JOINT USE CERTIFICATION: These facilities can be used by other components on an 'as available' basis; however, the scope of the project is based on Air Force requirements. This project will be submitted for NATO pre-financing.</p>			

1. COMPONENT AIR FORCE	FY 2022 MILITARY CONSTRUCTION PROJECT DATA		2. DATE MAY 2021
3. INSTALLATION, SITE AND LOCATION KECSKEMET AIR BASE HUNGARY		4. PROJECT TITLE ERI: CONSTRUCT AIRFIELD UPGRADES	
5. PROGRAM ELEMENT 91211F	6. CATEGORY CODE 113-321	7. PROJECT NUMBER LHKE180003	8. PROJECT COST (\$000) AUTH: 0 APPR: 20,564
12. SUPPLEMENTAL DATA:			
a. Estimated Design Data:			
(1) Status:			
(a) Type of Design			Design-Build
(b) Date Design Started			15-JUN-17
(c) Parametric Cost Estimates Used to develop costs			YES
(d) Percent Complete as of 01 JAN 2021			100%
(e) Date 35% Designed			15-MAR-18
(f) Date Design Complete			30-OCT-18
(g) Energy Study/Life-Cycle analysis was/will be performed			YES
(2) Basis:			
(a) Standard or Definitive Design			YNO
(b) Where Design Was Most Recently Used			N/A
(3) Total Cost (c) = (a) + (b) or (d) + (e)			(\$000)
(a) Production of Plans and Specifications			774
(b) All Other Design Costs			387
(c) Total			1,161
(d) Contract			968
(e) In-house			193
(4) Construction Contract Award			22-SEP
(5) Construction Start			23-APR
(6) Construction Completion			25-APR
b. Equipment associated with this project provided from other appropriations:			
		FISCAL YEAR	
	PROCURING	APPROPRIATED	COST
EQUIPMENT NOMENCLATURE	APPROP	OR REQUESTED	(\$000)
N/A			
c. AUTHORIZATIONS AND APPROPRIATIONS:			
	Authorization (\$000)	Auth of Approp (\$000)	Approp (\$000)
FY2018 Enacted	12,900	12,900	12,900
Reallocated to 10 USC 2808 Projects	-----	-----	(12,900)
Cost Variation	7,664	-----	-----
FY2022 Request	0	20,564	20,564
Total	20,564		20,564

1. COMPONENT AIR FORCE		FY <u>2022</u> MILITARY CONSTRUCTION PROGRAM					2. DATE (YYYYMMDD) MAY 2021				
3. INSTALLATION AND LOCATION KADENA AIR BASE, JAPAN				4. COMMAND PACIFIC AIR FORCES			5. AREA CONSTRUCTION COST INDEX 2.00				
6. PERSONNEL		(1) PERMANENT			(2) STUDENTS			(3) SUPPORTED			(4) TOTAL
		OFFICER	ENLISTED	CIVILIAN	OFFICER	ENLISTED	CIVILIAN	OFFICER	ENLISTED	CIVILIAN	
a. AS OF	30-SEP-20	756	5,704	1,347	0	0	0	2,270	17,821	4,155	32,053
b. END FY		756	5,704	1,347	0	0	0	2,270	17,821	4,155	32,053
7. INVENTORY DATA (\$000)											
a. TOTAL ACREAGE										12,428	
b. INVENTORY TOTAL AS OF 30-SEP-20										14,119,520.00	
c. AUTHORIZATION NOT YET IN INVENTORY										0.00	
d. AUTHORIZATION REQUESTED IN THIS PROGRAM										206,000.00	
e. AUTHORIZATION INCLUDED IN FOLLOWING PROGRAM										0.00	
f. PLANNED IN NEXT THREE PROGRAM YEARS										0.00	
g. REMAINING DEFICIENCY										1,011,580.00	
h. GRAND TOTAL										15,337,100.00	
8. PROJECTS REQUESTED IN THIS PROGRAM											
a. CATEGORY				b. COST (\$000)		c. DESIGN STATUS					
(1) CODE	(2) PROJECT TITLE		(3) SCOPE			(1) START	(2) COMPLETE				
442-758	AIRFIELD DAMAGE REPAIR STORAGE FAC		8,580 SM		38,000	08/19	11/20				
141-185	HELICOPTER RESCUE OPS MAINTENANCE HANGAR		5,503 SM		168,000	08/19	06/21				
422-264	REPLACE MUNITIONS STRUCTURES		2,676 SM		26,100	06/15	09/19				
9. FUTURE PROJECTS											
10. MISSION OR MAJOR FUNCTIONS											
Operating from the largest United States installation in the Asia-Pacific region, the 18th Wing defends United States and Japanese mutual interests by providing a responsive staging and operational air base with integrated, deployable, forward-based air power. Strategy used to employ this mission centers around 93 aircraft comprised of 54 F-15, 15 KC-135, 10 HH-60, 2 E-3, 10 C-130, and 2 RC-135.											
11. OUTSTANDING POLLUTION AND SAFETY DEFICIENCIES											
N/A											

1. COMPONENT AIR FORCE	FY 2022 MILITARY CONSTRUCTION PROJECT DATA			2. DATE MAY 2021
3. INSTALLATION, SITE AND LOCATION KADENA AIR BASE SITE #1 KADENA AIR BASE, JAPAN			4. PROJECT TITLE AIRFIELD DAMAGE REPAIR STORAGE FAC	
5. PROGRAM ELEMENT 91211F	6. CATEGORY CODE 442-758	7. PROJECT NUMBER LXEZ1069456	8. PROJECT COST (\$000) 38,000	
9. COST ESTIMATES				
ITEM	U/M	QUANTITY	UNIT	COST (\$000)
PRIMARY FACILITIES				16,645
WAREHOUSE SUPPLY AND EQUIPMENT BASE	SM	8,580	1,940	(16,645)
SUPPORTING FACILITIES				17,319
SPECIAL FOUNDATIONS	LS			(1,697)
UTILITIES	LS			(1,473)
SITE IMPROVEMENTS	LS			(7,340)
PAVEMENTS	LS			(4,567)
COMMUNICATIONS	LS			(195)
DEMOLITION	SM	56	551	(31)
ENVIRONMENTAL MITIGATION	LS			(353)
ARCHAEOLOGICAL MONITORING	LS			(1,663)
SUBTOTAL				33,964
CONTINGENCY (5.0%)				1,698
TOTAL CONTRACT COST				35,662
SUPERVISION, INSPECTION AND OVERHEAD (6.5%)				2,318
TOTAL REQUEST				37,980
TOTAL REQUEST (ROUNDED)				38,000
10. Description of Proposed Construction: Construct three Airfield Damage Repair storage facilities at three sites on Kadena Air Base. The facilities include a structural steel and cast-in-place concrete frame, perimeter cast-in-place and concrete masonry unit walls, and cast-in-place concrete slab-on-metal deck roof. The project will include supporting facilities such as utilities, pavements, and site improvements to provide a complete and usable facility. The project demolishes Building 3556 (56 SM). Facilities will be designed as permanent construction in accordance with the Department of Defense Unified Facilities Criteria 1-200-01, General Building requirements. This project will comply with Department of Defense Antiterrorism/Force Protection requirements per Unified Facilities Criteria 4-010-01, Department of Defense Minimum Anti-terrorism Standards for Buildings. Air Conditioning: 0 Tons				
11. Requirement: 8,580 SM Adequate: 0 SM Substandard: 56 SM PROJECT: Airfield Damage Repair Storage Facilities REQUIREMENT: Adequately sized and configured Airfield Damage Repair Storage Facilities are required to preposition War Reserve Material construction equipment and materiel to facilitate the rapid repair of airfield pavements during emergencies and contingency situations. Each storage facility will have open areas with minimal structural obstruction for equipment parking				

1. COMPONENT AIR FORCE	FY 2022 MILITARY CONSTRUCTION PROJECT DATA		2. DATE MAY 2021
3. INSTALLATION, SITE AND LOCATION KADENA AIR BASE SITE #1 KADENA AIR BASE, JAPAN		4. PROJECT TITLE AIRFIELD DAMAGE REPAIR STORAGE FAC	
5. PROGRAM ELEMENT 91211F	6. CATEGORY CODE 442-758	7. PROJECT NUMBER LXEZ1069456	8. PROJECT COST (\$000) 38,000

and storage, along with overhead roll-up doors to allow equipment to be moved onto the exterior concrete paving for staging. The facilities will include electrical utilities and lighting, telephone, fire alarm, and a wet pipe fire protection system. This is not a tenant or supported service requirement.

CURRENT SITUATION: The Air Force Civil Engineer Center has mandated the fielding of the new Airfield Damage Repair capability concept at Kadena Air Base. The 18th Civil Engineer Squadron received 338 pieces of heavy construction equipment and 140 sea van containers with consumable materiel to support this initiative. The total value of this fleet of equipment and materials is \$56M. Without adequate indoor storage, this equipment will be partially re-capitalized or fully replaced within 8-12 years due to the harsh weather conditions corroding the equipment. The cost benefit of investing in storage facilities far outweighs fleet re-capitalization and enhances overall ADR program readiness and effectiveness. Furthermore, Kadena Air Base does not have existing facilities to store the equipment and materiel.

IMPACT IF NOT PROVIDED: Without these facilities, \$56M of modernized airfield damage repair equipment will be directly exposed to Okinawa's harsh sub-tropical environment and will rapidly deteriorate to the point of not being mission capable. Not having this equipment jeopardizes 18th Wing's ability to recover the airfield and continue flight operations after an attack. Storage facilities are required to protect equipment & materiel from the effects of the environment. If not provided, the Air Force Civil Engineer Center initiative to field the airfield damage repair concept at Kadena Air Base will be severely hampered and will have an adverse effect on readiness and the base's capability to adequately support the flying mission in the Pacific theater.

ADDITIONAL: This project meets the criteria/scope specified in Air Force Manual 32-1084, Facility Requirements. This design shall conform to criteria established in the Air Force Corporate Facilities Standards, the Installation Facilities Standards, but will not employ a standard facility design because there is no Air Force standard facility design for this project and there is no applicable standard design from Air Force Civil Engineer Center nor U.S. Army Corps of Engineers. A Waiver for Economic Analysis has been approved for this project. This project is eligible for host nation funding; however, the US Forces Command states the project has extremely little chance of being funded in the foreseeable future. Due to the requirement for airfield damage repair equipment to be dispersed, the development of three sites, all requiring special foundations, utilities, access road pavement, archaeological monitoring, and environmental mitigation, is included in this project. This results in supporting facilities yielding a cost greater than the primary facility cost. Sustainable principles, to include life-cycle cost-effective practices, will be integrated into the design, development, and construction of the project in accordance with Unified Facilities Criteria 1-200-02, High Performance and

1. COMPONENT AIR FORCE	FY 2022 MILITARY CONSTRUCTION PROJECT DATA		2. DATE MAY 2021
3. INSTALLATION, SITE AND LOCATION KADENA AIR BASE SITE #1 KADENA AIR BASE, JAPAN		4. PROJECT TITLE AIRFIELD DAMAGE REPAIR STORAGE FAC	
5. PROGRAM ELEMENT 91211F	6. CATEGORY CODE 442-758	7. PROJECT NUMBER LXEZ1069456	8. PROJECT COST (\$000) 38,000
<p>Sustainable Building Requirements. This includes preparation of a life-cycle cost analysis for energy consuming systems, renewable energy generating systems, whenever life-cycle cost effective is selected as the reason any requirement of Unified Facilities Criteria 1-200-02, High Performance and Sustainable Building Requirements is partially compliant or not applicable. Facility is sited in accordance with the Installation Development Plan and is within a compatible land use area. This project does not fall within the 100-year flood plain. This project was included in the Fiscal Year 2021 future-years defense plan in Fiscal Year 2022.</p> <p>18th Civil Engineer Group: COMM 011-81-98-960-1807 718th Civil Engineer Squadron: COMM 011-81-98-960-0718 Airfield Damage Repair Storage Facilities: 8,580 SM = 92,357 Square Feet.</p> <p>FOREIGN CURRENCY: FCF Budget Rate Used: YEN-DOLLAR 106.4531</p> <p>JOINT USE CERTIFICATION: This facility can be used by other components on an "as available" basis; however, the scope of the project is based on Air Force requirements.</p>			

1. COMPONENT AIR FORCE	FY 2022 MILITARY CONSTRUCTION PROJECT DATA		2. DATE MAY 2021
3. INSTALLATION, SITE AND LOCATION KADENA AIR BASE SITE #1 KADENA AIR BASE, JAPAN		4. PROJECT TITLE AIRFIELD DAMAGE REPAIR STORAGE FAC	
5. PROGRAM ELEMENT 91211F	6. CATEGORY CODE 442-758	7. PROJECT NUMBER LXEZ1069456	8. PROJECT COST (\$000) 38,000
12. SUPPLEMENTAL DATA:			
a. Estimated Design Data:			
(1) Status:			
(a) Type of Design	Design-Bid-Build		
(b) Date Design Started	30-AUG-19		
(c) Parametric Cost Estimates Used to develop costs	YES		
(d) Percent Complete as of 01 JAN 2021	100%		
(e) Date 35% Designed	16-JAN-20		
(f) Date Design Complete	30-NOV-20		
(g) Energy Study/Life-Cycle analysis was/will be performed	YES		
(2) Basis:			
(a) Standard or Definitive Design	NO		
(b) Where Design Was Most Recently Used	N/A		
(3) Total Cost (c) = (a) + (b) or (d) + (e)	(\$000)		
(a) Production of Plans and Specifications	1,980		
(b) All Other Design Costs	990		
(c) Total	2,970		
(d) Contract	2,475		
(e) In-house	495		
(4) Construction Contract Award	22-FEB		
(5) Construction Start	22-APR		
(6) Construction Completion	23-NOV		
b. Equipment associated with this project provided from other appropriations: N/A			

1. COMPONENT AIR FORCE	FY 2022 MILITARY CONSTRUCTION PROJECT DATA			2. DATE MAY 2021	
3. INSTALLATION, SITE AND LOCATION KADENA AIR BASE SITE #1 KADENA AIR BASE, JAPAN		4. PROJECT TITLE HELICOPTER RESCUE OPS MAINTENANCE HANGAR			
5. PROGRAM ELEMENT 91211F	6. CATEGORY CODE 141-185	7. PROJECT NUMBER LXEZ1069516	8. PROJECT COST (\$000) 168,000		
9. COST ESTIMATES					
ITEM		U/M	QUANTITY	UNIT	COST (\$000)
PRIMARY FACILITIES					117,669
HELICOPTER RESCUE AND RECOVERY HANGAR (141-185)		SM	5,503	11,235	(61,826)
SQUADRON OPERATIONS (141-753)		SM	3,404	6,061	(20,632)
SHOP, AIRCRAFT MAINTENANCE, ORGANIZATIONAL (211-154)		SM	2,510	6,238	(15,657)
APRON (113-321)		SM	20,088	292	(5,866)
SHOULDER, PAVED (116-642)		SM	4,306	70	(301)
AIRCRAFT WASHRACK (116-672)		SM	1,270	362	(460)
FLIGHT SIMULATOR TRAINING (171-212)		SM	794	12,880	(10,227)
CYBERSECURITY OF FACILITY-RELATED CONTROL SYS		LS			(2,700)
SUPPORTING FACILITIES					32,649
UTILITIES		LS			(4,928)
SITE IMPROVEMENTS		LS			(18,037)
PAVEMENTS		LS			(1,630)
COMMUNICATIONS		LS			(25)
ENVIRONMENTAL & ARCHAEOLOGICAL MITIGATION		LS			(225)
BACKUP GENERATOR		KW	1,000	424	(424)
DEMOLITION		SM	10,483	704	(7,380)
SUBTOTAL					150,318
CONTINGENCY (5.0%)					7,516
TOTAL CONTRACT COST					157,834
SUPERVISION, INSPECTION AND OVERHEAD (6.5%)					10,259
TOTAL REQUEST					168,093
TOTAL REQUEST (ROUNDED)					168,000
EQUIPMENT FROM OTHER APPROPRIATIONS (NON-ADD)					(15,738)
10. Description of Proposed Construction: Construct a Helicopter Rescue Squadron Operations and Helicopter Maintenance Unit Hangar to support rescue missions for Indo-Pacific Command/Pacific Air Forces at Kadena Air Base. The facility is comprised of single-story bays for aircraft maintenance and storage, a two-story facility for administrative spaces and shops, a simulator bay, and cranes for simulator and hangar. The facility will be constructed of cast-in-place reinforced concrete walls with a reinforced concrete floor and roof slab. The roof structure for the hangar bays will consist of a low sloping arched cast-in-place concrete supported by structural steel framing. The roof of the squadron operations and Helicopter Maintenance Unit areas will also be constructed using cast-in-place concrete. The project will include supporting facilities such as utilities, pavements, concrete aircraft parking apron, edge lighting on the taxiway connection, exterior aircraft wash rack, backup generator,					

1. COMPONENT AIR FORCE		FY 2022 MILITARY CONSTRUCTION PROJECT DATA		2. DATE MAY 2021	
3. INSTALLATION, SITE AND LOCATION KADENA AIR BASE SITE #1 KADENA AIR BASE, JAPAN			4. PROJECT TITLE HELICOPTER RESCUE OPS MAINTENANCE HANGAR		
5. PROGRAM ELEMENT 91211F	6. CATEGORY CODE 141-185	7. PROJECT NUMBER LXEZ1069516	8. PROJECT COST (\$000) 168,000		
<p>connection to existing airfield fencing, and site improvements to provide a complete and usable facility. The project demolishes existing facilities to include Building 3534 (10,015 Square Meters), Building 3532 (58 Square Meters), Building 3536 (58 Square Meters), Building 3538 (92 Square Meters), Building 7109 (49 Square Meters), Building 83534 (50 Square Meters), Building 3516 (57 Square Meters), Building 3603 (52 Square Meters) and Building 3604 (52 Square Meters) (Total = 10,483 Square Meters). Facilities will be designed as permanent construction in accordance with the Department of Defense Unified Facilities Criteria 1-200-01, General Building Requirements. This project will comply with Department of Defense antiterrorism/force protection requirements per Unified Facilities Criteria 4-010-01, Department of Defense Minimum Antiterrorism Standards for Buildings. As a mission critical facility, a backup generator is authorized per AFI 32-1062. Air Conditioning: 170 Tons</p>					
<p>11. Requirement: 5,503 SM Adequate: 0 SM Substandard: 10,483 SM PROJECT: Helicopter Rescue Operations Maintenance Hangar</p> <p>REQUIREMENT: An adequately sized and configured Helicopter Rescue Squadron Operations/Helicopter Maintenance Unit Hangar is required for the 33rd Rescue Squadron and 33rd Helicopter Maintenance Unit at Kadena Air Base. This facility will provide area for operations, maintenance, and storage functions required to support the mission. The 33rd Rescue Squadron is assigned ten HH-60G helicopters which will be replaced by the same number of HH-60W helicopters in Fiscal Year 2024. At least one aircraft is expected to be deployed at all times; therefore, this project only provides maintenance and weather storage space for nine aircraft. The Squadron Operations requires administrative, medical, secure areas, aircrew flight equipment, and storage. The 33rd Helicopter Maintenance Unit requires administrative spaces such as a Command Suite, Air Force Engineering Technical Services office, production office, support office, flight supervisor offices, conference space, a ready room, and locker rooms. The 33rd Helicopter Maintenance Unit maintenance spaces include weapons maintenance and storage, avionics storage, tools and parts, and engine shop. The 33rd Rescue Squadron Simulator provides space to house a fixed flight simulator to support the new combat rescue helicopter scheduled for delivery in fiscal year 2024. The flight trainer facility will house the full crew operational flight simulator, computer and audio visual systems, instructor personnel, and other devices necessary to provide realistic flight operations in a simulated environment. The facility will provide space for maintenance, storage, mission planning/brief/de-brief rooms, secure intelligence vault, and administrative support. Site improvements are required and include the demolition of the existing Helicopter Rescue Operations Hangar (Building 3534), along with Building 3532, Building 3536, Building 3538, Building 7109, Building 83534, Building 3516, Building 3603, and Building 3604, to provide space on the site for the new construction of the Helicopter Rescue Squadron Operations/Helicopter Maintenance Unit Hangar. Additionally, the existing aircraft parking apron will be demolished and reconstructed to six HH-60 helicopter exterior parking spaces and a wash rack. Airfield paving is required to support the parking of six aircraft.</p>					

1. COMPONENT AIR FORCE	FY 2022 MILITARY CONSTRUCTION PROJECT DATA			2. DATE MAY 2021
3. INSTALLATION, SITE AND LOCATION KADENA AIR BASE SITE #1 KADENA AIR BASE, JAPAN			4. PROJECT TITLE HELICOPTER RESCUE OPS MAINTENANCE HANGAR	
5. PROGRAM ELEMENT 91211F	6. CATEGORY CODE 141-185	7. PROJECT NUMBER LXEZ1069516	8. PROJECT COST (\$000) 168,000	
<p>Utilities include Heating Ventilation and Air Conditioning system, electrical system, domestic hot and cold water system, sanitary waste and vent system, automatic wet-pipe sprinkler and high-expansion foam fire protection systems, and intrusion detection system.</p>				
<p>Tie-in to existing airfield fencing is required to secure the flight line. Paved asphalt parking will be provided for personal and government vehicles. This is not a tenant or supported service requirement.</p>				
<p>CURRENT SITUATION: Currently, there is approximately \$340 million of United States Air Force aircraft vulnerable to typhoon conditions (45 knot winds) for at least 7 events per year due to a lack of adequate aircraft storage for the severe weather conditions. The lack of storage requires aircraft to be folded and stored in another location during weather events. Each folding/unfolding requires 320 personnel hours, which reduces availability of maintenance personnel for routine aircraft maintenance and related functions during this time. In the existing helicopter rescue hangar, Building 3534, there is inadequate maintenance and storage space, which has led to approximately \$750,000 of damaged supplies, parts and gear per year. Re-procurement of damaged items requires approximately 400 personnel hours per year. Occupancy of Building 3534 is a major safety hazard; there are issues with failing debris, pinch points, crush hazards, and manually operated hangar doors that put 33rd Rescue Squadron and 33rd Helicopter Maintenance Unit personnel at risk regularly. Additionally, there is no adequate operations center, which degrades command and control capabilities for approximately two deployments, five rescues, six exercises and forty sorties per year. The current state of Building 3534 is unable to adequately support the mission of the 33rd Rescue Squadron/33rd Helicopter Maintenance Unit mission. Kadena Air Base does not have personnel recovery and rescue flight trainer facilities or excess space that can be reconfigured to meet flight training and aircraft developmental test requirements. The high Operations Tempo of the 33rd Rescue Squadron make it necessary to have a flight simulator capability to meet in-aircraft mission training requirements and alleviate high utilization rates. The simulator provides a training capability that increases familiarization and proficiency in handling aircraft emergencies that cannot be accomplished in live flight. Additionally it provides critical combat personnel recovery and rescue simulations that cannot be replicated in live flight training or at military training ranges, thereby increasing overall combat effectiveness.</p>				
<p>IMPACT IF NOT PROVIDED: If this project is not provided, aircraft will be vulnerable to typhoon conditions that can significantly damage or remove aircraft from operations, and maintenance personnel will be required to prioritize folding/unfolding aircraft over aircraft maintenance activities. Also, the United States Air Force will continue to be impacted by the cost of loss of equipment and personnel hours due to lack of storage and re-procurement processes.</p>				

1. COMPONENT AIR FORCE	FY 2022 MILITARY CONSTRUCTION PROJECT DATA			2. DATE MAY 2021
3. INSTALLATION, SITE AND LOCATION KADENA AIR BASE SITE #1 KADENA AIR BASE, JAPAN			4. PROJECT TITLE HELICOPTER RESCUE OPS MAINTENANCE HANGAR	
5. PROGRAM ELEMENT 91211F	6. CATEGORY CODE 141-185	7. PROJECT NUMBER LXEZ1069516	8. PROJECT COST (\$000) 168,000	
<p>If this project is not provided, the United States Air Force will assume the risk of safety hazard for personnel occupying Building 3534 and allow degraded command and control of helicopter rescue operations.</p> <p>The current inadequate facilities do not support the helicopter rescue missions that directly support Indo-Pacific Command/Pacific Air Force's theater stability and positioning for contingency objectives.</p> <p>Without the flight simulator space, it will not be possible to conduct current simulator training/new mission testing/flight training for aircrews and associated maintenance personnel of the legacy HH-60 and the new combat rescue helicopter. Aircrew members would have to utilize resources at Contiguous United States bases for required simulation events and this would result in increased temporary duty travel and per diem costs. Current HH-60 pilots would not have access to the simulator device, resulting in increased aircraft utilization rates, and saturated maintenance workloads.</p> <p>ADDITIONAL: This project meets the criteria/scope specified in Air Force Manual 32-1084, Facility Requirements. This design shall conform to criteria established in the Air Force Corporate Facilities Standards, the Installation Facilities Standards, but will not employ a standard facility design because there is no Air Force standard facility design for this project and there is no applicable standard design from the Air Force Civil Engineer Center nor the U.S. Army Corps of Engineers. All reasonable alternatives were considered during the development of this project to include status quo, add/alter, and new construction. An approved Economic Analysis determined new construction as the only viable option to meet this requirement. Sustainable principles, to include life-cycle cost-effective practices, will be integrated into the design, development, and construction of the project in accordance with Unified Facility Criteria 1-200-02, High Performance and Sustainable Building Requirements. This includes preparation of a life-cycle cost analysis for energy consuming systems, renewable energy generating systems, whenever life-cycle cost-effective is selected as the reason any requirement of Unified Facility Criteria 1-200-02, High Performance and Sustainable Building Requirements is partially compliant or not applicable. This project is eligible for host nation funding; however, the United States Forces Command states the project has extremely little chance of being funded by the host nation in the foreseeable future. Supporting Facility costs are greater than 25% of the Primary Facility costs due to extensive site improvements (i.e., excavation, cut, and fill) and removal/reconstruction of existing airfield pavements. This project does not fall within or partially within a 100-year flood plain. This project was included in the 2021 future years' defense plan in a future fiscal year. Facility is sited in accordance with the Installation Development Plan and is within a compatible land use area.</p> <p>18 Civil Engineer Group: 011-81-98-960-1807 718 Civil Engineer Squadron: 011-81-98-960-0718</p>				

1. COMPONENT AIR FORCE	FY 2022 MILITARY CONSTRUCTION PROJECT DATA			2. DATE MAY 2021
3. INSTALLATION, SITE AND LOCATION KADENA AIR BASE SITE #1 KADENA AIR BASE, JAPAN			4. PROJECT TITLE HELICOPTER RESCUE OPS MAINTENANCE HANGAR	
5. PROGRAM ELEMENT 91211F	6. CATEGORY CODE 141-185	7. PROJECT NUMBER LXEZ1069516	8. PROJECT COST (\$000) 168,000	
<p>FOREIGN CURRENCY BUDGET RATE USED: YEN-DOLLAR 106.4531</p> <p>HANGAR MAINTENANCE (141-185): 5,503 SM = 59,234 Square Feet.</p> <p>SQUADRON OPERATIONS (141-753): 3,404 SM = 36,640 Square Feet.</p> <p>HELICOPTER MAINTENANCE SHOP (211-154): 2,510 SM = 27,017 Square Feet.</p> <p>APRON (113-321): 20,088 SM = 216,225 Square Feet.</p> <p>SHOULDER, PAVED (116-642): 4,306 SM = 46,349 Square Feet.</p> <p>AIRCRAFT WASHRACK (116-672): 1,270 SM = 13,670 Square Feet.</p> <p>FLIGHT SIMULATOR TRAINING (171-212): 794 SM = 8,547 Square Feet.</p> <p>DEMOLITION: 10,483 SM = 112,838 Square Feet.</p> <p>JOINT USE CERTIFICATION: This facility can be used by other components on an "as available" basis; however, the scope of the project is based on Air Force requirements.</p>				

1. COMPONENT AIR FORCE	FY 2022 MILITARY CONSTRUCTION PROJECT DATA			2. DATE MAY 2021
3. INSTALLATION, SITE AND LOCATION KADENA AIR BASE SITE #1 KADENA AIR BASE, JAPAN		4. PROJECT TITLE HELICOPTER RESCUE OPS MAINTENANCE HANGAR		
5. PROGRAM ELEMENT 91211F	6. CATEGORY CODE 141-185	7. PROJECT NUMBER LXEZ1069516	8. PROJECT COST (\$000) 168,000	
12. SUPPLEMENTAL DATA:				
a. Estimated Design Data:				
(1) Status:				
(a) Type of Design	Design-Bid-Build			
(b) Date Design Started	06-AUG-19			
(c) Parametric Cost Estimates Used to develop costs	YES			
(d) Percent Complete as of 01 JAN 2021	95%			
(e) Date 35% Designed	20-FEB-20			
(f) Date Design Complete	12-JUN-21			
(g) Energy Study/Life-Cycle analysis was/will be performed	YES			
(2) Basis:				
(a) Standard or Definitive Design	NO			
(b) Where Design Was Most Recently Used	N/A			
(3) Total Cost (c) = (a) + (b) or (d) + (e)	(\$000)			
(a) Production of Plans and Specifications	9,780			
(b) All Other Design Costs	4,890			
(c) Total	14,670			
(d) Contract	12,225			
(e) In-house	2,445			
(4) Construction Contract Award	22-MAR			
(5) Construction Start	22-JUN			
(6) Construction Completion	25-MAY			
b. Equipment associated with this project provided from other appropriations:				
		FISCAL YEAR		
		APPROPRIATED	COST	
		OR REQUESTED	(\$000)	
EQUIPMENT NOMENCLATURE	FURNITURE	PROCURING	APPROP	
FIXTURES & EQUIP		3400	Future Request	35
COMMUNICATIONS EQUIPMENT/SIMULATOR		3080	Future Request	15,703

Project: Helicopter Rescue Ops Maintenance Hangar, Kadena AB, Japan (Current Authorization = \$0)

Project Spending Plan
 As of: 4-May-21
 All Cost in thousands (\$000)

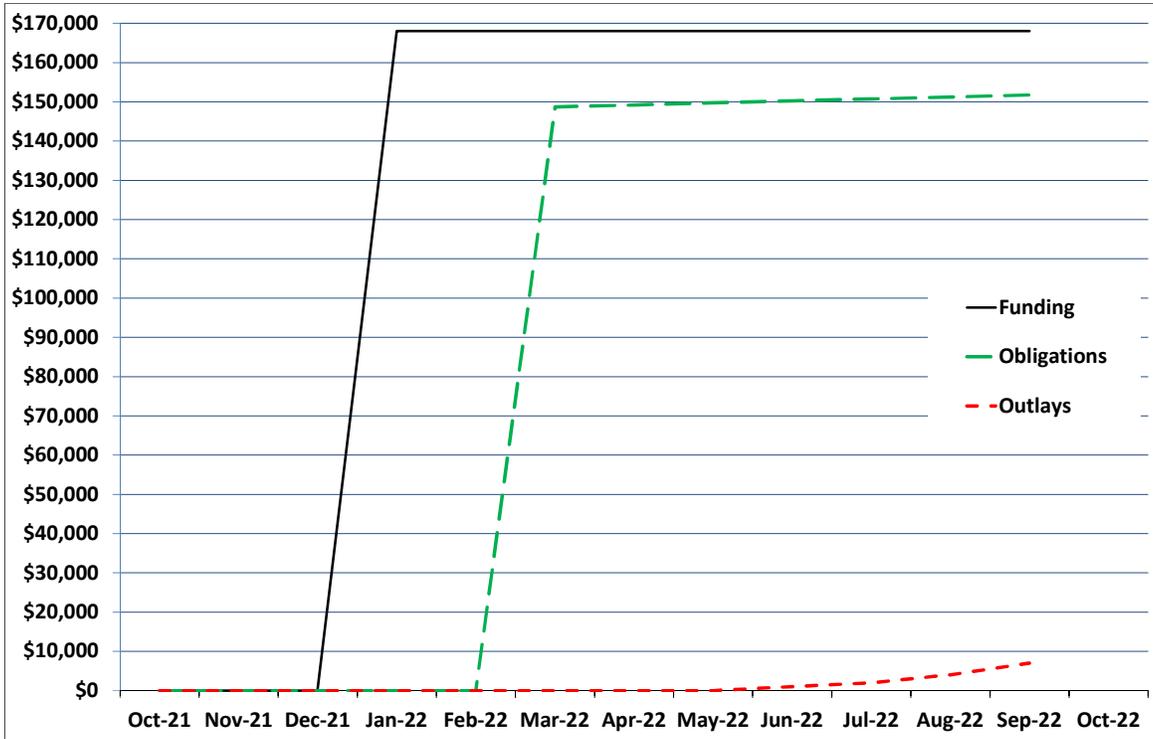
Chart Begin	FUNDING (note 1)		OBLIGATION (note 2)		OUTLAYS (note 3)	
Oct-21	Enacted	Cumulative	Obligated	Cumulative	Monthly	Cumulative
Oct-21	-	-	-	-	-	-
Nov-21	-	-	-	-	-	-
Dec-21	-	-	-	-	-	-
Jan-22	168,000	168,000	-	-	-	-
Feb-22	-	168,000	-	-	-	-
Mar-22	-	168,000	148,696	148,696	-	-
Apr-22	-	168,000	508	149,204	-	-
May-22	-	168,000	508	149,712	-	-
Jun-22	-	168,000	508	150,220	1,000	1,000
Jul-22	-	168,000	508	150,728	1,000	2,000
Aug-22	-	168,000	508	151,236	2,000	4,000
Sep-22	-	168,000	508	151,744	3,000	7,000

Note 1: Assumes initial appropriation is enacted by Congress January of the program year.

Note 2: Assumes funds are available to the contracting officer for the initial obligation no earlier than February of the program year to accommodate the funding process.

Note 3: Assumes contract award date of Mar 2022, Contract completion: May 2025, Duration 36 months.

Helicopter Rescue Ops Maintenance Hangar, Kadena AB, Japan (Current Authorization = \$0)



1. COMPONENT AIR FORCE	FY 2022 MILITARY CONSTRUCTION PROJECT DATA (computer generated)			2. DATE MAY 2021	
3. INSTALLATION, SITE AND LOCATION KADENA AIR BASE KADENA AMMO STORAGE ANNEX SITE # 1 JAPAN			4. PROJECT TITLE REPLACE MUNITIONS STRUCTURES		
5. PROGRAM ELEMENT 91211F	6. CATEGORY CODE 422-264	7. PROJECT NUMBER LXFB123876	8. PROJECT COST (\$000) Auth: 0 Appr: 26,100		
9. COST ESTIMATES					
ITEM		U/M	QUANTITY	UNIT	COST (\$000)
PRIMARY FACILITIES					11,884
STORAGE IGLOO (422-264)		SM	2,676	3,559	(9,524)
ABOVEGROUND STORAGE (422-258)		SM	841	2,529	(2,127)
SUSTAINABILITY AND ENERGY MEASURES		LS			(233)
SUPPORTING FACILITIES					11,444
UTILITIES		LS			(4,903)
PAVEMENTS		LS			(2,288)
DEMOLITION		SM	3,915	388	(1,519)
SITE PREPARATION		LS			(2,125)
FORCE PROTECTION		LS			(609)
SUBTOTAL					23,328
CONTINGENCY (5.0%)					1,166
TOTAL CONTRACT COST					24,494
SUPERVISION, INSPECTION AND OVERHEAD (6.5%)					1,592
TOTAL REQUEST					26,086
TOTAL REQUEST (ROUNDED)					26,100
10. Description of Proposed Construction: This project will demolish 14 earth covered munitions storage igloos and 1 above ground magazine to be replaced by 15 earth covered munitions storage igloos and 1 above ground magazine to accommodate the mission of the facility. In addition, local materials and construction techniques shall be used where cost effective. The facility must also be able to withstand wind loads and seismic effects as prescribed in applicable codes and design guides. This project includes demolition of munitions storage structures to include testing and abatement of asbestos and/or lead base paint materials. Facilities will be designed as permanent construction in accordance with the Department of Defense Unified Facilities Criteria 1-200-01, General Building Requirements. This project will comply with Department of Defense Antiterrorism/Force Protection requirements per Unified Facilities Criteria 4-010-01, Department of Defense Minimum Anti-terrorism Standards for Buildings.					
11. Requirement: 3517 SM Adequate: 0 SM Substandard: 3885 SM PROJECT: Replace Munitions structures REQUIREMENT: This project is part of a multi-phased effort to replace the munitions storage structures facilities at Kadena Air Base. Work to be included in this effort: For existing Igloos/Earth Covered Magazines, demolish existing facility and replace with 7-Bar Hayman Earth Covered Magazines featuring large sliding doors to support current and future munitions assets and their handling equipment. For Above Ground Magazines: Demolish existing facility and replace with Above Ground Magazine. Features to include drive-in-access, from ground level, to accommodate a 22k fork lift and doors no less than 34ft wide by 20 feet high. All facilities require 2-level Intrusion					

1. COMPONENT AIR FORCE	FY 2022 MILITARY CONSTRUCTION PROJECT DATA (computer generated)		2. DATE MAY 2021
3. INSTALLATION, SITE AND LOCATION KADENA AIR BASE KADENA AMMO STORAGE ANNEX SITE # 1 JAPAN		4. PROJECT TITLE REPLACE MUNITIONS STRUCTURES	
5. PROGRAM ELEMENT 91211F	6. CATEGORY CODE 422-264	7. PROJECT NUMBER LXFB123876	8. PROJECT COST (\$000) Auth: 0 Appr: 26,100
<p>Detection System, steel bars at opening of 96 square inches or greater, and high security hasps in accordance with Air Force Instruction 31-101. Projects should include testing and abatement of asbestos containing material and lead based paint. The Hayman Earth Covered Magazine meets this requirement.</p> <p>CURRENT SITUATION: Kadena Air Base's 18th Munitions Squadron's (18 MUNS) storage area has approximately 406 facilities, 105 miles of roadway, 9 miles of Kadena Air Base perimeter fence line, and 5,940 acres. 18 MUNS controls a stock pile of over 2,909,774.6 pounds, Net Explosive Weight, worth \$885,963,044. The 18 MUNS is responsible for the largest Munitions Storage Area in the Air Force. The 18th Munitions Squadron's mission is to provide conventional munitions maintenance, out-load ammo by air and/or sea, and support units for training and contingencies to sustain Indo-Pacific Command and 18th Wing. These structures were built with a service life of 50 years and were constructed between 1952 and 1965. During the construction of these facilities, all concrete was procured from local manufacturers on Okinawa. This concrete is made from limestone which is mined off the coast of Okinawa and contains salt, and with the heavy rain, and extremely humid climate, it causes expansion/stress and rapid oxidization of the rebar throughout the structures. This condition is the cause of the increased rate of corrosion. All 18 MUNS structures are painted on a reoccurring basis to slow corrosion. All preventative maintenance actions/materials have been utilized to their maximum extent. Due to the corrosion of the blast doors, uncontrollable concrete ceiling spalling, the age of the facilities, and the lack of features necessary to safely secure and store ammunition a complete infrastructure upgrade is required.</p> <p>IMPACT IF NOT PROVIDED: Without these replacement earth covered igloos and their associated access roads and load/unload pads Kadena Air Base's ability to accomplish its primary mission will be significantly reduced. Using the smaller blast doors imposes a safety risk of storing larger munitions in the older igloos. Continued use will place personnel at a significant safety risk. These facilities are currently used as either inert storage, or have been rendered unusable, as the condition of the structure is unsafe due to cement ceiling spalls unexpectedly falling, causing a constant potential of damage to munitions and danger to personnel. Also, there are several deviations currently in place with 18th Security Forces due to numerous violations of facility security requirements. in accordance with Air Force Instruction 31-101, requirements not being met include: exterior building and door lighting for Category I & II munitions, installation of Intrusion Detection System for Category I & II storage structures, and structure windows/other openings must be sealed with material comparable to the adjacent walls. This project will present new facilities in compliance with aforementioned standards that will allow movement of munitions from deficient buildings. The lack of available facilities to accommodate efficient storage, handling, and transport of a munitions stockpile, that is not only growing in diversity but in physical size as well, greatly degrades our ability to support 18 Wing Operational Plans and contingency operations.</p>			

1. COMPONENT AIR FORCE	FY 2022 MILITARY CONSTRUCTION PROJECT DATA (computer generated)		2. DATE MAY 2021
3. INSTALLATION, SITE AND LOCATION KADENA AIR BASE KADENA AMMO STORAGE ANNEX SITE # 1 JAPAN		4. PROJECT TITLE REPLACE MUNITIONS STRUCTURES	
5. PROGRAM ELEMENT 91211F	6. CATEGORY CODE 422-264	7. PROJECT NUMBER LXFB123876	8. PROJECT COST (\$000) Auth: 0 Appr: 26,100
<p>Upgrade of infrastructure will afford 18 MUNS with new capability and flexibility to disperse TARRP UTCs and future mobility related munitions assets. The proposed locations of these facilities will allow more efficient utilization and consolidation of interior and geographic storage space.</p> <p>ADDITIONAL: This design shall conform to criteria established in the Air Force Corporate Facilities Standards, the Installation Facilities Standards, and shall employ the standard facility design for Explosive Storage Facilities as approved by the Department of Defense Explosive Safety Board. A Waiver to an Economic Analysis has been approved for this project. Sustainable principles, to include life-cycle cost-effective practices, will be integrated into the design, development, and construction of the project in accordance with Unified Facilities Criteria 1-200-02, High Performance and Sustainable Building Requirements. This includes preparation of a life-cycle cost analysis for energy consuming systems, renewable energy generating systems, whenever life-cycle cost effective is selected as the reason any requirement of Unified Facilities Criteria 1-200-02, High Performance and Sustainable Building Requirements is partially compliant or not applicable. This project does not fall within or partly within the 100-year flood plain. Facility is sited in accordance with the Installation Development Plan and is within a compatible land use area. The supporting costs for this project exceed 25% of the cost of the Primary Facilities due to the distance (in excess of 1.5 miles) necessary to run the utilities and the large associated pavements. This project is eligible for host nation funding; however the US Forces Command of Japan states the project has extremely little chance of being funded in the foreseeable future. This project was appropriated in the Fiscal Year 2017 future years' defense plan but was deferred due to USC 2808 legislation.</p> <p>Base Civil Engineer: 011-81-6117-34-1807.</p> <p>Storage Igloos: 2,676 Square Meters = 28,793 Square Feet.</p> <p>Above Ground Storage: 841 Square Meters = 9049 Square Feet.</p> <p>FOREIGN CURRENCY: FCF Budget Rate Used: YEN-DOLLAR 106.4531</p> <p>JOINT USE CERTIFICATION: This facility can be used by other components on an "as available" basis; however, the scope of the project is based on Air Force requirements.</p>			

1. COMPONENT AIR FORCE	FY 2022 MILITARY CONSTRUCTION PROJECT DATA (computer generated)		2. DATE MAY 2021
3. INSTALLATION AND LOCATION KADENA AIR BASE KADENA AMMO STORAGE ANNEX SITE # 1 JAPAN		4. PROJECT TITLE REPLACE MUNITIONS STRUCTURES	
5. PROGRAM ELEMENT 91211F	6. CATEGORY CODE 422-264	7. PROJECT NUMBER LXFB123876	8. PROJECT COST (\$000) Auth: 0 Appr: 26,100
12. SUPPLEMENTAL DATA:			
a. Estimated Design Data:			
(1) Status:			
(a) Type of Design	Design-Bid-Build		
(b) Date Design Started	15 JUN 15		
(c) Parametric Cost Estimates Used to develop costs	YES		
(d) Percent Complete as of 01 JAN 2021	100%		
(e) Date 35% Designed	31 MAR 16		
(f) Date Design Complete	30 SEP 19		
(g) Energy Study/Life-Cycle analysis was/will be performed	YES		
(2) Basis:			
(a) Standard or Definitive Design	YES		
(b) Where Design Was Most Recently Used	Andersen Air Force Base		
(3) Total Cost (c) = (a) + (b) or (d) + (e)	(\$000)		
(a) Production of Plans and Specifications	1,500		
(b) All Other Design Costs	750		
(c) Total	2,250		
(d) Contract	1,875		
(e) In-house	375		
(4) Construction Contract Award	22 FEB		
(5) Construction Start	22 APR		
(6) Construction Completion	23 OCT		
b. Equipment associated with this project provided from other appropriations: N/A			
c. Authorization and Appropriation Summary:			
	Authorization (\$000)	Auth of Approp (\$000)	Approp (\$000)
FY2017 Enacted	19,815	19,815	19,815
Reallocated to 10 USC 2808 Projects	----	----	(19,815)
Cost Variation	6,285	----	----
FY2022 Request	0	26,100	26,100
Total	26,100		26,100

1. COMPONENT AIR FORCE		FY 2022 MILITARY CONSTRUCTION PROGRAM					2. DATE (YYYYMMDD) MAY 2021				
3. INSTALLATION AND LOCATION MISAWA AIR BASE, JAPAN				4. COMMAND PACIFIC AIR FORCES			5. AREA CONSTRUCTION COST INDEX 2.26				
6. PERSONNEL		(1) PERMANENT			(2) STUDENTS			(3) SUPPORTED			(4) TOTAL
		OFFICER	ENLISTED	CIVILIAN	OFFICER	ENLISTED	CIVILIAN	OFFICER	ENLISTED	CIVILIAN	
a. AS OF	30-SEP-20	268	2,452	983	0	0	0	148	1,199	150	5,200
b. END FY		269	2,452	984	0	0	0	148	1,199	149	5,201
7. INVENTORY DATA (\$000)											
a. TOTAL ACREAGE								5,753			
b. INVENTORY TOTAL AS OF 30-SEP-20								7,049,468.00			
c. AUTHORIZATION NOT YET IN INVENTORY								0.00			
d. AUTHORIZATION REQUESTED IN THIS PROGRAM								25,000.00			
e. AUTHORIZATION INCLUDED IN FOLLOWING PROGRAM								0.00			
f. PLANNED IN NEXT THREE PROGRAM YEARS								0.00			
g. REMAINING DEFICIENCY								432,500.00			
h. GRAND TOTAL								7,506,968.00			
8. PROJECTS REQUESTED IN THIS PROGRAM											
a. CATEGORY			(3) SCOPE			b. COST (\$000)		c. DESIGN STATUS			
(1) CODE	(2) PROJECT TITLE							(1) START		(2) COMPLETE	
442-758	AIRFIELD DAMAGE REPAIR FACILITY		2,640 SM			25,000	05/19		12/20		
9. FUTURE PROJECTS											
10. MISSION OR MAJOR FUNCTIONS											
<p>The mission of the 35th Fighter Wing is to provide worldwide deployable forces, protect United States interests in the Pacific and defend Japan with sustained forward presence and focused mission support. The wing operates and maintains two squadrons of F-16 (C and D models) Block 50 Fighting Falcons. The pilots of the 13th and 14th Fighter Squadrons conduct daily flight training including air-to-air tactics over water and air-to-ground weapons delivery at Draughon Range. The 35th Fighter Wing is the Air Force's premier Wild Weasel organization and specializes in the suppression and destruction of enemy air defenses including surface-to-air-missile systems. In addition to daily air combat training, the 35th Fighter Wing holds quarterly operational readiness exercises, which keep Misawa Airmen ready to execute their mission at home or abroad. The wing maintains readiness with participation in Pacific Air Forces sponsored exercises like RED FLAG-Alaska and DISTANT FRONTIER and participates in joint and bilateral exercises such as COPE NORTH and KEEN SWORD to maintain combat readiness of United States and allied forces.</p>											
11. OUTSTANDING POLLUTION AND SAFETY DEFICIENCIES											
N/A											

1. Component AIR FORCE	FY 2022 MILITARY CONSTRUCTION PROJECT DATA			2. Date MAY 2021	
3. Installation and Location: MISAWA AIR BASE, JAPAN			4. Project Title AIRFIELD DAMAGE REPAIR FACILITY		
5. Program Element 91211F	6. Category Code 442-758	7. Project Number QKKA1074664	8. Project Cost (\$000) 25,000		
9. COST ESTIMATES					
Item		U/M	Quantity	Unit Cost	Cost (\$000)
PRIMARY FACILITIES					16,959
WAREHOUSE SUPPLY AND EQUIPMENT BASE		SM	2,640	6,424	(16,959)
SUPPORTING FACILITIES					5,201
UTILITIES		LS	1	-	(1,399)
SITE IMPROVEMENTS		LS	1	-	(1,521)
PAVEMENTS		LS	1	-	(1,825)
COMMUNICATIONS		LS	1	-	(51)
ENVIRONMENTAL/ARCHAEOLOGICAL RESPONSE		LS	1	-	(405)
SUBTOTAL					22,160
CONTINGENCY (5.0%)					1,108
TOTAL CONTRACT COST					23,268
SUPERVISION, INSPECTION, & OVERHEAD (6.5%)					1,512
TOTAL REQUEST					24,780
TOTAL REQUEST (ROUNDED)					25,000
10. Description of Proposed Construction					
<p>Construct Airfield Damage Repair material/equipment storage facility utilizing conventional design and construction methods to accommodate the Civil Engineer mission of airfield damage repair by housing Airfield damage repair assets. The facility includes a structural steel frame with metal panel siding on a concrete base. The roofing is standing seam metal on metal deck with steel joists. The project will include supporting facilities such as utilities, pavements, site improvements and canopies to provide a complete and usable facility. Environmental and archaeological resource management and mitigation requirements include surveys, monitoring, and potential response actions to mitigate damage. Facility will be designed as permanent construction in accordance with the Department of Defense Unified Facilities Criteria 1-200-01, General Building Requirements and Unified Facilities Criteria 1-200-02, High Performance Sustainable Building Requirements. This project will comply with Department of Defense antiterrorism/force protection requirements per Unified Facility Criteria 4-010-01, Department of Defense Minimum Antiterrorism Standards for Buildings.</p> <p>Air Conditioning: 0 tons</p>					
11. Requirement: 2,640 SM Adequate: 0 SM Substandard: 0 SM					
PROJECT: Airfield Damage Repair Facility					
REQUIREMENT:					
<p>Misawa has received three Airfield Damage Repair Kits as part of the Air Force Civil Engineer Center's new airfield contingency repair method, enabling the 35th Civil Engineer Squadron to repair airfield damage after an attack using rapid setting concrete. Adequately sized and configured Airfield Damage Repair Storage Facilities are required to pre-position airfield damage repair equipment and materials to facilitate the rapid repair of airfield pavements during emergencies and contingency situations. The airfield damage repair storage facility will be constructed to allow for ease of movement for equipment parking and storage (i.e. an open area with minimal</p>					

1. Component AIR FORCE	FY 2022 MILITARY CONSTRUCTION PROJECT DATA			2. Date MAY 2021
3. Installation and Location: MISAWA AIR BASE, JAPAN		4. Project Title AIRFIELD DAMAGE REPAIR FACILITY		
5. Program Element 91211F	6. Category Code 442-758	7. Project Number QKKA1074664	8. Project Cost (\$000) 25,000	
<p>structural obstructions), along with vertical lift fabric hangar-type doors and overhead roll-up doors to allow equipment to be moved onto the exterior concrete paving for staging. The facility will include electrical utilities and lighting, telephone line (not connected to the facility), fire alarm, and a dry pipe fire protection system. This is not a tenant or supported service requirement.</p> <p>CURRENT SITUATION:</p> <p>The Air Force Civil Engineer Center has mandated the fielding of the new Airfield Damage Repair capability concept at Misawa Air Base. The 35th Civil Engineer Squadron has received approximately 146 pieces of heavy construction equipment and 27 sea van containers with consumable materials to support this initiative. The total value of this fleet of equipment and materials exceeds \$12M. Without adequate indoor storage, partial re-capitalization or full replacement will be required within 8-12 years due to the harsh weather conditions/corrosion of the equipment. The cost benefit of investing in storage facilities far outweighs fleet re-capitalization and enhances overall airfield damage repair program readiness and effectiveness. There is not enough vacant warehouse space at Misawa Air Base to store the full kit requirement. Airfield Damage Repair asset storage is currently an open air concrete pad that exposes all equipment and materials to a corrosive environment.</p> <p>IMPACT IF NOT PROVIDED:</p> <p>Without this facility, millions of dollars of modernized Airfield Damage Repair equipment will be directly exposed to environmental elements causing premature corrosion and rapid deterioration to the point of not being mission capable. If equipment and materials are not in optimal working condition due to environmental effects, expedient repair of Misawa's one runway, taxiways and aprons is not possible. Consequently, the 35th Fighter Wing mission will be halted due to the 35th Civil Engineer Squadron's inability to repair the airfield in a timely manner, and the base will not be able to support the flying mission in the Pacific theater.</p> <p>ADDITIONAL:</p> <p>This project meets the criteria/scope specified in Air Force Manual 32-1084, Facility Requirements. This design shall conform to criteria established in the Air Force Corporate Facilities Standards, the Installation Facilities Standards, but will not employ a standard facility design because there is no Air Force standard facility design for this project and there is no applicable standard design from Air Force Civil Engineer Center nor the U.S. Army Corps of Engineers. The cost estimate was based on Parametric Cost Estimating System and is in line with the Department of Defense Facilities Pricing Guide, Unified Facility Criteria 3-701-01. A Waiver for an Economic Analysis has been approved for this project. Due to the requirement for airfield damage repair equipment needing extensive pavement surrounding the facility, the supporting facilities yield a cost greater than 25% of the primary facility cost. Sustainable principles, to include life-cycle cost-effective practices, will be integrated into the design, development, and construction of the project in accordance with Unified Facility Criteria 1-200-02, High Performance Sustainable Building Requirements. This includes preparation of a life-cycle cost analysis for energy consuming systems, renewable energy generating systems, whenever life-cycle cost effective is selected as the reason any requirement of Unified Facility Criteria 1-200-02, High Performance Sustainable Building Requirements is partially compliant or not applicable. Facility is sited in accordance with the Installation Development Plan and is within a compatible land use area. This project does not fall within or partly within the 100-year flood plain. This project was included in the Fiscal Year 2021 future-years defense plan in Fiscal Year 2022.</p>				

1. Component AIR FORCE	FY 2022 MILITARY CONSTRUCTION PROJECT DATA			2. Date MAY 2021
3. Installation and Location: MISAWA AIR BASE, JAPAN			4. Project Title AIRFIELD DAMAGE REPAIR FACILITY	
5. Program Element 91211F	6. Category Code 442-758	7. Project Number QKKA1074664	8. Project Cost (\$000) 25,000	
<p>This project is eligible for host nation funding; however, the United States Forces Japan (USEJ) Command states the project has extremely little chance of being funded in the fore-seeable future.</p> <p>35th Fighter Wing Base Civil Engineer: (011) 81-3117-77-3089 / 315-226-3089.</p> <p>Airfield Damage Repair Storage Facilities (442-758): 2,640 SM = 28,417 Square Feet</p> <p>FOREIGN CURRENCY: Foreign Currency Fluctuations Budget Rate Used: YEN-DOLLAR 106.4531</p> <p>JOINT USE CERTIFICATION:</p> <p>This facility can be used by other components on an "as available" basis; however, the scope of the project is based on Air Force requirements.</p>				

1. Component AIR FORCE	FY 2022 MILITARY CONSTRUCTION PROJECT DATA			2. Date MAY 2021																												
3. Installation and Location: MISAWA AIR BASE, JAPAN			4. Project Title AIRFIELD DAMAGE REPAIR FACILITY																													
5. Program Element 91211F	6. Category Code 442-758	7. Project Number QKKA1074664	8. Project Cost (\$000) 25,000																													
<p>12. Supplemental Data:</p> <p>A. Estimated Design Data:</p> <p>(1) Status:</p> <table> <tr> <td>(a) Type of Design</td> <td>Design-Bid-Build</td> </tr> <tr> <td>(b) Date Design Started</td> <td>25-MAY-19</td> </tr> <tr> <td>(c) Parametric Cost Estimates used to develop costs</td> <td>YES</td> </tr> <tr> <td>(d) Percent Complete as of 01 JAN 2021</td> <td>100%</td> </tr> <tr> <td>(e) Date 35% Designed</td> <td>17-NOV-19</td> </tr> <tr> <td>(f) Date Design Complete</td> <td>16-DEC-20</td> </tr> <tr> <td>(g) Energy Study/ Life-Cycle analysis was/will be performed</td> <td>YES</td> </tr> </table> <p>(2) Basis:</p> <table> <tr> <td>(a) Standard or Definitive Design -</td> <td>NO</td> </tr> <tr> <td>(b) Where Design Was Most Recently used -</td> <td>N/A</td> </tr> </table> <p>(3) Total Cost (c) = (a) + (b) or (d) + (e) : (\$000)</p> <table> <tr> <td>(a) Production of Plans and Specifications</td> <td>1,380</td> </tr> <tr> <td>(b) All Other Design Costs</td> <td>690</td> </tr> <tr> <td>(c) Total</td> <td>2,070</td> </tr> <tr> <td>(d) Contract</td> <td>1,725</td> </tr> <tr> <td>(e) In-House</td> <td>345</td> </tr> </table> <p>(4) Construction Contract Award 22-FEB (5) Construction Start 22-APR (6) Construction Completion 23-DEC</p> <p>B. Equipment associated with this project that will be provided from other appropriations: N/A</p>					(a) Type of Design	Design-Bid-Build	(b) Date Design Started	25-MAY-19	(c) Parametric Cost Estimates used to develop costs	YES	(d) Percent Complete as of 01 JAN 2021	100%	(e) Date 35% Designed	17-NOV-19	(f) Date Design Complete	16-DEC-20	(g) Energy Study/ Life-Cycle analysis was/will be performed	YES	(a) Standard or Definitive Design -	NO	(b) Where Design Was Most Recently used -	N/A	(a) Production of Plans and Specifications	1,380	(b) All Other Design Costs	690	(c) Total	2,070	(d) Contract	1,725	(e) In-House	345
(a) Type of Design	Design-Bid-Build																															
(b) Date Design Started	25-MAY-19																															
(c) Parametric Cost Estimates used to develop costs	YES																															
(d) Percent Complete as of 01 JAN 2021	100%																															
(e) Date 35% Designed	17-NOV-19																															
(f) Date Design Complete	16-DEC-20																															
(g) Energy Study/ Life-Cycle analysis was/will be performed	YES																															
(a) Standard or Definitive Design -	NO																															
(b) Where Design Was Most Recently used -	N/A																															
(a) Production of Plans and Specifications	1,380																															
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(c) Total	2,070																															
(d) Contract	1,725																															
(e) In-House	345																															

1. COMPONENT AIR FORCE		FY <u>2022</u> MILITARY CONSTRUCTION PROGRAM					2. DATE (YYYYMMDD) MAY 2021				
3. INSTALLATION AND LOCATION YOKOTA AIR BASE, JAPAN				4. COMMAND PACIFIC AIR FORCES			5. AREA CONSTRUCTION COST INDEX 2.11				
6. PERSONNEL		(1) PERMANENT			(2) STUDENTS			(3) SUPPORTED			(4) TOTAL
		OFFICER	ENLISTED	CIVILIAN	OFFICER	ENLISTED	CIVILIAN	OFFICER	ENLISTED	CIVILIAN	
a. AS OF 30-SEP-20		455	2,762	1,557	0	0	0	0	0	0	4,774
b. END FY		461	2,810	1,562	0	0	0	0	0	0	4,833
7. INVENTORY DATA (\$000)											
a. TOTAL ACREAGE										3,954	
b. INVENTORY TOTAL AS OF 30-SEP-20										6,015,733.00	
c. AUTHORIZATION NOT YET IN INVENTORY										44,420.00	
d. AUTHORIZATION REQUESTED IN THIS PROGRAM										0.00	
e. AUTHORIZATION INCLUDED IN FOLLOWING PROGRAM										0.00	
f. PLANNED IN NEXT THREE PROGRAM YEARS										0.00	
g. REMAINING DEFICIENCY										423,600.00	
h. GRAND TOTAL										6,483,753.00	
8. PROJECTS REQUESTED IN THIS PROGRAM											
a. CATEGORY				b. COST (\$000)		c. DESIGN STATUS					
(1) CODE	(2) PROJECT TITLE		(3) SCOPE			(1) START	(2) COMPLETE				
171-475	CONSTRUCT CATM FACILITY		1,913 SM		25,000	06/16	03/18				
211-159	C-130J CORROSION CONTROL HANGAR		4,226 SM		67,000	06/15	09/16				
9. FUTURE PROJECTS											
10. MISSION OR MAJOR FUNCTIONS											
Yokota Air Base is home of the 374th Airlift Wing which includes the 36th Airlift Squadron, operating the C-130J; the 459th Airlift Squadron, operating the UH-1N and C-12J; and totaling 20 aircraft. Yokota Air Base in a strategic location that provides a central hub for western pacific contingency, peacetime, combat, humanitarian assistance missions, and peacetime airlift operations and logistics.											
11. OUTSTANDING POLLUTION AND SAFETY DEFICIENCIES											
N/A											

1. COMPONENT AIR FORCE	FY 2022 MILITARY CONSTRUCTION PROJECT DATA (computer generated)			2. DATE MAY 2021	
3. INSTALLATION, SITE AND LOCATION YOKOTA AIR BASE YOKOTA AB SITE # 1 JAPAN			4. PROJECT TITLE CONSTRUCT CATM FACILITY		
5. PROGRAM ELEMENT 91211F	6. CATEGORY CODE 171-475	7. PROJECT NUMBER ZNRE063004	8. PROJECT COST (\$000) AUTH: 0 APPR: 25,000		
9. COST ESTIMATES					
ITEM		U/M	QUANTITY	UNIT	COST (\$000)
PRIMARY FACILITY					15,671
CATM FACILITY (171-475)		SM	1,913	8,070	(15,438)
SUSTAINABILITY AND ENERGY MEASURES		LS			(233)
SUPPORTING FACILITIES					6,728
PAVEMENTS		LS			(873)
UTILITIES		LS			(486)
FIRE PROTECTION SYSTEM		LS			(832)
COMMUNICATION SYSTEM		LS			(301)
SPECIAL CONSTRUCTION (BULLET TRAPS)		LS			(2,555)
DEMOLITION COSTS (INCL ASBESTOS ABATEMENT)		SM	1,068	1,199	(1,281)
SITE IMPROVEMENT		LS			(400)
SUBTOTAL					22,399
CONTINGENCY (5.0%)					1,120
TOTAL CONTRACT COST					23,519
SUPERVISION, INSPECTION AND OVERHEAD (6.5%)					1,529
TOTAL REQUEST					25,048
TOTAL REQUEST (ROUNDED)					25,000
EQUIPMENT FROM OTHER APPROPRIATIONS (NON-ADD)					(45.0)
10. Description of Proposed Construction: Construct a compliant Combat Arms Training Maintenance (CATM) facility utilizing economical design and construction methods to accommodate the mission of the facility. Project includes HVAC/ filtration system, targeting and safety features, administrative, educational, maintenance, and storage areas, weapons vault, Combat Arms Training Simulator, and small arms range. The existing sub-standard CATM facility (1,068 Square Meters) will be demolished. Facilities will be designed as permanent construction in accordance with the Unified Facilities Criteria 1-200-01, General Building Requirements and Unified Facilities Criteria 1-200-02, High Performance and Sustainable Building Requirements. This project will comply with antiterrorism/ force protection requirements per Unified Facilities Criteria 4-010-01, Department of Defense Minimum Antiterrorism Standards for Buildings.					
Air Conditioning: 100 Tons					
11. Requirement: 1913 SM Adequate: 0 SM Substandard: 1068 SM					
PROJECT: Construct CATM Facility					
REQUIREMENT: This project is required to provide a compliant CATM facility to support current mission operations for 3.8K Joint US Personnel in the Tokyo Region, Japan. Small arms range requires a minimum of fourteen positions on the firing line, adequate space allocation for support functions to include life, health, safety requirements, and a ventilation system capable of controlling exposure to lead and heavy metals/and or dust in accordance with federal regulations.					

1. COMPONENT AIR FORCE	FY 2022 MILITARY CONSTRUCTION PROJECT DATA (computer generated)			2. DATE MAY 2021
3. INSTALLATION, SITE AND LOCATION YOKOTA AIR BASE YOKOTA AB SITE # 1 JAPAN			4. PROJECT TITLE CONSTRUCT CATM FACILITY	
5. PROGRAM ELEMENT 27576	6. CATEGORY CODE 171-475	7. PROJECT NUMBER ZNRE063004	8. PROJECT COST (\$000) AUTH: 0 APPR: 25,000	
<p>CURRENT SITUATION: Constructed in 1975, Yokota Air Base's current facility is not compliant with current standards. The existing facility features only 10 firing positions and is both undersized and inadequate to train the 2.6K base and 1.2K joint personnel YAB supports. Executing 18-22 training courses on average per month, the Combat Arms Division faces ongoing training delays and deficiencies. For example, a shut-down of 45 days occurred during February to October 2013, impacting training mission. Training has been impeded by increasingly frequent facility-closures due to failing systems and rapidly deteriorating components that threaten the facility's mission by causing unsafe firing conditions. Short term repairs will continue to be required in order to mitigate mission stoppage. The existing range is not air conditioned resulting in extreme seasonal temperatures, lacks acoustic dampening measures to reduce noise levels, and is outfitted with an antiquated ventilation system requiring an unprecedented maintenance/cleaning contract to maintain safe levels of lead exposure. August 2012, Bioenvironmental Engineering discovered the ventilation system was excessively contaminated with lead dust. Subsequently, airborne lead exposure levels were monitored in accordance with OSHA general industry standard and instructors were identified as having Occupational and Environmental Exposure Limits above OSHA Permissible Exposure Limits. As a result, worker exposure monitoring was mandated quarterly, 8-times more frequent than the bi-annual standard. The facility lacks hygiene functions such as hand-washing stations, shower and laundry areas required to minimize secondary lead exposure and contamination. A weapons cleaning area is not provided, forcing personnel to clean weapons in the classroom and further increasing lead exposure and contamination. No other facility in the greater Tokyo Region, Japan, is available to support Yokota Air Base's Combat Arms Training Maintenance mission operations.</p> <p>IMPACT IF NOT PROVIDED: Existing CATM facility will continue to threaten current mission operations, requiring significant risk management and on-going repairs to mitigate serious life, health, safety hazards and resulting mission stoppages. Combat Arms faces significant challenges in managing an inadequate and undersized facility while maintaining training and operational requirements in support of deployments, base and regional defense, and security. If the project is not provided and the facility closes, the missions of PACAF, 5AF, and the 374th AW will be significantly degraded as well as the AFRICOM and other missions supported by the base. A new compliant facility will guarantee a safe and fully-capable combat arms training facility, thus safeguarding critical mission operations.</p> <p>ADDITIONAL: This project is not eligible for Host Nation funding. This project meets the criteria/scope specified in Air Force Manual 32-1084, "Facility Requirements" and Engineering Technical Letter 11-18, "Small Arms Range Design and Construction". All reasonable alternatives were considered during the development of this project to include status quo, add/alter, and new construction. An approved Economic Analysis determined new construction as the only viable option to meet this requirement. Sustainable principles, to include life-cycle cost-effective practices, will be integrated into the design, development, and construction of the project in accordance with Unified Facilities Criteria 1-200-02, High Performance and Sustainable Building Requirements. This includes preparation of a life-cycle cost analysis (LCCA) for energy consuming systems, renewable energy generating</p>				

1. COMPONENT AIR FORCE	FY 2022 MILITARY CONSTRUCTION PROJECT DATA (computer generated)		2. DATE MAY 2021
3. INSTALLATION, SITE AND LOCATION YOKOTA AIR BASE YOKOTA AB SITE # 1 JAPAN		4. PROJECT TITLE CONSTRUCT CATM FACILITY	
5. PROGRAM ELEMENT 27576	6. CATEGORY CODE 171-475	7. PROJECT NUMBER ZNRE063004	8. PROJECT COST (\$000) AUTH: 0 APPR: 25,000
<p>systems, whenever life-cycle cost effective (LCCE) is selected as the reason any requirement of Unified Facilities Criteria 1-200-02, High Performance and Sustainable Building Requirements is partially compliant or not applicable. This project does not fall within or partly within the 100-year flood plain. Facility is sited in accordance with the Installation Development Plan and is within a compatible land use area.</p> <p>This project was appropriated in the Fiscal Year 2017 future years' defense plan but was deferred due to USC 2808 legislation.</p> <p>Base Civil Engineer: (011) 81-3117-55-7215. CATM Facility: 1,913 Square Meters = 20,595 Square Feet; Demolition: 1,068 Square Meters = 11,496 Square Feet</p> <p>FOREIGN CURRENCY: FCF Budget Rate Used: YEN 106.4531</p> <p>JOINT USE CERTIFICATION: This facility can be used by other components on an "as available" basis; however, the scope of the project is based on Air Force requirements.</p>			

1. COMPONENT AIR FORCE	FY 2022 MILITARY CONSTRUCTION PROJECT DATA (computer generated)		2. DATE MAY 2021
3. INSTALLATION AND LOCATION YOKOTA AIR BASE YOKOTA AB SITE # 1 JAPAN		4. PROJECT TITLE CONSTRUCT CATM FACILITY	
5. PROGRAM ELEMENT 27576	6. CATEGORY CODE 171-475	7. PROJECT NUMBER ZNRE063004	8. PROJECT COST (\$000) AUTH: 0 APPR: 25,000
12. SUPPLEMENTAL DATA:			
a. Estimated Design Data:			
(1) Status:			
(a) Type of Design	Design-Bid-Build		
(b) Date Design Started	01-JUN-16		
(c) Parametric Cost Estimates Used to develop costs	YES		
(d) Percent Complete as of 01 JAN 2021	100 %		
(e) Date 35% Designed	07-MAR-17		
(f) Date Design Complete	22-MAR-18		
(g) Energy Study/Life-Cycle analysis was/will be performed	YES		
(2) Basis:			
(a) Standard or Definitive Design	NO		
(b) Where Design Was Most Recently Used	N/A		
(3) Total Cost (c) = (a) + (b) or (d) + (e)	(\$000)		
(a) Production of Plans and Specifications	3,420		
(b) All Other Design Costs	1,710		
(c) Total	5,130		
(d) Contract	4,275		
(e) In-house	855		
(4) Construction Contract Award	22-JUN		
(5) Construction Start	22-JUL		
(6) Construction Completion	24-OCT		
b. Equipment associated with this project provided from other appropriations:			
EQUIPMENT NOMENCLATURE	PROCURING APPROPRIATION	FISCAL YEAR APPROPRIATED OR REQUESTED	COST (\$000)
RANGE & MAINTENANCE EQUIPMENT	3400	Future Request	45
c. Authorization and Appropriation Summary:			
	Authorization (\$000)	Auth of Approp (\$000)	Approp (\$000)
FY2017 Enacted	8,243	8,243	8,243
Reallocated to 10 USC 2808 Projects	----	----	(8,243)
Cost Variation	16,757	----	----
FY2022 Request	0	25,000	25,000
Total	25,000		25,000

1. COMPONENT AIR FORCE	FY 2022 MILITARY CONSTRUCTION PROJECT DATA (computer generated)			2. DATE MAY 2021	
3. INSTALLATION, SITE AND LOCATION YOKOTA AIR BASE YOKOTA AB SITE # 1 JAPAN			4. PROJECT TITLE C-130J CORROSION CONTROL HANGAR		
5. PROGRAM ELEMENT 91211F	6. CATEGORY CODE 211-159	7. RPSUID/PROJECT NUMBER ZNRE153001A	8. PROJECT COST (\$000) AUTH: 0 APPR: 67,000		
9. COST ESTIMATES					
ITEM		U/M	QUANTITY	UNIT	COST (\$000)
PRIMARY FACILITIES					49,664
CORROSION CONTROL HANGAR (211-159)		SM	4,226	9,770	(41,288)
BLDG 906 REPAIRS AND MODIFICATIONS (211-111)		SM	3,951	1,650	(6,519)
BLDG 907 REPAIRS AND MODIFICATIONS (211-157)		SM	4,170	380	(1,585)
SUSTAINABILITY AND ENERGY MEASURES		LS			(272)
SUPPORTING FACILITIES					10,226
SITE IMPROVEMENTS		LS			(99)
PAVEMENTS		LS			(392)
UTILITIES		LS			(2,438)
COMMUNICATIONS		LS			(996)
ENVIRONMENTAL REMEDIATION		LS			(601)
ARCHEOLOGICAL MONITORING		LS			(301)
DEMOLITION		SM	3,345	1,614	(5,399)
SUBTOTAL					59,890
CONTINGENCY (5.0%)					2,995
TOTAL CONTRACT COST					62,885
SUPERVISION, INSPECTION AND OVERHEAD (6.5%)					4,088
TOTAL REQUEST					66,973
TOTAL REQUEST (ROUNDED)					67,000
10. Description of Proposed Construction: Construct corrosion control facility utilizing conventional design and construction methods to accommodate the mission of the facility. Facility will consist of reinforced concrete foundation, steel structure, reinforced concrete walls, sloping roof, sliding metal doors and fire protection systems. The facility must also be able to withstand wind loads and seismic effects as prescribed in applicable codes and design guides. Demolish one building containing a total of 3,345 SM. Facilities will be designed as permanent construction in accordance with the DoD Unified Facilities Criteria (UFC) 1-200-01, General Building Requirements and UFC 1-200-02, High Performance and Sustainable Building Requirements. This project will comply with DoD antiterrorism/force protection requirements per UFC 4-010-01. Air Conditioning: 800 Tons					
11. Requirement: 4226 SM Adequate: 0 SM Substandard: 2201 SM PROJECT: Construct a C-130J-30 1-Bay Corrosion Control Hangar Facility (New Mission). REQUIREMENT: An adequate facility, properly sized and configured, is required to support C-130J-30 corrosion control operations in support of the current mission. The proposed C-130J-30 Corrosion Control Hangar will be designed to meet standards outlined in UFC 4-211-02 10 May 2012 Aircraft Corrosion Control and Paint					

1. COMPONENT AIR FORCE	FY 2022 MILITARY CONSTRUCTION PROJECT DATA (computer generated)			2. DATE MAY 2021
3. INSTALLATION, SITE AND LOCATION YOKOTA AIR BASE YOKOTA AB SITE # 1 JAPAN			4. PROJECT TITLE C-130J CORROSION CONTROL HANGAR	
5. PROGRAM ELEMENT 91211F	6. CATEGORY CODE 211-159	7. RPSUID/PROJECT NUMBER ZNRE153001A	8. PROJECT COST (\$000) AUTH: 0 APPR: 67,000	
<p>Facilities. The C-130J-30 requires complete painting every 2 years and spot painting on an as needed basis. The aircraft also require washing every 15 days and prior to any paint operations. The facility will include an aircraft restorations bay, preparation and drying areas, abrasive blasting rooms, paint booths for mixing and/or applying paint, curing, tool storage, lockers, administrative support functions tool storage, eye washing systems, electrical, mechanical, water, communication, fire suppression/detection, air conditioning system with humidity environmental controls, utilities, pavements, associated site improvements, archeological monitoring and all necessary supporting facilities for a complete and usable facility.</p> <p>CURRENT SITUATION: The 374 Air Wing is transitioning from the C-130H aircraft to the C-130J-30 aircraft. The C-130J-30 is 15 feet longer than the C-130H model. There is not currently a hangar at Yokota AB with corrosion control capabilities large enough to accommodate the extended length of C-130J-30 aircraft and the appropriate clearances required from hangar walls and doors as listed in Air Force Manual 32-1084. To support the 14 C-130J-30 assigned aircraft, the 374 Air Wing requires a facility can support the corrosion control requirements of the C-130J-30, is large enough to fit C-130J-30 aircraft, and meets the current standards for aircraft corrosion control.</p> <p>IMPACT IF NOT PROVIDED: Without this facility, Yokota AB will be unable to provide adequate corrosion control to the 14 C-130J-30 assigned aircraft. Lack of this facility would significantly reduce readiness, and could result in degradation of operational capability, and may increase potential for a serious mishap.</p> <p>ADDITIONAL: This project meets the criteria/ scope specified in Air Force Manual 32-1084 and the Yokota Air Base Architectural Compatibility and Base Design Standards (1996). A preliminary analysis of reasonable options for satisfying this requirement indicates that only one option will meet mission needs, new construction. Therefore, a certificate of exception was submitted and approved. Base Civil Engineer: (011) 81-3117-55-7215. C-130J Corrosion Control Hangar: 4,226 SM = 45,486 SF; Repair Bldg 906, 3,951 SM = 42,513 SF; Repair Bldg 907, 4,170 SM = 44,869 SF.</p> <p>FOREIGN CURRENCY: FCF Budget Rate Used: YEN 106.4531</p> <p>JOINT USE CERTIFICATION: This facility can be used by other components on an as available basis; however, the scope of the project is based on Air Force requirements.</p>				

1. COMPONENT AIR FORCE	FY 2022 MILITARY CONSTRUCTION PROJECT DATA (computer generated)		2. DATE MAY 2021
3. INSTALLATION AND LOCATION YOKOTA AIR BASE YOKOTA AB SITE # 1 JAPAN		4. PROJECT TITLE C-130J CORROSION CONTROL HANGAR	
5. PROGRAM ELEMENT 91211F	6. CATEGORY CODE 211-159	7. PROJECT NUMBER ZNRE153001A	8. PROJECT COST (\$000) AUTH: 0 APPR: 67,000
12. SUPPLEMENTAL DATA:			
a. Estimated Design Data:			
(1) Status:			
(a) Type of Design	Design-Bid-Build		
(b) Date Design Started	15-JUN-15		
(c) Parametric Cost Estimates used to develop costs	YES		
(d) Percent Complete as of 01 JAN 2021	100 %		
(e) Date 35% Designed	31-MAR-16		
(e) Date Design Complete	30-SEP-16		
(f) Energy Study/Life-Cycle analysis was/will be performed	YES		
(2) Basis:			
(a) Standard or 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	1,800		
(b) All Other Design Costs	900		
(c) Total	2,700		
(d) Contract	2,250		
(e) In-house	450		
(4) Construction Contract Award	22 FEB		
(5) Construction Start	22 MAR		
(6) Construction Completion	24 JUN		
b. Equipment associated with this project provided from other appropriations: N/A			
c. Authorization and Appropriation Summary:			
	Authorization (\$000)	Auth of Approp (\$000)	Approp (\$000)
FY2017 Enacted	23,777	23,777	23,777
Reallocated to 10 USC 2808 Projects	----	----	(23,777)
Cost Variation	43,223	----	----
FY2022 Request	0	67,000	67,000
Total	67,000		67,000

1. COMPONENT AIR FORCE		FY <u>2022</u> MILITARY CONSTRUCTION PROGRAM					2. DATE (YYYYMMDD) MAY 2021				
3. INSTALLATION AND LOCATION MORON AIR BASE, SPAIN				4. COMMAND UNITED STATES AIR FORCES IN EUROPE			5. AREA CONSTRUCTION COST INDEX 1.14				
6. PERSONNEL		(1) PERMANENT			(2) STUDENTS			(3) SUPPORTED			(4) TOTAL
		OFFICER	ENLISTED	CIVILIAN	OFFICER	ENLISTED	CIVILIAN	OFFICER	ENLISTED	CIVILIAN	
a. AS OF 30- Sep-20		86	319	101	0	0	0	56	268	0	830
b. END FY		85	314	105	0	0	0	55	255	0	814
7. INVENTORY DATA (\$000)											
a. TOTAL ACREAGE								3,428			
b. INVENTORY TOTAL AS OF 30- Sep-20								1,026,096.00			
c. AUTHORIZATION NOT YET IN INVENTORY								0.00			
d. AUTHORIZATION REQUESTED IN THIS PROGRAM								0.00			
e. AUTHORIZATION INCLUDED IN FOLLOWING PROGRAM								0.00			
f. PLANNED IN NEXT THREE PROGRAM YEARS								0.00			
g. REMAINING DEFICIENCY								122,800.00			
h. GRAND TOTAL								1,148,896.00			
8. PROJECTS REQUESTED IN THIS PROGRAM											
a. CATEGORY				b. COST (\$000)		c. DESIGN STATUS					
(1) CODE	(2) PROJECT TITLE		(3) SCOPE			(1) START	(2) COMPLETE				
116-662	EDI-HOT CARGO PAD		25,110SM		8,542	12/18	08/19				
9. FUTURE PROJECTS											
10. MISSION OR MAJOR FUNCTIONS											
The Mission of Moron Air Base is to provide expeditionary combat support and expandable forward operating base to support transient/bed-down of aircraft operations; to provide the staging of aircraft and personnel in support of US and NATO plans, exercises and contingency operations; and to provide Base Operating Support to tenant units.											
11. OUTSTANDING POLLUTION AND SAFETY DEFICIENCIES											
N/A											

1. COMPONENT AIR FORCE	FY 2022 MILITARY CONSTRUCTION PROJECT DATA		2. DATE MAY 2021		
3. INSTALLATION, SITE AND LOCATION MORON AIR BASE SPAIN			4. PROJECT TITLE EDI-HOT CARGO PAD		
5. PROGRAM ELEMENT 91211F	6. CATEGORY CODE 116-662	7. PROJECT NUMBER QUUG023002	8. PROJECT COST (\$000) AUTH: 0 APPR: 8,542		
9. COST ESTIMATES					
ITEM		U/M	QTY	UNIT COST	COST (\$000)
PRIMARY FACILITIES					5,963
DANGEROUS CARGO PAD (116-662)		SM	25,110	105	(2,637)
PAVED SHOULDER, ASPHALT (116-642)		SM	37,354	50	(1,868)
TAXIWAY (851-147)		SM	19,440	75	(1,458)
SUPPORTING FACILITIES					1,412
UTILITIES		LS			(884)
PAVEMENTS		LS			(528)
SUBTOTAL					7,375
CONTINGENCY (5.0%)					369
TOTAL CONTRACT COST					7,744
SUPERVISION, INSPECTION AND OVERHEAD (6.5%)					503
DESIGN/BUILD - DESIGN COST (4.0% OF SUBTOTAL)					295
TOTAL REQUEST					8,542
TOTAL REQUEST (ROUNDED)					8,542
EQUIPMENT FROM OTHER APPROPRIATIONS (NON-ADD)					(0)
<p>10. Description of Proposed Construction: Construct a dangerous cargo pad of concrete pavement over select base course to support heavy aircraft loaded with hot cargo and dangerous materials, complete with taxiway access, pavements and utilities. Construct asphalt shoulder over crushed aggregate. Construct necessary pavements required to allow transportation of munitions from the cargo pad to the Munitions Storage Area. Provide drainage through an oil water separator for incidental washing of contaminated aircraft. Work includes grubbing, leveling, compacting, paving, testing, tie-downs, grounding, signage, drainage, electrical, associated utilities, lighting, and pavement markings. This project is in support of the European Deterrence Initiative (EDI), formerly known as the European Reassurance Initiative. Sustainable principles, to include Life Cycle cost-effective practices, will be integrated into the design, development and construction of the project in accordance with Unified Facility Criteria (UFC) 1-200-02. This includes preparation of a life-cycle cost analysis for energy consuming systems, or renewable energy generating systems, whenever "life-cycle cost effective" is identified as the reason any requirement of UFC 1-200-02 is partially compliant or not applicable. This project will comply with Department of Defense (DoD) antiterrorism/force protection requirements per UFC 4-010-01.</p> <p>Air Conditioning: 0 Tons</p>					

1. COMPONENT AIR FORCE	FY 2022 MILITARY CONSTRUCTION PROJECT DATA		2. DATE MAY 2021
3. INSTALLATION, SITE AND LOCATION MORON AIR BASE SPAIN		4. PROJECT TITLE EDI-HOT CARGO PAD	
5. PROGRAM ELEMENT 91211F	6. CATEGORY CODE 116-662	7. PROJECT NUMBER QUUG023002	8. PROJECT COST (\$000) AUTH: 0 APPR: 8,542
<p>11. Requirement: 25,066 SM Adequate: 0 SM Substandard: 12,795 SM</p> <p>PROJECT: EDI-HOT CARGO PAD</p> <p>REQUIREMENT: Provide an isolated parking area for Air Mobility Command large-frame aircraft loaded with dangerous cargo. Keeping such aircraft away from occupied facilities and other parked aircraft is necessary for the safety of personnel and protection of high value assets that may be parked on the ramp. This project is in support of the EDI. This initiative includes military exercises and training on land, in the air, and at sea while sustaining a rotational presence throughout Europe. A key enabler for successful training and combat operations is the acquisition and maintenance of strategic assets at key locations throughout the theater.</p> <p>CURRENT SITUATION: Primary and alternate areas are available for parking aircraft with dangerous cargo but with severe limitations. The primary area, parking spot P1 on the main ramp, has limited explosives-handling capacity, reduces area for parking other aircraft and causes evacuation of nearby Spanish Air Force facilities when used. The alternate area, taxiway C, made of asphalt, violates both primary surface and 7:1 transitional slope airfield criteria, as well as UFC 3-260-02, which requires the use of rigid pavement for dangerous cargo parking. When either the primary or alternate areas are not used for hot cargo, they are utilized for their intended aircraft parking and movement. When they are used for hot cargo, many workarounds are required which reduce the parking capabilities of the base in order to observe the quantity-distance (Q-D) requirements. United States Transportation Command (USTRANSCOM) stated Moron AB will continue to operate under increased loading for the foreseeable future. An isolated area for parking aircraft loaded with dangerous cargo is critical to sustain en-route operations.</p> <p>IMPACT IF NOT PROVIDED: The base will continue having violations of airfield criteria and reduced ramp availability. During contingency operations, Moron AB is used extensively for transporting both cargo and passengers to and from US Central Command (USCENTCOM) area of responsibility (AOR). Without a dedicated area for parking large aircraft with dangerous cargo, the badly needed ramp space will continue to be limited and will restrict Moron's capability to support contingencies. Using the asphalted taxiway C for maneuvering large aircraft greatly reduces the life of the asphalt. Having to close taxiway C creates workarounds that create traffic problems with other aircraft during take-off and landing.</p> <p>ADDITIONAL: This project is not eligible for North Atlantic Treaty</p>			

1. COMPONENT AIR FORCE	FY 2022 MILITARY CONSTRUCTION PROJECT DATA		2. DATE MAY 2021
3. INSTALLATION, SITE AND LOCATION MORON AIR BASE SPAIN		4. PROJECT TITLE EDI-HOT CARGO PAD	
5. PROGRAM ELEMENT 91211F	6. CATEGORY CODE 116-662	7. PROJECT NUMBER QUUG023002	8. PROJECT COST (\$000) AUTH: 0 APPR: 8,542
<p>Organization (NATO) funding. Project has received US/ Spanish approval. Design and construction must be completed in accordance with Spanish laws and norms and US standards. The design and construction will meet the stricter of Spanish or US standards. This design shall conform to criteria established in the Air Force Corporate Facilities Standards but will not employ a standard facility design. This project meets the criteria/ scope specified in Air Force Manual (AFMAN) 32-1084, "Facility Requirements," and in UFC 3-260-01. A preliminary analysis of reasonable options for accomplishing this project (status quo, renovation, upgrade/removal, new construction, leasing) was performed. It indicates there is only one option that will meet operational requirements. This project will be submitted for NATO pre-financing. This project does not fall within or partly within the 100-year flood plain.</p> <p>Dangerous Cargo Pad: 25,066 SM = 269,808 SF; Paved Asphalt Shoulder: 14,485 SM = 155,915 SF; Asphalt Access Road: 41,793 SM = 449,856 SF</p> <p>Base Civil Engineer (BCE) commercial phone number +49 6371-47-6773</p> <p>FOREIGN CURRENCY: FCF Budget Rate Used: EURO-DOLLAR .8703</p> <p>JOINT USE CERTIFICATION: This facility can be used by other components on an "as available" basis; however, the scope of the project is based on Air Force requirements. This project will be submitted to NATO pre-financing.</p>			

1. COMPONENT AIR FORCE	FY 2022 MILITARY CONSTRUCTION PROJECT DATA		2. DATE MAY 2021
3. INSTALLATION, SITE AND LOCATION MORON AIR BASE SPAIN		4. PROJECT TITLE EDI-HOT CARGO PAD	
5. PROGRAM ELEMENT 91211F	6. CATEGORY CODE 116-662	7. PROJECT NUMBER QUUG023002	8. PROJECT COST (\$000) AUTH: 0 APPR: 8,542
12. SUPPLEMENTAL DATA:			
a. Estimated Design Data:			
(1) Status:			
(a) Type of Design			Design-Build
(b) Date Design Started			10-DEC-18
(c) Parametric Cost Estimates Used to develop costs			YES
(d) Percent Complete as of 01 JAN 2021			100%
(e) Date 35% Designed			15-APR-19
(f) Date Design Complete			30-AUG-19
(g) Energy Study/Life-Cycle analysis was/will be performed			YES
(2) Basis:			
(a) Standard or Definitive Design			NO
(b) Where Design Was Most Recently Used			N/A
(3) Total Cost (c) = (a) + (b) or (d) + (e)			(\$000)
(a) Production of Plans and Specifications			513
(b) All Other Design Costs			256
(c) Total			769
(d) Contract			641
(e) In-house			128
(4) Construction Contract Award			22-SEP
(5) Construction Start			22-NOV
(6) Construction Completion			24-NOV
b. Equipment associated with this project provided from other appropriations:			
		FISCAL YEAR	
		APPROPRIATED	COST
EQUIPMENT NOMENCLATURE	PROCURING	OR REQUESTED	(\$000)
N/A	APPROP		
c. AUTHORIZATIONS AND APPROPRIATIONS:			
	Authorization	Auth of Approp	Approp
	(\$000)	(\$000)	(\$000)
FY2019 Enacted	8,500	8,500	8,500
Reallocated to 10 USC 2808 Projects	-----	-----	(8,500)
Cost Variation	42	-----	-----
FY2022 Request	0	8,542	8,542
Total	8,542		8,542

1. COMPONENT AIR FORCE			FY 2022 MILITARY CONSTRUCTION PROGRAM						2. DATE (YYYYMMDD) MAY 2021			
3. INSTALLATION AND LOCATION RAF FAIRFORD, UNITED KINGDOM						4. COMMAND UNITED STATES AIR FORCES IN EUROPE			5. AREA CONSTRUCTION COST INDEX 1.05			
6. PERSONNEL			(1) PERMANENT			(2) STUDENTS			(3) SUPPORTED			(4) TOTAL
			OFFICER	ENLISTED	CIVILIAN	OFFICER	ENLISTED	CIVILIAN	OFFICER	ENLISTED	CIVILIAN	
a. AS OF 30-Sep-20			3	12	62	0	0	0	5	47	40	169
b. END FY			21	185	97	0	0	0	15	145	30	493
7. INVENTORY DATA (\$000)												
a. TOTAL ACREAGE										1,976		
b. INVENTORY TOTAL AS OF 30-Sep-20										793,286.00		
c. AUTHORIZATION NOT YET IN INVENTORY										45,600.00		
d. AUTHORIZATION REQUESTED IN THIS PROGRAM										0.00		
e. AUTHORIZATION INCLUDED IN FOLLOWING PROGRAM										0.00		
f. PLANNED IN NEXT THREE PROGRAM YEARS										0.00		
g. REMAINING DEFICIENCY										126,000.00		
h. GRAND TOTAL										964,886.00		
8. PROJECTS REQUESTED IN THIS PROGRAM												
a. CATEGORY						b. COST (\$000)		c. DESIGN STATUS				
(1) CODE	(2) PROJECT TITLE				(3) SCOPE				(1) START	(2) COMPLETE		
442-758	EDI-CONSTRUCT DABS-FEV STORAGE				24,271 SM		94,000		09/18	09/21		
9. FUTURE PROJECTS												
10. MISSION OR MAJOR FUNCTIONS												
RAF Fairford is the US Air Force's only European airfield for heavy bombers in support of U.S. Strategic Command's Bomber Task Force in Europe.												
11. OUTSTANDING POLLUTION AND SAFETY DEFICIENCIES												
N/A												

1. COMPONENT AIR FORCE	FY 2022 MILITARY CONSTRUCTION PROJECT DATA			2. DATE MAY 2021
3. INSTALLATION, SITE AND LOCATION RAF FAIRFORD UNITED KINGDOM			4. PROJECT TITLE EDI-CONSTRUCT DABS-FEV STORAGE	
5. PROGRAM ELEMENT 91211F	6. CATEGORY CODE 442-758	7. PROJECT NUMBER GKVB193028		8. PROJECT COST (\$000) AUTH: 0 APPR: 94,000
9. COST ESTIMATES				
ITEM	U/M	QTY	UNIT COST	COST (\$000)
PRIMARY FACILITIES				72,850
WAREHOUSE SUPPLY AND EQUIPMENT BASE (442-758)	SM	24,271	1,882	(45,678)
VEHICLE MAINTENANCE SHOP (214-425)	SM	3,644	4,431	(16,147)
BASE HAZARDOUS STORAGE (442-257)	SM	168	8,333	(1,400)
WRM (442-515)	SM	2,699	2,668	(7,201)
SECURITY POLICE ENTRY CONTR BUILDING (730-837)	SM	74	5,757	(426)
VEHICLE FUELING STATION (123-335)	OL			(580)
SUSTAINABLE DESIGN AND DEVELOPMENT (2%)	LS			(1,418)
SUPPORTING FACILITIES				10,924
UTILITIES	LS			(1,600)
SITE IMPROVEMENTS	LS			(330)
PAVEMENTS	LS			(5,350)
COMMUNICATIONS	LS			(844)
ENVIRONMENTAL MITIGATION	LS			(1,400)
LOW IMPACT DEVELOPMENT	LS			(1,400)
SUBTOTAL				83,774
CONTINGENCY (5.0%)				4,189
TOTAL CONTRACT COST				87,963
SUPERVISION, INSPECTION AND OVERHEAD (2.5%)				2,199
DESIGN/BUILD - DESIGN COST (4.0% OF SUBTOTAL)				3,351
TOTAL REQUEST				93,513
TOTAL REQUEST (ROUNDED)				94,000
EQUIPMENT FROM OTHER APPROPRIATIONS (NON-ADD)				(0)
10. Description of Proposed Construction: Construct a Deployable Air Base System-Facilities, Equipment and Vehicles (DABS-FEV) storage complex using conventional design and construction methods to accommodate equipment storage and maintenance for equipment. This project is in support of the European Deterrence Initiative (EDI) formerly known as the European Reassurance Initiative. The complex includes humidity controlled materiel and vehicle storage, humidity controlled and ventilated refueler vehicle storage, humidity controlled and ventilated medical war reserve materiel storage, climate controlled administrative support, and petroleum oil lubricant (POL) and hazardous material storage. In addition, the facilities include loading docks, a bridge crane, fire protection, utility management and control, closed circuit television and intrusion detection. Supporting facilities include site work (Landscaping, grading and paving), signage, security fencing, a manned gate and guard booth, and site utility systems (electrical, communications, geothermal,				

1. COMPONENT AIR FORCE	FY 2022 MILITARY CONSTRUCTION PROJECT DATA		2. DATE MAY 2021
3. INSTALLATION, SITE AND LOCATION RAF FAIRFORD UNITED KINGDOM		4. PROJECT TITLE EDI-CONSTRUCT DABS-FEV STORAGE	
5. PROGRAM ELEMENT 91211F	6. CATEGORY CODE 442-758	7. PROJECT NUMBER GKVB193028	8. PROJECT COST (\$000) AUTH: 0 APPR: 94,000
<p>water, sanitary sewer, and storm water). Low impact development integrated management practices are included. The facility is intended to be compatible with applicable DoD, Air Force, and host-nation design standards. In addition, local materials and construction techniques shall be used where required and/or appropriate. Design and construction efforts will be executed in accordance with the host-nation agreements, including construction and environmental permits. The facilities will be designed as permanent construction in accordance with the DoD Unified Facilities Criteria (UFC) 1-202-01, Host Nation Facilities in Support of Military Operations. This project will comply with DoD antiterrorism requirements per UFC 4-010-01. This 1391 indicates a Supervision/Inspection/Overhead (SIOH) rate of 2.5%. This percentage represents the pre-negotiated rate between the U.S. Government and the Defense Infrastructure Organization (DIO) for the SIOH services the Government of the United Kingdom (UK) provides for all U.S.-funded MILCON projects in the UK.</p> <p>Air Conditioning: 250 Tons</p>			
<p>11. Requirement: 24,271 SM Adequate: 0 SM Substandard: 0 SM</p> <p>PROJECT: EDI-CONSTRUCT DABS-FEV STORAGE</p> <p>REQUIREMENT: This project is in support of the EDI. This initiative includes military exercises and training on land, in the air, and at sea while sustaining a rotational presence throughout Europe. A key enabler for successful training and combat operations is the acquisition and maintenance of strategic assets at key locations throughout the theater. The DABS - FEV/EMEDS Storage will directly improve mission readiness, providing critical storage, distribution, and support capability to Aligned Forces in support of EUCOM requirements.</p> <p>CURRENT SITUATION: An adequate storage area capable of supporting deployable air base materiel and expeditionary medical support operations is not available. Similar facilities in the region are fully utilized and no facilities are present at Royal Air Force (RAF) Fairford that meet the requirement.</p> <p>IMPACT IF NOT PROVIDED: If this project is not provided, there will be no covered and humidity-controlled space at RAF Fairford in which United States Air Forces in Europe (USAFE) can store additional DABS-FEV and EMEDS assets. The lack of properly sized and configured humidity-controlled and covered warehouse space will force USAFE to make use of available open storage areas and set up temporary shelters that will not fully protect these valuable assets from climatic conditions. Exposure to excessive moisture will degrade and potentially damage the DABS equipment and vehicles. Deployment and use of the DABS and EMEDS will potentially be delayed while urgent repairs are made to restore the equipment and vehicles to their required operability standards.</p>			

1. COMPONENT AIR FORCE	FY 2022 MILITARY CONSTRUCTION PROJECT DATA		2. DATE MAY 2021
3. INSTALLATION, SITE AND LOCATION RAF FAIRFORD UNITED KINGDOM		4. PROJECT TITLE EDI-CONSTRUCT DABS-FEV STORAGE	
5. PROGRAM ELEMENT 91211F	6. CATEGORY CODE 442-758	7. PROJECT NUMBER GKVB193028	8. PROJECT COST (\$000) AUTH: 0 APPR: 94,000

Equipment will be required to be replaced earlier than if it is stored properly.

ADDITIONAL: This project meets applicable criteria/scope specified in Air Force Manual 32-1084, Facility Requirements, as well as Bi-Strategic Commands Directive 85-5, North Atlantic Treaty Organization Approved Criteria and Standards for Airfields. This design shall conform to criteria established in the Air Force Corporate Facilities Standards, the Installation Facilities Standards, but will not employ a standard facility design because there is no Air Force standard facility design for this project, and there is no applicable standard design from Air Force Civil Engineer Center. Sustainable principles, to include life-cycle cost-effective practices, will be integrated into the design, development, and construction of the project in accordance with Unified Facility Criteria 1-200-02. This includes preparation of a life-cycle cost analysis for energy consuming systems, renewable energy generating systems, whenever life-cycle cost effective is selected as the reason any requirement of Unified Facility Criteria 1-200-02 is partially compliant or not applicable. This project does not fall within or partly within the 100-year flood plan. This project will be submitted for North Atlantic Treaty Organization pre-financing. Although not currently part of an approved North Atlantic Treaty Organization capability package, a precautionary pre-finance statement will be filed for this project to allow possible future recoupment if the project becomes a North Atlantic Treaty Organization capability. This project was appropriated in the Fiscal Year 2019 future years' defense plan but deferred due to USC 2808 legislation.

Base Civil Engineer: 44 (0) 1285 714973.

Warehouse Supply And Equipment Base: 24,271 SM = 261,251 Square Feet

Vehicle Maintenance Shop: 3,644 SM = 39,224 Square Feet

Base Hazardous Storage: 168 SM = 1,808 Square Feet

WRM: 2,699 SM = 29,052 Square Feet

Security Police Entry Contr Building: 74 Square Meters = 797 Square Feet

FOREIGN CURRENCY BUDGET RATE USED: POUND-DOLLAR 0.7843

JOINT USE CERTIFICATION: This facility can be used by other components on an "as available" basis; however, the scope of the project is based on Air Force requirements. This project will be submitted to NATO pre-financing.

1. COMPONENT AIR FORCE	FY 2022 MILITARY CONSTRUCTION PROJECT DATA		2. DATE MAY 2021
3. INSTALLATION, SITE AND LOCATION RAF FAIRFORD UNITED KINGDOM		4. PROJECT TITLE EDI-CONSTRUCT DABS-FEV STORAGE	
5. PROGRAM ELEMENT 91211F	6. CATEGORY CODE 442-758	7. PROJECT NUMBER GKVB193028	8. PROJECT COST (\$000) AUTH: 0 APPR: 94,000
12. SUPPLEMENTAL DATA:			
a. Estimated Design Data:			
(1) Status:			
(a) Type of Design			Design-Build
(b) Date Design Started			18-SEP-18
(c) Parametric Cost Estimates Used to develop costs			YES
(d) Percent Complete as of 01 JAN 2021			35%
(e) Date 35% Designed			1-AUG-20
(f) Date Design Complete			14-SEP-21
(g) Energy Study/Life-Cycle analysis was/will be performed			YES
(2) Basis:			
(a) Standard or Definitive Design			YES
(b) Where Design Was Most Recently Used			N/A
(3) Total Cost (c) = (a) + (b) or (d) + (e)			(\$000)
(a) Production of Plans and Specifications			5,220
(b) All Other Design Costs			2,610
		(c) Total	7,830
		(d) Contract	6,525
		(e) In-house	1,305
(4) Construction Contract Award			22-FEB
(5) Construction Start			22-SEP
(6) Construction Completion			24-SEP
b. Equipment associated with this project provided from other appropriations:			
		FISCAL YEAR	
		APPROPRIATED	COST
EQUIPMENT NOMENCLATURE	PROCURING	OR REQUESTED	(\$000)
N/A	APPROP		
c. AUTHORIZATIONS AND APPROPRIATIONS:			
	Authorization	Auth of Approp	Approp
	(\$000)	(\$000)	(\$000)
FY2020 Enacted	87,000	87,000	87,000
Reallocated to 10 USC 2808 Projects	----	----	(87,000)
Cost Variation	7,000	----	----
FY2022 Request	0	94,000	94,000
Total	94,000		94,000

Project: EDI-Contract DABS/FEV Storage, RAF Fairford, UK (Current Authorization = \$87M)

Project Spending Plan

As of: 5-May-21

All Cost in thousands (\$000)

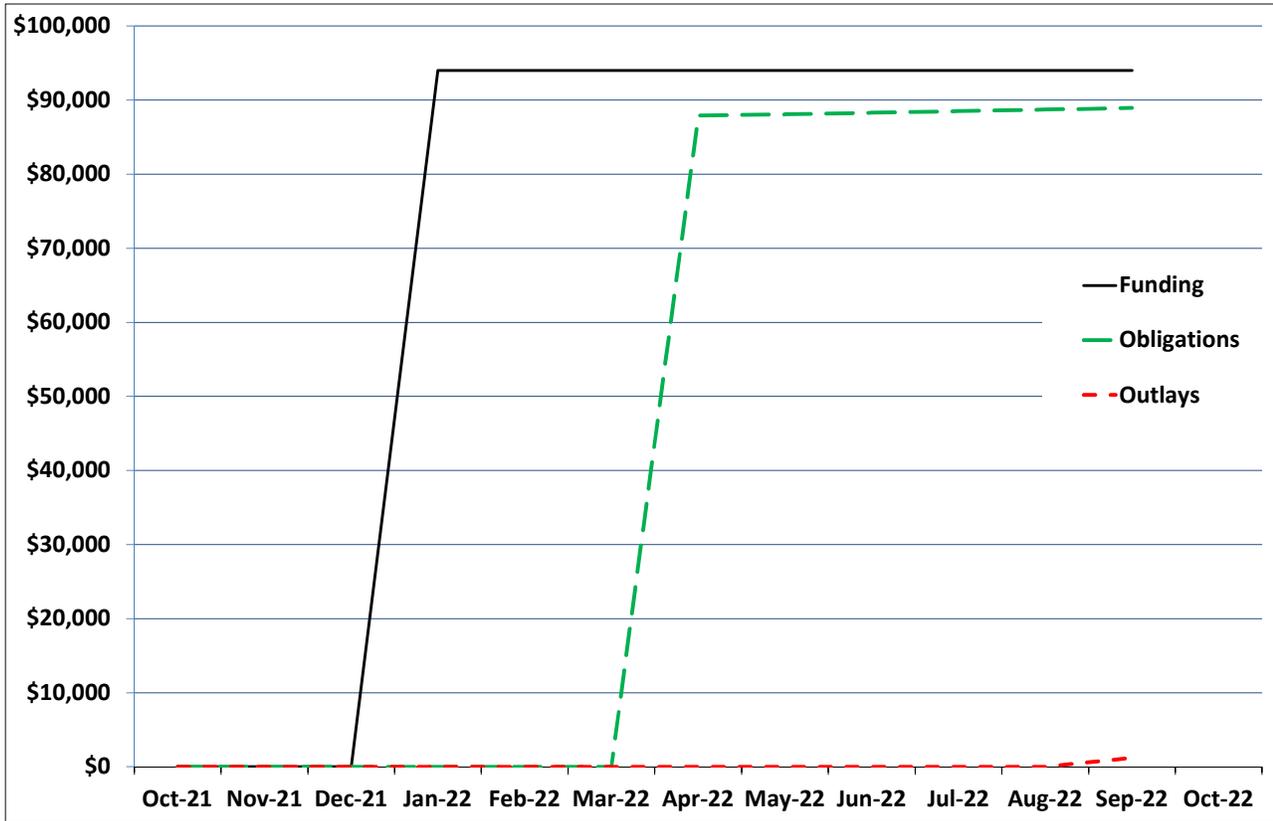
Chart Begin	FUNDING (note 1)		OBLIGATIONS (note 2)		OUTLAYS (note 3)	
Month-Yr	Enacted	Cumulative	Obligated	Cumulative	Monthly	Cumulative
Oct-21	-	-	-	-	-	-
Nov-21	-	-	-	-	-	-
Dec-21	-	-	-	-	-	-
Jan-22	94,000	94,000	-	-	-	-
Feb-22	-	94,000	-	-	-	-
Mar-22	-	94,000	-	-	-	-
Apr-22	-	94,000	87,881	87,881	-	-
May-22	-	94,000	211	88,092	-	-
Jun-22	-	94,000	211	88,303	-	-
Jul-22	-	94,000	211	88,514	-	-
Aug-22	-	94,000	211	88,725	-	-
Sep-22	-	94,000	211	88,936	1,196	1,196

Note 1: Assumes initial appropriation is enacted by Congress January of the program year.

Note 2: Assumes funds are available to the contracting officer for the initial obligation and contract award by 30 April of the program year to accommodate the funding process. Note that the Defence Infrastructure Office requires full funding of the project in order to get Ministry of Defence approval of their business case before awarding a project. There is no mechanism within the UK Government to address incremental funding in their business case.

Note 3: Contract completion: Sep 2024, duration 30 months.

EDI-Construct DABS-FEV Storage, RAF Fairford, UK (Current Authorization = \$87M)



1. COMPONENT AIR FORCE		FY <u>2022</u> MILITARY CONSTRUCTION PROGRAM					2. DATE (YYYYMMDD) MAY2021				
3. INSTALLATION AND LOCATION RAF LAKENHEATH, UNITED KINGDOM				4. COMMAND UNITED STATES AIR FORCES IN EUROPE			5. AREA CONSTRUCTION COST INDEX 1.05				
6. PERSONNEL		(1) PERMANENT			(2) STUDENTS			(3) SUPPORTED			(4) TOTAL
		OFFICER	ENLISTED	CIVILIAN	OFFICER	ENLISTED	CIVILIAN	OFFICER	ENLISTED	CIVILIAN	
a. AS OF 30-SEP-20		518	4,069	637	0	0	0	6	58	15	5,303
b. END FY		614	5,085	681	0	0	0	8	122	37	6,547
7. INVENTORY DATA (\$000)											
a. TOTAL ACREAGE										2,264	
b. INVENTORY TOTAL AS OF 30-SEP-20										3,447,600.00	
c. AUTHORIZATION NOT YET IN INVENTORY										299,759.00	
d. AUTHORIZATION REQUESTED IN THIS PROGRAM										80,000.00	
e. AUTHORIZATION INCLUDED IN FOLLOWING PROGRAM										0.00	
f. PLANNED IN NEXT THREE PROGRAM YEARS										0.00	
g. REMAINING DEFICIENCY										295,200.00	
h. GRAND TOTAL										4,122,559.00	
8. PROJECTS REQUESTED IN THIS PROGRAM											
a. CATEGORY				b. COST (\$000)		c. DESIGN STATUS					
(1) CODE	(2) PROJECT TITLE		(3) SCOPE			(1) START	(2) COMPLETE				
171-875	F-35A Weapons Load Training Facility		3,816 SM		49,000	04/20	09/21				
215-582	F-35A Munitions Inspection Facility		1,908 SM		31,000	02/20	02/22				
9. FUTURE PROJECTS											
10. MISSION OR MAJOR FUNCTIONS											
RAF Lakenheath is home to the 48th Fighter Wing, the largest fighter wing in USAFE. Its mission is to train, support, and employ a Combat Fighter Wing, including one F-15C (493 FS) and two F-15E squadrons (492 FS and 494 FS) together with a squadron of HH-60 helicopters (56 RQS). It is also the future home of the F-35A.											
11. OUTSTANDING POLLUTION AND SAFETY DEFICIENCIES											
N/A											

1. COMPONENT AIR FORCE	FY 2022 MILITARY CONSTRUCTION PROJECT DATA (computer generated)			2. DATE MAY 2021	
3. INSTALLATION, SITE AND LOCATION RAF LAKENHEATH RAF LAKENHEATH SITE # 1 UNITED KINGDOM			4. PROJECT TITLE F-35A WEAPONS LOAD TRAINING FACILITY		
5. PROGRAM ELEMENT 27142F	6. CATEGORY CODE 171-875	7. PROJECT NUMBER MSET183501	8. PROJECT COST(\$000) 49,000		
9. COST ESTIMATES					
ITEM		U/M	QUANTITY	UNIT	COST (\$000)
PRIMARY FACILITIES					36,697
MUNITIONS LOAD CREW TRAINING		SM	3,816	9,551	(36,447)
CYBERSECURITY OF FACILITY-RELATED CONTROL SYS		LS			(250)
SUPPORTING FACILITIES					6,978
PAVEMENT		LS			(3,500)
SITE IMPROVEMENT		LS			(570)
UTILITIES		LS			(2,408)
DEMOLITION		SM	163	3,067	(500)
SUBTOTAL					43,675
CONTINGENCY (5.0%)					2,184
TOTAL CONTRACT COST					45,859
SUPERVISION, INSPECTION AND OVERHEAD (2.5%)					1,146
DESIGN/BUILD - DESIGN COST (4% OF SUBTOTAL)					1,747
TOTAL REQUEST					48,752
TOTAL REQUEST (ROUNDED)					49,000
EQUIPMENT FROM OTHER APPROPRIATIONS (NON-ADD)					(925)
10. Description of Proposed Construction: Construct Weapons Load Training Facility with reinforced concrete slab and foundation, structural steel frame with metal panels, standing seam metal roof, and fire detection/protection, utilizing conventional design and construction methods to accommodate the mission of the facility. This facility will incorporate office space, Weapons Academics Classroom with Secret Internet Protocol Router Network capabilities and Centralized Tool Kit Tool Room. The project will demolish Building 1303 (147 square meters) and Building 1305 (16 Square meters). The project will also include the removal of an existing 500 Kilovolt substation. Remaining electrical infrastructure will be relocated/re-routed as part of the supporting facility utility work. The project includes electrical improvements, fencing, landscaping, pavement, parking, utilities and all necessary supporting facilities for a complete and usable facility. This 1391 indicates a Supervision/Inspection/Overhead (SIOH) rate of 2.5%. This percentage represents the pre-negotiated rate between the U.S. Government and the Defense Infrastructure Organization (DIO) for the SIOH services the Government of the United Kingdom (UK) provides for all U.S. funded MILCON projects in the UK. Facilities will be designed as permanent construction in accordance with the Department of					

1. COMPONENT AIR FORCE	FY 2022 MILITARY CONSTRUCTION PROJECT DATA (computer generated)		2. DATE MAY 2021
3. INSTALLATION, SITE AND LOCATION RAF LAKENHEATH RAF LAKENHEATH SITE # 1 UNITED KINGDOM		4. PROJECT TITLE F-35A WEAPONS LOAD TRAINING FACILITY	
5. PROGRAM ELEMENT 27142F	6. CATEGORY CODE 171-875	7. PROJECT NUMBER MSET183501	8. PROJECT COST(\$000) 49,000
<p>Defense Unified Facilities Criteria 1-200-01, General Building Requirements. This project will comply with Department of Defense antiterrorism/force protection requirements per Unified Facilities Criteria 4-010-01.</p> <p>Air Conditioning: 35 Tons</p>			
<p>11. Requirement: 3,816 SM Adequate: 0 SM Substandard: 163 SM</p> <p>PROJECT: F-35A Weapons Load Training Facility</p> <p>REQUIREMENT: Construct a Weapons Load Training facility in the flightline area of the base to support the bed-down of the incoming F-35's as well as to support the base's existing F-15 missions. The project will construct a new facility to house two F-15 aircraft and two F-35 aircraft simultaneously. This is not a tenant or supported service requirement.</p> <p>CURRENT SITUATION: The existing F-15 Weapons Load Training function is currently located in Hangar 7, along with the Contract Field Team. Hangar 7 is also the 9 bay maintenance hangar for the current mission. There is no current facility for the incoming F-35 mission.</p> <p>IMPACT IF NOT PROVIDED: Without the construction of a new Weapons Load Training facility there will not be a facility available to house the incoming two new F-35 squadrons as well as the current mission F-15 squadrons. There is considerable risk involved with the operations of 8 to 9 aircraft maintenance bays in Hangar 7. While Hangar 7 can hold 9 aircraft, it cannot sustain combined safe/efficient maintenance over the long term. There are operational concerns with the long-term impact of moving that many operations into one facility. By moving the Weapons Load Training function out of Hangar 7 and into a dedicated joint F-15/F-35 facility, it will allow the Contract Field Team and phase maintenance to operate safely and efficiently by facilitating the sharing of common resources, classrooms, and classified vaults. One facility will alleviate unnecessary long-term resource demands on the unit.</p> <p>ADDITIONAL: This project meets applicable criteria/scope identified in Air Force Manual 32-1084, Facility Requirements. All work associated with this project shall comply with United States Air Force and Host Nation regulations and agreements. The country-to-country agreement precludes the use of International Competitive Bidding proceedings in the United Kingdom. Work will comply with all relevant Unified Facilities Criteria, Air Force Instructions, and Royal Air Force Lakenheath Base Standards. All reasonable alternatives were considered during the development of this project to include status quo, add/alter, and new construction. An approved Economic Analysis determined new construction as the only viable</p>			

1. COMPONENT AIR FORCE	FY 2022 MILITARY CONSTRUCTION PROJECT DATA (computer generated)		2. DATE MAY 2021
3. INSTALLATION, SITE AND LOCATION RAF LAKENHEATH RAF LAKENHEATH SITE # 1 UNITED KINGDOM		4. PROJECT TITLE F-35A WEAPONS LOAD TRAINING FACILITY	
5. PROGRAM ELEMENT 27142F	6. CATEGORY CODE 171-875	7. PROJECT NUMBER MSET183501	8. PROJECT COST(\$000) 49,000
<p>option to meet this requirement. Sustainable principles, to include life-cycle cost-effective practices will be integrated into the design, development and construction of the project in accordance with Unified Facility Criteria 1-200-02, High Performance and Sustainable Building Requirements. This includes preparation of a life-cycle cost analysis for energy consuming systems, renewable energy generating systems, whenever life-cycle cost effective is selected as the reason any requirement of Unified Facilities Criteria 1-200-02 is partially compliant or not applicable. This project was included in the Fiscal Year 2021 Future-Years Defense Plan in Fiscal Year 2022. This project does not fall within or partly within the 100-year flood plain. This design shall conform to criteria established in the Air Force Corporate Facilities Standards, the Installation Facilities Standards, but will not employ the standard facility design because there is no Air Force standard facility design for this project and there is no applicable standard design from Air Force Civil Engineer Center. The project has been reviewed and a determination has been made that a portion may be eligible for North Atlantic Treaty Organization funding and a Pre-Financing Statement has been issued to North Atlantic Treaty Organization (NATO). This document informs NATO that the United States are funding 100% of the costs and if and when the facility is included in the NATO Inventory the United States will seek recompense against the NATO budget contribution. Facility is sited in accordance with the Installation Development Plan and is within a compatible land use area.</p> <p>48th Civil Engineering Squadron, Base Civil Engineer: 044-01638-522100 MUNITIONS LOAD CREW TRAINING: 3,816 SM = 41,075 Square Feet DEMOLITION: 163 SM = 1,755 Square Feet FOREIGN CURRENCY BUDGET RATE USED: POUND-DOLLAR 0.7843 JOINT USE CERTIFICATION: This facility can be used by other components on an "as available" basis; however, the scope of the project is based on Air Force requirements.</p>			

1. COMPONENT AIR FORCE	FY 2022 MILITARY CONSTRUCTION PROJECT DATA (computer generated)		2. DATE MAY 2021
3. INSTALLATION, SITE AND LOCATION RAF LAKENHEATH RAF LAKENHEATH SITE # 1 UNITED KINGDOM		4. PROJECT TITLE F-35A WEAPONS LOAD TRAINING FACILITY	
5. PROGRAM ELEMENT 27142F	6. CATEGORY CODE 171-875	7. PROJECT NUMBER MSET183501	8. PROJECT COST(\$000) 49,000
12. SUPPLEMENTAL DATA:			
a. Estimated Design Data:			
(1) Status:			
(a) Type of Design			Design-Build
(b) Date Design Started			01-APR-20
(c) Parametric Cost Estimates Used to develop costs			YES
(d) Percent Complete as of 01 JAN 2021			35%
(e) Date 35% Designed			01-JAN-21
(f) Date Design Complete			30-SEP-21
(g) Energy Study/Life-Cycle analysis was/will be performed			YES
(2) Basis:			
(a) Standard or Definitive Design			NO
(b) Where Design Was Most Recently Used			N/A
(3) Total Cost (c) = (a) + (b) or (d) + (e)			(\$000)
(a) Production of Plans and Specifications			1,960
(b) All Other Design Costs			980
(c) Total			2,940
(d) Contract			2,205
(e) In-house			735
(4) Construction Contract Award			22-MAY
(5) Construction Start			22-SEP
(6) Construction Completion			24-OCT
b. Equipment associated with this project provided from other appropriations:			
		FISCAL YEAR	
		APPROPRIATED	COST
EQUIPMENT NOMENCLATURE	PROCURING APPROP	OR REQUESTED	(\$000)
FURNITURE FIXTURES, AND EQUIP	3080	FUTURE REQUEST	500
COMMUNICATION EQUIPMENT	3080	FUTURE REQUEST	425

1. COMPONENT AIR FORCE	FY 2022 MILITARY CONSTRUCTION PROJECT DATA (computer generated)			2. DATE MAY 2021
3. INSTALLATION, SITE AND LOCATION RAF LAKENHEATH RAF LAKENHEATH SITE # 1 UNITED KINGDOM			4. PROJECT F-35A MUNITION INSPECTION FACILITY	
5. PROGRAM ELEMENT 27142F	6. CATEGORY CODE 215-582	7. PROJECT NUMBER MSET183503	8. PROJECT COST(\$000) 31,000	
9. COST ESTIMATES				
ITEM	U/M	QUANTITY	UNIT	COST (\$000)
PRIMARY FACILITIES				18,607
SHOP, SURVEILLANCE AND INSPECTION	SM	1,908	9,621	(18,357)
CYBERSECURITY OF FACILITY-RELATED CONTROL SYS	LS			(250)
SUPPORTING FACILITIES				9,296
PAVEMENTS	LS			(1,986)
SITE IMPROVEMENTS	LS			(665)
UTILITIES	LS			(1,448)
DEMOLITION	SM	1,531	948	(1,451)
REAL PROPERTY INSTALLED EQUIPMENT (CRANE)	LS			(600)
PASSIVE FORCE PROTECTION MEASURES	LS			(3,146)
SUBTOTAL				27,903
CONTINGENCY (5.0%)				1,395
TOTAL CONTRACT COST				29,298
SUPERVISION, INSPECTION AND OVERHEAD (2.5%)				732
DESIGN DURING CONSTRUCTION				618
TOTAL REQUEST				30,648
TOTAL REQUEST (ROUNDED)				31,000
EQUIPMENT FROM OTHER APPROPRIATIONS (NON-ADD)				(550)
10. Description of Proposed Construction: Construct a new munition inspection facility with reinforced concrete foundation and walls, concrete slab, concrete roof construction, and berms to support blast protection and force protection requirements. The facility must utilize construction methods and systems to meet all explosive criteria for the construction of a munitions maintenance bay and ensure compliance with Air Force Manual 91-201, Joint Service Publication 482 and Explosives Storage and Transport Committee Standard Number 6. This facility consists of five (5) individual drive through work bays with traveling crane, a storage bay incorporating storage for hazardous material, an administrative area for office space, ready and training rooms, supply and equipment storage, and latrines with showers. The project will include the demolition of nine facilities, Building 1552 (130 square meters (SM)), Building 1553 (125 SM), Building 1554 (189 SM), Building 1555 (127 SM), Building 1557 (124 SM), Building 1558 (179 SM), Building 1562 (143 SM), Building 1601 (202 SM), and Building 1604 (312 SM), with a total area of 1,531 SM. The project will include parking and access roadways to the				

1. COMPONENT AIR FORCE	FY 2022 MILITARY CONSTRUCTION PROJECT DATA (computer generated)		2. DATE MAY 2021
3. INSTALLATION, SITE AND LOCATION RAF LAKENHEATH RAF LAKENHEATH SITE # 1 UNITED KINGDOM		4. PROJECT F-35A MUNITION INSPECTION FACILITY	
5. PROGRAM ELEMENT 27142F	6. CATEGORY CODE 215-582	7. PROJECT NUMBER MSET183503	8. PROJECT COST(\$000) 31,000
<p>facility. The project will provide all associated utilities, site improvements, pavements, communication infrastructure, and all necessary supporting features for a complete and usable facility. This 1391 indicates a Supervision/Inspection/Overhead (SIOH) rate of 2.5%. This percentage represents the pre-negotiated rate between the U.S. Government and the Defense Infrastructure Organization (DIO) for the SIOH services the Government of the United Kingdom (UK) provides for all U.S. funded MILCON projects in the UK. Facilities will be designed as permanent construction in accordance with the Department of Defense Unified Facilities Criteria 1-200-01, General Building requirements. This project will comply with Department of Defense Antiterrorism/Force Protection requirements per Unified Facilities Criteria 4-010-01 application.</p> <p>Air Conditioning: 82 Tons</p>			
<p>11. Requirement: 1,908 SM Adequate: 0 SM Substandard: 1,531 SM</p> <p>PROJECT: F-35A Munition Inspection Facility</p> <p>REQUIREMENT: This facility is necessary to perform organizational maintenance and surveillance inspections on munitions systems. The facility needs a minimum of five work bays with bay doors. One bay must include a 6,000-pound transverse-mounted traveling crane that meets all host nation requirements for this application. Bay door design shall comply with Air Force Instruction 31-101, Integrated Defense. The facility must be equipped with lightning protection and electrical grounding system in accordance with the Department of Defense 6055.9-Std, Air Force Instruction 32-1065, and Air Force Manual 91-201. The facility bays require Low-pressure (0 to 150 pounds per square inch gauge) air along with 115 Volt Alternating Current 60 Hertz single-phase and 220 Volt Alternating Current power. Environmental controls for humidity and temperature are necessary to assure proper protection for munitions systems and test equipment. Heating Ventilation Air Conditioning for office and bays is required. This is not a tenant or supported service requirement.</p> <p>CURRENT SITUATION: Space in the current facility is barely capable of accommodating the current workload of one F-15C and two F-15E squadrons. Even though the F-15Cs are expected to depart in Fiscal Year 2024, this has not been assured. In November 2021 the first of two additional F-35 squadrons and their subsequent air-to-ground mission, will trigger a large stockpile increase driving a significant workload increase in maintenance, exceeding the mission capacity of the current facility. In an interim measure prior to the completion of this facility the users will have to work an extended shift patterns and carefully monitor the maintenance and</p>			

1. COMPONENT AIR FORCE	FY 2022 MILITARY CONSTRUCTION PROJECT DATA (computer generated)		2. DATE MAY 2021
3. INSTALLATION, SITE AND LOCATION RAF LAKENHEATH RAF LAKENHEATH SITE # 1 UNITED KINGDOM		4. PROJECT F-35A MUNITION INSPECTION FACILITY	
5. PROGRAM ELEMENT 27142F	6. CATEGORY CODE 215-582	7. PROJECT NUMBER MSET183503	8. PROJECT COST(\$000) 31,000
<p>inspection schedules of the various munitions. Two of the existing facilities (1601 and 1604) were constructed in 1964 and 1968, respectively, and are beyond economic repair. Additionally, the location of both these facilities impacts the explosive weight capability of building 1599 (Precision Guided Munitions Maintenance) facility under both the Host Nation and United States of America explosive licensing authorities</p> <p>IMPACT IF NOT PROVIDED: If this project is not provided there will be insufficient munitions maintenance space upon arrival of the F-35s in Fiscal Year 2021 causing a potential loss in mission effectiveness and accomplishment. The bed down of the new airframe will stretch the already limited munitions maintenance capability of this front line fighter base and impact the mission and operational readiness of the two F-35, two F-15E and one F-15C squadrons. This will have a negative impact on the force readiness in support of United States European Command Operations Plan and response capability to the United States European Command Commander.</p> <p>ADDITIONAL: All work associated with this project shall comply with United States Air Force and Host Nation regulations and agreements. The country-to-country agreement precludes the use of International Competitive Bidding proceedings in the United Kingdom. Project meets the criteria/scope in Air Force Manual 32-1084, Facility Requirements. Work will comply with all relevant Unified Facilities Criteria's, Air Force Instructions, and Royal Air Force Lakenheath Base Standards. The facility should be designed in accordance with the following documents: Unit Committed Munitions List--A list that identifies munitions required by a unit to support war plans (primary munitions) and contingency operations (support munitions); Air Force Instruction 11-212, Munitions Requirements for Aircrew Training; the Air Force Standard for Non-Expendable Air Munitions Training Authorizations; test plans; and bed down plans. An economic analysis of reasonable alternatives for accomplishing the project evaluating status quo, addition/alteration, and new construction has been completed. This analysis indicated that new construction is the only option that can meet mission requirements. Sustainable principles, to include life-cycle cost-effective practices, will be integrated into the design, development, and construction of the project in accordance with Unified Facility Criteria 1-200-02, High Performance and Sustainable Building Requirements. This includes preparation of a life-cycle cost analysis for energy consuming systems, renewable energy generating systems, or whenever life-cycle cost effective is selected as the reason any requirement of Unified Facility Criteria 1-200-02 is partially compliant or not applicable. This project does not fall within or partly within the 100-year flood plain. This</p>			

1. COMPONENT AIR FORCE	FY 2022 MILITARY CONSTRUCTION PROJECT DATA (computer generated)		2. DATE MAY 2021
3. INSTALLATION, SITE AND LOCATION RAF LAKENHEATH RAF LAKENHEATH SITE # 1 UNITED KINGDOM		4. PROJECT F-35A MUNITION INSPECTION FACILITY	
5. PROGRAM ELEMENT 27142F	6. CATEGORY CODE 215-582	7. PROJECT NUMBER MSET183503	8. PROJECT COST(\$000) 31,000
<p>project was included in the Fiscal Year 2021 Future-Years Defense Plan in Fiscal Year 2022. In accordance with Department of Defense Directive 2010.5, a determination has been made that a portion of this project may be eligible for North Atlantic Treaty Organization funding and a Pre-Financing Statement has been issued to North Atlantic Treaty Organization (NATO). The statement informs NATO that the United States are funding 100% of the costs and if and when the facility is included in the NATO Inventory the United States will seek recompense against the NATO budget contribution. This design shall conform to criteria established in the Air Force Corporate Facilities Standards, the Installation Facilities Standards, but will not employ a standard facility design because there is no Air Force standard facility design for this project and there is no applicable standard design from Air Force Civil Engineer Center. Facility is sited in accordance with the Installation Development Plan and is within a compatible land use area. Supporting facility costs exceed 25% of primary facility cost due to the required blast and force protection measures to meet UK and US explosive licensing requirements and increased expense of demolishing bunker type facilities.</p> <p>48th Civil Engineering Squadron, Base Civil Engineer: 044-01638-522100 SHOP, SURVEILLANCE and INSPECTION: 1,908 SM = 20,538 Square Feet DEMOLITION: 1,531 SM = 16,480 Square Feet FOREIGN CURRENCY BUDGET RATE USED: POUND-DOLLAR 0.7843</p> <p>JOINT USE CERTIFICATION: Mission requirements, operational considerations, and location are incompatible with use by other components.</p>			

1. COMPONENT AIR FORCE	FY 2022 MILITARY CONSTRUCTION PROJECT DATA (computer generated)		2. DATE MAY 2021
3. INSTALLATION, SITE AND LOCATION RAF LAKENHEATH RAF LAKENHEATH SITE # 1 UNITED KINGDOM		4. PROJECT F-35A MUNITION INSPECTION FACILITY	
5. PROGRAM ELEMENT 27142F	6. CATEGORY CODE 215-582	7. PROJECT NUMBER MSET183503	8. PROJECT COST (\$000) 31,000
12. SUPPLEMENTAL DATA:			
a. Estimated Design Data:			
(1) Status:			
(a) Type of Design	Design-Bid-Build		
(b) Date Design Started	16-FEB-20		
(c) Parametric Cost Estimates Used to develop costs	YES		
(d) Percent Complete as of 01 JAN 2021	35%		
(e) Date 35% Designed	01-JAN-21		
(f) Date Design Complete	28-FEB-22		
(g) Energy Study/Life-Cycle analysis was/will be performed	YES		
(2) Basis:			
(a) Standard or Definitive Design	NO		
(b) Where Design Was Most Recently Used	N/A		
(3) Total Cost (c) = (a) + (b) or (d) + (e)	(\$000)		
(a) Production of Plans and Specifications	1,240		
(b) All Other Design Costs	620		
(c) Total	1,860		
(d) Contract	1,395		
(e) In-house	465		
(4) Construction Contract Award	22-JUL		
(5) Construction Start	22-SEP		
(6) Construction Completion	25-MAY		
b. Equipment associated with this project provided from other appropriations:			
		FISCAL YEAR	
		APPROPRIATED	COST
EQUIPMENT NOMENCLATURE	PROCURING APPROP	OR REQUESTED	(\$000)
FURNITURE FITTINGS, AND EQUIP	3080	FUTURE REQUEST	300
COMMUNICATION EQUIPMENT	3080	FUTURE REQUEST	250

(Tab 13) - Planning and Design

1. COMPONENT AIR FORCE	FY 2022 MILITARY CONSTRUCTION PROJECT DATA (computer generated)			2. DATE MAY 2021
3. INSTALLATION, SITE AND LOCATION WORLDWIDE UNSPECIFIED VARIOUS LOCATIONS		4. PROJECT TITLE EDI: PLANNING AND DESIGN		
5. PROGRAM ELEMENT 91211F	6. CATEGORY CODE 961-000	7. RPSUID/PROJECT NUMBER /PAYZ220001	8. PROJECT COST (\$000) 648	
9. COST ESTIMATES				
ITEM		U/M	QUANTITY	UNIT
PRIMARY FACILITIES				648
PLANNING AND DESIGN (91211F)		LS		(648)
SUPPORTING FACILITIES				<u>0</u>
SUBTOTAL				<u>648</u>
TOTAL CONTRACT COST				<u>648</u>
TOTAL REQUEST				<u>648</u>
10. Description of Proposed Construction:				
11. Requirement: Adequate: Substandard:				
PROJECT: As required.				
REQUIREMENT: These planning and design funds are required to complete the design of facilities in the FY23 Military Construction Program, initiate design of facilities in the FY24 Military Construction Program, and accomplish planning and design for major and complex technical projects with long lead-times to be included in subsequent Military Construction programs. These funds may be used for value engineering and for support of the design and construction management of projects that are funded by foreign governments and for design of classified and special programs. The funds may also be used for developing the Tri-Services Cost Estimating Guide and Unified Facilities Criteria.				

(Tab 14) -Unspecified Minor Military Construction

1. COMPONENT AIR FORCE	FY 2022 MILITARY CONSTRUCTION PROJECT DATA (computer generated)			2. DATE MAY 2021	
3. INSTALLATION, SITE AND LOCATION WORLDWIDE UNSPECIFIED VARIOUS LOCATIONS		4. PROJECT TITLE UNSPECIFIED MINOR MILITARY CONSTRUCTION			
5. PROGRAM ELEMENT 91211F	6. CATEGORY CODE 962-000	7. RPSUID/PROJECT NUMBER /PAYZ220004	8. PROJECT COST (\$000) 58,884		
9. COST ESTIMATES					
ITEM		U/M	QUANTITY	UNIT	COST (\$000)
PRIMARY FACILITIES					58,884
MINOR MILITARY CONSTRUCTION (91211F)		LS			(58,884)
SUPPORTING FACILITIES					
SUBTOTAL					<u>0</u>
TOTAL CONTRACT COST					<u>58,884</u>
TOTAL REQUEST					58,884
10. Description of Proposed Construction:					
11. Requirement: Adequate: Substandard:					
PROJECT: As required.					
REQUIREMENT: Minor construction projects authorized by 10 U.S. Code 2805 are military construction projects with an estimated funded cost of more than \$2,000,000 and equal or less than \$6,000,000. This authority provides a means of accomplishing projects that are not identified but which are anticipated to arise during FY22. Included would be projects to support new mission requirements, new equipment, and other essential support to Air Force missions.					

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(Tab 15) - Host Nation Funded Construction



Department of the Air Force

Host Nation Funded Military Construction Program

**Fiscal Year (FY) 2022
Budget Estimates**

**Justification Data Submitted to
Congress May 2021**

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(Tab 16) - Table of Contents

**DEPARTMENT OF THE AIR FORCE
HOST NATION MILITARY CONSTRUCTION PROGRAM CALENDAR YEAR 2022
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(Tab 17) - Program Summary

**DEPARTMENT OF THE AIR FORCE
HOST NATION MILITARY CONSTRUCTION PROGRAM CALENDAR YEAR 2022
PROGRAM SUMMARY**

	Authorization Request <u>(\$000s)</u>
Military Construction	
Major Construction	246,000
Total Military Construction	246,000

Strategic Narrative:

The enclosed justification book represents the United States Air Forces Korea (USFK) Republic of Korea Funded Construction program for calendar year 2022. Although the justification book may appear to be a list of individual projects, these projects were developed in coordination between both countries to form an overall consolidated program to meet USFK priorities and Theater Infrastructure Master Plan – Armistice objectives. These projects have been through a detailed scoring and prioritization process with involvement of the USFK component commanders and represent the most critical and urgent operational requirements.

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(Tab 18) - Host Nation Funded **Index**

**DEPARTMENT OF THE AIR FORCE
 HOST NATION MILITARY CONSTRUCTION PROGRAM
 CALENDAR YEAR 2022 INDEX
 (DOLLARS IN THOUSANDS)**

STATE/COUNTRY	INSTALLATION	PROJECT	COST (\$000)
REPUBLIC OF KOREA	Gimhae Air Base	Repair Contingency Hospital	75,000
		Gimhae Air Base TOTAL:	75,000
	Osan Air Base	Munitions Storage Area Move Delta (Phase 2)	171,000
		Osan Air Base TOTAL:	171,000
		REPUBLIC OF KOREA TOTAL:	246,000
		HOST NATION FUNDED CONSTRUCTION TOTAL:	246,000

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(Tab 19) - Host Nation Funded Projects

1. COMPONENT AIR FORCE		REPUBLIC OF KOREA FUNDED CONSTRUCTION (ROKFC)		2. DATE 01 Jun 2020	
3. INSTALLATION AND LOCATION GIMHAE AIR BASE, KOREA			4. PROJECT TITLE REPAIR CONTINGENCY HOSPITAL		
5. PROGRAM ELEMENT N/A		6. CATEGORY CODE 510-001	7. PROJECT NUMBER MEPZ143001 (F20R800)	8. PROJECT COST (\$000) \$75,000	
9. COST ESTIMATES					
ITEM		U/M	QUANTITY	UNIT COST	COST (\$000)
PRIMARY FACILITIES					51,465
ARCHITECTURAL WORK		SM	19,760	827	16,342
MECHANICAL WORK		SM	19,760	882	17,428
ELECTRICAL WORK		SM	19,760	438	8,655
FIRE SUPPRESSION SYSTEM		SM	19,760	85	1,680
BUILDING INFORMATION SYSTEM		SM	19,760	315	6,224
CYBER SECURITY		LS	1	425,000	425
BUILDING COMMISSIONING		SM	19,760	36	711
SUPPORTING FACILITIES					16,259
UTILITIES		LS	1	9,797,000	9,797
PAVEMENT		LS	1	797,000	797
SITE IMPROVEMENT		LS	1	3,630,000	3,630
DEMOLITION		LS	1	385,000	385
COMMUNICATION		LS	1	215,000	215
ANTITERRORISM/FORCE PROTECTION		LS	1	344,000	344
ENVIRONMENTAL ABATEMENT		LS	1	225,000	225
COMMISSIONING		LS	1	866,000	866
SUBTOTAL					67,724
CONTINGENCY (5%)					3,386
TOTAL CONTRACT COST					71,110
SUPERVISION, INSPECTION AND OVERHEAD (6.0%)					4,267
TOTAL FUNDED COST					75,377
TOTAL FUNDED COST (ROUNDED)					75,000
10. DESCRIPTION OF PROPOSED WORK:					
<p>Utilize host-nation funding to repair the contingency hospital (16,700 Square Meters, SM) at Gimhae Air Base. This requirement includes increasing in footprint of 3,060 SM, repairing/reconfiguring administration space, patient care areas, staff support space, and warehouse areas. Also, this project is required to make adequate use of facility space, bring the electrical, fire, mechanical infrastructure up to current codes, and provide a professional facility conducive to patient care for the only United States Forces Korea (USFK) contingency hospital to enable our ability to support for the Fight Tonight mission. All utilities shall be metered using advanced meters as defined by Federal Energy Management Program (FEMP). Facilities will be designed as permanent construction in accordance with the Department of Defense (DoD) Unified Facilities Criteria (UFC) 1-200-01_General Building Requirements, UFC 1-200-02_High Performance and Sustainable Building Requirements, with Change 2 and UFC 4-510-01_Military Medical Facilities, with Change 2. This project will comply with DoD antiterrorism/ force protection requirements per UFC 4-010-01. Relocate building 1022 (HAZMAT Storage building) and demo building 1004 (patient ward), 1005 (patient ward), 1012 (Sewer Treatment Building) and 1017 (Septic Tank). Air Conditioning : 400 Tons</p>					
11. Requirement: 19,760 SM		Adequate: 0		Substandard: 16,700 SM	
PROJECT: Repair Contingency Hospital (Current Mission)					
REQUIREMENT: Project scope includes replacing and repairing patient support systems, electrical systems to include back-up power, mechanical and plumbing systems, structural and architectural components, applicable communication systems, fire alarm					

1. COMPONENT AIR FORCE		REPUBLIC OF KOREA FUNDED CONSTRUCTION (ROKFC)		2. DATE 01 Jun 2020	
3. INSTALLATION AND LOCATION GIMHAE AIR BASE, KOREA			4. PROJECT TITLE REPAIR CONTINGENCY HOSPITAL		
5. PROGRAM ELEMENT N/A		6. CATEGORY CODE 510-001	7. PROJECT NUMBER MEPZ143001 (F20R800)	8. PROJECT COST (\$000) \$75,000	

systems, Mass Notification Systems, medical gas systems, and all other necessary works for a complete and usable facility. Install automatic fire suppression system and alarm system. One of the three remaining medical-surgical wings will be renovated/reconfigured to accommodate 96 patient beds. The other existing medical-surgical wings will be renovated as functional flexible space. The existing air evacuation wings will be reconfigured to provide dedicated outpatient, staff dining, staff sleeping, evacuation beds and functional flexible space. The staff sleeping and air evacuation beds are designed so they can be interchangeable depending on operational need. Also, this project includes demolition of the two existing patient wards (building 1004 and 1005) to facilitate new construction in support Intensive Care Unit (ICU) and Step-Down patient beds designed to current criteria and code. Adjacent to this new structure is a new mechanical structure to support the Diagnostic & Treatment (D&T) building upgrades and the patient wards. The new wing will be designed to accommodate approximately 26 ICU beds, 26 Step-Down beds and 58 Medical-Surgical beds. The ICU and Step-Down beds are to be configured as an interchangeable units to allow for flexing beds as the patient population requires. A new helipad will be constructed to support air ambulance transfer operation.

CURRENT SITUATION:

Gimhae hospital is main hub for Air Evacuation (AE) and there is no alternative medical facility or Wartime Host Nation Support (WHNS) hospital. This facility has been listed on Fire Safety Deficiencies (FSD), Type I since there is no adequate fire suppression system. The medical gas system was not certified for use in accordance with National Fire protection Association (NFPA 99). Electrical switches and light fixtures are old, in a generally deteriorated state and are failing. The electrical power switchgear, panel boards and breakers are original equipment and no longer repair-parts supportable. The Mission Essential Power 12 (MEP12) prime power generators are no longer supportable and no longer in the Air Force inventory for spare parts. Because these generators are intended to be used to produce a prime utility, they must be constantly supervised by an operator if steady state power is going to be provided to the operating room table. The Medical Lab, Pharmacy, and Central Sterilization area, and six MSU and Aeromedical Staging Facility patient wards do not have a proper climate control system to manage temperature, humidity, and pressurization of the spaces. The contingency water source was an irrigation ditch on the site, with the water processed through the water treatment plant. However, the irrigation ditch is not capable of providing the required water usage. The aging contingency hospital requires functional and technical upgrades to meet current medical equipment outfitting requirements. Lastly, the hospital does not meet accessibility guidelines per the Architectural Barriers Act (ABA) Accessibility Standard for current medical requirements for patient care.

IMPACT IF NOT PROVIDED:

Gimhae Air Base contingency hospital has a critical medical mission to provide care for our joint warriors, support joint personnel, and significantly influence Noncombatant Evacuation Operation (NEO). Without this building, the contingency hospital functions cannot happen in a manner that allows acceptable health care standards. This project will enable USFK and 7th Air Force Surgeon General to have a robust medical care option, and is necessary to make tactical use of facility space and bring medical-grade oxygen generation and delivery capabilities, while bringing water, electrical, fire and mechanical infrastructure and functional space up to current healthcare codes and standards that our joint personnel deserve.

ADDITIONAL:

No portion of this facility is intended for Republic of Korea personnel exclusive or primary use. The project is located on an enduring installation which will be retained by United States Forces Korea (USFK) for the foreseeable future. This project meets applicable criteria/scope specified in Air Force Manual 32-1084, Facility Requirements.

JOINT USE CERTIFICATION:

This facility can be used by other components on an as available basis; however, the scope of the project is based on Air Force requirements.

1. COMPONENT AIR FORCE		REPUBLIC OF KOREA FUNDED CONSTRUCTION (ROKFC)		2. DATE	
3. INSTALLATION AND LOCATION OSAN AIR BASE, KOREA			4. PROJECT TITLE: MUNITIONS STORAGE AREA MOVE DELTA (PHASE 2)		
5. PROGRAM ELEMENT N/A		6. CATEGORY CODE 422-264	7. PROJECT NUMBER SMYU003005B (F17R620P2)	8. PROJECT COST (\$000) 171,000	
9. COST ESTIMATES					
ITEM		U/M	QUANTITY	UNIT COST	COST (\$000)
PRIMARY FACILITY					58,917
Explosive Storage Facility (Big Igloos) (422-264)		SM	6,567	4,242	(27,857)
Ancillary Explosives Facility (Flow-Thru) (422-275)		SM	1,990	5,694	(11,331)
Munitions Storage Module (Small) (422-271)		SM	180	8,224	(1,480)
Inert Storage Building (422-265)		SM	2,740	2,688	(7,365)
Trailer & Wood Shop Facility (215-582)		SM	1,220	3,284	(4,006)
Water Storage Tank (841-427)		EA	1	2,678,000	(2,678)
Cybersecurity		LS			(4,200)
SUPPORTING FACILITIES					95,073
Electric Service		LS			(2,543)
Water, Sewer ,Gas		LS			(1,553)
Paving, Walks, Curbs And Gutters		LS			(6,142)
Storm Drainage		LS			(2,237)
Site Improvements		LS			(77,432)
Special Foundations		LS			(1,878)
Intrusion Detection System		LS			(298)
Demolition		SM	6,349	134	(851)
Information System		LS			(473)
Passive Force Protection Measures		LS			(1,666)
SUBTOTAL					153,990
CONTINGENCY (5%)					7,700
TOTAL CONTRACT COST					161,690
SUPERVISION, INSPECTION AND OVERHEAD (6%)					9,701
TOTAL REQUEST					171,391
TOTAL REQUEST (ROUNDED)					171,000
EQUIPMENT FROM OTHER APPROPRIATIONS					(500)
10. DESCRIPTION OF PROPOSED CONSTRUCTION:					
<p>Utilize host-nation funding to construct a Munitions Storage Area (MSA) to consolidate Osan Air Base (AB) explosive storage facilities contained in the Delta Site utilizing conventional design and construction methods to accommodate the mission of the facility. This project is the second phase of two for the Delta Munitions relocation project. Primary facilities include explosive storage facilities (33ea), ancillary explosives facilities (flow-throughs, 10ea), munitions storage modules (small, 6ea), inert storage buildings (4ea), a trailer & wood shop facility and a 500K gallons elevated fire water storage tank. Work will include reinforced concrete foundation and floor slabs, structural steel frame, standing seam metal roof, utilities, electrical power including lighting, intrusion detection infrastructure and lightning protection system, Supervisory Control and Data Acquisition (SCADA) system, site improvements, security fence, landscaping, roads/parking adequate for trailer's circular path around covered structure, communications infrastructure, fire alarm system and all necessary supporting work for a complete and useable MSA. This project includes an extensive site improvement work by backfilling, piling, as well as preloading earthworks on the undeveloped lowland area for new munition facilities. The facility should be compatible with applicable Department of Defense (DoD), Air Force, and base design standards. In addition, local materials and construction techniques shall be used where cost effective. The facility must also be able to withstand wind loads and seismic effects as prescribed in applicable codes and design guides.</p>					

1. COMPONENT AIR FORCE	REPUBLIC OF KOREA FUNDED CONSTRUCTION (ROKFC)	2. DATE
3. INSTALLATION AND LOCATION OSAN AIR BASE, KOREA		
4. PROJECT TITLE MUNITIONS STORAGE AREA MOVE DELTA (PHASE 2)	5. PROJECT NUMBER SMYU003005B/F17R620P2	
<p>non-explosives facilities within an explosive clear zone. The supporting facilities costs exceed 25% of the primary facilities costs due to the facility being built in an undeveloped lowland area, requiring extensive utilities and communication runs, as well as associated site improvement by backfilling and piling. This project meets applicable criteria/scope specified in AFMAN 32-1084, Facility Requirements. All reasonable alternatives were considered during the development of this project to include [status quo, add/alter, and new construction]. New construction is the only viable option to meet this requirement. Since this is a host nation funding project, a formal economic analysis is not required. This project was included in the Fiscal Year 2022 future years' defense plan in Fiscal Year 2018-2023. This design shall conform to criteria established in the Air Force Corporate Facilities Standards and the Installation Facilities Standards, but will not employ a standard facility design because there is no Air Force standard facility design for this project; furthermore, there is no applicable standard design from the Air Force Civil Engineer Center. This is a mission-critical facility. This project falls within the 100-year flood plain. The facilities and any flood-susceptible utilities will be constructed a minimum of three feet above the 100-year flood plain elevation. This project fulfills US requirements only and will be designed and constructed for US exclusive use.</p> <p>Munitions Storage Area: 12,677 SM = 136,669 SF. Demolish: 6,349 SM = 68,340 SF</p> <p><u>JOINT USE CERTIFICATION</u>: The facility can be used by other components on an “as available” basis; however, the scope of the project is based on Air Force requirements.</p>		

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(Tab 20) - **Family Housing**



Department of the Air Force

Military Family Housing

Fiscal Year (FY) 2022 Budget Estimates

**Justification Data Submitted to
Congress**

May 2021

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(Tab 21) Table of Contents

**DEPARTMENT OF THE AIR FORCE
MILITARY FAMILY HOUSING
FISCAL YEAR 2022 BUDGET REQUEST**

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(Tab 22) - Family Housing Narrative

**DEPARTMENT OF THE AIR FORCE
MILITARY FAMILY HOUSING
FISCAL YEAR 2022 BUDGET REQUEST**

MILITARY FAMILY HOUSING

	<u>Program (\$ in Thousands)</u>
FY 2022 Budget Request	\$441,161
FY 2021 Budget Request	\$414,235
FY 2021 Enactment*	\$20,000
FY 2021 Appropriation	\$434,235

NARRATIVE SUMMARY

*Funds provided by Congress in FY2021 for additional Family Housing Support and Management are three year appropriated funds.

This Military Family Housing budget request reflects the Air Force's commitment to ensure military personnel and their families have access to excellent housing facilities and services. The Air Force relies on the local community to support military family housing needs. When community housing is unavailable or inadequate, we construct, replace, improve, or repair and maintain military family housing that meets contemporary standards.

The Air Force created the Family Housing Master Plan (FHMP) as the strategic planning and programming investment tool for government-owned, leased and privatized military family housing. This request funds the AF FHMP recommendations to sustain, improve and divest military family housing overseas, support privatized family housing, and lease family housing when necessary and fiscally appropriate.

Consistent with AF FHMP priorities, this budget provides a program that supports daily operations and the maintenance and repair of assets to sustain and prevent deterioration of adequate inventory. The operations, maintenance and leasing accounts predominantly support "must pay" requirements. These costs include service contracts, lease contracts, utilities, and essential maintenance to operate the units and contract funding to correct life safety, health, and facility preservation issues that cannot wait for Family Housing Construction funding.

We respectfully request full support for the Air Force family housing needs presented herein.

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(Tab 23) - Financial Summary

**DEPARTMENT OF THE AIR FORCE
MILITARY FAMILY HOUSING
FISCAL YEAR 2022 BUDGET REQUEST**

FINANCIAL SUMMARY

**AUTHORIZATION FOR APPROPRIATION
REQUESTED FOR FY 2022:**

(\$000)

FUNDING REQUEST FOR FY 2022

Construction	\$0
Construction Improvements	\$105,258
Planning and Design	\$10,458
<u>Appropriation Request: Construction</u>	<u>\$115,716</u>
<u>Operations, Utilities, and Maintenance</u>	<u>\$292,650</u>
Operating Expenses	\$107,228
Utilities	\$43,668
Maintenance	\$141,754
Housing Privatization	\$23,275
Leasing - Worldwide	\$9,520
<u>Appropriation Request: O&M, Leasing, Housing Privatization</u>	<u>\$325,445</u>
<u>Appropriation Request</u>	<u>\$441,161</u>
Reimbursement Request	\$5,715
FY 2022 FAMILY HOUSING REQUEST	\$446,876

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DEPARTMENT OF AIR FORCE
FH-11 Inventory and Condition of Government-Owned, Family Housing Units
(Number of Dwelling Units in Inventory)
Fiscal Year 2022

Worldwide

	Number of Units- Worldwide						
	FY 2020	FY 2021	FY 2022	FY 2023	FY 2024	FY 2025	FY 2026
Beginning of FY Adequate Inventory Total	11,811	12,015	12,386	12,014	11,933	11,356	10,722
FCI of 90% to 100% (Good Condition)	7,400	7,047	10,287	9,740	8,942	7,298	5,435
FCI of 80% to 89% (Fair Condition)	4,411	4,968	2,099	2,274	2,991	4,058	5,287
Beginning of FY Inadequate Inventory Total	3,442	3,245	2,887	3,234	3,315	3,438	4,101
FCI of 60% to 79% (Poor Condition)	1,790	1,875	2,542	2,777	2,815	3,081	3,707
FCI of 59% and below (Failing Condition)	1,652	1,370	345	457	500	357	394
Beginning of FY Total Inventory	15,253	15,260	15,273	15,248	15,248	14,794	14,823
Percent Adequate - Beginning of FY Inventory	77%	79%	81%	79%	78%	77%	72%
Inadequate Inventory Reduced Through:	(197)	(358)	347	81	123	663	381
Construction (FHCON)	(12)	(117)	(44)	0	(2)	(46)	(104)
Maintenance & Repair (FHO&M)	(210)	(61)	(168)	(146)	(68)	(113)	(120)
Privatization	0	0	0	0	0	0	0
Demolition/Divestiture/Diversion/Conversion	(54)	(9)	(74)	0	(310)	(40)	0
Funded by Host Nation	0	0	0	0	0	0	0
Additional Inadequate Units Identified	79	(171)	633	227	503	862	605
Adequate Inventory Changes:	204	371	(372)	(81)	(577)	(634)	(343)
Construction (FHCON)	88	117	44	0	4	75	104
Maintenance & Repair (FHO&M)	210	61	168	146	68	113	120
Privatization	0	0	0	0	0	0	0
Demolition/Divestiture/Diversion/Conversion	(69)	22	(7)	0	(170)	0	0
Funded by Host Nation	54	0	56	0	24	40	38
Additional Adequate Units Identified	(79)	171	(633)	(227)	(503)	(862)	(605)
End of FY Adequate Inventory Total	12,015	12,386	12,014	11,933	11,356	10,722	10,379
FCI of 90% to 100% (Good Condition)	7,047	10,287	9,740	8,942	7,298	5,435	5,527
FCI of 80% to 89% (Fair Condition)	4,968	2,099	2,274	2,991	4,058	5,287	4,852
End of FY Inadequate Inventory Total	3,245	2,887	3,234	3,315	3,438	4,101	4,482
FCI of 60% to 79% (Poor Condition)	1,875	2,542	2,777	2,815	3,081	3,707	4,083
FCI of 59% and below (Failing Condition)	1,370	345	457	500	357	394	399
End of FY Total Inventory	15,260	15,273	15,248	15,248	14,794	14,823	14,861
Percent Adequate - End of FY Inventory	79%	81%	79%	78%	77%	72%	70%
DoD Performance Goal - 90% of world-wide family housing inventory at FCI of at least 80% (Good or Fair Condition)	90%	90%	90%	90%	90%	90%	90%

NOTES:

- 1 - Facility Condition Index (FCI) is a general measure of the physical condition of the facility. FCI is calculated as the ratio of Plant Replacement Value (PRV) minus the estimated cost of maintenance and repair requirements, divided by PRV. This provides a FCI from 0% to 100% with 100% representing good condition.
- 2 - Assessment data and investment, sustainment, and divestiture strategy for the worldwide AF government-owned inventory is based on the Housing Community Profiles (HCP) and the Family Housing Master Plan (FHMP). The 2020 FHMP included reviews and updates to condition data based on project execution and data reviews. An adjustment of scores is shown in the FY21 inventory changes.
- 3 - Units with <60 FCI scores include units at Okinawa planned for replacement and land return; and units impacted by the European Infrastructure Consolidation (EIC) changes. Projects for the EIC changes are identified in the FMHP in FY25-30 investment planning.
- 4 - A portion of the inadequate inventory retained at Yokota and Misawa is being used for swing space during renovations.
- 5 - Units (12) at Akrotiri, Cypress added to MFH inventory in FY20, conditional on approved RAF/AF agreement. Units are managed by RAF Lakenheath.
- 6 - Air Force MFH homes challenged by a slowly declining Facility Condition Index score across the FYDP. Long term fixes include a greater level of analysis within the on-going update to the Air Force Family Housing Master Plan to determine the health and appropriate funding of both the FHCON and FHO&M Maintenance. This will provide insights into potential right-sizing of the total MFH to meet the OSD Goal (90% of MFH inventory in adequate condition) by changing the current downward trend of inventory condition to an upwards trend.

DEPARTMENT OF AIR FORCE
FH-11 Inventory and Condition of Government-Owned, Family Housing Units
(Number of Dwelling Units in Inventory)
Fiscal Year 2022

UNITED STATES (CONUS plus Hawaii and Alaska)

	Number of Units- U.S.						
	FY 2020	FY 2021	FY 2022	FY 2023	FY 2024	FY 2025	FY 2026
Beginning of FY Adequate Inventory Total	93	84	30	30	30	31	51
FCI of 90% to 100% (Good Condition)	19	30	30	30	30	31	51
FCI of 80% to 89% (Fair Condition)	74	54	0	0	0	0	0
Beginning of FY Inadequate Inventory Total	18	27	72	62	62	61	1
FCI of 60% to 79% (Poor Condition)	18	27	72	62	62	61	1
FCI of 59% and below (Failing Condition)	0	0	0	0	0	0	0
Beginning of FY Total Inventory	111	111	102	92	92	92	52
Percent Adequate - Beginning of FY Inventory	84%	76%	29%	33%	33%	34%	98%
Inadequate Inventory Reduced Through:	9	45	(10)	0	(1)	(60)	(1)
Construction (FHCON)	0	0	0	0	(1)	(20)	0
Maintenance & Repair (FHO&M)	0	0	0	0	0	0	(1)
Privatization	0	0	0	0	0	0	0
Demolition/Divestiture/Diversion/Conversion	0	(9)	(10)	0	0	(40)	0
Funded by Host Nation	0	0	0	0	0	0	0
Additional Inadequate Units Identified	9	54	0	0	0	0	0
Adequate Inventory Changes:	(9)	(54)	0	0	1	20	1
Construction (FHCON)	0	0	0	0	1	20	0
Maintenance & Repair (FHO&M)	0	0	0	0	0	0	1
Privatization	0	0	0	0	0	0	0
Demolition/Divestiture/Diversion/Conversion	0	0	0	0	0	0	0
Funded by Host Nation	0	0	0	0	0	0	0
Additional Inadequate Units Identified	(9)	(54)	0	0	0	0	0
End of FY Adequate Inventory Total	84	30	30	30	31	51	52
FCI of 90% to 100% (Good Condition)	30	30	30	30	31	51	52
FCI of 80% to 89% (Fair Condition)	54	0	0	0	0	0	0
End of FY Inadequate Inventory Total	27	72	62	62	61	1	0
FCI of 60% to 79% (Poor Condition)	27	72	62	62	61	1	0
FCI of 59% and below (Failing Condition)	0	0	0	0	0	0	0
End of FY Total Inventory	111	102	92	92	92	52	52
Percent Adequate - End of FY Inventory	76%	29%	33%	33%	34%	98%	100%
<p>NOTES:</p> <p>1 - Facility Condition Index (FCI) is a general measure of the physical condition of the facility. FCI is calculated as the ratio of Plant Replacement Value (PRV) minus the estimated cost of maintenance and repair requirements, divided by PRV. This provides a FCI from 0% to 100% with 100% representing good condition.</p> <p>2 - Wright Patterson assessment in FY18 identified the majority of the units as adequate at the beginning of the FYDP. However, the expected component repairs and life cycle renewals will result in the units becoming inadequate by FY22. The FHMP identifies FHCON projects for Key and Essential (K&E) at 29 historic units in FY20, and a second project in FY25 for 20 units. One K&E unit was completed through and FHO&M project in FY19 (end of year funds). Divestiture is identified for all 40 remaining units; with 10 units in FY22 and 50 historic units in FY25.</p> <p>3 - United States Air Force Academy (USAFA) includes two General Officer Quarters (GOQs) in the government-owned inventory; one is identified for an FHCON new construction project in FY24 the other as and FHO&M project in FY26. Execution to be finalized with appropriate approvals.</p> <p>4 - Nine government-owned units at Eglin are identified for divestiture in FY21.</p>							

DEPARTMENT OF AIR FORCE
FH-11 Inventory and Condition of Government-Owned, Family Housing Units
(Number of Dwelling Units in Inventory)
Fiscal Year 2022

FOREIGN (includes U.S. Territories)

	Number of Units- Foreign						
	FY 2020	FY 2021	FY 2022	FY 2023	FY 2024	FY 2025	FY 2026
Beginning of FY Adequate Inventory Total	11,718	11,931	12,356	11,984	11,903	11,325	10,671
FCI of 90% to 100% (Good Condition)	7,381	7,017	10,257	9,710	8,912	7,267	5,384
FCI of 80% to 89% (Fair Condition)	4,337	4,914	2,099	2,274	2,991	4,058	5,287
Beginning of FY Inadequate Inventory Total	3,424	3,218	2,815	3,172	3,253	3,377	4,100
FCI of 60% to 79% (Poor Condition)	1,772	1,848	2,470	2,715	2,753	3,020	3,706
FCI of 59% and below (Failing Condition)	1,652	1,370	345	457	500	357	394
Beginning of FY Total Inventory	15,142	15,149	15,171	15,156	15,156	14,702	14,771
Percent Adequate - Beginning of FY Inventory	77%	79%	81%	79%	79%	77%	72%
Inadequate Inventory Reduced Through:	(206)	(403)	357	81	124	723	382
Construction (FHCON)	(12)	(117)	(44)	0	(1)	(26)	(104)
Maintenance & Repair (FHO&M)	(210)	(61)	(168)	(146)	(68)	(113)	(119)
Privatization	0	0	0	0	0	0	0
Demolition/Divestiture/Diversion/Conversion	(54)	0	(64)	0	(310)	0	0
Funded by Host Nation	0	0	0	0	0	0	0
Additional Inadequate Units Identified	70	(225)	633	227	503	862	605
Adequate Inventory Changes:	213	425	(372)	(81)	(578)	(654)	(344)
Construction (FHCON)	88	117	44	0	3	55	104
Maintenance & Repair (FHO&M)	210	61	168	146	68	113	119
Privatization	0	0	0	0	0	0	0
Demolition/Divestiture/Diversion/Conversion	(69)	22	(7)	0	(170)	0	0
Funded by Host Nation	54	0	56	0	24	40	38
Additional Inadequate Units Identified	(70)	225	(633)	(227)	(503)	(862)	(605)
End of FY Adequate Inventory Total	11,931	12,356	11,984	11,903	11,325	10,671	10,327
FCI of 90% to 100% (Good Condition)	7,017	10,257	9,710	8,912	7,267	5,384	5,475
FCI of 80% to 89% (Fair Condition)	4,914	2,099	2,274	2,991	4,058	5,287	4,852
End of FY Inadequate Inventory Total	3,218	2,815	3,172	3,253	3,377	4,100	4,482
FCI of 60% to 79% (Poor Condition)	1,848	2,470	2,715	2,753	3,020	3,706	4,083
FCI of 59% and below (Failing Condition)	1,370	345	457	500	357	394	399
End of FY Total Inventory	15,149	15,171	15,156	15,156	14,702	14,771	14,809
Percent Adequate - End of FY Inventory	79%	81%	79%	79%	77%	72%	70%

NOTES:

- 1 - Facility Condition Index (FCI) is a general measure of the physical condition of the facility. FCI is calculated as the ratio of Plant Replacement Value (PRV) minus the estimated cost of maintenance and repair requirements, divided by PRV. This provides a FCI from 0% to 100% with 100% representing good condition.
- 2 - Assessment data and investment, sustainment, and divestiture strategy for the worldwide AF government-owned inventory is based on the Housing Community Profiles (HCP) and the Family Housing Master Plan (FHMP). The 2020 FHMP included reviews and updates to condition data based on project execution and data reviews. An adjustment of scores is shown in the FY21 inventory changes.
- 3 - Units with <60 FCI scores include units at Okinawa planned for replacement and land return; and units impacted by the European Infrastructure Consolidation (EIC) changes. Projects for the EIC changes are identified in the FMHP in FY25-30 investment planning.
- 4 - A portion of the inadequate inventory retained at Yokota and Misawa is being used for swing space during renovations.
- 5 - Units (12) at Akrotiri, Cypress added to MFH inventory in FY20, conditional on approved RAF/AF agreement. Units are managed by RAF Lakenheath.

DEPARTMENT OF AIR FORCE
FH-11 Inventory and Condition of Government-Owned, Family Housing Units
(Number of Dwelling Units in Inventory)
Fiscal Year 2022

Transitional

	<u>FY 2020</u>	<u>FY 2021</u>	<u>FY 2022</u>	<u>FY 2023</u>	<u>FY 2024</u>	<u>FY 2025</u>	<u>FY 2026</u>
Beginning of FY Adequate Inventory Total	301	163	0	0	0	0	0
FCI of 90% to 100% (Good Condition)	51	142	0	0	0	0	0
FCI of 80% to 89% (Fair Condition)	250	21	0	0	0	0	0
Beginning of FY Inadequate Inventory Total	608	569	0	0	0	0	0
FCI of 60% to 79% (Poor Condition)	608	442	0	0	0	0	0
FCI of 59% and below (Failing Condition)	0	127	0	0	0	0	0
Beginning of FY Total Inventory	909	732	0	0	0	0	0
Percent Adequate - Beginning of FY Inventory	33%	22%	0%	0%	0%	0%	0%
Inadequate Inventory Reduced Through:							
Construction (FHCON)	(39)	(569)	0	0	0	0	0
Maintenance & Repair (FHO&M)	0	0	0	0	0	0	0
Privatization	0	0	0	0	0	0	0
Demolition/Divestiture/Diversion/Conversion	(3)	(569)	0	0	0	0	0
Funded by Host Nation	0	0	0	0	0	0	0
Additional Inadequate Identified	(36)	0	0	0	0	0	0
Adequate Inventory Changes:							
Privatization	0	0	0	0	0	0	0
Demolition/Divestiture/Diversion/Conversion	(174)	(163)	0	0	0	0	0
Additional Inadequate Identified	36	0	0	0	0	0	0
End of FY Adequate Inventory Total							
	163	0	0	0	0	0	0
FCI of 90% to 100% (Good Condition)	142	0	0	0	0	0	0
FCI of 80% to 89% (Fair Condition)	21	0	0	0	0	0	0
End of FY Inadequate Inventory Total	569	0	0	0	0	0	0
FCI of 60% to 79% (Poor Condition)	442	0	0	0	0	0	0
FCI of 59% and below (Failing Condition)	127	0	0	0	0	0	0
End of FY Total Inventory	732	0	0	0	0	0	0
Percent Adequate - End of FY Inventory							
	22%	0%	0%	0%	0%	0%	0%

NOTES:

- 1 - The definition of transitional family housing (FH) are units that are at enduring and non-enduring sites 1) as a result of organizational deactivations, consolidation (e.g. Europe Infrastructure Consolidation (EIC), etc.) and relocation efforts; 2) where FH units have been identified by the Services as surplus and not currently occupied; and 3) in both cases, the Service has planned, documented, funded and/or announced the divestiture, demolition, or transfer of these units in the Future Years Defense Program (FYDP).
2. Units are removed from "Transitional Inventory", if the units have either been divested through demolition, diversion, or conversion to another use; OR are no longer considered "Transitional" by the definition written above.
- 3 - The European Infrastructure Consolidation (EIC) updates have impacted manpower requirements for bases in England and Germany. EIC updates identify increased manpower at RAF Alconbury, RAF Lakenheath, and RAF Mildenhall, therefore most units are no longer considered surplus units. The upcoming Housing Community Profile (HCP) will develop recommendations to meet the new Housing Requirement and Market Analysis (HRMA). RAF Alconbury transitional inventory is removed in FY20, RAF Mildenhall and RAF Feltwell (supports RAF Lakenheath) transitional inventory is removed in FY21.
- 4 - Misawa and Yokota have units identified as surplus based on the 2017 HCPs; however the units continue to be used as swing space. These units, previously identified as transitional inventory, are removed from transitional until the new HRMAs (in execution) and HCPs (planned in FY22) are finalized with updated requirements and divestiture identified.
- 5 - Facility Condition Index (FCI) is a general measure of the physical condition of the facility. FCI is calculated as the ratio of Plant Replacement Value (PRV) minus the estimated cost of maintenance and repair requirements, divided by PRV. This provides a FCI from 0% to 100% with 100% representing good condition.

DEPARTMENT OF AIR FORCE
FH-11 Inventory and Condition of Government-Owned, Family Housing Units
(Number of Dwelling Units in Inventory)
Fiscal Year 2022

Transitional Unit Details by Location

<u>State/Country</u>	<u>Installation</u>	<u>N/E²</u>	<u>Change in Transitional Units</u>	<u>Condition (FCI)³</u>	<u>Explanation</u>
FY 2020					
Germany	KMC	N	(18)	3	Surplus divestiture of inadequate units is identified for one stairwell building (828) at Ramstein.
Japan	Yokota AB	N	67	4	Divestiture of 67 inadequate units identified in FY18 did not occur. Surplus units are added back into the transitional inventory. 5 units are identified for demolition in FY21 and 62 units identified for divestiture in FY22. Current Family Housing Master Plan (FHMP) will reanalyze divestiture plan.
United Kingdom	RAF Alconbury	N > E	(205)	1/2/4	The European Infrastructure Consolidation (EIC) has identified additional manpower requirements for RAF Lakenheath / RAF Mildenhall. All housing units are removed from the Transitional inventory and identified as sustainment until EIC, Housing Requirement and Market Analysis (HRMAs), and Housing Community Profiles (HCPs) (inventory and investment plan document) are finalized.
United Kingdom	RAF Menwith Hill	N	(21)	2	Divestiture is identified for inadequate units located on-base which are no longer needed; these units were being used by the Ministry of Defense (MOD).
FY 2020 Transitional Unit Changes				(177)	
FY 2021					
Japan	Misawa	N > E	(232)	2/3	Units identified as surplus based on 2017 HCP; however, the units have continued to be used as swing space. Removed units from transitional inventory until new HRMA (in execution) and HCP (planned for FY22) identify the new requirements.
Japan	Yokota AB	N > E	(145)	3/4	Units identified as surplus based on 2017 HCP; however, the units have continued to be used as swing space. Removed units from transitional inventory until new HRMA (in execution) and HCP (planned for FY22) identify the new requirements.
United Kingdom	RAF Feltwell	N > E	(246)	1/2/3/4	EIC updates identify additional requirements for RAF Lakenheath / RAF Mildenhall. All transitional inventory is being removed and identified as sustainment until EIC, HRMA, and HCPs are finalized.
United Kingdom	RAF Mildenhall	N > E	(109)	2/4	EIC updates identify additional requirements for RAF Lakenheath / RAF Mildenhall. All transitional inventory is being removed and identified as sustainment until EIC, HRMA, and HCPs are finalized.
FY 2021 Transitional Unit Changes				(732)	
FY 2022					
FY 2022 Transitional Unit Changes					
				0	
FY 2023					

DEPARTMENT OF AIR FORCE
FH-11 Inventory and Condition of Government-Owned, Family Housing
Units (Number of Dwelling Units in Inventory)
Fiscal Year 2022

<u>State/Country</u>	<u>Installation</u>	<u>N/E²</u>	<u>Change in Transitional Units</u>	<u>Condition (FCI)³</u>	<u>Explanation</u>
FY 2023 Transitional Unit Changes					
			0		
FY 2024					
FY 2024 Transitional Unit Changes					
			0		
FY 2025					
FY 2025 Transitional Unit Changes					
			0		
FY 2026					
FY 2026 Transitional Unit Changes					
			0		
Total			(909)		

NOTES:

1 - The definition of transitional family housing (FH) are units that are at enduring and non-enduring sites 1) as a result of organizational deactivations, consolidation (e.g. Europe Infrastructure Consolidation (EIC), etc.) and relocation efforts; 2) where FH units have been identified by the Services as surplus and not currently occupied; and 3) in both cases, the Service has planned, documented, funded and/or announced the divestiture, demolition, or transfer of these units in the Future Years Defense Program (FYDP).

2. Units are removed from "Transitional Inventory", if the units have either been divested through demolition, diversion, or conversion to another use; OR are no longer considered "Transitional" by the definition written above.

3 - Table identifies the change to transitional units. Negative numbers identify transitional units removed from the "Transitional" inventory. Positive numbers identify the additional transitional inventory.

4 - The European Infrastructure Consolidation (EIC) updates have impacted manpower requirements for bases in England and Germany. EIC updates identified increased manpower at RAF Alconbury, RAF Lakenheath, and RAF Mildenhall, therefore most units are no longer considered surplus units. The upcoming Housing Community Profile (HCP) will develop recommendations to meet the new Housing Requirement and Market Analysis (HRMA). RAF Alconbury transitional inventory is removed in FY20; the inventory change includes 52 units being demolished that are not needed to meet the current HRMA, the remaining 153 are being removed from "Transitional" inventory based on the EIC change. RAF Mildenhall and RAF Feltwell (supports RAF Lakenheath) transitional inventory is removed in FY21 based on the EIC change.

5 - Misawa and Yokota have units identified as surplus based on the 2017 HCPs; however the units continue to be used as swing space. These units, previously identified as transitional inventory, are removed from transitional until the new HRMAs (in execution) and HCPs (planned in FY22) are finalized with updated requirements and divestiture identified.

6 - Non-enduring locations annotated by use of "N", while Enduring locations annotated by use of "E".

7 - Facility Condition Index (FCI) is a general measure of the physical condition of the facility. FCI is calculated as the ratio of Plant Replacement Value (PRV) minus the estimated cost of maintenance and repair requirements, divided by PRV. This provides a FCI from 0% to 100% with 100% representing good condition. Facility Condition Index bands:

- 1 - FCI of 90% to 100% (Good Condition)
- 2 - FCI of 80% to 89% (Fair Condition)
- 3 - FCI of 60% to 79% (Poor Condition)
- 4 - FCI of 59% and below (Failing Condition)

**DEPARTMENT OF THE AIR FORCE
MILITARY FAMILY HOUSING
FISCAL YEAR 2022 BUDGET REQUEST**

FH-8 Air Force Inadequate Family Housing Units Eliminated in FY 2020

MAJCOM	Project Type	Base	Total Inventory Minus Leased & Privatized	Total Inadequate Inventory	Total Inadequate Addressed
Units at Beginning of FY 2020			15,253	3,442	
Additional Inadequate Units Identified			0	79	0
PACAF	Condition Adjustment	Misawa	0	48	0
USAFE	Condition Adjustment	Spangdahlem	0	20	0
PACAF	Condition Adjustment	Okinawa	0	1	0
USAFE	Condition Adjustment	RAF Fairford	0	1	0
AFMC	Condition Adjustment	Wright-Patterson	0	9	0
FY 2020 Family Housing Construction, Improvement, and O&M Projects to Eliminate Inadequate Units			0	(222)	222
USAFE	FHO&M	RAF Mildenhall - Akrotiri	0	(6)	6
PACAF	FHCON	Yokota	0	(12)	12
PACAF	FHO&M	Okinawa	0	(204)	204
Privatization Projects Executed			0	0	0
Units Demolished/Divested FY 2020			(123)	(54)	54
USAFE	Divest (not executed)	KMC (Landstuhl)	36	36	(36)
USAFE	Divest	RAF Menwith Hill	(21)	0	0
PACAF	Divest (not executed)	Yokota	67	67	(67)
USAFE	Acquisition	RAF Lakenheath - Akrotiri	12	12	(12)
USAFE	Divest	KMC (Vogelweh)	(48)	0	0
PACAF	Divest (not executed)	Okinawa	28	28	(28)
USAFE	Divest	KMC (Ramstein)	(18)	(18)	18
PACAF	Divest	Okinawa	(179)	(179)	179
Units Added to Family Housing			0	0	0
Deficit Construction			76	0	0
USAFE	Deficit Construction	Spangdahlem	76	0	0
Host Nation Construction projects			54	0	0
PACAF	JFIP Replacement	Okinawa	54	0	0
Units at End of FY 2020			15,260	3,245	276
NOTES:					
1 - FHO&M and FHCON investments are based on the Housing Community Profile (HCP) and Family Housing Master Plan (FHMP).					
2 - Divestiture is based on the Family Housing Master Plan. Units at Yokota (67) and KMC (36) are being retained until a divestiture plan and Business Case Analyses are completed through current FHMP and ongoing HCPs. In addition, 28 units at Okinawa are awaiting demolition through SACO project in lieu of AF \$'s.					
3 - Units (12) at Akrotiri, Cypress added to the Military Family Housing (MFH) inventory, conditional on approved RAF/AF agreement. Units are managed by RAF Lakenheath.					

**DEPARTMENT OF THE AIR FORCE
MILITARY FAMILY HOUSING
FISCAL YEAR 2022 BUDGET REQUEST**

FH-8 Air Force Inadequate Family Housing Units Eliminated in FY 2021

<u>MAJCOM</u>	<u>Project Type</u>	<u>Base</u>	<u>Total Inventory Minus Leased & Privatized</u>	<u>Total Inadequate Inventory</u>	<u>Total Inadequate Addressed</u>
Units at Beginning of FY 2021			15,260	3,245	
Additional Inadequate Units Identified			0	(171)	0
	FHMP Condition Data Updates		0	(171)	0
FY 2021 Family Housing Construction, Improvement, and O&M Projects to Eliminate Inadequate Units			0	(178)	178
PACAF	FHO&M project	Yokota	0	(12)	12
PACAF	FHCON project	Okinawa	0	(117)	117
PACAF	FHO&M project	Misawa	0	(49)	49
Privatization Projects Executed			0	0	0
Units Demolished/Divested FY 2021			13	(9)	9
AFMC	Divest	Eglin	(9)	(9)	9
USAFE	Planned Acquisition	RAF Fairford	22	0	0
Deficit			0	0	0
			0	0	0
Units Added to Family Housing			0	0	0
Deficit Construction			0	0	0
Host Nation Construction projects			0	0	0
Units at End of FY 2021			15,273	2,887	187
NOTES:					
1 - FHCON and FHO&M investments are based on the Housing Community Profile (HCP) and Family Housing Master Plan (FHMP). Inventory reflects the FY21 FHCON and FHO&M projects.					
2 - The 2020 FHMP included reviews and updates to condition data based on project execution and data reviews. An adjustment of scores is shown in the FY21 inventory changes.					
3 - Divestiture is based on Family Housing Master Plan updates.					
4 - Fairford inventory includes 22 previously divested housing units added back into the inventory due to European Infrastructure Consolidation (EIC) basing decisions. However, these decisions are still being finalized. Manpower and requirement updates will be reflected in the future Housing Requirement and Market Analysis (HRMA) and HCP.					

**DEPARTMENT OF THE AIR FORCE
MILITARY FAMILY HOUSING
FISCAL YEAR 2022 BUDGET REQUEST**

FH-8 Air Force Inadequate Family Housing Units Eliminated in FY 2022

<u>MAJCOM</u>	<u>Project Type</u>	<u>Base</u>	<u>Total Inventory Minus Leased & Privatized</u>	<u>Total Inadequate Inventory</u>	<u>Total Inadequate Addressed</u>
Units at Beginning of FY 2022			15,273	2,887	
Additional Inadequate Units Identified			0	633	0
PACAF	Condition Adjustment	Yokota	0	186	0
PACAF	Condition Adjustment	Okinawa	0	437	0
PACAF	Condition Adjustment	Misawa	0	8	0
USAFE	Condition Adjustment	RAF Alconbury	0	2	0
FY 2022 Family Housing Construction, Improvement, and O&M Projects to Eliminate Inadequate Units			0	(212)	212
PACAF	FHO&M project	Misawa	0	(32)	32
PACAF	FHCON projects	Yokota	0	(44)	44
PACAF	FHO&M project	Okinawa	0	(136)	136
Privatization Projects Executed			0	0	0
Units Demolished/Divested FY 2022			(81)	(74)	74
AFMC	Demolition	Wright Patterson	(10)	(10)	10
PACAF	Divest	Okinawa	(71)	(64)	64
Units Added to Family Housing			0	0	0
Deficit Construction			0	0	0
			0	0	0
Host Nation Construction projects			56	0	0
PACAF	Special Actions Committee of Okinawa (SACO) (See note 3)	Okinawa	56	0	0
Units at End of FY 2022			15,248	3,234	286
NOTES:					
1 - FHCON and FHO&M investment projects are based Housing Community Profile (HCP) and Family Housing Master Plan (FHMP).					
2 - Divestiture based on Family Housing Master Plan updates.					
3 - The Host Nation project being built through the Special Actions Committee of Okinawa (SACO) program is funded by the Government of Japan (GOJ). Updates have been provided by AFIMSC Detachment 2.					

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(Tab 24) - Authorization Language

**DEPARTMENT OF THE AIR FORCE
MILITARY FAMILY HOUSING
FISCAL YEAR 2022 BUDGET REQUEST**

AUTHORIZATION LANGUAGE

SEC. 2302. FAMILY HOUSING

PLANNING AND DESIGN. — Using amounts appropriate pursuant to the authorization of appropriations in Section 2304(a) and available for military family housing functions as specified in the funding table in section 4601, the Secretary of the Air Force may carry out architectural and engineering services and construction design activities with respect to the construction or improvement of military family housing units in an amount not to exceed [\$2,969,000] \$10,458,000.

SEC. 2303. IMPROVEMENT TO MILITARY FAMILY HOUSING UNITS

Subject to section 2825 of Title 10, United States Code, and using amounts appropriated pursuant to the authorization of appropriations in Section 2304(a) and available for military family housing functions as specified in the funding table in section 4601, the Secretary of the Air Force may improve existing military family housing units in an amount not to exceed [\$94,245,000] \$105,258,000.

SEC. 2304. AUTHORIZATION OF APPROPRIATIONS, AIR FORCE

(a) AUTHORIZATION OF APPROPRIATIONS. – Funds are hereby authorized to be appropriated for fiscal years beginning after September 30, 2021, for military construction, land acquisition, and military family housing functions of the Department of the Air Force, as specified in the funding table in section 4601.

(b) LIMITATION ON TOTAL COST OF CONSTRUCTION PROJECTS. – Notwithstanding the cost variations authorized by section 2853 of title 10, United States Code, and any other cost variation authorized by law, the total cost of all projects carried out under section 2301 of this Act may not exceed the total amount authorized to be appropriated under subsection (a), as specified in the funding table in section 4601.

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(Tab 25) - Appropriation Language

**DEPARTMENT OF THE AIR FORCE
MILITARY FAMILY HOUSING
FISCAL YEAR 2022 BUDGET REQUEST**

APPROPRIATION LANGUAGE

FAMILY HOUSING CONSTRUCTION, AIR FORCE

For expenses of family housing for the Air Force for construction, including acquisition, replacement, addition, expansion, extension, and alteration, as authorized by law, [\$97,214,000] \$115,716,000 to remain available until September 30, 2026.

FAMILY HOUSING OPERATION AND MAINTENANCE, AIR FORCE

For expenses of family housing for the Air Force for operation and maintenance, including, debt payment, leasing, minor construction, principal and interest charges, and insurance premiums, as authorized by law [\$337,021,000] \$325,445,000.

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(Tab 26) - Construction Improvements

**DEPARTMENT OF THE AIR FORCE
MILITARY FAMILY HOUSING
FISCAL YEAR 2022 BUDGET REQUEST
Construction Improvements**

CONSTRUCTION IMPROVEMENTS

Budget Request (\$ in Thousands)

FY 2022 Budget Request	\$105,258
FY 2021 Budget Request	\$94,245

Purpose and Scope

The Air Force is expected to have approximately 15,248 owned units at the end of FY 2022. The average age of housing units in the Air Force's inventory is close to 30 years.

The Air Force developed the "whole house" revitalization concept for construction improvement projects. Whole house is the combination of required maintenance and repair together with improvements to bring the unit to contemporary standards. In addition, we are looking beyond the house to the entire housing area in our comprehensive plan. Our "whole neighborhood" concept includes the development of supporting housing infrastructure requirements, neighborhood vehicular and pedestrian circulation concepts to consider siting, density, landscaping, parking, playgrounds, recreation areas and utilities, in addition to the housing unit itself. The Air Force has gathered data on the construction improvement projects to detail past projects on these units and any future work being programmed within a three year period. This information is provided as part of this submittal.

Budget Request Summary

Authorization is requested for:

- (1) Various improvements to existing dwelling units and support facilities as described on DD Form 1391.
- (2) Appropriation of \$105,258,000 to fund one improvement construction project at Yokota AB, Japan (\$49,258,000), and two MHPI Restructures (\$56,000,000) in FY 2022.

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**DEPARTMENT OF THE AIR FORCE
MILITARY FAMILY HOUSING
FISCAL YEAR 2022 BUDGET REQUEST
Construction Improvements**

1. COMPONENT PACAF	FY 2022 PROJECT DATA			2. DATE	
3. INSTALLATION AND LOCATION YOKOTA AIR BASE, JAPAN (PACAF)			4. PROJECT TITLE: ZNRE254300 IMPROVE FAMILY HOUSING, YOKOTA AB PHASE 8 (45 UN)		
5. PROGRAM ELEMENT 88742F	6. CATEGORY CODE 711-143	7. PROJECT NUMBER ZNRE254300	8. PROJECT COST (\$000) 49,258		
9. COST ESTIMATE					
ITEM	UOM	QTY	UNIT COST	COST (\$000)	
Primary Facilities					
IMPROVE FAMILY HOUSING	UN	45	875,900	39,416	
SUPPORTING FACILITIES					
UTILITIES	LS	1	830,000	830	
SITE ELECTRICAL	LS	1	590,000	590	
SITE MECHANICAL	LS	1	658,000	658	
LANDSCAPE	LS	1	350,000	350	
HAZARDOUS ABATEMENT	LS	1	290,000	290	
PAVEMENTS	LS	1	320,000	320	
SUBTOTAL				42,454	
CONTINGENCY (5%)				2,123	
TOTAL CONTRACT COST				44,577	
SUPERVISION, INSPECTION & OVERHEAD (6.5%)				2,898	
DESIGN (4% OF SUBTOTAL)				1,783	
TOTAL REQUEST				49,258	
TOTAL REQUEST (ROUNDED)				49,258	
EQUIPMENT FROM OTHER APPROPRIATIONS (NON-ADD)					
<p>10. DESCRIPTION OF PROPOSED WORK: Provides whole house interior and exterior modernization, renovation and repair of 45 housing units at Yokota Air Base, including unit types: SEQ (4 units, E9, 4BR), 3 GAW (24 units), 4GAW (8 units), buildings 3285 and 3286 (4GAW, 8 units, E9, 4BR) and GOQ (1 unit) (see attached facility list). The work includes but is not limited to, providing all labor, materials, transportation, and performing all work necessary for the improvements of the family housing units to meet current codes and standards. Modernizing finishes in kitchen, bathrooms, living room, bedrooms and family rooms, replace windows and doors, lifecycle replacement of domestic water and sanitary plumbing, bring unit up to LHS code by installing hard wired smoke alarms and fire sprinklers. Prestige finishes in E9 units. Include construction of a half bath to GOQ 693. Include construction of awnings and exterior storage. Lifecycle replacement of mechanical systems in one supporting mechanical building, to provide energy efficient heating and cooling (see attached facility list). Infrastructure repair/replacement work includes utilities, site electrical, site mechanical, landscape and pavement. Perform remediation testing and abatement of asbestos and lead plus necessary electrical upgrades to meet code to provide safe and adequate housing. Buildings 3285 and 3286 only (8 units, E9, 4BR) construct addition to expand existing floorplan to provide a family room and secondary dining space consistent with the Air Force family housing design guide standards. Include demolition, disposal, hazardous material abatement and other site work necessary to provide a complete and usable facility.</p> <p>The overall facility improvement shall be permanent and designed to meet the current Family Housing Standard and shall be in accordance with UFC 4-711-01 Family Housing, UFC 3-600-01 "Fire Protection Requirement" and other latest applicable DoD Unified Facilities Criteria. In addition; environmental (asbestos/lead) sampling, testing, remediation and all other related work are programmed into the project to provide complete and usable facilities.</p>					
<p>11. REQUIREMENT:</p> <p>PROJECT: ZNRE254300 IMPROVE FAMILY HOUSING, YOKOTA AB PHASE 8 (45 UN)</p> <p>REQUIREMENT: The project is required to provide safe and efficient housing for Military members and their families stationed at Yokota AB. Units currently have FCI scores ranging from 64 to 79, and are in need of lifecycle repair/ replacement of basic utility and mechanical systems, hardware and finishes. Housing must be upgraded to meet</p>					

**DEPARTMENT OF THE AIR FORCE
MILITARY FAMILY HOUSING
FISCAL YEAR 2022 BUDGET REQUEST
Construction Improvements**

1. COMPONENT PACAF	FY 2022 PROJECT DATA			2. DATE
3. INSTALLATION AND LOCATION YOKOTA AIR BASE, JAPAN (PACAF)		4. PROJECT TITLE: ZNRE254300 IMPROVE FAMILY HOUSING, YOKOTA AB PHASE 8 (45 UN)		
5. PROGRAM ELEMENT 88742F	6. CATEGORY CODE 711-143	7. PROJECT NUMBER ZNRE254300	8. PROJECT COST (\$000) 49,258	
<p>current life safety codes for electrical, mechanical, seismic, fire safety and energy efficiency. This project is programmed in accordance with the Family Housing Master Plan.</p> <p>CURRENT SITUATION: This project upgrades and modernizes housing which was constructed between 1975-1993. These housing units require major renovation and repair to correct deterioration resulting from age and heavy use. They have had no major upgrades since construction, and do not meet the needs of today's families, nor do they provide a modern home environment. Kitchens do not provide adequate storage, cabinet space or countertop area, and are not functionally arranged. Plumbing and lighting fixtures are deteriorated. The electrical systems do not meet modern construction codes. Ground fault circuit interrupter protection is not provided for bathrooms, kitchens, and exterior circuits. Fire detection systems do not meet modern construction codes, and fire suppression systems are non-existent. Flooring, windows, and roofing require replacement. The units have inadequate living space and storage. E94GAW units are below minimum required square footage. Playgrounds, parking areas, and landscaping are inadequate or nonexistent.</p> <p>IMPACT IF NOT PROVIDED: Units will continue to deteriorate resulting in increasing operations, maintenance and repair costs to the AF. Without this project repair of these units will be accomplished in a costly and piecemeal fashion with no improvements to meet modern, whole house, safety codes. Low morale and retention problems will result if conditions are permitted to continue.</p> <p><u>WORK ACCOMPLISHED IN PREVIOUS YEARS:</u> None</p> <p><u>WORK PROGRAMMED FOR THE NEXT THREE YEARS:</u> None</p> <p><u>ADDITIONAL:</u> An economic analysis has been prepared comparing the alternatives for new construction, improvement, and status quo operation. Based on the net present values and benefits of the respective alternatives, improvement was found to be the most cost effective over the life of the project. This project is not eligible for Host Nation funding. Deputy Base Civil Engineer: DSN 225-7215.</p> <p>FOREIGN CURRENCY FY21 RATE: \$1.00 = ¥107.9114</p> <p>EIAP: The action described for this project is not a major Federal action that will significantly harm the environment and/or the resources of the foreign nation that is not involved in the action per DoDD 6050.7. Therefore, IAW DoDD 6050.7, para E2.2.1.1, an environmental review or study is not required.</p> <p>JOINT USE CERTIFICATION: (Required for MILCON, Optional for O&M; choose 1 of 5) I.E. "These facilities can be used by other components on an "as available" basis; however, the scope of this project is based on Air Force requirements".</p>				

**DEPARTMENT OF THE AIR FORCE
MILITARY FAMILY HOUSING
FISCAL YEAR 2022 BUDGET REQUEST
Construction Improvements**

1. COMPONENT	FY 2022 PROJECT DATA			2. DATE
PACAF				
3. INSTALLATION AND LOCATION		4. PROJECT TITLE:		
YOKOTA AIR BASE, JAPAN (PACAF)		ZNRE254300 IMPROVE FAMILY HOUSING, YOKOTA AB PHASE 8 (45 UN)		
5. PROGRAM ELEMENT	6. CATEGORY CODE	7. PROJECT NUMBER	8. PROJECT COST (\$000)	
88742F	711-143	ZNRE254300	49,258	
12. SUPPLEMENTAL DATA:				
a. Estimated Design Data:				
(1) Status:				
(a) Date Design Started			24-MAR-20	
(b) Parametric Cost Estimate used to develop costs			YES	
(c) Percent Complete as of Jan 2021			15%	
(d) Date 35% Designed (DB Final RFP = 35% Design)			19-APR-21	
(e) Date Design Complete (DB Final RFP Complete)			19-APR-21	
(f) Energy Study/Life-Cycle Cost analysis was/will be performed;			YES	
(2) Basis:				
(a) Standard or Definitive Design -			NO	
(b) Where design was most recently used -			N/A	
(3) Total Cost (c) = (a) + (b) or (d) + (e):			(\$000)	
(a) Production of Plans and Specifications			\$0	
(b) All other Design Costs			\$1,800	
(c) Total			\$1,800	
(d) Contract			\$0	
(e) In-house			\$0	
(4) Construction Contract Award			JUN-22	
(5) Construction Start			AUG-22	
(6) Construction Completion			NOV-24	
b. Equipment associated with this project will be provided from other appropriations: None				

**DEPARTMENT OF THE AIR FORCE
MILITARY FAMILY HOUSING
FISCAL YEAR 2022 BUDGET REQUEST
Construction Improvements**

1. COMPONENT PACAF	FY 2022 PROJECT DATA				2. DATE											
3. INSTALLATION AND LOCATION YOKOTA AIR BASE, JAPAN (PACAF)			4. PROJECT TITLE: ZNRE254300 IMPROVE FAMILY HOUSING, YOKOTA AB PHASE 8 (45 UN)													
5. PROGRAM ELEMENT 88742F	6. CATEGORY CODE 711-143	7. PROJECT NUMBER ZNRE254300	8. PROJECT COST (\$000) 49,258													
FACILITY LISTING																
Neighborhood	Bldg#	Unit Type/ Fac. Name	Street Street Name	Config	Unit Cnt	Bt By	Yr Bt	Last Ren.	Status	Bed	Bath	GSF	Adequacy	adeq	B/C	Decision
West Area	3276	SEQ	3276 Knight Avenue	Single Family	1	GOJ	1993		Existing	4	2	1908	0	1	64	Improve (FHCON)
West Area	32761	FH Unit Storage			1	US	1993		Existing	0		41	0	1	79	Improve (FHCON)
West Area	32762	FH Carport			1	US	1993		Existing	0		153	0	1	79	Improve (FHCON)
West Area	3277	SEQ	3277 Knight Avenue	Single Family	1	GOJ	1993		Existing	4	2	1908	0	1	64	Improve (FHCON)
West Area	32771	FH Unit Storage			1	US	1993		Existing	0		32	0	1	79	Improve (FHCON)
West Area	32772	FH Carport			1	US	1993		Existing	0		153	0	1	79	Improve (FHCON)
West Area	3278	SEQ	3278 Godfrey Avenue	Single Family	1	GOJ	1993		Existing	4	2	1908	0	1	64	Improve (FHCON)
West Area	32781	FH Unit Storage			1	US	1993		Existing	0		32	0	1	79	Improve (FHCON)
West Area	32782	FH Carport			1	US	1993		Existing	0		153	0	1	79	Improve (FHCON)
West Area	3279	SEQ	3279 Godfrey Avenue	Single Family	1	GOJ	1993		Existing	4	2	1908	0	1	64	Improve (FHCON)
West Area	32791	FH Unit Storage			1	US	1993		Existing	0		32	0	1	79	Improve (FHCON)
West Area	32792	FH Carport			1	US	1993		Existing	0		153	0	1	79	Improve (FHCON)
West Area	3285	4GAW	3285 Godfrey Avenue	Townhome	4	GOJ	1992		Existing	4	1, N, N	1640	0	4	64	Improve (FHCON)
West Area	3286	4GAW	3286 Godfrey Avenue	Townhome	4	GOJ	1992		Existing	4	1, N, N	1640	0	4	64	Improve (FHCON)
West Area	3288	4GAW	3288 Lindsey Lane	Townhome	4	GOJ	1992		Existing	4	1, N, N	1640	0	4	64	Improve (FHCON)
West Area	3289	4GAW	3289 Godfrey Avenue	Townhome	4	GOJ	1992		Existing	4	1, N, N	1640	0	4	64	Improve (FHCON)
West Area	3292	3GAW	3292 Godfrey Avenue	Townhome	6	GOJ	1992		Existing	3	1, N, N	1562	0	6	64	Improve (FHCON)
West Area	3293	3GAW	3293 Godfrey Avenue	Townhome	6	GOJ	1992		Existing	3	1, N, N	1562	0	6	64	Improve (FHCON)
West Area	3294	3GAW	3294 Godfrey Avenue	Townhome	6	GOJ	1992		Existing	3	1, N, N	1562	0	6	64	Improve (FHCON)
West Area	3295	3GAW	3295 Godfrey Avenue	Townhome	6	GOJ	1992		Existing	3	1, N, N	1562	0	6	64	Improve (FHCON)
West Area	3296	Mechanical Building			1	GOJ	1992		Existing	0		894	0	1	52	Improve (FHCON)
Kenny Court	693	GOC-693	693 Kenny Court	Single Family	1	GOJ	1975	2006	Existing	4	2, N	3482	0	1	69	Sustain

**DEPARTMENT OF THE AIR FORCE
MILITARY FAMILY HOUSING
FISCAL YEAR 2022 BUDGET REQUEST
Construction Improvements**

1. COMPONENT PACAF	FY 2022 PROJECT DATA			2. DATE
3. INSTALLATION AND LOCATION YOKOTA AIR BASE, JAPAN (PACAF)		4. PROJECT TITLE: ZNRE254300 IMPROVE FAMILY HOUSING, YOKOTA AB PHASE 8 (45 UN)		
5. PROGRAM ELEMENT 88742F	6. CATEGORY CODE 711-143	7. PROJECT NUMBER ZNRE254300	8. PROJECT COST (\$000) 49,258	

SITE MAP



**DEPARTMENT OF THE AIR FORCE
MILITARY FAMILY HOUSING
FISCAL YEAR 2022 BUDGET REQUEST
Construction Improvements**

1. COMPONENT Air Force	FY 2022 MILITARY CONSTRUCTION PROJECT DATA			2. DATE
3. INSTALLATION, SITE AND LOCATION Offutt AFB Omaha/NB			4. PROJECT TITLE Offutt MHPI project restructure	
5. PROGRAM ELEMENT 88742F	6. CATEGORY CODE 711	7. RPSUID/PROJECT NUMBER SGBPPHY01	8. PROJECT COST (\$000) 50,000	
9. COST ESTIMATES				
ITEM	U/M	QTY	UNIT COST	COST (\$000)
PRIMARY FACILITIES				50,000
Housing Inventory	UN	1640	30.49	50,000
SUPPORTING FACILITIES				N/A
SUBTOTAL				50,000
CONTINGENCY (5.0%)				N/A
TOTAL CONTRACT COST				50,000
SUPERVISION, INSPECTION AND OVERHEAD (5.7%)				N/A
DESIGN/BUILD - DESIGN COST (4.0% OF SUBTOTAL)				N/A
TOTAL REQUEST				50,000
TOTAL REQUEST (ROUNDED)				50,000
EQUIPMENT FROM OTHER APPROPRIATIONS (NON-ADD)				0
10. Description of Proposed Work: Complete a financial restructure of the Offutt AFB military housing privatization initiative (MHPI) project by utilizing FY22 AF Budget Authority to modify the terms of the Offutt AFB MHPI project's Government Direct Loan (GDL) and add a second GDL to ensure adequate funding available for sustainment/reinvestment needs.				
11. Requirement: 1640 UN REQUIREMENT: Since closing in 2005, this project is required to provide 1,640 modern and efficient housing units for military members and their dependents stationed at Offutt AFB through the end of the lease term in 2055. CURRENT SITUATION: The AF currently forecasts not meeting Government Direct				

**DEPARTMENT OF THE AIR FORCE
MILITARY FAMILY HOUSING
FISCAL YEAR 2022 BUDGET REQUEST
Construction Improvements**

1. COMPONENT Air Force	FY 2022 MILITARY CONSTRUCTION PROJECT DATA			2. DATE
3. INSTALLATION, SITE AND LOCATION Offutt AFB Omaha/NB			4. PROJECT TITLE Offutt MHPI project restructure	
5. PROGRAM ELEMENT 88742F	6. CATEGORY CODE 711	7. RPSUID/PROJECT NUMBER SGBPPHY01	8. PROJECT COST (\$000) 50,000	
<p>Loan service by FY23, as well as sustainment funding shortfalls of \$13M through the project mid-term, specifically insufficient funds for HVAC, flooring, exterior maintenance, roofing and infrastructure. Additionally, there are zero projected funds available for mid-term reinvestment, meaning there will be no whole-house renovations accomplished. A small amount of funding is forecasted to be deposited into the Reinvestment Account after the project's mid-term in 2035, which will be used to address ongoing sustainment funding shortfalls.</p> <p>IMPACT IF NOT PROVIDED: Project housing at Offutt AFB will continue to deteriorate, reducing the quality of life for 1,640 Airmen, Guardians, and their families. This could result in increased life/health/safety issues and/or a drop in occupancy, putting repayment of the project's Government Direct Loan at risk.</p> <p>ADDITIONAL: In accordance with 10 U.S.C. §2883, these funds will be transferred to the Department of Defense Family Housing Improvement Fund (FHIF) to support this financial restructure.</p>				

**DEPARTMENT OF THE AIR FORCE
MILITARY FAMILY HOUSING
FISCAL YEAR 2022 BUDGET REQUEST
Construction Improvements**

1. COMPONENT Air Force	FY 2022 MILITARY CONSTRUCTION PROJECT DATA			2. DATE
3. INSTALLATION, SITE AND LOCATION Robins AFB Warner Robins/GA			4. PROJECT TITLE Robins 2 MHPI project restructure	
5. PROGRAM ELEMENT 88742F	6. CATEGORY CODE 711	7. RPSUID/PROJECT NUMBER UHHZPHFY02	8. PROJECT COST (\$000) 6,000	
9. COST ESTIMATES				
ITEM	U/M	QTY	UNIT COST	COST (\$000)
PRIMARY FACILITIES				6,000
Housing Inventory	UN	207	XX	6,000
SUPPORTING FACILITIES				N/A
SUBTOTAL				6,000
CONTINGENCY (5.0%)				N/A
TOTAL CONTRACT COST				N/A
SUPERVISION, INSPECTION AND OVERHEAD (5.7%)				N/A
DESIGN/BUILD - DESIGN COST (4.0% OF SUBTOTAL)				N/A
TOTAL REQUEST				6,000
TOTAL REQUEST (ROUNDED)				6,000
EQUIPMENT FROM OTHER APPROPRIATIONS (NON-ADD)				0
10. Description of Proposed Work: Complete a financial restructure of the Robins 2 military housing privatization initiative (MHPI) project by utilizing FY22 AF Budget Authority to contribute Government Equity into the Robins 2 MHPI project to ensure adequate funding available for sustainment/reinvestment needs.				
11. Requirement: 207 UN				
REQUIREMENT: Since closing in 2007, this project is required to provide 207 modern and efficient housing units for military members and their dependents stationed at Robins AFB through the end of the lease term in 2057.				

**DEPARTMENT OF THE AIR FORCE
MILITARY FAMILY HOUSING
FISCAL YEAR 2022 BUDGET REQUEST
Construction Improvements**

1. COMPONENT Air Force	FY 2022 MILITARY CONSTRUCTION PROJECT DATA			2. DATE
3. INSTALLATION, SITE AND LOCATION Robins AFB Warner Robins/GA			4. PROJECT TITLE Robins 2 MHPI project restructure	
5. PROGRAM ELEMENT 88742F	6. CATEGORY CODE 711	7. RPSUID/PROJECT NUMBER UHHZPHFY02	8. PROJECT COST (\$000) 6,000	
<p>CURRENT SITUATION: The AF currently projects large sustainment funding shortfalls through the end of the lease term in 2057. The sustainment shortfalls include funds for health and life safety, roofing, doors, interior upgrades, exterior siding/painting and sewer mains/laterals. Additionally, there are no projected funds available for mid-term renovations at the project, meaning there will be no whole-house renovations. Limited funding is forecasted to reach the project's Reinvestment Account through the end of the lease term, with all funds used to address ongoing sustainment funding shortfalls.</p> <p>IMPACT IF NOT PROVIDED: Housing will continue to deteriorate, impacting the quality of life for 207 Airmen, Guardians, and their families stationed at Robins AFB. Additionally, the ongoing degradation of the units could result in increased health and life safety issues for project units and/or a drop in occupancy, exacerbating the project's financial challenges.</p> <p>ADDITIONAL: In accordance with 10 U.S.C. §2883, these funds will be transferred to the Department of Defense Family Housing Improvement Fund (FHIF) to support this financial restructure.</p>				

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(Tab 27) - Planning and Design

**DEPARTMENT OF THE AIR FORCE
MILITARY FAMILY HOUSING
FISCAL YEAR 2022 BUDGET REQUEST**

PLANNING AND DESIGN

Budget Request (\$ in Thousands)

FY 2022 Budget Request	\$10,458
FY 2021 Budget Request	\$2,969

Purpose and Scope

This program provides for preliminary studies to develop additional family housing facilities, on time multi-phase design, and housing community profile developments; studies for site adaptation and determination of type and design of units; and working drawings, specifications, estimates, project planning reports and final design drawings of facility housing construction projects. This includes the use of architectural and engineering services in connection with any family housing new construction or construction improvement program.

Budget Request Summary

Authorization is requested for:

- (1) Planning and design for future year housing programs;
- (2) FY 2022 Authorization and Appropriation of \$10,458,000 to fund this effort as outlined in the following exhibit:
- (3) The increase enables MFH to adequately design projects for through FY25 while meeting design requirements to have projects at 35% design prior to budget submission
- (4) Family Housing Construction P&D funds have been declining over the last few years thus failing to keep pace with requirements.

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**DEPARTMENT OF THE AIR FORCE
MILITARY FAMILY HOUSING
FISCAL YEAR 2022 BUDGET REQUEST**

DD FORM 1391 – Family Housing Planning and Design

1. COMPONENT AIR FORCE	FY 2021 MILITARY CONSTRUCTION PROJECT DATA			2. DATE
3. INSTALLATION AND LOCATION VARIOUS AIR FORCE BASES		4. PROJECT TITLE FAMILY HOUSING PLANNING AND DESIGN		
5. PROGRAM ELEMENT 88742	6. CATEGORY CODE 711-000	7. PROJECT NUMBER PAYZ714FNA	8. PROJECT COST (\$000) 10,458	
9. COST ESTIMATE				
ITEM	U/M	QUANTITY	UNIT COST	COST (\$000)
FAMILY HOUSING PLANNING AND DESIGN	LS			
SUBTOTAL				10,458
TOTAL CONTRACT COST				10,458
TOTAL REQUEST				10,458
<p>10. <u>DESCRIPTION OF PROPOSED CONSTRUCTION</u>: Architect-engineer services, survey, fees, etc., in connection with advance planning and design of family housing dwelling units and properties included in or proposed for the Air Force Family Housing Construction Account.</p> <p>11. <u>PROJECT</u>: This request is for an authorization and appropriation of \$10.458 million to provide planning and design costs in connection with family housing new construction or construction improvements programs.</p> <p><u>REQUIREMENT</u>: The funds requested are necessary to procure architect-engineer services to make site and utility investigations; one time multi-phase design, and housing community profiles (HCP) developments; and for the preparation of design and specifications of advance plans for future year family housing programs in connection with any family housing new construction or construction improvements programs.</p> <p><u>IMPACT IF NOT PROVIDED</u>: The funds requested are necessary to support the development of the housing community profile planning documents and to support the new construction and construction improvement programs. Without the requested funds, housing community profiles cannot be developed and the new construction and construction improvement programs cannot be designed and constructed.</p>				

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(Tab 28) - Operations and Maintenance Summary

**DEPARTMENT OF THE AIR FORCE
MILITARY FAMILY HOUSING
FISCAL YEAR 2022 BUDGET REQUEST**

Operations, Utilities and Maintenance Summary
(Excludes Leasing and Privatization)

Budget Request (\$ in Thousands)

FY 2022 Budget Request	\$292,650
FY 2021 Budget Request	\$284,528
FY 2021 Appropriation	\$284,528

Purpose and Scope

Provides operations and maintenance resources to fund property management, utilities, and maintenance of Air Force owned units. The Air Force requests essential resources to provide military families with housing either in the private market through assistance from a housing office, or by providing government housing. The Air Force's Military Family Housing Operation and Maintenance program emphasizes the following goals:

- * Identify suitable, affordable housing for military members. Where shortages exist, identify alternative solutions, to include privatization, new construction or leased housing.
- * Reduce utility consumption to increase energy efficiency and conservation.
- * Provide government appliances and furniture as required.
- * Invest wisely in maintenance and repairs to sustain the existing adequate housing inventory worldwide. The top priorities are life, safety, and health issues and divestiture of surplus housing.

a. Operations. This portion of the program provides for operating expenses in the following sub-accounts:

(1) Management. Includes installation-level housing management office operations. It supports the housing referral and relocation program to assist military families in locating suitable housing and implements the Fair Housing Act. Management efforts at privatized installations include duties that are inherently governmental such as asset management, housing support services, and fiscal oversight. It supports the AF Family Housing Master Plan (FHMP) planning efforts.

(2) Services. Includes basic support services comprising refuse collection and disposal; fire and police protection; custodial services; entomology and pest control; and snow removal and street cleaning. Privatized units do not receive funding from this account.

(3) Furnishings. Includes household appliances (primarily stoves and refrigerators) and furniture (in limited circumstances and mainly in overseas locations). It includes costs associated with procurement, management, and repairs of furnishings and appliance inventories.

(4) Miscellaneous. Includes payments to other Federal agencies or foreign governments (i.e., United States Coast Guard and United Kingdom) to operate housing units occupied by military personnel.

b. Utilities. Includes all purchased and base-produced heat, electricity, water, sewer, and gas commodities serving family housing. Residents purchase their own telephone, internet and cable TV service. Privatized housing units do not receive funding from this account.

c. Maintenance. Privatized housing units do not receive funding from this account.

Provides the following:

(1) Maintenance/Repair of Dwellings. Includes service calls, routine maintenance and repairs, and replacement of deteriorated facility components. Housing maintenance contracts are included in these costs.

**DEPARTMENT OF THE AIR FORCE
MILITARY FAMILY HOUSING
FISCAL YEAR 2022 BUDGET REQUEST**

(2) Exterior Utilities. Includes maintenance and repair of water, sewer, electrical, and gas lines and other utility distribution, collection, or service systems assigned to or supporting family housing areas.

(3) Other Real Property. Includes maintenance of grounds, common areas, roads, parking areas, and other property for the exclusive use of family housing occupants not included above.

(4) Alterations and Additions. Includes minor alterations to housing units or housing support facilities. Whole-house improvements with complex scopes are included in the construction program.

Operation and Maintenance FY 2022 Budget Request Summary - Highlights

The requested amount in FY 2022 is \$292,650,000. This amount, together with estimated reimbursements of \$5,715,000 will fund the FY 2022 Operation and Maintenance program of \$298,365,000.

A summary of the budget request for FY 2022 is as follows (\$ in thousands):

<u>Operations Request</u>	<u>Utility Request</u>	<u>Maintenance Request</u>	<u>Total Direct Request</u>	<u>Reimbursement</u>	<u>Total Program</u>
\$107,228	\$43,668	\$141,754	\$292,650	\$5,715	\$298,365

**DEPARTMENT OF THE AIR FORCE
MILITARY FAMILY HOUSING
FISCAL YEAR 2022 BUDGET REQUEST**

Inventory and Funding Summary (FH-2)

USAF FY 2022 PB	Fiscal Year: 2022
Family Housing Operations and Maintenance, Summary	Command: USAF
Excludes Leased Units and Costs	Exhibit: FH-2
Worldwide Summary	

<u>Inventory Data (Units)</u>	<u>FY 2020</u>	<u>FY 2021</u>	<u>FY 2022</u>
Units in Being Beginning of Year	15,253	15,260	15,273
Units in Being at End of Year	15,260	15,273	15,248
Average Inventory for Year	15,257	15,267	15,261
Historic Units	101	101	101
Units Requiring FHO&M Funding			
a. Contiguous US	111	111	102
b. U.S. Overseas	0	0	0
c. Foreign	15,142	15,149	15,171
d. Worldwide	15,253	15,260	15,273

<u>Funding Requirements (\$000)</u>	<u>FY 2020</u>		<u>FY 2021</u>		<u>FY 2022</u>	
	<u>Total Cost (\$000)</u>	<u>Unit Cost (\$)</u>	<u>Total Cost (\$000)</u>	<u>Unit Cost (\$)</u>	<u>Total Cost (\$000)</u>	<u>Unit Cost (\$)</u>
OPERATIONS (DIRECT)						
Management	55,126	3,613	64,732	4,240	70,062	4,591
Services	11,786	773	7,968	522	8,124	532
Furnishings	23,060	1,511	25,805	1,690	26,842	1,759
Miscellaneous	1,146	75	2,184	143	2,200	144
Sub-Total Direct Operations	91,118	5,972	100,689	6,595	107,228	7,027
Anticipated Reimbursements	735	48	735	48	735	48
Gross Obligations, Operations	91,853	6,021	101,424	6,644	107,963	7,075
UTILITIES (DIRECT)						
Direct Utilities	45,790	3,001	43,173	2,828	43,668	2,862
Utilities Anticipated Reimbursements	1,477	97	1,477	97	1,477	97
Gross Obligations, Utilities	47,267	3,098	44,650	2,925	45,145	2,958
MAINTENANCE (DIRECT)						
M&R Dwelling	93,307	6,116	109,321	7,161	111,389	7,299
M&R Ext. Utilities	16,376	1,073	17,765	1,164	16,755	1,098
M&R Other Real Property	11,696	767	11,930	781	11,655	764
Alter & Add	1,171	77	1,650	108	1,955	128
Sub-Total Direct Maintenance	122,550	8,033	140,666	9,214	141,754	9,289
Anticipated Reimbursements	3,503	230	3,503	229	3,503	230
Gross Obligations, Maintenance	126,053	8,262	144,169	9,443	145,257	9,518
GRAND TOTAL, FHO&M - Direct	259,458	17,006	284,528	18,637	292,650	19,177
Anticipated Reimbursements	5,715	375	5,715	374	5,715	374
GRAND TOTAL, FHO&M - TOA	265,173	17,381	290,243	19,012	298,365	19,551
NOTES:						

**DEPARTMENT OF THE AIR FORCE
MILITARY FAMILY HOUSING
FISCAL YEAR 2022 BUDGET REQUEST**

USAF FY 2022 PB	Fiscal Year: 2022
Family Housing Operation and Maintenance, Summary	Command: USAF
Excludes Leased Units and Costs	Exhibit: FH-2
Contiguous US	

<u>Inventory Data (Units)</u>	<u>FY 2020</u>	<u>FY 2021</u>	<u>FY 2022</u>
Units in Being Beginning of Year	111	111	102
Units in Being at End of Year	111	102	92
Average Inventory for Year	111	107	97
Historic Units	101	101	101

	<u>FY 2020</u>		<u>FY 2021</u>		<u>FY 2022</u>	
	<u>Total Cost (\$000)</u>	<u>Unit Cost (\$)</u>	<u>Total Cost (\$000)</u>	<u>Unit Cost (\$)</u>	<u>Total Cost (\$000)</u>	<u>Unit Cost (\$)</u>
OPERATIONS (DIRECT)						
Management	40,358	N/A	43,095	N/A	50,212	N/A
Services	53	N/A	55	N/A	58	N/A
Furnishings	1,082	N/A	1,085	N/A	1,089	N/A
Miscellaneous	404	N/A	477	N/A	481	N/A
Sub-Total Direct Operations	41,897	N/A	44,712	N/A	51,840	N/A
Anticipated Reimbursements	0	N/A	0	N/A	0	N/A
Gross Obligations, Operations	41,897	N/A	44,712	N/A	51,840	N/A
UTILITIES (DIRECT)						
Direct Utilities	370	N/A	344	N/A	348	N/A
Utilities Anticipated Reimbursements	0	N/A	0	N/A	0	N/A
Gross Obligations, Utilities	370	N/A	344	N/A	348	N/A
MAINTENANCE (DIRECT)						
M&R Dwelling	733	N/A	754	N/A	776	N/A
M&R Ext. Utilities	0	N/A	0	N/A	0	N/A
M&R Other Real Property	0	N/A	0	N/A	0	N/A
Alter & Add	0	N/A	0	N/A	0	N/A
Sub-Total Direct Maintenance	733	N/A	754	N/A	776	N/A
Maintenance Anticipated Reimbursements	0	N/A	0	N/A	0	N/A
Gross Obligations, Maintenance	733	N/A	754	N/A	776	N/A
GRAND TOTAL, FHO&M - Direct	43,000	N/A	45,810	N/A	52,964	N/A
Anticipated Reimbursements	0	N/A	0	N/A	0	N/A
GRAND TOTAL, FHO&M - TOA	43,000	N/A	45,810	N/A	52,964	N/A

**DEPARTMENT OF THE AIR FORCE
MILITARY FAMILY HOUSING
FISCAL YEAR 2022 BUDGET REQUEST**

USAF FY 2022 PB	Fiscal Year: 2022
Family Housing Operation and Maintenance, Summary	Command: USAF
Excludes Leased Units and Costs	Exhibit: FH-2
US Overseas	

<u>Inventory Data (Units)</u>	<u>FY 2020</u>	<u>FY 2021</u>	<u>FY 2022</u>
Units in Being Beginning of Year	0	0	0
Units in Being at End of Year	0	0	0
Average Inventory for Year	0	0	0
Historic Units	0	0	0

	<u>FY 2020</u>		<u>FY 2021</u>		<u>FY 2022</u>	
	<u>Total Cost (\$000)</u>	<u>Unit Cost (\$)</u>	<u>Total Cost (\$000)</u>	<u>Unit Cost (\$)</u>	<u>Total Cost (\$000)</u>	<u>Unit Cost (\$)</u>
OPERATIONS (DIRECT)						
Management	1,500	N/A	1,621	N/A	1,745	N/A
Services	0	N/A	0	N/A	0	N/A
Furnishings	998	N/A	927	N/A	949	N/A
Miscellaneous	0	N/A	0	N/A	0	N/A
Sub-Total Direct Operations	2,498	N/A	2,548	N/A	2,694	N/A
Anticipated Reimbursements	0	N/A	0	N/A	0	N/A
Gross Obligations, Operations	2,498	N/A	2,548	N/A	2,694	N/A
UTILITIES (DIRECT)						
Direct Utilities	0	N/A	0	N/A	0	N/A
Utilities Anticipated Reimbursements	0	N/A	0	N/A	0	N/A
Gross Obligations, Utilities	0	N/A	0	N/A	0	N/A
MAINTENANCE (DIRECT)						
M&R Dwelling	0	N/A	0	N/A	0	N/A
M&R Ext. Utilities	0	N/A	0	N/A	0	N/A
M&R Other Real Property	0	N/A	0	N/A	0	N/A
Alter & Add	0	N/A	0	N/A	0	N/A
Sub-Total Direct Maintenance	0	N/A	0	N/A	0	N/A
Maintenance Anticipated Reimbursements	0	N/A	0	N/A	0	N/A
Gross Obligations, Maintenance	0	N/A	0	N/A	0	N/A
GRAND TOTAL, FHO&M - Direct	2,498	N/A	2,548	N/A	2,694	N/A
Anticipated Reimbursements	0	N/A	0	N/A	0	N/A
GRAND TOTAL, FHO&M - TOA	2,498	N/A	2,548	N/A	2,694	N/A

**DEPARTMENT OF THE AIR FORCE
MILITARY FAMILY HOUSING
FISCAL YEAR 2022 BUDGET REQUEST**

USAF FY 2022 PB	Fiscal Year: 2022
Family Housing Operation and Maintenance, Summary	Command: USAF
Excluded Leased Units and Costs	Exhibit: FH-2
Foreign	

<u>Inventory Data (Units)</u>	<u>FY 2020</u>	<u>FY 2021</u>	<u>FY 2022</u>
Units in Being Beginning of Year	15,142	15,149	15,171
Units in Being at End of Year	15,149	15,171	15,156
Average Inventory for Year	15,146	15,160	15,164
Historic Units	0	0	0

	<u>FY 2020</u>		<u>FY 2021</u>		<u>FY 2022</u>	
	<u>Total Cost (\$000)</u>	<u>Unit Cost (\$)</u>	<u>Total Cost (\$000)</u>	<u>Unit Cost (\$)</u>	<u>Total Cost (\$000)</u>	<u>Unit Cost (\$)</u>
OPERATIONS (DIRECT)						
Management	13,268	876	20,016	1,320	18,105	1,194
Services	11,733	775	7,913	522	8,066	532
Furnishings	20,980	1,385	23,793	1,569	24,804	1,636
Miscellaneous	742	49	1,707	113	1,719	113
Sub-Total Direct Operations	46,723	3,085	53,429	3,524	52,694	3,475
Anticipated Reimbursements	735	49	735	48	735	48
Gross Obligations, Operations	47,458	3,133	54,164	3,573	53,429	3,524
UTILITIES (DIRECT)						
Direct Utilities	45,420	2,999	42,829	2,825	43,320	2,857
Utilities Anticipated Reimbursements	1,477	98	1,477	97	1,477	97
Gross Obligations, Utilities	46,897	3,096	44,306	2,923	44,797	2,954
MAINTENANCE (DIRECT)						
M&R Dwelling	92,574	6,112	108,567	7,161	110,613	7,295
M&R Ext. Utilities	16,376	1,081	17,765	1,172	16,755	1,105
M&R Other Real Property	11,696	772	11,930	787	11,655	769
Alter & Add	1,171	77	1,650	109	1,955	129
Sub-Total Direct Maintenance	121,817	8,043	139,912	9,229	140,978	9,297
Maintenance Anticipated Reimbursements	3,503	231	3,503	231	3,503	231
Gross Obligations, Maintenance	125,320	8,274	143,415	9,460	144,481	9,528
GRAND TOTAL, FHO&M - Direct	213,960	14,127	236,170	15,578	236,992	15,629
Anticipated Reimbursements	5,715	377	5,715	377	5,715	377
GRAND TOTAL, FHO&M - TOA	219,675	14,504	241,885	15,955	242,707	16,006

**DEPARTMENT OF THE AIR FORCE
MILITARY FAMILY HOUSING
FISCAL YEAR 2022 BUDGET REQUEST**

Summary Historic Housing

Summary of Historic Housing Detail			
	<u>2020</u>	<u>2021</u>	<u>2022</u>
1. Historic Housing Costs, Non-GOQ Data			
a. Number of Non-GOQ units on NHRP (Inventory)	78	78	78
b. Improvement Costs (\$000)	12,723	0	0
c. Maintenance and Repair Costs (\$000)	1,062	1,459	1,488
d. Total Historic Maintenance, Repair, Improvements (\$000)	13,785	1,459	1,488
e. Average Cost Per Unit (\$000)	177	19	19
2. Historic Housing Costs, GOQ Data			
a. Number of GOQ units on NHRP (Inventory)	23	23	23
b. Improvement Costs (\$000)	23,052		
c. Maintenance and Repair Costs (\$000)	696	341	348
d. Total Historic Maintenance, Repair, Improvements (\$000)	23,748	341	348
e. Average Cost Per Unit (\$000)	1,033	15	15
3. Total Historic Inventory & Costs (Non-GOQ & GOQ)			
a. Number of Non-GOQ and GOQ units on NHRP (Inventory)	101	101	101
b. Improvement Costs (\$000)	35,775	0	0
c. Maintenance and Repair Costs (\$000)	1,758	1,800	1,836
d. Total Historic Maintenance, Repair, Improvements (\$000)	37,533	1,800	1,836
e. Average Cost Per Unit (\$000)	372	18	18

**DEPARTMENT OF THE AIR FORCE
MILITARY FAMILY HOUSING
FISCAL YEAR 2022 BUDGET REQUEST**

Family Housing Operation and Maintenance Reprogramming Actions

(\$ in Thousands) as of 30 Sep 2020

	<u>FY 2020 Appropriation</u>	<u>Funds Reprogrammed</u>	<u>Percent Reprogrammed</u>	<u>FY 2020 End of Year</u>
Utilities	42,732	3,614	8.46%	46,346
Operations				
Management	56,022	148	0.26%	56,170
Services	7,770	4,207	54.14%	11,977
Furnishings	30,283	(6,606)	(21.81%)	23,677
Miscellaneous	2,144	(970)	(45.24%)	1,174
Leasing	15,768	(7,529)	(47.75%)	8,239
Maintenance	117,704	4,886	4.15%	122,590
Debt	0	0	0.00%	0
Privatization	22,593	2,250	9.96%	24,843
Foreign Currency	0	10,000	0.00%	10,000
Total	295,016	10,000	3.39%	305,016

(Tab 29) - Management Exhibit OP-5

**DEPARTMENT OF THE AIR FORCE
MILITARY FAMILY HOUSING
FISCAL YEAR 2022 BUDGET REQUEST**

RECONCILIATION OF INCREASES AND DECREASES

MANAGEMENT EXHIBIT OP-5

Management - The Management account supports housing operations to include management office personnel; supplies, equipment and custodial services; community liaison and housing support services; and housing information technology software and support. It supports studies such as the housing requirements and market analyses, preliminary studies, and engineering construction plans. It includes concept development, acquisition, and portfolio management supporting housing privatization.

	<u>(\$ in Thousands)</u>
1. FY 2021 President's Budget Request:	\$64,155
2. Congressional Adjustment	
a. Family Housing Support and Management Costs	\$0
3. FY 2021 Appropriated Amount:	\$64,155
4. FY 2021 Current Estimate:	\$64,155
5. Price Growth:	\$1,283
a. General Inflation	2.00% \$1,283
6. Program Increase:	\$4,624
7. Program Decrease:	\$0
8. FY 2022 Budget Request:	\$70,062

Notes

Analysis of changes in Management:

The FY22 program increase sustains the FY20 Congressional funding for additional manpower needed to enhance privatization oversight. The additional manpower positions are aligned to Air Force Installation Military Housing Offices, Air Force Civil Engineer Center, and Headquarters Air Force to support inherently governmental activities of privatized housing oversight, asset management, housing support services, and fiscal oversight. A total of 218 positions (GS 7-15) were added in FY21 with 100% fill rate. Program increase of \$1,353K aligns with changes in Joint Base Anacostia-Bolling Memorandum of Agreement whereby the Navy transferred Military Housing Office manpower and associated funding to the Air Force.

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(Tab 30) - Services Exhibit OP-5

**DEPARTMENT OF THE AIR FORCE
MILITARY FAMILY HOUSING
FISCAL YEAR 2022 BUDGET REQUEST**

RECONCILIATION OF INCREASES AND DECREASES

SERVICES EXHIBIT OP-5

Services Provides basic municipal-type support services such as refuse collection and disposal; fire and police protection; entomology and pest control; snow removal; street cleaning, and custodial services for government-owned family housing units. Since private developers are responsible for municipal services, installations with privatized housing have no requirements for funding. Services at remaining government-owned housing units are based on historical obligations.

	<u>(\$ in Thousands)</u>
1. FY 2021 President's Budget Request:	\$7,968
2. Congressional Adjustment	\$0
a. Family Housing Support and Management Costs	\$0
3. FY 2021 Appropriated Amount:	\$0
4. FY 2021 Current Estimate:	\$7,968
5. Price Growth:	\$159
a. General Inflation	2.00% \$159
6. Program Increase:	\$0
7. Program Decrease:	(\$3)
8. FY 2022 Budget Request:	\$8,124

Notes

Analysis of changes in Services:

The FY2022 requirement is based on historical expenditures allowing for adjustments in service contracts at OCONUS locations, and for standard inflation rate of 2.0%.

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(Tab 31) - Furnishings Exhibit OP-5

**DEPARTMENT OF THE AIR FORCE
MILITARY FAMILY HOUSING
FISCAL YEAR 2022 BUDGET REQUEST**

RECONCILIATION OF INCREASES AND DECREASES

FURNISHINGS EXHIBIT OP-5

Furnishings The Air Force provides furnishings support to members in overseas locations and for general officers residing in government-provided and privatized housing. This request includes the procurement for initial issue and replacement of household equipment, domestic appliances (primarily stoves and refrigerators) and for furniture in limited circumstances. It funds the control, moving, and handling of furnishings inventories, and the maintenance and repair of such items. Privatized housing units do not receive funding with the exception for residents of general officers' quarters.

Loaner furniture is provided to military families overseas so they may occupy permanent quarters prior to the arrival of their personally-owned furniture.

“Loaner kits” consisting of beds, sofas, dining tables, etc., allows members to set up their household faster while reducing the cost of temporary quarters. In addition, there are some furnishings normally built into CONUS houses that are often limited or nonexistent in foreign private rentals, such as wardrobes (clothes closets), kitchen cabinets, sideboards and appliances. These items are provided to families as required.

The furnishings account funds essential furnishings at levels consistent with the needs of the Air Force.

	<u>(\$ in Thousands)</u>
1. FY 2021 President's Budget Request:	\$26,382
2. Congressional Adjustment	\$0
3. FY 2021 Appropriated Amount:	\$0
4. FY 2021 Current Estimate:	\$26,382
5. Price Growth:	\$528
a. General Inflation	2.00% \$528
6. Program Increase:	\$0
7. Program Decrease:	(\$68)
8. FY 2022 Budget Request:	\$26,842

Notes

Analysis of changes in Furnishings:

The FY2022 requirement was developed from historical expenditures, and a standard inflation rate of 2.0%. CONUS program is limited to providing furniture for general officers residing privatized housing, and government-owned housing at Wright-Patterson AFB, OH, and the United States Air Force Academy, CO. A large OCONUS requirement remains at foreign locations as furnishings allows families to occupy permanent quarters faster and avoids higher costs in other accounts such as military allowances and other support appropriations.

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(Tab 32) - Miscellaneous Exhibit OP-5

**DEPARTMENT OF THE AIR FORCE
MILITARY FAMILY HOUSING
FISCAL YEAR 2022 BUDGET REQUEST**

RECONCILIATION OF INCREASES AND DECREASES

MISCELLANEOUS EXHIBIT OP-5

Miscellaneous Includes payments to other Federal agencies or foreign governments (i.e. United States Coast Guard and United Kingdom) to operate housing units occupied by Air Force personnel. For locations that are U.S. government owned or controlled, funding is based on historical obligations. No funding is provided in this category for installations with privatized housing.

	<u>(\$ in Thousands)</u>
1. FY 2021 President's Budget Request:	\$2,184
2. Congressional Adjustment	\$0
a. Family Housing Support and Management Cost	\$0
3. FY 2021 Appropriated Amount:	\$0
4. FY 2021 Current Estimate:	\$2,184
5. Price Growth:	\$44
a. General Inflation	2.00% \$44
6. Program Increase:	\$0
7. Program Decrease:	(\$28)
8. FY 2022 Budget Request:	\$2,200

Notes

Analysis of changes in Miscellaneous:

The FY2022 requirement is based on historical expenditures, a standard inflation rate of 2.0%, and right-sizing based prior year requirements.

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(Tab 33) - Utilities Exhibit OP-5

**DEPARTMENT OF THE AIR FORCE
MILITARY FAMILY HOUSING
FISCAL YEAR 2022 BUDGET REQUEST**

RECONCILIATION OF INCREASES AND DECREASES

UTILITIES EXHIBIT OP-5

This program provides for all utilities consumed in government-owned family housing. This program funds electricity, natural gas, fuel oil and other purchased heating, water, sewage and waste systems. Military Family Housing residents and housing management continue to work towards meeting energy reduction goals. However, as the majority of homes become privatized, and utility cost responsibility is shifted to private developers, this becomes less of an overall government concern.

Utilities Reconciliation Increases Decreases

	<u>(\$ in Thousands)</u>
1. FY 2021 President's Budget Request:	\$43,173
2. Congressional Adjustment	\$0
a. Family Housing Support and Management Costs	\$0
3. FY 2021 Appropriated Amount:	
4. FY 2021 Current Estimate:	\$43,173
5. Price Growth:	\$863
a. General Inflation	2.00% \$863
6. Program Increase:	\$0
7. Program Decrease:	(\$368)
8. FY 2022 Budget Request:	\$43,668

Notes

Analysis of changes in Utilities:

The FY2022 requirement is based on historical expenditures, a standard inflation rate of 2.0%, and right-sizing based prior year requirements.

**DEPARTMENT OF THE AIR FORCE
MILITARY FAMILY HOUSING
FISCAL YEAR 2022 BUDGET REQUEST**

Family Housing Summary of Utilities Detail

	2020	2021	2022
Total Cost of Utilities (\$000)	45,790	43,173	43,668
Utility Quantities			
Electricity (KwH)	191,968,758	196,389,268	200,317,054
Heating			
Gas(CF)	546,666,102	559,254,314	570,439,400
Fuel Oil			
Residuals (BBLs)			
Distillates (BBLs)	20,836	17,399	17,747
Purchased Steam (MBTU)	296,420	303,246	309,311
Heat Plants Coal Fired (MBTU)	0	0	0
Heat Plants Other Than Gas, Oil, Coal (MBTU)	0	0	0
Propane (BBLs)	12,821	13,116	13,379
Water (Kgal)	2,334,388	2,388,143	2,435,906
Sewage (Kgal)	2,109,261	2,157,831	2,200,988

(Tab 34) - Maintenance Exhibit OP-5

**DEPARTMENT OF THE AIR FORCE
MILITARY FAMILY HOUSING
FISCAL YEAR 2022 BUDGET REQUEST**

RECONCILIATION OF INCREASES AND DECREASES

MAINTENANCE EXHIBIT OP-5

Maintenance provides for sustainment of family housing assets through service calls, change of occupancy rehabilitation, routine maintenance, preventive maintenance, interior and exterior painting, and major repairs. Housing condition assessments conducted for the AF FHMP substantiate that the maintenance and repair funding profile represents a balanced, fiscally constrained program, while ensuring sufficient Real Property Maintenance by Contract (RPMC) funds are available to maintain the existing adequate inventory. MFH maintenance is categorized in two types of service.

The first is routine recurring work such as service calls and repairs necessary to keep a house habitable (e.g. repairing leaking faucets, replacing broken windows, or replacing furnace filters). It includes maintenance performed during change of occupancy, such as painting or carpet replacement.

The second type of service is major maintenance and repair needed to fix or replace major systems and their components that are nearing the end of their useful life. Examples include restoring or replacing structural items including roofs, electrical, plumbing, heating, ventilation and air conditioning, landscaping and complete exterior painting.

No maintenance funds are provided for privatized housing units which are the responsibility of the privatization property owner.

			<u>(\$ in Thousands)</u>
1. FY 2021 President's Budget Request:			\$140,666
2. Congressional Adjustment			\$0
a. Family Housing Support and Management Costs			\$0
3. FY 2021 Appropriated Amount:			\$0
4. FY 2021 Current Estimate:			\$140,666
5. Price Growth:			\$2,813
a. General Inflation	2.00%	\$2,813	
6. Program Increase:			\$0
7. Program Decrease:			(\$1,725)
8. FY 2022 Budget Request:			\$141,754

Notes

Analysis of changes in Maintenance:

Maintenance will be rebalanced based on prior years' requirements for FY22. The Air Force is attempting to hold the Maintenance account flat to allow previous rebalancing efforts to take effect.

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(Tab 35) - Maintenance and Repair Over 20K

**DEPARTMENT OF THE AIR FORCE
MILITARY FAMILY HOUSING
FISCAL YEAR 2022 BUDGET REQUEST**

MAINTENANCE AND REPAIR NON-GOQ UNITS EXCEED \$20,000 THRESHOLD

This information complies with the House of Representatives, Military Construction Appropriations Bill (Conference Report 106-614) requiring the Services to report major maintenance and repair expenditures projected to exceed \$20,000 per unit. While these projects are shown as line items here, the maintenance budget estimate includes them among overall requirements for the entire inventory. AF Policy is to program projects that exceed \$20K threshold when work cannot await FHCON funding or housing privatization. Work will improve and/or sustain units as adequate and correct life, safety, and health issues.

Location	Base	Number of Units	Year Built	High Unit Cost (\$000)	Unit (NSM)	Project (NSM)	Total Cost (\$000)	Significant O&M FY 2016-2020 (\$000)
OVERSEAS								
GERMANY	Ramstein Air Base	31	2006	36.0	175	5,425	1,116.0	0
YANB 22-4510 - Work includes the repair of current installed townhouse roof tiles in Area – D, work also includes safety scaffolding, replacement of the roof battens, roof panels and gutters if required. Work shall be in compliance with all Air Force and German regulations and include all other necessary support to provide a complete usable facility. Area - D includes Bldg. 1260, 1262, 1259, 1264, 1255, 1557, 1266, 1268 and 1270 in the total of 31 MFH units at Vogelweh Military Family Housing (MFH).								
GERMANY	Ramstein Air Base	31	2006	36.0	175	5,425	1,116.0	0
YANB 22-4511 - Work includes the repair of current installed townhouse roof tiles in, work also includes safety scaffolding, replacement of the roof battens, roof panels and gutters if required, provide snow gutters and lightning protection. Work shall be in compliance with all Air Force and German regulations and include all other necessary support to provide a complete usable facility. Area includes Bldg. 1271, 1272, 1274, 1276, 1277, 1278, 1282, 1284, 1286 and 1288 in the total of 31 MFH units at Vogelweh Military Family Housing MFH.								
GERMANY	Ramstein Air Base	33	2006	36.0	175	5,775	1,188.0	0
YANB 22-4512 - Work includes the repair of current installed townhouse roof tiles, work also includes safety scaffolding, replacement of the roof battens, roof panels and gutters if required, provide snow gutters and lightning protection. Work shall be in compliance with all Air Force and German regulations and include all other necessary support to provide a complete usable facility. Area includes Bldg. 1289, 1291, 1293, 1295, 1297, 1299, 1301, 1303, 1305, 1307 and 1309 in the total of 33 MFH units at Vogelweh Military Family Housing (MFH).								
GERMANY	Ramstein Air Base	26	2007	36.0	175	4,550	936.0	0
YANB 22-4513 - Work includes the repair of current installed townhouse roof tiles, work also includes safety scaffolding, replacement of the roof battens, roof panels and gutters if required, provide snow gutters and lightning protection. Work shall be in compliance with all Air Force and German regulations and include all other necessary support to provide a complete usable facility. Area includes Bldg. 1343, 1344, 1346, 1347, 1348, 1349 and 1351 in the total of 26 MFH units at Vogelweh Military Family Housing (MFH).								
GERMANY	Ramstein Air Base	26	2006-07	36.0	175	4,550	936.0	0
YANB 22-4514 - Work includes the repair of current installed townhouse roof tiles, work also includes safety scaffolding, replacement of the roof battens, roof panels and gutters if required, provide snow gutters and lightning protection. Work shall be in compliance with all Air Force and German regulations and include all other necessary support to provide a complete usable facility. Area includes Bldg. 1353, 1355, 1356, 1347, 1358, 1360, 1362, 1364 and 1366 in the total of 26 MFH units at Vogelweh Military Family Housing (MFH).								

**DEPARTMENT OF THE AIR FORCE
MILITARY FAMILY HOUSING
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Location	Base	Number of Units	Year Built	High Unit Cost (\$000)	Unit (NSM)	Project (NSM)	Total Cost (\$000)	Significant O&M FY 2016-2020 (\$000)
JAPAN	KADENA	68	1986	425.0	126	8,548	28,913.0	0
<p>This project is required to provide modern and efficient housing for military members and their dependents stationed at Camp Courtney. Tower 4511 (68 units TJ3-86p8p9 B, SNCO, 3BD) units require interior lifecycle repairs of kitchen, bathrooms, flooring, plumbing and lighting fixtures, windows and doors. In addition replacement of building utility systems, roofing, hot water storage and HVAC systems is required to meet lifecycle renewal and current life safety codes. These housing units have had major repairs executed through Post Acquisition Improvement plan (PAIP) phase 9, of which utilities were not included. Currently, systems have surpassed their expected life cycle and are deteriorated resulting from age and heavy use. In addition, environmental (asbestos/lead) sampling, testing, remediation and all other related work are programmed into the project to provide complete and usable facilities.</p>								
JAPAN	KADENA	68	1990	518.0	129	8,752	35,222.0	0
<p>This project is required to provide modern and efficient housing for military members and their dependents stationed at Camp Kinser, Okinawa, Japan. Tower 1086 (68 units TJ3-90, JNCO, 3BD) requires interior lifecycle repairs of kitchen, bathrooms, flooring, plumbing and lighting fixtures, windows and doors. In addition, replacement of building utility systems, fire detection & suppression, roofing, hot water storage and HVAC systems is required to meet lifecycle renewal and current life safety codes. These units have had no major investment since 1990. Project scope includes asbestos/lead-based paint removal. This project is programed in accordance with the current Housing Community Profile, and to comply with the 2016 USD AT&L RMD.</p>								
JAPAN	KADENA	34	1990	690.0	125	4,233	24,456.0	0
<p>This project is required to provide modern and efficient housing for military members and their dependents stationed at Camp Kinser, Okinawa Japan. Project repairs 34 dwelling units (twenty-two JB4-90 KI and twelve JC3-90 KI) located at Kinser Heights, these units require interior lifecycle repairs of kitchen, bathrooms, flooring, plumbing and lighting fixtures. In addition, replacement of building utility systems, fire detection, fire suppression and roofing are required to meet lifecycle renewal and current life safety codes. Project scope includes asbestos/lead-based paint removal. This project is programed in accordance with the current Housing Community Profile and to comply with the 2016 USD AT&L RMD.</p>								
JAPAN	KADENA	57	2008	213.0	120	6,834	12,117.0	0
<p>This project is required to provide modern and efficient housing for military members and their dependents stationed at Kadena Air base. 57 JNCO Units located at Stillwell Park (JSP3-08, 32UN, 3BR; JSP3-09, 6UN, 3BR; JSP4-08, 6UN, 4BR; JSP3-11, 12UN, 3BR and JSP4-07, 1UN, 4BR) require interior lifecycle repairs of Shell & Core: Building System (Environmental and Exterior Structure) and Lot (Trash Enclosure and Utilities). Unit: Building System (Fire and Life Safety and Mechanical Systems); Space (Bathroom, Bedroom, Dining Room, Family Room, Foyer, Hallway, Storage, Kitchen, Laundry Room, Closet, Living Room and Stairway). In addition, environmental (asbestos/lead) sampling, testing, remediation and all other related work are programmed into the project to provide complete and usable facilities.</p>								
JAPAN	Misawa Air Base	32	1997	531.0	111	3,552	17,014.0	0
<p>This project is required to complete whole house lifecycle repair and corrects life/health/safety deficiencies in Government of Japan constructed (1997) military family housing units, at Misawa Air Base, Japan. The project will improve energy efficiency in housing to decrease utility costs. Repaired housing will provide modern kitchens, living rooms, bedrooms and bathrooms. Per regulatory codes, smoke detectors, fire alarms and mass notification system upgraded. Upgrade cable, internet and telephone lines to meet modern capabilities. Common areas modernized. Energy efficient windows and doors to achieve energy efficiencies and decrease elevated utility costs. Upgrade electrical panels; provide electric and water meters. All repairs made in accordance with the current Housing Community Profile and Air Force Family Housing Design Guide.</p>								

(Tab 36) - G&FO Quarters

**DEPARTMENT OF THE AIR FORCE
MILITARY FAMILY HOUSING
FISCAL YEAR 2022 BUDGET REQUEST**

GENERAL AND FLAG OFFICERS' QUARTERS

Anticipated Operations, Maintenance and Repair Expenditures Exceeding \$35,000 per Unit (FH-5)

Installation	Quarters Address	Year Built	Size NSF	Operations Cost	Maintenance Cost	Total OMR > \$35K Cost	Utility Cost	Leasing Cost	Historic Preservation Cost	Total FH O&M Cost	Significant O&M FY 2016-2020 (\$000)
OVERSEAS											
Yokota	691 Kenney Court	1975	3,342	\$3.7	\$26.2	\$29.9	\$8.0	\$0.0	\$0.0	\$37.9	\$0.0
Provides for amplified change of occupancy maintenance (COM) for GOQ 691. In addition to the standard maintenance, repairs and cleaning, the amplified COM will include select lifecycle replacement of built-in appliances, fixtures, furnishings and carpeting, as needed. No minor alterations exceeding \$2500 are planned (no DD1391).											
Total GOQ Units				\$3.7	\$26.2	\$29.9	\$8.0	\$0.0	\$0.0	\$37.9	\$0.0

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**DEPARTMENT OF THE AIR FORCE
MILITARY FAMILY HOUSING
FISCAL YEAR 2022 BUDGET REQUEST**

GENERAL AND FLAG OFFICERS' QUARTERS

Quarters 6,000 Net Square Feet (FH-10)

State/Country	Installation	Quarters ID	Year Built	Size NSF	Total FHO&M Cost (\$000)	Alternative Use	Cost to Convert Unit	If O&M >\$35K Demolish & Rebuild Cost
Colorado	USAF Academy	6776 Carlton	1930	10,846	\$35	None	N/A	N/A
Colorado	USAF Academy	6950 Otis	1929	11,553	\$35	None	N/A	N/A
Total:					\$70		0.00	0

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**DEPARTMENT OF THE AIR FORCE
MILITARY FAMILY HOUSING
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Privatized GFOO Operations, Maintenance and Repair Costs Exceeding \$50,000 (FH-12)

<u>State/Country</u>	<u>Installation</u>	<u>Quarters ID</u>	<u>Year Built</u>	<u>Size NSF</u>	<u>Operations Cost</u>	<u>Maintenance and Repair Cost</u>	<u>Total FH O&M Cost</u>
Hawaii	Hickam AFB	301 Julian Ave	1941	3913	18.0	68.5	86.5
Texas	Randolph AFB	11 S. Park	1931	2355	6.4	44.2	50.6
Florida	MacDill AFB	8222 Constellation Blvd	2009	3445	4.9	51.5	56.4
Total					29.3	164.2	193.5

Notes:

- (1) Maintenance & Repair includes Capital Repair & Replacement and reinvestment Costs
- (2) This annual report complies with the FY 2009 National Defense Authorization Act (NDAA), amended Section 2805 requirement.
- (3) Cost incurred per unit by the private sector developer/partner/owner for Fiscal Year 2020 (\$ in Thousands).

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(Tab 37) - Reimbursements Exhibit OP-5

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(Tab 38) - Leasing

**DEPARTMENT OF THE AIR FORCE
MILITARY FAMILY HOUSING
FISCAL YEAR 2022 BUDGET REQUEST**

Leasing

Budget Request (\$ in Thousands)

FY 2022 Budget Request	\$9,520
FY 2021 Budget Request	\$9,318

Purpose and Scope

Leasing provides privately owned housing for assignment as government quarters at both domestic and foreign locations when the local economy and on-base housing cannot satisfy requirements. The leasing program is authorized by 10 United States Code (U.S.C.) §2828 and provides for payment of rental and operation and maintenance costs of privately owned quarters for assignment as government quarters to military families. This program includes funds needed to pay for services such as utilities and refuse collection when these services are not part of the lease agreement. The Air Force (AF) also uses the authorities in 10 U.S.C. §2834 to participate in Department of State (DoS) embassy leased housing pools.

The AF continues to rely on the private sector to meet the majority of housing needs. Where the private sector rental markets and on-base housing cannot meet requirements and cost-effective alternatives do not exist, short and long-term leases are used. The AF must use the leasing program in high-cost areas to obtain adequate housing to meet critical needs and to avoid unacceptably high out-of-pocket costs for the member where government-owned housing is not available.

Program Summary - Highlights

Authorization is requested to fund leases and related expenses in FY 2022. The FY 2022 request for family housing leasing points is summarized as follows:

		<u>FY 2020</u>		<u>FY 2021</u>		<u>FY 2022</u>	
		Used	Cost	Used	Cost	Used	Cost
	Lease Pts						
Foreign:	8,988	118	\$7,488	129	\$8,808	126	\$8,995
Domestic:	3,333	10	\$310	15	\$510	15	\$525
Total:	12,321	128	\$7,798	144	\$9,318	141	\$9,520

Foreign Leasing

Congress authorized leasing in foreign countries in 10 U.S.C. §2828 as amended, which limits the number of lease points authorized and funds appropriated, and as required, through notifications prior to execution of lease agreements exceeding \$1M annually. The AF strategy is to provide adequate housing for our personnel serving in other countries where military family housing is not available. Foreign leases are primarily provided at Aviano, Italy; Mexico City, Mexico; Southwest Asia, and other countries to support direct AF mission.

The AF also provides appropriate funding support to accompanied military members and DoD civilian assigned at the DoS embassies where their housing and related services are provided by the DoS embassies under the authority of 10 U.S.C. §2834. DoS provides leased housing support through the International Cooperative Administrative Support Services (ICASS) program and requires ICASS administrative fees.

Domestic Leasing

Congress authorized domestic leasing program in 10 U.S.C. §2828 as amended, which limits the number of units authorized at any one time and specifies the maximum cost limitation. The AF supports independent duty personnel residing in high cost rental areas of which their duty locations are geo-graphically separated and/or outside of commuting distance from the nearest military installations with government-owned or privatized family housing. This support is provided since adequate housing is not available within member's housing allowances.

**DEPARTMENT OF THE AIR FORCE
MILITARY FAMILY HOUSING
FISCAL YEAR 2022 BUDGET REQUEST**

RECONCILIATION OF INCREASES AND DECREASES

EXHIBIT OP-5

			<u>(\$ in Thousands)</u>
1. FY 2021 President's Budget Request:			\$9,318
2. FY 2021 Appropriated Amount:			\$9,318
3. FY 2021 Current Estimate:			\$9,318
4. Price Growth:			\$186
a. General Inflation	2.0%	\$186	
5. Program Increase:			\$16
6. Program Decrease:			\$0
7. FY 2022 Budget Request:			\$9,520

Analysis of Changes in Leasing

The FY22 program increase supports additional requirements associated with Air Force participation in the 10 USC 2834 Department of State lease pool.

**DEPARTMENT OF THE AIR FORCE
MILITARY FAMILY HOUSING
FISCAL YEAR 2022 BUDGET REQUEST**

Analysis of Leased Units Exhibit (FH-4)

LOCATION	FY 20			FY 21			FY 22		
	# UNITS	LEASE MONTHS	COST (\$000)	# UNITS	LEASE MONTHS	COST (\$000)	# UNITS	LEASE MONTHS	COST (\$000)
DOMESTIC LEASES									
CONUS-wide (AF Recruiters, ROTC staffs, & other)	10	120	\$310	15	180	\$510	15	180	\$525
Unassigned	3,323	0	\$0	3,318	0	\$0	3,318	0	\$0
TOTAL DOMESTIC LEASES	3,333	120	\$ 310	3,333	180	\$ 510	3,333	180	\$ 525
FOREIGN LEASES									
Department of State (§2834):									
Abu Dhabi, UAE	15	180	\$1,095	15	180	\$1,143	15	180	\$1,210
Amman, Jordan	6	72	\$476	6	72	\$489	6	72	\$504
Bangkok, Thailand	1	12	\$61	1	12	\$63	1	12	\$65
Bogotá, Colombia	1	12	\$64	1	12	\$68	1	12	\$69
Brasília, Brazil	1	12	\$91	1	12	\$118	1	12	\$121
Cairo, Egypt	4	48	\$357	4	48	\$374	5	60	\$475
Chiang Mai, Thailand	4	48	\$127	4	48	\$137	4	48	\$137
Classified Location	3	36	\$237	3	36	\$255	3	36	\$267
Copenhagen, Denmark	2	24	\$176	2	24	\$187	2	24	\$192
Doha, Qatar	2	24	\$147	1	12	\$79	2	24	\$161
Mexico City, Mexico	10	120	\$465	10	120	\$499	12	144	\$618
Oslo, Norway	1	12	\$79	1	12	\$85	1	12	\$89
Paris, France	8	96	\$816	5	60	\$589	12	144	\$1,173
Santiago, Chile	0	0	\$0	0	0	\$0	2	24	\$126
Tel Aviv, Israel	1	12	\$98	1	12	\$94	2	24	\$188
DoS Subtotal	59	708	\$ 4,289	55	660	\$ 4,180	69	828	\$ 5,395
AF Foreign Leases (§2828):									
Doha, Qatar	36	432	\$2,198	51	612	\$3,470	36	432	\$2,533
Geilenkirchen, Germany	1	12	\$63	1	12	\$64	1	12	\$67
Aviano, Italy	20	240	\$830	20	240	\$980	18	216	\$882
Mayaguez, Puerto Rico	1	12	\$44	1	12	\$47	1	12	\$49
Stavanger, Norway	1	12	\$64	1	12	\$67	1	12	\$69
AF Foreign Leases Subtotal	59	708	\$ 3,199	74	888	\$ 4,628	57	684	\$ 3,600
Unassigned	8,870	0	\$0	8,859	0	\$0	8,862	0	\$0
TOTAL FOREIGN LEASES	8,988	1,416	\$ 7,488	8,988	1,548	\$ 8,808	8,988	1,512	\$ 8,995
GRAND TOTAL FH-4	12,321	1,536	\$ 7,798	12,321	1,728	\$ 9,318	12,321	1,692	\$ 9,520

**DEPARTMENT OF THE AIR FORCE
MILITARY FAMILY HOUSING
FISCAL YEAR 2022 BUDGET REQUEST**

Analysis of High Cost Leased Units (FH-4) (Other than Section 801)

LOCATION	FY21 TOTAL LEASES PER LOCATION	FY20			FY21			FY22		
		HIGH COST UNITS DEFINED	EST COST (\$000)	HIGH COST UNITS DEFINED	HIGH COST UNITS DEFINED	HIGH COST UNITS DEFINED	HIGH COST UNITS DEFINED	HIGH COST UNITS DEFINED	HIGH COST UNITS DEFINED	EST COST (\$000)
DOMESTIC LEASES	0	0	\$35,438	\$0	0	\$35,438	\$0	0	\$36,216	\$0
Sub-Total Domestic High-cost	0	0	\$0	\$0	0	\$0	\$0	0	\$0	\$0
FOREIGN LEASES										
Doha, Qatar	36	36	\$53,864	\$2,197	51	\$53,864	\$3,470	36	\$56,191	\$2,533
Geilenkirchen, Germany	1	1	\$53,864	\$63	1	\$53,864	\$64	1	\$56,191	\$67
Stavanger, Norway	1	1	\$53,864	\$64	1	\$53,864	\$67	1	\$56,191	\$69
Sub-Total Foreign High-cost	38	38	\$2,324	\$2,324	53	\$53,864	\$3,601	38	\$56,191	\$2,669
GRAND TOTAL FH-4A	38	38	\$2,324	\$2,324	53	\$53,864	\$3,601	38	\$56,191	\$2,669

**DEPARTMENT OF THE AIR FORCE
MILITARY FAMILY HOUSING
FISCAL YEAR 2022 BUDGET REQUEST**

FAMILY HOUSING PRIVATIZATION

Budget Request (\$ in Thousands)

FY 2022 Budget Request	\$23,275
FY 2021 Budget Request	\$23,175
FY 2021 Enactment*	\$20,000
FY 2021 Appropriation	\$43,175

Purpose and Scope

*Funds provided by Congress in FY2021 for additional Family Housing Support and Management are three year appropriated funds.

The Department of the Air Force uses the Military Housing Privatization Initiative (MHPI) program to provide quality and affordable housing to military members and their families throughout the continental United States (U.S.) at locations where adequate housing in the local community is not readily available. The Air Force's program consists of an end state of 53,237 privatized homes at 63 installations within 32 privatization projects. This represents 99.8% of the total on-base family housing inventory in the U.S. The Air Force plans to complete the Initial Development Period for 100% of the projects by the end of FY22, extended from FY19 due to environmental remediation delays. To date, privatization has provided the Air Force with 22,364 new homes and 12,595 renovated homes, in addition to the 18,029 homes conveyed as-is at project closings. The remaining homes are on schedule to be replaced or renovated by FY22. The Air Force is focused on sustaining the housing privatization program through a detailed portfolio and asset management process. The Air Force remains committed to providing members and their families access to safe and adequate housing facilities and services.

Program Summary

The FY 2022 funding request provides \$23,275,000 portfolio oversight and management. This program funds all costs related to family housing privatization, to include civilian pay for portfolio management personnel, privatized housing resident advocates, travel, contracts for environmental assessments, financial consultant services, project construction oversight, and training. This funding ensures the Air Force maintains oversight and accountability and fulfills reporting requirements mandated in Title 10, United States Code, Section 2885. In addition, long-term project oversight is essential to ensuring the Air Force continues to receive quality housing from the privatized housing project owners.

It is estimated that the Air Force will pay basic allowance for housing (BAH) under section 403 of title 37 to members living in privatized housing the amounts of \$890,297,532 in FY 2021 and \$923,910,831 in FY 2022. The number of units of military family housing upon which these estimated payments are made is 40,361 in FY 2021 and FY 2022. The number of units of military unaccompanied housing upon which these estimated payments are made is 117 in FY 2021 and FY 2022.

These estimates meet the reporting requirement stipulated in 10 USC 2884(b)(2). However, it must be noted that it is difficult to project the true cost of BAH allowances provided to members living in privatized housing. BAH allowances for members in privatized housing are not specifically tracked in budget or execution data, as these members receive the same allowances as those who live on the economy. BAH accounting data is available for only the various categories of payments (for instance, domestic with and without dependents, partial, overseas housing allowances, etc.).

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(Tab 39) - Family Housing Privatization

**DEPARTMENT OF THE AIR FORCE
MILITARY FAMILY HOUSING
FISCAL YEAR 2022 BUDGET REQUEST**

RECONCILIATION OF INCREASES AND DECREASES

Housing Privatization Exhibit OP-5

Housing Privatization Support

	<u>(\$ in Thousands)</u>
1. FY 2021 President's Budget Request:	\$23,175
2. Congressional Adjustment	
a. Family Housing Support and Management Costs	\$20,000
3. FY 2021 Appropriated Amount:	\$43,175
4. FY 2021 Current Estimate:	\$43,175
5. Price Growth:	\$464
a. General Inflation	2.0% \$464
6. Program Decrease:	(\$20,364)
a. FY 2021-2023 Congressional Program Increase:	
Family Housing Support and Management Cost	(\$20,000)
b. FY 2022 Program Decreases:	(\$364)
c. Net decrease:	(\$20,364)
7. Program Increase:	\$0
8. FY 2022 Budget Request:	\$23,275

Notes

Analysis of changes in Privatization:

FY21 appropriations included a \$60M DoD Congressional increase, AF portion \$20M, to provide family housing support and management costs to enhance the Services' ability to provide oversight, management, and hire personnel to track current and future issues that affect military family housing. The Air Force is committed to long-term project oversight to ensure program accountability and compliance.

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**DEPARTMENT OF THE AIR FORCE
MILITARY FAMILY HOUSING
FISCAL YEAR 2022 BUDGET REQUEST**

Family Housing Privatization Comparison Exhibit (FH-6)

Privatization Date ¹	MHPPI Project Name ²	Installation/State ³	Approved by OSD & OMB ⁴				Actual/Current ⁸				MHPPI Authorities ¹³				
			No. Units Conveyed ⁵	No. End State Units ⁶	Funding Source ⁶		Total No. Units in Current Inventory ¹¹	Amount (\$M) ¹²	Budget Year(s) ¹²	Funding Source ¹²					
					Amount (\$M) ^{7a}	Budget Year(s) ^{7b}				Type of Funds ^{7c}		Source Project Name ^{7d}	Type of Funds ¹²	Source Project Name ¹²	
Aug-98	Lackland I	Lackland AFB, TX (Ph I)	272	420	6.200	96	Construction	Lackland	420	6.161	96	Construction	Lackland	Lackland SIOH	1, 2, 5
Sep-00	Robins I	Robins AFB, GA (Ph I)	670	670	12.800	98	Construction	Lackland SIOH Robins Replace MFH Ph 4 (60) Dyess Construct MFH Ph 1 (70)	670	12.624	98	Construction	Lackland SIOH Robins Replace MFH Ph 4 (60) Dyess Construct MFH Ph 1 (70)	1, 2, 5	
Sep-00	Dyess	Dyess AFB, TX	0	402	16.300	99	Construction	Dyess-Construct MFH Ph 2 (64) Dyess-Construct MFH Ph 1 (70)	402	16.269	99	Construction	Dyess-Construct MFH Ph 2 (64) Dyess-Construct MFH Ph 1 (70)	1	
Mar-01	Elmendorf I	Elmendorf AFB, AK (Ph I)	584	828	23.304	98	Improvement	Elmendorf-Improve MFH Ph 9 (82 units) HRSO to FHIF	828	23.304	98	Improvement	Elmendorf-Improve MFH Ph 9 (82 units) HRSO to FHIF	1, 5	
Aug-02	Wright-Patterson I	Wright-Patterson AFB, OH (Ph I)	1,733	1,536	10.813	02	Improvement	Hickam-Privatize MFH Wright Patterson-Replace 40 Units	1,536	10.715	02	Improvement	Hickam-Privatize MFH Wright Patterson-Replace 40 Units	1, 2, 5	
Apr-03	Kirtland	Kirtland AFB, NM	1,783	1,078	24.221	02	Construction	Travis - Replace MFH Ph 1 Mountain Home-Replace MFH 56 Units Kirtland-Replace MFH Ph 5 (37)	1,303	24.013	02	Construction	Travis - Replace MFH Ph 1 Mountain Home-Replace MFH 56 Units Kirtland-Replace MFH Ph 5 (37)	1, 2, 5	
Aug-04	Buckley	Buckley AFB, CO	0	351	15.619	04	Improvement	Hickam - Improve 190 MFH Buckley-Privatize MFH	351	17.893	04	Improvement	Hickam - Improve 190 MFH Buckley-Privatize MFH	1, 5	
Sep-04	Elmendorf II	Elmendorf AFB, AK (Ph II)	986	1,194	41.496	03	Improvement	Elmendorf-192 Ph 11 Improve Elmendorf-Privatize MFH	1,194	41.496	03	Improvement	Elmendorf-192 Ph 11 Improve Elmendorf-Privatize MFH	1, 4, 5	
Feb-05	Hickam I	Hickam AFB, HI (Ph I)	1,356	1,356	4.194	02	Improvement	Hickam Privatize MFH	1,356	4.185	02	Improvement	Hickam Privatize MFH	1, 5	
Sep-05	Offutt	Offutt AFB, NE	2,600	1,640	12.568	01	Improvement	Offutt Privatize MFH	1,954	12.568	01	Improvement	Offutt Privatize MFH	1, 5	
Sep-05	Hill	Hill AFB, UT	1,138	1,018	11.280	05	Improvement	Davis-Monahan, Repair MFH Ph 6 Hill, Privatize MFH	1,082	11.656	05	Improvement	Davis-Monahan, Repair MFH Ph 6 Hill, Privatize MFH	1, 5	
Sep-05	Dover	Dover AFB, DE	1,488	980	12.425	05	Improvement	Fairchild AFB - Privatize MFH Dover, Repl 112 MFH Ph 3	980	12.278	05	Improvement	Fairchild AFB - Privatize MFH Dover, Repl 112 MFH Ph 3	1, 5	
Jan-06	Scott	Scott AFB, IL	1,430	1,593	0.000	N/A	N/A	N/A	1,593	0.000	N/A	N/A	N/A	N/A	1, 5

**DEPARTMENT OF THE AIR FORCE
MILITARY FAMILY HOUSING
FISCAL YEAR 2022 BUDGET REQUEST**

Privatization Date ¹	MHPJ Project Name ²	Installation/State ³	Approved by OSD & OMB ⁴						Actual/Current ⁸						MHPJ Authorities ¹³
			No. Units Conveyed ⁵	No. End State Units ⁶	Funding Source ⁶			End State Units ¹⁰	Total No. Units in Current Inventory ¹¹	Amount (\$M) ¹²	Budget Year(s) ¹²	Type of Funds ¹²	Source Project Name ¹²		
					Amount (\$M) ¹²	Budget Year(s) ¹²	Type of Funds ¹²								
May-06	Nellis	Nellis AFB, NV	1,278	1,178	1,827	05	Improvement	Holloman - Privatize MFH	1,178	1,178	1,827	05	Improvement	Holloman - Privatize MFH	1, 5
			2,364	2,083	7,569	02	Improvement	Nellis - Privatize MFH	2,084	2,212	5,270	02	Improvement	McGuire Privatize MFH	
Sep-06	McGuire	Altus AFB, OK	883	530					530	530					1, 5
			690	550	6,244	04	Improvement	Sheppard Privatize 1,288 MFH	550	550	6,244	04	Improvement	Sheppard Privatize 1,288 MFH	
Feb-07	AETC Group I	Sheppard AFB, TX	1,167	714					714	714					1, 5
			848	813						848	593				
		AETC Group I Total:	3,588	2,607					2,387	1,846					
May-07	USAF A	US Air Force Academy, CO	1,208	427	2,219	06	Improvement	AF Academy Privatize 445 Units	425	669	2,219	06	Improvement	AF Academy Privatize 445 Units	1, 5
Jul-07	ACC Group II	Davis-Monthan AFB, AZ	1,256	929					961	1,174					1, 5
			1,009	909	27,922	05	Construction	Davis-Monthan AFB - Replace FH Ph 6	929	1,065	27,922	05	Construction	Davis-Monthan AFB - Replace FH Ph 6	
		ACC Group II Total:	2,265	1,838				1,884	2,239						
Aug-07	Hickam II	Hickam AFB, HI (Ph II)	1,303	1,118	0,000	N/A	N/A	N/A	1,118	1,139	0,000	N/A	N/A	5	
Sep-07	Tri-Group	Los Angeles AFB, CA	617	572					613	617					3, 5
			493	723	19,950	06	Improvement	Fort MacArthur - Improve 188 Units	493	669	19,945	06	Improvement	Fort MacArthur - Improve 188 Units	
		Tri-Group Total:	1,110	1,564				1,110	1,524						
Sep-07	BLB	Barksdale AFB, LA	729	1,090					990	1,090					1, 5
			1,343	669	15,300	05	Improvement	Barksdale, Imp MFH Ph 1	1,343	850	15,231	05	Improvement	Barksdale, Imp MFH Ph 1	
		BLB Total:	3,568	3,189				3,192	3,370						
Oct-07	Robins II	Robins AFB, GA (Ph II)	563	207	10,600	05	Improvement	FY 05 Robins, Improve Family Housing	207	254	10,600	05	Improvement	FY 05 Robins, Improve Family Housing	3, 5

**DEPARTMENT OF THE AIR FORCE
MILITARY FAMILY HOUSING
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Privatization Date ¹	MHPJ Project Name ²	Installation/State ³	Approved by OSD & OMB ⁴				Actual/Current ⁸				MHPJ Authorities ¹³		
			No. Units Conveyed ⁵	No. End State Units ⁶	Funding Source ⁶		Total No. Units in Current Inventory ¹¹	Amount (\$M) ²	Budget Year(s) ¹²	Type of Funds ¹²		Source Project Name ¹²	
					Amount (\$M) ⁷	Budget Year(s) ⁷							Type of Funds ⁷
Oct-07	AETC Group II	Columbus AFB, MS	518	453	06	Improvement	Andrews-Improve 178 Units	517	453	06	Improvement	Andrews-Improve 178 Units	3, 5
		Goodfellow AFB, TX	98	241	05	Improvement	Randolph, Construct MFH Ph 1	98	241	05	Improvement	Randolph, Construct MFH Ph 1	
		Laughlin AFB, TX	534	516	05	Construction	Davis-Monthan, Repair MFH Ph 6	534	451	05	Construction	Davis-Monthan, Repair MFH Ph 6	
		Maxwell AFB, AL	729	501	03	Construction	Hurlburt, 134 MFH Ph 2A	723	501	03	Construction	Hurlburt, 134 MFH Ph 2A	
		JBSA-Randolph, TX	397	317	03	Improvement	Eglin - Hurlburt 213 MFH Improvement	397	317	03	Improvement	Eglin - Hurlburt 213 MFH Improvement	
Nov-07	Vandenberg	Vance AFB, OK	230	229				230	242				5
		AETC Group II Total:	2,506	2,257				2,499	2,205				
Nov-07	AMC East	Vandenberg AFB, CA	1,336	867	N/A	N/A	N/A	1,336	867	N/A	N/A	N/A	3, 5
		Andrews AFB, MD	1,480	887				1,466	933				
		MacDill AFB, FL	752	571	N/A	N/A	N/A	752	572	N/A	N/A	N/A	
Jul-08	AMC West	AMC East Total:	2,232	1,458				2,218	1,505			1,685	1, 5
		Fairchild AFB, WA	1,055	641	04	Construction	Tinker, Privatize 730 MFH	1,055	641	04	Construction	Tinker, Privatize 730 MFH	
		Tinker AFB, OK	694	660	04	Improvement	Sheppard, Privatize 1,288 Units	694	660	04	Improvement	Sheppard, Privatize 1,288 Units	
		Travis AFB, CA	2,187	1,134				1,094	1,134				
Nov-08	Falcon Group	AMC West Total:	3,936	2,435				2,843	2,435			2,574	1, 5
		Hanscom AFB, MA	726	746	02	Improvement	Hickam - Privatize MFH	726	731	02	Improvement	Hickam - Privatize MFH	
		Little Rock AFB, AR	1,295	999	01	Improvement	Moody MFH Privatization	1,295	991	01	Improvement	Moody MFH Privatization	
		Moody AFB, GA	303	256	01	Construction	Travis - Replace 64 Units	303	287	01	Construction	Travis - Replace 64 Units	
		Patrick AFB, FL	991	616	00	Improvement	Little Rock - Privatize MFH	991	616	00	Improvement	Little Rock - Privatize MFH	
Dec-08	Lackland II	Falcon Group Total:	3,315	2,617				3,315	2,625			2,625	1, 5
		Lackland AFB, TX (Ph II)	264	465	05	Improvement	Robins - Improve Family Housing			05	Improvement	Robins - Improve Family Housing	
					03	Improvement	Keesler - Replace 117 Ph 1	264	465	03	Improvement	Keesler - Replace 117 Ph 1	
Jun-11	JBER	JB Elmendorf-Richardson	1,242	1,240	11	Improvement	Army Funds Transferred	1,242	1,240	11	Improvement	Army Funds Transferred	1, 5

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Privatization Date ¹	MHPJ Project Name ²	Installation/State ³	Approved by OSD & OMB ⁴				Actual/Current ⁸				MHPJ Authorities ¹³			
			No. Units Conveyed ⁵	No. End State Units ⁶	Funding Source ⁶		Total No. Units in Current Inventory ¹¹	Amount (\$M) ²	Budget Year(s) ¹²	Type of Funds ¹²		Source Project Name ¹²		
					Amount (\$M) ¹¹	Type of Funds ¹¹								
Sep-11	Southern Group	Arnold AFB, TN	40	22								1, 5		
		Charleston AFB, SC	478	345										
		Keesler AFB, MS	1,188	1,188	23,354	07	Construction	Mountain Home - Replace 457 MFH	23,354	07	Construction		Mountain Home - Replace 457 MFH	
		Shaw AFB, SC	681	630										
	Southern Group Total:		2,387	2,185										
Mar-12	Western Group	Beale AFB, CA	884	509								1, 5		
		F.E. Warren AFB, WY	831	749										
		Malinstrom AFB, MT	1,412	1,116	20,053	04	FHIF	Beale	20,053	04	FHIF		Beale	
		Whiteman AFB, MO	920	890										
	Western Group Total:		4,047	3,264										
Aug-13	Northern Group	Cannon AFB, NM	763	1,038								1, 2, 5		
		Cavalier AFB, ND	14	14										
		Ellsworth AFB, SD	283	497										
		Grand Forks AFB, ND	833	547	37,813	09	Improvement	Kadena - Improve 614 MFH (Ph 9) Misawa - Improve 370 MFH (Ph 4)	37,576	09	Improvement		Kadena - Improve 614 MFH (Ph 9) Misawa - Improve 370 MFH (Ph 4)	
	Northern Group Total:		4,595	4,546										
Sep-13	Continental Group	Edwards AFB, CA	741	741								1, 2, 5		
		Eglin AFB, FL	898	747										
		Eielson AFB, AK	934	898										
		Hurlburt AFB, FL	380	404	82,610	09	Improvement	Mountain Home - Replace 457 MFH Kadena - Improve 614 MFH (Ph 9) Yokota - Improve 350 MFH (Ph 7) Misawa - Improve 370 MFH (Ph 4)	80,181	09	Improvement		Mountain Home - Replace 457 MFH Kadena - Improve 614 MFH (Ph 9) Yokota - Improve 350 MFH (Ph 7) Misawa - Improve 370 MFH (Ph 4)	
	Continental Group Total:		4,062	3,862										
Sep-13	ACC Group III	Dyess AFB, TX (PH ID)	674	674								1, 2, 5		
		Moody AFB, GA (PH ID)	0	184	9,617	09	Improvement	Yokota - Improve 350 MFH (Ph 7) Misawa - Improve 370 MFH (Ph 4)	6,315	09	Improvement		Yokota - Improve 350 MFH (Ph 7) Misawa - Improve 370 MFH (Ph 4)	
		ACC Group III Total:	674	858										
Grand Totals¹⁴			61,883	53,331	617,796					611,228	55,083	60,204	53,017	611,228

**DEPARTMENT OF THE AIR FORCE
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Notes

- 1 - The date real property is transferred (land and housing units) to private ownership/developer, and when service members become entitled to receive a Basic Allowance for Housing (BAH).
- 2 - Provide the name of the MHPI Project given to the privatization project, including the name given to integrated/grouped projects. The MHPI project name should be consistent with the MHPI project name used in the previously approved OSD/OMB Scoring report and/or subsequent notification to Congress.
- 3 - List the MHPI project location by installation and state, including each installation/state incorporated into the integrated/grouped MHPI project.
- 4 - This section relates the previously-approved OSD/OMB project scope and funding amounts contained in the scoring package and/or subsequent Notification of Funds Transfer letters to Congress.
- 5 - Provide the number of family housing units to be conveyed by installation and state to the Developer, including each installation and state incorporated into the integrated/grouped MHPI project, as previously-approved in the OSD/OMB Scoring report.
- 6 - Provide the end state number of family housing units by installation and state to the Developer, including each installation/state incorporated into the integrated/grouped MHPI project, as previously-approved in the OSD/OMB Scoring report.
- 7 - Provide all of the funding source information for the MHPI project as reflected in the previously-approved OSD/OMB report and consistent with the project summary details accompanying the Notification of Transfer letter to Congress, such as:
 - a. The amount of funds to be used for the Government's cost of the project (i.e., equity contribution, credit subsidy costs, differential lease payments, etc.).
 - b. The fiscal year(s) of the funding sources to be used to cover the Government's cost of the MHPI project.
 - c. The type of funds (e.g., FH New Construction, FH Construction Improvements, FH Improvement Funds) to be used to cover the Government's cost of the MHPI project.
 - d. The project(s) that are used to source the Government's cost of the privatization project.
- 8 - This section relates to the Military Departments' actual and/or current plan, which might or might not be consistent with the details contained in the previously-approved OSD/OMB Scoring report and project summary to Congress for the MHPI project due to extenuating circumstances.
- 9 - Provide the actual and/or revised planned number of family housing units conveyed to the Developer by installation and state, including each installation/state incorporated into the integrated/grouped MHPI project.
- 10 - Provide the actual and/or revised, planned number of family housing end state units by installation and state, including each installation/state incorporated into the integrated/grouped MHPI project. Comments to 08/13/20 reporting: AETC Group 1 (cell K34) Approved end state rebuilt at Tyndall after Hurricane Michael recovery changed from 813 to 593 units. BLB: (Cells K46 and K47) Per the terms of the restructure, 100 "End State" units will be "swapped" from Barksdale to Bolling effectively reducing the unit count at Barksdale to 990 (cell K46) and increasing the unit count at Bolling from 672 to 772 (cell K47) with an additional 43 excess units online along with the proposal to bring an additional 21 units back on line in 2022. There are 14 other units being used as Maintenance storage facilities and will continue being used as such.
- 11 - Provide the total number of privatized family housing units in the inventory for each MHPI project by installation/state, including each installation/state incorporated into the integrated/grouped MHPI project, regardless if they are currently occupied or not. Kirtland increased by 1 unit due to one unit used as office/storage not accounted for on previous FH-6; ACC II-Holloman decreased by 10 over previous FH-6 which erroneously included ten units demolished in previous years; Hickam increased by 6 units at Bellows Air Force Station and 1 model unit not counted in previous FH-6; Tri-Group-Los Angeles increased by 4 for a quadplex not part of project end state but renting two units and using the other two units for storage; AMC East-Andrews decreased by 28 units erroneously counted that had been demolished in previous years; Northern Group change due to Initial Development Period (IDP) progress; Continental Group-Eglin change due to IDP progress; Continental Group-Hurlburt change due to IDP progress. Comments to 08/13/20 reporting: AETC Group 1 (cell K34) Approved end state rebuilt at Tyndall after Hurricane Michael recovery changed from 813 to 593 units and (cell L34) 52 units have been restored and are online for occupancy as of 31 Jul. AMC East (Cell L59) 933 was the end state; however, 2 of the Madison burn units were deleted because they were not rebuilt. Northern Group: (cell L87) 3 NDSU Units were a part of Hunt's project back in the 90s. They were not part of the inventory until 2016. Wing leadership was living in those homes and didn't want them to be torn down, so Hunt transferred them to BBC and BBC renovated them and includes them in the inventory now. The 3 units are SOQ's but are classified as NDSU's because they were transferred from 801 housing.
- 12 - Provide all the "actual and/or current" funding sources used to fund the MHPI project, which might or might not be consistent with the details contained in the previous-approved OSD/OMB Scoring report and project summary (i.e., project amount, budget year of funds, source project, appropriation) to Congress for the MHPI project due to extenuating circumstances. If possible and/or available, please provide the requested funding information by installation/state. Change to scoring reported as actual for Wright Patterson as a result of actual scoring found in historical records.
- 13 - Provide the applicable MHPI authorities in subchapter IV of Chapter 169 in title 10 U.S.C. was used and/or proposed to be used for the privatization project. Designators are as follows:
 - 1 = 10 USC 2873 - Government Direct Loans
 - 2 = 10 USC 2873 - Loan Guarantees
 - 3 = 10 USC 2875 - Investments, such as DoD Equity Contributions in non-governmental entities
 - 4 = 10 USC 2877 - Differential Lease Payments
 - 5 = 10 USC 2878 - Conveyance or Lease of Existing Property and Facilities
- 14 - Totals of number of units conveyed, number of end state units, and funding amounts.

(Tab 40) - Foreign Currency Exchange Data

**DEPARTMENT OF THE AIR FORCE
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FOREIGN CURRENCY EXCHANGE DATA (PB-18)
(\$ in Thousands)

MFH O&M	Country	Local Currency	FY 2020		FY 2021		FY 2022	
			Budget Exchange Rates	\$ U.S. Requiring Conversion	Budget Exchange Rates	\$ U.S. Requiring Conversion	Budget Exchange Rates	\$ U.S. Requiring Conversion
	Denmark	Krone	6.4006		6.7012		6.4823	
	European Comm	Euro	0.8587	\$ 42,366	0.8978	\$ 42,342	0.8703	\$ 51,915
	Japan	Yen	111.1542	\$ 37,587	107.9114	\$ 37,736	106.4531	\$ 129,337
	Norway	Krone	8.1941	-	8.881	-	9.3841	\$ -
	Singapore	Dollar	1.3620	-	1.3713	-	1.3826	\$ -
	South Korea	Won	1112.2819	\$ 4,559	1186.8982	\$ 4,624	1190.9277	\$ 6,210
	Turkey	Lira	5.3522	716	5.763	482	7.2233	\$ 482
	United Kingdom	Pound	0.7614	\$ 18,806	0.8002	\$ 18,897	0.7843	\$ 22,829
	Total			\$ 104,034		\$ 104,081		\$ 210,773

MFH Construction	Country	Local Currency	FY 2020		FY 2021		FY 2022	
			Budget Exchange Rates	\$ U.S. Requiring Conversion	Budget Exchange Rates	\$ U.S. Requiring Conversion	Budget Exchange Rates	\$ U.S. Requiring Conversion
	Denmark	Krone	6.4006	-	6.7012		6.4823	
	European Comm	Euro	0.8587	\$ 53,584	0.8978	\$ -	0.8703	\$ -
	Japan	Yen	111.1542	\$ 46,682	107.9114	\$ 94,245	106.4531	\$ 49,258
	Norway	Krone	8.1941	-	8.881	-	9.3841	\$ -
	Singapore	Dollar	1.3620	-	1.3718	-	1.3826	\$ -
	South Korea	Won	1112.2819	-	1186.8982	-	1190.9277	\$ -
	Turkey	Lira	5.3522	-	5.763	-	7.2233	\$ -
	United Kingdom	Pound	0.7614	-	0.8002	-	0.7843	\$ -
	Total			\$ 100,266		\$ 94,245		\$ 49,258

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