Department of the Air Force

Military Construction Program

Fiscal Year (FY) 2021
Budget Estimates

Justification Data Submitted to
Congress February 2020

February 2020

THIS PAGE INTENTIONALLY LEFT BLANK

DEPARTMENT OF THE AIR FORCE
MILITARY CONSTRUCTION PROGRAM FISCAL YEAR 2021
TABLE OF CONTENTS

General **PAGE NUMBER**

European Deterrence Initiative

Host Nation Funded Construction

DEPARTMENT OF THE AIR FORCE
MILITARY FAMILY HOUSING PROGRAM FISCAL YEAR 2021
TABLE OF CONTENTS

Family Housing **PAGE NUMBER**

Tab - **PROGRAM SUMMARY**

DEPARTMENT OF THE AIR FORCE
MILITARY CONSTRUCTION AND MILITARY FAMILY HOUSING FISCAL YEAR 2021
PROGRAM SUMMARY

	Authorization Request ($000s)	Appropriation Request ($000s)
Military Construction		
Major Construction	143,000	402,000
Unspecified Minor Construction (10 USC 2805)	-	68,600
Planning and Design (10 USC 2807)		296,532
Total Military Construction	143,000	767,132
Military Family Housing		
New Construction	-	-
Improvements	94,245	94,245
Planning and Design	2,969	2,969
Subtotal	97,214	97,214
Operations, Utilities and Maintenance	284,528	284,528
Operations		100,689
Utilities	43,173	43,173
Maintenance		140,666
Privatization	23,175	23,175
Leasing	9,318	9,318
Subtotal	317,021	317,021
Total Military Family Housing	414,235	414,235
Grand Total Air Force	557,235	1,181,367

THIS PAGE INTENTIONALLY LEFT BLANK

Tab - **STATE SUMMARY**

DEPARTMENT OF THE AIR FORCE
MILITARY CONSTRUCTION PROGRAM FISCAL YEAR 2021
INDEX - INSIDE THE US
(DOLLARS IN THOUSANDS)

STATE	INSTALLATION	PROJECT	AUTHORIZATION REQUEST	APPROPRIATION REQUEST
COLORADO	Schriever	Consolidated Space Operations Facility, Inc 2	-	88,000
		Schriever TOTAL:	-	88,000
		COLORADO TOTAL:	-	88,000
MONTANA	Malmstrom	Weapons Storage and Maintenance Facility, Inc 2	-	25,000
		Malmstrom TOTAL:	-	25,000
		MONTANA TOTAL:	-	25,000
NEW JERSEY	JB McGuire-Dix-Lakehurst	Munitions Storage Area	22,000	22,000
		JB McGuire-Dix-Lakehurst TOTAL:	22,000	22,000
		NEW JERSEY TOTAL:	22,000	22,000
TEXAS	JBSA-Lackland	BMT Recruit Dormitory 8, Inc 2		36,000
		JBSA-Lackland TOTAL:	-	36,000
	JBSA-Randolph	T-X (T-7A) ADAL Ground Based Trng Sys (GBTS) Sim	19,500	19,500
		JBSA-Randolph TOTAL:	19,500	19,500
		TEXAS TOTAL:	19,500	55,500
UTAH	Hill	GBSD Mission Integration Facility, Inc 2		68,000
		Hill TOTAL:	-	68,000
		UTAH TOTAL:	-	68,000
VIRGINIA	JB Langley-Eustis	Access Control Point Main Gate With Land Acq	19,500	19,500
		JB Langley-Eustis TOTAL:	19,500	19,500
		VIRGINIA TOTAL::	19,500	19,500
		INSIDE THE US TOTAL:	61,000	278,000

THIS PAGE INTENTIONALLY LEFT BLANK

DEPARTMENT OF THE AIR FORCE
MILITARY CONSTRUCTION PROGRAM FISCAL YEAR 2021
INDEX - OUTSIDE THE US
(DOLLARS IN THOUSANDS)

STATE	INSTALLATION	PROJECT	AUTHORIZATION REQUEST	APPROPRIATION REQUEST
GUAM	JRM-Andersen	Stand Off Weapons Complex, MSA 2	56,000	56,000
		JRM-Andersen TOTAL:	56,000	56,000
		GUAM TOTAL:	56,000	56,000
COMMONWEALTH OF THE NORTHERN MARIANAS ISLANDS	Tinian	Fuel Tanks with Pipeline & Hydrant Sys, Inc 2	-	7,000
		Airfield Development Phase 1, Inc 2	-	20,000
		Parking Apron, Inc 2	-	15,000
		Tinian TOTAL:	-	42,000
		COMMONWEALTH OF THE NORTHERN MARIANAS ISLANDS TOTAL:	-	42,000
QATAR	Al Udeid	Cargo Marshalling Yard	26,000	26,000
		Al Udeid TOTAL:	26,000	26,000
		QATAR TOTAL:	26,000	26,000
		OUTSIDE THE US TOTAL:	82,000	124,000
WORLDWIDE UNSPECIFIED	Various Locations	Planning And Design	-	296,532
		Unspecified Minor Military Construction	-	68,600
		WORLDWIDE UNSPECIFIED TOTAL:	-	365,132
		INSIDE THE US TOTAL::	61,000	278,000
		OUTSIDE THE US TOTAL::	82,000	124,000
		WORLDWIDE UNSPECIFIED TOTAL:	-	365,132
		FY 2021 TOTAL:	143,000	767,132

THIS PAGE INTENTIONALLY LEFT BLANK

Tab - **NEW/CURRENT MISSION**

DEPARTMENT OF THE AIR FORCE
MILITARY CONSTRUCTION PROGRAM FISCAL YEAR 2021
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.

FY21	Appropriation Request ($000)
NEW MISSION	129,500
CURRENT MISSION	272,500
PLANNING & DESIGN	296,532
MINOR CONSTRUCTION	68,600
TOTAL:	767,132

DEPARTMENT OF THE AIR FORCE
MILITARY CONSTRUCTION PROGRAM FISCAL YEAR 2021
INDEX - CURRENT/NEW MISSION BREAKOUT
(DOLLARS IN THOUSANDS)

STATE/COUNTRY	INSTALLATION	PROJECT	APPROPRIATION REQUEST	TYPE
COLORADO	Schriever	Consolidated Space Operations Facility, Inc 2	88,000	CM
GUAM	JRM-Andersen	Stand Off Weapons Complex, MSA 2	56,000	CM
MONTANA	Malmstrom	Weapons Storage & Maintenance Facility, Inc 2	25,000	CM
NEW JERSEY	JB McGuire-Dix-Lakehurst	Munitions Storage Area	22,000	CM
QATAR	Al Udeid	Cargo Marshalling Yard	26,000	CM
TEXAS	JBSA-Lackland	BMT Recruit Dormitory 8, Inc 2	36,000	CM
VIRGINIA	JB Langley-Eustis	Access Control Point Main Gate With Land Acq	19,500	CM
		Current Mission TOTAL	**272,500**	

STATE/COUNTRY	INSTALLATION	PROJECT	APPROPRIATION REQUEST	TYPE
COMMONWEALTH OF THE NORTHERN MARIANAS ISLANDS	Tinian	Fuel Tanks with Pipeline & Hydrant Sys, Inc 2	7,000	NM
COMMONWEALTH OF THE NORTHERN MARIANAS ISLANDS	Tinian	Airfield Development Phase 1, Inc 2	20,000	NM
COMMONWEALTH OF THE NORTHERN MARIANAS ISLANDS	Tinian	Parking Apron, Inc 2	15,000	NM
TEXAS	JBSA-Randolph	T-7A ADAL Ground Based Trng Sys Sim	19,500	NM
UTAH	Hill	GBSD Mission Integration Facility, Inc 2	68,000	NM
		New Mission TOTAL	**129,500**	
WORLDWIDE UNSPECIFIED	Various Locations	Planning and Design	296,532	P&D
WORLDWIDE UNSPECIFIED	Various Locations	Unspecified Minor Military Construction	68,600	UMMC
		Central Program TOTAL	**365,132**	
		Active AF Program TOTAL	**767,132**	

Tab - **INSTALLATIONS**

DEPARTMENT OF THE AIR FORCE
MILITARY CONSTRUCTION PROGRAM FISCAL YEAR 2021
INSTALLATION INDEX

ACC – AIR COMBAT COMMAND
AETC – AIR EDUCATION AND TRAINING COMMAND
AFCENT – AIR FORCE CENTRAL COMMAND
AFGSC – AIR FORCE GLOBAL STRIKE COMMAND
AFMC – AIR FORCE MATERIEL COMMAND
AFSPC – AIR FORCE SPACE COMMAND
AMC – AIR MOBILITY COMMAND
PACAF – PACIFIC AIR FORCES

THIS PAGE INTENTIONALLY LEFT BLANK

Tab - **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 2021 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.

DEPARTMENT OF THE AIR FORCE
MILITARY CONSTRUCTION PROGRAM FISCAL YEAR 2021
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 2021
APPROPRIATION SOUGHT FOR PREVIOUSLY AUTHORIZED PROJECTS

APPROPRIATIONS SOUGHT FOR FY20 AUTHORIZATIONS

In the FY2021 President's Budget, the Department is requesting appropriation in the amount of $259.0 million total for seven projects that were fully authorized in the National Defense Authorization Act for Fiscal Year 2020 (P.L. 116-92). The BMT Recruit Dormitory 8 at Joint Base San Antonio, Airfield Development Phase 1 at Tinian, Consolidated Space Operations Facility at Schriever Air Force Base, Fuel Tanks with Pipeline & Hydrant System at Tinian, Ground Based Strategic Deterrent (GBSD) Mission Integration Facility at Hill Air Force Base, Parking Apron at Tinian and the Weapons Storage & Maintenance Facility at Malmstrom Air Force Base were fully authorized and the Department is requesting the amounts be appropriated as specified in this budget estimate.

THIS PAGE INTENTIONALLY LEFT BLANK

Tab - **APPROPRIATION LANGUAGE**

DEPARTMENT OF THE AIR FORCE
MILITARY CONSTRUCTION PROGRAM FISCAL YEAR 2021
APPROPRIATION LANGUAGE

FY2021 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, $767,132,000, to remain available until September 30, 2025: Provided that, of this amount, not to exceed $296,532,000 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 her determination and the reason therefor.

THIS PAGE INTENTIONALLY LEFT BLANK

Tab - **INSIDE THE UNITED STATES**

1. COMPONENT	FY 2021 MILITARY CONSTRUCTION PROGRAM	2. DATE (YYYYMMDD)
AIR FORCE		February 2020

3. INSTALLATION AND LOCATION	4. COMMAND	5. AREA CONTRUCTION COST INDEX
SCHRIEVER AIR FORCE BASE, COLORADO	AIR FORCE SPACE COMMAND	1.12

6. PERSONNEL	(1) PERMANENT			(2) STUDENTS			(3) SUPPORTED			(4) TOTAL
	OFFICER	ENLISTED	CIVILIAN	OFFICER	ENLISTED	CIVILIAN	OFFICER	ENLISTED	CIVILIAN	
a. AS OF 30-SEP-19	718	2,154	686	0	0	0	0	0	0	3,558
b. END FY	718	2,154	686	0	0	0	0	0	0	3,558

7. INVENTORY DATA ($000)	
a. TOTAL ACREAGE	8,660
b. INVENTORY TOTAL AS OF 30-SEP-19	1,229,608.00
c. AUTHORIZATION NOT YET IN INVENTORY	148,000.00
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	25,500.00
h. GRAND TOTAL	1,403,108.00

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
131-200	CONSOLIDATED SPACE OPERATION FACILITY, INC 2	16,505 SM	88,000	05/18	09/19

9. FUTURE PROJECTS

10. MISSION OR MAJOR FUNCTIONS

The 50th Space Wing, a component of Air Force Space Command, located at Schriever Air Force Base is responsible for the operation and support of 185 Department of Defense satellites and installation support to 20 mission partners.

11. OUTSTANDING POLLUTION AND SAFETY DEFICIENCIES

a. Air Pollution	0
b. Water Pollution	0
c. Occupational Safety and Health	0
d. Other Environmental	0
OUTSTANDING DEFICIENCIES TOTAL:	0

1. COMPONENT	FY 2021 MILITARY CONSTRUCTION PROJECT DATA	2. DATE
AIR FORCE	(computer generated)	February 2020

3. INSTALLATION, SITE AND LOCATION	4. PROJECT TITLE
SCHRIEVER AIR FORCE BASE SCHRIEVER AFB SITE # 1 COLORADO	CONSOLIDATED SPACE OPERATIONS FACILITY, INC 2

5. PROGRAM ELEMENT	6. CATEGORY CODE	7. RPSUID/PROJECT NUMBER	8. PROJECT COST ($000)
91211F	131-200	2067/GLEN203001	Auth: 0 Appro: 88,000

9. COST ESTIMATES

ITEM	U/M	QUANTITY	UNIT	COST ($000)
PRIMARY FACILITIES				119,856
SPACE OPERATIONS FACILITY - SCIF (131-200)	SM	16,505	6,399	(105,615)
DINING AREA (722-345)	SM	585	4,058	(2,374)
ENTRY CONTROL FACILITY (730-837)	SM	595	10,784	(6,416)
CYBERSECURITY OF FACILITY-RELATED CONTROL SYS	LS			(3,100)
SUSTAINABILITY AND ENERGY MEASURES (2.0%)	LS			(2,350)
SUPPORTING FACILITIES				13,510
EMERGENCY POWER GENERATION	LS			(6,472)
SITE PREPARATION	LS			(283)
SITE IMPROVEMENTS	LS			(486)
UTILITIES	LS			(3,344)
EXTERIOR COMMUNICATIONS	LS			(530)
STORM DRAINAGE	LS			(834)
LIGHTING	LS			(376)
PAVEMENTS	LS			(1,185)
SUBTOTAL				133,366
CONTINGENCY (5.0%)				6,668
TOTAL CONTRACT COST				140,034
SUPERVISION, INSPECTION AND OVERHEAD (5.7%)				7,982
TOTAL REQUEST				148,016
TOTAL REQUEST (ROUNDED)				148,000
EQUIPMENT FROM OTHER APPROPRIATIONS (NON-ADD)				(59,338)

10. Description of Proposed Construction: Construct a three-story Consolidated Space Operations Facility with reinforced concrete foundation, steel structure, clad with precast concrete panels and a low slope membrane roof. Construct a new electrical feeder connecting to the central utility plant, Building 600, and a new buried concrete utilidor connection to support redundant potable water, steam and condensate piping service to the new building. Connect the sanitary wastewater, fire protection, and water service to respective infrastructure. Construct a power generation and steam heat plant adjacent/attached to the Consolidated Space Operations Facility to provide back-up power and heating, ventilation, and air conditioning (HVAC). Construct a one-story entry control facility at the south side of the restricted area with reinforced concrete foundation, steel structure, clad with precast concrete panels, a low slope membrane roof and all necessary utilities and infrastructure along with a south vehicle parking lot. The project will also include a dining area. Project will comply with all applicable Department of Defense (DoD), Air Force, and base design standards. In addition, local materials and construction techniques shall be used where cost effective. Sustainable principles, to include Life Cycle cost-effective practices, will be

DD FORM 1391, DEC 99 Previous editions are obsolete. Page No.

1. COMPONENT	FY 2021 MILITARY CONSTRUCTION PROJECT DATA	2. DATE
AIR FORCE	(computer generated)	February 2020

3. INSTALLATION, SITE AND LOCATION	4. PROJECT TITLE
SCHRIEVER AIR FORCE BASE SCHRIEVER AFB SITE # 1 COLORADO	CONSOLIDATED SPACE OPERATIONS FACILITY, INC 2

5. PROGRAM ELEMENT	6. CATEGORY CODE	7. RPSUID/PROJECT NUMBER	8. PROJECT COST ($000)
91211F	131-200	2067/GLEN203001	Auth: 0 Appro: 88,000

integrated into the design, development and construction of the project in accordance with Unified Facilities Criteria (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 UFC 1-200-02 is partially compliant or not applicable. This project will comply with DoD antiterrorism/force protection requirements per UFC 4-010-01.

Air Conditioning: 1,400 Tons

11. Requirement: 16505 SM Adequate: 0 SM Substandard: 3264 SM

PROJECT: Consolidated Space Operations Facility

REQUIREMENT: Adequately sized and configured Consolidated Space Operations Facility (CSOF) to accommodate the Joint Force Space Component Commander (JFSCC) and the National Space Defense Center (NSDC) staffs and operations centers at Schriever Air Force Base. The CSOF must be constructed to meet Protection Level 2 requirements and designed for a future expansion. To ensure reliable operations, the CSOF will have multiple active power and cooling distribution paths and redundant components to meet the fault-tolerant facility "Tier IV" standard as defined by The Uptime Institute. The entire CSOF is a Sensitive Compartmented Information Facility (SCIF) and meets all mission separation and collaboration requirements. A 500-person SCIF auditorium is required for secure briefings and conferences. The CSOF will also include a dining area to support 24/7 operations. Due to a deficit of available space to expand north-side and west-side parking for the Schriever Restricted Area (RA), new parking is required on the south-side with a new RA entry control facility (ECF).

CURRENT SITUATION: To improve space warfighting effectiveness against our adversaries, Commander US Strategic Command (CDRUSSTRATCOM) directed an organizational restructure of space forces to foster mission command and to posture USSTRATCOM as a global warfighting command. Within this restructure, the Air Force Space Command Commander (AFSPC/CC) is designated as the JFSCC. With both AFSPC service component responsibilities to organize, train and equip and now space warfighting command and control responsibilities as JFSCC, AFSPC/CC requires both staffs in geographic proximity to ensure timely and effective direction. Therefore, AFSPC/CC requested JFSCC staff to be located at Schriever AFB near HQ AFSPC. There are currently no facilities in the Colorado Springs area to accommodate the new mission. Furthermore, the collocation with NSDC, the primary operations center reporting to JFSCC for fires and maneuvers in space, is imperative to achieve USSTRATCOM operational command and control directives. NSDC was established by DoD in 2016 and has experienced significant growth. The renovated facility currently serving NSDC is undersized and cannot continue to meet all operational requirements. NSDC has also displaced many units assigned to Schriever including 2nd, 3rd, and 4th Space Operations Squadrons, 3rd Space Experimentation Squadron and other 50th Space Wing (50 SW) and tenant units--all forced into undersized space until NSDC can move into the CSOF. The sense of Congress on NSDC in the FY18 National Defense Authorization Act is that the NSDC is critical to defending and securing the space domain in order to protect all U.S. assets in space and essential to detecting, assessing, and reacting to evolving

1. COMPONENT AIR FORCE	FY 2021 MILITARY CONSTRUCTION PROJECT DATA (computer generated)	2. DATE February 2020

3. INSTALLATION, SITE AND LOCATION	4. PROJECT TITLE
SCHRIEVER AIR FORCE BASE SCHRIEVER AFB SITE # 1 COLORADO	CONSOLIDATED SPACE OPERATIONS FACILITY, INC 2

5. PROGRAM ELEMENT	6. CATEGORY CODE	7. RPSUID/PROJECT NUMBER	8. PROJECT COST ($000)
91211F	131-200	2067/GLEN203001	Auth: 0 Appro: 88,000

space threats. There is currently no SCIF auditorium in the Colorado Springs area to support secure briefings to large audiences. A dining area is necessary to the new mission bed-down since there are few dining options on base and nothing directly off-base.

IMPACT IF NOT PROVIDED: If the CSOF is not funded, severe facility shortfalls will keep JFSCC from effectively meeting directed warfighting responsibilities and continue to constrain the 50 SW and NSDC.

ADDITIONAL: This project meets applicable criteria/scope specified in Air Force Manual (AFMAN) 32-1084, "Facility Requirements." Where special purpose space requirements do not exist in AFMAN 32-1084, project criteria/scope was determined based on interviews with subject matter experts from JFSCC and NSDC. Detailed space requirements and justifications are documented in the "Consolidated Space Operations Facility Charrette Report," 2017. A preliminary economic analysis (EA) of reasonable options for accomplishing this project (status quo, lease/rent, relocate, and upgrade) was done. There is only one option that will meet the new operational mission and current mission requirement. 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, and there is no applicable standard design from the Air Force Civil Engineer Center. This project does not fall within or partly within the 100-year flood plain. 50 SW Base Civil Engineer: (719) 567-4200. CSOF: 17,090 SM = 183,955 SF. ECF: 595 SM = 6,405 SF.

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	FY 2021 MILITARY CONSTRUCTION PROJECT DATA	2. DATE
AIR FORCE	(computer generated)	February 2020

3. INSTALLATION AND LOCATION	4. PROJECT TITLE
SCHRIEVER AIR FORCE BASE SCHRIEVER AFB SITE # 1 COLORADO	CONSOLIDATED SPACE OPERATIONS FACILITY, INC 2

5. PROGRAM ELEMENT	6. CATEGORY CODE	7. PROJECT NUMBER	8. PROJECT COST ($000)
91211F	131-200	2067/GLEN203001	Auth: 0 Appro: 88,000

12. SUPPLEMENTAL DATA:

a. Estimated Design Data:

(1) Status :	
(a) Type of design	Design Bid Build
(b) Date Design Started	30-MAY-18
(c) Parametric Cost Estimates used to develop costs	YES
* (c) Percent Complete as of 01 JAN 2019	15%
* (d) Date 35% Designed	01-MAR-19
(e) Date Design Complete	01-SEP-19
(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 -	
(3) Total Cost (c) = (a) + (b) or (d) + (e):	($000)
(a) Production of Plans and Specifications	8,880
(b) All Other Design Costs	4,440
(c) Total	13,320
(d) Contract	11,100
(e) In-house	2,220
(4) Construction Contract Award	20 DEC
(5) Construction Start	21 FEB
(6) Construction Completion	22 MAR

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

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

EQUIPMENT NOMENCLATURE	PROCURING APPROPRIATION	FISCAL YEAR APPROPRIATED OR REQUESTED	COST ($000)
UNINTERRUPTIBLE POWER SUPPLY	3080	22	5,038
SECURITY EQUIPMENT	3080	22	1,500
FURNISHINGS	3400	22	9,500
COMMUNICATIONS EQUIPMENT	3080	22	43,300

1. COMPONENT	FY 2021 MILITARY CONSTRUCTION PROJECT DATA	2. DATE
AIR FORCE	(computer generated)	February 2020

3. INSTALLATION AND LOCATION	4. PROJECT TITLE
SCHRIEVER AIR FORCE BASE SCHRIEVER AFB SITE # 1 COLORADO	CONSOLIDATED SPACE OPERATIONS FACILITY, INC 2

5. PROGRAM ELEMENT	6. CATEGORY CODE	7. PROJECT NUMBER	8. PROJECT COST ($000)
91211F	131-200	2067/GLEN203001	Auth: 0 Appro: 88,000

12. SUPPLEMENTAL DATA (cont.)

FY ($M)	Authorization Requested	Authorization of Appropriations	Appropriation
2020	148	60	60
2021	0	0	0

DD FORM 1391, DEC 99 Previous editions are obsolete. Page No.

Project: Consolidated Space Operations Facility, Inc 2; Schriever AFB Colorado

Project Spending Plan
As of: 14-Jan-20
All Cost in thousands ($000)

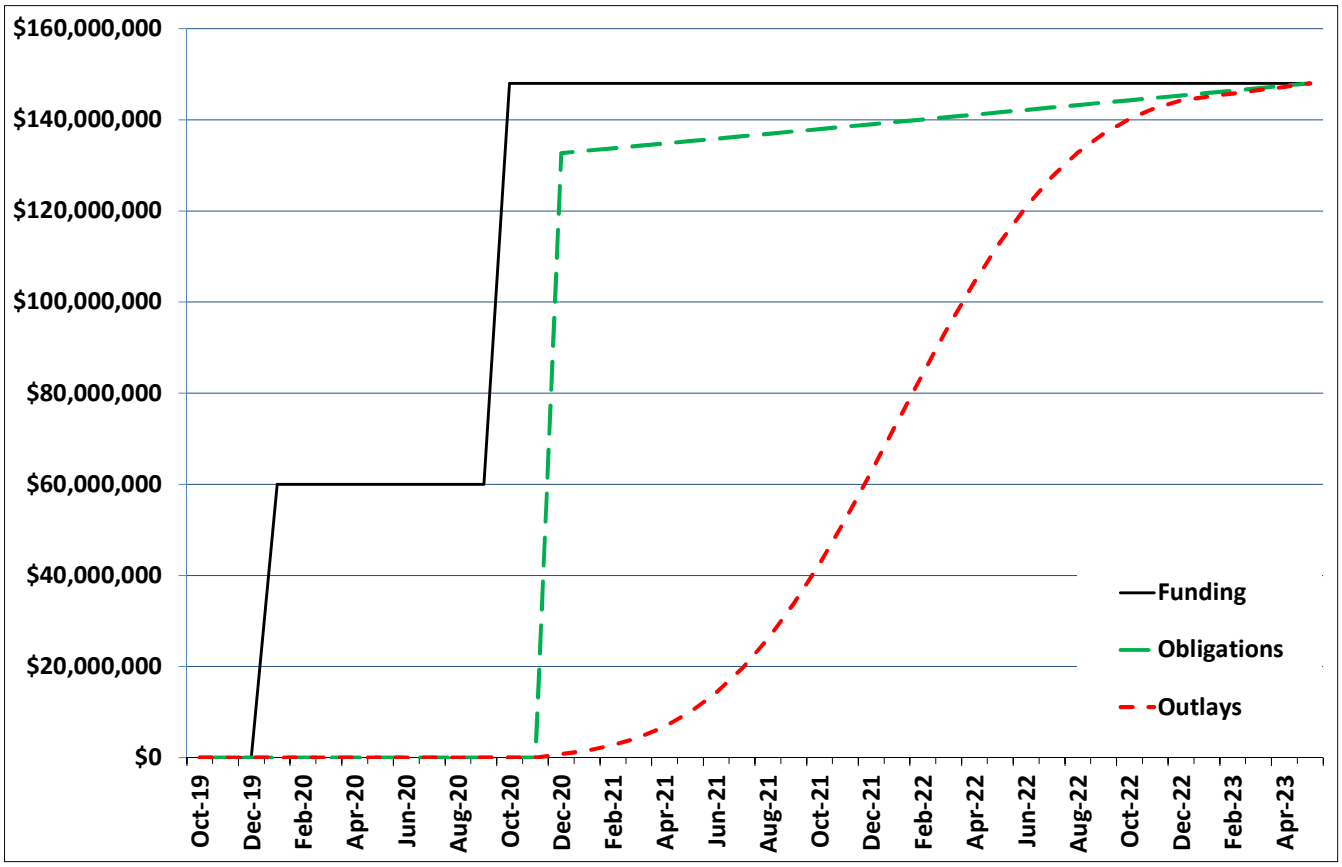
Chart Begin Oct-19	FUNDING (note 1)		OBLIGATION (note 2)		OUTLAYS (note 3)		
Month	**Enacted**	**Cumulative**	**Obligated**	**Cumulative**	**Monthly**	**Cumulative**	
Oct-19	-	-	-	-	-	-	
Nov-19	-	-	-	-	-	-	
Dec-19	-	-	-	-	-	-	#
Jan-20	60,000,000	60,000,000	-	-	-	-	
Feb-20	-	60,000,000	-	-	-	-	
Mar-20	-	60,000,000	-	-	-	-	
Apr-20	-	60,000,000	-	-	-	-	
May-20	-	60,000,000	-	-	-	-	
Jun-20	-	60,000,000	-	-	-	-	
Jul-20	-	60,000,000	-	-	-	-	
Aug-20	-	60,000,000	-	-	-	-	
Sep-20	-	60,000,000	-	-	-	-	
Oct-20	88,000,000	148,000,000	-	-	-	-	
Nov-20	-	148,000,000	-	-	-	-	
Dec-20	-	148,000,000	132,691,857	132,691,857	785,633	785,633	
Jan-21	-	148,000,000	527,867	133,219,724	785,633	1,571,266	
Feb-21	-	148,000,000	527,867	133,747,591	1,175,320	2,746,586	
Mar-21	-	148,000,000	527,867	134,275,458	1,700,257	4,446,843	
Apr-21	-	148,000,000	527,867	134,803,325	2,378,456	6,825,298	
May-21	-	148,000,000	527,867	135,331,192	3,217,344	10,042,642	
Jun-21	-	148,000,000	527,867	135,859,059	4,208,446	14,251,088	
Jul-21	-	148,000,000	527,867	136,386,926	5,323,142	19,574,231	
Aug-21	-	148,000,000	527,867	136,914,793	6,510,830	26,085,060	
Sep-21	-	148,000,000	527,867	137,442,660	7,700,635	33,785,696	
Oct-21	-	148,000,000	527,867	137,970,527	8,807,218	42,592,913	
Nov-21	-	148,000,000	527,867	138,498,394	9,740,312	52,333,225	
Dec-21	-	148,000,000	527,867	139,026,261	10,416,671	62,749,896	
Jan-22	-	148,000,000	527,867	139,554,128	10,772,264	73,522,160	
Feb-22	-	148,000,000	527,867	140,081,995	10,772,264	84,294,424	
Mar-22	-	148,000,000	527,867	140,609,862	10,416,671	94,711,094	
Apr-22	-	148,000,000	527,867	141,137,729	9,740,312	104,451,406	
May-22	-	148,000,000	527,867	141,665,596	8,807,218	113,258,624	
Jun-22	-	148,000,000	527,867	142,193,463	7,700,635	120,959,259	
Jul-22	-	148,000,000	527,867	142,721,330	6,510,830	127,470,089	
Aug-22	-	148,000,000	527,867	143,249,197	5,323,142	132,793,231	
Sep-22	-	148,000,000	527,867	143,777,064	4,208,446	137,001,677	
Oct-22	-	148,000,000	527,867	144,304,931	3,217,344	140,219,021	
Nov-22	-	148,000,000	527,867	144,832,798	2,378,456	142,597,476	
Dec-22	-	148,000,000	527,867	145,360,665	1,700,259	144,297,735	
Jan-23	-	148,000,000	527,867	145,888,532	740,453	145,038,188	
Feb-23	-	148,000,000	527,867	146,416,399	740,453	145,778,641	
Mar-23	-	148,000,000	527,867	146,944,266	740,453	146,519,094	
Apr-23	-	148,000,000	527,867	147,472,133	740,453	147,259,547	
May-23	-	148,000,000	527,867	148,000,000	740,453	148,000,000	

Note 1: Assumes initial appropriation is enacted by Congress January of the program year. The appropriation of follow-on increments is anticipated in subsequent Octobers.

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

Note 3: Assumes contract award date of Dec 2020, Contract completion: May 2023, Duration 30 months

Consolidated Space Operations Facility, Inc 2; Schriever AFB Colorado



1. COMPONENT	FY 2021 MILITARY CONSTRUCTION PROGRAM	2. DATE (YYYYMMDD)
AIR FORCE		February 2020

3. INSTALLATION AND LOCATION	4. COMMAND	5. AREA CONTRUCTION COST INDEX
MALMSTROM AIR FORCE BASE, MONTANA	AIR FORCE GLOBAL STRIKE COMMAND	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-19	847	2,543	622	0	0	0	462	3,053	647	8,174
b. END FY	848	2,548	622	0	0	0	373	2,625	645	7,661

7. INVENTORY DATA ($000)	
a. TOTAL ACREAGE	28,838
b. INVENTORY TOTAL AS OF 30-SEP-19	3,905,170.00
c. AUTHORIZATION NOT YET IN INVENTORY	269,300.00
d. AUTHORIZATION REQUESTED IN THIS PROGRAM	0.00
e. AUTHORIZATION INCLUDED IN FOLLOWING PROGRAM	0.00
f. PLANNED IN NEXT THREE PROGRAM YEARS	11,000.00
g. REMAINING DEFICIENCY	261,800.00
h. GRAND TOTAL	4,447,270.00

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 Storage & Maintenance Facility, Inc 2	7,510 SM	25,000	05/18	09/19

9. FUTURE PROJECTS

215-582 Weapons Storage & Maintenance Facility, Inc 3 (7,510 SM / $90,000)

730-839 Comm Gate Entrance Ctrl Facility (1,387 SM / $11,000)

10. MISSION OR MAJOR FUNCTIONS

Malmstrom Air Force Base is home to the 341st Missile Wing of Air Force Global Strike Command and also home to the 819th Red Horse Squadron of Air Combat Command. The mission of the 341st Missile Wing is to defend America with safe, secure, effective nuclear forces and combat-ready Airmen. The 341st Missile Wing operates, maintains and secures 150 Intercontinental Ballistic Missiles positioned across 23,500-square miles of Montana. The wing also operates eight UH-1N Huey helicopters that perform nuclear convoy security and missile site support.

11. OUTSTANDING POLLUTION AND SAFETY DEFICIENCIES

a. Air Pollution	0
b. Water Pollution	0
c. Occupational Safety and Health	0
d. Other Environmental	0
OUTSTANDING DEFICIENCIES TOTAL:	0

1. COMPONENT	FY 2021 MILITARY CONSTRUCTION PROJECT DATA	2. DATE
AIR FORCE		February 2020

3. INSTALLATION AND LOCATION	4. PROJECT TITLE:
MALMSTROM AFB MONTANA	WEAPONS STORAGE & MAINTENANCE FACILITY, INC 2

5. PROGRAM ELEMENT	6. CATEGORY CODE	7. PROJECT NUMBER	8. PROJECT COST ($000)
91211F	215-582	2529 / NZAS1014838	AUTH: 0 APP: 25,000

9. COST ESTIMATES

ITEM	U/M	QUANTITY	UNIT COST	COST ($000)
PRIMARY FACILITIES				
WEAPON STORAGE AND MAINT FACILITY (215-582)	SM	7510	19,175	144,004,250
SECURITY SUPPORT BUILDNG (730-834)	SM	63	4,762	300,000
WEATHER SHELTER (738-401)	SM	14	3,571	50,000
PIER AND GRADE BEAM FOUNDATION	LS	1	15,000,000	15,000,000
CYBERSECURITY (2.5% OF PROJECT COST)	LS	1	3,609,000	3,609,000
SUSTAINABILITY AND ENERGY MEASURES	LS	1	2,880,000	2,880,000
			Line Item Total:	165,843,250
SUPPORTING FACILITIES				
UTILITIES	LS	1	17,000,000	17,000,000
COMMUNICATION SUPPORT	LS	1	3,000,000	3,000,000
GENERATOR	LS	1	1,600,000	1,600,000
DEMOLITION	SM	2161	1,666	3,600,226
SITE IMPROVEMENTS	LS	1	11,000,000	11,000,000
PAVEMENTS	LS	1	7,500,000	7,500,000
FIRE PUMP BUILDING	SM	104	20,422	2,123,888
			Line Item Total:	45,824,114
PROJECT SUBTOTAL				211,667,364
CONTINGENCY COST (5%)				10,583,368
SUPERVISION, INSPECTION & OVERHEAD (5.7%)				12,668,292
PROJECT TOTAL				234,919,024
ROUNDED TOTAL COST				235,000,000

10. DESCRIPTION OF PROPOSED CONSTRUCTION

Project will construct an earth-covered reinforced concrete Weapon Storage Facility (WSF) combining storage and maintenance functions into a single hardened facility, to include a Remote Targeting Engagement System (RTES) tower, weather shelter, and supporting fire pump building. The project will demolish buildings 1829 (13 SM), 1835 (1,090 SM), 1870 (529 SM) and 1871 (529 SM). All construction will meet requirements for Department of Defense explosives safety standards and essential facility systems design certification. Facilities will be designed as permanent construction in accordance with the DoD Unified Facilities Criteria (UFC) 1-200-01. Sustainable principals, 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 DoD antiterrorism/force protection requirements per UFC 4-010-01.

Air Conditioning: 130 TONS

11. REQUIREMENT: 7,510 SM ADEQUATE: 0 SM SUBSTANDARD: 4,643 SM

PROJECT DESCRIPTION: Construct a consolidated Weapons Storage Facility

REQUIREMENT: A reinforced concrete facility that puts all weapon maintenance and storage operations in a single facility to minimize the effects of weather in operations, eliminates security deviations, recapitalizes aging infrastructure and achieves economies of scale throughout the mission. A structural foundation with pier and grade-beam construction is required to mitigate the effects of clay soil conditions at Malmstrom Air Force Base. A mast and catenary wire type lighting protection is required in lieu of a roof mounted type lightning protection system. A paved patrol

DD FORM 1391, DEC 99 PREVIOUS EDITION IS OBSOLETE

1. COMPONENT AIR FORCE	FY 2021 MILITARY CONSTRUCTION PROJECT DATA	2. DATE February 2020
3. INSTALLATION AND LOCATION MALMSTROM AFB MONTANA	4. PROJECT TITLE: WEAPONS STORAGE & MAINTENANCE FACILITY, INC 2	

5. PROGRAM ELEMENT	6. CATEGORY CODE	7. PROJECT NUMBER	8. PROJECT COST ($000)
91211F	215-582	2529 / NZAS1014838	AUTH: 0 APP: 25,000

road shall be constructed around the outside perimeter of the security fence. The perimeter road needs to be relocated outside of the new Quantity-Distance arc. The facility shall be designed and constructed to meet weapon surety requirements.

CURRENT SITUATION: There are numerous facilities in the current Weapons Storage Area. Building 1840, the primary storage and maintenance facility, is an existing facility placed into service in 1957, which is primarily utilized for maintenance and inspection. Aging infrastructure needs massive overhaul to meet current standards and requirements. The various missions related to the weapons are scattered leading to inefficiencies in security and operations and making the mission more vulnerable. The current facilities do not meet several of the security requirements mandated in Department of Defense security directives. The aging infrastructure necessitates workarounds to meet mission requirements and the current facilities systems are inadequate to support ongoing intrusive weapons maintenance. The existing facilities have outlived their design life span. Operations and Maintenance costs are high and deficiencies result in mission impact. Transverse cracking in foundations and structural elements are evidence of an increased risk of structure failure.

There is a lack of space for munitions maintenance, administrative, safety/security screening equipment and general storage. Current work arounds do not address multiple security deviations nor can they realistically address all of the known requirements. Recent failures in the fire suppression piping have flooded the building and disrupted weapon maintenance operations. Emergency repairs were recently performed on the failed boiler system, also disrupting operations.

IMPACT IF NOT PROVIDED: Munitions operations will remain at high risk due to inefficiencies, environmental exposure, and failing infrastructure. Waivers and work-arounds to address facility noncompliance with DoD security requirements will continue to create inefficiencies and risks. Outright system failure, as in the case of the fire suppression system, may disrupt or stop operations for duration of failure and emergency repairs.

ADDITIONAL: This project meets applicable criteria/scope specified in Air Force Manual 32-1084, 'Facility Requirements'. This project does not fall within or partly within the 100-year flood plain. A preliminary analysis of reasonable options for accomplishing this project (status quo, renovation, new construction) indicated there is only one option that will meet operational requirements, i.e., new construction. An economic analysis waiver is approved. This design shall conform to criteria established in the Air Force Corporate Facilities Standards (AFCFS), the Installation Facilities Standards (IFS) [if available], 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.

Base Civil Engineer: (406) 731-6188. Weapons Storage Facility: 7,510 SM = 80,837 SF

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

DD FORM 1391, DEC 99 PREVIOUS EDITION IS OBSOLETE

1. COMPONENT AIR FORCE	FY 2021 MILITARY CONSTRUCTION PROJECT DATA	2. DATE February 2020

3. INSTALLATION AND LOCATION	4. PROJECT TITLE:
MALMSTROM AFB MONTANA	WEAPONS STORAGE & MAINTENANCE FACILITY, INC 2

5. PROGRAM ELEMENT	6. CATEGORY CODE	7. PROJECT NUMBER	8. PROJECT COST ($000)
91211F	215-582	2529 / NZAS1014838	AUTH: 0 APP: 25,000

12. SUPPLEMENTAL DATA

a. Estimated Design Data:

(1)	Status :	
	(a) Type of design	Design Bid Build
	(b) Date Design Started	01-MAY-18
	(c) Parametric Costs Estimates used to develop costs	Yes
(2)	(c) Percent Complete as of 01-JAN-19	15%
(3)	(d) Date 35% Designed	01-JAN-19
	(e) Date Design Complete	15-SEP-19
	(f) Energy Study/Life-Cycle cost analysis was/will be performed	YES
(4)	Basis:	YES
	(a) Standard or Definitive Design	FE Warren
	(b) Where Design was most recently used	
		($000)
(5)	Total Cost (c) = (a) + (b) or (d) + (e):	300
	(a) Production of Plans and Specifications:	1,700
	(b) All Other Design Costs:	2,000
	(c) Total:	2,000
	(d) Contract:	0
	(e) In-House	21 FEB
(6)	Construction Contract Award	21 APR
(7)	Construction Start	24 AUG
(8)	Construction Completion	

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

(9) Equipment associated with this project provided from other appropriations:

EQUIPMENT NOMENCLATURE	PROCURING APPRO	FISCAL YEAR APPROPRIATED OR REQUESTED	COST ($000)
COMMUNICATION EQUIPMENT	3080	2023	1,500
SECURITY SYSTEMS	3080	2023	20,000
FURNISHINGS	3080	2023	800

DD FORM 1391, DEC 99 PREVIOUS EDITION IS OBSOLETE

1. COMPONENT	FY 2021 MILITARY CONSTRUCTION PROJECT DATA	2. DATE
AIR FORCE		February 2020

3. INSTALLATION AND LOCATION	4. PROJECT TITLE:
MALMSTROM AFB MONTANA	WEAPONS STORAGE & MAINTENANCE FACILITY, INC 2

5. PROGRAM ELEMENT	6. CATEGORY CODE	7. PROJECT NUMBER	8. PROJECT COST ($000)
91211F	215-582	2529 / NZAS1014838	AUTH: 0 APP: 25,000

SUPPLEMENTAL DATA (CONT.):

FY ($M)	Authorization Requested	Authorization of Appropriations	Appropriation
2020	235	59	120
2021	0	0	0
2022	0	0	0

DD FORM 1391, DEC 99 PREVIOUS EDITION IS OBSOLETE

Project: Weapons Storage & Maintenance Facility, Inc 2; Malmstrom AFB Montana

Project Spending Plan
As of: 14-Jan-20
All Cost in thousands ($000)

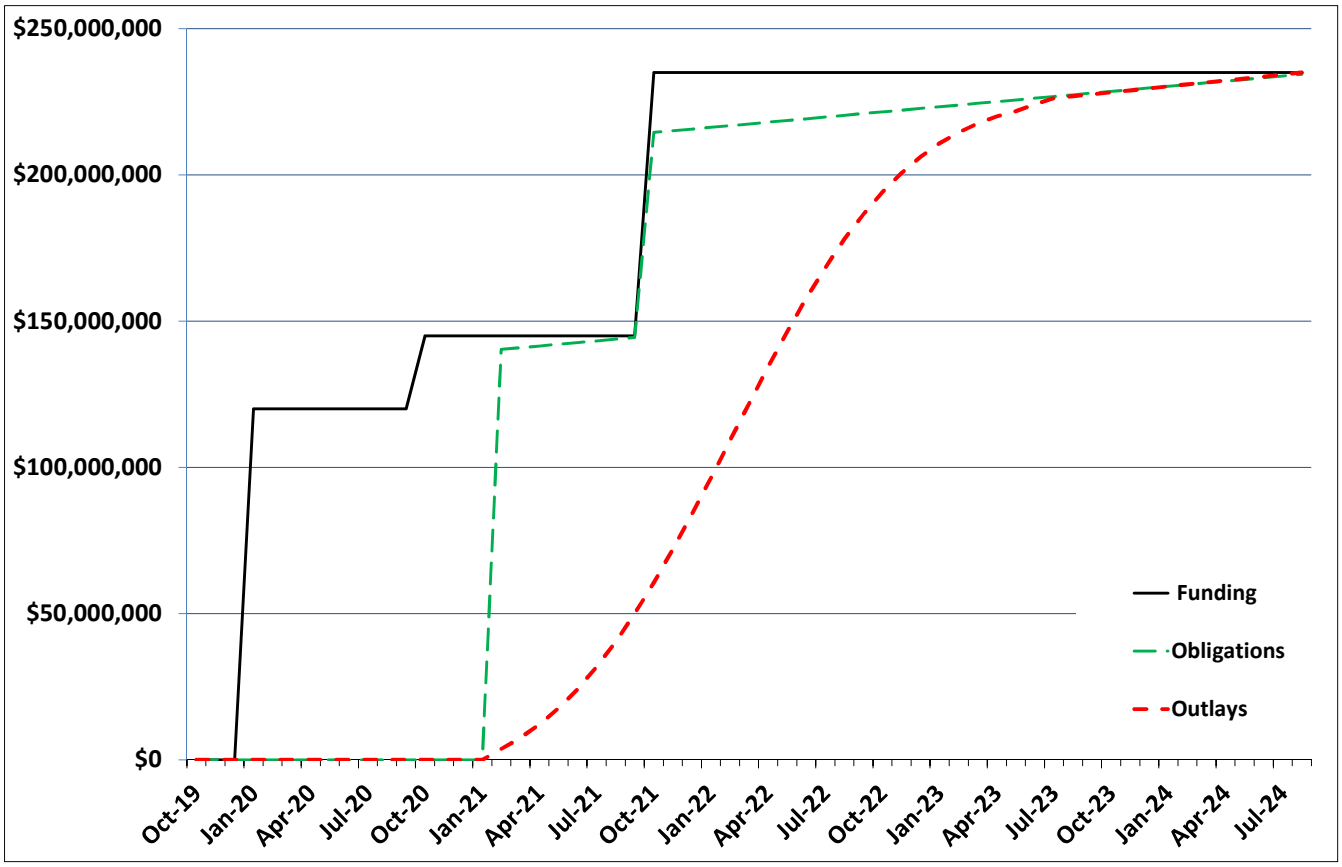
Chart Begin Oct-19	FUNDING (note 1)		OBLIGATION (note 2)		OUTLAYS (note 3)		
Month	**Enacted**	**Cumulative**	**Obligated**	**Cumulative**	**Monthly**	**Cumulative**	
Oct-19	-	-	-	-	-	-	
Nov-19	-	-	-	-	-	-	
Dec-19	-	-	-	-	-	-	#
Jan-20	120,000,000	120,000,000	-	-	-	-	
Feb-20	-	120,000,000	-	-	-	-	
Mar-20	-	120,000,000	-	-	-	-	
Apr-20	-	120,000,000	-	-	-	-	
May-20	-	120,000,000	-	-	-	-	
Jun-20	-	120,000,000	-	-	-	-	
Jul-20	-	120,000,000	-	-	-	-	
Aug-20	-	120,000,000	-	-	-	-	
Sep-20	-	120,000,000	-	-	-	-	
Oct-20	25,000,000	145,000,000	-	-	-	-	
Nov-20	-	145,000,000	-	-	-	-	
Dec-20	-	145,000,000	-	-	-	-	
Jan-21	-	145,000,000	-	-	-	-	
Feb-21	-	145,000,000	140,321,856	140,321,856	3,758,509	3,758,509	
Mar-21	-	145,000,000	584,768	140,906,624	3,758,509	7,517,017	
Apr-21	-	145,000,000	584,768	141,491,392	4,604,570	12,121,587	
May-21	-	145,000,000	584,768	142,076,160	5,537,921	17,659,508	
Jun-21	-	145,000,000	584,768	142,660,928	6,538,659	24,198,167	
Jul-21	-	145,000,000	584,768	143,245,696	7,579,052	31,777,219	
Aug-21	-	145,000,000	584,768	143,830,464	8,624,328	40,401,547	
Sep-21	-	145,000,000	584,768	144,415,232	9,634,294	50,035,841	
Oct-21	90,000,000	235,000,000	70,117,888	214,533,120	10,565,711	60,601,552	
Nov-21	-	235,000,000	584,768	215,117,888	11,375,273	71,976,825	
Dec-21	-	235,000,000	584,768	215,702,656	12,022,898	83,999,722	
Jan-22	-	235,000,000	584,768	216,287,424	12,475,004	96,474,726	
Feb-22	-	235,000,000	584,768	216,872,192	12,707,393	109,182,119	
Mar-22	-	235,000,000	584,768	217,456,960	12,707,393	121,889,512	
Apr-22	-	235,000,000	584,768	218,041,728	12,475,004	134,364,516	
May-22	-	235,000,000	584,768	218,626,496	12,022,898	146,387,413	
Jun-22	-	235,000,000	584,768	219,211,264	11,375,273	157,762,686	
Jul-22	-	235,000,000	584,768	219,796,032	10,565,711	168,328,398	
Aug-22	-	235,000,000	584,768	220,380,800	9,634,294	177,962,691	
Sep-22	-	235,000,000	584,768	220,965,568	8,624,328	186,587,019	
Oct-22	-	235,000,000	584,768	221,550,336	7,579,052	194,166,071	
Nov-22	-	235,000,000	584,768	222,135,104	6,538,659	200,704,730	
Dec-22	-	235,000,000	584,768	222,719,872	5,537,921	206,242,651	
Jan-23	-	235,000,000	584,768	223,304,640	4,604,570	210,847,221	
Feb-23	-	235,000,000	584,768	223,889,408	3,758,509	214,605,729	
Mar-23	-	235,000,000	584,768	224,474,176	3,011,801	217,617,531	
Apr-23	-	235,000,000	584,768	225,058,944	2,369,307	219,986,837	
May-23	-	235,000,000	584,768	225,643,712	1,829,787	221,816,624	
Jun-23	-	235,000,000	584,768	226,228,480	2,387,279	224,203,903	
Jul-23	-	235,000,000	584,768	226,813,248	2,032,563	226,236,466	
Aug-23	-	235,000,000	584,768	227,398,016	674,118	226,910,584	
Sep-23	-	235,000,000	584,768	227,982,784	674,118	227,584,702	
Oct-23	-	235,000,000	584,768	228,567,552	674,118	228,258,820	
Nov-23	-	235,000,000	584,768	229,152,320	674,118	228,932,938	
Dec-23	-	235,000,000	584,768	229,737,088	674,118	229,607,056	
Jan-24	-	235,000,000	584,768	230,321,856	674,118	230,281,174	
Feb-24	-	235,000,000	584,768	230,906,624	674,118	230,955,292	
Mar-24	-	235,000,000	584,768	231,491,392	674,118	231,629,410	
Apr-24	-	235,000,000	584,768	232,076,160	674,118	232,303,528	
May-24	-	235,000,000	584,768	232,660,928	674,118	232,977,646	
Jun-24	-	235,000,000	584,768	233,245,696	674,118	233,651,764	
Jul-24	-	235,000,000	584,768	233,830,464	674,118	234,325,882	
Aug-24	-	235,000,000	584,768	234,415,232	674,118	235,000,000	

Note 1: Assumes initial appropriation is enacted by Congress January of the program year. The appropriation of follow-on increments is anticipated in subsequent Octobers.

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

Note 3: Assumes contract award date of Feb 2021, Contract completion: Aug 2024, Duration 40 months

Weapons Storage & Maintenance Facility, Inc 2; Malmstrom AFB Montana



1. COMPONENT	FY 2021 MILITARY CONSTRUCTION PROGRAM	2. DATE (YYYYMMDD)
AIR FORCE		February 2020

3. INSTALLATION AND LOCATION	4. COMMAND	5. AREA CONTRUCTION COST INDEX
JOINT BASE MCGUIRE-DIX-LAKEHURST	AIR MOBILITY COMMAND	1.28

6. PERSONNEL	(1) PERMANENT			(2) STUDENTS			(3) SUPPORTED			(4) TOTAL
	OFFICER	ENLISTED	CIVILIAN	OFFICER	ENLISTED	CIVILIAN	OFFICER	ENLISTED	CIVILIAN	
a. AS OF 30-Sep-19	1,091	6,437	1,867	1,169	10,517	587	476	4,287	233	26,664
b. END FY	1,074	6,458	1,828	1,169	10,517	587	476	4,287	233	26,629

7. INVENTORY DATA ($000)	
a. TOTAL ACREAGE	41,836
b. INVENTORY TOTAL AS OF 30-Sep-19	9,497,482.00
c. AUTHORIZATION NOT YET IN INVENTORY	0.00
d. AUTHORIZATION REQUESTED IN THIS PROGRAM	22,000.00
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	9,519,482.00

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 AREA	1409 SM	22,000	04/11	09/12

9. FUTURE PROJECTS

10. MISSION OR MAJOR FUNCTIONS

Joint Base McGuire-Dix-Lakehurst is home to the 305th Air Mobility Wing and extends America's global reach by generating, mobilizing and deploying 32 KC-10 and 15 C-17 aircraft to conduct strategic airlift and air refueling missions worldwide. Additionally, the Wing operates two of America's largest strategic aerial ports supporting the delivery of cargo to combatant commanders abroad. Joint Base McGuire-Dix-Lakehurst also hosts and supports the 621st Contingency Response Wing and 87th Air Base Wing.

11. OUTSTANDING POLLUTION AND SAFETY DEFICIENCIES

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

OUTSTANDING DEFICIENCIES TOTAL: 0

1. COMPONENT	FY 2021 MILITARY CONSTRUCTION PROJECT DATA	2. DATE
AIR FORCE	(computer generated)	February 2020

3. INSTALLATION, SITE AND LOCATION	4. PROJECT TITLE
JB MCGUIRE-DIX-LAKEHURST MCGUIRE AFB NEW JERSEY	MUNITIONS STORAGE AREA

5. PROGRAM ELEMENT	6. CATEGORY CODE	7. RPSUID/PROJECT NUMBER	8. PROJECT COST ($000)
91211F	422-264	2795/PTFL023003	22,000

9. COST ESTIMATES

ITEM	U/M	QUANTITY	UNIT	COST ($000)
PRIMARY FACILITIES				15,169
STORAGE IGLOOS (422-264)	SM	1,409	9,070	(12,780)
MUNITIONS MAINETENANCE ADMINISTRATION (610-144)	SM	255	5,952	(1,518)
SHOP CONVENTIONAL MUNITIONS (216-642)	SM	107	5,800	(621)
CYBERSECURITY OF FACILITY CONTROL SYSTEMS	LS			(250)
SUPPORTING FACILITIES				4,455
UTILITIES	LS			(2,160)
SITE IMPROVEMENTS	LS			(1,561)
DEMOLITION	SM	607	229	(139)
PAVEMENTS	LS			(497)
HAZARDOUS MATERIAL ABATEMENT & DISPOSAL	LS			(98)
SUBTOTAL				19,624
CONTINGENCY (5.0%)				981
TOTAL CONTRACT COST				20,605
SUPERVISION, INSPECTION AND OVERHEAD (5.7%)				1,174
TOTAL REQUEST				21,779
TOTAL REQUEST (ROUNDED)				22,000
EQUIPMENT FROM OTHER APPROPRIATIONS (NON-ADD)				(220.0)

10. Description of Proposed Construction: Construct 27 concrete earth covered igloos with blast-resistant concrete foundations, floors, walls and ceilings; include blast doors, ventilation, electrical power and lighting, fire detection, intrusion detection system, grounding, and lightning protection systems. Construct munitions maintenance administration facility with concrete foundation, slab, and metal stud wall with brick veneer exterior. Add 1 bay to existing munitions maintenance shop with concrete foundation and slab, blast proof concrete exterior and partition walls with brick veneer, and blast-proof concrete ceiling overhead monorail hoist system; include communications and security systems, standing seam metal roof, oil fired boiler and reciprocating chiller heating and cooling system, plumbing system, fire detection and suppression systems, electrical power and lighting systems, communications and security systems, and compressed air system as required. Incorporate pavement, site improvement, utilities, security fencing, fire main, fiber optic communications duct-bank, 2 foot high earth berms over igloos, environment remediation, temporary office trailers and utility hook-up, and all necessary site support. This project will demolish buildings 1913 (89 Square Meters), 1918(509 Square Meters) & 1939 (9 Square Meters) (Total: 607 Square Meters). Facilities will be designed as permanent construction in accordance with the DoD Unified Facilities Criteria (UFC) 1-200-01, General Building requirements. Sustainable principles, to include life-cycle cost effective practices, will be integrated into the design, development, and construction of the project in

DD FORM 1391, DEC 99 Previous editions are obsolete. Page No.

1. COMPONENT	FY 2021 MILITARY CONSTRUCTION PROJECT DATA	2. DATE
AIR FORCE	(computer generated)	February 2020

3. INSTALLATION, SITE AND LOCATION	4. PROJECT TITLE
JB MCGUIRE-DIX-LAKEHURST MCGUIRE AFB NEW JERSEY	MUNITIONS STORAGE AREA

5. PROGRAM ELEMENT	6. CATEGORY CODE	7. RPSUID/PROJECT NUMBER	8. PROJECT COST ($000)
91211F	422-264	2795/PTFL023003	22,000

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 will comply with Department of Defense anti-terrorism/force protection requirements per Unified Facility Criteria 4-010-01.

Air Conditioning: 10 Tons

11. Requirement: 1409 **SM** **Adequate:** 0 **SM** **Substandard:** 607 **SM**

PROJECT: Munitions Storage Area (Current Mission)

REQUIREMENT: Twenty-seven single bay earth-covered igloos in a multi-cubicle configuration are required to maximize storage capacity, and minimize the storage footprint and quantity / distance arc, while eliminating 30 inadequate bays. An addition to the conventional munitions shop is required to accommodate weapon assembly and disassembly, corrosion control, maintenance, and repair of single practice bombs, 30 millimeter ammunition, flare dispensers, countermeasures, and containers. A munitions administration facility is required to house administrative and control functions.

CURRENT SITUATION: The existing munitions storage area consists of four multi-cube magazines, each with 30 bays, a munitions administration facility, a munitions maintenance shop and a small ancillary building. These facilities were built in 1958, and current configuration limits storage of class 1.1 and 1.2 munitions to 66 pounds net explosive weight. The four existing 30-bay multi-cube magazines, 120 bays total, cannot be utilized to the full capacity because allowable net explosive weight and munitions incompatibilities require minimum distances between stored items, rendering many bays unusable as munitions storage. Storage of munitions in excess of 66 lbs net explosive weight is accommodated at the Dix area Army ammunition supply point in multi-cube igloos. Currently, munitions are transported over 5.8 miles of unsecured roads, between the McGuire munition support area and the Fort Dix ammunition supply point. The only available route through Fort Dix traverses through public roads; therefore the transportation falls under U.S. Department of Transportation regulations which requires approval for any munitions transportation. Communications and intrusion detection systems are outdated or degraded and require new supporting infrastructure. Munitions storage has multiple bays with structural damage and deterioration. There are many cases where the rebar is severely rusted thus compromising the structural integrity of the concrete. The bay in the worst condition has been assigned a risk assessment code characterized as SERIOUS and is not operational.

IMPACT IF NOT PROVIDED: Munitions storage operations will continue to suffer from deteriorated facilities until buildings can no longer support this mission requirement. Munitions in excess of 66 pounds net explosive weight will have to be stored at other locations. Personnel will continue to risk injury from inoperable, deteriorated overhead doors. Logistical difficulties due to security, transport and documentation of munitions on public roads will continue to require additional explosive ordnance demolition, security forces, and maintenance man-hours.

1. COMPONENT	FY 2021 MILITARY CONSTRUCTION PROJECT DATA	2. DATE
AIR FORCE	(computer generated)	February 2020

3. INSTALLATION, SITE AND LOCATION	4. PROJECT TITLE
JB MCGUIRE-DIX-LAKEHURST MCGUIRE AFB NEW JERSEY	MUNITIONS STORAGE AREA

5. PROGRAM ELEMENT	6. CATEGORY CODE	7. RPSUID/PROJECT NUMBER	8. PROJECT COST ($000)
91211F	422-264	2795/PTFL023003	22,000

ADDITIONAL: This project meets applicable criteria/scope specified in Air Force Manual 32-1084, Facility Requirements. All reasonable alternatives were considered during the development of this project to include status quo, new construction, renovation of existing facility, leasing. An approved Economic Analysis determined new construction is 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 (if applicable), but will not employ a standard facility design because there is no Air Force standard facility design for the project, and there is no applicable standard design from the Air Force Civil Engineer Center. The cost estimate for this project was created using Parametric Cost Estimating System and is in line with the Department of Defense Pricing Guide, Unified Facility Criteria 3-701-01. This project requires extensive utilities, security measures and site improvements, to include 2 foot high earth berms, causing the supporting facilities cost to exceed 25% of primary facilities cost. This project does not fall within or partly within the 100-year flood plain.

Joint Base McGuire Dix-Lakehurst Base Civil Engineer: (609) 754-3722.

Storage Igloos 1409 Square Meters = 15,166 Square Feet; Munitions Maintenance Administration 255 Square Meters = 2,745 Square Feet; add to shop, munitions maintenance 107 Square Meters = 1,152 Square Feet. Demolish facilities 1913, 1918, & 1939; 607 Square Meters = 6531 Square Feet, total demolition.

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.

DD FORM 1391, DEC 99 Previous editions are obsolete. Page No.

1. COMPONENT	FY 2021 MILITARY CONSTRUCTION PROJECT DATA	2. DATE
AIR FORCE	(computer generated)	February 2020

3. INSTALLATION AND LOCATION	4. PROJECT TITLE
JB MCGUIRE-DIX-LAKEHURST MCGUIRE AFB NEW JERSEY	MUNITIONS STORAGE AREA

5. PROGRAM ELEMENT	6. CATEGORY CODE	7. PROJECT NUMBER	8. PROJECT COST ($000)
91211F	422-264	2795/PTFL023003	22,000

12. SUPPLEMENTAL DATA:

a. Estimated Design Data:

(1) Status:	
(a) Type of Design	Design-Bid-Build
(b) Date Design Started	14-APR-11
(c) Parametric Cost Estimates used to develop costs	YES
(d) Percent Complete as of 01 JAN 2020	100%
(e) Date 35% Designed	14-MAR-12
(f) Date Design Complete	20-SEP-12
(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) and (d) + (e):	($000)
(a) Production of Plans and Specifications	1,140
(b) All Other Design Costs	570
(c) Total	1,710
(d) Contract	1,425
(e) In-house	285
(4) Construction Contract Award	21 SEP
(5) Construction Start	21 OCT
(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, FIXTURES, AND EQUIPMENT	3400	2023	192
COMMUNICATIONS EQUIPMENT	3400	2023	28

DD FORM 1391, DEC 99 Previous editions are obsolete. Page No.

1. COMPONENT	FY 2021 MILITARY CONSTRUCTION PROGRAM	2. DATE (YYYYMMDD)
AIR FORCE		February 2020

3. INSTALLATION AND LOCATION	4. COMMAND	5. AREA CONTRUCTION COST INDEX
JOINT BASE SAN ANTONIO, TEXAS	AIR EDUCATION AND TRAINING COMMAND	0.88

6. PERSONNEL	(1) PERMANENT			(2) STUDENTS			(3) SUPPORTED			(4) TOTAL
	OFFICER	ENLISTED	CIVILIAN	OFFICER	ENLISTED	CIVILIAN	OFFICER	ENLISTED	CIVILIAN	
a. AS OF 30 SEP 19	2,611	8,041	13,863	555	1,356	25	1,634	7,557	5,708	41,350
b. END FY	2,585	7,983	13,758	555	1,356	25	1,672	7,179	6,630	41,743

7. INVENTORY DATA ($000)	
a. TOTAL ACREAGE	45,641
b. INVENTORY TOTAL AS OF 30 SEP 19	13,754,439.00
c. AUTHORIZATION NOT YET IN INVENTORY	431,066.00
d. AUTHORIZATION REQUESTED IN THIS PROGRAM	19,500.00
e. AUTHORIZATION INCLUDED IN FOLLOWING PROGRAM	140,000.00
f. PLANNED IN NEXT THREE PROGRAM YEARS	100,000.00
g. REMAINING DEFICIENCY	373,400.00
h. GRAND TOTAL	14,818,405.00

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
171-212	T-X ADAL Ground Based Trng Sys Sim	2,608 SM	19,500	05/18	09/19
721-311	BMT Recruit Dormitory 8, Inc 2	20,211 SM	36,000	03/18	09/19

9. FUTURE PROJECTS

721-311 BMT Recruit Dormitory 7 (26,130 SM/$140,000)
730-773 BMT Chapel for America's Airmen (7,014 SM/$49,000)
141-456 91 Cyber Operations Center (3,888 SM/$30,000)
730-839 JBSA Lackland Luke East Gate (2,468 SM/$21,000)

10. MISSION OR MAJOR FUNCTIONS

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 Cost Guard, and 15 US Governmental Organizations Mission Partners, that accomplish diverse training, flying, cyber, intelligence, medical and installations missions every day.

11. OUTSTANDING POLLUTION AND SAFETY DEFICIENCIES

a. Air Pollution 0
b. Water Pollution 0
c. Occupational Safety and Health 0
d. Other Environmental 0
OUTSTANDING DEFICIENCIES TOTAL: 0

1. COMPONENT	FY 2021 MILITARY CONSTRUCTION PROJECT DATA	2. DATE
AIR FORCE	(computer generated)	February 2020

3. INSTALLATION, SITE AND LOCATION	4. PROJECT TITLE
JOINT BASE SAN ANTONIO - RANDOLPH RANDOLPH AIR FORCE BASE SITE # 1 TEXAS	T-X ADAL GROUND BASED TRNG SYS SIM

5. PROGRAM ELEMENT	6. CATEGORY CODE	7. RPSUID/PROJECT NUMBER	8. PROJECT COST ($000)
84701F	171-212	3209/TYMX1031074	19,500

9. COST ESTIMATES

ITEM	U/M	QUANTITY	UNIT	COST ($000)
NEW TITLE: T-7A ADAL GROUND BASED TRNG SYS SIM				
PRIMARY FACILITIES				13,053
SIMULATOR WING ADDITION	SM	2,608	4,909	(12,803)
CYBERSECURITY OF FACILITY-RELATED CONTROL SYS	LS			(250)
SUPPORTING FACILITIES				4,327
UTILITIES	LS			(2,141)
SITE IMPROVEMENTS	LS			(200)
PAVEMENTS	LS			(1,571)
COMMUNICATIONS SUPPORT	LS			(200)
PRIVITIZED POWER SUPPORT	LS			(125)
SPECIAL FOUNDATION	LS			(90)
SUBTOTAL				17,380
CONTINGENCY (5.0%)				869
TOTAL CONTRACT COST				18,249
SUPERVISION, INSPECTION AND OVERHEAD (5.7%)				1,040
TOTAL REQUEST				19,289
TOTAL REQUEST (ROUNDED)				19,500
EQUIPMENT FROM OTHER APPROPRIATIONS (NON-ADD)				(15,500.0)

10. Description of Proposed Construction: Construct a facility addition to hold a ground based facility training simulator system, which consists of a Weapon Systems Trainer (WST), Operational Flight Trainer (OFT) and Unit Training Device (UTD). The facility will include a reinforced concrete foundation, concrete floor slab, structural steel frame, standing seam metal roof and exterior. Project will include fire suppression systems, all utilities, pavements, communications, site improvements and associated supporting facilities to provide a complete and useable facility. Facilities will be designed as permanent construction in accordance with the DoD 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 DoD Antiterrorism/force protection requirements per UFC 4-010-01.

Air Conditioning: 150 Tons

11. Requirement: 2608 SM Adequate: 0 SM Substandard:0 SM

PROJECT: Ground Based Training System (GBTS) - Simulator
REQUIREMENT: Facility requires eight (8) bays for simulators. Space will also include administration, records, classrooms, brief/debrief rooms, classified server room, and storage space for T-7A pilot flight simulator training. Area communications

DD FORM 1391, DEC 99 Previous editions are obsolete. Page No.

1. COMPONENT AIR FORCE	FY 2021 MILITARY CONSTRUCTION PROJECT DATA (computer generated)	2. DATE February 2020

3. INSTALLATION, SITE AND LOCATION	4. PROJECT TITLE
JOINT BASE SAN ANTONIO - RANDOLPH RANDOLPH AIR FORCE BASE SITE # 1 TEXAS	T-X ADAL GROUND BASED TRNG SYS SIM

5. PROGRAM ELEMENT	6. CATEGORY CODE	7. RPSUID/PROJECT NUMBER	8. PROJECT COST ($000)
84701F	171-212	3209/TYMX1031074	19,500

network will need to be upgraded to support new flight simulator and associated equipment.

CURRENT SITUATION: Headquarters Air Eduction and Training Command is engaged in a $20B major acquisition effort to re-capitalize its aging fleet of 430 T-38C aircraft and associated training systems currently located at five existing bases, with the T-7A system comprised of 350 total aircraft, and the associated Ground-Based Training System. Randolph will see the first simulator arrive in 2nd Qtr FY2022 and T-7A aircraft will arrive in 1st Qtr FY 2023 for Initial Operational Test and Evaluation. Aircraft arrival date drives the need/requirement for the simulator facility to begin training as early as 2nd Qtr FY 2022.

IMPACT IF NOT PROVIDED: This project provides critical real-world mission rehearsal and training for T-7A pilots. Without it, pilots will be unable to provide adequate support in operational tactics development while also maintaining proficiency through flight simulator training. This, in turn, affects the overall operational capability of the warfighter.

ADDITIONAL: This project meets the criteria/scope in Air Force Manual 32-1084 "Facility Requirements." This design shall conform to criteria established in the Air Force Corporate Facility Standards and the Installation Facility Standards but will not employ a standard design because there is no AF standard facility design. This project does not fall within or partly within the 100-year flood plain. A preliminary analysis of alternatives was accomplished comparing status quo, renovation, and new construction. This analysis indicated new construction is the most economical solution to meet mission requirements. The economic analysis will be complete February 2020. 502d Joint Base Civil Engineer: 210-671-2977. Facility: 2,608 SM to 28,077 SF.

1. COMPONENT	FY 2021 MILITARY CONSTRUCTION PROJECT DATA	2. DATE
AIR FORCE	(computer generated)	February 2020

3. INSTALLATION AND LOCATION	4. PROJECT TITLE
JOINT BASE SAN ANTONIO - RANDOLPH RANDOLPH AIR FORCE BASE SITE # 1 TEXAS	T-X ADAL GROUND BASED TRNG SYS SIM

5. PROGRAM ELEMENT	6. CATEGORY CODE	7. PROJECT NUMBER	8. PROJECT COST ($000)
84701F	171-212	3209/TYMX1031074	19,500

12. SUPPLEMENTAL DATA:

a. Estimated Design Data:

(1) Status:	
(a) Type of Design:	Design-Bid-Build
(b) Date Design Started	07-MAY-18
(c) Parametric Cost Estimates used to develop costs	YES
* (c) Percent Complete as of 01 JAN 2019	15%
* (d) Date 35% Designed	01-JAN-19
(e) Date Design Complete	06-SEP-19
(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 -	
(3) Total Cost (c) = (a) + (b) or (d) + (e):	($000)
(a) Production of Plans and Specifications	564
(b) All Other Design Costs	282
(c) Total	846
(d) Contract	705
(e) In-house	141
(4) Construction Contract Award	21 FEB
(5) Construction Start	21 JUN
(6) Construction Completion	23 MAR

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

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

EQUIPMENT NOMENCLATURE	PROCURING APPROPRIATION	FISCAL YEAR APPROPRIATED OR REQUESTED	COST ($000)
Furniture, Fixtures, & Equipment	3400	22	250
Uninterruptible Power Supply (UPS)	3400	22	250
Flight Simulators	3010	21	15,000

DD FORM 1391, DEC 99 Previous editions are obsolete. Page No.

1. COMPONENT	FY 2021 MILITARY CONSTRUCTION PROJECT DATA	2. DATE
AIR FORCE	(computer generated)	February 2020

3. INSTALLATION, SITE AND LOCATION	4. PROJECT TITLE
JOINT BASE SAN ANTONIO - LACKLAND LACKLAND AIR FORCE BASE SITE # 1 TEXAS	BMT RECRUIT DORMITORY 8, INC 2

5. PROGRAM ELEMENT	6. CATEGORY CODE	7. RPSUID/PROJECT NUMBER	8. PROJECT COST ($000)
91211F	721-311	2461/MPLS083737R8	AUTH: 0 APP: 36,000

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)				(2,750.0)

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 (1,201 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.

DD FORM 1391, DEC 99 Previous editions are obsolete. Page No.

1. COMPONENT AIR FORCE	FY 2021 MILITARY CONSTRUCTION PROJECT DATA (computer generated)	2. DATE February 2020

3. INSTALLATION, SITE AND LOCATION	4. PROJECT TITLE
JOINT BASE SAN ANTONIO - LACKLAND LACKLAND AIR FORCE BASE SITE # 1 TEXAS	BMT RECRUIT DORMITORY 8, INC 2

5. PROGRAM ELEMENT	6. CATEGORY CODE	7. RPSUID/PROJECT NUMBER	8. PROJECT COST ($000)
91211F	721-311	2461/MPLS083737R8	AUTH: 0 APP: 36,000

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.

Air Conditioning: 450 Tons

11. Requirement: 219884 SF Adequate: 118629 SF Substandard: 135023 SF

PROJECT: Construct BMT Recruit Dormitory 8

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.

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 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.

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

1. COMPONENT AIR FORCE	FY 2021 MILITARY CONSTRUCTION PROJECT DATA (computer generated)	2. DATE February 2020
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 2	

5. PROGRAM ELEMENT	6. CATEGORY CODE	7. RPSUID/PROJECT NUMBER	8. PROJECT COST ($000)
91211F	721-311	2461/MPLS083737R8	AUTH: 0 APP: 36,000

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.

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 (AFCFS), 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.

BASE CIVIL ENGINEER: (210) 671-2977
721-311 Dormitory, Recruit: 20,221 SM = 217,657 SF
171-627 AETC Technical Training Support: 2,354 SM = 25,338 SF
179-371 Misc Training Facility/Formation Open Space 1,741 SM = 18,803 SF
145-921 Weapons Cleaning Pavilion: 456 SM = 4,908 SF

BY-2 Unaccompanied Housing Repair & Maintenance Conducted: $12.6M
BY-1 Unaccompanied Housing Repair & Maintenance Conducted: $10.5M
Future Unaccompanied Housing Repair & Maintenance Requirements: $8.9M

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	FY 2021 MILITARY CONSTRUCTION PROJECT DATA	2. DATE
AIR FORCE	(computer generated)	February 2020

3. INSTALLATION AND LOCATION	4. PROJECT TITLE
JOINT BASE SAN ANTONIO - LACKLAND LACKLAND AIR FORCE BASE SITE # 1 TEXAS	BMT RECRUIT DORMITORY 8, INC 2

5. PROGRAM ELEMENT	6. CATEGORY CODE	7. PROJECT NUMBER	8. PROJECT COST ($000)
91211F	721-311	2461/MPLS083737R8	AUTH: 0 APP: 36,000

12. SUPPLEMENTAL DATA:

a. Estimated Design Data:

(1) Status:	
(a) Type of design	Design Bid Build
(b) Date Design Started	01-MAR-18
(c) Parametric Cost Estimates used to develop costs	YES
* (c) Percent Complete as of 01 JAN 2019	15%
* (d) Date 35% Designed	01-JAN-19
(e) Date Design Complete	02-SEP-19
(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 -	
(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 AUG
(5) Construction Start	21 OCT
(6) Construction Completion	24 JAN

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

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

EQUIPMENT NOMENCLATURE	PROCURING APPROPRIATION	FISCAL YEAR APPROPRIATED OR REQUESTED	COST ($000)
WALL LOCKERS AND FURNISHINGS	3400	2022	2,560
AUTOMATED DATA PROCESSING	3080	2022	190

FY ($M)	Authorization Requested	Authorization of Appropriations	Appropriation
2020	235	59	120
2021	0	0	0
2022	0	0	0

DD FORM 1391, DEC 99 Previous editions are obsolete. Page No.

Project: BMT Recruit Dormitory 8, Inc 2; JBSA-Lackland AFB Texas

Project Spending Plan
As of: 14-Jan-20
All Cost in thousands ($000)

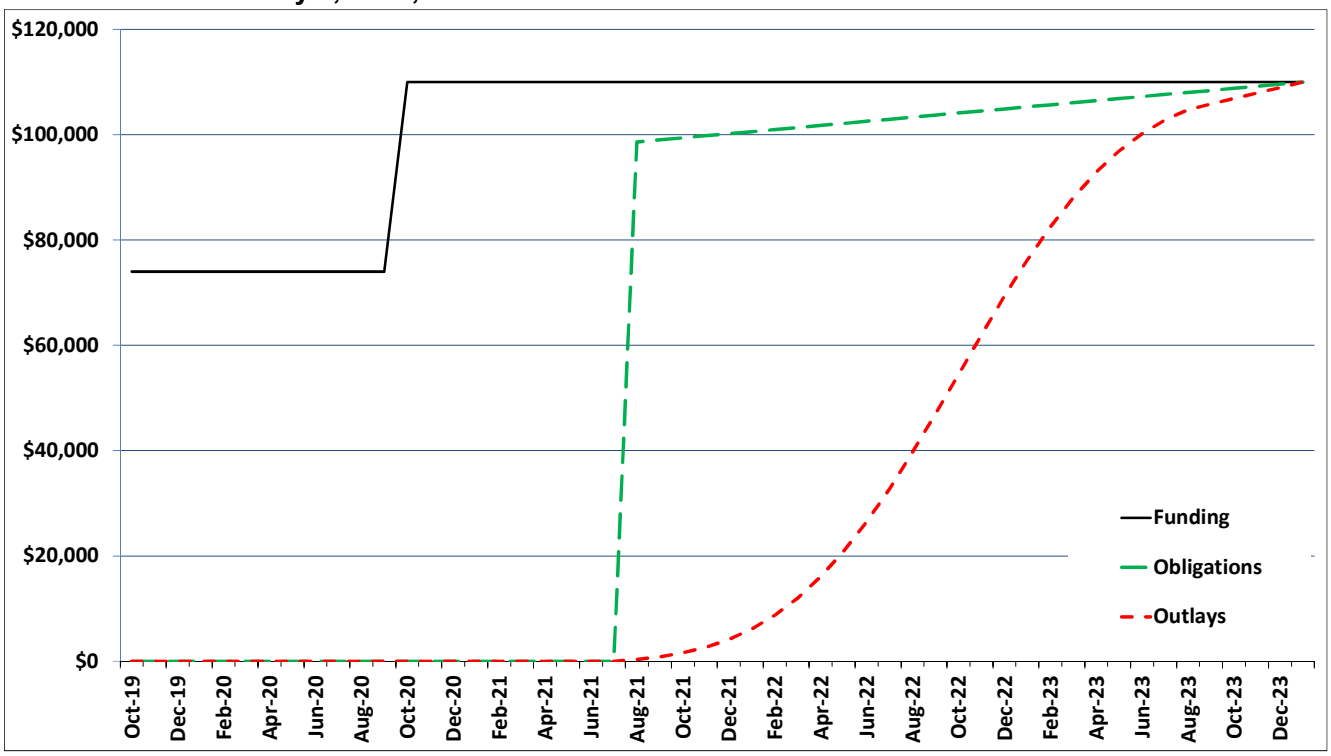
Chart Begin Oct-19	FUNDING (note 1)		OBLIGATION (note 2)		OUTLAYS (note 3)	
Month	**Enacted**	**Cumulative**	**Obligated**	**Cumulative**	**Monthly**	**Cumulative**
Oct-19	74,000	74,000	-	-	-	-
Nov-19	-	74,000	-	-	-	-
Dec-19	-	74,000	-	-	-	-
Jan-20		74,000	-	-	-	-
Feb-20	-	74,000	-	-	-	-
Mar-20	-	74,000	-	-	-	-
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	36,000	110,000	-	-	-	-
Nov-20	-	110,000	-	-	-	-
Dec-20	-	110,000	-	-	-	-
Jan-21	-	110,000	-	-	-	-
Feb-21	-	110,000	-	-	-	-
Mar-21	-	110,000	-	-	-	-
Apr-21	-	110,000	-	-	-	-
May-21	-	110,000	-	-	-	-
Jun-21	-	110,000	-	-	-	-
Jul-21	-	110,000	-	-	-	-
Aug-21	-	110,000	98,632	98,632	337	337
Sep-21	-	110,000	392	99,024	510	846
Oct-21	-	110,000	392	99,416	748	1,595
Nov-21	-	110,000	392	99,808	1,067	2,662
Dec-21	-	110,000	392	100,200	1,478	4,140
Jan-22	-	110,000	392	100,592	1,987	6,126
Feb-22	-	110,000	392	100,984	2,593	8,719
Mar-22	-	110,000	392	101,376	3,285	12,004
Apr-22	-	110,000	392	101,768	4,040	16,044
May-22	-	110,000	392	102,160	4,825	20,869
Jun-22	-	110,000	392	102,552	5,594	26,463
Jul-22	-	110,000	392	102,944	6,297	32,760
Aug-22	-	110,000	392	103,336	6,881	39,641
Sep-22	-	110,000	392	103,728	7,301	46,942
Oct-22	-	110,000	392	104,120	7,520	54,462
Nov-22	-	110,000	392	104,512	7,520	61,981
Dec-22	-	110,000	392	104,904	7,301	69,282
Jan-23	-	110,000	392	105,296	6,881	76,163
Feb-23	-	110,000	392	105,688	6,297	82,460
Mar-23	-	110,000	392	106,080	5,594	88,054
Apr-23	-	110,000	392	106,472	4,825	92,879
May-23	-	110,000	392	106,864	4,040	96,920
Jun-23	-	110,000	392	107,256	3,285	100,204
Jul-23	-	110,000	392	107,648	2,593	102,797
Aug-23	-	110,000	392	108,040	1,988	104,785
Sep-23	-	110,000	392	108,432	1,043	105,828
Oct-23	-	110,000	392	108,824	1,043	106,871
Nov-23	-	110,000	392	109,216	1,043	107,914
Dec-23	-	110,000	392	109,608	1,043	108,957
Jan-24	-	110,000	392	110,000	1,043	110,000

Note 1: Assumes initial appropriation is enacted by Congress January of the program year. The appropriation of follow-on increments is anticipated in subsequent Octobers.

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

Note 3: Assumes contract award date of Aug 2021, Contract completion: Jan 2024, Duration 41 months

BMT Recruit Dormitory 8, Inc 2; JBSA Lackland AFB Texas



1. COMPONENT	FY 2021 MILITARY CONSTRUCTION PROGRAM	2. DATE (YYYYMMDD)
AIR FORCE		February 2020

3. INSTALLATION AND LOCATION	4. COMMAND	5. AREA CONTRUCTION COST INDEX
HILL AIR FORCE BASE, UTAH	AIR FORCE MATERIEL COMMAND	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-19	320	1,172	10,681	0	0	0	283	3,182	705	16,343
b. END FY	320	1,171	10,681	0	0	0	308	3,337	700	16,517

7. INVENTORY DATA ($000)	
a. TOTAL ACREAGE	962,091
b. INVENTORY TOTAL AS OF 30-SEP-19	5,945,374.00
c. AUTHORIZATION NOT YET IN INVENTORY	251,400.00
d. AUTHORIZATION REQUESTED IN THIS PROGRAM	0.00
e. AUTHORIZATION INCLUDED IN FOLLOWING PROGRAM	362,800.00
f. PLANNED IN NEXT THREE PROGRAM YEARS	112,884.00
g. REMAINING DEFICIENCY	500,216.00
h. GRAND TOTAL	7,172,674.00

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
141-764	GBSD Mission Integration Facility, Inc 2	12,870 SM	68,000	03/18	12/19

9. FUTURE PROJECTS

141-764 GBSD Training and Collaboration Center (9,463 SM / $50,000)
211-111 F-35 Composite Repair Facility (21,962 SM / $55,000)
141-762 GBSD Software Sustainment Center (17,214 SM / $132,000)
211-111 24 Bay Maintenance Hanger (44,778 SM / $125,800)
211-152 F-35A Canopy Repair Facility (6,968 SM / $61,700)
211-159 Depot (18,220 SM / $51,184)

10. MISSION OR MAJOR FUNCTIONS

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.

11. OUTSTANDING POLLUTION AND SAFETY DEFICIENCIES

a. Air Pollution	0
b. Water Pollution	0
c. Occupational Safety and Health	0
d. Other Environmental	0
OUTSTANDING DEFICIENCIES TOTAL:	0

1. COMPONENT	FY 2021 MILITARY CONSTRUCTION PROJECT DATA	2. DATE
AIR FORCE		February 2020

3. INSTALLATION AND LOCATION	4. PROJECT TITLE:
HILL AIR FORCE BASE UTAH	GBSD MISSION INTEGRATION FACILITY, INC 2

5. PROGRAM ELEMENT	6. CATEGORY CODE	7. PROJECT NUMBER	8. PROJECT COST ($000)
11233F	141-764	2349 / KRSM1065068	AUTH: 0 APP: 68,000

9. COST ESTIMATES

ITEM	U/M	QUANTITY	UNIT COST	COST ($000)
PRIMARY FACILITIES				
MISSION INTEGRATION FACILITY (141-764)	SM	12,870	4,925	63,384,750
SENSITIVE COMPARTMENTED INFORMATION FAC (140-422)	SM	136	5,310	722,160
MULTI-LEVEL PARKING STRUCTURE (852-261)	SM	29,264	750	21,948,000
SUSTAINABILITY AND ENERGY MEASURES (2%)	LS	1	1,721,098	1,721,098
CYBERSECURITY OF FACILITY-RELATED CONTROL SYS	LS	1	2,151,373	2,151,373
			Line Item Total:	89,927,381
SUPPORTING FACILITIES				
PAVEMENTS	LS	1	800,000	800,000
UTILITIES	LS	1	1,465,000	1,465,000
SITE IMPROVEMENTS	LS	1	285,000	285,000
PRIVATIZED UTILITIES CONNECTION FEE	LS	1	10,000	10,000
EMERGENCY BACK-UP GENERATOR & FUEL TANK	LS	1	245,000	245,000
COMMUNICATION SUPPORT	LS	1	660,000	660,000
RELOCATE RV STORAGE LOT	LS	1	650,000	650,000
			Line Item Total:	4,115,000

PROJECT SUBTOTAL	$94,042,381
CONTINGENCY COST (5%)	$4,702,119
D/B DESIGN COST (4%)	$3,949,780
SUPERVISION, INSPECTION & OVERHEAD (5.7%)	$5,628,437
PROJECT TOTAL	$108,322,717
ROUNDED TOTAL COST	$108,000,000

10. DESCRIPTION OF PROPOSED CONSTRUCTION

Construct a secure multi-story mixed use facility for integration, testing, laboratory support, and administrative support required to develop the next generation Intercontinental Ballistic Missile (ICBM) weapon system. New construction will have reinforced concrete footings, foundation, basement floor slab, structural steel frame, insulated walls and roof. Additionally, new construction will provide a high ceiling (at least 28 feet) basement level to house multiple labs including a mockup of a Launch Control Center with steel "I" beam Capsule and Launch Control Equipment Module. Selected secured areas are to have special shielding. The facility will also have lightning protection, fire detection/suppression, intrusion detection, and all required supporting facilities to fulfill mission requirements including: utilities, pavements, site improvements, and communication support. A multi-level parking structure will be designed for 700 stalls complete with adequate area lighting and the existing Recreation Vehicle (RV) storage lot will be relocated in order to clear the site for the construction of the Mission Integration Facility. Facilities will be designed as permanent construction in accordance with the Department of Defense 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 Antiterrorism/force protection requirements per UFC 4-010-01.

Air Conditioning: 300 TONS

11. REQUIREMENTS: 12,870 SM Adequate: 0 SM Substandard: 28,019 SM

PROJECT: GBSD Mission Integration Facility
REQUIREMENT: An adequately sized mission integration support facility is required to manage all weapon system engineering analysis, testing, and sustainment for the new Ground Based Strategic Deterrent (GBSD) program. The mission of the GBSD program is to design, develop, produce, and deploy

1. COMPONENT AIR FORCE	FY 2021 MILITARY CONSTRUCTION PROJECT DATA		2. DATE February 2020
3. INSTALLATION AND LOCATION HILL AIR FORCE BASE UTAH		4. PROJECT TITLE: GBSD MISSION INTEGRATION FACILITY, INC 2	
5. PROGRAM ELEMENT 11233F	6. CATEGORY CODE 141-764	7. PROJECT NUMBER 2349 / KRSM1065068	8. PROJECT COST ($000) AUTH: 0 APP: 68,000

a complete integrated Intercontinental Ballistic Missile (ICBM) weapon system to replace the current Minuteman III ICBM over the next two decades. This project is also required to consolidate multiple contractor managed Minuteman III ICBM support labs located throughout the United States into a single joint use Air Force owned GBSD ICBM facility. This project will enable the Air Force to take complete ownership of all workload currently performed in contractor support labs. A one stop shop for GBSD testing and data management will reduce time and money spent traveling to and from labs located across the U.S.; and facilitate the transition from a contractor managed, to an Air Force owned GBSD program. While this transition is occurring, work activities associated with the Minuteman III program need to be kept separate from those associated with the GBSD program, as one system stands up and the other one taken down. The proposed facility will house approximately 700 Military, civilian, and contractor employees.

CURRENT SITUATION: Currently there is no facility on Hill AFB with adequate vacant space to serve as the required secure central location for all activities associated with this category 1 Major Defense Acquisition Program (MDAP). Approximately 100 government personnel assigned to the GBSD program are currently working in 17,500 SF of borrowed space in Bldg.1530 under crowded conditions and with limited resources to analyze the data on the new weapon system development. The only available test facilities are owned and managed by contractors competing for the design of the new weapon system. The situation is proving to be unacceptable because, at the present time, much of the government researched GBSD acquisition information needs to be segregated from commercial entities that are not under contract with the Air Force. Other GBSD personnel are working in detached offices in obsolete facilities scattered across Hill AFB, where efficient coordinated work flow is difficult, if not impossible, to achieve. Time and money is spent in traveling to and from labs located across the United States to facilitate the transition of standing up a new ICBM program, while at the same time, phasing out an old one.

IMPACT IF NOT PROVIDED: Without this project, the deployment of a weapon system vital to the defense and security of the United States and its allies could be delayed. Time and money will continue to be spent traveling to and from labs located across the United States in order to facilitate the transition of phasing out an old ICBM program, while at the same time, standing up a new one.

ADDITIONAL: This project meets the criteria/scope specified in Air Force Manual 32-1084, "Facility Requirements". This project does not fall within or partly within the 100-year flood plain. A preliminary analysis of reasonable options for satisfying the GBSD program facility requirements (status quo, facility repair/modification, new construction, etc.) was completed. The conclusion was that new construction is the only option that will meet operational requirements. The economic analysis has been approved. This design shall

conform to criteria established in the Air Force Corporate Facilities Standards (AFCFS), the Installation Facilities Standards (IFS) [if available], 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). Base Civil Engineer: (801) 777-7505. GBSD Mission Integration Facility: 13,006 SM = 140,000 SF. Multi- Level Parking Structure: 29,264 SM = 315,000 SF

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

1. COMPONENT	FY 2021 MILITARY CONSTRUCTION PROJECT DATA	2. DATE
AIR FORCE		February 2020

3. INSTALLATION AND LOCATION	4. PROJECT TITLE:
HILL AIR FORCE BASE UTAH	GBSD MISSION INTEGRATION FACILITY, INC 2

5. PROGRAM ELEMENT	6. CATEGORY CODE	7. PROJECT NUMBER	8. PROJECT COST ($000)
11233F	141-764	2349 / KRSM1065068	AUTH: 0 APP: 68,000

12. SUPPLEMENTAL DATA

a. Estimated Design Data:

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

(a) Date Design Start:	13 MAR 18
(b) Parametric Cost Estimates Used to Develop Costs:	YES
(c) Percent Complete as of January 20:	35%
(d) Date Design 35% Complete:	1 JAN 19
(e) Date Design 100% Complete:	1 DEC 19

(2) Basis:	
(a) Standard or Definitive Design –	NO
(b) Where Design Was Most Recently Used –	
(3) All Other Design Costs:	4,160
(4) Construction Contract Award:	20 MAY
(5) Construction Start:	20 NOV
(6) Construction Completion:	22 OCT
(7) Energy Study/Life-Cycle Cost analysis was/will be performed:	YES

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

EQUIPMENT NOMENCLATURE	PROCURING APPRO	FISCAL YEAR APPROPRIATED OR REQUESTED	COST ($000)
SENSITIVE COMPARTMENTED INFORMATION FACILITY			
CONSTRUCTION AND SURVEILLANCE TECHNOLOGY	3600	2022	10,000
COMMUNICATION EQUIPMENT	3600	2022	612
TELEPHONE EQUIPMENT	3600	2022	291
OFFICE FURNITURE	3600	2022	1,581
INFORMATION TECHNOLOGY EQUIPMENT	3600	2022	159
LAB EQUIPMENT	3600	2022	16,614

1. COMPONENT	FY 2021 MILITARY CONSTRUCTION PROJECT DATA		2. DATE
AIR FORCE			February 2020
3. INSTALLATION AND LOCATION		4. PROJECT TITLE:	
HILL AIR FORCE BASE UTAH		GBSD MISSION INTEGRATION FACILITY, INC 2	
5. PROGRAM ELEMENT	6. CATEGORY CODE	7. PROJECT NUMBER	8. PROJECT COST ($000)
11233F	141-764	2349 / KRSM1065068	AUTH: 0 APP: 68,000

12. SUPPLEMENTAL DATA (cont.)

FY ($M)	Authorization Requested	Authorization of Appropriations	Appropriation
2020	108	33	40
2021	0	0	0

Project: GBSD Mission Integration Facility, Inc 2; Hill AFB Utah

Project Spending Plan
As of: 14-Jan-20
All Cost in thousands ($000)

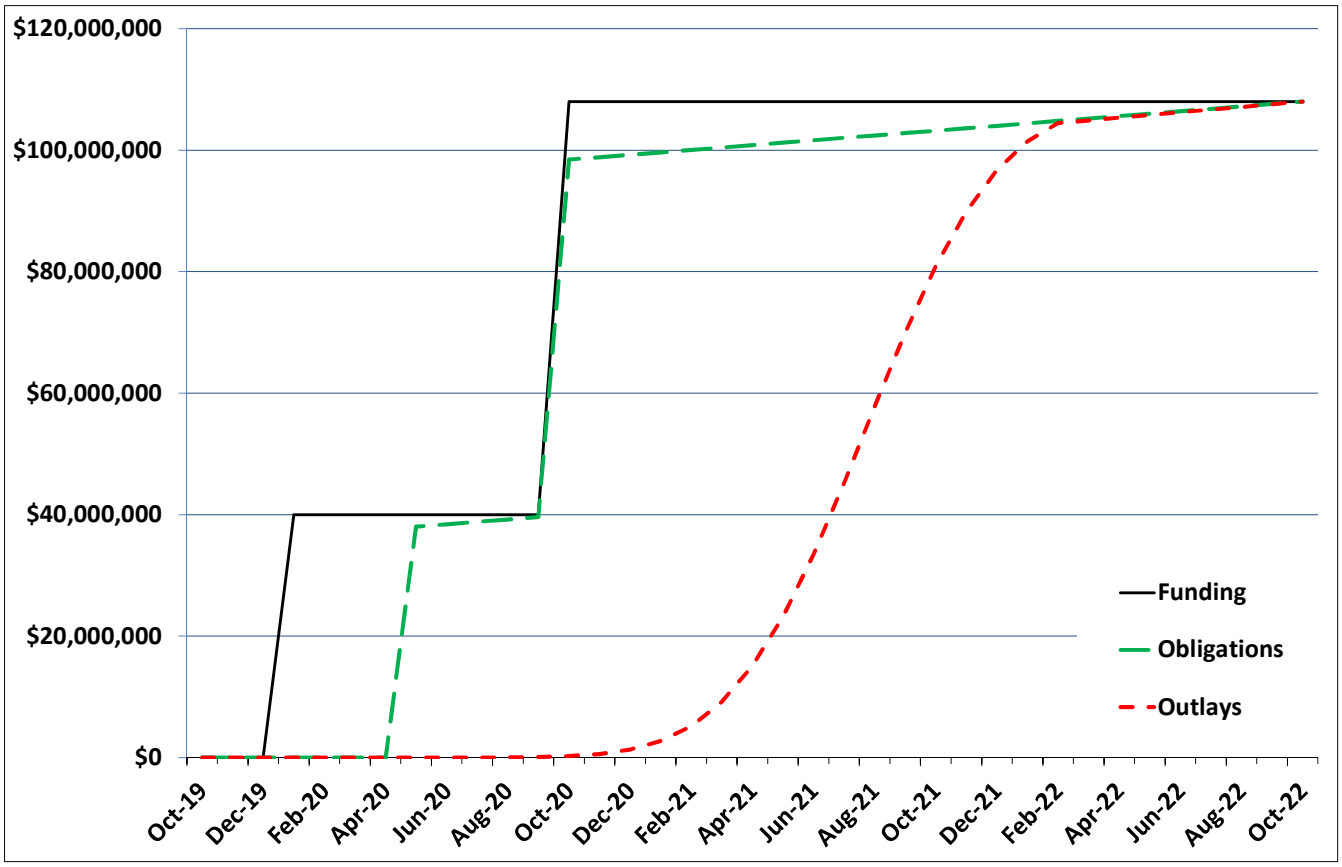
Chart Begin Oct-19	FUNDING (note 1)		OBLIGATION (note 2)		OUTLAYS (note 3)		
Month	**Enacted**	**Cumulative**	**Obligated**	**Cumulative**	**Monthly**	**Cumulative**	
Oct-19	-	-	-	-	-	-	
Nov-19	-	-	-	-	-	-	
Dec-19	-	-	-	-	-	-	#
Jan-20	40,000,000	40,000,000	-	-	-	-	
Feb-20	-	40,000,000	-	-	-	-	
Mar-20	-	40,000,000	-	-	-	-	
Apr-20	-	40,000,000	-	-	-	-	
May-20	-	40,000,000	38,007,585	38,007,585	2,422	2,422	
Jun-20	-	40,000,000	398,483	38,406,068	2,422	4,843	
Jul-20	-	40,000,000	398,483	38,804,551	7,742	12,586	
Aug-20	-	40,000,000	398,483	39,203,034	22,739	35,325	
Sep-20	-	40,000,000	398,483	39,601,517	61,353	96,677	
Oct-20	68,000,000	108,000,000	58,834,891	98,436,408	152,073	248,751	
Nov-20	-	108,000,000	398,483	98,834,891	346,281	595,031	
Dec-20	-	108,000,000	398,483	99,233,374	724,371	1,319,403	
Jan-21	-	108,000,000	398,483	99,631,857	1,392,039	2,711,441	
Feb-21	-	108,000,000	398,483	100,030,340	2,457,528	5,168,969	
Mar-21	-	108,000,000	398,483	100,428,823	3,985,684	9,154,653	
Apr-21	-	108,000,000	398,483	100,827,306	5,938,330	15,092,983	
May-21	-	108,000,000	398,483	101,225,789	8,127,985	23,220,968	
Jun-21	-	108,000,000	398,483	101,624,272	10,220,182	33,441,150	
Jul-21	-	108,000,000	398,483	102,022,755	11,805,693	45,246,843	
Aug-21	-	108,000,000	398,483	102,421,238	12,527,993	57,774,836	
Sep-21	-	108,000,000	398,483	102,819,721	12,213,177	69,988,013	
Oct-21	-	108,000,000	398,483	103,218,204	10,937,874	80,925,887	
Nov-21	-	108,000,000	398,483	103,616,687	8,999,002	89,924,889	
Dec-21	-	108,000,000	398,483	104,015,170	6,801,628	96,726,517	
Jan-22	-	108,000,000	398,483	104,413,653	4,722,680	101,449,197	
Feb-22	-	108,000,000	398,483	104,812,136	3,012,467	104,461,664	
Mar-22	-	108,000,000	398,483	105,210,619	442,292	104,903,956	
Apr-22	-	108,000,000	398,483	105,609,102	442,292	105,346,248	
May-22	-	108,000,000	398,483	106,007,585	442,292	105,788,540	
Jun-22	-	108,000,000	398,483	106,406,068	442,292	106,230,832	
Jul-22	-	108,000,000	398,483	106,804,551	442,292	106,673,124	
Aug-22	-	108,000,000	398,483	107,203,034	442,292	107,115,416	
Sep-22	-	108,000,000	398,483	107,601,517	442,292	107,557,708	
Oct-22	-	108,000,000	398,483	108,000,000	442,292	108,000,000	

Note 1: Assumes initial appropriation is enacted by Congress January of the program year. The appropriation of follow-on increments is anticipated in subsequent Octobers.

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

Note 3: Assumes contract award date of May 2020, Contract completion: Oct 2022, Duration 30 months

GBSD Mission Integration Facility, Inc 2; Hill AFB Utah



1. COMPONENT	FY 2021 MILITARY CONSTRUCTION PROGRAM	2. DATE (YYYYMMDD)
AIR FORCE		February 2020

3. INSTALLATION AND LOCATION	4. COMMAND	5. AREA CONTRUCTION COST INDEX
JOINT BASE LANGLEY-EUSTIS, VIRGINIA	AIR COMBAT COMMAND	0.95

6. PERSONNEL	(1) PERMANENT			(2) STUDENTS			(3) SUPPORTED			(4) TOTAL
	OFFICER	ENLISTED	CIVILIAN	OFFICER	ENLISTED	CIVILIAN	OFFICER	ENLISTED	CIVILIAN	
a. AS OF 30-SEP-19	1,392	6,170	3,187	0	0	0	0	0	700	11,449
b. END FY	1,356	5,921	2,961	0	0	0	0	0	700	10,938

7. INVENTORY DATA ($000)	
a. TOTAL ACREAGE	14,214
b. INVENTORY TOTAL AS OF 30-SEP-19	5,027,929.00
c. AUTHORIZATION NOT YET IN INVENTORY	59,200.00
d. AUTHORIZATION REQUESTED IN THIS PROGRAM	19,500.00
e. AUTHORIZATION INCLUDED IN FOLLOWING PROGRAM	0.00
f. PLANNED IN NEXT THREE PROGRAM YEARS	0.00
g. REMAINING DEFICIENCY	275,660.00
h. GRAND TOTAL	5,382,289.00

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
730-839	Access Control Point Main Gate With Land Acq	593 SM	19,500	03/19	06/20

9. FUTURE PROJECTS

10. MISSION OR MAJOR FUNCTIONS

Joint Base Langley-Eustis is host to Headquarters Air Combat Command, a fighter wing with F-22A fighters, an airlift wing, an intelligence group, the Aerospace Command and Control Intelligence, Surveillance and Reconnaissance Center, a Detachment of the USAF Doctrine Center, and the Air Force Rescue Coordination Center. The 733d Mission Support Group provides garrison support in crisis and emergency management, mail operations, installation and Rapid Port Opening Element support and exercise development to sustain Soldiers and customers in accomplishing the Joint Base Langley-Eustis mission. Joint Base Langley-Eustis is host to the United States Army 7th Transportation Brigade, 128th Aviation Brigade, and the 93rd Signal Brigade.

11. OUTSTANDING POLLUTION AND SAFETY DEFICIENCIES

a. Air Pollution	0
b. Water Pollution	0
c. Occupational Safety and Health	0
d. Other Environmental	0
OUTSTANDING DEFICIENCIES TOTAL:	0

1. COMPONENT	FY 2021 MILITARY CONSTRUCTION PROJECT DATA	2. DATE
AIR FORCE	(computer generated)	February 2020

3. INSTALLATION, SITE AND LOCATION	4. PROJECT TITLE
JOINT BASE LANGLEY-EUSTIS (EUSTIS), VIRGINIA	ACCESS CONTROL POINT MAIN GATE WITH LAND ACQ

5. PROGRAM ELEMENT	6. CATEGORY CODE	7. RPSUID/PROJECT NUMBER	8. PROJECT COST ($000)
91211F	730-839	5002/HERT117021	19,500

9. COST ESTIMATES

ITEM	U/M	QUANTITY	UNIT	COST ($000)
PRIMARY FACILITIES				12,805
ACCESS CONTROL FACILITY (730-839)	SM	593	6,788	(4,025)
ROAD (851-147)	SM	2,939	1,054	(3,098)
OVERHEAD PROTECTION (730-839)	SM	684	1,720	(1,176)
VISITOR CONTROL CENTER (730-832)	SM	248	5,633	(1,397)
FENCE BOUNDARY (872-245)	LM	951	929	(883)
FENCE SECURITY/VEHICLE BARRIERS (872-247)	LM	37	12,865	(476)
LAND ACQUISITION	LS			(1,500)
CYBERSECURITY OF FACILITY-RELATED CONTROL SYS	LS			(250)
SUPPORTING FACILITIES				6,488
PRIVATIZED UTILITIES	LS			(1,156)
PAVEMENTS	LS			(399)
UTILITIES	LS			(1,221)
SITE IMPROVEMENTS	LS			(710)
DEMOLITION	SM	660	165	(109)
GENERATOR	KW	100		(65)
COMMUNICATIONS	LS			(75)
SUBTOTAL				17,793
CONTINGENCY (5.0%)				890
TOTAL CONTRACT COST				18,683
SUPERVISION, INSPECTION AND OVERHEAD (5.7 %)				1,065
TOTAL REQUEST				19,748
TOTAL REQUEST (ROUNDED)				19,500
EQUIPMENT FROM OTHER APPROPRIATIONS (NON-ADD)				(950)

10. Description of Proposed Construction: Work consists of the demolition and removal of existing gate houses, canopy, visitor center, concrete islands, pavement, concrete curb and gutter, and fence line. Construction consists of new pavement and road realignment, concrete curbing, concrete and grass medians, roadway lighting, new backup generator in accordance with Air Force Instruction 32-1062, passive barriers, gate house, concrete identification check islands with canopy and ballistic rated guard booths, visitor control center and commercial and privately owned vehicle inspection building. Project will include fire suppression systems (as applicable), all utilities, pavements associated with sidewalks/parking, communications, site improvements, and associated support facilities to provide a complete and useable facility. Project shall demolish buildings 2 (322 Square Meter), 3 (16 Square Meter), 4 (296 Square Meter), 8 (6 Square Meter), 9 (4 Square Meter), 10(4 Square Meter), 11(4 Square Meter), 12(4 Square Meter) & 13 (4 Square Meter) (Total: 660 ***Square Meter).*** Facilities will be designed as permanent construction in accordance with the DoD Unified Facilities Criteria 1-200-01, General Building Requirements and Unified Facilities Criteria 4-022-01 Entry Control; Facilities / Access Control Points. This project

DD FORM 1391, DEC 99 Previous editions are obsolete. Page No.

1. COMPONENT	FY 2021 MILITARY CONSTRUCTION PROJECT DATA	2. DATE
AIR FORCE	(computer generated)	February 2020

3. INSTALLATION, SITE AND LOCATION	4. PROJECT TITLE
JOINT BASE LANGLEY-EUSTIS (EUSTIS), VIRGINIA	ACCESS CONTROL POINT MAIN GATE WITH LAND ACQ

5. PROGRAM ELEMENT	6. CATEGORY CODE	7. RPSUID/PROJECT NUMBER	8. PROJECT COST ($000)
91211F	730-839	5002/HERT117021	19,500

will comply with Department of Defense antiterrorism/force protection requirements per Unified Facilities Criteria 4-010-01.

Air Conditioning: 250 Tons

11. Requirement: 593 SM Adequate: 0 SM Substandard: 660 SM

PROJECT: Access Control Point, Main Gate.

REQUIREMENT: Project addresses safety, security, and traffic flow deficiencies and needs outlined in the 2012 Fort Eustis Access Control Point and Corridor Evaluation Final Report regarding the main gate. Specifically to satisfy safety, security, and traffic flow as identified in Unified Facilities Criteria 4-022-01 and Department of Defense standard design criteria and correct deficiencies and vulnerabilities identified and tracked in Core Vulnerabilities Assessment Management Program, item # AF2012-0014.

CURRENT SITUATION: The following deficiencies must be addressed to meet identified standards: The ACP does not satisfy the functional requirements as identified in the 2014 Surface Deployment and Distribution Command's Transportation Engineering Agency Pamphlet 55-15, or 2017 Unified Facilities Criteria 4-022-01; Inadequate safety zone as defined by 2017 Unified Facilities Criteria 4-022-01; The Access Control Point does not have identification check islands compliant with standards; The visitor center does not meet standoff requirements; No commercial vehicle inspection facility exists. Commercial vehicles are currently inspected in a parking lot; The gate is operating with documented deficiencies and vulnerabilities in the Joint Staff Integrated Vulnerability Assessment report tracked in Core Vulnerabilities Assessment Management Program, item# AF2012-0014.

IMPACT IF NOT PROVIDED: Security and safety will be degraded if the existing main gate is not brought up to Department of Defense standards identified. The impact of not addressing safety includes a greater exposure to threats, crashes, as well as a loss of productivity. Security will not be adequately addressed and the installation’s mission and population may be at greater risk to vehicle borne threats prescribed in Unified Facilities Criteria 4- 020-01 Facilities Planning Manual. Traffic flow will continue to be hindered since there is not sufficient capacity to accommodate existing demands. The existing gate routinely experiences large queues.

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 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 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. 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 and shall employ the standard facility design Dynamic Prototypes Design: Entry Control Facilities / Installation Access Control Points. All utilities except for storm water have been privatized on Ft Eustis. This project does not fall within or partly within the 100- year flood plain. Supporting Facilities cost exceeds 25% of the Primary Facilities cost due to land acquisition and privatized utilities costs associated with the project site. Base has reviewed various options to obtain required land and will need several parcels of land including a re-route of Dozier Road to maintain access to other parcels of land, a cemetery and a cell tower. Therefore, land acquisition is included in this project to account for current on-going discussions with local municipality to obtain the land needed. Dominion Electric Privatized Utilities are for privatized

1. COMPONENT	FY 2021 MILITARY CONSTRUCTION PROJECT DATA	2. DATE
AIR FORCE	(computer generated)	February 2020

3. INSTALLATION, SITE AND LOCATION	4. PROJECT TITLE
JOINT BASE LANGLEY-EUSTIS (EUSTIS), VIRGINIA	ACCESS CONTROL POINT MAIN GATE WITH LAND ACQ

5. PROGRAM ELEMENT	6. CATEGORY CODE	7. RPSUID/PROJECT NUMBER	8. PROJECT COST ($000)
91211F	730-839	5002/HERT117021	19,500

electrical service. American State Utility Services Privatized Utilities are for Water, Sewer, and Gas privatized service. Utility connections are required to privatized electric distribution, natural gas, water, and wastewater systems. The Government intends to have the Utilities Privatization System Owners make and own the necessary connections up to the facility service disconnect or other defined point of demarcation. Electric, natural gas, water, and waste water service utility connections shall meet all requirements of the utility system owners. Connections will enable utility systems to be connected to the facility and the utility systems will not be owned by the Government. Base Civil Engineer: (757) 878-2642.

Access Control Facility: 597 Square Meter = 6,426 Square Feet. Overhead Protection: 684 Square Meter = 7,363 Square Feet. Visitor Control Center: 260 Square Meter = 2,799 Square Feet. Fence Boundary: 951 Linear Meter = 3120 Linear Feet. Fence Security/Vehicle Barriers: 37 Linear Meters = 122 Linear Feet. Demolition: 660 Square Meter = 7,105 Square Feet.

JOINT USE CERTIFICATION: This is an installation infrastructure project and does not qualify for joint use at this location. However, all tenants on this installation are benefited by this project.

1. COMPONENT	FY 2021 MILITARY CONSTRUCTION PROJECT DATA	2. DATE
AIR FORCE	(computer generated)	February 2020

3. INSTALLATION, SITE AND LOCATION	4. PROJECT TITLE
JOINT BASE LANGLEY-EUSTIS (EUSTIS), VIRGINIA	ACCESS CONTROL POINT MAIN GATE WITH LAND ACQ

5. PROGRAM ELEMENT	6. CATEGORY CODE	7. RPSUID/PROJECT NUMBER	8. PROJECT COST ($000)
91211F	730-839	5002/HERT117021	19,500

12. SUPPLEMENTAL DATA

a. Estimated Design Data:

(1) Status

(a) Type of Design	Design-Bid-Build
(b) Date Design Started	01-MAR-19
(c) Parametric Cost Estimates used to develop costs	YES
(d) Percent Complete as of 01 Jan 2020	65%
(e) Date 35% Designed	19-OCT
(f) Date Design Complete	20-JUN
(g) Energy Study/Life-Cycle analysis was performed	YES

(2) Basis:

(a) Standard or Definitive Design-	YES
(b) Where Design Was Most Recently Used-	FY18/Vandenberg Gate Complex

(3) Total Cost (c) = (a) + (b) or (d) + (e)

	($000)
(a) Production of Plans and Specifications	1,170
(b) All Other Design Costs	585
(c) Total	1,755
(d) Contract	1,463
(e) In-house	292

(4) Construction Contract Award	21 MAR
(5) Construction Start	21 MAY
(6) Construction Completion	22 MAY

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

EQUIPMENT NOMENCLATURE	PROCURING APPROPRIATION	FISCAL YEAR APPROPRIATED OR REQUESTED	COST ($000)
COMMUNICATIONS EQUIPMENT	3400	2022	200
FURNITURE, FIXTURES, & EQUIPMENT	3080	2022	750

Tab - **OUTSIDE THE UNITED STATES**

1. COMPONENT	FY 2021 MILITARY CONSTRUCTION PROGRAM	2. DATE (YYYYMMDD)
AIR FORCE		February 2020

3. INSTALLATION AND LOCATION	4. COMMAND	5. AREA CONTRUCTION COST INDEX
ANDERSEN AIR FORCE BASE, GUAM	PACIFIC AIR FORCES	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-19	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	20,270
b. INVENTORY TOTAL AS OF 30-Sep-19	6,145,097.00
c. AUTHORIZATION NOT YET IN INVENTORY	206,258.00
d. AUTHORIZATION REQUESTED IN THIS PROGRAM	56,000.00
e. AUTHORIZATION INCLUDED IN FOLLOWING PROGRAM	104,000.00
f. PLANNED IN NEXT THREE PROGRAM YEARS	340,200.00
g. REMAINING DEFICIENCY	663,000.00
h. GRAND TOTAL	7,514,355.00

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
212-212	STAND OFF WEAPONS COMPLEX, MSA 2	2831 SM	56,000	01/19	09/20

9. FUTURE PROJECTS

442-758 Airfield Damage Repair Facility (6,839 SM/$30,000)
422-264 Munitions Storage Igloos IV (4,128 SM/$74,000)
113-321 APSI - N Ramp Infrastructure PH1 (235,140 SM/$307,000)
121-122 APSI - N Ramp Infrastructure Ph 2 (4,000 SM/$33,200)

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 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

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

OUTSTANDING DEFICIENCIES TOTAL: 0

1. COMPONENT	FY 2021 MILITARY CONSTRUCTION PROJECT DATA	2. DATE
AIR FORCE	(computer generated)	February 2020

3. INSTALLATION, SITE AND LOCATION	4. PROJECT TITLE
JOINT REGION MARIANAS - ANDERSEN ANDERSEN AF BASE SITE # 1 GUAM	STAND OFF WEAPONS COMPLEX, MSA 2

5. PROGRAM ELEMENT	6. CATEGORY CODE	7. RPSUID/PROJECT NUMBER	8. PROJECT COST ($000)
91211F	212-212	1366/AJJY203001	56,000

9. COST ESTIMATES

ITEM	U/M	QUANTITY	UNIT	COST ($000)
PRIMARY FACILITIES				42,910
ADD MISSILE ASSEMBLY SHOP (212-212)	SM	1,514	11,616	(17,587)
ALTER MISSILE ASSEMBLY SHOP (212-212)	SM	1,317	3,250	(4,280)
AIRCRAFT SUPPORT EQUIPMENT SHOP (218-712)	SM	769	9,545	(7,340)
EARTH COVERED MAGAZINE (422-264)	SM	413	6,358	(2,626)
ROAD (851-147)	SM	31,565	343	(10,827)
CYBERSECURITY OF FACILITIES-RELATED CONTROL	LS			(250)
SUPPORTING FACILITIES				7,554
UTILITIES	LS			(1,808)
PAVEMENTS	LS			(1,443)
SITE IMPROVEMENTS	LS			(828)
EXPLOSIVE SAFETY COMPLIANCE	LS			(2,786)
ARCHEOLOGIAL MONITORING	LS			(225)
ENVIRONMENTAL MITIGATION	LS			(464)
SUBTOTAL				50,464
CONTINGENCY (5.0%)				2,523
TOTAL CONTRACT COST				52,987
SUPERVISION, INSPECTION AND OVERHEAD (6.2%)				3,285
TOTAL REQUEST				56,272
TOTAL REQUEST (ROUNDED)				56,000

10. Description of Proposed Construction: Alter and construct an addition to Building 51109 to support the pre-load capability of rotary launchers, improve access roadways to support loaded munitions trailers, construct a powered munitions trailer maintenance facility to support specialized maintenance activities for munitions trailers, and construct two Earth Covered Magazines to support pre-loaded munitions trailers. The project will include all necessary supporting facilities for a complete and usable facility. 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, General Building Requirements and UFC 1-200-02, High Performance and Sustainable Building 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. 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 antiterrorism/force protection requirements per Unified Facility Criteria 4-010-01.
Air Conditioning: 74 Tons

DD FORM 1391, DEC 99 Previous editions are obsolete. Page No.

1. COMPONENT	FY 2021 MILITARY CONSTRUCTION PROJECT DATA	2. DATE
AIR FORCE	(computer generated)	February 2020

3. INSTALLATION, SITE AND LOCATION	4. PROJECT TITLE
JOINT REGION MARIANAS - ANDERSEN ANDERSEN AF BASE SITE # 1 GUAM	STAND OFF WEAPONS COMPLEX, MSA 2

5. PROGRAM ELEMENT	6. CATEGORY CODE	7. RPSUID/PROJECT NUMBER	8. PROJECT COST ($000)
91211F	212-212	1366/AJJY203001	56,000

11. Requirement: 2831 SM Adequate: 0 SM Substandard: 1317 SM

PROJECT: Stand Off Weapons Complex, MSA 2

REQUIREMENT: An adequately sized and configured missile maintenance and assembly complex for loading, unloading, transferring, storing, testing, and preparing missiles for operational use. It supports the pre-load activities for rotary launchers and the associated trailers with up to eight missiles. An addition to Building 51109 will include a high-bay space that will suspend the rotary launcher on which the missiles will be loaded. Road access from the maintenance facility to flight line and/or storage igloos is required, loaded munitions trailers weigh 77,500 pounds and existing roadways need to be improved to increase the bearing capacity required to serve as access routes to aircraft and storage facilities. The existing facility will be altered to enable missile maintenance and testing operations to safely, efficiently, and securely flow into the new pre-load area. Facility construction should be concrete, or similar, designed to withstand high wind speeds up to 195 Miles Per Hour) and applicable seismic design categories. The roof and floor structures will be designed for heavy loads with strict level tolerance and include a 5-ton monorail crane system. A Powered Trailer Maintenance Facility is required for inspecting, maintaining, servicing, and repairing assigned munitions trailers. A high-bay work space for four munitions trailers with a 10-ton overhead hoist is required to support maintenance activities. This project will include maintenance bays, tool/staging aisles, shop stock, ready room, support section tool room, office space, restroom, and building support spaces. Two new standard design 7-bar Earth Covered Magazines, "Hayman" Igloos, are required to support storage of additional standoff weapons and pre-loaded Common Strategic Rotary Launchers. As a complex, these facilities establish the ability to rapidly assemble and deliver the standoff weapons capability.

CURRENT SITUATION: Currently, there are no facilities capable of supporting standoff weapon pre-load operations at Andersen Air Force Base. Without this capability, missiles are loaded one at a time, requiring more than 11 hours. Pre-loaded rotary launchers reduces this to less than 2 1/2 hours. In addition, the access road from the missile maintenance facility to the airfield and storage igloos is not constructed for and is not capable of withstanding the weight of loaded trailers. There are no facilities able to accommodate the special maintenance activities associated with trailers. Existing facilities cannot be altered to accommodate maintenance of munitions trailers due to site and facility layout constraints. There is no available capacity to store pre-loaded Common Strategic Rotary Launchers.

IMPACT IF NOT PROVIDED: There is currently no pre-load capability at Andersen Air Force Base. Without pre-load capability, significantly longer load and regeneration times are required, impacting operational response times. The existing roadways cannot support the heavy load associated with the loaded rotary launcher along with the munitions trailer and will fail if the load is transported on the existing asphalt roadway. If this project is not provided, the current inadequate facilities cannot support missions that directly support Pacific Command/Pacific Air Force's

1. COMPONENT	FY 2021 MILITARY CONSTRUCTION PROJECT DATA	2. DATE
AIR FORCE	(computer generated)	February 2020

3. INSTALLATION, SITE AND LOCATION	4. PROJECT TITLE
JOINT REGION MARIANAS - ANDERSEN ANDERSEN AF BASE SITE # 1 GUAM	STAND OFF WEAPONS COMPLEX, MSA 2

5. PROGRAM ELEMENT	6. CATEGORY CODE	7. RPSUID/PROJECT NUMBER	8. PROJECT COST ($000)
91211F	212-212	1366/AJJY203001	56,000

theater stability and positioning for contingency objectives.

ADDITIONAL: This project meets applicable criteria/scope 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. An Economic Analysis waiver has been approved. The design will 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 and there is no applicable standard design from the Air Force Civil Engineer Center. The cost estimate was based on Parametric Cost Estimating System and is in line with the Department of Defense Pricing Guide Parameters. 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 Fiscal Year 2021.

Andersen Air Force Base Civil Engineer: 671-366-2530.

Area: 1,514 Square Meters = 16,297 Square Feet; 1,317 Square Meters = 14,176 Square Feet; 769 Square Meters = 8,278 Square Feet; 413 Square Meters = 4,446 Square Feet; 31,565 Square Meters = 339,766 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	FY 2021 MILITARY CONSTRUCTION PROJECT DATA	2. DATE
AIR FORCE	(computer generated)	February 2020

3. INSTALLATION AND LOCATION	4. PROJECT TITLE
JOINT REGION MARIANAS - ANDERSEN ANDERSEN AF BASE SITE # 1 GUAM	STAND OFF WEAPONS COMPLEX, MSA 2

5. PROGRAM ELEMENT	6. CATEGORY CODE	7. PROJECT NUMBER	8. PROJECT COST ($000)
91211F	212-212	1366/AJJY203001	56,000

12. SUPPLEMENTAL DATA:

a. Estimated Design Data:

(1) Status:	
(a) Type of Design	Design-Bid-Build
(b) **Date Design Started**	18-JAN-19
(c) **Parametric Cost Estimates used to develop costs**	YES
(d) Percent Complete as of 01 JAN 2020*	15%
(e) Date 35% Designed*	01-MAR-20
(f) Date Design Complete	16-SEP-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) and (d) + (e):	($000)
(a) **Production of Plans and Specifications**	3,360
(b) **All Other Design Costs**	1,680
(c) **Total**	5,040
(d) **Contract**	4,200
(e) **In-house**	840
(4) Construction Contract Award	21 FEB
(5) Construction Start	21 APR
(6) Construction Completion	23 JUL

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

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

1. COMPONENT	FY 2021 MILITARY CONSTRUCTION PROGRAM	2. DATE (YYYYMMDD)
AIR FORCE		February 2020

3. INSTALLATION AND LOCATION	4. COMMAND	5. AREA CONTRUCTION COST INDEX
JOINT REGION MARIANAS - TINIAN	PACIFIC AIR FORCES	2.64

6. PERSONNEL	(1) PERMANENT			(2) STUDENTS			(3) SUPPORTED			(4) TOTAL
	OFFICER	ENLISTED	CIVILIAN	OFFICER	ENLISTED	CIVILIAN	OFFICER	ENLISTED	CIVILIAN	
a. AS OF 30-Sep-19	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-19	0.00
c. AUTHORIZATION NOT YET IN INVENTORY	366,700.00
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	0.00
h. GRAND TOTAL	366,700.00

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
411-135	Fuel Tanks with Pipeline & Hydrant Sys, Inc 2	220,000 BL	7,000	07/18	09/19
851-147	Airfield Development Phase 1, Inc 2	69,920 SM	20,000	06/18	09/19
113-321	Parking Apron, Inc 2	152,411 SM	15,000	06/18	09/19

9. FUTURE PROJECTS

411-135 Fuel Tanks with Pipeline & Hydrant Sys, Inc 3 (220,000 BL/$77,000)
851-147 Airfield Development Phase 1, Inc 3 (69,920 SM/$64,000)
113-321 Parking Apron, Inc 3 (152,411 SM/$58,000)

10. MISSION OR MAJOR FUNCTIONS

Protect and defend, in concert with other United States Government agencies, the territory of the United States,its people, and its interests. With allies and partners, commitment to enhancing stability in the Asia-Pacific region by promoting security cooperation, encouraging peaceful development, responding to contingencies, deterring aggression, and, when necessary, fighting to win.

11. OUTSTANDING POLLUTION AND SAFETY DEFICIENCIES

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

OUTSTANDING DEFICIENCIES TOTAL: 0

1. COMPONENT	FY 2021 MILITARY CONSTRUCTION PROJECT DATA	2. DATE
AIR FORCE	(computer generated)	February 2020

3. INSTALLATION, SITE AND LOCATION	4. PROJECT TITLE
TINIAN INTERNATIONAL AIRPORT NORTHERN MARIANA ISLANDS	FUEL TANKS WITH PIPELINE & HYDRANT SYS, INC 2

5. PROGRAM ELEMENT	6. CATEGORY CODE	7. RPSUID/PROJECT NUMBER	8. PROJECT COST ($000)
91211F	411-135	PAF189010	AUTH: 0 APP: 7,000

9. COST ESTIMATES

ITEM	U/M	QUANTITY	UNIT	COST ($000)
PRIMARY FACILITIES				75,797
JET FUEL STORAGE-ABOVE GROUND (411-135)	BL	220,000	146	(32,085)
PIPELINE, LIQUID FUELS-ABOVE GROUND (125-554)	LM	9,020	2,244	(20,241)
PUMP STATION, LIQUID FUELS (125-977)	GM	4,400	4,470	(19,667)
HYDRANT FUELING BUILDING (121-124)	SM	84	5,667	(476)
LIQUID FUEL TRUCK FILL STAND (126-925)	OL	2	355,428	(711)
PETROLEUM OPERATIONS BUILDING (121-111)	SM	149	4,906	(731)
AVIATION FUEL DISPENSING (121-115)	OL	1	150,000	(150)
CYBERSECURITY OF FACILITY-RELATED CONTROL SYS	LS			(250)
SUSTAINABILITY AND ENERGY MEASURES (2.0%)	LS			(1,486)
SUPPORTING FACILITIES				22,278
SITE IMPROVEMENTS	LS			(12,911)
PAVEMENTS	LS			(2,716)
UTILITIES	LS			(3,322)
BACKUP GENERATORS	LS			(890)
ENVIRONMENTAL REMEDIATION	LS			(300)
ARCHEOLOGICAL MONITORING	LS			(75)
EXPLOSIVE SAFETY SUBMISSION COMPLIANCE	LS			(2,064)
SUBTOTAL				98,075
CONTINGENCY (5.0%)				4,904
TOTAL CONTRACT COST				102,978
SUPERVISION, INSPECTION AND OVERHEAD (6.2%)				6,385
TOTAL REQUEST				109,363
TOTAL REQUEST (ROUNDED)				109,000
EQUIPMENT FROM OTHER APPROPRIATIONS (NON-ADD)				(2,030.0)

10. Description of Proposed Construction: Construct new jet fuel system including harbor fuel receipt, pipeline, fuel storage, and high flow rate fuel delivery to parking apron hydrant system as well as to truck stands. Fuel storage tanks include one 100K barrel aboveground storage tank and two 60K barrel aboveground storage tanks. The system will also include carbon steel pipelines, additization station, seaport pump station, cargo staging area with biosecurity control, operational pump station at airport, truck fillstands, pantograph fuel dispensing, fire protection, spill control, emergency generators, and parking for fuel-related vehicles. The project will include all necessary supporting facilities for a complete and usable facility including electrical, mechanical, HVAC, communications, area lighting and structural work for full and complete operations. Facilities must be able to withstand 190 mile per hour winds for structural elements and Seismic Zone 3 design criteria. Sustainable principles, to include Life Cycle cost-effective practices,

DD FORM 1391, DEC 99 Previous editions are obsolete. Page No.

1. COMPONENT AIR FORCE	FY 2021 MILITARY CONSTRUCTION PROJECT DATA (computer generated)	2. DATE February 2020

3. INSTALLATION, SITE AND LOCATION	4. PROJECT TITLE
TINIAN INTERNATIONAL AIRPORT NORTHERN MARIANA ISLANDS	FUEL TANKS WITH PIPELINE & HYDRANT SYS, INC 2

5. PROGRAM ELEMENT	6. CATEGORY CODE	7. RPSUID/PROJECT NUMBER	8. PROJECT COST ($000)
91211F	411-135	PAF189010	AUTH: 0 APP: 7,000

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 UFC 1-200-02 is partially compliant or not applicable. This project will comply with Department of Defense antiterrorism/force protection requirements per UFC 4-010-01.

Air Conditioning: 18 Tons

11. Requirement: 220000 BL Adequate: 0 BL Substandard: 0 BL
PROJECT: Fuel Tanks with Receipt Pipeline and Hydrant System

REQUIREMENT: This project is part of a USAF plan in the Commonwealth of the Northern Mariana Islands (CNMI) to support a combination of cargo, tanker, and similar aircraft and associated support personnel for divert operations, training exercises, humanitarian assistance, disaster relief, and operational support to Air Force missions. This project will provide the ability to receive, store, and distribute 220,000 barrels of jet fuel in the CNMI to support Air Force mission requirements. It includes seaport facilities and pipelines to transport fuel from delivery ship to the bulk tanks at the airfield. It includes pump stations as needed (i.e., near the seaport to pump fuel from transport vessel to the bulk tanks, and another pump station to transport fuel from the tanks to the aircraft). The tanks will include an additization station and truck fillstands. Fire suppression is included, as required. A storage facility is required near the pump and controls building to store a trailer with containment boom and store the tanker to shore offload hose. The purpose is to support and conduct current, emerging, and future USAF training activities, while ensuring the capability to meet mission requirements in the event that access to Andersen Air Force Base or other western Pacific locations is limited or denied. The proposed action is needed because there is not an existing divert or contingency airfield on U.S. territory in the western Pacific that is designed and designated to provide strategic operational and exercise capabilities for U.S. forces when needed and humanitarian assistance and disaster relief in times of natural or man-made disasters. All construction projects must comply with Federal Aviation Administration regulations including Orders and Advisory Circulars applicable to commercial airports. In addition, project will comply with CNMI Public Law 06-45 building codes.

CURRENT SITUATION: A single airfield with facilities for the safe exercise of military activities does not exist in the Commonwealth of the Northern Mariana Islands.

IMPACT IF NOT PROVIDED: Without this facility, there is not an adequate supply of fuel to conduct USAF missions from the Commonwealth of the Northern Mariana Islands, which precludes use of the CNMI for emerging and future exercise missions or to divert tanker aircraft or respond effectively to natural disasters in the area.

ADDITIONAL: This project complies with the criteria/scope specified in AFMAN 32-1084, "Facility Requirements." An Economic Analysis waiver was previously approved for related projects in the CNMI, which is being updated to reflect the current program.

1. COMPONENT AIR FORCE	FY 2021 MILITARY CONSTRUCTION PROJECT DATA (computer generated)	2. DATE February 2020

3. INSTALLATION, SITE AND LOCATION	4. PROJECT TITLE
TINIAN INTERNATIONAL AIRPORT NORTHERN MARIANA ISLANDS	FUEL TANKS WITH PIPELINE & HYDRANT SYS, INC 2

5. PROGRAM ELEMENT	6. CATEGORY CODE	7. RPSUID/PROJECT NUMBER	8. PROJECT COST ($000)
91211F	411-135	PAF189010	AUTH: 0 APP: 7,000

Note the unit costs for the Hydrant System Fuel Pump House and Seaport Fuel Pump House are seemingly high as the unit cost includes, in addition to the respective pump house facilities, pumps and associated equipment which will be contained in the pump houses. Supporting Facilities exceed 25% of the primary facility costs due to extensive excavation/in-fill requirements due to the topography of the land and the lack of power and water utilities. This design shall conform to criteria established in the Air Force Corporate Facilities Standards (AFCFS) but will not employ a standard facility design. This project does not fall within or partly within the 100-year flood plain. Facilities will be designed as permanent construction in accordance with the DoD 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 DoD Antiterrorism/force protection requirements per UFC 4-010-01.
Base Civil Engineer: 808-449-3810. Fuel Tanks: 35,000 CM = 9,246,100 gallons; Pipeline: 9,020 LM = 29,600 LF; Additization Station: 84 SM = 904 SF; Boom Storage Facility: 149 SM = 1604 SF.

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.

DD FORM 1391, DEC 99 Previous editions are obsolete. Page No.

1. COMPONENT	FY 2021 MILITARY CONSTRUCTION PROJECT DATA	2. DATE
AIR FORCE	(computer generated)	February 2020

3. INSTALLATION AND LOCATION	4. PROJECT TITLE
TINIAN INTERNATIONAL AIRPORT NORTHERN MARIANA ISLANDS	FUEL TANKS WITH PIPELINE & HYDRANT SYS, INC 2

5. PROGRAM ELEMENT	6. CATEGORY CODE	7. PROJECT NUMBER	8. PROJECT COST ($000)
91211F	411-135	PAF189010	AUTH: 0 APP: 7,000

12. SUPPLEMENTAL DATA:

a. Estimated Design Data:

(1) Status:	
(a) Type of Design	Design-Bid-Build
(b) Date Design Started	01-JUL-18
(c) Parametric Cost Estimates used to develop costs	YES
* (d) Percent Complete as of 01 JAN 2019	15%
* (e) Date 35% Designed	30-MAR-19
(f) Date Design Complete	30-SEP-19
(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 -	

(3) Total Cost (c) = (a) + (b) or (d) + (e):	($000)
(a) Production of Plans and Specifications	6,540
(b) All Other Design Costs	3,270
(c) Total	9,810
(d) Contract	8,175
(e) In-house	1,635
(4) Construction Contract Award	21 MAR
(5) Construction Start	21 MAY
(6) Construction Completion	23 MAY

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

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

EQUIPMENT NOMENCLATURE	PROCURING APPROPRIATION	FISCAL YEAR APPROPRIATED OR REQUESTED	COST ($000)
FURNISHING, FIXTURES & EQUIP	3400	23	2,030

FY ($M)	Authorization Requested	Authorization of Appropriations	Appropriation
2020	235	59	120
2021	0	0	0
2022	0	0	0

DD FORM 1391, DEC 99 Previous editions are obsolete. Page No.

Project: Fuel Tanks with Pipeline & Hydrant Sys, Inc 2; CNMI Tinian

Project Spending Plan
As of: 14-Jan-20
All Cost in thousands ($000)

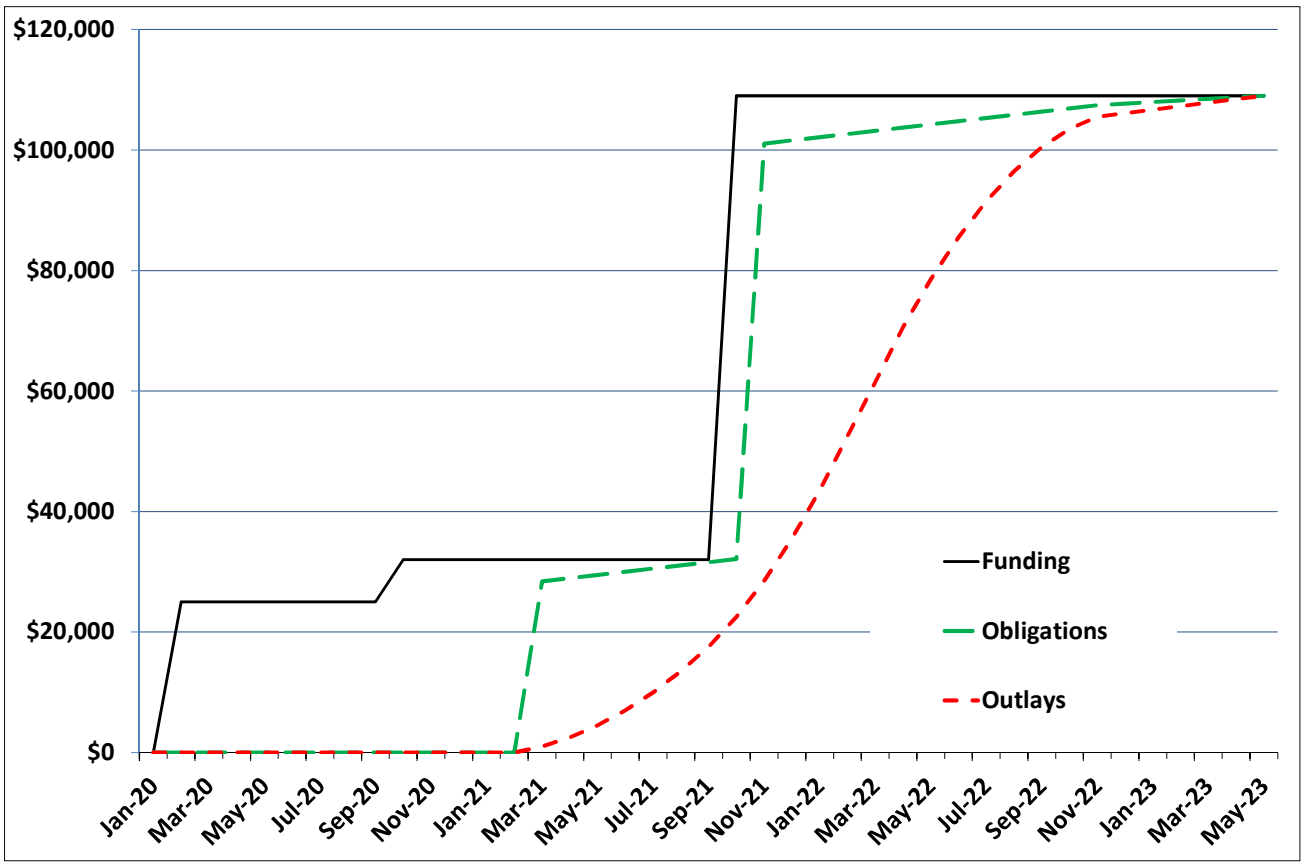
Chart Begin Jan-20	FUNDING (note 1)		OBLIGATION (note 2)		OUTLAYS (note 3)	
Month	**Enacted**	**Cumulative**	**Obligated**	**Cumulative**	**Monthly**	**Cumulative**
Jan-20	-	-	-	-	-	-
Feb-20	25,000	25,000	-	-	-	-
Mar-20	-	25,000	-	-	-	-
Apr-20	-	25,000	-	-	-	-
May-20	-	25,000	-	-	-	-
Jun-20	-	25,000	-	-	-	-
Jul-20	-	25,000	-	-	-	-
Aug-20	-	25,000	-	-	-	-
Sep-20	-	25,000	-	-	-	-
Oct-20	7,000	32,000	-	-	-	-
Nov-20	-	32,000	-	-	-	-
Dec-20	-	32,000	-	-	-	-
Jan-21	-	32,000	-	-	-	-
Feb-21	-	32,000	-	-	-	-
Mar-21	-	32,000	28,416	28,416	1,000	1,000
Apr-21	-	32,000	531	28,947	1,500	2,500
May-21	-	32,000	531	29,478	2,000	4,500
Jun-21	-	32,000	531	30,009	2,500	7,000
Jul-21	-	32,000	531	30,540	3,000	10,000
Aug-21	-	32,000	531	31,071	3,500	13,500
Sep-21	-	32,000	531	31,602	4,000	17,500
Oct-21	77,000	109,000	531	32,133	5,000	22,500
Nov-21	-	109,000	68,907	101,040	6,000	28,500
Dec-21	-	109,000	531	101,571	7,000	35,500
Jan-22	-	109,000	531	102,102	8,000	43,500
Feb-22	-	109,000	531	102,633	9,000	52,500
Mar-22	-	109,000	531	103,164	9,000	61,500
Apr-22	-	109,000	531	103,695	9,000	70,500
May-22	-	109,000	531	104,226	8,000	78,500
Jun-22	-	109,000	531	104,757	7,000	85,500
Jul-22		109,000	531	105,288	6,000	91,500
Aug-22	-	109,000	531	105,819	5,000	96,500
Sep-22	-	109,000	531	106,350	4,000	100,500
Oct-22	-	109,000	531	106,881	3,000	103,500
Nov-22	-	109,000	531	107,412	2,000	105,500
Dec-22	-	109,000	265	107,677	584	106,084
Jan-23	-	109,000	265	107,942	584	106,668
Feb-23	-	109,000	265	108,207	583	107,251
Mar-23	-	109,000	265	108,472	583	107,834
Apr-23	-	109,000	264	108,736	583	108,417
May-23	-	109,000	264	109,000	583	109,000

Note 1: Assumes initial appropriation is enacted by Congress January of the program year. The appropriation of follow-on increments is anticipated in subsequent Octobers.

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

Note 3: Assumes contract award date of Mar 2021, Contract completion: May 2023, Duration 26 months

Fuel Tanks with Pipeline & Hydrant Sys, Inc 2; CNMI Tinian



1. COMPONENT	FY 2021 MILITARY CONSTRUCTION PROJECT DATA	2. DATE
AIR FORCE	(computer generated)	February 2020

3. INSTALLATION, SITE AND LOCATION	4. PROJECT TITLE
TINIAN INTERNATIONAL AIRPORT NORTHERN MARIANA ISLANDS	AIRFIELD DEVELOPMENT PHASE 1, INC 2

5. PROGRAM ELEMENT	6. CATEGORY CODE	7. RPSUID/PROJECT NUMBER	8. PROJECT COST ($000)
91211F	851-147	PAF189021	AUTH: 0 APP: 20,000

9. COST ESTIMATES

ITEM	U/M	QUANTITY	UNIT	COST ($000)
PRIMARY FACILITIES				14,083
ROAD, SURFACED (851-147)	SM	69,920	136	(9,488)
FENCE BOUNDARY (872-245)	LM	3,865	368	(1,422)
PRIMARY DISTRIBUTION LINE UNDERGROUND (812-225)	LM	1,562	1,694	(2,646)
CYBERSECURITY OF FACILITY RELATED CONTROL SYS	LS			(250)
SUSTAINABILITY AND ENERGY MEASURES (2.0%)	LS			(276)
SUPPORTING FACILITIES				84,114
SITE IMPROVEMENTS	LS			(57,948)
UTILITIES	LS			(3,566)
ENVIRONMENTAL REMEDIATION	LS			(300)
ARCHEOLOGICAL MONITORING	LS			(300)
EXPLOSIVE SAFETY SUBMISSION COMPLIANCE	LS			(20,000)
DEMOLITION	LS			(2,000)
SUBTOTAL				98,196
CONTINGENCY (5.0%)				4,910
TOTAL CONTRACT COST				103,106
SUPERVISION, INSPECTION AND OVERHEAD (6.2%)				6,393
TOTAL REQUEST				109,499
TOTAL REQUEST (ROUNDED)				109,000

10. Description of Proposed Construction: This project provides site development for Air Force access to Tinian International Airport, including a cleared and level site with paved road access, security fencing, extensive earthwork, drainage, electrical and water utility connections, demolition of World War II-era airfield pavements, repair/improvement of haul route, and all other requirements. Facilities must be able to withstand 190 mph winds for structural elements and will be designed to Seismic Zone 3 design criteria. 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 (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 UFC 1-200-02 is partially compliant or not applicable. This project will comply with Department of Defense antiterrorism/force protection requirements per UFC 4-010-01.

Air Conditioning: 0 Tons

11. Requirement: 69920 SM Adequate: 0 SM Substandard: 0 SM

PROJECT: Airfield Development Phase 1

REQUIREMENT: Construct facilities and infrastructure in the Commonwealth of the Northern Mariana Islands (CNMI) to support a combination of cargo, tanker, and

1. COMPONENT AIR FORCE	FY 2021 MILITARY CONSTRUCTION PROJECT DATA (computer generated)	2. DATE February 2020
3. INSTALLATION, SITE AND LOCATION TINIAN INTERNATIONAL AIRPORT NORTHERN MARIANA ISLANDS	4. PROJECT TITLE AIRFIELD DEVELOPMENT PHASE 1, INC 2	

5. PROGRAM ELEMENT	6. CATEGORY CODE	7. RPSUID/PROJECT NUMBER	8. PROJECT COST ($000)
91211F	851-147	PAF189021	AUTH: 0 APP: 20,000

similar aircraft and associated support personnel for divert operations, training exercises, humanitarian assistance, disaster relief, and operational support to Air Force missions. This project will provide a secure, final-graded/level surface complete with all required and necessary utilities and infrastructure in-place. In so doing, this project will ensure the slope of the pavements, provided under another project, and surrounding areas comply with Federal Aviation Administration, DoD/UFC, and AF requirements, including UFC 3-210-01 regarding Low Impact Development. Water and electrical requirements/connections sized for planned Air Force operations at this location will be built into this project. Repairs and possible improvements will be needed to local infrastructure (e.g., roads) used to receive construction materials and haul them to the airfield site.
The purpose is to support and conduct current, emerging, and future USAF training activities, while ensuring the capability to meet mission requirements in the event that access to other western Pacific locations is limited or denied. The proposed action is needed because there is not an existing divert or contingency airfield on U.S. territory in the western Pacific that is designed and designated to provide strategic operational and exercise capabilities for U.S. forces when needed and humanitarian assistance and disaster relief in times of natural or man-made disasters. All construction projects must comply with FAA regulations including Orders and Advisory Circulars applicable to commercial airports. In addition, this project will comply with CNMI Public Law 06-45 building codes.

CURRENT SITUATION:A redundant airfield, with a required fuel depot and refueling capability/facilities for refueling aircraft that support multiple military activities/missions does not exist in the CNMI.
IMPACT IF NOT PROVIDED: Without, the final grade leveling and comprehensive infrastructure (e.g., water, electrical, road systems, and secure perimeter fencing) installation resulting from this project, the follow-on bulk fuel storage and aircraft parking apron projects will not be executable. CNMI's strategic location is vital to Pacific Command (PACOM)/Pacific Air Forces (PACAF) emerging/future missions/activities and for divert tanker aircraft to effectively respond to natural disaster/humanitarian relief efforts in the area.
ADDITIONAL: This design shall conform to criteria established in the Air Force Corporate Facilities Standards (AFCFS) 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 from the Navy design agent. This project complies with the criteria/scope specified in Air Force Manual 32-1084, "Facility Requirements." An Economic Analysis (EA) waiver has been requested and will be approved prior to the president's budget submission. The Air Force will work with CNMI government and local authorities to obtain permissions for road and infrastructure improvements. Supporting Facilities costs exceed primary facility costs due to extensive excavation/in-fill requirements due to the topography of the undeveloped land, the distance from existing utilities, and potential presence of Munitions and Explosives of Concern (MEC) from WWII. The supporting facilities cost exceeds 25% of the primary facilities cost due to the substantial amount of earthwork required to add roads, fencing, and utilities. This project does not fall within or partly within the

1. COMPONENT AIR FORCE	FY 2021 MILITARY CONSTRUCTION PROJECT DATA (computer generated)	2. DATE February 2020

3. INSTALLATION, SITE AND LOCATION	4. PROJECT TITLE
TINIAN INTERNATIONAL AIRPORT NORTHERN MARIANA ISLANDS	AIRFIELD DEVELOPMENT PHASE 1, INC 2

5. PROGRAM ELEMENT	6. CATEGORY CODE	7. RPSUID/PROJECT NUMBER	8. PROJECT COST ($000)
91211F	851-147	PAF189021	AUTH: 0 APP: 20,000

100-year flood plain. This project was included in the Fiscal Year 2019 future-years defense plan in FY20. Base Civil Engineer: 808-449-3810. Road: 69,920 SM = 752,613 SF. Fence: 3,865 M = 12,680 ft. Electrical Distribution Line: 1,562 M = 16,813 ft.

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

DD FORM 1391, DEC 99 Previous editions are obsolete. Page No.

1. COMPONENT	FY 2021 MILITARY CONSTRUCTION PROJECT DATA	2. DATE
AIR FORCE	(computer generated)	February 2020

3. INSTALLATION AND LOCATION	4. PROJECT TITLE
TINIAN INTERNATIONAL AIRPORT NORTHERN MARIANA ISLANDS	AIRFIELD DEVELOPMENT PHASE 1, INC 2

5. PROGRAM ELEMENT	6. CATEGORY CODE	7. PROJECT NUMBER	8. PROJECT COST ($000)
91211F	851-147	PAF189021	AUTH: 0 APP: 20,000

12. SUPPLEMENTAL DATA:

a. Estimated Design Data:

(1) Status:	
(a) Type of Design	Design-Bid-Build
(b) Date Design Started	01-JUN-18
(c) Parametric Cost Estimates used to develop costs	YES
* (d) Percent Complete as of 01 JAN 2019	15%
* (e) Date 35% Designed	15-MAR-19
(f) Date Design Complete	02-SEP-19
(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 -	
(3) Total Cost (c) = (a) + (b) or (d) + (e):	($000)
(a) Production of Plans and Specifications	6,540
(b) All Other Design Costs	3,270
(c) Total	9,810
(d) Contract	8,175
(e) In-house	1,635
(4) Construction Contract Award	21 JAN
(5) Construction Start	21 MAR
(6) Construction Completion	23 MAY

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

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

FY ($M)	Authorization Requested	Authorization of Appropriations	Appropriation
2020	109	10	25
2021	0	0	0
2022	0	0	0

DD FORM 1391, DEC 99 Previous editions are obsolete. Page No.

Project: Airfield Development Phase 1, Inc 2; CNMI Tinian

Project Spending Plan
As of: 14-Jan-20
All Cost in thousands ($000)

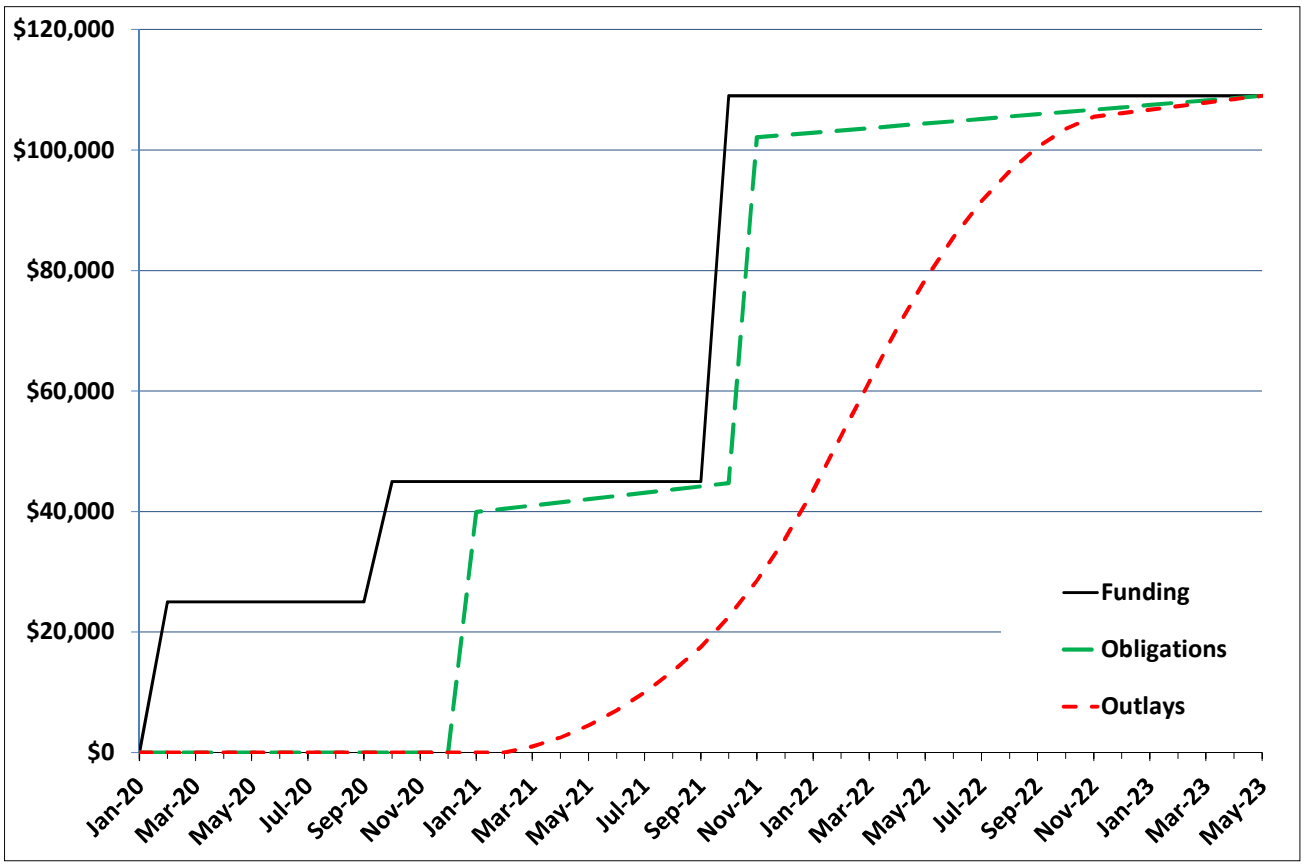
Chart Begin Jan-20	FUNDING (note 1)		OBLIGATION (note 2)		OUTLAYS (note 3)	
Month	**Enacted**	**Cumulative**	**Obligated**	**Cumulative**	**Monthly**	**Cumulative**
Jan-20	-	-	-	-	-	-
Feb-20	25,000	25,000	-	-	-	-
Mar-20	-	25,000	-	-	-	-
Apr-20	-	25,000	-	-	-	-
May-20	-	25,000	-	-	-	-
Jun-20	-	25,000	-	-	-	-
Jul-20	-	25,000	-	-	-	-
Aug-20	-	25,000	-	-	-	-
Sep-20	-	25,000	-	-	-	-
Oct-20	20,000	45,000	-	-	-	-
Nov-20	-	45,000	-	-	-	-
Dec-20	-	45,000	-	-	-	-
Jan-21	-	45,000	39,960	39,960	-	-
Feb-21	-	45,000	531	40,491	-	-
Mar-21	-	45,000	531	41,022	1,000	1,000
Apr-21	-	45,000	531	41,553	1,500	2,500
May-21	-	45,000	531	42,084	2,000	4,500
Jun-21	-	45,000	531	42,615	2,500	7,000
Jul-21	-	45,000	531	43,146	3,000	10,000
Aug-21	-	45,000	531	43,677	3,500	13,500
Sep-21	-	45,000	531	44,208	4,000	17,500
Oct-21	64,000	109,000	531	44,739	5,000	22,500
Nov-21	-	109,000	57,363	102,102	6,000	28,500
Dec-21	-	109,000	383	102,485	7,000	35,500
Jan-22	-	109,000	383	102,868	8,000	43,500
Feb-22	-	109,000	383	103,251	9,000	52,500
Mar-22	-	109,000	383	103,634	9,000	61,500
Apr-22	-	109,000	383	104,017	9,000	70,500
May-22	-	109,000	383	104,400	8,000	78,500
Jun-22	-	109,000	383	104,783	7,000	85,500
Jul-22		109,000	383	105,166	6,000	91,500
Aug-22	-	109,000	383	105,549	5,000	96,500
Sep-22	-	109,000	383	105,932	4,000	100,500
Oct-22	-	109,000	383	106,315	3,000	103,500
Nov-22	-	109,000	383	106,698	2,000	105,500
Dec-22	-	109,000	383	107,081	585	106,085
Jan-23	-	109,000	383	107,464	583	106,668
Feb-23	-	109,000	383	107,847	583	107,251
Mar-23	-	109,000	383	108,230	583	107,834
Apr-23	-	109,000	383	108,613	583	108,417
May-23	-	109,000	383	108,996	583	109,000

Note 1: Assumes initial appropriation is enacted by Congress January of the program year. The appropriation of follow-on increments is anticipated in subsequent Octobers.

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

Note 3: Assumes contract award date of Jan 2021, Contract completion: May 2023, Duration 30 months

Airfield Development Phase 1, Inc 2; CNMI Tinian



1. COMPONENT AIR FORCE	FY 2021 MILITARY CONSTRUCTION PROJECT DATA (computer generated)	2. DATE February 2020

3. INSTALLATION, SITE AND LOCATION	4. PROJECT TITLE
TINIAN INTERNATIONAL AIRPORT NORTHERN MARIANA ISLANDS	PARKING APRON, INC 2

5. PROGRAM ELEMENT	6. CATEGORY CODE	7. RPSUID/PROJECT NUMBER	8. PROJECT COST ($000)
91211F	113-321	PAF189022	AUTH: 0 APP: 15,000

9. COST ESTIMATES

ITEM	U/M	QUANTITY	UNIT	COST ($000)
PRIMARY FACILITIES				64,981
APRON (113-321)	SM	152,411	270	(41,151)
TAXIWAY (112-211)	SM	39,783	270	(10,741)
SHOULDER, PAVED (116-642)	SM	37,726	55	(2,075)
HYDRANT FUELING SYSTEM (121-122)	OL	12	790,802	(9,490)
CYBERSECURITY OF FACILITY-REALTED CONTROL SYS	LS			(250)
SUSTAINABILITY AND ENERGY MEASURES (2.0%)	LS			(1,274)
SUPPORTING FACILITIES				23,285
UTILITIES	LS			(2,844)
SITE IMPROVEMENTS	LS			(13,142)
PAVEMENTS	LS			(1,017)
LIGHTING AND COMMUNICATIONS	LS			(1,844)
ENVIRONMENTAL MONITORING	LS			(150)
EXPLOSIVE SAFETY SUBMISSION COMPLIANCE	LS			(4,288)
SUBTOTAL				88,266
CONTINGENCY (5.0%)				4,413
TOTAL CONTRACT COST				92,679
SUPERVISION, INSPECTION AND OVERHEAD (6.2%)				5,746
TOTAL REQUEST				98,425
TOTAL REQUEST (ROUNDED)				98,000

10. Description of Proposed Construction: Construct an aircraft parking apron and taxiways, with associated shoulders, using established airfield concrete and hot mix asphalt standards. The parking apron will be sized for 12 KC-135/KC-46A aircraft and includes hydrant piping and related components to support 12 fuel valve pits. The taxiways are required to meet Department of Defense standards for ground control operations for large frame aircraft. The project includes all necessary supporting components for a complete and usable facility. Facilities must be able to withstand 190 mph winds for structural elements and will be designed to Seismic Zone 3 design criteria.

Air Conditioning: 0 Tons

11. Requirement: 152,411 SM Adequate: 0 SM Substandard: 0 SM

PROJECT : Parking Apron
REQUIREMENT: Construct facilities and infrastructure in the Commonwealth of the Northern Mariana Islands (CNMI) to support a combination of cargo, tanker, and similar aircraft and associated support personnel for divert operations, training exercises, humanitarian assistance, disaster relief, and operational support to Air Force missions.

DD FORM 1391, DEC 99 Previous editions are obsolete. Page No.

1. COMPONENT AIR FORCE	FY 2021 MILITARY CONSTRUCTION PROJECT DATA (computer generated)	2. DATE February 2020

3. INSTALLATION, SITE AND LOCATION	4. PROJECT TITLE
TINIAN INTERNATIONAL AIRPORT NORTHERN MARIANA ISLANDS	PARKING APRON, INC 2

5. PROGRAM ELEMENT	6. CATEGORY CODE	7. RPSUID/PROJECT NUMBER	8. PROJECT COST ($000)
91211F	113-321	PAF189022	AUTH: 0 APP: 15,000

This project will provide the aircraft parking apron (includes hydrant refueling) and taxiway system to access the commercial runway needs to comply with DoD/Unified Facilities Criteria, Federal Aviation Administration (FAA), and AF requirements. The purpose is to support and conduct current, emerging, and future USAF training activities, while ensuring the capability to meet mission requirements in the event that access to other western Pacific locations is limited or denied. The proposed action is needed because there is not an existing divert or contingency airfield on U.S. territory in the western Pacific that is designed and designated to provide strategic operational and exercise capabilities for U.S. forces when needed and humanitarian assistance and disaster relief in times of natural or man-made disasters. All construction projects must comply with FAA regulations including Orders and Advisory Circulars applicable to commercial airports. In addition, this project will comply with CNMI Public Law 06-45 building codes.

CURRENT SITUATION: A redundant airfield, with a required fuel depot and refueling capability/facilities for refueling aircraft that support multiple military activities/ missions does not exist in the CNMI.

IMPACT IF NOT PROVIDED: Without this apron and taxiway system, there is not adequate aircraft parking and in-ground re-fueling capability to conduct USAF refueling operation missions from the CNMI. CNMI's strategic location is vital to PACOM/PACAF emerging/future missions/activities for divert tanker aircraft to effectively respond to natural disaster/humanitarian relief efforts in the area.

ADDITIONAL: 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 from the Navy design agent. This project complies with the criteria/scope specified in Air Force Manual 32-1084, "Facility Requirements." Supporting Facility costs exceed 25% of the cost of Primary Facilities due to the extensive costs of site improvements and the associated Explosive Safety clearance requirements. This project does not fall within or partly within the 100-year flood plain. 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 UFC 1-200-02 is partially compliant or not applicable. This project will comply with DoD antiterrorism/force protection requirements per UFC 4-010-01. Base Civil Engineer: 808-449-3810. Apron: 152,411 SM = 1,640,538 SF; Taxiway: 39,783 SM = 428,221 SF; Shoulder: 37,726 SM = 406,079 SF

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 2021 MILITARY CONSTRUCTION PROJECT DATA (computer generated)	2.DATE February 2020

3. INSTALLATION AND LOCATION	4. PROJECT TITLE
TINIAN INTERNATIONAL AIRPORT NORTHERN MARIANA ISLANDS	PARKING APRON, INC 2

5. PROGRAM ELEMENT	6. CATEGORY CODE	7. PROJECT NUMBER	8. PROJECT COST ($000)
91211F	113-321	PAF189022	AUTH: 0 APP: 15,000

12. SUPPLEMENTAL DATA:

a. Estimated Design Data:

(1) Status:	
(a) Type of Design	Design-Bid-Build
(b) Date Design Started	01-JUN-18
(c) Parametric Cost Estimates used to develop costs	YES
* (d) Percent Complete as of 01 JAN 2019	15%
* (e) Date 35% Designed	15-MAR-19
(f) Date Design Complete	02-SEP-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 -	

(3) Total Cost (c) = (a) + (b) or (d) + (e):	($000)
(a) Production of Plans and Specifications	5,880
(b) All Other Design Costs	2,940
(c) Total	8,820
(d) Contract	7,350
(e) In-house	1,470
(4) Construction Contract Award	21 JAN
(5) Construction Start	21 MAR
(6) Construction Completion	23 MAY

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

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

FY ($M)	Authorization Requested	Authorization of Appropriations	Appropriation
2020	109	10	25
2021	0	0	0
2022	0	0	0

DD FORM 1391, DEC 99 Previous editions are obsolete. Page No.

Project: Parking Apron, Inc 2; CNMI Tinian

Project Spending Plan
As of: 14-Jan-20
All Cost in thousands ($000)

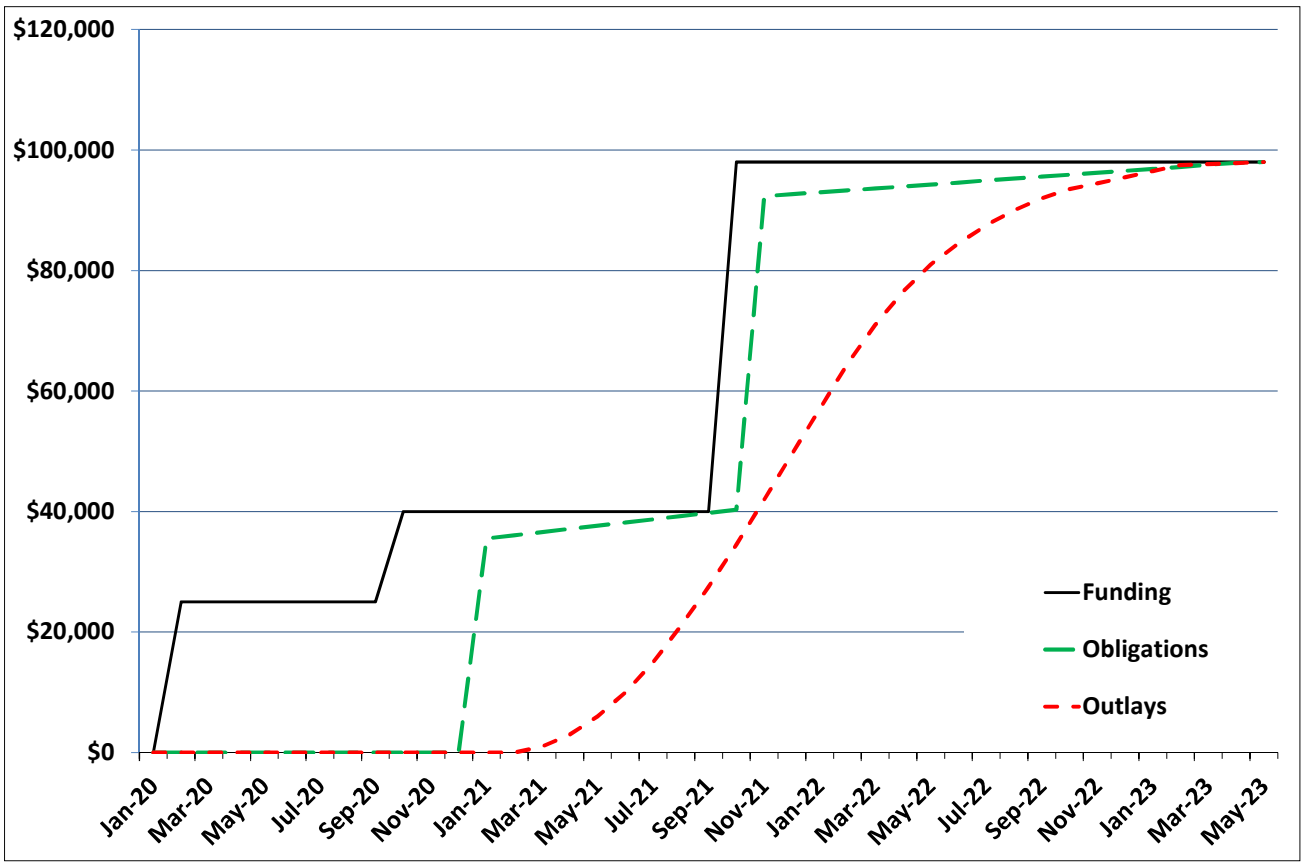
Chart Begin Jan-20	FUNDING (note 1)		OBLIGATION (note 2)		OUTLAYS (note 3)	
Month	**Enacted**	**Cumulative**	**Obligated**	**Cumulative**	**Monthly**	**Cumulative**
Jan-20	-	-	-	-	-	-
Feb-20	25,000	25,000	-	-	-	-
Mar-20	-	25,000	-	-	-	-
Apr-20	-	25,000	-	-	-	-
May-20	-	25,000	-	-	-	-
Jun-20	-	25,000	-	-	-	-
Jul-20	-	25,000	-	-	-	-
Aug-20	-	25,000	-	-	-	-
Sep-20	-	25,000	-	-	-	-
Oct-20	15,000	40,000	-	-	-	-
Nov-20	-	40,000	-	-	-	-
Dec-20	-	40,000	-	-	-	-
Jan-21	-	40,000	35,520	35,520	-	-
Feb-21	-	40,000	531	36,051	-	-
Mar-21	-	40,000	531	36,582	1,000	1,000
Apr-21	-	40,000	531	37,113	2,000	3,000
May-21	-	40,000	531	37,644	3,000	6,000
Jun-21	-	40,000	531	38,175	4,000	10,000
Jul-21	-	40,000	531	38,706	5,000	15,000
Aug-21	-	40,000	531	39,237	6,000	21,000
Sep-21	-	40,000	531	39,768	6,500	27,500
Oct-21	58,000	98,000	531	40,299	7,000	34,500
Nov-21	-	98,000	52,035	92,334	7,500	42,000
Dec-21	-	98,000	325	92,659	7,500	49,500
Jan-22	-	98,000	325	92,984	7,500	57,000
Feb-22	-	98,000	325	93,309	7,500	64,500
Mar-22	-	98,000	325	93,634	6,500	71,000
Apr-22	-	98,000	325	93,959	5,500	76,500
May-22	-	98,000	325	94,284	4,500	81,000
Jun-22	-	98,000	325	94,609	3,500	84,500
Jul-22		98,000	325	94,934	3,000	87,500
Aug-22	-	98,000	325	95,259	2,500	90,000
Sep-22	-	98,000	325	95,584	2,000	92,000
Oct-22	-	98,000	325	95,909	1,500	93,500
Nov-22	-	98,000	325	96,234	1,000	94,500
Dec-22	-	98,000	325	96,559	1,000	95,500
Jan-23	-	98,000	325	96,884	1,000	96,500
Feb-23	-	98,000	325	97,209	1,000	97,500
Mar-23	-	98,000	325	97,534	167	97,667
Apr-23	-	98,000	325	97,859	167	97,834
May-23	-	98,000	141	98,000	166	98,000

Note 1: Assumes initial appropriation is enacted by Congress January of the program year. The appropriation of follow-on increments is anticipated in subsequent Octobers.

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

Note 3: Assumes contract award date of Jan 2021, Contract completion: May 2023, Duration 30 months

Parking Apron, Inc 2; CNMI Tinian



1. COMPONENT	FY 2021 MILITARY CONSTRUCTION PROGRAM	2. DATE (YYYYMMDD)
AIR FORCE		February 2020

3. INSTALLATION AND LOCATION	4. COMMAND	5. AREA CONTRUCTION COST INDEX
AL UDEID AIR BASE, QATAR	AIR COMBAT COMMAND	1.17

6. PERSONNEL	(1) PERMANENT			(2) STUDENTS			(3) SUPPORTED			(4) TOTAL
	OFFICER	ENLISTED	CIVILIAN	OFFICER	ENLISTED	CIVILIAN	OFFICER	ENLISTED	CIVILIAN	
a. AS OF 30 SEP 19	45	42	0	0	0	0	134	6,434	350	7,005
b. END FY	45	42	0	0	0	0	134	6,434	350	7,005

7. INVENTORY DATA ($000)	
a. TOTAL ACREAGE	13,534
b. INVENTORY TOTAL AS OF 30 SEP 19	1,594,298.00
c. AUTHORIZATION NOT YET IN INVENTORY	85,400.00
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	0.00
h. GRAND TOTAL	1,705,698.00

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
452258	Cargo Marshalling Yard	3,245 SM	26,000	01/19	10/19

9. FUTURE PROJECTS

10. MISSION OR MAJOR FUNCTIONS

The 379th Air Expeditionary Wing is the largest, most diverse expeditionary wing the Air Force, providing combat air power and support for Operations Inherent Resolve and Freedom's Sentinel. The wing and associate units operate more than 100 aircraft, making the base a large hub for humanitarian airlift activity while providing mission essential combat power, aero-medical evacuation, airlift, air refueling, and intelligence gathering for multiple theaters of operations.

11. OUTSTANDING POLLUTION AND SAFETY DEFICIENCIES

a. Air Pollution 0
b. Water Pollution 0
c. Occupational Safety and Health 0
d. Other Environmental 0
OUTSTANDING DEFICIENCIES TOTAL: 0

1. COMPONENT	FY 2021 MILITARY CONSTRUCTION PROJECT DATA	2. DATE
AIR FORCE	(computer generated)	February 2020

3. INSTALLATION, SITE AND LOCATION	4. PROJECT TITLE
AL UDEID AB QATAR	CARGO MARSHALLING YARD

5. PROGRAM ELEMENT	6. CATEGORY CODE	7. RPSUID/PROJECT NUMBER	8. PROJECT COST ($000)
91211F	141-782	/ALUA083030	26,000

9. COST ESTIMATES

ITEM	U/M	QUANTITY	UNIT	COST ($000)
PRIMARY FACILITIES				16,819
TERMIMAL, AIR FREIGHT (141-782)	SM	3,245	3,598	(11,676)
OPEN STORE, AIR/SURFACE FREIGHT MGT (452-258)	SM	40,796	96	(3,916)
AIR MOBILITY CONTROL CENTER (141-461)	SM	150	6,513	(977)
CYBERSECURITY OF FACILITY CONTROLS SYS	LS			(250)
SUPPORTING FACILITIES				6,271
UTILITIES	LS			(3,500)
COMMUNICATIONS SUPPORT	LS			(500)
SITE IMPROVEMENTS	LS			(1,327)
DEMOLITION	SM	2,843	100	(284)
BACKUP GENERATOR	KW	250	2	(500)
PHASE I ACCESS ROAD	LS			(160)
SUBTOTAL				23,090
CONTINGENCY (5.0%)				1,155
TOTAL CONTRACT COST				24,245
SUPERVISION, INSPECTION AND OVERHEAD (6.5%)				1,576
TOTAL REQUEST				25,821
TOTAL REQUEST (ROUNDED)				26,000
EQUIPMENT FROM OTHER APPROPRIATIONS (NON-ADD)				(949)

10. Description of Proposed Construction: Construct an air freight terminal with air mobility control center that provides space for the personnel and functions that comprise command and control operations, maintenance operations center, and air terminal operations center along with a cargo marshaling yard that includes a material handling equipment parking area. The terminal will be constructed with reinforced concrete foundation, concrete floor slab, structural steel frame, concrete masonry unit (CMU) walls with standing metal seam roof. The facility will include fire suppression systems, all utilities, pavements, communications, site improvements, backup generator (per AFM 10-207 3-33), and associated support facilities to provide a complete and useable facility. Project scope includes electrical work in the adjacent C-17 Aircraft Maintenance Unit and Entry Control Point facilities to enable connection of those facilities to British Standard power when the existing temporary U.S. standard power from the cargo marshalling yard is disconnected. The cargo yard and parking area will consist of concrete and asphalt with unpaved shoulders, area light system, pavement markings, and security fence. The yard will include a vehicle wash area with oil/water separator, area for latrine service discharge, and diesel refueling pump to include a 2,000 gallon above ground tank. Project shall demolish buildings 3925(390 SM), 3972 (306 SM), 3976 (1145 SM), and 3979 (1002 SM) (total: 2843 SM).

1. COMPONENT AIR FORCE	FY 2021 MILITARY CONSTRUCTION PROJECT DATA (computer generated)	2. DATE February 2020

3. INSTALLATION, SITE AND LOCATION	4. PROJECT TITLE
AL UDEID AB QATAR	CARGO MARSHALLING YARD

5. PROGRAM ELEMENT	6. CATEGORY CODE	7. RPSUID/PROJECT NUMBER	8. PROJECT COST ($000)
91211F	141-782	/ALUA083030	26,000

This project will comply with Department of Defense antiterrorism/force protection requirements per Unified Facility Criteria 4-010-01.

Air Conditioning: 125 Tons

11. Requirement: 3245 **SM Adequate: 0 SM Substandard: 2843 SM**

PROJECT: Cargo Marshalling Yard and Air Freight Terminal

REQUIREMENT:An immediate requirement exists to construct a new cargo marshaling yard capable of supporting at least ten 60K loaders, three 25K all-terrain forklifts, three 10K forklifts, five 6K forklifts, and movement of all pallets and containers passing through Al Udeid Air Base. Additionally, the construction of an air freight terminal is required to allow personnel to process cargo inside of a climate-controlled environment. Construction of a new Material Handling Equipment parking area to support all equipment including passenger buses, stair case trucks, baggage conveyors, lavatory servicing vehicles, and bobtail trucks is a requirement for this project. Construction of a diesel refueling pump station is also required.

CURRENT SITUATION: Al Udeid Air Base serves as the key hub for Joint/Coalition personnel and cargo traveling into and out of the United States Central Command Area of Responsibility. Cargo is currently moved and stored in an unimproved cargo yard, but limited paved areas is used for cargo buildup and material handling equipment storage. The lack of an enclosed facility, in the extreme summer heat, slows personnel operations and limits the amount of cargo that can be processed during the day light hours. During times of heavy precipitation the ground can become very muddy, making it difficult or impossible to move vital cargo into and out of the area. Uneven dirt areas put the cargo and personnel working with and around the cargo at risk of serious accidents along with increasing the Foreign Object Damage potential for aircraft. This facility and the equipment it services are in direct support of all branches of the Department of Defense. The facilities that comprise the Cargo Marshalling Yard are not connected to a permanent power source. There are no existing substations, connections or tie points for permanent power in this site. These facilities are connected to and are powered by the installations' contingency power plant and transformer. There is no treatment area for a sanitary lift station. Sewage is collected in tanks that are manually pumped into the larger collection system. There is an additional need for storm water retention (retention pond) to ensure sufficient capacity for rain events. There is insufficient (potable) water in the site which is needed for required emergency showering stations and eyewash stations.

IMPACT IF NOT PROVIDED:If this project is not completed, cargo operations will remain inefficient until a properly sized paved marshalling yard and cargo reception facility can be built. All of the cargo and equipment entering and leaving Al Udeid Air Base by air required for operations will continue to worsen due to inadequate maintenance facilities and undue exposure to the harsh desert

1. COMPONENT AIR FORCE	FY 2021 MILITARY CONSTRUCTION PROJECT DATA (computer generated)	2. DATE February 2020
3. INSTALLATION, SITE AND LOCATION AL UDEID AB QATAR	4. PROJECT TITLE CARGO MARSHALLING YARD	

5. PROGRAM ELEMENT	6. CATEGORY CODE	7. RPSUID/PROJECT NUMBER	8. PROJECT COST ($000)
91211F	141-782	/ALUA083030	26,000

environment. This can affect mission operations with delays due to aged facilities and equipment. Reduced cargo operations at this base will have a direct impact on the delivery of mission critical equipment and supplies to air drops and delivery to forward operation locations manned by all branches of the armed forces. Cargo will continue to be stored on uneven and unfinished surfaces, thereby putting personnel and cargo needed for joint operations at risk. The lack of permanent waterline infrastructure in the project sites vicinity will prevent connection to a water source capable of transmitting water for refrigeration and ice production required for medical related or other temperature sensitive cargo. The lack of permanent water and waterline infrastructure also increases the risk of an inability to meet mandatory fire suppression requirements and assure safe egress which require increased water and water flow to mitigate fire events.

ADDITIONAL: This project **meets the criteria/scope in Air Force Manual 32-1084, "Facility Requirements". This design shall conform to the criteria established in the Air Force Corporate Facility Standards, but will not employ a standard facility design due to unique aerial port of embarkation and the aerial port of debarkation requirements in accordance with Air Mobility Command Terminal Facility Design standards. A preliminary analysis of reasonable alternatives was accomplished comparing status quo, renovation, and new construction. The analysis indicated that new construction is the most cost effective means to meet mission requirements. A formal economic analysis is complete. This project is not within an established host nation agreement for cost sharing (the Implementing Agreement signed in November 2002) between the United States Government and the Government of Qatar which did not cover construction of this requirement. This project does not fall within or partly within the 100-year flood plain. The supporting facility cost exceeds 25% due to the lack of existing primary electrical distribution, water/sanitary sewer lines and communication infrastructure exists in the proximity of this project. As a result, this project must construct permanent utility infrastructure as part of the 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 1-200-01. 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 Representative 803-717- 7055
Cargo Marshaling Yard; 40,796 SM = 439,124 SF; Air Freight Terminal Cargo Reception Facility: 3,245 SM = 34,929 SF; A7P Civil Engineer Manager; 803-717-7055.

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 to support joint operations at Al Udeid.

Foreign Currency Exchange Rate: $1 = 3.63991 Qatari Rials

1. COMPONENT	FY 2021 MILITARY CONSTRUCTION PROJECT DATA	2. DATE
AIR FORCE	(computer generated)	February 2020

3. INSTALLATION AND LOCATION	4. PROJECT TITLE
AL UDEID AB QATAR	CARGO MARSHALLING YARD

5. PROGRAM ELEMENT	6. CATEGORY CODE	7. PROJECT NUMBER	8. PROJECT COST ($000)
91211	141-782	/ALUA083030	26,000

12. SUPPLEMENTAL DATA:

a. Estimated Design Data:

(1) Status :

(a) Type of Design	Design Bid Build
(b) Date Design Started	09-JAN-19
(c) Parametric Cost Estimates used to develop costs	YES
* (c) Percent Complete as of 01 JAN 2020	15%
* (d) Date 35% Designed	04-JUN-19
(e) Date Design Complete	16-OCT-19
(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	1,440
(b) All Other Design Costs	720
(c) Total	2,160
(d) Contract	1,800
(e) In-house	360

(4) Construction Contract Award	21 FEB
(5) Construction Start	21 MAR
(6) Construction Completion	23 SEP

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

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

EQUIPMENT NOMENCLATURE	PROCURING APPROPRIATION	FISCAL YEAR APPROPRIATED OR REQUESTED	COST ($000)
FURNITURE, FIXTURES AND EQUIP	3400	22	449
COMMUNICATIONS	3400	22	500

Tab - **PLANNING AND DESIGN**

1. COMPONENT	FY 2021 MILITARY CONSTRUCTION PROJECT DATA	2. DATE
AIR FORCE	(computer generated)	February 2020

3. INSTALLATION, SITE AND LOCATION	4. PROJECT TITLE
WORLDWIDE UNSPECIFIED VARIOUS LOCATIONS	PLANNING AND DESIGN

5. PROGRAM ELEMENT	6. CATEGORY CODE	7. RPSUID/PROJECT NUMBER	8. PROJECT COST ($000)
91211F	961-000	PAYZ210001	296,532

9. COST ESTIMATES

ITEM	U/M	QUANTITY	UNIT	COST ($000)
PRIMARY FACILITIES				296,532
PLANNING AND DESIGN (91211F)	LS			(248,232)
PLANNING AND DESIGN (11233F)	LS			(11,200)
PLANNING AND DESIGN (27142F)	LS			(37,100)
SUPPORTING FACILITIES				0
SUBTOTAL				296,532
TOTAL CONTRACT COST				296,532
TOTAL REQUEST				296,532
TOTAL REQUEST (ROUNDED)				296,532

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 FY22 Military Construction Program, initiate design of facilities in the FY23 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 - **UNSPECIFIED MINOR CONSTRUCTION**

1. COMPONENT AIR FORCE	FY 2021 MILITARY CONSTRUCTION PROJECT DATA (computer generated)	2. DATE February 2020

3. INSTALLATION, SITE AND LOCATION	4. PROJECT TITLE
WORLDWIDE UNSPECIFIED VARIOUS LOCATIONS	UNSPECIFIED MINOR MILITARY CONSTRUCTION

5. PROGRAM ELEMENT	6. CATEGORY CODE	7. RPSUID/PROJECT NUMBER	8. PROJECT COST ($000)
91211F	962-000	PAYZ210003	68,600

9. COST ESTIMATES

ITEM	U/M	QUANTITY	UNIT	COST ($000)
PRIMARY FACILITIES				68,600
MINOR MILITARY CONSTRUCTION (91211F)	LS			(49,951)
MINOR MILITARY CONSTRUCTION (41221F)	LS			(10,700)
MINOR MILITARY CONSTRUCTION (27229F)	LS			(4,049)
MINOR MILITARY CONSTRUCTION (84701F)	LS			(3,900)
SUPPORTING FACILITIES				0
SUBTOTAL				68,600
TOTAL CONTRACT COST				68,600
TOTAL REQUEST				68,600

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 FY21. Included would be projects to support new mission requirements, new equipment, and other essential support to Air Force missions.

Tab - **EUROPEAN DETERRENCE INITIATIVE**

Department of the Air Force

European Deterrence Initiative Military Construction Program

Fiscal Year (FY) 2021 Budget Estimates

Justification Data Submitted to Congress February 2020

February 2020

DEPARTMENT OF THE AIR FORCE
OVERSEAS CONTINGENCY OPERATIONS
MILITARY CONSTRUCTION PROGRAM FISCAL YEAR 2021
TABLE OF CONTENTS

THIS PAGE INTENTIONALLY LEFT BLANK

DEPARTMENT OF THE AIR FORCE
OVERSEAS CONTINGENCY OPERATIONS
MILITARY CONSTRUCTION PROGRAM FISCAL YEAR 2021

PROGRAM SUMMARY

	Authorization Request ($000s)	Appropriation Request ($000s)
Military Construction		
Major Construction	**192,669**	**192,669**
Unspecified Minor Construction (10 USC 2805)	**-**	**16,400**
Planning and Design (10 USC 2807)	**-**	**54,800**
Total Military Construction	**192,669**	**263,869**

THIS PAGE INTENTIONALLY LEFT BLANK

DEPARTMENT OF THE AIR FORCE
MILITARY CONSTRUCTION PROGRAM FISCAL YEAR 2021
INDEX - OVERSEAS CONTINGENCY OPERATIONS
(DOLLARS IN THOUSANDS)

COUNTRY	INSTALLATION	PROJECT	AUTHORIZATION REQUEST	APPROPRIATION REQUEST
GERMANY	Ramstein	EDI: Rapid Airfield Damage Repair Storage	36,345	36,345
		Ramstein TOTAL:	36,345	36,345
	Spangdahlem	EDI: Rapid Airfield Damage Repair Storage	25,824	25,824
		Spangdahlem TOTAL:	25,824	25,824
		GERMANY TOTAL:	62,169	62,169
ROMANIA	Campia Turzii	EDI: Dangerous Cargo Pad	11,000	11,000
		EDI: DABS-FEV Storage Complex	68,000	68,000
		EDI: Parking Apron	19,500	19,500
		EDI: POL Increase Capacity	32,000	32,000
		Campia Turzii TOTAL:	130,500	130,500
		ROMANIA TOTAL:	130,500	130,500
EDI WORLDWIDE UNSPECIFIED	Various Locations	EDI: Planning & Design	-	54,800
		EDI: Unspecified Minor Military Construction	-	16,400
		EDI WORLDWIDE UNSPECIFIED TOTAL:	-	71,200
		EDI TOTAL:	192,669	263,869

Tab - **EDI PROJECTS**

1. COMPONENT	FY 2021 MILITARY CONSTRUCTION PROGRAM	2. DATE (YYYYMMDD)
AIR FORCE		February 2020

3. INSTALLATION AND LOCATION	4. COMMAND	5. AREA CONTRUCTION COST INDEX
RAMSTEIN AIR BASE, GERMANY	UNITED STATES AIR FORCES IN EUROPE	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-19	976	5,006	1,851	0	0	0	137	1,096	200	9,266
b. END FY	965	4,961	1,828	0	0	0	139	1,152	200	9,245

7. INVENTORY DATA ($000)	
a. TOTAL ACREAGE	1,024
b. INVENTORY TOTAL AS OF 30-Sep-19	6,519,546.00
c. AUTHORIZATION NOT YET IN INVENTORY	132,437.00
d. AUTHORIZATION REQUESTED IN THIS PROGRAM	36,345.00
e. AUTHORIZATION INCLUDED IN FOLLOWING PROGRAM	0.00
f. PLANNED IN NEXT THREE PROGRAM YEARS	141,300.00
g. REMAINING DEFICIENCY	167,200.00
h. GRAND TOTAL	6,996,828.00

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:Rapid Airfield Damage Repair Storage	7,880 SM	36,345	03/19	09/20

9. FUTURE PROJECTS

211-159	EIC-Two Bay Tanker Aircraft Hangar	16,538 SM	50,600
113-321	EIC-Expand Ramp 1/Provide Hydrant Fuel Sys	41,955 SM	51,700
171-475	35 Point Indoor Firing Range	2,436 SM	23,000
442-758	EDI: Aeromedical Staging Compound	15,552 SM	16,000

10. MISSION OR MAJOR FUNCTIONS

Home of the 86th Airlift Wing, Headquarters US Air Forces in Europe, 3rd Air Force, 17th Air Force, as well as the North Atlantic Treaty Organization Headquarters Air North. Ramstein AB is the central airlift hub for strategic and tactical airlift within the European theater. The wing's mission is the operation and maintenance of airlift assets composed of C-130s for tactical airlift, a C-40, C-20s & C-21s for DV airlift throughout Europe, Africa, and the Middle East.

11. OUTSTANDING POLLUTION AND SAFETY DEFICIENCIES

a. Air Pollution 0
b. Water Pollution 0
c. Occupational Safety and Health 0
d. Other Environmental 0
OUTSTANDING DEFICIENCIES TOTAL: 0

1. COMPONENT	FY 2021 MILITARY CONSTRUCTION PROJECT DATA	2. DATE
AIR FORCE		February 2020

3. INSTALLATION AND LOCATION	4. PROJECT TITLE:
RAMSTEIN AIR BASE, GERMANY	EDI: RAPID AIRFIELD DAMAGE REPAIR STORAGE

5. PROGRAM ELEMENT	6. CATEGORY CODE	7. PROJECT NUMBER	8. PROJECT COST ($000)
91211F	442-758	TYFR203027	36,345

9. COST ESTIMATES

ITEM	U/M	QTY	UNIT COST	COST ($000)
PRIMARY FACILITIES				**27,263**
WAREHOUSE SUPPLY AND EQUIPMENT BASE (442-758)	SM	7,880	3,312	(26,098)
PAD, EQUIPMENT OR SUPPORT (132-133)	SM	2,353	218	(513)
CYBERSECURITY OF FAC-RELATED CONTROL SYS (2.5%)	LS			(652)
SUPPORTING FACILITIES				**5,239**
UTILITIES	LS			(1,407)
SITE IMPROVEMENTS	LS			(1,100)
PAVEMENTS	LS			(1,725)
SITE PREPARATION	LS			(400)
ENVIRONMENTAL MITIGATION	LS			(240)
DEMOLITION	SM	981	374	(367)
SUBTOTAL				**32,502**
CONTINGENCY (5%)				1,625
TOTAL CONTRACT COST				**34,127**
SUPERVISION, INSPECTION AND OVERHEAD (6.5%)				2,218
TOTAL REQUEST				**36,345**
TOTAL REQUEST (ROUNDED)				**36,345**
EQUIPMENT FROM OTHER APPROPRIATIONS (NON-ADD)				(3,900)

10. DESCRIPTION OF PROPOSED CONSTRUCTION:

Construct a Rapid Airfield Damage Repair Storage Facility of structural metal frame, metal panel walls and roof, and concrete foundation; exterior concrete pad for International Standard Organization storage container storage; and relocated Bird/Wildlife Airfield Strike Hazard Falconry Facility of masonry walls, concrete foundations and roof tiles. The storage facility includes overvoltage protection, exterior site lighting oil water separators and fire suppression system. Supporting facilities include utility connections for electric, site lighting, water, communications, lightning protection system, and storm water; site improvements for earthwork, paving for access road, site circulation and sidewalk, and landscaping; site preparation and demolition for site clearing; demolition of pavement; environmental mitigation for erosion control, asbestos containing material and lead based paint removal and abatement from Building 2225. This project will demolish Building 2194 (93 Square Meters) and Building 2225 (888 Square Meters) (Total Demolition: 981 Square Meters). Facilities will be designed as permanent construction in accordance with the Unified Facilities Criteria (UFC) 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.
Air Conditioning: 0 Tons

1. COMPONENT	FY 2021 MILITARY CONSTRUCTION PROJECT DATA		2. DATE
AIR FORCE			February 2020
3. INSTALLATION AND LOCATION		4. PROJECT TITLE:	
RAMSTEIN AIR BASE, GERMANY		EDI: RAPID AIRFIELD DAMAGE REPAIR STORAGE	
5. PROGRAM ELEMENT	6. CATEGORY CODE	7. PROJECT NUMBER	8. PROJECT COST ($000)
91211F	442-758	TYFR203027	36,345

11. REQUIREMENT: 7,880 SM ADEQUATE: 0 SUBSTANDARD: 181 SM

PROJECT: EDI: RAPID AIRFIELD DAMAGE REPAIR STORAGE

REQUIREMENT: Supports the European Deterrence Initiative (EDI), 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 operations is infrastructure at key locations to support military activities. To support this initiative, Ramstein Air Base requires a Rapid Airfield Damage Repair Storage Facility to provide rapid airfield damage repair. Rapid Airfield Damage Repair materiel and equipment are deployed to conduct repairs and have the airfield operational within two hours of an event.

CURRENT SITUATION: Existing storage and maintenance facilities are not adequate to support the addition of the Rapid Airfield Damage Repair mission requirements. The Rapid Airfield Damage Repair mission requirement is currently unmet.

IMPACT IF NOT PROVIDED: If this project is not provided, Ramstein Air Base will not have readily available materiel and vehicles to conduct necessary expedient airfield damage repair in an operational environment. The lack of properly sized and configured humidity-controlled, heated and ventilated vehicle storage spaces and pavement for International Standard Organization container storage will force United States Air Forces Europe to make use of available open storage areas for vehicles and materiel that will not protect these valuable assets from climatic conditions. Assets are also unlikely to be stored in a consolidated area due to limited space availability, which will limit the maintenance and training capacity of the Rapid Airfield Damage Repair mission. Exposure to excessive moisture will degrade and potentially damage the Rapid Airfield Damage Repair materiel and vehicles. Consequent urgent repairs to restore the materiel and vehicles to the operability standards will cause a high risk of failing to meet the mission.

ADDITIONAL: 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, 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 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 (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. A preliminary 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 complete economic analysis was not performed. A waiver has been completed and is currently being staffed for review and approval. The Unified Facility Criteria 4-701-01, Department of Defense Pricing Guide, Parametric Cost Estimating System and Means were used to develop the estimate for this project.

1. COMPONENT	FY 2021 MILITARY CONSTRUCTION PROJECT DATA		2. DATE
AIR FORCE			February 2020
3. INSTALLATION AND LOCATION		4. PROJECT TITLE:	
RAMSTEIN AIR BASE, GERMANY		EDI: RAPID AIRFIELD DAMAGE REPAIR STORAGE	
5. PROGRAM ELEMENT	6. CATEGORY CODE	7. PROJECT NUMBER	8. PROJECT COST ($000)
91211F	442-758	TYFR203027	36,345

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 does not fall within or partly within the 100-year flood plain.

Warehouse Supply and Equipment Base: 7,880 Square Meters = 84,820 Square Feet
Pad, Equipment Or Support: 2,353 Square Meters = 25,328 Square Feet

Demolition:
Building 2194: 93 Square Meters = 1,001 Square Feet
Building 2225: 888 Square Meters = 9,558 Square Feet
Total Demolition: 981 Square Meters = 10,560 Square Feet

CURRENCY CONVERSION: Foreign Currency Fluctuation Budget Rate Used: EURO 0.8978
Base Civil Engineer: +49 6371-47-6773.

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 United States Air Force requirements.

1. COMPONENT	FY 2021 MILITARY CONSTRUCTION PROJECT DATA		2. DATE
AIR FORCE			February 2020
3. INSTALLATION AND LOCATION		4. PROJECT TITLE:	
RAMSTEIN AIR BASE, GERMANY		EDI: RAPID AIRFIELD DAMAGE REPAIR STORAGE	
5. PROGRAM ELEMENT	6. CATEGORY CODE	7. PROJECT NUMBER	8. PROJECT COST ($000)
91211F	442-758	TYFR203027	36,345

12. SUPPLEMENTAL DATA:

a. Estimated Design Data:

(1) Status:	
(a) Type of Design	Design-Bid-Build
(b) Date Design Started	15-MAR-19
* (c) Parametric Cost Estimates used to develop costs	YES
* (d) Percent Complete as of 01-JAN-2020	15%
(e) Date 35% Designed	01-JAN-20
(f) Date Design Complete	30-SEP-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 –	NA
(3) Total Cost (c) = (a) + (b) or (d) + (e):	($000)
(a) Production of Plans and Specifications	2,280
(b) All Other Design Costs	1,140
(c) Total (a+b)	3,420
(d) Contract	2,850
(e) In-house	570
(4) Construction Contract Award	21-FEB
(5) Construction Start	21-APR
(6) Construction Completion	23-JUN

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

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

EQUIPMENT NOMENCLATURE	PROCURING APPROP	FISCAL YEAR APPROPRIATED OR REQUESTED	COST ($000)
Movable Equipment	3400	2023	109
Multi-Tier Shelving	3080	2023	3,693
Furniture and IT Equipment RADR	3400	2023	67
Furniture and IT Equipment FALCONR	3400	2023	17
Falconry Equipment	3400	2023	14

1. COMPONENT	FY 2021 MILITARY CONSTRUCTION PROGRAM	2. DATE (YYYYMMDD)
AIR FORCE		February 2020

3. INSTALLATION AND LOCATION	4. COMMAND	5. AREA CONTRUCTION COST INDEX
SPANGDAHLEM AIR BASE, GERMANY	UNITED STATES AIR FORCES EUROPE	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-19	226	2,515	740	0	0	0	0	0	5,207	8,688
b. END FY	226	2,515	740	0	0	0	0	0	6,200	9,681

7. INVENTORY DATA ($000)	
a. TOTAL ACREAGE	1,654
b. INVENTORY TOTAL AS OF 30-Sep-19	2,392,398.00
c. AUTHORIZATION NOT YET IN INVENTORY	116,169.00
d. AUTHORIZATION REQUESTED IN THIS PROGRAM	25,824.00
e. AUTHORIZATION INCLUDED IN FOLLOWING PROGRAM	0.00
f. PLANNED IN NEXT THREE PROGRAM YEARS	417,400.00
g. REMAINING DEFICIENCY	71,050.00
h. GRAND TOTAL	3,022,841.00

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:RAPID AIRFIELD DAMAGE REPAIR STORAGE	4,992 SM	25,824	03/19	09/20

9. FUTURE PROJECTS

141-753 EIC - ADAL Spec Tactics Sqd Fac	(11,287 SM/$31,000);	141-461 EIC - B137 Addition for 352 SOW HQ	(1,966 SM/ $5,400)
141-753 EIC - Special Ops Sup Sq Fac	(7,282 SM/$20,000);	171-212 EIC - MC-130J/CV-22 Sim Fac	(2,847 SM/$12,000)
141-753 EIC - MC-130J/CV-22 Sq OPS Bldg	(8,738 SM/$24,000);	113-321 EIC - MC-130J/CV-22 Airfield Pvmt	(18,357 SM/$26,000)
211-159 EIC - Two-Bay Maint Sup Hangar	(8,240 SM/$39,000);	211-111 EIC - MC-130J Two Bay Hangar/AMU	(16,414 SM/$50,000)
211-154 EIC - CV-22 Three Bay Hangar/AMU	(22,623 SM/$44,000);	211-111 RECAP AIRCRAFT HANGAR	(14,773 SM/$45,000)
442-758 EDI: DABS-FEV	(54,432 SM/$56,000);	422-264 EDI: Munitions Storage Area	(12,105 SM/$65,000)

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

a. Air Pollution 0
b. Water Pollution 0
c. Occupational Safety and Health 0
d. Other Environmental 0
OUTSTANDING DEFICIENCIES TOTAL: 0

1. COMPONENT	FY 2021 MILITARY CONSTRUCTION PROJECT DATA	2. DATE
AIR FORCE		February 2020

3. INSTALLATION AND LOCATION	4. PROJECT TITLE:
SPANGDAHLEM AIR BASE, GERMANY	EDI: RAPID AIRFIELD DAMAGE REPAIR STORAGE

5. PROGRAM ELEMENT	6. CATEGORY CODE	7. PROJECT NUMBER	8. PROJECT COST ($000)
91211F	442-758	VYHK213002	25,824

9. COST ESTIMATES

ITEM	U/M	QTY	UNIT COST	COST ($000)
PRIMARY FACILITIES				**16,672**
WAREHOUSE SUPPLY AND EQUIPMENT BASE (442-758)	SM	4,992	3,176	(15,852)
PAD, EQUIPMENT OR SUPPORT (132-133)	SM	1,985	208	(413)
CYBERSECURITY OF FAC-RELATED CONTL SYS (2.5%)	LS			(407)
SUPPORTING FACILITIES				**6,421**
UTILITIES	LS			(1,365)
PAVEMENTS	LS			(1,564)
SITE IMPROVEMENTS	LS			(3,467)
ENVIRONMENTAL MITIGATION	LS			(25)
SUBTOTAL				**23,093**
CONTINGENCY (5%)				1,155
TOTAL CONTRACT COST				**24,248**
SUPERVISION, INSPECTION AND OVERHEAD (6.5%)				1,576
TOTAL REQUEST				**25,824**
TOTAL REQUEST (ROUNDED)				**25,824**
EQUIPMENT FROM OTHER APPROPRIATIONS (NON-ADD)				(2,400)

10. DESCRIPTION OF PROPOSED CONSTRUCTION:

Construct a Rapid Airfield Damage Repair Storage Facility of structural metal frame, metal panel walls and roof, and concrete foundation, exterior concrete pad for International Standard for Organization container storage and an airfield access roadway. The storage facility includes, overvoltage protection, fire suppression system, and oil/water separators. Supporting facilities include utility connections for electric, site lighting, water, communications, lightning protection system, and stormwater collection and retention basin; site improvements for earthwork, paving for site and airfield access roads, and landscaping; site preparation and demolition of existing pavement and utilities; and environmental mitigation for erosion control and soil testing. Facilities will be designed as permanent construction in accordance with the Unified Facilities Criteria (UFC) 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.
Air Conditioning: 0 Tons

1. COMPONENT	FY 2021 MILITARY CONSTRUCTION PROJECT DATA		2. DATE
AIR FORCE			February 2020
3. INSTALLATION AND LOCATION		4. PROJECT TITLE:	
SPANGDAHLEM AIR BASE, GERMANY		EDI: RAPID AIRFIELD DAMAGE REPAIR STORAGE	
5. PROGRAM ELEMENT	6. CATEGORY CODE	7. PROJECT NUMBER	8. PROJECT COST ($000)
91211F	442-758	VYHK213002	25,824

11. REQUIREMENT: 4,992 SM ADEQUATE: 0 SM SUBSTANDARD: 0 SM

PROJECT: EDI: RAPID AIRFIELD DAMAGE REPAIR STORAGE

REQUIREMENT: This project is in support of the European Deterrence Initiative (EDI), 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 contingency operations is infrastructure at key locations to support military activities. To support this initiative, Spangdahlem Air Base requires a Medium Rapid Airfield Damage Repair Storage Facility to provide rapid airfield damage repair in the event of a contingency. Rapid Airfield Damage Repair materiel and equipment are deployed to conduct repairs and have the airfield operational within two hours of an event.

CURRENT SITUATION: Existing storage and maintenance facilities are not adequate to support the addition of the Rapid Airfield Damage Repair mission requirements. The Rapid Airfield Damage Repair mission requirement is currently unmet.

IMPACT IF NOT PROVIDED: If this project is not provided, Spangdahlem Air Base will not have readily available materiel and vehicles to conduct necessary expedient airfield damage repair. The lack of properly sized materiel and vehicle storage spaces and pavement for International Standard for Organization container storage will force United States Air Force Europe to make use of available open storage areas for vehicles and materiel that will not fully protect these valuable assets from climatic conditions. Assets are also unlikely to be stored in a consolidated area due to limited space availability, which will limit the maintenance and training capacity of the Rapid Airfield Damage Repair mission. Exposure to excessive moisture will degrade and potentially damage the Rapid Airfield Damage Repair materiel and vehicles. Consequent urgent repairs to restore the materiel and vehicles to the operability standards will cause a high risk of failing to meet the mission.

ADDITIONAL: 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, 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 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 (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. A preliminary 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 complete economic analysis was not performed. A waiver has been completed and is currently being staffed for review and approval. Supporting facility cost exceeds 25% of the primary facilities because the site requires significant utility connections, site improvements, and removal of existing pavement. The Unified Facility Criteria 4-701-01, Department of Defense Pricing Guide, Parametric Cost Estimating System and Means were used to develop the estimate for this project. This project does not fall within or partly within the 100-year flood plan. This project was included in the Fiscal Year 2020 future year defense plan.

1. COMPONENT	FY 2021 MILITARY CONSTRUCTION PROJECT DATA		2. DATE
AIR FORCE			February 2020
3. INSTALLATION AND LOCATION		4. PROJECT TITLE:	
SPANGDAHLEM AIR BASE, GERMANY		EDI: RAPID AIRFIELD DAMAGE REPAIR STORAGE	
5. PROGRAM ELEMENT	6. CATEGORY CODE	7. PROJECT NUMBER	8. PROJECT COST ($000)
91211F	442-758	VYHK213002	25,824

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.

Warehouse Supply and Equipment Base: 4,992 Square Meters = 53,733 Square Feet
Pad, Equipment or Support: 1,985 Square Meters = 21,366 Square Feet

FOREIGN CURRENCY: Foreign Currency Fluctuation Budget Rate Used: EURO 0.8978
Base Civil Engineer: 011-49-6565-61-6302

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 United States Air Force requirements.

1. COMPONENT	FY 2021 MILITARY CONSTRUCTION PROJECT DATA		2. DATE
AIR FORCE			February 2020
3. INSTALLATION AND LOCATION		4. PROJECT TITLE:	
SPANGDAHLEM AIR BASE, GERMANY		EDI: RAPID AIRFIELD DAMAGE REPAIR STORAGE	
5. PROGRAM ELEMENT	6. CATEGORY CODE	7. PROJECT NUMBER	8. PROJECT COST ($000)
91211F	442-758	VYHK213002	25,824

12. SUPPLEMENTAL DATA:

a. Estimated Design Data:

(1) Status:

(a) Type of Design	Design-Bid-Build
(b) Date Design Started	15-MAR-19
* (c) Parametric Cost Estimates used to develop costs	YES
* (d) Percent Complete as of 01-JAN-2020	15%
(e) Date 35% Designed	01-JAN-20
(f) Date Design Complete	30-SEP-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 –	NA

(3) Total Cost (c) = (a) + (b) or (d) + (e):

	($000)
(a) Production of Plans and Specifications (6%)	1,620
(b) All Other Design Costs (3%)	810
(c) Total (a+b)	2,430
(d) Contract (7.5%)	2,025
(e) In-house (1.5%)	405

(4) Construction Contract Award	21-SEP
(5) Construction Start	21-NOV
(6) Construction Completion	24-FEB

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

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

EQUIPMENT NOMENCLATURE	PROCURING APPROP	FISCAL YEAR APPROPRIATED OR REQUESTED	COST ($000)
Furniture, Fixtures and Equipment	3080	2023	2,400

1. COMPONENT	FY 2021 MILITARY CONSTRUCTION PROGRAM	2. DATE (YYYYMMDD)
AIR FORCE		February 2020

3. INSTALLATION AND LOCATION	4. COMMAND	5. AREA CONTRUCTION COST INDEX
CÂMPIA TURZII AIR BASE, ROMANIA	UNITED STATES AIR FORCES EUROPE	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-19	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-19	0.00
c. AUTHORIZATION NOT YET IN INVENTORY	0.00
d. AUTHORIZATION REQUESTED IN THIS PROGRAM	130,500.00
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	130,500.00

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	EDI:DANGEROUS CARGO PAD	7,710 SM	11,000	03/19	09/20
124-135	EDI:POL INCREASE CAPACITY	1,300,000 GA	32,000	05/19	10/20
442-758	EDI:DABS-FEV STORAGE COMPLEX	14,287 SM	68,000	03/19	09/20
113-321	EDI:PARKING APRON	42,350 SM	19,500	03/19	09/20

9. FUTURE PROJECTS

10. MISSION OR MAJOR FUNCTIONS

Campia Turzii Air Base is one of the primary sources for United States European Command and its Service Components' ability to respond to an evolving European security environment.

11. OUTSTANDING POLLUTION AND SAFETY DEFICIENCIES

a. Air Pollution 0
b. Water Pollution 0
c. Occupational Safety and Health 0
d. Other Environmental 0
OUTSTANDING DEFICIENCIES TOTAL: 0

1. COMPONENT	FY 2021 MILITARY CONSTRUCTION PROJECT DATA	2. DATE
AIR FORCE		February 2020

3. INSTALLATION AND LOCATION	4. PROJECT TITLE:
CÂMPIA TURZII AIR BASE, ROMANIA	EDI: DANGEROUS CARGO PAD

5. PROGRAM ELEMENT	6. CATEGORY CODE	7. PROJECT NUMBER	8. PROJECT COST ($000)
91211F	112-211	LRCT190001	11,000

9. COST ESTIMATES

ITEM	U/M	QTY	UNIT COST	COST ($000)
PRIMARY FACILITIES				**2,390**
SHOULDER, PAVED (116-642)	SM	10,780	40	(431)
PAD, DANGEROUS CARGO, LOAD/UNLOAD (116-662)	SM	8,100	120	(972)
TAXIWAY (112-211)	SM	7,710	128	(987)
SUPPORTING FACILITIES				**7,355**
UTILITIES	LS			(3,245)
PAVEMENTS	LS			(2,905)
SITE IMPROVEMENTS	LS			(1,205)
SUBTOTAL				**9,745**
CONTINGENCY (5%)				(487)
TOTAL CONTRACT COST				**10,232**
SUPERVISION, INSPECTION AND OVERHEAD (6.5%)				(665)
TOTAL REQUEST				**10,897**
TOTAL REQUEST (ROUNDED)				**11,000**
EQUIPMENT FROM OTHER APPROPRIATIONS (NON-ADD)				NA

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 by vehicle to the dangerous cargo pad. Work includes grubbing, leveling, compacting, paving, testing, tie-downs, grounding, signage, drainage, electrical, associated utilities, lighting, and pavement markings. Facilities will be designed as permanent construction in accordance with the Unified Facilities Criteria (UFC) 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.

Air Conditioning: 0 Tons

1. COMPONENT	FY 2021 MILITARY CONSTRUCTION PROJECT DATA		2. DATE
AIR FORCE			February 2020
3. INSTALLATION AND LOCATION		4. PROJECT TITLE:	
CÂMPIA TURZII AIR BASE, ROMANIA		EDI: DANGEROUS CARGO PAD	
5. PROGRAM ELEMENT	6. CATEGORY CODE	7. PROJECT NUMBER	8. PROJECT COST ($000)
91211F	112-211	LRCT190001	11,000

11. REQUIREMENT: 7,710 SM ADEQUATE: 0 SM SUBSTANDARD: 0 SM

PROJECT: EDI: DANGEROUS CARGO PAD

REQUIREMENT: This project is in support of the European Deterrence Initiative (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 training and contingency operations is infrastructure at key locations to support military activities. To support this operation, Câmpia Turzii Air Base requires an adequately sized Dangerous Cargo Pad. A paved area with tie-downs and mooring points is required for a fixed-wing aircraft to load and unload explosives and other dangerous cargo from aircraft. The dangerous cargo pad will be sited in accordance with Department of Defense 6055.9-Standard, Department of Defense Ammunition and Explosives Safety Standards; Air Force Instruction 91-201, Explosives Safety Standards; and Allied Ammunition Storage and Transport Publication-1 North Atlantic Treaty Organization Guidelines for the Storage of Military Ammunition and Explosives.

CURRENT SITUATION: A dedicated, properly sized, and located dangerous cargo pad capable of supporting one North Atlantic Treaty Organization equivalent strategic transport aircraft does not exist at Câmpia Turzii Air Base. Currently, Câmpia Turzii Air Base is not able to safely receive or ship munitions by air. As a result, the base cannot support the air mobility requirements for the assigned mission. The construction of the dangerous cargo pad is essential in order to protect personnel, aircraft and facilities from the damaging effects of explosions involving munitions and explosives.

IMPACT IF NOT PROVIDED: If the dangerous cargo pad is not provided, personnel, aircraft, and resources will continue to operate under considerable risk due to the inadequate areas for loading and unloading of dangerous cargo. Personnel are unnecessarily compromised and the potential for injury is substantial. Furthermore, this limitation will undermine airfield presence and impair airfield capability and readiness response. Responsiveness for bilateral and multilateral exercises and training missions will be compromised.

ADDITIONAL: 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 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 (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. The Unified Facility Criteria 4-701-01, Department of Defense Pricing Guide, Parametric Cost Estimating System and Means were used to develop the estimate for this project. The cost of the supporting facilities exceeds 25% of the primary facilities cost due to the remote location of the DCP as well as poor condition of infrastructure at Campia Turzii. Due to the explosive arc requirements, the DCP is required to be sited at the furthest point on the base from interrelated sites such as the MSA and fuels area. This necessitated approximately 4 miles of new roadway around the perimeter of the base to enable safe transportation of dangerous cargo to the MSA or fuels area. Additionally, all utilities have to be run considerable distances to the nearest tie-in point.

1. COMPONENT	FY 2021 MILITARY CONSTRUCTION PROJECT DATA		2. DATE
AIR FORCE			February 2020
3. INSTALLATION AND LOCATION		4. PROJECT TITLE:	
CÂMPIA TURZII AIR BASE, ROMANIA		EDI: DANGEROUS CARGO PAD	
5. PROGRAM ELEMENT	6. CATEGORY CODE	7. PROJECT NUMBER	8. PROJECT COST ($000)
91211F	112-211	LRCT190001	11,000

A preliminary 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 complete economic analysis was not performed. A waiver has been completed and is currently being staffed for review and approval. 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.

Shoulder, Paved: 10,780 Square Meters = 116,035 Square Feet
Pad, Dangerous Cargo, Load/Unload: 8,100 Square Meters = 87,188 Square Feet
Taxiway: 7,710 Square Meters = 82,990 Square Feet

Base Civil Engineer: +49 6371-47-6773

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 United States Air Force requirements.

1. COMPONENT	FY 2021 MILITARY CONSTRUCTION PROJECT DATA		2. DATE
AIR FORCE			February 2020
3. INSTALLATION AND LOCATION		4. PROJECT TITLE:	
CÂMPIA TURZII AIR BASE, ROMANIA		EDI: DANGEROUS CARGO PAD	
5. PROGRAM ELEMENT	6. CATEGORY CODE	7. PROJECT NUMBER	8. PROJECT COST ($000)
91211F	112-211	LRCT190001	11,000

12. SUPPLEMENTAL DATA:

a. Estimated Design Data:

(1) Status:

(a) Type of Design	Design-Bid-Build
(b) Date Design Started	06-MAR-19
* (c) Parametric Cost Estimates used to develop costs	YES
* (d) Percent Complete as of 01-JAN-2020	15%
(e) Date 35% Designed	01-JAN-20
(f) Date Design Complete	30-SEP-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 –	NA

(3) Total Cost (c) = (a) + (b) or (d) + (e):	($000)
(a) Production of Plans and Specifications	660
(b) All Other Design Costs	330
(c) Total (a+b)	990
(d) Contract	825
(e) In-house	165
(4) Construction Contract Award	21-FEB
(5) Construction Start	21-APR
(6) Construction Completion	23-MAR

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

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

N/A

1. COMPONENT	FY 2021 MILITARY CONSTRUCTION PROJECT DATA	2. DATE
AIR FORCE		February 2020

3. INSTALLATION AND LOCATION	4. PROJECT TITLE:
CAMPIA TURZII, ROMANIA	EDI: DABS-FEV STORAGE

5. PROGRAM ELEMENT	6. CATEGORY CODE	7. PROJECT NUMBER	8. PROJECT COST ($000)
91211F	442-758	LRCT210001	68,000

9. COST ESTIMATES

ITEM	U/M	QTY	UNIT COST	COST ($000)
PRIMARY FACILITIES				**43,643**
WAREHOUSE SUPPLY AND EQUIPMENT BASE (442-758)	SM	14,287	1,544	(22,057)
CONTROLED HUMIDITY WAREHOUSE (442-421)	SM	6,472	1,647	(10,659)
VEHICLE MAINTENANCE SHOP (214-425)	SM	2,288	4,310	(9,862)
CYBERSECURITY OF FAC-RELATED CONTL SYS (2.5%)	LS			(1,065)
SUPPORTING FACILITIES				**17,145**
UTILITIES	LS			(4,781)
PAVEMENTS	LS			(2,284)
SITE IMPROVEMENTS	LS			(10,080)
SUBTOTAL				**60,788**
CONTINGENCY (5%)				3,039
TOTAL CONTRACT COST				**63,827**
SUPERVISION, INSPECTION AND OVERHEAD (6.5%)				4,149
TOTAL REQUEST				**67,976**
TOTAL REQUEST (ROUNDED)				**68,000**
EQUIPMENT FROM OTHER APPROPRIATIONS (NON-ADD)				(250)

10. DESCRIPTION OF PROPOSED CONSTRUCTION:

Construct controlled humidity warehouse(s); supply and equipment warehouses; and vehicle maintenance shop of structural metal frame, metal panel walls and roof, and concrete foundation. Facilities provide materiel and vehicle storage, administrative and maintenance support. The facilities include overhead bridge cranes, lightning protection, overvoltage protection, closed-circuit television, and information systems connectivity. Supporting facilities include vehicle parking; vehicle fueling station and tanks; testing facilities; central wash facility; security fencing with gate; security entry control building; shed supplies and equipment depot; scale; material processing depots for hazardous materials and petroleum oil and lubricants; loading and unloading area; environmental mitigation; site improvements (landscaping, grading, and paving); and site utility systems (electrical, communications, water sanitary sewer, and stormwater). Facilities will be designed as permanent construction in accordance with the Unified Facilities Criteria (UFC) 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.
Air Conditioning: 90 Tons

1. COMPONENT	FY 2021 MILITARY CONSTRUCTION PROJECT DATA		2. DATE
AIR FORCE			February 2020
3. INSTALLATION AND LOCATION		4. PROJECT TITLE:	
CAMPIA TURZII, ROMANIA		EDI: DABS-FEV STORAGE	
5. PROGRAM ELEMENT	6. CATEGORY CODE	7. PROJECT NUMBER	8. PROJECT COST ($000)
91211F	442-758	LRCT210001	68,000

11. REQUIREMENT: 14,287 SM ADEQUATE: 0 SM SUBSTANDARD: 0 SM

PROJECT: EDI: DABS-FEV STORAGE

REQUIREMENT: This project is in support of the European Deterrence Initiative (EDI), 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 operations is infrastructure at key locations to support military activities. To support this initiative, Campia Turzii Air Base requires humidity-controlled, ventilated, and heated storage spaces for Deployable Air Base Systems (DABS) - Facilities, Equipment and Vehicles (FEV) assets, as well as supportive administrative and maintenance spaces.

CURRENT SITUATION: No facilities are present at Campia Turzii Air Base that meet the requirements of this project. The high-humidity climate is not compatible with storing the required material and vehicles outside of a humidity-controlled environment.

IMPACT IF NOT PROVIDED: If this project is not provided, Campia Turzii Air Base will not have readily available storage for Deployable Air Base materiel and vehicles. The lack of properly sized and configured humidity-controlled and ventilated storage spaces will force United States Air Forces Europe to make use of available open storage areas and expedient shelters that will not fully protect these valuable assets from extreme climatic condition variations. Exposure to excessive moisture will degrade and potentially damage the deployable air base systems materiel and vehicles. Consequently, urgent repairs to restore the materiel and vehicles to the operability standards will cause a high risk of delaying employment. This project will improve United States Air Forces Europe's mission readiness by ensuring that the deployable air base systems vehicles and materiel are protected from the elements and maintained in a condition of constant readiness.

ADDITIONAL: 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 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 (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. A preliminary 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 complete economic analysis was not performed. A waiver has been completed and is currently being staffed for review and approval. The Supporting facilities cost exceeds 25% of the Primary facilities cost due to extensive site prep, utilities and pavements work to make this a complete and usable facility. The Unified Facility Criteria 4-701-01, Department of Defense Pricing Guide, Parametric Cost Estimating System, and Means were used to develop the estimate for this project. This project does not fall within or partly within the 100-year flood plan.

1. COMPONENT	FY 2021 MILITARY CONSTRUCTION PROJECT DATA		2. DATE
AIR FORCE			February 2020
3. INSTALLATION AND LOCATION		4. PROJECT TITLE:	
CAMPIA TURZII, ROMANIA		EDI: DABS-FEV STORAGE	
5. PROGRAM ELEMENT	6. CATEGORY CODE	7. PROJECT NUMBER	8. PROJECT COST ($000)
91211F	442-758	LRCT210001	68,000

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.

Warehouse Supply And Equipment Base: 14,287 Square Meters = 153,784 Square Feet
Controlled Humidity Warehouse: 6,472 Square Meters = 69,664 Square Feet Vehicle
Vehicle Maintenance Shop: 2,288 Square Meters = 24,628 Square Feet

Base Civil Engineer: +49 6371-47-6773.

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 United States Air Force requirements.

1. COMPONENT	FY 2021 MILITARY CONSTRUCTION PROJECT DATA		2. DATE
AIR FORCE			February 2020
3. INSTALLATION AND LOCATION		4. PROJECT TITLE:	
CAMPIA TURZII, ROMANIA		EDI: DABS-FEV STORAGE	
5. PROGRAM ELEMENT	6. CATEGORY CODE	7. PROJECT NUMBER	8. PROJECT COST ($000)
91211F	442-758	LRCT210001	68,000

12. SUPPLEMENTAL DATA:

a. Estimated Design Data:

(1) Status:

(a) Type of Design	Design-Bid-Build
(b) Date Design Started	06-MAR-19
* (c) Parametric Cost Estimates used to develop costs	YES
* (d) Percent Complete as of 01-JAN-2020	15%
(e) Date 35% Designed	01-JAN-20
(f) Date Design Complete	30-SEP-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 –	NA

(3) Total Cost (c) = (a) + (b) or (d) + (e):

	($000)
(a) Production of Plans and Specifications	4,080
(b) All Other Design Costs	2,040
(c) Total (a+b)	6,120
(d) Contract	5,100
(e) In-house	1,020

(4) Construction Contract Award	21-FEB
(5) Construction Start	21-APR
(6) Construction Completion	23-JUN

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

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

EQUIPMENT NOMENCLATURE	PROCURING APPROP	FISCAL YEAR APPROPRIATED OR REQUESTED	COST ($000)
Furniture, Fixtures and Equipment	3400	2023	250

1. COMPONENT	FY 2021 MILITARY CONSTRUCTION PROJECT DATA	2. DATE
AIR FORCE		February 2020

3. INSTALLATION AND LOCATION	4. PROJECT TITLE:
CAMPIA TURZII, ROMANIA	EDI: PARKING APRON

5. PROGRAM ELEMENT	6. CATEGORY CODE	7. PROJECT NUMBER	8. PROJECT COST ($000)
91211F	113-321	LRCT210002	19,500

9. COST ESTIMATES

ITEM	U/M	QTY	UNIT COST	COST ($000)
PRIMARY FACILITIES				**11,897**
APRON (113-321)	SM	42,350	127	(5,378)
SHOULDER, PAVED (116-642)	SM	17,310	130	(2,257)
TAXIWAY (112-211)	SM	13,700	130	(1,781)
TAXIWAY LIGHTING (136-667)	LM	2,700	247	(666)
JET BLAST DEFLECTOR (116-945)	EA	12	151,250	(1,815)
SUPPORTING FACILITIES UTILITIES				**5,369**
UTILITIES	LS			(3,449)
SITE PREPARATION	LS			(205)
SITE IMPROVEMENTS	LS			(1,633)
ENVIRONMENTAL MITIGATION	LS			(82)
SUBTOTAL				**17,266**
CONTINGENCY (5%)				(863)
TOTAL CONTRACT COST				**18,129**
SUPERVISION, INSPECTION AND OVERHEAD (6.5%)				(1,178)
TOTAL REQUEST				**19,308**
TOTAL REQUEST (ROUNDED)				**19,500**
EQUIPMENT FROM OTHER APPROPRIATIONS (NON-ADD)				NA

10. DESCRIPTION OF PROPOSED CONSTRUCTION:

Construct a parking apron, taxiways, paved shoulders, taxiway edge lighting, and jet blast deflectors. Pavement construction for the parking apron and taxiways is comprised of portland cement layer, stabilization drainage layer, subbase separation layer, compacted subgrade, pavement markings, edge lighting, earthwork, and grading. Shoulder pavement construction includes hot mix asphalt, aggregate base, drainage layer, subbase separation layer, compacted subgrade, pavement markings, edge lighting, earthwork, and grading. Supporting facilities include utility connections for electric, water, site lighting, communications, and stormwater drainage; site improvements for earthwork and landscaping; site preparation for site clearing, removal of existing lighting, navigation aids, and communications lines; and environmental mitigation for erosion control. Facilities will be designed as permanent construction in accordance with the Unified Facilities Criteria (UFC) 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.

Air Conditioning: 0 Tons

1. COMPONENT	FY 2021 MILITARY CONSTRUCTION PROJECT DATA		2. DATE
AIR FORCE			February 2020
3. INSTALLATION AND LOCATION		4. PROJECT TITLE:	
CAMPIA TURZII, ROMANIA		EDI: PARKING APRON	
5. PROGRAM ELEMENT	6. CATEGORY CODE	7. PROJECT NUMBER	8. PROJECT COST ($000)
91211F	113-321	LRCT210002	19,500

11. REQUIREMENT: 42,350 SM ADEQUATE: 0 SM SUBSTANDARD: 0 SM

PROJECT: EDI: PARKING APRON

REQUIREMENT: This project is in support of the European Deterrence Initiative (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 training is infrastructure at key locations to support military activities. To support this operation, Câmpia Turzii Air Base, Romania, requires additional tactical fighter aircraft parking apron capabilities supporting two tactical fighter aircraft squadrons comprising North Atlantic Treaty Organization-equivalent tactical fighter aircraft. The parking apron will be sized for the largest length/width North Atlantic Treaty Organization tactical fighter aircraft. The taxiways will be sized to accommodate United States/North Atlantic Treaty Organization Strategic Transport Aircraft. The apron will increase maintenance and aircrew accessibility and timeliness of sortie generation as a result of the proximity to the tactical fighter aircraft Maintenance Hangar and Squadron Operations Facility. This project will directly improve airfield presence and bolster airfield capability and readiness to support bilateral and multilateral exercises and training with allied partners. This will include providing turn-off capability and taxiway connections sized to accommodate large transport aircraft and North Atlantic Treaty Organization Unmanned Aerial Vehicle.

CURRENT SITUATION: An adequate tactical fighter aircraft parking apron capable of supporting larger North Atlantic Treaty Organization weapon systems is not currently available at Câmpia Turzii Air Base. Five (5) aprons at Câmpia Turzii Air Base currently serve as tactical fighter aircraft parking aprons, with two areas located on the southern end of the runway dedicated for Host Nation aircraft. The three remaining aprons include Apron N1 that is designated as the Strategic Transport Airlift parking apron; Apron N3 that is designated as the Tactical Transport Aircraft parking apron; and Apron C1 that is designated for visiting unit tactical fighter aircraft. Aprons N1 and N3 are not available for dedicated use for tactical fighter aircraft. Apron C1 has limited use for visiting unit tactical fighter aircraft but is not sized to accommodate two North Atlantic Treaty Organization-equivalent tactical fighter aircraft squadrons.

IMPACT IF NOT PROVIDED: If this project is not provided, adequate tactical fighter aircraft parking aprons supporting two tactical fighter aircraft squadrons comprising the largest United States/North Atlantic Treaty Organization tactical fighter aircraft weapon systems will not be available to the Department of Defense or its allied partners. This limitation will impede sortie generation and flying schedules, directly limiting airfield presence and impairing airfield capability and readiness. Therefore, responsiveness for bilateral and multilateral exercises and training missions would be compromised, directly limiting theater presence and impairing mission capability and readiness within the designated Area of Responsibility.

ADDITIONAL: 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.

1. COMPONENT	FY 2021 MILITARY CONSTRUCTION PROJECT DATA		2. DATE
AIR FORCE			February 2020
3. INSTALLATION AND LOCATION		4. PROJECT TITLE:	
CAMPIA TURZII, ROMANIA		EDI: PARKING APRON	
5. PROGRAM ELEMENT	6. CATEGORY CODE	7. PROJECT NUMBER	8. PROJECT COST ($000)
91211F	113-321	LRCT210002	19,500

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 (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. A preliminary 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 complete economic analysis was not performed. A waiver has been completed and is currently being staffed for review and approval. The Supporting facilities cost exceeds 25% of the Primary facilities cost due to the removal and replacement of existing aging utility infrastructure in order to make this a complete and usable facility. The Unified Facility Criteria 4-701-01, Department of Defense Pricing Guide, Parametric Cost Estimating System, and Means were used to develop the estimate for this project. 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.

Apron: 42,350 Square Meters = 455,852 Square Feet

Shoulder, Paved: 17,310 Square Meters = 186,323 Square Feet Taxiway-Ladder

Taxiway: 13,700 Square Meters = 147,466 Square Feet Taxiway lighting-

Taxiway Lighting: 2,700 Linear Meters = 8,858 Linear Feet

Base Civil Engineer commercial phone number +49 6371-47-6773.

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 United States Air Force requirements.

1. COMPONENT	FY 2021 MILITARY CONSTRUCTION PROJECT DATA		2. DATE
AIR FORCE			February 2020
3. INSTALLATION AND LOCATION		4. PROJECT TITLE:	
CAMPIA TURZII, ROMANIA		EDI: PARKING APRON	
5. PROGRAM ELEMENT	6. CATEGORY CODE	7. PROJECT NUMBER	8. PROJECT COST ($000)
91211F	113-321	LRCT210002	19,500

12. SUPPLEMENTAL DATA:

a. Estimated Design Data:

(1) Status:

(a) Type of Design	Design-Bid-Build
(b) Date Design Started	06-MAR-19
* (c) Parametric Cost Estimates used to develop costs	YES
* (d) Percent Complete as of 01-JAN-2020	15%
(e) Date 35% Designed	01-JAN-20
(f) Date Design Complete	30-SEP-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 –	NA

(3) Total Cost (c) = (a) + (b) or (d) + (e):	($000)
(a) Production of Plans and Specifications	1,170
(b) All Other Design Costs	585
(c) Total (a+b)	1,755
(d) Contract	1,463
(e) In-house	293
(4) Construction Contract Award	21-FEB
(5) Construction Start	21-APR
(6) Construction Completion	23-JUN

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

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

NA

1. COMPONENT	FY 2021 MILITARY CONSTRUCTION PROJECT DATA		2. DATE
AIR FORCE			February 2020
3. INSTALLATION AND LOCATION		4. PROJECT TITLE:	
CÂMPIA TURZII AIR BASE, ROMANIA		EDI: POL INCREASE CAPACITY	
5. PROGRAM ELEMENT	6. CATEGORY CODE	7. PROJECT NUMBER	8. PROJECT COST ($000)
91211F	124-135	LRCT190002	32,000

9. COST ESTIMATES

ITEM	U/M	QTY	UNIT COST	COST ($000)
PRIMARY FACILITIES				**22,442**
OPERATING STORAGE, JET FUEL (124-135)	GA	1,300,000	8	(10,400)
HYDRANT FUELING BUILDING (121-124)	SM	254	18,839	(4,785)
PIPELINE, LIQUID FUELS (125-554)	LM	2,395	1,180	(2,825)
LIQUID FUEL TRUCK FILL STAND (126-925)	OL	2	230,000	(460)
LIQUID FUEL STAND, UNLOADING (126-926)	OL	2	1,712,500	(3,425)
CYBERSECURITY OF FAC-RELATED CONTL SYS (2.5%)	LS			(547)
SUPPORTING FACILITIES				**5,846**
UTILITIES	LS			(695)
SITE IMPROVEMENTS	LS			(1,693)
PAVEMENTS	LS			(3,458)
SUBTOTAL				**28,288**
CONTINGENCY (5%)				(1,414)
TOTAL CONTRACT COST				**29,702**
SUPERVISION, INSPECTION AND OVERHEAD (6.5%)				(1,931)
TOTAL REQUEST				**31,633**
TOTAL REQUEST (ROUNDED)				**32,000**
EQUIPMENT FROM OTHER APPROPRIATIONS (NON-ADD)				(40)

10. DESCRIPTION OF PROPOSED CONSTRUCTION:

Construct permanent operational storage jet fuel facilities. Project constructs two each metal cut-and-cover tanks with pump houses, liquid fuels pipeline, hydrant fueling building(s), rail offload facility, refueler fill stands, and tanker truck offloading positions. Support facilities include vehicle parking, site improvements, utilities and connections, lighting, lightning protection, paving, markings, storm drainage, landscaping, and signage. 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 will comply with Department of Defense antiterrorism/force protection requirements per Unified Facility Criteria 4- 010-01.
Air Conditioning: 0 tons

1. COMPONENT	FY 2021 MILITARY CONSTRUCTION PROJECT DATA		2. DATE
AIR FORCE			February 2020
3. INSTALLATION AND LOCATION		4. PROJECT TITLE:	
CÂMPIA TURZII AIR BASE, ROMANIA		EDI: POL INCREASE CAPACITY	
5. PROGRAM ELEMENT	6. CATEGORY CODE	7. PROJECT NUMBER	8. PROJECT COST ($000)
91211F	124-135	LRCT190002	32,000

11. REQUIREMENT: 1,300,000 GA ADEQUATE: 0 GA SUBSTANDARD: 0 GA

PROJECT: EDI: POL INCREASE CAPACITY

REQUIREMENT: This project is in support of the European Deterrence Initiative (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 training and combat operations is infrastructure at key locations to support military activities. To support this operation, Câmpia Turzii Air Base, Romania requires an Operational Storage Jet Fuel Facility programmed to accommodate two North Atlantic Treaty Organization equivalent Tactical Fighter Aircraft squadrons and supporting Strategic Transport Aircraft. The operational storage jet fuel facilities will support the simultaneous refueling of Tactical Fighter Aircraft and Strategic Transport Aircraft. This facility will increase the frequency of sortie generation, directly improving airfield operations for greater responsiveness during bilateral and multilateral exercises, and training with allies and partners. This project will boost airfield presence and improve airfield capability and readiness response.

CURRENT SITUATION: The existing fuel storage facilities are substandard in size to support exercises of two squadrons of United States and North Atlantic Treaty Organization equivalent tactical fighter aircraft and supporting strategic transport aircraft. Current United States Air Forces Europe fuel operations consist of three temporary fuel bladders with a total capacity of 7,378 barrels, as well as a 2,378 barrel capacity fuel system consisting of four 598 barrel aboveground fuel storage tanks. Jet Propellant-8 fuel, which is used by United States Air Forces Europe at Câmpia Turzii Air Base, is supplied by commercial tanker trucks and offloaded at the existing petroleum, oil and lubricant facility. Fuel for the Romanian tanks is delivered by railcar to the existing railhead, which is not constructed for fuel delivery. The fuel is pumped at the railhead by the fuel truck from the railcar and transported 2.02 miles over a gravel road to the petroleum, oil and lubricant (POL) facility where it is unloaded into Romanian Air Force fuel tanks. This method of fuel delivery is laborious, inefficient, environmentally unsafe, and costly.

IMPACT IF NOT PROVIDED: If the project is not provided, an adequate operational storage jet fuel facility capable of supporting tactical fighter aircraft and strategic transport aircrafts will not be available to Department of Defense or its allies and partners. Personnel, aircraft, and resources will continue to operate using insufficient and outdated facilities. Within limited airspace windows, all aircraft need to be fueled and ready for takeoff at the commencement of their respective flying schedules. Responsiveness for bilateral and multilateral exercises and training missions would be compromised.

ADDITIONAL: 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 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 (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. The Unified Facility Criteria 4-701-01, Department of Defense Pricing Guide, Parametric Cost Estimating System and Means were used to develop the estimate for this project.

1. COMPONENT	FY 2021 MILITARY CONSTRUCTION PROJECT DATA		2. DATE
AIR FORCE			February 2020
3. INSTALLATION AND LOCATION		4. PROJECT TITLE:	
CÂMPIA TURZII AIR BASE, ROMANIA		EDI: POL INCREASE CAPACITY	
5. PROGRAM ELEMENT	6. CATEGORY CODE	7. PROJECT NUMBER	8. PROJECT COST ($000)
91211F	124-135	LRCT190002	32,000

A preliminary 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 complete economic analysis was not performed. A waiver has been completed and is currently being staffed for review and approval. 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. The cost of the supporting facilities exceeds 25% of the primary facilities cost due to extensive pavement work required to make the site complete and usable. This project does not fall within or partly within the 100-year flood plain.

Hydrant Fueling Buildings: 254 Square Meters = 2,734 Square Feet
Pipeline, Liquid Fuels: 2,395 Linear Meters = 7,858 Linear Feet

Base Civil Engineer commercial phone number +49 6371-47-6773.

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 United States Air Force requirements.

1. COMPONENT	FY 2021 MILITARY CONSTRUCTION PROJECT DATA		2. DATE
AIR FORCE			February 2020
3. INSTALLATION AND LOCATION		4. PROJECT TITLE:	
CÂMPIA TURZII AIR BASE, ROMANIA		EDI: POL INCREASE CAPACITY	
5. PROGRAM ELEMENT	6. CATEGORY CODE	7. PROJECT NUMBER	8. PROJECT COST ($000)
91211F	124-135	LRCT190002	32,000

12. SUPPLEMENTAL DATA:

a. Estimated Design Data:

(1) Status:

(a) Type of Design	Design-Bid-Build
(b) Date Design Started	06-MAR-19
* (c) Parametric Cost Estimates used to develop costs	YES
* (d) Percent Complete as of 01-JAN-2020	15%
(e) Date 35% Designed	01-JAN-20
(f) Date Design Complete	30-SEP-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 –	NA

(3) Total Cost (c) = (a) + (b) or (d) + (e):

	($000)
(a) Production of Plans and Specifications	1,920
(b) All Other Design Costs	960
(c) Total (a+b)	2,880
(d) Contract	2,400
(e) In-house	480

(4) Construction Contract Award	21-FEB
(5) Construction Start	21-APR
(6) Construction Completion	23-SEP

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

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

EQUIPMENT NOMENCLATURE	PROCURING APPROP	FISCAL YEAR APPROPRIATED OR REQUESTED	COST ($000)
Furniture, Fixtures and Equipment	3400	2023	20
Tank Gauge (2EA)	3080	2023	20

1. COMPONENT AIR FORCE	FY 2021 MILITARY CONSTRUCTION PROJECT DATA (computer generated)	2. DATE February 2020

3. INSTALLATION, SITE AND LOCATION	4. PROJECT TITLE
WORLDWIDE UNSPECIFIED VARIOUS LOCATIONS	EDI: PLANNING AND DESIGN

5. PROGRAM ELEMENT	6. CATEGORY CODE	7. RPSUID/PROJECT NUMBER	8. PROJECT COST ($000)
91211F	961-000	/PAYZ210002	54,800

9. COST ESTIMATES

ITEM	U/M	QUANTITY	UNIT	COST ($000)
PRIMARY FACILITIES				54,800
PLANNING AND DESIGN (91211F)	LS			(54,800)
SUPPORTING FACILITIES				0
SUBTOTAL				54,800
TOTAL CONTRACT COST				54,800
TOTAL REQUEST				54,800
TOTAL REQUEST (ROUNDED)				54,800

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 FY22 Military Construction Program, initiate design of facilities in the FY23 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.

1. COMPONENT	FY 2021 MILITARY CONSTRUCTION PROJECT DATA	2. DATE
AIR FORCE	(computer generated)	February 2020

3. INSTALLATION, SITE AND LOCATION	4. PROJECT TITLE
WORLDWIDE UNSPECIFIED VARIOUS LOCATIONS	EDI: UNSPECIFIED MINOR MILITARY CONSTRUCTION

5. PROGRAM ELEMENT	6. CATEGORY CODE	7. RPSUID/PROJECT NUMBER	8. PROJECT COST ($000)
91211F	962-000	/PAYZ210004	16,400

9. COST ESTIMATES

ITEM	U/M	QUANTITY	UNIT	COST ($000)
PRIMARY FACILITIES				16,400
MINOR MILITARY CONSTRUCTION (91211F)	LS			(16,400)
SUPPORTING FACILITIES				0
SUBTOTAL				16,400
TOTAL CONTRACT COST				16,400
TOTAL REQUEST				16,400
TOTAL REQUEST (ROUNDED)				16,400

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 FY21. Included would be projects to support new mission requirements, new equipment, and other essential support to Air Force missions.

Tab - **HOST NATION FUNDED CONSTRUCTION**

Department of the Air Force

Host Nation Military Construction Program

Calendar Year (CY) 2021 Budget Estimates

Justification Data Submitted to Congress February 2020

February 2020

DEPARTMENT OF THE AIR FORCE
HOST NATION MILITARY CONSTRUCTION PROGRAM CALENDAR YEAR 2021
TABLE OF CONTENTS

THIS PAGE INTENTIONALLY LEFT BLANK

DEPARTMENT OF THE AIR FORCE
HOST NATION MILITARY CONSTRUCTION PROGRAM CALENDAR YEAR 2021
PROGRAM SUMMARY

	Authorization Request ($000s)
Military Construction	
Major Construction	**149,000**
Total Military Construction	**149,000**

Strategic Narrative:

The enclosed justification book represents the United States Air Forces Korea (USFK) Republic of Korea Funded Construction program for calendar year 2021. 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 component commanders and represent the most critical and urgent USFK operational requirements.

THIS PAGE INTENTIONALLY LEFT BLANK

DEPARTMENT OF THE AIR FORCE
HOST NATION MILITARY CONSTRUCTION PROGRAM
CALENDAR YEAR 2021 INDEX
(DOLLARS IN THOUSANDS)

STATE/COUNTRY	INSTALLATION	PROJECT	COST ($000)
REPUBLIC OF KOREA	Daegu Air Base	Aerospace Ground Equipment Facility and Parking Apron, Multi	14,000
		Daegu Air Base TOTAL:	14,000
	Kunsan Air Base	Construct Backup Generator Plant	19,000
		Kunsan Air Base TOTAL:	19,000
	Osan Air Base	Aircraft Corrosion Control Facility, Part 3	12,000
		Munitions Storage Area Move Delta (Phase 1)	84,000
		Child Development Center	20,000
		Osan Air Base TOTAL:	116,000
		REPUBLIC OF KOREA TOTAL:	149,000
		HOST NATION FUNDED CONSTRUCTION TOTAL:	149,000

1. COMPONENT	REPUBLIC OF KOREA FUNDED CONSTRUCTION (ROKFC)	2. DATE
AIR FORCE		February 2020

3. INSTALLATION AND LOCATION	4. PROJECT TITLE
DAEGU AIR BASE, KOREA	AEROSPACE GROUND EQUIPMENT FACILITY AND PARKING APRON, MULTI

5. PROGRAM ELEMENT	6. CATEGORY CODE	7. PROJECT NUMBER	8. PROJECT COST ($000)
N/A	218-712	WPZQ153012 (F17R670)	$14,000

9. COST ESTIMATES

ITEM	U/M	QUANTITY	UNIT COST	COST ($000)
PRIMARY FACILITY:				**9,427**
AEROSPACE GROUND EQUIPMENT FACILITY (218-712)	SM	2,546	1,900	(4,838)
ADD/ALTER AIRCRAFT PARKING APRON (113-321)	SM	19,200	226	(4,340)
CYBER SECURITY FACILITY RELATED CONTROL SYSTEMS	LS	1	250	(250)
SUPPORTING FACILITIES				**3,286**
UTILITIES	LS	1	298,100	(298)
PAVEMENTS	LS	1	137,200	(137)
PILE FOUNDATION	VM	300	149	(45)
SITE IMPROVEMENT	LS	1	545,600	(546)
DEMOLITION	SM	18,650	97	(1,809)
COMMUNICATION SUPPORTING	LS	1	10,600	(11)
ANTITERRORISM/FORCE PROTECTION	LS	1	139,816	(140)
TEMPORARY FACILITY	LS	1	300,000	(300)
SUB-TOTAL				**12,713**
CONTINGENCY (5%)				636
TOTAL CONTRACT COST				13,349
SUPERVISION, INSPECTION AND OVERHEAD (6.0%)				801
TOTAL FUNDED COST				14,150
TOTAL FUNDED COST (ROUNDED)				14,000

10. DESCRIPTION OF PROPOSED WORK:

Utilize host-nation funding to construct an Aerospace Ground Equipment (AGE) Facility (2,546 Square Meters (SM)), and add/alter aircraft parking apron (19,200 SM) at Daegu Air Base (AB). This project includes altering existing aircraft parking apron pavement and adding additional pavement needed to meet Air Task Order requirements. This project includes construction of an AGE Facility that consists of maintenance space, operations space, admin space, and covered and open storage space. Supporting Facilities will include fire suppression systems, all utilities, facility components, pavements, communication support, site improvements and associated support facilities. This project shall demolish one facility (600 SM). 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 will comply with Department of Defense antiterrorism/force protection requirements per Unified Facility Criteria 4-010-01.

Air Conditioning : 53 Tons

11. Requirement: 21,571 SM **Adequate:** 0 **Substandard: 14,711 SM**

PROJECT:

Construct Aerospace Ground Equipment Facility And Parking Apron, Multi (Current Mission)

Previous editions are obsolete

1. COMPONENT	REPUBLIC OF KOREA FUNDED CONSTRUCTION (ROKFC)		2. DATE
AIR FORCE			February 2020
3. INSTALLATION AND LOCATION		4. PROJECT TITLE	
DAEGU AIR BASE, KOREA		AEROSPACE GROUND EQUIPMENT FACILITY AND PARKING APRON, MULTI	
5. PROGRAM ELEMENT	6. CATEGORY CODE	7. PROJECT NUMBER	8. PROJECT COST ($000)
N/A	218-712	WPZQ153012 (F17R670)	$14,000

REQUIREMENT:

This project is required to construct an AGE facility that consists of maintenance space, operations space. AGE facility includes 962 SM office area, 1,440 SM covered storage and 144 SM open storage. The facility shall include reinforced concrete foundation, concrete floor slab, structural steel frame and standing seam metal roof. Functional areas include: maintenance stalls with work benches, indoor wash rack, tool crib, bench stock, sealed lead acid battery servicing area, engine exhaust education system, administrative space, and personnel locker space. Storage area for shop support equipment (e.g., portable hoists, hacks, refrigerant recovery system, antifreeze recycle). Separate area for Liquid Oxygen (LOX) handling equipment is required – must be oil free, floor must be concrete, electrical power (120 voltage and 220 voltage), must be covered, but should preferably be inside a facility. Office areas require sound insulation and portions of this facility require special ventilation and/or exhaust evacuation. Environmental protection, eye wash and an emergency shower are required near the battery shop. Special ventilation and floor drainage with oil/water separation is required in the maintenance area. Provide a swing space with coordination of AGE facility manager. Also, parking apron for aircraft including supporting facilities such as electric services; airfield lighting; storm sewer system; site preparation. Demolish building #2900.

This project also includes temporary facility space for AGE personnel during facility construction. Additionally, this project is required now to enable our ability to start the fight tonight and execute the Air Tasking Order (ATO).There are no alternate facilities on the installation, either adequate or available, which could be used to satisfy this requirement. The economic benefit of this project is significant. It will eliminate high operating, maintenance and repair costs for bulk tank and hydrant system and environmental clean-up/restoration costs resulting from fuel storage tank failures/leaks. Also, this project will allow us to meet mission requirements near the passenger terminal at Daegu AB that will ideally be supported by C-130/C-17s.

CURRENT SITUATION:

There is currently no usable aircraft parking space in the USAF Controlled Areas that will allow for the parking of large-frame aircraft due to the condition of the existing apron as well as not meeting UFC 3-260-01/02 minimum standards. The current inadequate AGE facility will be demolished and relocated to accommodate a new mission requirement for larger airframe parking apron.

IMPACT IF NOT PROVIDED:

If this project is not provided there will be no heavy aircraft operation capabilities supporting contingency and exercise operations on this installation. Also, there will not be an adequate AGE facility to maintain and service the equipment in support of the existing airfield and aircraft missions. The condition of the equipment will deteriorate to the point of being non-mission capable. This will adversely affect the mission readiness and capability of the Base during peacetime and contingency.

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.
There is no alternative to this project to meet mission requirements; therefore, a certificate in lieu of economic analysis will be prepared. This project meets the criteria/scope specified in Air Force Manual (AFMAN) 32-1084, Facility Requirements and the Air Mobility Command Aerospace Ground Equipment Maintenance and Storage Facilities Design Guide. 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. The project has been coordinated with the installation physical security plan and all security measures are included. Also, all required antiterrorism force protection measures are included. The Department of Defense Explosives Safety Board (DDESB) approval of the Explosive Safety Site Plan (ESSP) is required.

1. COMPONENT	REPUBLIC OF KOREA FUNDED CONSTRUCTION (ROKFC)		2. DATE
AIR FORCE			February 2020
3. INSTALLATION AND LOCATION		4. PROJECT TITLE	
DAEGU AIR BASE, KOREA		AEROSPACE GROUND EQUIPMENT FACILITY AND PARKING APRON, MULTI	
5. PROGRAM ELEMENT	6. CATEGORY CODE	7. PROJECT NUMBER	8. PROJECT COST ($000)
N/A	218-712	WPZQ153012 (F17R670)	$14,000

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

AEROSPACE GROUND EQUIPMENT FACILITY (218-712); 2,546 SM
ADD/ALTER EXISTING PARKING APRON (113-321); 19,200 SM
Base Civil Engineer; 011-82-53-980-4985.

12. Supplemental Data;

a. Estimated Design Data;

(1) Status	
(a) Date Design Started	Jan 2020
(b) Parametric Cost Estimates used to develop costs	N/A
(c) Percent Complete	N/A
(d) Date Design 35% Complete	N/A
(e) Date Design 100% Complete	Dec 2020
(f) Energy Study and Life Cycle Analysis Performed	NO
(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) :	
(a) Date Design Started	0
(b) Where Design Was Most Recently Used	0
(c) Total	0
(d) Contract	0
(e) In-house	0
(4) Construction Contract Award	Jan 21
(5) Construction Start	Mar 21
(6) Construction Completion	Dec 21

* Indicates completion of Project Definition with Parametric Cost Estimate which is comparable to traditional 35% design to ensure valid scope, cost, and execution.
b. Equipment associated with this project provided from other appropriations: Furniture, furnishings, and equipment such as housing unit furniture, furnishings, and appliances shall be funded by other appropriations.
c. Explosive safety Quantity-Distance (Q-D) Siting: The proposed site will require and Exposed Site (ES) Site plan IAW AFMAN 91-201, para 14.9.2 for new construction of none explosives facilities within an explosive clear zone. 607 MMS/SEW will start ESP process for preliminary DDESB approval, which is required IAW para 14.8 and para 4.15.1.1 with the process tasking roughly 6-10 months for approval.

1. COMPONENT	REPUBLIC OF KOREA FUNDED CONSTRUCTION (ROKFC)	2. DATE
AIR FORCE		February 2020

3. INSTALLATION AND LOCATION	4. PROJECT TITLE:
KUNSAN AIR BASE, KOREA	CONSTRUCT BACKUP GENERATOR PLANT

5. PROGRAM ELEMENT	6. CATEGORY CODE	7. PROJECT NUMBER	8. PROJECT COST ($000)
N/A	811-145	F17R756 (MLWR053154)	19,000

9. COST ESTIMATES

ITEM	U/M	QUANTITY	UNIT COST	COST ($000)
PRIMARY FACILITIES				14,396
ELECTRONIC POWER GENERATION PLANT (811-145)	KW	12,000	1.176	(14,114)
SDD & EP ACT 05	LS			(282)
SUPPORTING FACILITIES				2,411
UTILITIES	LS			(1,772)
PAVEMENTS	LS			(19)
SITE IMPROVEMENTS	LS			(572)
DEMOLITION	EA	16	3,000	(48)
SUBTOTAL				16,807
CONTINGENCY (5.0 %)				840
TOTAL CONTRACT COST				17,647
SUPERVISION, INSPECTION AND OVERHEAD (6.0 %)				1,059
TOTAL REQUEST				18,706
TOTAL REQUEST (ROUNDED)				19,000

10. DESCRIPTION OF PROPOSED CONSTRUCTION

Utilize host-nation funding to replace Kunsan AB's standby generator system incorporating economical design and construction methods to supply power to entire base for the installation's mission support and operational resiliency for theater-wide operations. This project includes removal of existing temporary iBEAR/BPUs utility generators, transformers, switch gears and fuel storage tanks; installation of new 1.5MW commercial generators, transformers, switch gear shelters with controls, supervisory control and data acquisition (SCADA) system, load banks, fuel storage tanks with concrete pads and cathodic protection system; an upgrade of the generator supply and primary distribution circuits, revetment and other necessary support to deliver the full power capacity of the generators to the base loads. The project will demolish existing iBEARs utility generator system at 3 sites. In addition, local materials and construction techniques shall be used where cost effective. 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 will comply with Department of Defense antiterrorism/force protection requirements per Unified Facility Criteria 4-010-01.

11. REQUIREMENT: 12,000 KW ADEQUATE: 0 KW SUBSTANDARD: 12,000 KW
PROJECT: Construct Backup Generator Plant. (Current Mission)

REQUIREMENT: This project is necessary to provide reliable standby power for the base in case of commercial power outages as well as provide additional power during peak cooling season or future base growth. Increased capacity of 1.5MW units will handle Kunsan AB's peak load plus additional 20% increase, which is expected during contingency operations or future load increases of the base.

CURRENT SITUATION: Backup power for Kunsan AB was historically provided by eight 750KW MEP-12 diesel generators located at three separate locations; four at Alpha site, two at Bravo site, and two at Charlie site. The units were manufactured in 1987 and delivered in used condition to Kunsan AB in the early 1990s. These generators have frequently required repairs and cannot be used any more, therefore they were all removed. As a replacement, 16 each 750 KW temporary iBEAR/BPUs utility generators are dispersed across the 3 sites.

1. COMPONENT		2. DATE
AIR FORCE	**REPUBLIC OF KOREA FUNDED CONSTRUCTION (ROKFC)**	February 2020

3. INSTALLATION AND LOCATION

KUNSAN AIR BASE, KOREA (PACAF)

4. PROJECT TITLE	5. PROJECT NUMBER
CONSTRUCT BACKUP GENERATOR PLANT	F17R756 (MLWR053154)

Besides the generators, the switchgear and transformers associated with the generators are in significantly deteriorated condition. Since the generators do not have automatic controls, the operating procedures require two people to be at each of the three utility generator sites (total of six personnel) when the generators operate. This takes approximately 50% of the total section manning, leaving only a few personnel to respond to emergency flight line barrier maintenance activities and the other 60 emergency standby generators. During disaster recovery or contingency operations, many of the other generators on the base will operate and place a tremendous burden on generator personnel. Therefore it causes a substantial impact to operate and maintain the entire base generator system. Finally, the temporary iBEAR/BPUs provided to the installation are currently under construction as an interim solution. They are not intended for permanent use, maintenance, or storage. Therefore, this project provides a permanent solution.

IMPACT IF NOT PROVIDED: Without this project, the continued support of the base operational mission will be seriously limited due to a lack of adequate back-up power. The existing generators will progressively require more repairs and fewer generators will be available for use. Therefore back-up power for the base will be substantially compromised. This project provides power for sustained contingency/outage operations.

ADDITIONAL: This project meets the criteria/scope specified in Air Force Manual 32-1084, "Facility Requirements." All known alternatives were considered during the development of this project. No other option could meet mission requirements; therefore, no economic analysis was performed. This design shall conform to criteria established in the Air Force Corporate Facilities Standards (AFCFS), the Installation Facilities Standards, and all applicable federal and host nation 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 Executive Order 13423, 10 USC 2802 (c), and other applicable laws and Executive orders. The construction of this project will provide anti-terrorism force protection/physical security in compliance with current DoD Minimum Antiterrorism Standards for Buildings (UFC 4-010-01, 8 Oct 2003) and to conform to the current USFK level of threat. 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. 2 out of 3 generator sites fall within the installation explosive safety Q-D arcs, therefore a Non-Explosive Quantity Distance Safety Submission will be submitted through DDESB upon finalizing the 30% design.

New 8 Each 1.5MW Generators: Total 12MW
Demolition: 16 Each 750KW Generators = Total 12MW.

Base Civil Engineer: 011-82-63-470-5400

JOINT USE CERTIFICATION: This facility can be also used by other components and the scope of this project is based on the total base requirements.

1. COMPONENT	REPUBLIC OF KOREA FUNDED CONSTRUCTION (ROKFC)	2. DATE
AIR FORCE		February 2020

3. INSTALLATION AND LOCATION

KUNSAN AIR BASE, KOREA

4. PROJECT TITLE	5. PROJECT NUMBER
CONSTRUCT BACKUP GENERATOR PLANT	F17R756 (MLWR053154)

12. SUPPLEMENTAL DATA:

a. Estimated Design Data:

(1)	Status:	
	(a) Date Design Started	N/A
	(b) Parametric Cost Estimates used to develop costs	YES
	*(c) Percent Complete as of 1 Jan 2019	N/A
	*(d) Date 35% Designed	N/A
	(e) Date Design Complete	N/A
	(f) Energy Study/Life-Cycle analysis was/will be performed	NO
(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	0
	(c) Total	0
	(d) Contract	0
	(e) In-house	0
(4)	Construction Contract Award	Jan 21
(5)	Construction Start	Mar 21
(6)	Construction Completion	Oct 22

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

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

1. COMPONENT		2. DATE
AIR FORCE	**REPUBLIC OF KOREA FUNDED CONSTRUCTION (ROKFC)**	February 2020

3. INSTALLATION AND LOCATION	4. PROJECT TITLE:
OSAN AIR BASE, KOREA	AIRCRAFT CORROSION CONTROL FACILITY, PART 3

5. PROGRAM ELEMENT	6. CATEGORY CODE	7. PROJECT NUMBER	8. PROJECT COST ($000)
N/A	211-159	F16R600P3 (SMYU20300)	12,000

9. COST ESTIMATES

ITEM	U/M	QUANTITY	UNIT COST	COST ($000)
PRIMARY FACILITY				**9,642**
CORROSION CONTROL FACILITY (211-159)	SM	2,961	2,912	(8,622)
WATER FIRE PUMPING STATION (843-316)	SM	100	5,900	(590)
CYBER SECURITY	LS			(250)
SUPPORTING FACILITIES				**1,151**
UTILITIES	LS			(100)
PAVEMENTS	LS			(15)
SITE IMPROVEMENTS	LS			(20)
COMMUNICATIONS SUPPORT	LS			(50)
FIRE WATER STORAGE TANK	LS			(300)
TEST AND BALANCING	LS			(180)
DEMOLITION	SM	1,942	250	(486)
SUBTOTAL				**10,793**
CONTINGENCY (5%)				540
TOTAL CONTRACT COST				**11,333**
SUPERVISION, INSPECTION AND OVERHEAD (6.0%)				680
TOTAL REQUEST				**12,013**
TOTAL REQUEST (Rounded)				**12,000**

10. DESCRIPTION OF PROPOSED CONSTRUCTION:

Utilize host-nation funding to complete construction of the current mission's aircraft Corrosion Control Facility (CCF) B1635, to include critical system repairs on restoration/wash bays, paint/media blast booths, paint mixing room, storage, transition rooms/areas, and Hazardous Material to bring the facility's Heating, Ventilation, and Air Conditioning, electrical/communications systems and the floor layout into code compliance and ensure the CCF functions as intended. Construct an underground water storage tank plus pumps, piping, controls and accessories. Construct an essential fire pumping station to house fire pumps and controls in addition to the CCF. Korean materials shall be used to the maximum extent practicable. This project demolishes five facilities (1,942 SM). 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 will comply with Department of Defense antiterrorism/force protection requirements per Unified Facility Criteria 4-010-01. The project will demolish buildings 1747, 1749, 1750, 1751 and 1752 (1,942 SM). This project fulfills US requirements only and will be designed and constructed for US exclusive use. Air Conditioning: 100 Tons

11. REQUIREMENT: 3,061 SM **ADEQUATE: 0 SM** **SUBSTANDARD: 4,903 SM**

PROJECT: Construct Aircraft Corrosion Control Facility Phase 3. (Current Mission)

REQUIREMENT: This project provides "fight tonight" readiness required to "start the fight" and is required now because the workarounds are unacceptable in the next 4 years. This project completes Osan AB's CCF (B1635) to

1. COMPONENT		2. DATE
AIR FORCE	**REPUBLIC OF KOREA FUNDED CONSTRUCTION (ROKFC)**	February 2020

3. INSTALLATION AND LOCATION	
OSAN AIR BASE, KOREA	
4. PROJECT TITLE	**5. PROJECT NUMBER**
AIRCRAFT CORROSION CONTROL FACILITY, PART 3	F16R600P3 (SMYU203002)

REQUIREMENT (continued): ensure it meets mission requirements and intended use of: aircraft wash, repair and touchup painting, full aircraft painting, finish curing and drying, full aircraft de-paint by mechanical means, paint mixing, component painting, chemical and paint storage and any functions required to meet permanently assigned and determined transient aircraft missions. Mechanical ventilation is required to remove paint particulates, dry vapors, and solvent vapors produced by the CCF. An independent ventilation expert must evaluate the mechanical ventilation system effectiveness and provide a detailed report with system acceptance and corrective actions. Transition space is nonexistent and is required to decontaminate before entering administrative areas.

CURRENT SITUATION: Osan AB built a new CCF B1635 by CY13 and CY15 ROKFC In-Kind projects to replace the old inadequate and deteriorated CCF. These projects were completed in Dec 17, however many latent design deficiencies were identified. B1635 is incapable of supporting safe and effective entire aircraft or parts painting. Painting cannot occur because of an inadequate mechanical ventilation system that fails to remove vapors from the air. Without a properly designed transition space, Airmen cannot decontaminate from paint/media blast operations. Due to water pressure issues, no capability exists to abate a jet fuel fire because the newly installed fire protection system is not fully functional. Osan AB's sole aircraft washing method is through an expiring waiver for the old CCF B1750 that is contingent on B1635 being repaired. B1750 was scheduled for demolition in Feb 18 and is failing, requiring up to $500K in operations and maintenance costs to sustain limited functions. It inadequately dries aircraft, does not meet DoD and Air Force design and operating standards, and is an unsustainable in 4 years.

IMPACT IF NOT PROVIDED: Without this project, USAF operations will continue in a substandard, antiquated, and unprotected CCF and will lead to mission disruption and inefficiencies. It will negatively affect the timely decision making process, battle management, and optimization of combined capabilities across warfighting platforms affecting 300 to 400 rotational forces across 4 flying and maintenance squadrons. Current workarounds increase risk to Airmen and result in extra aircraft maintenance time. When B1750 completely fails, sending aircraft to other locations for corrosion control will reduce training hours and cost $200K annually in flight hours alone to send aircraft to Kunsan AB or Korean Airlines for maintenance. Osan AB's focus is executing combat operations and defending the base and Republic of Korea from a North Korea attack. With a very high ops tempo, a fully compliant CCF is required to protect aircraft assets, "fight tonight" and carry out missions on schedule.

ADDITIONAL: No portion of the constructed facility is intended for Republic of Korea personnel exclusive or primary use. The project is located on an enduring installation which is retained by United States Forces Korea. 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 Air Force Civil Engineer Center.

JOINT USE CERTIFICATION: For US exclusive use but can be used on an "as available" basis; however, the scope of the project is based on Air Force requirements.

1. COMPONENT		2. DATE
AIR FORCE	**REPUBLIC OF KOREA FUNDED CONSTRUCTION (ROKFC)**	February 2020

3. INSTALLATION AND LOCATION	
OSAN AIR BASE, KOREA	
4. PROJECT TITLE	**5. PROJECT NUMBER**
AIRCRAFT CORROSION CONTROL FACILITY, PART 3	F16R600P3 (SMYU203002)

12. SUPPLEMENTAL DATA:

a. Estimated Design Data:

(1) Status:

(a) Date Design Started	Aug 2018
(b) Parametric Cost Estimates used to develop costs	YES
*(c) Percent Complete	30%
*(d) Date 35% Designed	Feb 2019
(e) Date Design Complete	Dec 2020
(f) Energy Study/Life-Cycle analysis was/will be performed	NO

(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	0
(d) Contract	0
(e) In-house	0
(4) Construction Contract Award	Jun 2021
(5) Construction Start	Sep 2021
(6) Construction Completion	Sep 2023

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

1. COMPONENT	REPUBLIC OF KOREA FUNDED CONSTRUCTION (ROKFC)	2. DATE
AIR FORCE		February 2020

3. INSTALLATION AND LOCATION	4. PROJECT TITLE:
OSAN AIR BASE, KOREA	MUNITIONS STORAGE AREA MOVE DELTA (PHASE 1)

5. PROGRAM ELEMENT	6. CATEGORY CODE	7. PROJECT NUMBER	8. PROJECT COST ($000)
N/A	212-217	F17R620 (SMYU003005A)	84,000

9. COST ESTIMATES

ITEM	U/M	QUANTITY	UNIT COST	COST ($000)
PRIMARY FACILITY				**27,098**
Precision Guided Munitions Building (212-217)	SM	1,452	4,520	(6,563)
Munitions Administration Building (610-144)	SM	973	4,630	(4,505)
Conventional Munitions Building (216-642)	SM	1,097	4,660	(5,112)
Surveillance / Inspection Facility (215-582)	SM	1,164	5,015	(5,837)
Ancillary Explosives Facility (Flow-Thru) (422-275)	SM	402	6,525	(2,623)
Entry Control Point (730-837)	SM	36	7,860	(283)
Defensive Fighting Position (730-834)	SM	68	5,515	(375)
Cybersecurity	LS			(1,800)
SUPPORTING FACILITIES				**48,007**
Utilities And Fence	LS			(1,500)
Roads & Pavements	LS			(2,000)
Storm Drainage	LS			(1,500)
Site Improvements/Demolition	LS			(39,500)
Electrical Utilities	LS			(3,000)
Information/Communication System	LS			(507)
SUBTOTAL				**75,105**
Contingency (5%)				(3,755)
TOTAL CONTRACT COST				**78,860**
Supervision, Inspection And Overhead (6%)				(4,732)
TOTAL REQUEST				**83,592**
TOTAL REQUEST (ROUNDED)				**84,000**
EQUIPMENT FROM OTHER APPROPRIATION				(1,400)

10. DESCRIPTION OF PROPOSED CONSTRUCTION:

Utilize host-nation funding to construct a 5,192 SM Munitions Storage Area (MSA) using conventional design and construction methods to accommodate the mission of the facility. This project is phase one of two of the relocation of the Delta Munition Site. The construction of facilities to support the relocation of the Alpha Munitions Site in the same area is already under construction. 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. 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 will comply with Department of Defense antiterrorism/force protection requirements per Unified Facility Criteria 4-010-01. The project will demolish buildings 2419, 2421, 2422, 2424, 2427, 2429, 2431, 2457, 2458, 2499 and 7210 (6,006 SM).

11. REQUIREMENT: 5,192 SM **ADEQUATE: 0 SM** **SUBSTANDARD: 6,006 SM**

PROJECT: Munitions Storage Area Move Delta (Phase 1) (Current Mission)

REQUIREMENT: This project is required to replace explosive storage facilities on Osan AB. The following

1. COMPONENT	REPUBLIC OF KOREA FUNDED CONSTRUCTION (ROKFC)	2. DATE
AIR FORCE		February 2020

3. INSTALLATION AND LOCATION	
OSAN AIR BASE, KOREA	
4. PROJECT TITLE	**5. PROJECT NUMBER**
MUNITIONS STORAGE AREA MOVE DELTA (PHASE 1)	F17R620 / SMYU003005A

facilities are required: an admin supervisory building, a precision guided munitions facility, a surveillance / inspection facility, a conventional munitions maintenance facility and flow-through-type explosive storage facilities. The administration building and inspection facility require collective protection systems. Building information system, pile foundations, utilities, power, lighting, fencing, fill and compaction including fill surcharge, pavements, security tower, entry control point, standard defensive fighting positions (DFPs) and over watch DFPs are also required.

CURRENT SITUATION: The existing munitions storage facilities at Osan AB are currently located at on-base and off-base locations. A project to relocate the off-base storage is currently under construction in a new location on base (Echo Site). The smaller-capacity Delta site is located near the Southwest perimeter of the base. This phase resolves separation, operational times, and safety risks of the current location of the Delta MSA by relocating the functions to the Echo Site. The next phase moves the remaining storage to the Echo site, finishing the co-location of all munitions. Most existing buildings in the Delta MSA were built in the late 1980s or early 1990s with an expected service life of 30 years. The Delta to Echo munitions relocation and expansion project will enhance the operational effectiveness of the Wing by consolidating all munitions areas into one location on base and facilitating “fight tonight” capabilities.

IMPACT IF NOT PROVIDED: This project provides pre-positioned stocks required to "start the fight". If this project is not provided, the separation of the MSAs on base will continue to negatively impact production rates and efficiency of munitions personnel and will continue to waste man-hours in unnecessary transportation between the existing Delta and Echo sites. There will continue to be significant life safety risk to base personnel and the local community and impact to “fight tonight” capabilities due to excess explosive safety/quantitative distance arcs over populated areas. This project is required in order for Osan AB to protect 51 million people and support the air tasking order.

ADDITIONAL: No portion of this facility is intended for Republic of Korea personnel exclusive or primary use. SOFA-JC approval is already granted on 9 September 2016 for FASC 3420. This project is located on an enduring installation which will be retained by United States Forces Korea for the foreseeable future due approval of FASC 3420. The proposed site will require an Explosive Safety Site Plan (ESSP) IAW AFMAN 91-201, para 14.9.2 for new construction of 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. 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), and shall employ the standard facility designs where applicable with DDESB approval. This project fulfills US requirements only and will be designed and constructed for US exclusive use.

JOINT USE CERTIFICATION: For US exclusive use but can be used on an “as available” basis; however, the scope of the project is based on Air Force requirements.

Base Civil Engineer: 011-82-31-661-4312. Munitions Storage Production Area: 5,192 SM = 55,886 SF. Demolish: 6,006 SM = 64,648 SF.

1. COMPONENT		2. DATE
AIR FORCE	**REPUBLIC OF KOREA FUNDED CONSTRUCTION (ROKFC)**	February 2020

3. INSTALLATION AND LOCATION	
OSAN AIR BASE, KOREA	
4. PROJECT TITLE	**5. PROJECT NUMBER**
MUNITIONS STORAGE AREA MOVE DELTA (PHASE 1)	F17R620 / SMYU003005A

12. SUPPLEMENTAL DATA:

a. Estimated Design Data:

(1) Status:	
(a) Date Design Started	Feb 2019
(b) Parametric Cost Estimates used to develop costs	YES
*(c) Percent Complete	15%
*(d) Date 35% Designed (Estimated)	Nov 2019
(e) Date Design Complete (Estimated)	Sep 2020
(f) Energy Study/Life-Cycle analysis was/will be performed	N/A
(2) Basis:	
(a) Standard or Definitive Design -	N/A
(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	0
(c) Total	0
(d) Contract	0
(e) In-house	0
(4) Construction Contract Award	Jan 2021
(5) Construction Start	Mar 2021
(6) Construction Completion	Mar 2023

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

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

Equipment Nomenclature	Procuring Appropriation	FY	Cost ($000)
Furniture, Fixture, CCTV & Equip	3080	2023	1,200
Communication Equipment	3400	2023	200

c. Explosive Safety Quantity-Distance (Q-D) Siting: The proposed site will require an Explosive Safety Site Plan (ESSP) IAW AFMAN 91-201, para 14.9.2 for new construction of non-explosives facilities within an explosive clear zone. 51 FW/SEW will start the ESP process for preliminary DDESB approval, which is required IAW para13.8 and para 14.8 with the process taking roughly 6-10 months for approval.

d. FASC Task: SOFA-JC approval was granted on 9 September 2016 for FASC 3420.

1. COMPONENT	REPUBLIC OF KOREA FUNDED CONSTRUCTION (ROKFC)	2. DATE
AIR FORCE		February 2020

3. INSTALLATION AND LOCATION	4. PROJECT TITLE:
OSAN AIR BASE, KOREA	CHILD DEVELOPMENT CENTER

5. PROGRAM ELEMENT	6. CATEGORY CODE	7. PROJECT NUMBER	8. PROJECT COST ($000)
N/A	740-884	SMYU093007 (F16Z455)	20,000

9. COST ESTIMATES

ITEM	U/M	QUANTITY	UNIT COST	COST ($000)
PRIMARY FACILITY				**13,218**
CHILD DEVELOPMENT CENTER (740-884)	SM	3,821	3,394	(12,968)
CYBERSECURITY	LS			(250)
SUPPORTING FACILITIES				**4,663**
PLAYGROUND	LS			(795)
PAVEMENTS	LS			(705)
SITE IMPROVEMENTS	LS			(556)
RELOCATION OF THE PUBLIC PLAYGROUND	LS			(500)
PASSIVE FORCE PROTECTION MEASURES	LS			(398)
UTILITIES	LS			(837)
COMMUNICATIONS	LS			(604)
DEMOLITION	SM	972	276	(268)
SUBTOTAL				**17,881**
CONTINGENCY (5%)				894
TOTAL CONTRACT COST				**18,775**
SUPERVISION, INSPECTION AND OVERHEAD (6.5%)				1,220
TOTAL REQUEST				**19,995**
TOTAL REQUEST (ROUNDED)				**20,000**
EQUIPMENT FROM OTHER APPROPRIATIONS (NON-ADD)				(600)

10. DESCRIPTION OF PROPOSED CONSTRUCTION:

Utilize host-nation funding to construct a Child Development Center utilizing conventional design and construction methods to accommodate the mission of the facility. Construction will include concrete foundation and floor slab, masonry walls, standing seam metal roof, utilities, energy management control system, water/electric meters, fire detection/protection, fencing, communication support, parking, pick-up/drop-off area, access road, site improvements, landscaping, playgrounds, pavements, communications infrastructure and all necessary supporting work for a complete and usable facility. The new facility will offer pre-school activity rooms, toddler activity rooms, consolidate infant and pre-toddler activity rooms, School Age Center activity rooms, science, technology, engineering and mathematics rooms, general administrative space, storage, a kitchen, and janitor closet. 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 Facility Criteria 4-740-14, *Child Development Centers*. 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 effectiveness 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 will comply with Department of Defense antiterrorism/force protection requirements per Unified Facility Criteria 4-010-01. The project will demolish buildings 738 (581 Square Meters), 739 (16 Square Meters) and 750 (375 Square Meters) (Total: 972 Square Meters). This project fulfills U. S. requirements only and will be designed and constructed for U. S. exclusive use.

Air Conditioning: 80 Tons

1. COMPONENT	REPUBLIC OF KOREA FUNDED CONSTRUCTION (ROKFC)	2. DATE
AIR FORCE		February 2020

3. INSTALLATION AND LOCATION	
OSAN AIR BASE, KOREA	
4. PROJECT TITLE	**5. PROJECT NUMBER**
CHILD DEVELOPMENT CENTER	SMYU093007/F16Z455

11. REQUIREMENT: 3,821 SM **ADEQUATE: 0 SM** **SUBSTANDARD: 972 SM**

PROJECT: Construct a Child Development Center

REQUIREMENT: An adequately sized, configured and centrally located Child Development Center is required to provide day care services for active duty dependent children at this remote and isolated oversea base. It must provide a safe and healthy environment that includes early childhood development and preschool programs. Child Development Center space is required to accommodate up to 274 children and 58 staff members to support active duty members with dependent children for full-day, part-day, and hourly services.

CURRENT SITUATION: The current Child Development Center's (building 738) capacity supports 66 children and has a demand beyond the current operating capability with an average of 40 children waitlisted. Osan Air Base currently has 860 Command Sponsorship Program billets, which equates to 14% of the active duty military population. The insufficient facility is unable to accommodate a majority of active duty dependent children. The Child Development Center facility is 34-years old and only provides 30% of the required operational space. The School Age Center (building 433) is 37-years old with a capacity of 48 children. Both existing Child Development and School Age Centers lack key capabilities, such as a nursing area, isolation room, staff breakroom, staff restrooms, outdoor play areas, indoor play areas, training room etc., which does not meet Air Force Manual 32-1084 nor Unified Facilities Criteria 4-740-14. The heating, ventilation and air conditioning system in the existing aged facility is in poor condition which raises numerous health concerns and therefore must be replaced. The fire suppression systems of the Child Development and School Age Centers are inadequate and were respectively given a Fire Suppression Deficiency II rating in May 2016 and a Fire Suppression Deficiency III rating in February 2018. These deficiencies negatively impact military family care leading to mission disruptions and inefficiencies. Over $1. 4M have been invested into these facilities with 71% or $1.0M of those funds having been expensed over the past 5 years to maintain the degraded Child Development and School Age Centers.

IMPACT IF NOT PROVIDED: Without this project, Osan Air Base will continue to fail to provide a better quality of life nor remediate unacceptable child care conditions for team Osan members. It is required now, because the workarounds are unacceptable in the next 4 years. It affects a very large number of people (500+) based on the current Command Sponsorship Program billets. Without a new Child Development Center, the level of service at Osan Air Base will continue to be degraded and the active duty military/civilian families will be forced to use an undersized and deteriorating child care facility or off-base child care options, which is not safe and is an insufficient environment during the early critical years of childhood. The lack of an adequately sized/capable Child Development Center negatively impacts mission and family readiness, personnel retention, and overall productivity of Team Osan.

ADDITIONAL: No portion of the constructed 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 for the foreseeable future. This project meets applicable criteria/scope specified in Air Force Manual 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. An economic analysis has been exempted from Host Nation funding construction programs. 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. The Air Force Services Agency provided a catalog of standard facility types for the development of the Child Development Center and a prototype design guidance was used for the "K-shape" facility per Unified Facilities Criteria 4-740-14. This project does not fall within or partly within the 100-year flood plain. The initial cost estimate for this project is within the Department

1. COMPONENT	REPUBLIC OF KOREA FUNDED CONSTRUCTION (ROKFC)	2. DATE
AIR FORCE		February 2020

3. INSTALLATION AND LOCATION	
OSAN AIR BASE, KOREA	
4. PROJECT TITLE	**5. PROJECT NUMBER**
CHILD DEVELOPMENT CENTER	SMYU093007/F16Z455

(continued from page 2)

of Defense Pricing Guide parameters. The supporting facilities' costs exceed 25% of the primary facilities' costs due to extensive utilities, security lightings, closed circuit television cables and communication runs, associated site work for installing underground electrical duct banks to include spoils, concrete, excavation and backfilling and relocation of the existing public playground. Base Civil Engineer: 011-82-31-661-4312. Child Development Center: 3,821 SM = 41,126 SF. Demolition: 972 SM = 10,468 SF.

JOINT USE CERTIFICATION: For US exclusive use but can be used on an "as available" basis; however, the scope of the project is based on Air Force requirements.

1. COMPONENT	REPUBLIC OF KOREA FUNDED CONSTRUCTION (ROKFC)	2. DATE
AIR FORCE		February 2020

3. INSTALLATION AND LOCATION	
OSAN AIR BASE, KOREA	
4. PROJECT TITLE	**5. PROJECT NUMBER**
CHILD DEVELOPMENT CENTER	SMYU093007/F16Z455

12. SUPPLEMENTAL DATA:

a. Estimated Design Data:

(1) Status:	
(a) Date Design Started	15 Jun 18
(b) Parametric Cost Estimates used to develop costs	YES
*(c) Percent Complete as of 01 Jan 2020	100%
*(d) Date 35% Designed	23 Oct 18
(e) Date Design Complete	31 Dec 19
(f) 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	540
(b) All other Design Costs	0
(c) Total	0
(d) Contract	0
(e) In-house	0
(4) Construction Contract Award	Feb 21
(5) Construction Start	Apr 21
(6) Construction Completion	Apr 23

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

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

Equipment Nomenclature	Procuring Appropriation	Fiscal Year Appropriated or Requested	Cost ($000)
Furniture, Fixture & Equip	3080	2023	500
Communications Equipment	3400	2023	100

c. Explosive Safety Quantity-Distance (Q-D) Siting: N/A
Department of Defense Explosive Safety Board (DDESB): N/A

Tab – FAMILY HOUSING

Department of the Air Force

Military Family Housing

Fiscal Year (FY) 2021 Budget Estimates

Justification Data Submitted to Congress

February 2020

This Page Intentionally Left Blank.

Tab - **CONTENTS**

TABLE OF CONTENTS

This Page Intentionally Left Blank.

Tab – FAMILY HOUSING
NARRATIVE

MILITARY FAMILY HOUSING

	Program ($ in Thousands)
FY 2021 Budget Request	$414,235
FY 2020 Budget Request	$398,647
FY2020 Enactment*	$ 31,200
FY2020 Appropriation	$429,847

NARRATIVE SUMMARY

* Funds provided by Congress in FY2020 for additional Family Housing Support and Management are two 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.

This Page Intentionally Left Blank.

FINANCIAL SUMMARY

AUTHORIZATION FOR APPROPRIATION REQUESTED FOR FY 2021:	($000)
FUNDING REQUEST FOR FY 2021	
Construction	$0
Construction Improvements	$94,245
Planning and Design	$2,969
Appropriation Request: Construction	$97,214
Operations, Utilities, and Maintenance	$284,528
Operating Expenses	$100,689
Utilities	$43,173
Maintenance	$140,666
Housing Privatization	$23,175
Leasing - Worldwide	$9,318
Appropriation Request: O&M, Leasing, Housing Privatization	$317,021
Appropriation Request	$414,235
Reimbursement Request	$5,715
FY 2021 FAMILY HOUSING REQUEST	**$419,950**

This Page Intentionally Left Blank.

DEPARTMENT OF AIR FORCE
FH-11 Inventory and Condition of Government-Owned, Family Housing Units
WORLDWIDE
(Number of Dwelling Units in Inventory)
Fiscal Year 2021

	FY 2019	FY 2020	FY 2021	FY 2022	FY 2023	FY 2024	FY 2025
Beginning of FY Adequate Inventory Total	11,796	11,811	12,015	11,452	11,340	11,227	11,389
FCI of 90% to 100% (Good Condition)	8,207	7,400	7,047	6,471	5,956	4,776	4,938
FCI of 80% to 89% (Fair Condition)	3,589	4,411	4,968	4,981	5,384	6,451	6,451
Beginning of FY Inadequate Inventory Total	3,371	3,442	3,245	3,762	3,595	3,426	3,266
FCI of 60% to 79% (Poor Condition)	2,794	1,790	1,875	2,567	2,549	2,391	2,231
FCI of 59% and below (Failing Condition)	577	1,652	1,370	1,195	1,046	1,035	1,035
Beginning of FY Total Inventory	15,167	15,253	15,260	15,214	14,935	14,653	14,655
Percent Adequate - Beginning of FY Inventory	**78%**	**77%**	**79%**	**75%**	**76%**	**77%**	**78%**
Inadequate Inventory Reduced Through:	71	(197)	517	(167)	(169)	(160)	(113)
Construction (FHCON)	(130)	(12)	(117)	(231)	(1)	(20)	(107)
Maintenance & Repair (FHO&M)	(114)	(210)	(151)	(140)	(29)	(140)	(6)
Privatization							
Demolition/Divestiture/Diversion/Conversion	86	(54)	(117)	(279)	(143)		
Funded by Host Nation							
Additional Inadequate Units Identified	229	79	902	483	4		
Adequate Inventory Changes:	15	204	(563)	(112)	(113)	162	194
Construction (FHCON)	130	88	117	231	1	22	148
Maintenance & Repair (FHO&M)	114	210	151	140	29	140	6
Privatization							
Demolition/Divestiture/Diversion/Conversion	-	(69)	15		(163)		
Funded by Host Nation		54	56		24		40
Additional Inadequate Units Identified	(229)	(79)	(902)	(483)	(4)		
End of FY Adequate Inventory Total	11,811	12,015	11,452	11,340	11,227	11,389	11,583
FCI of 90% to 100% (Good Condition)	7,400	7,047	6,471	5,956	4,776	4,938	5,132
FCI of 80% to 89% (Fair Condition)	4,411	4,968	4,981	5,384	6,451	6,451	6,451
End of FY Inadequate Inventory Total	3,442	3,245	3,762	3,595	3,426	3,266	3,153
FCI of 60% to 79% (Poor Condition)	1,790	1,875	**2,567**	2,549	2,391	2,231	2,118
FCI of 59% and below (Failing Condition)	1,652	1,370	1,195	1,046	1,035	1,035	1,035
End of FY Total Inventory	15,253	15,260	15,214	14,935	14,653	14,655	14,736
Percent Adequate - End of FY Inventory	**77%**	**79%**	**75%**	**76%**	**77%**	**78%**	**79%**
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 at a specific point in time with respect to physical condition and ability to support the current occupant or mission. 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

2 - Assessment data and investment, sustainment, and divestiture strategy for the worldwide AF government-owned inventory is based on the Housing Community Profiles for those locations and the Family Housing Master Plan.

3 - Units with <60 FCI scores is largely due to the retention of units on Okinawa to provide "swing-space" during the on-going revitalization surge. When renovated units come back on line, the failing units (863 on Okinawa) will be divested. In addition, 144 units with <60 FCI are at bases that were planned to be divested associated with the EIC; however, due to updates in EIC planning these units are retained throughout the FYDP.

4 - A portion of the inadequate inventory retained at Yokota and Misawa is being used for swing space during renovations.

5 - Drop in percent adequacy in FY21 and 22 is due to stairwell units in Germany and tower units in Japan reaching 20 years since the last renovation. Due to age, many components will require expected repairs and life cycle renewals which will reduce FCI scores, resulting in the units becoming inadequate.

6 - Units (12) at Akrotiri, Cypress added to MFH inventory in FY20, conditional on approved RAF/AF agreement. Units are managed by RAF Lakenheath.

7 - Inventory reflects leveling of FY21 FHCON projects.

DEPARTMENT OF AIR FORCE
FH-11 Inventory and Condition of Government-Owned, Family Housing Units
UNITED STATES (CONUS plus Hawaii and Alaska)
(Number of Dwelling Units in Inventory)
Fiscal Year 2021

	FY 2019	FY 2020	FY 2021	FY 2022	FY 2023	FY 2024	FY 2025
Beginning of FY Adequate Inventory Total	-	93	84	30	32	32	32
FCI of 90% to 100% (Good Condition)		19	30	30	32	32	32
FCI of 80% to 89% (Fair Condition)		74	54	-			
Beginning of FY Inadequate Inventory Total	111	18	27	72	60	60	60
FCI of 60% to 79% (Poor Condition)	111	18	27	72	60	60	60
FCI of 59% and below (Failing Condition)							
Beginning of FY Total Inventory	111	111	111	102	92	92	92
Percent Adequate - Beginning of FY Inventory	**0%**	**84%**	**76%**	**29%**	**35%**	**35%**	**35%**
Inadequate Inventory Reduced Through:	(93)	9	45	(12)	-	-	-
Construction (FHCON)							
Maintenance & Repair (FHO&M)				(2)			
Privatization							
Demolition/Divestiture/Diversion/Conversion			(9)	(10)			
Funded by Host Nation							
Additional Inadequate Units Identified:	(93)	9	54				
Adequate Inventory Changes:	93	(9)	(54)	2	-	-	-
Construction (FHCON)							
Maintenance & Repair (FHO&M)		-		2			
Privatization							
Demolition/Divestiture/Diversion/Conversion							
Funded by Host Nation							
Additional Inadequate Units Identified	93	(9)	(54)				
End of FY Adequate Inventory Total	93	84	30	32	32	32	32
FCI of 90% to 100% (Good Condition)	19	30	30	32	32	32	32
FCI of 80% to 89% (Fair Condition)	74	54	-	-	-	-	-
End of FY Inadequate Inventory Total	18	27	72	60	60	60	60
FCI of 60% to 79% (Poor Condition)	18	27	72	60	60	60	60
FCI of 59% and below (Failing Condition)				-	-	-	-
End of FY Total Inventory	111	111	102	92	92	92	92
Percent Adequate - End of FY Inventory	**84%**	**76%**	**29%**	**35%**	**35%**	**35%**	**35%**

NOTES:

1 - Facility Condition Index (FCI) is a general measure at a specific point in time with respect to physical condition and ability to support the current occupant or mission. 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 - The 100 Wright Patterson units were assumed inadequate in the 2017 BES submission. The FY18 assessment identified the majority of the units as adequate at the beginning of the FYDP, therefore the adjustment is made in FY19 to show adequacy. However,

3 - Two United States Air Force Academy (USAFA) units (previously privatized and brought back into the government-owned inventory in FY18) are identified for FHO&M projects in FY22. Execution to be finalized with appropriate approvals.

4 - Nine government-owned units at Eglin are identified for divestiture in FY21.

DEPARTMENT OF AIR FORCE
FH-11 Inventory and Condition of Government-Owned, Family Housing Units
FOREIGN (includes U.S. Territories)
(Number of Dwelling Units in Inventory)
Fiscal Year 2021

	FY 2019	FY 2020	FY 2021	FY 2022	FY 2023	FY 2024	FY 2025
Beginning of FY Adequate Inventory Total	11,796	11,718	11,931	11,422	11,308	11,195	11,357
FCI of 90% to 100% (Good Condition)	8,207	7,381	7,017	6,441	5,924	4,744	4,906
FCI of 80% to 89% (Fair Condition)	3,589	4,337	4,914	4,981	5,384	6,451	6,451
Beginning of FY Inadequate Inventory Total	3,260	3,424	3,218	3,690	3,535	3,366	3,206
FCI of 60% to 79% (Poor Condition)	2,683	1,772	1,848	2,495	2,489	2,331	2,171
FCI of 59% and below (Failing Condition)	577	1,652	1,370	1,195	1,046	1,035	1,035
Beginning of FY Total Inventory	15,056	15,142	15,149	15,112	14,843	14,561	14,563
Percent Adequate - Beginning of FY Inventory	**78%**	**77%**	**79%**	**76%**	**76%**	**77%**	**78%**
Inadequate Inventory Reduced Through:	164	(206)	472	(155)	(169)	(160)	(113)
Construction (FHCON)	(130)	(12)	(117)	(231)	(1)	(20)	(107)
Maintenance & Repair (FHO&M)	(114)	(210)	(151)	(138)	(29)	(140)	(6)
Privatization							
Demolition/Divestiture/Diversion/Conversion	86	(54)	(108)	(269)	(143)		
Funded by Host Nation							
Additional Inadequate Units Identified:	322	70	848	483	4		
Adequate Inventory Changes:	(78)	213	(509)	(114)	(113)	162	194
Construction (FHCON)	130	88	117	231	1	22	148
Maintenance & Repair (FHO&M)	114	210	151	138	29	140	6
Privatization							
Demolition/Divestiture/Diversion/Conversion		(69)	15		(163)		
Funded by Host Nation		54	56		24		40
Additional Inadequate Units Identified:	(322)	(70)	(848)	(483)	(4)		
End of FY Adequate Inventory Total	11,718	11,931	11,422	11,308	11,195	11,357	11,551
FCI of 90% to 100% (Good Condition)	7,381	7,017	6,441	5,924	4,744	4,906	5,100
FCI of 80% to 89% (Fair Condition)	4,337	4,914	4,981	5,384	6,451	6,451	6,451
End of FY Inadequate Inventory Total	3,424	3,218	3,690	3,535	3,366	3,206	3,093
FCI of 60% to 79% (Poor Condition)	1,772	1,848	2,495	2,489	2,331	2,171	2,058
FCI of 59% and below (Failing Condition)	1,652	1,370	1,195	1,046	1,035	1,035	1,035
End of FY Total Inventory	15,142	15,149	15,112	14,843	14,561	14,563	14,644
Percent Adequate - End of FY Inventory	**77%**	**79%**	**76%**	**76%**	**77%**	**78%**	**79%**

NOTES:

1 - Facility Condition Index (FCI) is a general measure at a specific point in time with respect to physical condition and ability to support the current occupant or mission. 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 for those locations and the Family Housing Master Plan.

3 - Units with <60 FCI scores is largely due to the retention of units on Okinawa to provide "swing-space" during the on-going revitalization surge. When renovated units come back on line, the failing units (863 on Okinawa) will be divested. In addition, 144 units with <60 FCI are at bases that were planned to be divested associated with the EIC; however, due to updates in EIC planning these units are retained throughout the FYDP.

4 - A portion of inadequate inventory retained is due to units at Yokota and Misawa being used for swing space during renovations. Misawa divestiture is identified in FY21 (68 units), FY22 (136 units), and FY23 (28 units). Yokota divestiture is identified in FY21 (5 units), FY22 (62 units), and FY26+ (78 units)

5 - Drop in percent adequacy in FY21 and 22 is due to stairwell units in Germany and tower units in Japan reaching 20 years since the last renovation. Due to age, many components will require expected repairs and life cycle renewals which will reduce FCI scores, resulting in the units becoming inadequate.

6 - Units (12) at Akrotiri, Cypress added to MFH inventory in FY20, conditional on approved RAF/AF agreement. Units are managed by RAF Lakenheath.

7 - Inventory reflects leveling of FY21 FHCON projects.

DEPARTMENT OF AIR FORCE
FH-11 Inventory and Condition of Government-Owned, Family Housing Units (Number of Dwelling Units in Inventory) Fiscal Year 2021

Transitional

	FY 2019	FY 2020	FY 2021	FY 2022	FY 2023	FY 2024	FY 2025
Beginning of FY Adequate Inventory Total	**402**	**301**	**163**	**159**	**146**	**4**	**4**
FCI of 90% to 100% (Good Condition)	205	51	142	142	70	2	2
FCI of 80% to 89% (Fair Condition)	197	250	21	17	76	2	2
Beginning of FY Inadequate Inventory Total	**493**	**608**	**569**	**500**	**291**	**183**	**183**
FCI of 60% to 79% (Poor Condition)	493	608	442	378	203	95	95
FCI of 59% and below (Failing Condition)			127	122	88	88	88
Beginning of FY Total Inventory	**895**	**909**	**732**	**659**	**437**	**187**	**187**
Percent Adequate - Beginning of FY Inventory	**45%**	**33%**	**22%**	**24%**	**33%**	**2%**	**2%**
Inadequate Inventory Reduced Through:	**86**	**(39)**	**(69)**	**(209)**	**(108)**	**(181)**	**0**
Construction (FHCON)							
Maintenance & Repair (FHO&M)							
Privatization							
Demolition/Divestiture/Diversion/Conversion	86	(3)	(73)	(222)	(112)	(181)	
Funded by Host Nation							
Additional Inadequate Units Identified		(36)	4	13	4		
Adequate Inventory Changes:	**(72)**	**(138)**	**(4)**	**(13)**	**(142)**	**(161)**	**0**
Privatization							
Demolition/Divestiture/Diversion/Conversion	(72)	(174)			(138)	(161)	
Additional Inadequate Units Identified		36	(4)	(13)	(4)		
End of FY Adequate Inventory Total	**301**	**163**	**159**	**146**	**4**	**4**	**4**
FCI of 90% to 100% (Good Condition)	51	142	142	70	2	2	2
FCI of 80% to 89% (Fair Condition)	250	21	17	76	2	2	2
End of FY Inadequate Inventory Total	**608**	**569**	**500**	**291**	**183**	**183**	**183**
FCI of 60% to 79% (Poor Condition)	608	442	378	203	95	95	95
FCI of 59% and below (Failing Condition)		127	122	88	88	88	88
End of FY Total Inventory	**909**	**732**	**659**	**437**	**187**	**187**	**187**
Percent Adequate - End of FY Inventory	**33%**	**22%**	**24%**	**33%**	**2%**	**2%**	**2%**

NOTES:

1 - Facility Condition Index (FCI) is a general measure at a specific point in time with respect to physical condition and ability to support the current occupant or mission. 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 - RAF Alconbury units are removed from Transitional inventory in FY20, since European Infrastructure Consolidation (EIC) updates identify Alconbury to be retained. Units are identified as sustainment until EIC is finalized and new HRMA and HCP are updated.

3 - 187 transitional units remain at the end of the FYDP. This includes 78 units at Yokota, being used as swing space until other tower renovations are complete; and 109 units at RAF Mildenhall, being retained throughout the FYDP due EIC updates.

4 - Previous FH-11 Transitional Inventory tables did not account for the change in adequacy throughout the FYDP. Added "Future Inadequate" as an inventory change to accurately portray adequacy of units. Therefore 36 units previously identified as inadequate in FY20, are adequate in FY20 before being divested.

FH-11 Inventory and Condition of Government-Owned, Family Housing Units
(Number of Dwelling Units in Inventory)
Fiscal Year 2021

Transitional Unit Details by Location

State/Country	Installation	N/E[2]	Change in Transitional Units	Condition (FCI)[3]	Explanation
FY 2019					
Germany	KMC	N	(126)	3	Surplus divestiture of inadequate units in stairwell buildings: Landstuhl (2 buildings) and Ramstein (5 buildings)
Germany	KMC	N	(72)	1	Surplus stairwell units previously identified as transitional units are identified to be retained based on occupancy at Ramstein (3 buildings)
Japan	Misawa AB	N	136	3	Divestiture of two towers identified in FY18 was not executed. It was determined the two towers will be used for swing space during renovations until FY21. These surplus units are being added back into the transitional inventory.
Japan	Yokota AB	N	78	3	Divestiture of one tower and 8 townhouse units identified in FY18 was not executed. It was determined these units will be used for swing space during renovations throughout the FYDP. These surplus units are being added back into the transitional inventory.
United Kingdom	RAF Menwith Hill	N	(2)	3	Divestiture of inadequate units located off-base, currently used by DOS which are no longer needed.
FY 2020					
Germany	KMC	N	(18)	3	Surplus divestiture of inadequate units in stairwell building 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 FHMP will reanalyze divestiture plan.
United Kingdom	RAF Alconbury	N	(205)	1/2 /4	EIC updates identify Alconbury to be retained. Removed all units from Transitional inventory and identified as sustainment until EIC is finalized and new HRMA and HCP are updated.
United Kingdom	RAF Menwith Hill	N	(21)	2	Divestiture of units located on-base, currently used by DOS which are no longer needed.
FY 2020 Transitional			**(177)**		
FY 2021					
Japan	Misawa AB	N	(68)	3	Surplus divestitures of inadequate units in 2 housing tower at Main Base
Japan	Yokota AB	N	(5)	4	Demolition of 5 surplus inadequate (FCI<60) units.
FY 2021 Transitional Unit Changes			**(73)**		
FY 2022					
Japan	Misawa AB	N	(136)	3	Surplus divestitures of inadequate units in 2 housing towers at Main Base
Japan	Yokota AB	N	(62)	4	Divestiture of 62 units inadequate (FCI<60) units. Current FHMP will reanalyze divestiture plan.
United Kingdom	RAF Feltwell	E	(24)	3	Divestiture of inadequate units due to EIC (Portal Close units)
FY 2022 Transitional Unit Changes			**(222)**		

FH-11 Inventory and Condition of Government-Owned, Family Housing Units
(Number of Dwelling Units in Inventory)
Fiscal Year 2021

Transitional Unit Details by Location

FY 2023					
Japan	Misawa AB	N	(28)	3	Surplus divestiture of inadequate townhouse units at Main Base
United Kingdom	RAF Feltwell	N	(138)	2	Divestiture of adequate units due to EIC
United Kingdom	RAF Feltwell	E	(84)	3	Divestiture of adequate units due to EIC
FY 2023 Transitional Unit Changes			**(250)**		
FY 2024					
FY 2024 Transitional Unit Changes			**0**		
FY 2025					
FY2025					
Transitional Unit Changes					
Total			**(708)**		

NOTES:

1 - Table identifies the change of transitional units. Negative numbers identify transitional units removed from the inventory. Positive numbers identify the addition of transitional inventory (surplus units previously identified as being divested, which are being used as swing space duringrenovations).

2 - Non-enduring locations annotated by use of "N", while Enduring locations annotated by use of"E". 3 - 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)

4 - The EIC updates have resulted in changes to the divestiture plan at three bases. RAF Alconbury is now planned to be retained, therefore the units are identified to be removed from transitional inventory in FY20 (previously identified for divestiture in FY23). RAF Feltwell divestiture has moved from FY20 and FY21, to FY22 and FY23. RAF Mildenhall has moved from FY23 toFY26+.

5 - Misawa and Yokota divestiture has been updated to incorporate changes needed in swing space. Misawa divestiture moved one tower from FY21 to FY22; therefore there are now 68 units divested in FY21 and 136 units divested in FY22. Yokota did notdivest 67 units identified in FY18, which are added back into the inventory in FY20, and identified to be divested in FY21 and FY22. The current FHMP will reanalyze divestiture plan withYokota.

6 - The definition of transitional FH are units that are at enduring and non-enduring sites: 1) as a result of organizational deactivations (e.g., Brigade Combat Team (BCT), etc.), consolidation (e.g., Europe Installation Consolidation (EIC), etc.) and relocation efforts (e.g., Yongson Relocation, etc.); 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 FYDP.

DEPARTMENT OF THE AIR FORCE
MILITARY FAMILY HOUSING
FISCAL YEAR 2021 BUDGET REQUEST

FH-8 Air Force Inadequate Family Housing Units Eliminated in FY2019

MAJCOM	Project Type	Base	Total Inventory Minus Leased & Privatized	Total Inadequate Inventory	Total Inadequate Addressed
Units at the Beginning of FY2019			**15,167**	**3,371**	
Additional Inadequate Units Identified			**0**	**229**	**0**
AFMC	Condition Adjustment	Wright Patterson		(93)	
PACAF	Condition Adjustment	Misawa		113	
PACAF	Condition Adjustment	Okinawa		136	
PACAF	Condition Adjustment	Yokota		1	
USAFE	Condition Adjustment	KMC		64	
USAFE	Condition Adjustment	RAF Croughton		2	
USAFE	Condition Adjustment	RAF Lakenheath		4	
USAFE	Condition Adjustment	Spangdahlem		2	
FY2019 Family Housing Construction, Improvement, and O&M Projects to Eliminate Inadequate Units			**0**	**(244)**	**244**
PACAF	FHO&M	Misawa		(68)	68
PACAF	FHCON	Okinawa		(130)	130
PACAF	FHO&M	Okinawa		(46)	46
Units Demolished/Divested FY2019			**86**	**86**	**(86)**
PACAF	Divest (not executed)	Misawa	136	136	(136)
PACAF	Divest (not executed)	Yokota	78	78	(78)
USAFE	Demo	KMC	(36)	(36)	36
USAFE	Demo	KMC	(90)	(90)	90
USAFE	Divest	RAF Menwith Hill	(2)	(2)	2
Deficit Construction			**0**	**0**	**0**
Host Nation Construction projects			**0**	**0**	**0**
Units at End of FY2019			**15,253**	**3,442**	**158**

NOTES:
1 - FHO&M and FHCON investments support the Housing Community Profile and Family Housing Master plan.
2 - Divestiture based on Family Housing Master Plan. Units at Misawa (136) and Yokota (78) being retained for swing space during construction improvement projects.
3 - 93 Wright Patterson identified as adequate based on FY18 HCP (previously identified as inadequate).

DEPARTMENT OF THE AIR FORCE
MILITARY FAMILY HOUSING
FISCAL YEAR 2021 BUDGET REQUEST

FH-8 Air Force Inadequate Family Housing Units Eliminated in FY2020

MAJCOM	Project Type	Base	Total Inventory Minus Leased & Privatized	Total Inadequate Inventory	Total Inadequate Addressed
Units at the Beginning of FY2020			**15,253**	**3,442**	
Additional Inadequate Units Identified			**0**	**79**	**0**
AFMC	Condition Adjustment	Wright Patterson		9	
PACAF	Condition Adjustment	Misawa		48	
PACAF	Condition Adjustment	Okinawa		1	
PACAF	Condition Adjustment	RAF Fairford		1	
USAFE	Condition Adjustment	Spangdahlem		20	
FY2020 Family Housing Construction, Improvement, and O&M Projects to Eliminate Inadequate Units			**0**	**(222)**	**222**
PACAF	FHO&M	Okinawa		(204)	204
PACAF	FHCON	Yokota		(12)	12
USAFE	FHO&M	RAF Mildenhall		(6)	6
USAFE	FHO&M	RAF Mildenhall			
Units Demolished/Divested FY2020			**(123)**	**(54)**	**54**
PACAF	Divest	Okinawa	(179)	(179)	179
PACAF	Divest (not executed)	Okinawa	28	28	(28)
PACAF	Divest (not executed)	Yokota	67	67	(67)
USAFE	Divest	KMC (Ramstein)	(18)	(18)	18
USAFE	Divest (not executed)	KMC (Landstuhl)	36	36	(36)
USAFE	Divest	RAF (Vogelweh)	(48)		
USAFE	Divest	RAF Menwith Hill	(21)		
USAFE	Acquisition	RAF Lakenheath	12	12	(12)
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 FY2020			**15,260**	**3,245**	**276**

NOTES:
1 - FHO&M and FHCON investments support the Housing Community Profile and Family Housing Master Plan.
2 - Divestiture based on 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. In addition, 28 units at Okinawa are awaiting demolition through SACO project in lieu of AF funds.
3 - Units (12) at Akrotiri, Cypress added to MFH inventory, conditional on approved RAF/AF agreement. Units are managed by RAF Lakenheath.

DEPARTMENT OF THE AIR FORCE
MILITARY FAMILY HOUSING
FISCAL YEAR 2021 BUDGET REQUEST

FH-8 Air Force Inadequate Family Housing Units Eliminated in FY2021

MAJCOM	Project Type	Base	Total Inventory Minus Leased & Privatized	Total Inadequate Inventory	Total Inadequate Addressed
Units at the Beginning of FY2021			**15,260**	**3,245**	
Additional Inadequate Units Identified				**902**	
AFMC	Condition Adjustment	Wright-Patterson		54	
PACAF	Condition Adjustment	Misawa		8	
PACAF	Condition Adjustment	Okinawa		148	
PACAF	Condition Adjustment	Yokota		66	
USAFE	Condition Adjustment	KMC		568	
USAFE	Condition Adjustment	Lakenheath		4	
USAFE	Condition Adjustment	Spangdahlem		54	
FY2021 Family Housing Construction, Improvement, and O&M Projects to Eliminate Inadequate Units				**(268)**	**268**
PACAF	FHO&M	Misawa		(68)	68
PACAF	FHCON	Okinawa		(117)	117
PACAF	FHO&M	Yokota		(83)	83
Units Demolished/Divested FY2021			**(102)**	**(117)**	**117**
AFMC	Divest	Eglin	(9)	(9)	9
PACAF	Divest	Misawa	(68)	(68)	68
PACAF	Divest	Okinawa	(42)	(35)	35
PACAF	Divest	Yokota	(5)	(5)	5
USAFE	Acquire	RAF Fairford	22	0	0
Deficit Construction			**0**	**0**	**0**
			0	0	0
Host Nation Construction projects			**56**	**0**	**0**
PACAF	SACO Replacement	Okinawa	56	0	0
Units at End of FY2021			**15,214**	**3,762**	**385**

NOTES:

1 - FHO&M investments support the Housing Community Profile and Family Housing Master Plan. Inventory reflects the leveling in FY21 FHCON projects.

2 - Large drop in percent adequacy at KMC is due to stairwell units reaching the 20 year plus mark since last renovation.

3 - Divestiture based on Family Housing Master Plan.

4 - Fairford inventory includes 22 previously divested housing units added back into the inventory, due to EIC basing decisions.

Tab – LEGISLATIVE LANGUAGE

AUTHORIZATION LANGUAGE
SEC. 2302. FAMILY HOUSING

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 [$3,409,000] $2,969,000.

SEC. 2303. IMPROVEMENT TO MILITARY FAMILY HOUSING UNITS

Subject to section 2825 of Title 10, United Stated 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 [$46,638,000] $94,245,000.

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, 2020, 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.

This Page Intentionally Left Blank.

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, [$103,631,000] $97,214,000 to remain available until September 30, 2025.

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 [$326,216,000] $317,021,000.

This Page Intentionally Left Blank.

Tab – CONSTRUCTION
IMPROVEMENTS

CONSTRUCTION IMPROVEMENTS

	Budget Request ($ in Thousands)
FY 2021 Budget Request	$94,245
FY 2020 Budget Request	$46,638

Purpose and Scope

The Air Force is expected to have approximately 15,200 owned units at the end of FY 2021. 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 $94,245,000 to fund one improvement construction project in FY 2021.

DEPARTMENT OF THE AIR FORCE
MILITARY FAMILY HOUSING
FISCAL YEAR 2021 BUDGET REQUEST
Construction Improvements

1. Component AIR FORCE	FY 2021 MILITARY CONSTRUCTION PROJECT DATA	2. Date [Publish Date]
3. Installation and Location: KADENA AIR BASE, JAPAN	4. Project Title: LXEZ194583 IMPROVE FAMILY HOUSING, KADENA AB, PAIP 15 (117 UN)	

5. Program Element	6. Category Code	7. Project Number	8. Project Cost ($000)
88742F	711-143	LXEZ1069764	**94,245**

9. COST ESTIMATE

ITEM	U/M	QUANTITY	UNIT COST	COST ($000)
Primary Facilities				
IMPROVE FAMILY HOUSING	UNIT	117	552,632	64,657.9
SUSTAINABILITY AND ENERGY MEASURES	LS	1	1,939,738	1,939.7
Supporting Facilities				
SITE ELECTRICAL	LS	1	1,708,564	1,708.6
SITE MECHANICAL/UTILITIES	LS	1	9,996,058	9,996.1
HAZARDOUS ABATEMENT	LS	1	4,629,474	4,629.5
PAVEMENTS	LS	1	1,121,560	1,121.6
LANDSCAPE	LS	1	741,157	741.2
Subtotal				**84,524.6**
CONTINGENCY (5%)				4,226.2
SIOH (6.5%)				5,494.1
TOTAL REQUEST				**94,245**
AREA COST				
AREA COST FACTOR	2.1			

10. DESCRIPTION OF PROPOSED WORK: Provides whole house interior and exterior modernization, renovation, and repair of one hundred seventeen (117) housing units at Kadena Air Base, including unit types: H4-56 (7 units), G3-56R (8 units), K2-56 (14 units), F2-56R (20 units) and JC3-90 NT (68 units)(see attached facility list). The work includes but is not limited to, providing all labor, materials, transportation, and performing all work necessary for the improvement of family housing to meet current codes and standards. Replace ceiling, windows, exterior & interior doors, roof covering, and repair and repaint exterior wall surfaces. Lifecycle replacement repair of all interior finishes, plumbing and lighting fixtures. Replacement repair of domestic water and sanitary sewer collection including laterals, and mechanical HVAC systems. Upgrade and reconfigure kitchen and laundry to provide secondary dining space and separate water heater utility space. Includes hazardous materials sampling, remediation, demolition, disposal, radon management and any other work necessary to provide a complete and usable facility. Site work includes replacement/repair of parking surfaces, sidewalks and walkways, repair/replace grass and shrubs, and lifecycle replacement of neighborhood electrical infrastructure.
The overall facility improvement shall be permanent and designed in accordance with Unified Facilities Criteria 1-200-02 "High Performance and Sustainable Building", Unified Facilities Criteria 3-600-01 "Fire Protection Requirement" and other latest applicable Department of Defense Unified Facilities Criteria.
Air Conditioning: 410Tons

11. REQUIREMENT: 117UN
PROJECT: LXEZ194583 IMPROVE FAMILY HOUSING, KADENA AB, PAIP 15 (117 UN)
REQUIREMENT: This project is required to provide safe and efficient housing for JNCO and E9 military members and their dependents stationed at Kadena Air Base. Existing housing must be upgraded to meet current life safety codes and to provide a comfortable and appealing living environment comparable to the off-base civilian community. Renovated housing will provide modern kitchens, primary and secondary dining, living room, family room, bedrooms, bathrooms, and storage configuration in compliance with relevant Unified Facilities Criteria. Improvements are programmed in accordance with the Family Housing Master Plan.

1. Component	FY 2021 MILITARY CONSTRUCTION PROJECT DATA *(Continuation)*	2. Date
AF (PACAF)		[Publish Date]

3. Installation and Location:	
KADENA AIR BASE, OKINAWA, JAPAN	
4. Project Title	**5. Project Number**
LXEZ194583 IMPROVE FAMILY HOUSING, KADENA AB, PAIP 15 (117 UN)	LXEZ1069764

CURRENT SITUATION: This project upgrades and modernizes single family homes constructed in 1953-56, and townhomes constructed in the 1990's. These housing units are identified as inadequate in the current Housing Community Profile. No major upgrades have been performed since construction, and the homes do not meet the needs of today's families. Interior finishes and hardware including flooring, plumbing and lighting fixtures are obsolete and deteriorated. The electrical systems do not meet modern electrical codes. Ground fault circuit interrupter protection is not provided for bathrooms, kitchens, and exterior circuits. Domestic water lines, sanitary sewer collection systems, heating and cooling systems are all beyond expected useful life and require replacement. Flooring, windows, and roofing require replacement.

IMPACT IF NOT PROVIDED: Units will progressively deteriorate resulting in increasing operations, maintenance and repair costs and worsening living conditions for Military Family Housing residents. Without this project, unnecessarily expensive piecemeal emergency repairs will continue with little or no improvement in the quality of life for Kadena Air Base Military Family Housing residents. Health and life safety concerns associated with electrical ground fault circuit interrupter protection, and fire detection systems will not be accomplished quickly or economically.

WORK ACCOMPLISHED IN PREVIOUS YEARS: None

WORK PROGRAMMED FOR THE NEXT THREE YEARS: None

ADDITIONAL: 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, therefore renovation is the only option available.

JOINT USE CERTIFICATION: 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.

12. Supplemental Data

a. Estimated Design Data:

(1) Status:	
(a) Type of Design	Design-Bid-Build
(b) Date Design Started	12 NOV19
(c) Parametric Cost Estimate used to develop costs	Yes
(d) Percent Complete as of Jan 2020	15
(e) Date 35% Designed	31 AUG 20
(f) Date Design Complete	30 APR 21
(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	5,654.7
(b) All other Design Costs	2,827.4
(c) Total	8,482.1
(d) Contract	7,068.4
(e) In-house	1,413.7

1. Component	FY 2021 MILITARY CONSTRUCTION PROJECT DATA *(Continuation)*	2. Date
AF (PACAF)		[Publish Date]

3. Installation and Location:
KADENA AIR BASE, OKINAWA, JAPAN

4. Project Title	5. Project Number
LXEZ194583 IMPROVE FAMILY HOUSING, KADENA AB, PAIP 15 (117 UN)	LXEZ1069764

(4) Construction Contract Award	27 AUG 21
(5) Construction Start	01 NOV 21
(6) Construction Completion	01 NOV 24
b. Equipment associated with this project will be provided from other appropriations:	N/A
c. Facility Condition Index: FY21 = 51	

FACILITY LISTING

Bldg #	Unit Type/Facility Name	Grade	Bedrooms	Quantity	Year Constructed	FCI
2563	JC3-90 NT	SNCO	3	6	1990	63
2564	JC3-90 NT	SNCO	3	4	1990	60
2566	JC3-90 NT	SNCO	3	4	1990	60
2568	JC3-90 NT	SNCO	3	6	1990	63
2569	JC3-90 NT	SNCO	3	6	1990	63
2570	JC3-90 NT	JNCO	3	6	1990	63
2571	JC3-90 NT	SNCO	3	4	1990	60
2572	JC3-90 NT	JNCO	3	6	1990	63
2573	JC3-90 NT	JNCO	3	4	1990	60
2574	JC3-90 NT	JNCO	3	6	1990	63
2575	JC3-90 NT	JNCO	3	4	1990	60
2576	JC3-90 NT	JNCO	3	4	1990	60
2577	JC3-90 NT	JNCO	3	4	1990	60
2579	JC3-90 NT	JNCO	3	4	1990	60
2527	H4-56	JNCO	4	1	1956	54
2529	H4-56	E9	4	1	1956	54
2546	G3-56R	E9	3	1	1956	42
2548	K2-56	JNCO	2	2	1956	50
2550	K2-56	JNCO	2	2	1956	50
2567	G3-56R	E9	3	1	1956	42
2601	F2-56R	JNCO	2	1	1956	47
2603	K2-56	JNCO	2	2	1956	50
2605	K2-56	JNCO	2	2	1956	50
2607	K2-56	JNCO	2	2	1956	50
2609	H4-56	JNCO	4	1	1956	54
2611	F2-56R	JNCO	2	1	1956	47
2613	F2-56R	JNCO	2	1	1956	47
2615	F2-56R	JNCO	2	1	1956	47
2617	K2-56	JNCO	2	2	1956	50

1. Component	FY 2021 MILITARY CONSTRUCTION PROJECT DATA *(Continuation)*	2. Date
AF (PACAF)		[Publish Date]

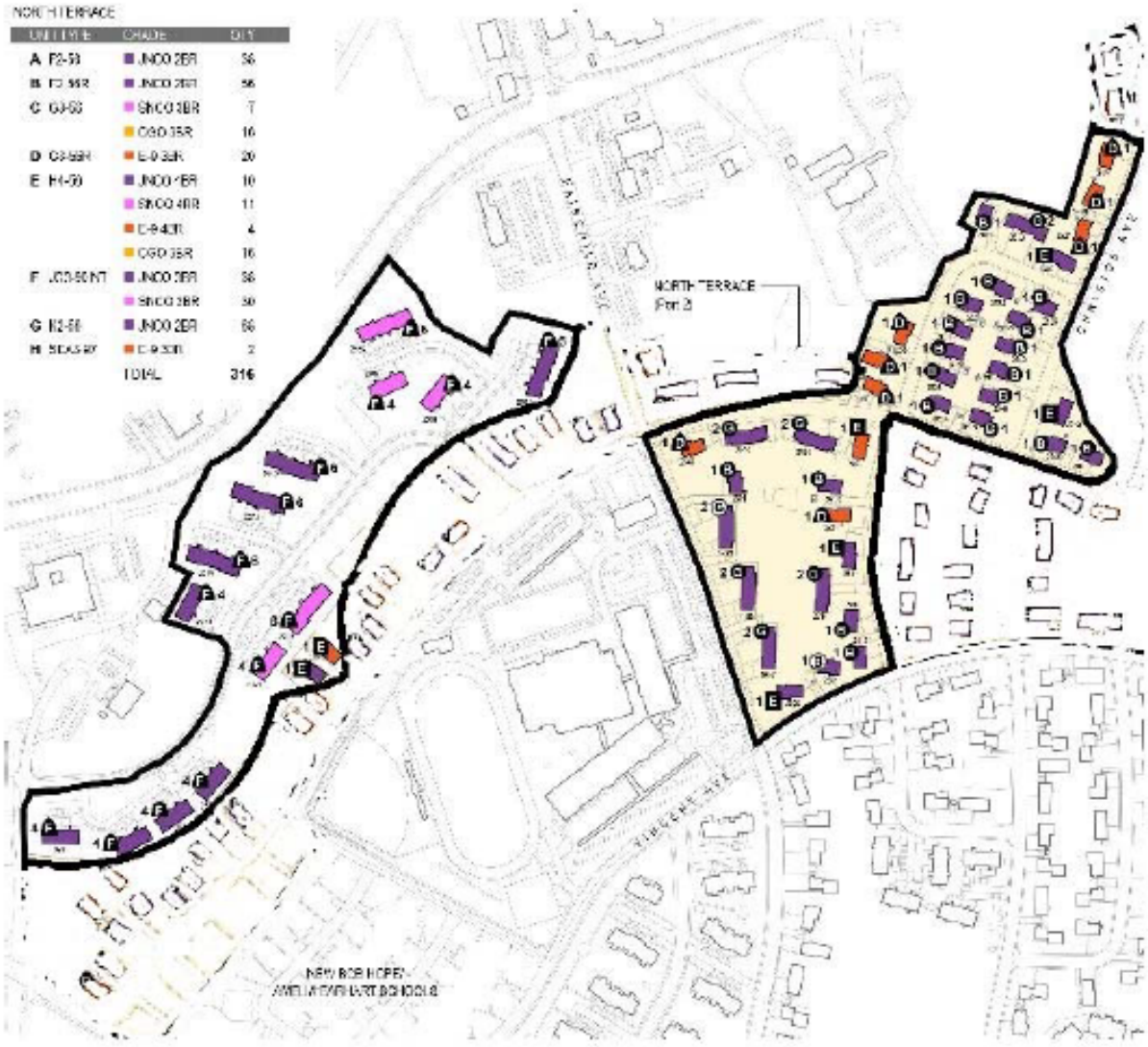
3. Installation and Location:
KADENA AIR BASE, OKINAWA, JAPAN

4. Project Title	5. Project Number
LXEZ194583 IMPROVE FAMILY HOUSING, KADENA AB, PAIP 15 (117 UN)	LXEZ1069764

2619	H4-56	JNCO	4	1	1956	54
2621	G3-56R	E9	3	1	1956	42
2623	F2-56R	JNCO	2	1	1956	47
2624	F2-56R	JNCO	2	1	1956	47
2625	H4-56	E9	4	1	1956	54
2626	F2-56R	JNCO	2	1	1956	47
2627	G3-56R	E9	3	1	1956	42
2628	F2-56R	JNCO	2	1	1956	47
2629	G3-56R	E9	3	1	1956	42
2630	F2-56R	JNCO	2	1	1956	47
2631	F2-56R	JNCO	2	1	1956	47
2632	F2-56R	JNCO	2	1	1956	47
2633	K2-56	JNCO	2	2	1956	50
2634	F2-56R	JNCO	2	1	1956	47
2635	H4-56	JNCO	4	1	1956	54
2636	F2-56R	JNCO	2	1	1956	47
2637	G3-56R	E9	3	1	1956	42
2638	F2-56R	JNCO	2	1	1956	47
2639	G3-56R	E9	3	1	1956	42
2640	F2-56R	JNCO	2	1	1956	47
2641	G3-56R	E9	3	1	1956	42
2642	F2-56R	JNCO	2	1	1956	47
2643	H4-56	JNCO	4	1	1956	54
2644	F2-56R	JNCO	2	1	1956	47
2645	F2-56R	JNCO	2	1	1956	47
2646	F2-56R	JNCO	2	1	1956	47
2665	F2-56R	JNCO	2	1	1956	47

1. Component	FY 2021 MILITARY CONSTRUCTION PROJECT DATA *(Continuation)*	2. Date
AF (PACAF)		[Publish Date]
3. Installation and Location: KADENA AIR BASE, OKINAWA, JAPAN		
4. Project Title: LXEZ194583 IMPROVE FAMILY HOUSING, KADENA AB, PAIP 15 (117 UN)		5. Project Number: LXEZ1069764

SITE PLAN



DD FORM 1391C, DEC1999 PREVIOUS EDITION IS OBSOLETE. Page 5 of 6

Tab – PLANNING AND DESIGN

PLANNING AND DESIGN

	Budget Request ($ in Thousands)
FY 2021 Budget Request	$2,969
FY 2020 Budget Request	$3,409

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) FY2021 Authorization and Appropriation of $2,969,000 to fund this effort as outlined in the following exhibit.

DEPARTMENT OF THE AIR FORCE
MILITARY FAMILY HOUSING
FISCAL YEAR 2021 BUDGET REQUEST

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	6. CATEGORY CODE	7. PROJECT NUMBER	8. PROJECT COST ($000)
88742	711-000	PAYZ714FNA	2,969

9. COST ESTIMATE

ITEM	U/M	QUANTITY	UNIT COST	COST ($000)
FAMILY HOUSING PLANNING AND DESIGN	LS			
SUBTOTAL				2,969
TOTAL CONTRACT COST				2,969
TOTAL REQUEST				2,969

10. DESCRIPTION OF PROPOSED CONSTRUCTION: 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.

11. PROJECT: This request is for an authorization and appropriation of $2.969 million to provide planning and design costs in connection with family housing new construction or construction improvements programs.

REQUIREMENT: 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.

IMPACT IF NOT PROVIDED: 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.

This Page Intentionally Left Blank.

Tab – OPERATION AND
MAINTENANCE
SUMMARY

DEPARTMENT OF THE AIR FORCE
MILITARY FAMILY HOUSING
FISCAL YEAR 2021 BUDGET REQUEST

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

	Budget Request ($ in Thousands)
FY 2021 Budget Request	$284,528
FY 2020 Budget Request	$256,655
FY2020 Enactment*	$24,547
FY2020 Appropriation	$281,202

Purpose and Scope

* Funds provided by Congress in FY2020 for additional Family Housing Support and Management are two year appropriated funds.

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 Operations 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.

(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.

Operations and Maintenance FY 2021 Budget Request Summary - Highlights

The requested amount in FY 2021 is $284,528,000. This amount, together with estimated reimbursements of $5,715,000 will fund the FY 2021 Operation and Maintenance program of $290,243,000.

DEPARTMENT OF THE AIR FORCE
MILITARY FAMILY HOUSING
FISCAL YEAR 2021 BUDGET REQUEST

A summary of the budget request for FY 2021 is as follows ($ in thousands):

Operations Request	Utility Request	Maintenance Request	Total Direct Request	Reimbursement	Total Program
$100,689	$43,173	$140,666	$284,528	$5,715	$290,243

USAF FY2021 PB					Fiscal Year:	**2021**
Family Housing Operation and Maintenance, Summary					Command:	**USAF**
Excludes Leased Units and Costs					Exhibit:	**FH-2**
Worldwide Summary						
Fiscal Year:	2019		2020		2021	
Inventory Data (Units)						
Units in Being Beginning of Year		15,167		15,253		15,260
Units in Being at End of Year		15,253		15,260		15,214
Average Inventory for Year		15,210		15,257		15,237
Historic Units		101		101		101
Units Requiring FHO&M Funding:						
a. Contiguous US		111		111		111
b. U. S. Overseas		0		0		0
c. Foreign		15,056		15,142		15,149
d. Worldwide	-	15,167		15,253		15,260
Funding Requirements ($000)	Total Cost ($000)	Unit Cost ($)	Total Cost ($000)	Unit Cost ($)	Total Cost ($000)	Unit Cost ($)
OPERATIONS (DIRECT)						
Management	50,507	3,321	80,569	5,282	64,155	4,204
Services	8,749	575	7,770	509	7,968	522
Furnishings	26,347	1,732	30,283	1,985	26,382	1,729
Miscellaneous	1,449	95	2,144	141	2,184	143
Sub-Total Direct Operations	87,052	5,723	120,766	7,917	100,689	6,598
Anticipated Reimbursements	735	48	735	48	735	48
Gross Obligations, Operations	**87,787**	**5,772**	**121,501**	**7,966**	**101,424**	**6,646**
UTILITIES (DIRECT)						
Direct Utilities	43,863	2,884	42,732	2,801	43,173	2,829
Anticipated Reimbursements	1,477	97	1,477	97	1,477	97
Gross Obligations, Utilities	**45,340**	**2,981**	**44,209**	**2,898**	**44,650**	**2,926**
MAINTENANCE (DIRECT)						
M&R Dwelling	139,119	9,147	88,461	5,798	109,321	7,164
M&R Ext. Utilities	5,202	342	16,376	1,073	17,765	1,164
M&R Other Real Property	10,456	687	11,696	767	11,930	782
Alter & Add.	1,922	126	1,171	77	1,650	108
Sub-Total Direct Maintenance	156,699	10,302	117,704	7,715	140,666	9,218
Anticipated Reimbursements	3,503	230	3,503	230	3,503	230
Gross Obligations, Maintenance	**160,202**	**10,533**	**121,207**	**7,945**	**144,169**	**9,448**
GRAND TOTAL, FHO&M - Direct	**287,614**	**18,963**	**281,202**	**18,436**	**284,528**	**18,645**
Anticipated Reimbursements	**5,715**	**376**	**5,715**	**375**	**5,715**	**375**
GRAND TOTAL, FHO&M - TOA	**293,329**	**19,339**	**286,917**	**18,810**	**290,243**	**19,020**

USAF FY2021 PB					Fiscal Year:	**2021**
Family Housing Operation and Maintenance, Summary					Command:	**USAF**
Excludes Leased Units and Costs					Exhibit:	**FH-2**
Contiguous US						
Fiscal Year:	2019		2020		2021	
Inventory Data (Units)						
Units in Being Beginning of Year		111		111		111
Units in Being at End of Year		111		111		102
Average Inventory for Year		111		111		107
Historic Units		101		101		101
Funding Requirements ($000)	($000)	Cost ($)	($000)	Cost ($)	($000)	Cost ($)
OPERATIONS (DIRECT)						
Management	32,955	N/A	61,491	N/A	42,518	N/A
Services	31	N/A	46	N/A	55	N/A
Furnishings	1,210	N/A	1,182	N/A	1,085	N/A
Miscellaneous	298	N/A	424	N/A	477	N/A
Sub-Total Direct Operations	34,494	N/A	63,143	N/A	44,135	N/A
Anticipated Reimbursements	0	N/A	0	N/A	0	N/A
Gross Obligations, Operations	**34,494**	**N/A**	**63,143**	**N/A**	**44,135**	**N/A**
UTILITIES (DIRECT)						
Direct Utilities	346	N/A	370	N/A	344	N/A
Anticipated Reimbursements	0	N/A	0	N/A	0	N/A
Gross Obligations, Utilities	**346**	**N/A**	**370**	**N/A**	**344**	**N/A**
MAINTENANCE (DIRECT)						
M&R Dwelling	719	N/A	733	N/A	754	N/A
M&R Ext. Utilities	80	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	799	N/A	733	N/A	754	N/A
Anticipated Reimbursements	0	N/A	0	N/A	0	N/A
Gross Obligations, Maintenance	**799**	**N/A**	**733**	**N/A**	**754**	**N/A**
		N/A		N/A		N/A
GRAND TOTAL, FHO&M - Direct	**35,639**	**N/A**	**64,246**	**N/A**	**45,233**	**N/A**
Anticipated Reimbursements	**0**	**N/A**	**0**	**N/A**	**0**	**N/A**
GRAND TOTAL, FHO&M - TOA	**35,639**	**N/A**	**64,246**	**N/A**	**45,233**	**N/A**

USAF FY2021 PB					Fiscal Year:	**2021**
Family Housing Operation and Maintenance, Summary					Command:	**USAF**
Excludes Leased Units and Costs					Exhibit:	**FH-2**
US Overseas						
Fiscal Year:	2019		2020		2021	
Inventory Data (Units)						
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
	Total Cost	Unit	Total Cost	Unit	Total Cost	Unit
Funding Requirements ($000)	($000)	Cost ($)	($000)	Cost ($)	($000)	Cost ($)
OPERATIONS (DIRECT)						
Management	1,339	N/A	1,500	N/A	1,621	N/A
Services	0	N/A	0	N/A	0	N/A
Furnishings	948	N/A	1098	N/A	927	N/A
Miscellaneous	0	N/A	0	N/A	0	N/A
Sub-Total Direct Operations	2,287	N/A	2,598	N/A	2,548	N/A
Anticipated Reimbursements	0	N/A	0	N/A	0	N/A
Gross Obligations, Operations	**2,287**	**N/A**	**2,598**	**N/A**	**2,548**	**N/A**
UTILITIES (DIRECT)						
Direct Utilities	0	N/A	0	N/A	0	N/A
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
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	**2,287**	**N/A**	**2,598**	**N/A**	**2,548**	**N/A**
Anticipated Reimbursements	**0**	**N/A**	**0**	**N/A**	**0**	**N/A**
GRAND TOTAL, FHO&M - TOA	**2,287**	**N/A**	**2,598**	**N/A**	**2,548**	**N/A**

USAF FY2021 PB					Fiscal Year:	**2021**
Family Housing Operation and Maintenance, Summary					Command:	**USAF**
Excludes Leased Units and Costs					Exhibit:	**FH-2**
Foreign						
Fiscal Year:	2019		2020		2021	
Inventory Data (Units)						
Units in Being Beginning of Year		15,056		15,142		15,149
Units in Being at End of Year		15,142		15,149		15,112
Average Inventory for Year		15,099		15,146		15,131
Historic Units		0		0		0
Funding Requirements ($000)	Total Cost ($000)	Unit Cost ($)	Total Cost ($000)	Unit Cost ($)	Total Cost ($000)	Unit Cost ($)
OPERATIONS (DIRECT)						
Management	16,213	1,424	17,578	1,147	20,016	1,323
Services	8,718	577	7,724	510	7,913	523
Furnishings	24,189	1,602	28,003	1,849	24,370	1,611
Miscellaneous	1,151	76	1,720	114	1,707	113
Sub-Total Direct Operations	50,271	3,680	55,025	3,619	54,006	3,569
Anticipated Reimbursements	735	49	735	49	735	49
Gross Obligations, Operations	**51,006**	**3,728**	**55,760**	**3,668**	**54,741**	**3,618**
UTILITIES (DIRECT)						
Direct Utilities	43,517	2,882	42,362	2,797	42,829	2,831
Anticipated Reimbursements	1,477	98	1,477	98	1,477	98
Gross Obligations, Utilities	**44,994**	**2,980**	**43,839**	**2,895**	**44,306**	**2,928**
MAINTENANCE (DIRECT)						
M&R Dwelling	138,400	9,166	87,728	5,792	108,567	7,175
M&R Ext. Utilities	5,122	339	16,376	1,081	17,765	1,174
M&R Other Real Property	10,456	692	11,696	772	11,930	788
Alter & Add.	1,922	127	1,171	77	1,650	109
Sub-Total Direct Maintenance	155,900	10,325	116,971	7,723	139,912	9,247
Anticipated Reimbursements	3,503	231	3,503	231	3,503	232
Gross Obligations, Maintenance	**159,403**	**10,556**	**120,474**	**7,954**	**143,415**	**9,479**
GRAND TOTAL, FHO&M - Direct	**249,688**	**16,887**	**214,358**	**18,786**	**236,747**	**15,647**
Anticipated Reimbursements	**5,715**	**379**	**5,715**	**377**	**5,715**	**378**
GRAND TOTAL, FHO&M - TOA	**255,403**	**17,265**	**220,073**	**19,163**	**242,462**	**16,025**

DEPARTMENT OF THE AIR FORCE
MILITARY FAMILY HOUSING FISCAL
YEAR 2021 BUDGET REQUEST

Summary of Historic Housing Detail

Fiscal Year:	2019	2020	2021
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	-
c. Maintenance and Repair Costs ($000)	683	696	1,459
d. Total Historic Maintenance, Repair, Improvements ($000)	683	13,419	1,459
e. Average Cost Per Unit ($000)	9	172	19
2. Historic Housing Costs, GOQ Data			
a. Number of GOQ units on NHRP (Inventory)	23	23	23
b. Improvement Costs ($000)	847	23,052	-
c. Maintenance and Repair Costs ($000)	214	334	341
d.Total Historic Maintenance, Repair, Improvements ($000)	1,061	23,386	341
e. Average Cost Per Unit ($000)	46	1,017	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)	847	35,775	-
c. Maintenance and Repair Costs ($000)	897	1,030	1,800
d.Total Historic Maintenance, Repair, Improvements ($000)	1,744	36,805	1,800
e. Average Cost Per Unit ($000)	17	364	18

Family Housing Operation and Maintenance Reprogramming Actions

($ in Thousands) as of 30 Sep 2019

	FY 2019 Appropriation	Funds Reprogrammed	Percent Reprogrammed	FY 2019 End of Year
Utilities	48,566	(4,330)	(8.92%)	44,236
Operations				
Management	54,423	(2,397)	(4.40%)	52,026
Services	13,669	(4,711)	(34.46%)	8,958
Furnishings	30,645	(3,687)	(12.03%)	26,958
Miscellaneous	2,171	(701)	(32.29%)	1,470
Leasing	15,832	(6,994)	(44.18%)	8,838
Maintenance	129,763	27,013	20.82%	156,776
Debt	0	0	0.00%	0
Privatization	22,205	(4,193)	(18.88%)	18,012
Foreign Currency	0	10,000	0.00%	10,000
Total	**317,274**	**10,000**	**3.15%**	**327,274**

Tab – OPERATIONS

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.

			($ in Thousands)
1.FY 2020 President's Budget Request:			$56,022
2. Congressional Adjustment			
a. Family Housing Support & Management Cost			$24,547
3. FY 2020 Appropriated Amount:			$80,569
4. FY 2020 Current Estimate:			$80,569
5: Price Growth:			2,926
a. General Inflation	2.00%	$1,611	
b. Civilian Pay Adjustment		$1,315	
6: Program Decrease:			($32,558)
a. One-Time FY 2020 Congressional Program Increase:			
Family Housing Support and Management Cost		($24,547)	
b. FY2021 Program Decreases		($8,013)	
7: Program Increase:			$13,218
a. Continued Family Housing Support and Management		$12,551	
b. Economic Adjustments		$667	
8. FY 2021 Budget Request:			$64,155

Notes

FY21 program adjustment includes increase and decrease due to the cumulative effect of the FY20 Congressional increase of $24,547K for additional manpower needed for privatization oversight and a separate internal program reduction of $8,013K to accurately align sub-account historic obligations and projected future needs. FY21 program adjustment also includes funds to cover the personnel cost for adding Military Family Housing personnel at 60 CONUS bases. The additional personnel will increase oversight and management of Military Housing Privatization Initiative (MHPI) projects and the MHPI program. The sub-account reduction was aligned with increase of future maintenance requirements.

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.

			($ in Thousands)
1.FY 2020 President's Budget Request:			$7,770
2. Congressional Adjustment			
a. Family Housing Support and Management Costs			
3. FY 2020 Appropriated Amount:			$7,770
4. FY 2020 Current Estimate:			$7,770
5: Price Growth:			$155
a. General Inflation	2.00%	$155	
b. Realignment of Civilian Pay			
6: Program Increase:			$43
7: Program Decrease:			
8. FY 2021 Budget Request:			$7,968

Notes
In FY2021, rebalanced program by realigning $43K based on prior years' requirements. Future program increases are expected as off-line units (average 1200 units) are revitalized and brought back on-line.

DEPARTMENT OF THE AIR FORCE
MILITARY FAMILY HOUSING
FISCAL YEAR 2021 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.

			($ in Thousands)
1.FY 2020 President's Budget Request:			$30,283
2. Congressional Adjustment			
a. Family Housing Support and Management Cost			
a. General Inflation	2.00%	$606	
b. Realignment of Civilian Pay			
3. FY 2020 Appropriated Amount:			$30,283
4. FY 2020 Current Estimate:			$30,283
5: Price Growth:			$606
6: Program Increase:			
7: Program Decrease:			($4,507)
8. FY 2021 Budget Request:			$26,382

Notes
FY21 program rebalanced by realigning $4,507K to maintenance to reflect prior years' requirements.

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.

			($ in Thousands)
1.FY 2020 President's Budget Request:			$2,144
2. Congressional Adjustment			
a. Family Housing Support and Management Cost			
3. FY 2020 Appropriated Amount:			$2,144
4. FY 2020 Current Estimate:			$2,144
5: Price Growth:			$43
a. General Inflation	2.00%	$43	
6: Program Increase:			
7: Program Decrease:			($3)
8. FY 2021 Budget Request:			$2,184

This Page Intentionally Left Blank.

Tab – UTILITIES

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

			($ in Thousands)
1.FY 2020 President's Budget Request:			$42,732
2. Congressional Adjustment			
a. Family Housing Support and Management Costs			
3. FY 2020 Appropriated Amount:			$42,732
4. FY 2020 Current Estimate:			$42,732
5: Price Growth:			$855
a. General Inflation	2.00%	$855	
b. Realignment of Civilian Pay			
6: Program Increase:			
7: Program Decrease:			($414)
8. FY 2021 Budget Request:			**$43,173**

Notes

FY21 program rebalanced by $414K based on prior years' requirements. Future program increases are expected as renovations are completed and units are brought back on-line.

Family Housing Summary of Utilities Detail

	2019	2020	2021
Total Cost of Utilities ($000)	**43,941**	**42,732**	**43,173**
Utility Quantities			
Electricity (KwH)	**197,400,056**	**198,968,758**	**196,389,268**
Heating			
Gas(CF)	562,132,719	546,666,102	559,254,314
Fuel Oil			
Residuals (BBLS)			
Distillates (BBLS)	22,577	20,836	17,399
Purchased Steam (MBTU)	304,807	296,420	303,246
Heat Plants Coal Fired (MBTU)	0	0	0
Heat Plants Other Than Gas, Oil, Coal (MBTU)	0	0	0
Propane (BBLS)	13,184	12,821	13,116
Water (Kgal)	**2,400,435**	**2,334,388**	**2,388,143**
Sewage (Kgal)	**2,168,938**	**2,109,261**	**2,157,831**

This Page Intentionally Left Blank.

Tab – MAINTENANCE

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.

			($ in Thousands)
1.FY 2020 President's Budget Request:			$117,704
2. Congressional Adjustment			
a. Family Housing Support and Management Costs			
3. FY 2020 Appropriated Amount:			$117,704
4. FY 2020 Current Estimate:			$117,704
5: Price Growth:			$2,354
a. General Inflation	2.00%	$2,354	
6: Program Increase:			$20,608
7: Program Decrease:			
8. FY 2021 Budget Request:			$140,666

NOTES

FY21 program rebalanced by realigning $20,608K to maintenance from management, furnishings, and leasing. The additional $20,608K is in-keeping with the Air Force Family Housing Master Plan, which begins to focus sustaining and maintaining an adequate inventory.

As the Air Force meets its goals to eliminate inadequate housing, we will transition our focus to sustaining housing units and maintaining an adequate steady-state inventory. Funding is necessary to prevent deterioration of the government-owned housing inventory. Maintaining an adequate level of funding for both routine recurring repair and major maintenance and repair will provide the necessary quality of life for military personnel and their families. Maintenance funding is also required to sustain and repair government-owned housing referral offices to include those few that support the privatized housing at CONUS installations.

This Page Intentionally Left Blank.

Tab – MAINTENANCE & REPAIR
OVER $20K

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 FY2014-2018 ($000)
OVERSEAS								
Germany	Ramstein AB	26	2007	36.0	173	4,494	936.0	0
Repair by replacement substandard failed tiles 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. 1335, 1337, 1339, 1341, 1343, 1345, 1352, and 1354 in the total of 26 MFH units at Vogelweh Military Family Housing (MFH).								
Germany	Ramstein AB	3	2008	26.3	196	587	79.0	0
Repair by replacement all hot water lines in Town-house 3612-B, 3626-B, and 3632-A. Scope of work includes deconstruction of the existing hot water lines, building structure including all interior and exterior components, supply and waste lines and all other supporting facilities. After completion of the works, the area impacted shall be restored to their original condition.								
Japan	Yokota AB	70	1998	388.0	95	6,650	27,200.0	0
Tower 3002 (70 units 2TA(98), JNCO, 2BD) units require interior lifecycle repairs of kitchen, bathrooms, flooring, plumbing, lighting fixtures, windows and doors. In addition, replacement of building utility, fire detection & suppression, roofing, hot water storage and HVAC systems is required to meet lifecycle renewal and current life safety codes. Project scope includes asbestos/lead-based paint removal.								

Location	Base	Number of Units	Year Built	High Unit Cost ($000)	Unit (NSM)	Project (NSM)	Total Cost ($000)	Significant O&M FY2014-2018 ($000)
Japan	Yokota AB	12	1970	1,763.0	161	1,931	22,415.0	0
Repairs to twelve family housing units, including buildings 1007 (SOQ4-4, 4BD), 1016-1021 (6 units SOQ6-4, 4BD), 1022 (SOQ5-p1-4, 4BD), 43 (4GA76-4, 4BD) to meet lifecycle replacement requirements and current life safety codes. Project work includes repair by replacement of mechanical systems, utility systems and laterals, roof covering, doors, windows, kitchen and bathroom fixtures and finishes, flooring and lighting fixtures. Work also includes whole neighborhood infrastructure repairs to utility systems, playgrounds, and recreation areas. Includes asbestos/lead-based paint removal. Project is programmed to provide safe, modern and efficient military family housing.								
Japan	Misawa AB	29	1993	691.0	154	4,451	16,250.0	0
Repairs to twenty-nine dwelling units in Bldgs 221 (SO, 3BD), 712 (H2-3, JNCO, 3BD) , 716 (H2-3, JNCO, 3BD), 718 (H2-3, JNCO, 3BD), 808 (H2-2, JNCO, 2BD), 812 (H2-3, JNCO, 3BD), 817 (H2-3, JNCO, 3BD) and 818 (H2-3, JNCO, 3BD) at Misawa AB. Includes utility and fire protection upgrades to meet current building codes, repair and modernization of kitchens, bathrooms and finishes throughout and floor coverings, repair, by replacement, mechanical systems to provide heating, cooling and dehumidification, installation of energy management controls, elastomeric roof coating or re-roofing as required. Project will abate asbestos, lead-based paint, arsenic gypsum board and other hazardous materials as encountered. Project is programmed in accordance with the latest Housing Community Profile to provide safe modern and efficient military family housing								
Japan	Misawa AB	20	1999	351.0	116	2,311	7,800.0	0
Repair to twenty dwelling units (H3-2, JNCO, 2BD) in Bldgs 123, 125, 127, 129, 291, Misawa AB. Includes utility and fire protection upgrades to meet current building codes, repair and modernization of kitchens, bathrooms and finishes throughout and floor coverings, repair, by replacement, mechanical systems to provide heating, cooling and dehumidification, installation of energy management controls, elastomeric roof coating or re-roofing as required. Project will abate asbestos, lead-based paint, arsenic gypsum board and other hazardous materials as encountered.								

Location	Base	Number of Units	Year Built	High Unit Cost ($000	Unit (NSM)	Project (NSM)	Total Cost ($000	Significant O&M FY2014-2018 ($000)
Japan	Misawa AB	8	1987	31.0	232	1,859	250.0	0
Provides lifecycle exterior surface repair & painting for eight SOQ dwelling units on Misawa AB. Exterior surface repair will include sealing of cracks, surface preparation and paint to eliminate water intrusion. Exterior work will also include spot repair and coatings, as needed, to existing roof system, gutters and downspouts to extend the useful life. Continued exterior maintenance to the Military Family Housing units is key to long term use of the units. Project will abate asbestos, lead-based paint and other hazardous materials as encountered. Project is programmed to provide safe, modern and efficient military family housing.								
Japan	Yokota	350	1970	57.1	129	45,150	20,000.0	0
Repairs a total of 5 High Rise Towers, buildings 4300, 4301, 4302, 4303 and 4305, a total of 350 units at Yokota Air Base (210 units, 3TAI-p1 JNCO/SNCO, 3BD, seventy units, 3TAI-p1 CGO/FGO 3BD, seventy units, 3 TAI-p4, CGO/FGO, 3BD). Work to include lifecycle replacement of windows (with insulated glass for energy efficiency), interior and exterior doors, interior painting and repair of walls and floors in common areas, replacement balcony guardrails and other incidental work as required to meet life/safety requirements.								
Ohio	Wright-Patterson	10	1934	75.0	147	1,470	750.0	0
Repair kitchens and bathrooms in 10 units, Replace cabinets, countertops, kitchen sink, flooring, light fixtures, and kitchen plumbing including sink and fixtures. Gut the bathrooms and replace tile with painted walls and replace bathroom flooring. Provide vanity, countertop, and lavatory sink. Replace vanity lighting and provide recessed ceiling lighting. Replace and relocate medicine cabinet and mirror. Replace bathroom fixtures, fittings, and connecting plumbing.								
United Kingdom	RAF Fairford	67	1959	356.4	177	7,085	19,056.0	0
Major repair of 67 housing units in 20 multiplex buildings to bring units to current Air Force adequacy standards. Repairs will include 65 units in current configuration and will convert two (2) four-bedroom units to three-bedroom units to meet Air Force size standards. Five multi-unit garage buildings will be repaired in addition to neighborhood sidewalks, fences, sheds, playground surfaces and equipment, sewage and storm drainage, ATFP barriers and landscaping.								

This Page Intentionally Left Blank.

Tab – G&FOQ OVER $35K

DEPARTMENT OF THE AIR FORCE
MILITARY FAMILY HOUSING
FISCAL YEAR 2021 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 FY2014- 2018 ($000)
OVERSEAS											
Ramstein AB	1013 California Avenue	1958	3855	$6.9	$92.9	$99.8	$13.0	$0.0	$0.0	$112.8	$0.0
Repair basement bathroom, last repaired in 1990, repair by replacement family room wood floor, paint Exterior Walls and repair by replacement single paned window in the sunroom. Unit 4BR, Single Family home.											
Ramstein AB	1010 California Avenue	1956	3161	$5.9	$40.6	$46.5	$13.0	$0.0	$0.0	$59.5	$35.5
Paint Exterior Walls of GOQ, 4BR, Single Family home.											
Ramstein AB	1012 California Avenue	1958	3161	$5.9	$40.6	$46.5	$13.0	$0.0	$0.0	$59.5	$0.0
Paint Exterior Walls of GOQ 1012, 4BR, Single Family home.											
Yokota	692 Kenney Court	1973	4568	$9.7	$2,537.7	$2,547.4	$6.1	$0.0	$0.0	$2,553.5	$50.7
Repair GOH 692 (1 unit). Provides whole house repair of GOH 692. Work includes all lifecycle repair replacements. Project includes repair by replacement utility systems, roofing, electrical distribution, switches and outlets, HVAC system (with heat pump type split; condensing units piped to the roof), replacing existing windows with energy efficient, and sound rated windows. Modernizes the kitchen and bathrooms with new cabinetry, sinks, wall tile, plumbing fixtures and new government furnished appliances. Additionally, an electric resistance type water heater and hard-wired smoke detectors will be installed. Finishes and fixtures throughout the home have reached the end of their useful like and will be replaced. Project corrects health and safety issues by remediating all ACM & Lead-based paint, updating fire detection systems and providing GFCI controlled electrical circuits.											
Total GOQ Units				**$28.4**	**$2,711.8**	**$2,740.2**	**$45.1**	**$0.0**	**$0.0**	**$2,785.3**	**$86.2**

DEPARTMENT OF THE AIR FORCE
MILITARY FAMILY HOUSING
FISCAL YEAR 2021 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 Conv	If O&M >$35K Demolish & Rebuild Cost
Colorado	USAF Academy	6950 Otis	1929	11553	$35	None	$0	$0
Colorado	USAF Academy	6776 Carlton	1931	10846	$35	None	$0	$0
Total:					**$70**		**$0**	**$0**

This Page Intentionally Left Blank.

Privatized GFOO Operations, Maintenance and Repair Costs Exceeding $50,000 (FH-12)

State/Country	Installation	Quarters ID	Year Built	Size NSF	Operations Cost (Note 1)	Maintenance and Repair Cost (Note 2)	Total FH O&M Cost
Florida	MACDILL AFB	8116 Constellation Blvd*	2009	3835	4.1	137.6	141.7
Florida	MACDILL AFB	8216 Constellation Blvd*	2009	3445	4.1	260.3	264.4
Florida	MACDILL AFB	8222 Constellation Blvd*	2009	3445	4.6	252.8	257.4
Hawaii	JBPHH	301 Julian Avenue*	1941	3913	15.5	51.6	67.1
Louisiana	Barksdale AFB	204 Spaatz Ave*	1933	3032	3.6	49.8	53.4
Maryland	Joint Base Andrews	1966 Maryland*	1912	5298	12.4	42.4	54.8
Florida	MACDILL AFB	8008 Constellation Blvd*	2009	3445	4.1	59.2	63.3
Alaska	JBER	63 Birch Hill*	2007	3853	25.1	32.4	57.5
Alaska	JBER	8433 Mitchell*	1942	3986	27.2	30.6	57.8
Total					**100.7**	**916.7**	**1,017.4**

Notes:

(1) The Asterisk (*) next to the Quarters ID indicates some Utility Costs are included as part of Operation Costs.
(2) Maintenance & Repair includes Capital Repair & Replacement and Reinvestment Costs
(3) Total O&M cost are from FY19 fourth quarter GOQ report
(4) This annual report complies with the FY2009 National Defense Authorization Act (NDAA), amended Section 2805 requirement.
(5) Cost incurred per unit by the private sector developer/partner/owner for Fiscal Year 2019 ($ in Thousands).

Tab – REIMBURSABLE PROGRAM

REIMBURSEMENT EXHIBIT OP-5

Includes collections received from rental of Air Force family housing units to foreign nationals, civilians and others. Included in the estimate are the anticipated reimbursements due to members who voluntarily separate that are authorized to live in government quarters for up to six months after separation.

		($ in Thousands)
1. FY 2020 President's Budget Request:		$5,715
2. Congressional Adjustments:		$0
3. FY 2020 Appropriated Amount:		$0
4. Supplementals:		$0
5. Price Growth:		$0
6. Functional Program Transfers:		$0
7. Program Increases:		$0
8. Program Decreases		$0
9. FY 2019 Current Estimate:		$5,715
10. Price Growth:		
a. Inflation	2.00%	$114
11. Functional Program Transfer:		$0
12. Program Increases:		$0
13. Program Decreases:		
Standardized based on historical data		($114)
14. FY 2021 Budget Request:		**$5,715**

This Page Intentionally Left Blank.

Tab – LEASING

Leasing

Budget Request ($ in Thousands)

FY 2021 Budget Request	$9,318
FY 2020 Budget Request	$15,768

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 2021. The FY 2021 request for family housing leasing points is summarized as follows:

		FY2019		FY2020		FY2021	
	Lease Pt	Used	Cost	Used	Cost	Used	Cost
Foreign:	8,988	108	$7,909	197	$15,273	129	$8,808
Domestic:	3,333	1	$23	15	$495	15	$510
Total:	**12,321**	**109**	**$7,932**	**212**	**$15,768**	**144**	**$9,318**

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.

RECONCILIATION OF INCREASES AND DECREASES
EXHIBIT OP-5

Leasing

			($ in Thousands)
1.FY 2020 President's Budget Request:			$15,768
2. FY 2020 Appropriated Amount:			$15,768
3. FY 2020 Current Estimate:			$15,768
4: Price Growth:			$315
a. General Inflation	2.00%	$315	
b. Realignment of Civilian Pay			
5. FY 2021 Budget Request:			**$9,318**
5: Program Increase:			
6: Program Decrease:			($6,765)

Analysis of Changes in Leasing

The decrease is due to right-sizing the program based on prior years' requirements and realigning funds to Maintenance.

Analysis of Leased Units Exhibit (FH-4)

LOCATION	FY 19 # UNITS	FY 19 LEASE MONTHS	FY 19 COST ($000)	FY 20 # UNITS	FY 20 LEASE MONTHS	FY 20 COST ($000)	FY 21 # UNITS	FY 21 LEASE MONTHS	FY 21 COST ($000)
DOMESTIC LEASES									
CONUS-wide (AF Recruiters, ROTC staffs, & other)	1	12	$23	15	180	$495	15	180	$510
Unassigned	3,332	0	$0	3,318	0	$0	3,318	0	$0
TOTAL DOMESTIC LEASES	**3,333**	**12**	**$ 23**	**3,333**	**180**	**$ 495**	**3,333**	**180**	**$ 510**
FOREIGN LEASES									
Department of State (§2834):									
Abu Dhabi, UAE	8	96	$725	27	324	$3,108	15	180	$1,143
Amman, Jordan	2	24	$155	7	84	$571	6	72	$489
Bangkok, Thailand	1	12	$63	1	12	$63	1	12	$63
Bogotá, Colombia	1	12	$67	1	12	$67	1	12	$68
Brasilia, Brazil	1	12	$122	2	24	$230	1	12	$118
Cairo, Egypt	4	48	$395	6	72	$561	4	48	$374
Chiang Mai, Thailand	4	48	$176	6	72	$294	4	48	$137
Classified Location	3	36	$225	3	36	$255	3	36	$255
Copenhagen, Denmark	2	24	$105	2	24	$187	2	24	$187
Doha, Qatar	5	60	$425	8	96	$720	1	12	$79
Mexico City, Mexico	10	120	$675	25	300	$2,208	10	120	$499
Oslo, Norway	1	12	$75	1	12	$85	1	12	$85
Paris, France	5	60	$634	8	96	$941	5	60	$589
Tel Aviv, Israel	1	12	$84	2	24	$170	1	12	$94
DoS Subtotal	**48**	**576**	**$ 3,926**	**99**	**1,188**	**$9,460**	**55**	**660**	**$4,180**
AF Foreign Leases (§2828):									
Doha, Qatar	47	564	$3,281	65	780	$4,163	51	612	$3,470
Geilenkirchen, Germany	1	12	$65	1	12	$65	1	12	$64
Aviano, Italy	10	120	$525	30	360	$1,470	20	240	$980
Mayaguez, Puerto Rico	1	12	$45	1	12	$46	1	12	$47
Stavanger, Norway	1	12	$67	1	12	$69	1	12	$67
AF Foreign Leases Subtotal	**60**	**720**	**$ 3,983**	**98**	**1,176**	**$ 5,813**	**74**	**888**	**$ 4,628**
Unassigned	8,880	0	$0	8,791	0	$0	8,859	0	$0
TOTAL FOREIGN LEASES	**8,988**	**1,296**	**$ 7,909**	**8,988**	**2,364**	**$ 15,273**	**8,988**	**1,548**	**$ 8,808**
GRAND TOTAL FH-4	**12,321**	**1,308**	**$ 7,932**	**12,321**	**2,544**	**$ 15,768**	**12,321**	**1,728**	**$ 9,318**

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

LOCATION	FY21 TOTAL LEASES PER LOCATION	FY14 HIGH COST UNITS	FY14 HIGH COST DEFINED	FY14 EST COST ($000)	FY15 HIGH COST UNITS	FY15 HIGH COST DEFINED	FY15 EST COST ($000)	FY16 HIGH COST UNITS	FY16 HIGH COST DEFINED	FY16 EST COST ($000)	FY19 HIGH COST UNITS	FY19 HIGH COST DEFINED	FY19 EST COST ($000)	FY20 HIGH COST UNITS	FY20 HIGH COST DEFINED	FY20 EST COST ($000)	FY21 HIGH COST UNITS	FY21 HIGH COST DEFINED	FY21 EST COST ($000)
DOMESTIC LEASES	0	0	$28,217	0	0	$29,514	$0	0	$29,646	$0	0	$35,438	$0	0	$35,438	$0	0	$35,438	$0
Sub-Total Domestic High-cost	0	0		$0	0		$0	0		$0	0		$0	0		$0	0		$0
FOREIGN LEASES																			
Doha, Qatar	51	50	$49,249	$4,800	28	$51,161	$1,959	32	$51,161	$1,983	47	$53,864	$3,281	65	$53,864	$4,163	51	$53,864	$3,470
Geilenkirchen, Germany	1	1	$49,249	$75	0[1]	$51,161	$0	0	$59,549	$0	1	$53,864	$65	1	$53,864	$65	1	$53,864	$64
Stavanger, Norway	1	1	$49,249	$103	1	$51,161	$76	1	$51,161	$95	1	$53,864	$67	1	$53,864	$69	1	$53,864	$67
Sub-Total Foreign High-cost	**53**	**60**		**$5,717**	**29**		**$2,035**	**33**		**$2,078**	**49**		**$3,413**	**67**		**$4,297**	**53**		**$3,601**
GRAND TOTAL FH-4A	**53**	**105**		**$9,155**	**29**		**$2,035**	**33**		**$2,078**	**49**		**$3,413**	**67**		**$4,297**	**53**		**$3,601**

This Page Intentionally Left Blank.

Tab – FAMILY HOUSING
PRIVATIZATION

FAMILY HOUSING PRIVATIZATION

Budget Request ($ in Thousands)

FY 2021 Budget Request	$23,175
FY 2020 Budget Request	$22,593
FY 2020 Enactment*	$6,653
FY 2020 Appropriation	$29,246

Purpose and Scope

* Funds provided by Congress in FY2020 for additional Family Housing Support and Management are two 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 FY2021 funding request provides $23,175,000 for portfolio oversight and management. This program funds all costs related to family housing privatization, to include civilian pay for portfolio management personnel, 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 $871,819,947 in FY 2020 and $906,675,793 in FY 2021. The number of units of military family housing upon which these estimated payments are made is 41,835 in FY 2020 and FY 2021. The number of units of military unaccompanied housing upon which these estimated payments are made is 110 in FY 2020 and FY 2021.

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.).

RECONCILIATION OF INCREASES AND DECREASES

Housing Privatization Exhibit OP-5

Housing Privatization Support

			($ in Thousands)
1.FY 2020 President's Budget Request:			$22,593
2. Congressional Adjustment			
a. Family Housing Support and			$6,653
3. FY 2020 Appropriated Amount:			$29,246
4. FY 2020 Current Estimate:			$29,246
5: Price Growth:			$585
a. General Inflation	2.00%	$585	
b. Realignment of Civilian Pay			
6: Program Decrease:			($6,656)
a. One-Time FY 2020 Congressional Program Increase: Family Housing Support and Management Cost		($6,653)	
b. FY2021 Program Decreases		($3)	
7: Program Increase:			
8. FY 2021 Budget Request:			$23,175

Notes

Analysis of changes in Privatization

FY20 Appropriations included a $6,653K Congressional increase for additional manpower needed for privatization tenant advocates. Additional oversight positions are included for AFCEC and Higher Headquarters. The additional privatized housing resident advocate positions will support 60 CONUS locations. The above funding for the out-years is currently in the Management portion of the Operations PE and will be internally adjusted to privatization.

Air Force BAH payments to military housing privatization projects

Air Force

BAH Payments to Military Housing Privatization Projects

	Inflation Factor	$	UH in UH Privatized Army (No AF in Navy or USMC) $	Total BAH $
FY2017 Estimated BAH Payments to MHPI Projects ($M)	N/A	800,961,228	1,544,165	802,505,393
FY2018 Estimated BAH Payments to MHPI Projects ($M)	2.40%	820,184,297	1,581,225	821,765,522
FY2019 Estimated BAH Payments to MHPI Projects ($M)	2.70%	842,329,273	1,628,662	843,957,935
FY2020 Estimated BAH Payments to MHPI Projects ($M)	3.30%	870,126,139	1,693,808	871,819,947
FY2021 Estimated BAH Payments to MHPI Projects ($M)	4.00%	904,931,185	1,744,608	906,675,793
Number of Servicemembers (annual average)	N/A	41,835	110	

Family Housing Privatization Comparison Exhibit (FH-6)

Privatization Date[1]	MHPI Project Name[2]	Installation/State[3]	Approved by OSD & OMB[4]						Actual/Current[8]							MHPI Authorities[13]
			No. Units Conveyed[5]	No. End State Units[6]	Funding Source[6]				No. Units Conveyed[9]	End State Units[10]	Total No. Units in Current Inventory[11]	Funding Source[12]				
					Amount ($M)[7a]	Budget Year(s)[7b]	Type of Funds[7c]	Source Project Name[7d]				Amount ($M)[12]	Budget Year(s)[12]	Type of Funds[12]	Source Project Name[12]	
Aug-98	Lackland I	Lackland AFB, TX (Ph I)	272	420	6.200	96 97	Construction Construction	Lackland Lackland SIOH	272	420	420	6.161	96 97	Construction Construction	Lackland Lackland SIOH	1, 2, 5
Sep-00	Robins I	Robins AFB, GA (Ph I)	670	670	12.800	98 97	Construction Construction	Robins Replace MFH Ph 4 (60) Dyess Construct MFH Ph 1 (70)	670	670	670	12.624	98 97	Construction Construction	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 98	Construction Construction	Dyess-Construct MFH Ph 2 (64) Dyess-Construct MFH Ph 1 (70)	0	402	402	16.269	99 98	Construction 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	584	828	828	23.304	98	Improvement	Elmendorf-Improve MFH Ph 9 (82 units) HRSO to FIFH	1, 5
Aug-02	Wright-Patterson I	Wright-Patterson AFB, OH (Ph I)	1,733	1,536	10.813	02 99	Improvement Construction	Hickam-Privatize MFH Wright Patterson-Replace 40 Units	1,733	1,536	1,536	10.715	02 99	Improvement Construction	Hickam-Privatize MFH Wright Patterson-Replace 40 Units	1, 2, 5
Apr-03	Kirtland	Kirtland AFB, NM	1,783	1,078	24.221	02 02 99	Construction Construction Construction	Travis - Replace MFH Ph 1 Mountain Home-Replace MFH 56 Units Kirtland-Replace MFH Ph 5 (37)	1,783	1,078	1,303	24.013	02 02 99	Construction Construction 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 02	Improvement Construction	Hickam - Improve 190 MFH Buckley-Privatize MFH	0	351	351	17.893	04 02	Improvement Construction	Hickam - Improve 190 MFH Buckley-Privatize MFH	1, 5
Sep-04	Elmendorf II	Elmendorf AFB, AK (Ph II)	986	1,194	41.496	03 02	Improvement Improvement	Elmendorf-192 Ph 11 Improve Elmendorf-Privatize MFH	986	1,194	1,194	41.496	03 02	Improvement 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	1,356	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	2,600	1,640	1,954	12.568	01	Improvement	Offutt Privatize MFH	1, 5
Sep-05	Hill	Hill AFB, UT	1,138	1,018	11.280	05 01	Improvement Improvement	Davis-Monthan, Repair MFH Ph 6 Hill, Privatize MFH	1,138	1,018	1,082	11.656	05 01	Improvement Improvement	Davis-Monthan, Repair MFH Ph 6 Hill, Privatize MFH	1, 5

DEPARTMENT OF THE AIR FORCE
MILITARY FAMILY HOUSING
FISCAL YEAR 2021 BUDGET REQUEST

Privatization Date[1]	MHPI Project Name[2]	Installation/State[3]	Approved by OSD & OMB[4]						Actual/Current[8]							MHPI Authorities[13]
			No. Units Conveyed[5]	No. End State Units[6]	Funding Source[6]				No. Units Conveyed[9]	End State Units[10]	Total No. Units in Current Inventory[11]	Funding Source[12]				
					Amount ($M)[7a]	Budget Year(s)[7b]	Type of Funds[7c]	Source Project Name[7d]				Amount ($M)[12]	Budget Year(s)[12]	Type of Funds[12]	Source Project Name[12]	
Sep-05	Dover	Dover AFB, DE	1,488	980	12.425	05 04	Improvement Construction	Fairchild AFB - Privatize MFH Dover, Repl 112 MFH Ph 3	1,488	980	980	12.278	05 04	Improvement Construction	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	1,430	1,593	1,593	0.000	N/A	N/A	N/A	1, 5
May-06	Nellis	Nellis AFB, NV	1,278	1,178	1.827	05 02	Improvement Improvement	Holloman - Privatize MFH Nellis - Privatize MFH	1,278	1,178	1,178	1.827	05 02	Improvement Improvement	Holloman - Privatize MFH Nellis - Privatize MFH	1, 5
Sep-06	McGuire	McGuire AFB/Ft. Dix, NJ	2,364	2,083	7.569	02	Improvement	McGuire Privatize MFH	2,364	2,084	2,212	5.270	02	Improvement	McGuire Privatize MFH	1, 5
Feb-07	AETC Group I	Altus AFB, OK Luke AFB, AZ Sheppard AFB, TX Tyndall AFB, FL **AETC Group I Total:**	883 690 1,167 848 **3,588**	530 550 714 813 **2,607**	6.244	04	Improvement	Sheppard Privatize 1,288 MFH	883 690 1,167 848 **3,588**	530 550 714 813 **2,607**	530 550 714 0 **1,794**	6.244	04	Improvement	Sheppard Privatize 1,288 MFH	1, 5
May-07	USAFA	US Air Force Academy, CO	1,208	427	2.219	06	Improvement	AF Academy Privatize 445 Units	1,207	425	669	2.219	06	Improvement	AF Academy Privatize 445 Units	1, 5
Jul-07	ACC Group II	Davis-Monthan AFB, AZ Holloman AFB, NM **ACC Group II Total:**	1,256 1,009 **2,265**	929 909 **1,838**	27.922	05 05 05	Construction Construction Improvement	Davis-Monthan AFB - Replace FH Ph 6 MacDill Replace FH Ph 6 Holloman, Privatize Family Housing	1,256 929 **2,185**	961 923 **1,884**	1,174 1,065 **2,239**	27.922	05 05 05	Construction Construction Improvement	Davis-Monthan AFB - Replace FH Ph 6 MacDill Replace FH Ph 6 Holloman, Privatize Family Housing	1, 5
Aug-07	Hickam II	Hickam AFB, HI (Ph II)	1,303	1,118	0.000	N/A	N/A	N/A	1,303	1,118	1,139	0.000	N/A	N/A	N/A	5
Sep-07	Tri-Group	Los Angeles AFB, CA Peterson AFB, CO Schriever AFB, CO **Tri-Group Total:**	617 493 0 **1,110**	572 723 269 **1,564**	19.950	06 06	Improvement Improvement	Fort MacArthur - Improve 188 Units Peterson, Privatize 1,132 Units	617 493 0 **1,110**	613 669 242 **1,524**	617 669 242 **1,528**	19.945	06 06	Improvement Improvement	Fort MacArthur - Improve 188 Units Peterson, Privatize 1,132 Units	3, 5
Sep-07	BLB	Barksdale AFB, LA Joint Base Anacostia-Bolling (Bolling), MD Joint Base Langley-Eustis (Langley), VA **BLB Total:**	729 1,343 1,496 **3,568**	1,090 669 1,430 **3,189**	15.300	06 05 05 03 03	Improvement Improvement Improvement Construction Improvement	Bolling, Improve 24 Units Barksdale, Imp MFH Ph 1 Langley, Improve Electrical System Eglin, 234 MFH Ph 2A Eglin - Hurlburt 213 MFH Improvement	723 1,343 1,496 **3,562**	1,090 672 1,430 **3,192**	1,090 850 1,430 **3,370**	15.231	06 05 05 03 03	Improvement Improvement Improvement Construction Improvement	Bolling, Improve 24 Units Barksdale, Imp MFH PH 1 Langley, Improve Electrical System Eglin, 234 MFH Ph 2A Eglin - Hurlburt 213 MFH Improvement	1, 5

DEPARTMENT OF THE AIR FORCE
MILITARY FAMILY HOUSING
FISCAL YEAR 2021 BUDGET REQUEST

Privatization Date[1]	MHPI Project Name[2]	Installation/State[3]	Approved by OSD & OMB[4]						Actual/Current[8]							MHPI Authorities[13]
					Funding Source[6]							Funding Source[12]				
			No. Units Conveyed[5]	No. End State Units[6]	Amount ($M)[7a]	Budget Year(s)[7b]	Type of Funds[7c]	Source Project Name[7d]	No. Units Conveyed[9]	End State Units[10]	Total No. Units in Current Inventory[11]	Amount ($M)[12]	Budget Year(s)[12]	Type of Funds[12]	Source Project Name[12]	
Oct-07	Robins II	Robins AFB, GA (Ph II)	563	207	10.600	05	Improvement	FY 05 Robins, Improve Family Housing	558	207	254	10.600	05	Improvement	FY 05 Robins, Improve Family Housing	3, 5
Oct-07	AETC Group II	Columbus AFB, MS	518	453	59.000	06	Improvement	Andrews-Improve 178 Units	517	453	453	59.000	06	Improvement	Andrews-Improve 178 Units	3, 5
		Goodfellow AFB, TX	98	241		05	Improvement	Randolph, Construct MFH Ph 1	98	241	241		05	Improvement	Randolph, Construct MFH Ph 1	
		Laughlin AFB, TX	534	516		05	Construction	Davis-Monthan, Repair MFH Ph 6	534	451	451		05	Construction	Davis-Monthan, Repair MFH Ph 6	
		Maxwell AFB, AL	729	501		03	Construction	Hurlburt, 134 MFH Ph 2A	723	501	513		03	Construction	Hurlburt, 134 MFH Ph 2A	
		JBSA-Randolph, TX	397	317		03	Improvement	Eglin - Hurlburt 213 MFH Improvement	397	317	317		03	Improvement	Eglin - Hurlburt 213 MFH Improvement	
		Vance AFB, OK	230	229					230	242	242					
		AETC Group II Total:	**2,506**	**2,257**					**2,499**	**2,205**	**2,217**					
Nov-07	Vandenberg	Vandenberg AFB, CA	1,336	867	0.000	N/A	N/A	N/A	1,336	867	999	0.000	N/A	N/A	N/A	5
Nov-07	AMC East	Andrews AFB, MD	1,480	887	0.000	N/A	N/A	N/A	1,466	933	1,115	0.000	N/A	N/A	N/A	3, 5
		MacDill AFB, FL	752	571					752	572	572					
		AMC East Total:	**2,232**	**1,458**					**2,218**	**1,505**	**1,687**					
Jul-08	AMC West	Fairchild AFB, WA	1,055	641	28.190	04	Construction	Tinker, Privatize 730 MFH	1,055	641	641	28.190	04	Construction	Tinker, Privatize 730 MFH	1, 5
		Tinker AFB, OK	694	660		04	Improvement	Sheppard, Privatize 1,288 Units	694	660	660		04	Improvement	Sheppard, Privatize 1,288 Units	
		Travis AFB, CA	2,187	1,134				FHIF Funds	1,094	1,134	1,273				FHIF Funds	
		AMC West Total:	**3,936**	**2,435**					**2,843**	**2,435**	**2,574**					
Nov-08	Falcon Group	Hanscom AFB, MA	726	746	15.723	02	Improvement	Hickam - Privatize MFH	726	731	731	15.723	02	Improvement	Hickam - Privatize MFH	1, 5
		Little Rock AFB, AR	1,295	999		01	Improvement	Moody MFH Privatization	1,295	991	991		01	Improvement	Moody MFH Privatization	
		Moody AFB, GA	303	256		01	Construction	Travis - Replace 64 Units	303	287	287		01	Construction	Travis - Replace 64 Units	
		Patrick AFB, FL	991	616		00	Improvement	Little Rock - Privatize MFH	991	616	616		00	Improvement	Little Rock - Privatize MFH	
		Falcon Group Total:	**3,315**	**2,617**					**3,315**	**2,625**	**2,625**					
Dec-08	Lackland II	Lackland AFB, TX (Ph II)	264	465	21.785	05	Improvement	Robins - Improve Family Housing	264	465	613	21.618	05	Improvement	Robins - Improve Family Housing	1, 5
						03	Improvement	Keesler - Replace 117 Ph 1					03	Improvement	Keesler - Replace 117 Ph 1	
						03	Improvement	Eglin - Hurlburt 213 MFH Improve					03	Improvement	Eglin - Hurlburt 213 MFH Improve	
Jun-11	JBER	JB Elmendorf-Richardson	1242	1240	36.800	11	Improvement	Army Funds Transferred	1,242	1,240	1,240	36.798	11	Improvement	Army Funds Transferred	1, 5

DEPARTMENT OF THE AIR FORCE
MILITARY FAMILY HOUSING
FISCAL YEAR 2021 BUDGET REQUEST

Privatization Date[1]	MHPI Project Name[2]	Installation/State[3]	Approved by OSD & OMB[4]						Actual/Current[8]							MHPI Authorities[13]
			No. Units Conveyed[5]	No. End State Units[6]	Funding Source[6]				No. Units Conveyed[9]	End State Units[10]	Total No. Units in Current Inventory[11]	Funding Source[12]				
					Amount ($M)[7a]	Budget Year(s)[7b]	Type of Funds[7c]	Source Project Name[7d]				Amount ($M)[12]	Budget Year(s)[12]	Type of Funds[12]	Source Project Name[12]	
Sep-11	Southern Group	Arnold AFB, TN	40	22	23.354	07	Construction	Mountain Home - Replace 457 MFH	40	22	22	23.354	07	Construction	Mountain Home - Replace 457 MFH	1, 5
		Charleston AFB, SC	478	345					478	345	599					
		Keesler AFB, MS	1,188	1,188					1,188	1,188	1,188					
		Shaw AFB, SC	681	630					679	630	633					
		Southern Group Total:	**2,387**	**2,185**					**2,385**	**2,185**	**2,442**					
Mar-12	Western Group	Beale AFB, CA	884	509	20.053	07	Construction	Mountain Home - Replace 457 MFH	683	509	509	20.053	07	Construction	Mountain Home - Replace 457 MFH	1, 5
		F.E. Warren AFB, WY	831	749		05	FHIF	Beale	831	749	749		05	FHIF	Beale	
		Malmstrom AFB, MT	1,412	1,116		04	FHIF	Beale	1,168	1,116	1,116		04	FHIF	Beale	
		Whiteman AFB, MO	920	890		03	FHIF	Beale	920	890	890		03	FHIF	Beale	
		Western Group Total:	**4,047**	**3,264**					**3,602**	**3,264**	**3,264**					
Aug-13	Northern Group	Cannon AFB, NM	763	1,038	37.813	09	Improvement	Kadena - Improve 614 MFH (Ph 9) Misawa - Improve 370 MFH (Ph 4)	763	1,038	1,038	37.576	09	Improvement	Kadena - Improve 614 MFH (Ph 9) Misawa - Improve 370 MFH (Ph 4)	1, 2, 5
		Cavalier AFB, ND	14	14					14	14	14					
		Ellsworth AFB, SD	283	497					283	497	497					
		Grand Forks AFB, ND	833	547					833	547	547					
		Minot AFB, ND	1,746	1,606					1,746	1,606	1,606					
		Mountain Home AFB, ID	956	844					956	844	844					
		Northern Group Total:	**4,595**	**4,546**					**4,595**	**4,546**	**4,546**					
Sep-13	Continental Group	Edwards AFB, CA	741	741	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)	741	741	741	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)	1, 2, 5
		Eglin AFB, FL	898	747					894	747	861					
		Eielson AFB, AK	934	898					934	898	898					
		Hurlburt AFB, FL	380	404					380	404	429					
		McConnell AFB, KS	401	364					401	364	381					
		Seymour Johnson, NC	708	708					686	686	686					
		Continental Group Total:	**4,062**	**3,862**					**4,036**	**3,840**	**3,996**					
Sep-13	ACC Group III	Dyess AFB, TX (PH II) Moody AFB, GA (PH II)	674	674	9.617	09	Improvement	Yokota - Improve 350 MFH (Ph 7) Misawa - Improve 370 MFH (Ph 4)	674	674	674	6.315	09	Improvement	Yokota - Improve 350 MFH (Ph 7) Misawa - Improve370 MFH (Ph 4)	1, 2, 5
			0	184					0	101	101					
		ACC Group III Total:	**674**	**858**					**674**	**775**	**775**					
Grand Totals[14]			**61,883**	**53,331**	**617.796**				**60,204**	**53,237**	**55,030**	**611.228**				

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.
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; Continental Group-McConnell change due to IDP progress.

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 – FOREIGN CURRENCY

DEPARTMENT OF THE AIR FORCE
MILITARY FAMILY HOUSING
FISCAL YEAR 2021 BUDGET REQUEST

MFH O&M		FY 2019		FY 2020		FY 2020	
Country	Local Currency	Budget Exchange Rates	$ U.S. Requiring Conversion	Budget Exchange Rates	$ U.S. Requiring Conversion	Budget Exchange Rates	$ U.S. Requiring Conversion
Denmark	Krone	6.3847		6.3847		6.7012	
European Comm	Euro	0.8582	$ 45,476	0.8582	$ 42,366	0.8978	$ 42,342
Japan	Yen	111.5938	$ 115,893	111.5938	$ 37,587	107.9114	$ 37,736
Norway	Krone	8.0858	$ -	8.0858	$ -	8.881	$ -
Singapore	Dollar	1.3640	$ -	1.3640	$ -	1.3718	$ -
South Korea	Won	1128.1127	$ 7,263	1128.1127	$ 4,559	1186.8982	$ 4,624
Turkey	Lira	3.6022	$ 2,598	3.6022	$ 716	5.763	$ 482
United Kingdom	Pound	0.7651	$ 25,568	0.7651	$ 18,806	0.8002	$ 18,897
Total			$ 196,798		$ 104,035		$ 104,081

MFH Construction		FY 2019		FY 2020		FY 2021	
Country	Local Currency	Budget Exchange Rates	$ U.S. Requiring Conversion	Budget Exchange Rates	$ U.S. Requiring Conversion	Budget Exchange Rates	$ U.S. Requiring Conversion
Denmark	Krone	6.3847	$ -	6.3847	$ -	6.7012	
European Comm	Euro	0.8582	$ -	0.8582	$ 53,584	0.8978	$ -
Japan	Yen	111.5938	$ 72,766	111.5938	$ 46,638	107.9114	$ 94,245
Norway	Krone	8.0858	$ -	8.0858	$ -	8.881	$ -
Singapore	Dollar	1.3640	$ -	1.3640	$ -	1.3718	$ -
South Korea	Won	1128.1127	$ -	1128.1127	$ -	1186.8982	$ -
Turkey	Lira	3.6022	$ -	3.6022	$ -	5.763	$ -
United Kingdom	Pound	0.7651	$ 3,146	0.7651	$ -	0.8002	$ -
Total			$ 75,912		$ 100,222		$ 94,245