



Department of the Air Force

Military Construction Program

**Fiscal Year (FY) 2020
Budget Estimates**

**Justification Data Submitted to Congress
March 2019**

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MILITARY CONSTRUCTION PROGRAM FISCAL YEAR 2020
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**DEPARTMENT OF THE AIR FORCE
MILITARY CONSTRUCTION AND MILITARY FAMILY HOUSING FISCAL YEAR 2020
PROGRAM SUMMARY**

	Authorization Request <u>(\$000s)</u>	Appropriation Request <u>(\$000s)</u>
Military Construction		
Major Construction	1,615,500	1,957,400
Unspecified Minor Construction (10 USC 2805)	-	79,682
Planning and Design (10 USC 2807)		142,148
Total Military Construction	1,615,500	2,179,230
Military Family Housing		
New Construction	53,584	53,584
Improvements	46,638	46,638
Planning and Design	3,409	3,409
Subtotal	103,631	103,631
Operations, Utilities and Maintenance		
Operations	96,219	96,219
Utilities	42,732	42,732
Maintenance	117,704	117,704
Privatization	22,593	22,593
Leasing	15,768	15,768
Subtotal	295,016	295,016
Total Military Family Housing	398,647	398,647
Grand Total Air Force	2,014,147	2,577,877

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**DEPARTMENT OF THE AIR FORCE
MILITARY CONSTRUCTION PROGRAM FISCAL YEAR 2020
INDEX - INSIDE THE US
(DOLLARS IN THOUSANDS)**

STATE	INSTALLATION	PROJECT	AUTHORIZATION REQUEST	APPROPRIATION REQUEST	
ALASKA	Eielson	F-35A AME Storage Facility	8,600	8,600	
			Eielson TOTAL:	8,600	8,600
			ALASKA TOTAL:	8,600	8,600
ARKANSAS	Little Rock	C-130-H/J Fuselage Trainer Facility	47,000	47,000	
			Little Rock TOTAL:	47,000	47,000
			ARKANSAS TOTAL:	47,000	47,000
CALIFORNIA	Travis	KC-46A Alter B181/B185/B187 Squad Ops/AMU	6,600	6,600	
		KC-46A Regional Maintenance Training Facility	19,500	19,500	
		Travis TOTAL:	26,100	26,100	
CALIFORNIA TOTAL:	26,100	26,100			
COLORADO	Schriever	Consolidated Space Operations Facility	148,000	148,000	
			Schriever TOTAL:	148,000	148,000
			COLORADO TOTAL:	148,000	148,000
ILLINOIS	Scott	Joint Operations and Mission Planning Center	100,000	100,000	
			Scott TOTAL:	100,000	100,000
			ILLINOIS TOTAL:	100,000	100,000
MARYLAND	JB Andrews	Presidential Aircraft Recap (PAR) Complex, Inc 3	-	86,000	
			JB Andrews TOTAL:	-	86,000
			MARYLAND TOTAL:	-	86,000
MASSACHUSETTS	Hanscom	MIT-Lincoln Laboratory (West Lab CSL/MIF), Inc 2	-	135,000	
			Hanscom TOTAL:	-	135,000
			MASSACHUSETTS TOTAL:	-	135,000
MONTANA	Malmstrom	Weapons Storage and Maintenance Facility	235,000	235,000	
			Malmstrom TOTAL:	235,000	235,000
			MONTANA TOTAL:	235,000	235,000
NEVADA	Nellis	365th ISR Group Facility	57,000	57,000	
		F-35A Munitions Assembly Conveyor Facility	8,200	8,200	
		Nellis TOTAL:	65,200	65,200	
NEVADA TOTAL:	65,200	65,200			
NEW MEXICO	Kirtland	Combat Rescue Helicopter Simulator (CRH) ADAL	15,500	15,500	
		UH-1 Replacement Facility	22,400	22,400	
		Kirtland TOTAL:	37,900	37,900	
NEW MEXICO TOTAL:	37,900	37,900			
NORTH DAKOTA	Minot	Consolidated Helo/Trf Ops/AMU And Alert Facility	5,500	5,500	
			Minot TOTAL:	5,500	5,500
			NORTH DAKOTA TOTAL:	5,500	5,500
OHIO	Wright-Patterson	ADAL Intelligence Production Facility	-	120,900	
			Wright-Patterson TOTAL:	-	120,900
			OHIO TOTAL:	-	120,900
TEXAS	JBSA-Lackland	Aquatics Tank	69,000	69,000	
		BMT Recruit Dormitory 8	110,000	110,000	
		JBSA-Lackland TOTAL:	179,000	179,000	
	JBSA-Randolph	T-X ADAL Ground Based Trng Sys (GBTS) Sim	9,300	9,300	
		T-X MX Trng Sys Centralized Trng Fac	19,000	19,000	
JBSA-Randolph TOTAL:	28,300	28,300			
TEXAS TOTAL:	207,300	207,300			
UTAH	Hill	GBSD Mission Integration Facility	108,000	108,000	
		Joint Advanced Tactical Missile Storage Facility	6,500	6,500	
		Hill TOTAL:	114,500	114,500	
UTAH TOTAL:	114,500	114,500			
WASHINGTON	Fairchild	Consolidated TFI Base Operations	31,000	31,000	
			Fairchild TOTAL:	31,000	31,000
			WASHINGTON TOTAL::	31,000	31,000
WYOMING	FE Warren	Consolidated Helo/Trf Ops/AMU And Alert Facility	18,100	18,100	
			FE Warren TOTAL:	18,100	18,100
			WYOMING TOTAL:	18,100	18,100
INSIDE THE US TOTAL:			1,044,200	1,386,100	

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**DEPARTMENT OF THE AIR FORCE
MILITARY CONSTRUCTION PROGRAM FISCAL YEAR 2020
INDEX - OUTSIDE THE US
(DOLLARS IN THOUSANDS)**

STATE	INSTALLATION	PROJECT	AUTHORIZATION REQUEST	APPROPRIATION REQUEST
AUSTRALIA	RAAF Tindal	Jet Fuel Storage Tanks	59,000	59,000
		Earth Covered Magazine	11,600	11,600
		RAAF Tindal TOTAL:	70,600	70,600
		AUSTRALIA TOTAL:	70,600	70,600
CYPRUS	RAF Akrotiri	1 ERS Dormitory	27,000	27,000
		Akrotiri TOTAL:	27,000	27,000
		CYPRUS TOTAL:	27,000	27,000
GUAM	JRM-Andersen	Munition Storage Igloos Ph 3	65,000	65,000
		JRM-Andersen TOTAL:	65,000	65,000
		GUAM TOTAL:	65,000	65,000
JAPAN	Yokota	Fuel Receipt and Distribution Upgrades	12,400	12,400
		Yokota TOTAL:	12,400	12,400
		JAPAN TOTAL:	12,400	12,400
JORDAN	Muwaffaq-Salti	Air Traffic Control Tower	24,000	24,000
		Munitions Storage Area	42,000	42,000
		Muwaffaq-Salti TOTAL:	66,000	66,000
		JORDAN TOTAL:	66,000	66,000
COMMONWEALTH OF THE NORTHERN MARIANAS ISLANDS	Tinian	Fuel Tanks with Receipt Pipeline and Hydrant System	109,000	109,000
		Airfield Development Phase 1	109,000	109,000
		Parking Apron	98,000	98,000
		Tinian TOTAL:	316,000	316,000
		COMMONWEALTH OF THE NORTHERN MARIANAS ISLANDS TOTAL:	316,000	316,000
UNITED KINGDOM	Lakenheath	F-35A PGM Facility	14,300	14,300
		Lakenheath TOTAL:	14,300	14,300
		UNITED KINGDOM TOTAL:	14,300	14,300
			OUTSIDE THE US TOTAL:	571,300
WORLDWIDE UNSPECIFIED	Various Locations	Planning And Design	-	142,148
		Unspecified Minor Military Construction	-	79,682
		WORLDWIDE UNSPECIFIED TOTAL:	-	221,830
		INSIDE THE US TOTAL::	1,044,200	1,386,100
			OUTSIDE THE US TOTAL::	571,300
			WORLDWIDE UNSPECIFIED TOTAL:	-
			FY 2020 TOTAL:	1,615,500
				2,179,230

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**DEPARTMENT OF THE AIR FORCE
MILITARY CONSTRUCTION PROGRAM FISCAL YEAR 2020
NEW AND CURRENT MISSION**

DEFINITIONS OF NEW AND CURRENT MISSION

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

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

<u>FY20</u>	Appropriation Request <u>(\$000)</u>
NEW MISSION	602,500
CURRENT MISSION	1,354,900
PLANNING & DESIGN	142,148
MINOR CONSTRUCTION	79,682
TOTAL:	2,179,230

**DEPARTMENT OF THE AIR FORCE
MILITARY CONSTRUCTION PROGRAM FISCAL YEAR 2020
INDEX - CURRENT/NEW MISSION BREAKOUT
(DOLLARS IN THOUSANDS)**

STATE/COUNTRY	INSTALLATION	PROJECT	APPROPRIATION	
			REQUEST	TYPE
ARKANSAS	Little Rock	C-130-H/J Fuselage Trainer Facility	47,000	CM
COLORADO	Schreiver	Consolidated Space Operations Facility	148,000	CM
CYPRUS	Akrotiri	1 ERS Dorm	27,000	CM
GUAM	JRM-Andersen	APR - Munitions Storage Igloos Ph 3	65,000	CM
ILLINOIS	Scott	Joint Operations & Mission Planning Center	100,000	CM
JAPAN	Yokota	Fuel Receipt and Distribution Upgrades	12,400	CM
JORDAN	Muwaffaq-Salti	Air Traffic Control Tower	24,000	CM
JORDAN	Muwaffaq-Salti	Munitions Storage Area	42,000	CM
MASSACHUSETTS	Hanscom	MIT-Lincoln Laboratory (West Lab CSL/MIF)	135,000	CM
MONTANA	Malmstrom	Weapons Storage and Maintenance Facility	235,000	CM
NEVADA	Nellis	365th ISR Group Facility	57,000	CM
NORTH DAKOTA	Minot	Consolidated Helo/TRF Ops/AMU And Alert Fac	5,500	CM
OHIO	Wright-Patterson	ADAL Intelligence Production Complex (NASIC)	120,900	CM
TEXAS	JBSA-Lackland	Aquatics Tank	69,000	CM
TEXAS	JBSA-Lackland	BMT Recruit Dormitory 8	110,000	CM
UTAH	Hill	GBSD Mission Integration Facility	108,000	CM
WASHINGTON	Fairchild	Consolidated TFI Base Operations	31,000	CM
WYOMING	FE Warren	Consolidated Helo/TRF Ops/AMU And Alert Facility	18,100	CM
Current Mission TOTAL			1,354,900	

STATE/COUNTRY	INSTALLATION	PROJECT	APPROPRIATION	
			REQUEST	TYPE
ALASKA	Eielson	F-35 AME Storage Facility	8,600	NM
AUSTRALIA	RAAF Tindal	Jet Fuel Storage Tanks	59,000	NM
AUSTRALIA	RAAF Tindal	Earth Covered Magazine	11,600	NM
CALIFORNIA	Travis	KC-46A Alter B181/B185/B187 Squad Ops/AMU	6,600	NM
CALIFORNIA	Travis	KC-46A Regional Maintenance Training Facility	19,500	NM
MARYLAND	JB Andrews	Presidential Aircraft Recap (PAR) Complex	86,000	NM
COMMONWEALTH OF THE NORTHERN MARIANAS ISLANDS	Tinian	Airfield Development Phase 1	109,000	NM
COMMONWEALTH OF THE NORTHERN MARIANAS ISLANDS	Tinian	Fuel Tanks with Receipt Pipeline and Hydrant System	109,000	NM
COMMONWEALTH OF THE NORTHERN MARIANAS ISLANDS	Tinian	Parking Apron	98,000	NM
NEVADA	Nellis	F-35A Munitions Assembly Conveyor Facility	8,200	NM
NEW MEXICO	Kirtland	Combat Rescue Helicopter Simulator (CRH) ADAL	15,500	NM
NEW MEXICO	Kirtland	UH-1 Replacement Facility	22,400	NM
TEXAS	JBSA-Randolph	T-X ADAL Ground Based Trng Sys (GBTS) Sim	9,300	NM
TEXAS	JBSA-Randolph	T-X MX Trng Sys Centralized Trng Fac	19,000	NM
UNITED KINGDOM	Lakenheath	F-35A PGM Facility	14,300	NM
UTAH	Hill	Joint Advanced Tactical Missile Storage Facility	6,500	NM
New Mission TOTAL			602,500	

WORLDWIDE UNSPECIFIED	Various Locations	Planning and Design	142,148	P&D
WORLDWIDE UNSPECIFIED	Various Locations	Unspecified Minor Military Construction	79,682	UMMC
Central Program TOTAL			221,830	

Active AF Program TOTAL 2,179,230

**DEPARTMENT OF THE AIR FORCE
MILITARY CONSTRUCTION PROGRAM FISCAL YEAR 2020
INSTALLATION INDEX**

<u>INSTALLATION</u>	<u>COMMAND</u>	<u>STATE/COUNTRY</u>	<u>PAGE</u>
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NELLIS	ACC	NEVADA	71
KIRTLAND	AETC	NEW MEXICO	78
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WRIGHT-APPTERSON	AFMC	OHIO	93
JBSA-RANDOLPH	AETC	TEXAS	98
LAKENHEATH	USAFE	UNITED KINGDOM	184
HILL	AFMC	UTAH	116
FAIRCHILD	AMC	WASHINGTON	125
FE WARREN	AFGSC	WYOMING	129

ACC – AIR COMBAT COMMAND

AETC – AIR EDUCATION AND TRAINING COMMAND

AFCENT – AIR FORCE CENTRAL COMMAND

AFDW – AIR FORCE DISTRICT OF WASHINGTON

AFGSC – AIR FORCE GLOBAL STRIKE COMMAND

AFMC – AIR FORCE MATERIEL COMMAND

AFSPC – AIR FORCE SPACE COMMAND

AMC – AIR MOBILITY COMMAND

PACAF – PACIFIC AIR FORCES

USAFE – US AIR FORCES, EUROPE

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**DEPARTMENT OF THE AIR FORCE
MILITARY CONSTRUCTION PROGRAM FISCAL YEAR 2020
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 2019 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 2020
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 2020
APPROPRIATION SOUGHT FOR PREVIOUSLY AUTHORIZED PROJECTS**

APPROPRIATIONS SOUGHT FOR FY18 AUTHORIZATIONS

In the FY2020 President's Budget, the Department is requesting appropriation in the amount of \$104.1 million total for two projects that were fully authorized in the National Defense Authorization Act for Fiscal Year 2018 (P.L. 115-91). The Presidential Aircraft Recapitalization project at Joint Base Andrews and the FE Warren Air Force Base Consolidated Helo/TRF/AMU and Alert Facility were fully authorized and the Department is requesting the final required appropriation for these projects in this request.

APPROPRIATIONS SOUGHT FOR FY19 AUTHORIZATIONS

In the FY2020 President's Budget, the Department is requesting appropriation in the amount of \$261.4 million total for three projects that were fully authorized in the National Defense Authorization Act for Fiscal Year 2019 (P.L. 115-232). The Hanscom Air Force Base MIT Lincoln Lab, the Wright Patterson Air Force Base NASIC Intelligence Production Facility, and the Minot Air Force Base Consolidated Helo/TRF/AMU and Alert Facility were fully authorized and the Department is requesting the final required appropriation for these projects in this request.

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**DEPARTMENT OF THE AIR FORCE
MILITARY CONSTRUCTION PROGRAM FISCAL YEAR 2020
APPROPRIATION LANGUAGE**

FY2020 MILITARY CONSTRUCTION AIR FORCE

For acquisition, construction, installation and equipment of temporary or permanent public works, military installations, facilities, and real property of the Air Force as currently authorized by law, \$2,179,230,000, to remain available until September 30, 2024: Provided that, of this amount, not to exceed \$142,148,000 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.

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1. COMPONENT AIR FORCE		FY 2020 MILITARY CONSTRUCTION PROJECT DATA			2. DATE March 2019	
3. INSTALLATION AND LOCATION EIELSON AIR FORCE BASE EIELSON, ALASKA			4. PROJECT TITLE: F-35 AME STORAGE FACILITY			
5. PROGRAM ELEMENT 27142F		6. CATEGORY CODE 442758	7. PROJECT NUMBER 1703/FTQW1055646		8. PROJECT COST (\$000) 8,600	
9. COST ESTIMATES						
ITEM		U/M	QUANTITY	UNIT COST	COST	
<u>PRIMARY FACILITIES</u>						
AME Storage Facility		Square Meter	1,208	\$3,406	\$4,114,448	
Sustainability and Energy Measures (2%)		Lump Sum	1	\$87,000	\$87,000	
Cybersecurity of Facility Related Control Systems		Lump Sum	1	\$250,000	\$250,000	
				Line Item Total:	\$4,451,448	
<u>SUPPORTING FACILITIES</u>						
Utilities		Lump Sum	1	\$400,000	\$400,000	
Site Improvements		Lump Sum	1	\$1,300,000	\$1,300,000	
Pavements		Lump Sum	1	\$245,000	\$245,000	
Communications		Lump Sum	1	\$55,000	\$55,000	
Environmental Site Treatment and Soil Disposal		Lump Sum	1	\$900,000	\$900,000	
Archaeological Monitoring		Lump Sum	1	\$25,000	\$25,000	
Demolition		Lump Sum	1	\$13,000	\$13,000	
				Line Item Total:	\$2,938,000	
PROJECT SUBTOTAL					\$7,389,448	
CONTINGENCY COST (5%)					\$369,472	
D/B DESIGN COST (4%)					\$295,578	
SUPERVISION, INSPECTION & OVERHEAD (5.7%)					\$504,330	
PROJECT TOTAL					\$8,558,828	
ROUNDED TOTAL COST					\$8,600,000	
10. DESCRIPTION OF PROPOSED CONSTRUCTION						
<p>Construct an Alternate Mission Equipment (AME) Storage facility for the beddown of the F-35A at Eielson AFB using conventional design and construction methods to accommodate the mission of the facility. The facility should include a standard slab-on-grade foundation, steel structure with metal siding, and standing seam metal roof. The facility should be compatible with applicable Department of Defense, Air Force, and base design standards. In addition, local materials and construction techniques shall be used where cost effective. The facility must also be able to withstand wind loads and seismic effects as prescribed in applicable codes and design guides. Special foundations are included for arctic conditions. Project shall demolish existing chain link fence and pavements. 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 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.</p> <p>Air Conditioning: 0 kW (0 tons)</p>						
11. REQUIREMENT: 1,208 SM Adequate: 2,812 SM Substandard: 0 SM						
PROJECT: F-35A AME Storage Facility						
<p>REQUIREMENT: This project provides a storage facility for storing alternate mission equipment (AME) associated with the F-35 mission. The AME storage area provides space for performing off-equipment maintenance and storage of both internal and external AME of the F-35A aircraft. It is critical that this AME is stored properly so that when it is loaded onto an aircraft it is not damaged or weathered. The facility will be sized to provide sufficient area for vertical storage of AME for 54 F-35 permanently assigned aircraft. Work includes, but is not limited to construction of a facility with standard slab-on-grade concrete foundation, spread footings, steel structure with metal siding, and a standing seam metal roof. The electrical utilities will be limited to interior lighting, heating, fire suppression system and a wall mounted phone. Demolition includes removal of chain link fencing and pavement. Extensive soils remediation is required to mitigate and transport hazardous</p>						

1. COMPONENT AIR FORCE	FY 2020 MILITARY CONSTRUCTION PROJECT DATA		2. DATE March 2019
3. INSTALLATION AND LOCATION EIELSON AIR FORCE BASE EIELSON, ALASKA		4. PROJECT TITLE: F-35 AME STORAGE FACILITY	
5. PROGRAM ELEMENT 27142F	6. CATEGORY CODE 442758	7. PROJECT NUMBER 1703/FTQW1055646	8. PROJECT COST (\$000) 8,600

soil to appropriate disposal facility. The AME must be stored in a location with airfield access that allows for rapid loading of the AME onto the F-35 aircraft and for routine maintenance inspections.

CURRENT SITUATION: The F-35 beddown will include the arrival of large amounts of AME. AME is non-motorized, non-explosive equipment that attaches to the aircraft and is used during exercises and contingency operations. There is currently no space available on the installation to store the AME. The lifespan of the AME will be compromised if it is stored outside in the arctic environment.

IMPACT IF NOT PROVIDED: Eielson AFB is the third Main Operating Base (MOB) for the F-35A aircraft; but, does not have an adequate storage facility available for the AME associated with the F-35 squadrons. If the facility is not constructed then there will be no place to store the AME out of the weather which will compromise the ability to maintain the AME and rapidly deploy the F-35 squadrons that use the AME during exercises and contingency operations.

ADDITIONAL: This project meets the criteria/scope specified in AFM 32-1084, Facility Requirements. This design shall conform to criteria established in the Air Force Corporate Facilities Standards (AFCFS), the Installation Facilities Standards (IFS), but will not employ a standard facility design as the facility is based off of the specific needs of the F-35 squadron's AME. The proposed location was identified as Site 24 in the F-35A Operational Beddown - Pacific Final Environmental Impact Statement (EIS) dated February 2016. The storage facility will be located adjacent to Building 1353. All known alternative options were considered during the development of this project. A full Economic Analysis is being developed. The initial cost estimate for this project is within DoD Pricing Guide parameters. The supporting facility costs exceed 25% of the primary facilities due to extensive site improvements and contaminated soils remediation required at the site. This project does not fall within or partly within the 100-year flood plain. This project was not included in the Fiscal Year 2019 future-years defense plan.

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: Comm. (907) 377-5213. AME Storage Facility: 1,208 SM = 13,000 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 2020 MILITARY CONSTRUCTION PROJECT DATA			2. DATE March 2019
3. INSTALLATION AND LOCATION EIELSON AIR FORCE BASE EIELSON, ALASKA		4. PROJECT TITLE: F-35 AME STORAGE FACILITY		
5. PROGRAM ELEMENT 27142F	6. CATEGORY CODE 442758	7. PROJECT NUMBER 1703/FTQW1055646	8. PROJECT COST (\$000) 8,600	
12. SUPPLEMENTAL DATA				
a. Estimated Design Data:				
(1) Project to be accomplished by design-build procedures				
(a) Date Design Started:				
				20 JUN 18
(b) Parametric Cost Estimates Used to Develop Costs:				
				YES
(c) Percent Complete as of January 2019:				
				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 –				
				N/A
(3) All Other Design Costs:				
				360
(4) Construction Contract Award:				
				20 FEB
(5) Construction Start:				
				20 JUN
(6) Construction Completion:				
				22 MAR
(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)	
FURNISHINGS, FIXTURES, & EQUIPMENT (FF&E)	3080	2022	5,000	

1. COMPONENT AIR FORCE			FY 2020 MILITARY CONSTRUCTION PROGRAM						2. DATE (YYYYMMDD) March 2019			
3. INSTALLATION AND LOCATION LITTLE ROCK AIR FORCE BASE ARKANSAS						4. COMMAND AIR MOBILITY COMMAND			5. AREA CONSTRUCTION COST INDEX 0.82			
6. PERSONNEL			(1) PERMANENT			(2) STUDENTS			(3) SUPPORTED			TOTAL
			OFFICER	ENLISTED	CIVILIAN	OFFICER	ENLISTED	CIVILIAN	OFFICER	ENLISTED	CIVILIAN	
a. AS OF 30-Sep-18			301	2819	898	30	6	0	372	1467	708	6,601
b. END FY 2024			301	2819	898	30	6	0	372	1467	708	6,601
7. INVENTORY DATA (\$000)												
a. TOTAL ACREAGE			6,104									
b. INVENTORY TOTAL AS OF 30-Sep-18												1,261,000
c. AUTHORIZATION NOT YET IN INVENTORY												0
d. AUTHORIZATION REQUESTED IN THIS PROGRAM (FY 2020)												47,000
e. PLANNED IN NEXT FOUR PROGRAM YEARS (FY 2021-2024)												0
f. REMAINING DEFICIENCY												73,680
g. GRAND TOTAL												1,381,680
8. PROJECTS REQUESTED IN THIS PROGRAM (FY 2020)												
a. CATEGORY						b. COST (\$000)			c. DESIGN STATUS			
(1) CODE	(2) PROJECT TITLE					(3) SCOPE			(1) START	(2) COMPLETE		
171-625	C-130H/J Fuselage Trainer Facility					11,942 SM			02/20	06/20		
TOTAL									47,000			
9. FUTURE PROJECTS IN NEXT FOUR PROGRAM YEARS (FY 2021-2024)												
FUTURE PROJECTS TOTAL									0			
R&M UNFUNDED REQUIREMENT (\$M)						TOTAL			32,638.0			
10. MISSION OR MAJOR FUNCTIONS												
Little Rock AFB operates an airlift wing with five C-130 squadrons, conducting operations and training. The only Department of Defense C-130 training base consisting of an Air Mobility Command airlift group with C-130 aircraft, an Air National Guard C-130 airlift wing, and an Air Force Reserve Command aerial port squadron.												
11. OUTSTANDING POLLUTION AND SAFETY DEFICIENCIES (FY 2020-2024)												
a. Air Pollution												0
b. Water Pollution												0
c. Occupational Safety and Health												0
d. Other Environmental												0
												0
												0
OUTSTANDING DEFICIENCIES TOTAL									0			

1. COMPONENT AIR FORCE		FY 2020 MILITARY CONSTRUCTION PROJECT DATA			2. DATE March 2019	
3. INSTALLATION AND LOCATION LITTLE ROCK AFB ARKANSAS				4. PROJECT TITLE: C-130H/J FUSELAGE TRAINER FACILITY		
5. PROGRAM ELEMENT 41897F		6. CATEGORY CODE 171625	7. PROJECT NUMBER 2496 / NKAK123007		8. PROJECT COST (\$000) 47,000	
9. COST ESTIMATES						
<u>PRIMARY FACILITIES</u>		U/M	QUANTITY	UNIT COST	COST	
APPLIED INSTRUCTION BUILDING		Square Meter	11942	\$2,554	\$30,499,868	
SUSTAINABILITY AND ENERGY MEASURES (2%)		Lump Sum			\$656,093	
CYBERSECURITY OF FACILITY-RELATED CONTROL SYS		Lump Sum			\$820,117	
				Line Item Total:	\$31,976,078	
<u>SUPPORTING FACILITIES</u>						
SPECIAL FOUNDATIONS		Square Meter	11942	\$193	\$2,304,806	
COMMUNICATIONS		Lump Sum	1	\$161,000	\$161,000	
PAVEMENTS		Lump Sum	1	\$2,079,000	\$2,079,000	
SITE IMPROVEMENTS		Lump Sum	1	\$3,290,000	\$3,290,000	
UTILITIES		Lump Sum	1	\$1,260,000	\$1,260,000	
				Line Item Total:	\$9,094,806.00	
PROJECT SUBTOTAL					\$41,070,884	
CONTINGENCY COST (5%)					\$2,053,544	
D/B DESIGN COST (4% OF SUBTOTAL)					\$1,642,835	
SUPERVISION, INSPECTION & OVERHEAD (5.7%)					\$2,458,092	
PROJECT TOTAL					\$47,225,35	
ROUNDED TOTAL COST					\$47,000,000	
10. DESCRIPTION OF PROPOSED CONSTRUCTION						
<p>Construct a seven high-bay Fuselage Training Facility utilizing economical design and construction methods to accommodate the C-130H/J series training mission. Construction will include reinforced concrete foundation, steel frame structure, and metal roof. This facility will include special foundations. The project will include all necessary utilities, site improvements, pavements, communications support infrastructure, and all necessary supporting work for a complete and usable facility. The project includes four J model trainers, their associated administrative and support areas and required parking. Administrative area to include restrooms, break room and utility rooms sized to meet the requirements for both H and J model functions. The four trainers will be in individual bays sized to perform night vision goggle operations with maneuvering space for a K-Loader in each. The project will also include a high-bay area for three H model trainers, their associated administrative areas and required parking. The three trainers will be in individual bays sized to perform night vision goggle operations with maneuvering space for a K-Loader in each. 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 DoD Antiterrorism/force protection requirements per UFC 4-010-01.</p> <p>Air Conditioning: 167 Tons</p>						
11. REQUIREMENT: 11,942 SM ADEQUATE: 0 SM SUSTANDARD: 3,205 SM						
PROJECT: Construct new C-130H and C-130J Fuselage Trainer Facility						
REQUIREMENT: The new facility will meet the support requirements for three high-bay C-130H model Fuselage Trainers, four high-bay C-130J Fuselage Trainers, cargo training and associated K-loader equipment storage requirements, associated classroom and briefing spaces, and training administration areas. Specialized mechanical spaces to support each Fuselage Trainers are also required. This project was developed based on criteria specified in Air Force Handbook 32-1084, Facility Requirements, C-130J Maintenance and Aircrew Training System (MATS) Facilities Design Criteria Report (dated 2 October 2008) and user interviews.						

1. COMPONENT AIR FORCE	FY 2020 MILITARY CONSTRUCTION PROJECT DATA	2. DATE March 2019
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3. INSTALLATION AND LOCATION LITTLE ROCK AFB ARKANSAS	4. PROJECT TITLE: C-130H/J FUSELAGE TRAINER FACILITY
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5. PROGRAM ELEMENT 41897F	6. CATEGORY CODE 171625	7. PROJECT NUMBER 2496 / NKAK123007	8. PROJECT COST (\$000) 47,000
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CURRENT SITUATION: The existing fuselage trainer facility at Little Rock AFB houses four H model trainers and two J model trainers. The 714 Training Squadron is the focal point for all C-130 formal training functions and manages 1,700 C-130H/J students annually. In 2003, the Formal J Maintenance and Aircrew Training System Fuselage Trainers function at Keesler AFB relocated to Little Rock AFB into existing facilities that were originally designed to support a refresher training program. The Air Force will be commissioning new J model trainers that will be too large to have their required clearances met in the existing facility. The training program will have to expand in order to meet the growing training needs of the Air Force. In its current location, the existing fuselage trainer facilities are physically isolated from the other training facilities. The proposed site for the new facility will locate the fuselage trainers adjacent to the training campus to improve the efficiency for the training mission.

Since 2003, the function has continued to expand with a consistent aircrew production shortfall of approximately 20%. There are currently three shifts of students. The trainers are operated 24/7 with the seventh day reserved for make-up training or equipment maintenance. Due to the necessary increases required for aircrew production and initiatives to eliminate use of aircraft as ground trainers, additional classroom space and offices are required to meet the expansion of the training program. The 714 Training Squadron is anticipating up to three additional trainers to be funded and procured by Headquarters Air Mobility Command.

These trainers will have higher fidelity than existing devices and will require housing compatible to protect sensitive electronic and computer equipment. The existing facilities are only 57% the required size. The existing building 253, was originally constructed in 1955 and has four Fuselage Trainer bays. Building 254 was constructed in 2004 to expand the training conducted in building 253 and has three Fuselage Trainer bays; one bay is occupied by pallets and equipment storage. Current facilities are located on the flight line in a zone designated in the Installation Development Plan and Flight Line Area Development Plan for aircraft maintenance facilities. Little Rock AFB will eliminate a \$13M MILCON requirement for a new Maintenance Facility (NKAK133002) by moving the Fuselage Trainers from buildings 253 and 254 and repurposing the buildings for the maintenance mission. During installation training exercises or escalated real-world force protection conditions, the flight line is secured and becomes extremely difficult to access causing delays to training, especially for foreign national students. The loadmaster's course consists of fuselage and flight deck training which are conducted in two geographically-separated locations. Airmen who walk between the dorms, dining facility, and classes have a daily commute of three or more miles carrying 80 pounds of academic material. Classroom instructors have tried to ease their burden by offering rides in their privately owned vehicles. However, this removes the instructors from their primary academic duties, and represents a loss of man hours/cost to the government.

IMPACT IF NOT PROVIDED: The inability to train C-130H/J crew members prevents recovery of the 20% aircrew production shortfall and diminishes Air Force-wide C-130 mission readiness. The undersized facilities prevent full mission accomplishment, limits instructor-student interaction, and increases training waiting periods and frequencies. Little Rock AFB supports a 1,700 annual student load in existing facilities that are only 57% of the required size, requiring Fuselage Trainers to operate 24/7. While on the flight line, the Fuselage Training mission will remain geographically and physically isolated from the rest of the Air Education Training Command leadership and training campus, adding to the challenge of accessing facilities between the locations for instructors and students on increasingly tight schedules. Due to Fuselage Trainer inadequacies, the training unit must substitute by removing C-130s from the flight schedule result in loss of approximately 20 student pilots and 20 student loadmasters per year.

ADDITIONAL: Air Force Manual 32-1084 does not specifically detail "Facilities Requirements" for a Fuselage Training facility. A size requirement analysis was performed to establish project requirements. This project was not included in the Fiscal Year 2019 future-years defense plan in Fiscal Year 2020. This project does not fall within or partly within the 100-year flood plain. An economic analysis was completed in January 2012, however a new economic analysis has been requested due to significant change in scope. All reasonable alternatives were considered during the development of this project to include status quo, renovation, and new construction. New facility construction was the only viable option to meet this requirement. The site plan has been adopted into the approved Installation Development Plan and a site plan was approved at the Facilities Board level. This design shall conform to criteria established in the Air Force Corporate Facilities Standards, the Installation Facilities Standards, but will not employ a standard facility design because there is no AF standard facility design for this project and there is no applicable standard design from Air Force Civil Engineer Center (AFCEC). The design is to be based on the requirements of the fuselage trainers. Base Civil Engineer: (501)987-3322. C-130H/J Fuselage Trainer Facility (11,942 SM=128543 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 2020 MILITARY CONSTRUCTION PROJECT DATA	2. DATE March 2019
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3. INSTALLATION AND LOCATION LITTLE ROCK AFB ARKANSAS	4. PROJECT TITLE: C-130H/J FUSELAGE TRAINER FACILITY
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5. PROGRAM ELEMENT 41897F	6. CATEGORY CODE 171625	7. PROJECT NUMBER 2496 / NKAK123007	8. PROJECT COST (\$000) 47,000
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12. SUPPLEMENTAL DATA

a. Estimated Design Data:

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

(a) Date Design Started:	25 JUN 18
(b) Parametric Cost Estimates Used to Develop Costs:	YES
(c) Percent Complete as of January 2019:	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 –	N/A

(3) All Other Design Costs: 1,880

(4) Construction Contract Award: 20 FEB

(5) Construction Start: 20 JUN

(6) Construction Completion: 22 MAR

(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)
FUSELAGE TRAINERS	3080	2022	4,436

1. COMPONENT AIR FORCE			FY 2020 MILITARY CONSTRUCTION PROGRAM						2. DATE (YYYYMMDD) March 2019			
3. INSTALLATION AND LOCATION TRAVIS AIR FORCE BASE CALIFORNIA						4. COMMAND AIR MOBILITY COMMAND			5. AREA CONSTRUCTION COST INDEX 1.32			
6. PERSONNEL			(1) PERMANENT			(2) STUDENTS			(3) SUPPORTED			TOTAL
			OFFICER	ENLISTED	CIVILIAN	OFFICER	ENLISTED	CIVILIAN	OFFICER	ENLISTED	CIVILIAN	
a. AS OF 30-Sep-18			1300	5866	2247	0	0	0	661	2629	1564	14,267
b. END FY 2024			1300	5866	2247	0	0	0	661	2629	1564	14,267
7. INVENTORY DATA (\$000)												
a. TOTAL ACREAGE			6,383									
b. INVENTORY TOTAL AS OF 30-Sep-18												4,789,007
c. AUTHORIZATION NOT YET IN INVENTORY												114,700
d. AUTHORIZATION REQUESTED IN THIS PROGRAM (FY 2020)												26,100
e. PLANNED IN NEXT FOUR PROGRAM YEARS (FY 2021-2024)												21,350
f. REMAINING DEFICIENCY												68,000
g. GRAND TOTAL												5,019,157
8. PROJECTS REQUESTED IN THIS PROGRAM (FY 2020)												
a. CATEGORY						b. COST (\$000)			c. DESIGN STATUS			
(1) CODE	(2) PROJECT TITLE					(3) SCOPE			(1) START		(2) COMPLETE	
171-618	KC-46A REGIONAL MAINTENANCE TRAINING FACILITY					3,100 SM			19,500		05/17 04/19	
141-753	KC-46A ALTER B181/B185/B187 SQUAD OPS/AMU					7,853 SM			6,600		05/17 04/19	
TOTAL						26,100						
9. FUTURE PROJECTS IN NEXT FOUR PROGRAM YEARS (FY 2021-2024)												
121-122	KC-46A ADAL Parking Apron/Hydrant Fuel System					2,098 SM			5,300			
171-625	KC-46A ADAL B862 Fuselage Trainer					506 SM			1,200			
171-212	KC-46A ADAL B179 Simulator Facility					2,583 SM			5,400			
141-453	KC-46A Alter B4 Mission Planning Center					744 SM			7,000			
218-712	KC-46A AGE Covered Storage					1,858 SM			2,450			
FUTURE PROJECTS TOTAL						21,350						
R&M UNFUNDED REQUIREMENT (\$M)						TOTAL			21,204.6			
10. MISSION OR MAJOR FUNCTIONS												
Travis Air Force Base, under the operational control of the Air Mobility Command supports Headquarters 15th Air Force, an air mobility wing with two C-5 squadrons and two KC-10 air refueling squadrons, an Air Force Reserve Command Associate air mobility wing, and David Grant Medical Center.												
11. OUTSTANDING POLLUTION AND SAFETY DEFICIENCIES (FY 2020-2024)												
a. Air Pollution												
b. Water Pollution												
c. Occupational Safety and Health												
d. Other Environmental												
OUTSTANDING DEFICIENCIES TOTAL						0						

1. COMPONENT AIR FORCE	FY 2020 MILITARY CONSTRUCTION PROJECT DATA			2. DATE March 2019	
3. INSTALLATION AND LOCATION TRAVIS AIR FORCE BASE, CALIFORNIA		4. PROJECT TITLE: KC-46A ALTER B181/B185/B187 SQUAD OPS/AMU			
5. PROGRAM ELEMENT 41221F	6. CATEGORY CODE 141753	7. PROJECT NUMBER 3351 / XDAT1026962	8. PROJECT COST (\$000) 6,600		
9. COST ESTIMATES					
ITEM		U/M	QUANTITY	UNIT COST	COST
<u>PRIMARY FACILITIES</u>					
ALTER BUILDING 181 (141-753)		SM	3927	\$460	\$1,806,420
ALTER BUILDING 185 (211-154)		SM	3584	\$523	\$1,874,432
ALTER BUILDING 187 (141-753)		SM	3926	\$460	\$1,805,960
SUSTAINABILITY AND ENERGY MEASURES (2%)		LS			\$109,736
CYBERSECURITY OF FACILITY-RELATED CONTROL SYS		LS			\$163,000
				Line Item Total:	\$5,759,548
<u>SUPPORTING FACILITIES</u>					
SITE IMPROVEMENTS		LS	1	\$86,000	\$86,000
COMMUNICATIONS		LS	1	\$59,000	\$59,000
ENVIRONMENTAL MONITORING		LS	1	\$83,000	\$83,000
				Line Item Total:	\$228,000.00
PROJECT SUBTOTAL					\$5,987,548
CONTINGENCY COST (5%)					\$299,377
SUPERVISION, INSPECTION & OVERHEAD (5.7%)					\$358,355
PROJECT TOTAL					\$6,645,280
ROUNDED TOTAL COST					\$6,600,000
10. DESCRIPTION OF PROPOSED CONSTRUCTION					
<p>Alter buildings 181, 185 and 187 to provide adequate space for squadron operations and aircraft maintenance unit functions in support of the KC-46A beddown at Travis AFB. Alteration work includes reconfiguring interior walls, Heating, Ventilation, and Air Conditioning Systems, interior electrical systems, interior lighting, communications infrastructure, interior plumbing systems and all other supporting work necessary to make complete and useable facilities. 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: 100 TONS</p>					
11. REQUIREMENT: 7,853 SM		ADEQUATE: 0 SM		SUSTANDARD: 3,205 SM	
PROJECT: KC-46A Alter B181/B185/B187 Squad Ops/AMU					
<p>REQUIREMENT: Alter existing facility space at Travis AFB to accommodate active duty and Air Force Reserve Component Aircraft Operations units' leadership, under the Total Force Integration concept. Adequate space for squadron operations and aircraft maintenance unit administrative functions is required to support KC-46A beddown. The Air Force has designated Travis AFB as the preferred alternative for the fourth KC-46A Main Operating Base (MOB 4). The first KC-46A tanker aircrafts are expected for delivery in Fiscal Year 2020. The new unit will be a total force initiative unit where integrated active duty and Air Force Reserve components will execute the mission together, therefore collocation is required to optimize unit effectiveness. This project will include necessary work to provide a complete and usable facility that meets mission needs and requirements.</p>					

1. COMPONENT AIR FORCE	FY 2020 MILITARY CONSTRUCTION PROJECT DATA			2. DATE March 2019
3. INSTALLATION AND LOCATION TRAVIS AIR FORCE BASE, CALIFORNIA		4. PROJECT TITLE: KC-46A ALTER B181/B185/B187 SQUAD OPS/AMU		
5. PROGRAM ELEMENT 41221F	6. CATEGORY CODE 141753	7. PROJECT NUMBER 3351 / XDAT1026962	8. PROJECT COST (\$000) 6,600	
<p>CURRENT SITUATION: Adequate space is not available to support KC-46A squadron operations and aircraft maintenance unit administrative functions under the Total Force Integration concept at Travis AFB. Current Total Force Integration units are not integrated into a single facility and building 181 is not configured to support effective and efficient command and control of aircraft operations functions for the combined Total Force units. The lack of proper command and control will increase delays and degrade the ability to generate aircraft missions. Additionally, the ability for aircrew to coordinate training, scheduling, briefing and aircraft personnel support equipment will not be met due to inadequate usable space for the envisioned Total Force Integration operations concepts. Failure to realign will preclude effective operations of assigned aircraft, negatively impacting mobility requirements and preventing the Wing from meeting mission priorities.</p> <p>IMPACT IF NOT PROVIDED: Adequate KC-46A Squadron operations area will not be optimized and therefore Travis AFB will be unable to support the required Operations personnel for the KC-46A aircraft unless Air Force Reserve unit is housed in another facility elsewhere on base. Integrated total force operations will be negatively impacted. No other facilities or workarounds are available. Lack of proper facilities for KC-46A command and control functions will degrade the ability of assigned personnel to generate KC-46A sorties in support of critical Air Force missions. Additionally, efficiencies generated by Total Force Integration operations will not be fully realized as active duty and Air Reserve Command personnel will be forced to operate from geographically separated facilities.</p> <p>ADDITIONAL: This project meets the applicable criteria/scope specified in Air Force Manual 32-1084, "Facility Requirements" and the KC-46A Facility Requirements Plan. This project does not fall within or partly within the 100-year flood plain. A preliminary analysis of reasonable alternatives evaluating status quo, alteration and new construction was accomplished. This analysis indicated alteration is the most cost effective alternative which meets mission requirements. A formal economic analysis is being developed. 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).</p> <p>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.</p> <p>Base Civil Engineer: (707) 424-2492.</p> <p>Alter Building 181: 3,927 SM = 42,270 SF. Alter Building 185: 3,584 SM = 38,578 SF. Alter Building 187: 3,925 SM = 42,248 SF.</p> <p>JOINT USE CERTIFICATION: This facility can be used by other components on an "as available" basis; however, the scope of the project is based on Air Force requirements.</p>				

1. COMPONENT AIR FORCE	FY 2020 MILITARY CONSTRUCTION PROJECT DATA	2. DATE March 2019	
3. INSTALLATION AND LOCATION TRAVIS AIR FORCE BASE, CALIFORNIA		4. PROJECT TITLE: KC-46A ALTER B181/B185/B187 SQUAD OPS/AMU	
5. PROGRAM ELEMENT 41221F	6. CATEGORY CODE 141753	7. PROJECT NUMBER 3351 / XDAT1026962	
8. PROJECT COST (\$000) 6,600			
12. SUPPLEMENTAL DATA			
a. Estimated Design Data:			
(1) Status			
(a) Date Design Started:		01-JAN-18	
(b) Parametric Cost Estimates Used to Develop Costs:		YES	
* (c) Percent Complete as of January 2019:		100%	
* (d) Date Design 35% Complete:		01-APR-18	
(e) Date Design 100% Complete:		01-APR-19	
(f) Energy Study and Life Cycle Cost Analysis was/will be performed:		YES	
(2) Basis			
(a) Standard or Definitive Design Used:		NO	
(b) Where Design Was Previously Used:		N/A	
(3) Total Cost (\$000)			
(a) Production of Plans and Specification:		396	
(b) All Other Design Costs:		198	
(c) Total Cost (a + b or d + e):		594	
(d) Contract Cost:		495	
(e) In-House Cost:		99	
(4) Construction Contract Award Date:		20 FEB	
(5) Construction Start Date:		20 JUN	
(6) Construction Completion Date:		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 APPRO	FISCAL YEAR APPROPRIATED OR REQUESTED	COST (\$000)
COMMUNICATIONS EQUIPMENT	3400	2021	50
FURNITURE, FIXTURES, & EQUIPMENT	3400	2021	135

1. COMPONENT AIR FORCE	FY 2020 MILITARY CONSTRUCTION PROJECT DATA			2. DATE March 2019	
3. INSTALLATION AND LOCATION TRAVIS AFB, CALIFORNIA		4. PROJECT TITLE: KC-46A REGIONAL MAINTENANCE TRAINING FACILITY			
5. PROGRAM ELEMENT 41221F	6. CATEGORY CODE 171618	7. PROJECT NUMBER 3351 / XDAT1046451	8. PROJECT COST (\$000) 19,500		
9. COST ESTIMATES					
<u>PRIMARY FACILITIES</u>		U/M	QUANTITY	UNIT COST	COST
MAINTENANCE TRAINING FACILITY		SM	3100	\$4,241	\$13,147,100
CYBERSECURITY OF FACILITY-RELATED CONTROL SYS		LS	1	\$250,000	\$250,000
SUSTAINABILITY AND ENERGY MEASURES (2%)		LS	1	\$263,000	\$263,000
		Line Item Total:			\$13,660,100
<u>SUPPORTING FACILITIES</u>					
COMMUNICATIONS		LS	1	\$410,000	\$410,000
PAVEMENTS		LS	1	\$1,500,000	\$1,500,000
PRIVATIZED UTILITY CONNECTION FEES		LS	1	\$78,000	\$78,000
ENVIRONMENTAL		LS	1	\$60,000	\$60,000
SITE IMPROVEMENTS		LS	1	\$812,000	\$812,000
UTILITIES		LS	1	\$550,000	\$550,000
		Line Item Total:			\$3,410,000
PROJECT SUBTOTAL					\$17,070,100
CONTINGENCY COST (5%)					\$853,505
D/B DESIGN COST (4%)					\$682,804
SUPERVISION, INSPECTION & OVERHEAD (5.7%)					\$1,060,565
PROJECT TOTAL					\$19,666,974
ROUNDED TOTAL COST					\$19,500,000
10. DESCRIPTION OF PROPOSED CONSTRUCTION					
Construct a Regional Maintenance Training Facility using reinforced concrete foundation, concrete floor slab, structural steel frame with split face concrete masonry unit façade, and a standing seam metal roof. The project will construct a multi-story facility to provide areas for airframe maintenance training devices, parts storage, briefing rooms, classrooms, mechanical room, computer room, restrooms, administration areas, electrical/mechanical, and fire protection detection/suppression systems. Also included are all associated utility site work, communications support, environmental controls, pavements, parking area, exterior lighting, landscaping, and all other work necessary to provide a complete and usable 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 DoD Antiterrorism/Force Protection requirements per UFC 4-010-01.					
Air Conditioning: 100 Tons					
11. REQUIREMENT: 3,100 SM ADEQUATE: 0 SM SUBSTANDARD: 0 SM					
PROJECT: KC-46A Regional Maintenance Training Facility					
REQUIREMENT: Construct a properly sized and configured facility to house KC-46A Maintenance Training Devices and associated equipment. This facility will house large scale mock-ups, classrooms and training devices (hardware and computer based) to provide specialized hands-on training to enhance learning, facilitate the development of skills, and permit the practice of proper procedures necessary for the maintenance of integrated systems of the KC-46A aircraft.					

1. COMPONENT AIR FORCE	FY 2020 MILITARY CONSTRUCTION PROJECT DATA			2. DATE March 2019
3. INSTALLATION AND LOCATION TRAVIS AFB, CALIFORNIA		4. PROJECT TITLE: KC-46A REGIONAL MAINTENANCE TRAINING FACILITY		
5. PROGRAM ELEMENT 41221F	6. CATEGORY CODE 171618	7. PROJECT NUMBER 3351 / XDAT1046451	8. PROJECT COST (\$000) 19,500	
<p>CURRENT SITUATION: The KC-46A is a new aircraft and there are no facilities at Travis AFB capable of providing this type of training operations for this weapon system. Existing facilities do not meet physical requirements and cannot be modified to house the high bay and classrooms necessary to fit training devices necessary to train aircraft maintenance personnel. The new facility will provide a controlled training environment to receive formal instructions, avoiding the use of mission-ready aircraft for on-the-job training which results in reduced operational assets available for the warfighter and incurs higher fuel costs.</p> <p>IMPACT IF NOT PROVIDED: Without this facility Air Mobility Command will not be able to provide the required maintenance training to properly support the new KC-46A aircraft. The lack of properly trained personnel will decrease mission capability and ability to generate available aircraft to support operational/training missions. The absence of this facility will greatly increase training costs and require the use of operational aircraft for maintenance training, which would otherwise be assigned to operational missions. If deficiency continues, it places active KC-46A assets at risk of damage due to training accidents and higher fuel costs. There are no other facilities available to accommodate this requirement.</p> <p>ADDITIONAL: This project meets the criteria/scope specified in Air Force Manual 32-1084 "Facility Requirements". This project was included in the Fiscal Year 2019 future-years defense plan in Fiscal Year 2020.</p> <p>This project does not fall within or partly within the 100-year flood plain. An economic analysis of reasonable options comparing alternatives of status quo, renovation, addition/ alteration and new construction has been submitted. New construction was found to be the best solution. This design shall conform to criteria established in the Air Force Corporate Facilities Standards and the Installation Facilities Standards [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). 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.</p> <p>Base Civil Engineer: (707) 424- 2492</p> <p>Maintenance Training Facility: 3,100 SM = 33,368 SF</p> <p>JOINT USE CERTIFICATION: This facility can be used by other components on an "as available" basis; however, the scope of the project is based on Air Force requirements.</p>				

1. COMPONENT AIR FORCE	FY 2020 MILITARY CONSTRUCTION PROJECT DATA			2. DATE March 2019
3. INSTALLATION AND LOCATION TRAVIS AFB, CALIFORNIA		4. PROJECT TITLE: KC-46A REGIONAL MAINTENANCE TRAINING FACILITY		
5. PROGRAM ELEMENT 41221F	6. CATEGORY CODE 171618	7. PROJECT NUMBER 3351 / XDAT1046451	8. PROJECT COST (\$000) 19,500	
12. SUPPLEMENTAL DATA				
a. Estimated Design Data:				
(1) Project to be accomplished by design-build procedures				
(a) Date Design Started:				25 OCT 17
(b) Parametric Cost Estimates Used to Develop Costs:				YES
(c) Percent Complete as of January 2019:				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:				585
(4) Construction Contract Award:				01-FEB-20
(5) Construction Start:				01-JUN-20
(6) Construction Completion:				31-MAR-22
(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)	
KC-46A MX TRAINING DEVICES	3010	2021	54,000	
KC-46A MX TRAINING DEVICES	3010	2021	87,000	
COMMUNICATIONS EQUIPMENT	3400	2021	140	
FURNITURE FIXTURES EQUIPMENT	3080	2021	950	

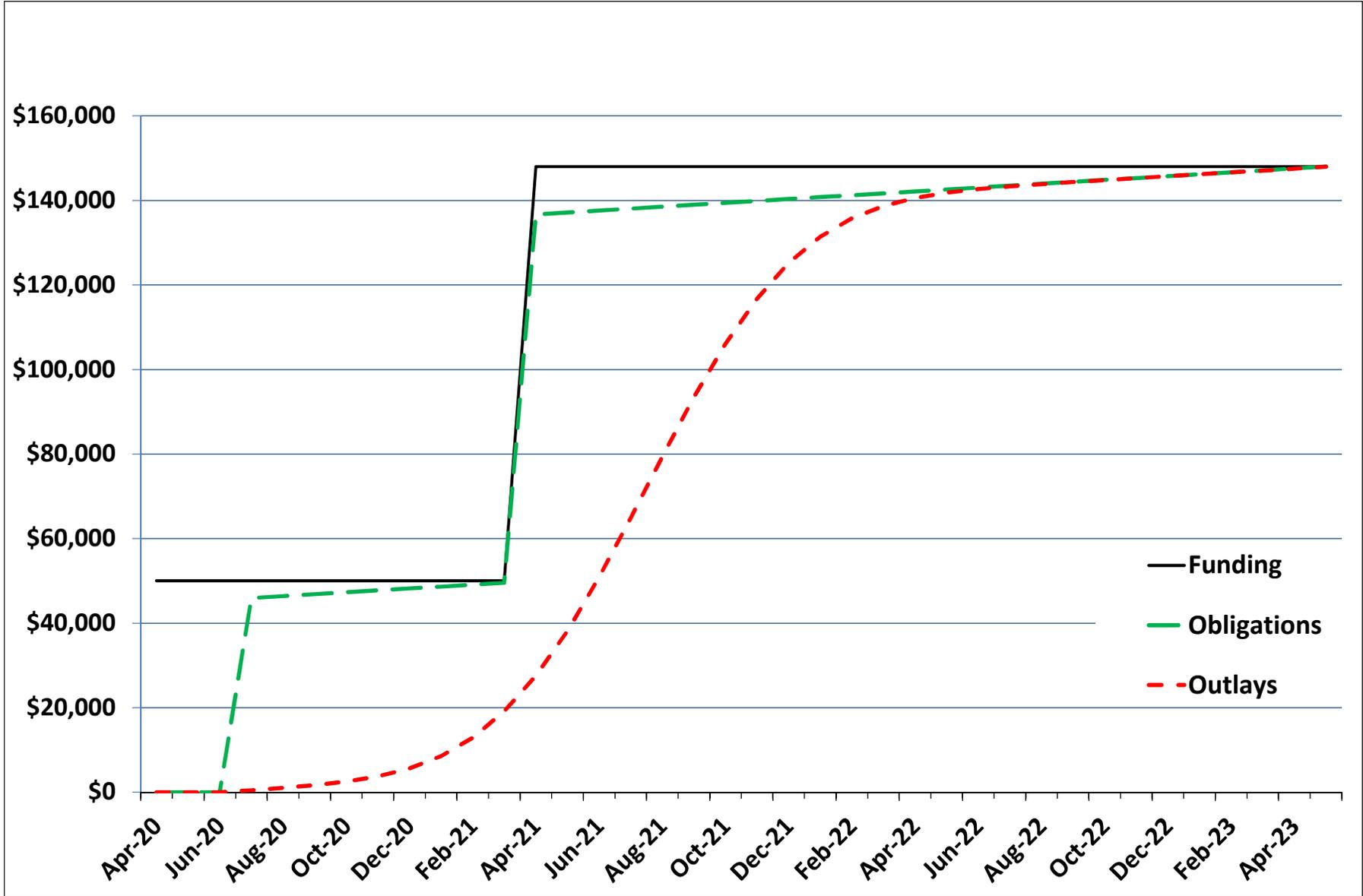
1. COMPONENT AIR FORCE	FY 2020 MILITARY CONSTRUCTION PROJECT DATA (computer generated)			2. DATE March 2019	
3. INSTALLATION, SITE AND LOCATION SCHRIEVER AIR FORCE BASE SCHRIEVER AFB SITE # 1 COLORADO			4. PROJECT TITLE CONSOLIDATED SPACE OPERATIONS FACILITY		
5. PROGRAM ELEMENT 91211F	6. CATEGORY CODE 131-200	7. RPSUID/PROJECT NUMBER 2067/GLEN203001	8. PROJECT COST (\$000) 148,000		
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					

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5. PROGRAM ELEMENT 91211F	6. CATEGORY CODE 131-200	7. RPSUID/PROJECT NUMBER 2067/GLEN203001	8. PROJECT COST (\$000) 148,000	
<p>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.</p> <p>Air Conditioning: 1,400 Tons</p>				
<p>11. Requirement: 16505 SM Adequate: 0 SM Substandard: 3264 SM</p> <p>PROJECT: Consolidated Space Operations Facility</p> <p>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).</p> <p>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</p>				

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3. INSTALLATION, SITE AND LOCATION SCHRIEVER AIR FORCE BASE SCHRIEVER AFB SITE # 1 COLORADO			4. PROJECT TITLE CONSOLIDATED SPACE OPERATIONS FACILITY	
5. PROGRAM ELEMENT 91211F	6. CATEGORY CODE 131-200	7. RPSUID/PROJECT NUMBER 2067/GLEN203001	8. PROJECT COST (\$000) 148,000	
<p>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.</p> <p>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.</p> <p>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. The EA will be approved prior to the president's budget. 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. This project was not included in the Fiscal Year 2019 future-years defense plan. 50 SW Base Civil Engineer: (719) 567-4200. CSOF: 17,090 SM = 183,955 SF. ECF: 595 SM = 6,405 SF.</p> <p>JOINT USE CERTIFICATION: This facility can be used by other components on an as available basis; however, the scope of the project is based on Air Force requirements.</p>				

1. COMPONENT AIR FORCE	FY 2020 MILITARY CONSTRUCTION PROJECT DATA (computer generated)		2. DATE March 2019
3. INSTALLATION AND LOCATION SCHRIEVER AIR FORCE BASE SCHRIEVER AFB SITE # 1 COLORADO		4. PROJECT TITLE CONSOLIDATED SPACE OPERATIONS FACILITY	
5. PROGRAM ELEMENT 91211F	6. CATEGORY CODE 131-200	7. PROJECT NUMBER 2067/GLEN203001	8. PROJECT COST (\$000) 148,000
12. SUPPLEMENTAL DATA:			
a. Estimated Design Data:			
(1) Status:			
(a) Date Design Started			30-MAY-18
(b) 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 FEB
(5) Construction Start			20 JUN
(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

Consolidated Space Operations Facility, Schriever AFB



Project: Consolidated Space Operations Facility

Project Spending Plan

As of: 20-Aug-18

All Cost in thousands (\$000)

Chart Begin/End

Apr-20	FUNDING		OBLIGATION		OUTLAYS	
May-23	(note 1)		(note 2)		(note 3)	
Month	Enacted	Cumulative	Obligated	Cumulative	Monthly	Cumulative
Apr-20	50,000	50,000	-	-	-	-
May-20	-	50,000	-	-	-	-
Jun-20	-	50,000	-	-	-	-
Jul-20	-	50,000	45,932.03	45,932.03	34.13	486.16
Aug-20	-	50,000	452.03	46,384.06	83.19	1,021.38
Sep-20	-	50,000	452.03	46,836.09	188.80	1,662.20
Oct-20	-	50,000	452.03	47,288.11	398.99	2,513.23
Nov-20	-	50,000	452.03	47,740.14	785.22	3,750.47
Dec-20	-	50,000	452.03	48,192.17	1,439.01	5,641.51
Jan-21	-	50,000	452.03	48,644.20	2,455.77	8,549.31
Feb-21	-	50,000	452.03	49,096.23	3,902.67	12,904.01
Mar-21	-	50,000	452.03	49,548.26	5,775.46	19,131.50
Apr-21	98,000	148,000	87,151.03	136,699.29	7,959.05	27,542.59
May-21	-	148,000	452.03	137,151.31	10,213.77	38,208.39
Jun-21	-	148,000	452.03	137,603.34	12,205.65	50,866.07
Jul-21	-	148,000	452.03	138,055.37	13,582.69	64,900.79
Aug-21	-	148,000	452.03	138,507.40	14,075.40	79,428.22
Sep-21	-	148,000	452.03	138,959.43	13,582.69	93,462.94
Oct-21	-	148,000	452.03	139,411.46	12,205.65	106,120.62
Nov-21	-	148,000	452.03	139,863.49	10,213.77	116,786.42
Dec-21	-	148,000	452.03	140,315.51	7,959.05	125,197.51
Jan-22	-	148,000	452.03	140,767.54	5,775.46	131,425.00
Feb-22	-	148,000	452.03	141,219.57	3,902.67	135,779.70
Mar-22	-	148,000	452.03	141,671.60	2,455.77	138,687.50
Apr-22	-	148,000	452.03	142,123.63	1,439.01	140,578.54
May-22	-	148,000	452.03	142,575.66	785.22	141,815.78
Jun-22	-	148,000	452.03	143,027.69	398.99	142,666.81
Jul-22	-	148,000	452.03	143,479.71	188.80	143,307.63
Aug-22	-	148,000	452.03	143,931.74	83.19	143,842.85
Sep-22	-	148,000	452.03	144,383.77	34.13	144,329.01
Oct-22	-	148,000	452.03	144,835.80	13.04	144,794.08
Nov-22	-	148,000	452.03	145,287.83	4.64	145,250.75
Dec-22	-	148,000	452.03	145,739.86	1.54	145,704.32
Jan-23	-	148,000	452.03	146,191.89	0.47	146,156.82
Feb-23	-	148,000	452.03	146,643.91	0.14	146,608.99
Mar-23	-	148,000	452.03	147,095.94	0.04	147,061.05
Apr-23	-	148,000	452.03	147,547.97	0.01	147,513.09
May-23	-	148,000	452.03	148,000.00	0.00	147,965.12

Note 1: Assumes initial appropriation is enacted by Congress January of the program year. The appropriation of follow-on increment anticipated February FY20.

Note 2: Assumes funds are available to the contracting officer for the initial obligation no earlier than April of the program year to accommodate the funding process. The obligations of follow-on obligations anticipated February 2020.

Note 3: Assumes contract award date of Jul 2020, Contract completion: May 2023, Duration 35 months

1. COMPONENT AIR FORCE		FY 2020 MILITARY CONSTRUCTION PROJECT DATA			2. DATE March 2019	
3. INSTALLATION AND LOCATION SCOTT AFB ILLINOIS			4. PROJECT TITLE: JOINT OPERATIONS & MISSION PLANNING CENTER			
5. PROGRAM ELEMENT 91211F		6. CATEGORY CODE 141461	7. PROJECT NUMBER 3255 / VDYD1055428		8. PROJECT COST (\$000) 100,000	
9. COST ESTIMATES						
ITEM		U/M	QUANTITY	UNIT COST	COST	
<u>PRIMARY FACILITIES</u>						
JOINT OPERATIONS & MISSION PLANNING CTR (141-461)		SM	13534	\$4,338.87	\$58,722,304	
SENSITIVE COMPARTMENTED INFORMATION FAC (140-422)		SM	2427	\$6,648.11	\$16,134,696	
SUSTAINABILITY AND ENERGY MEASURES (2%)		LS	1	\$1,500,000	\$1,500,000	
CYBERSECURITY OF FACILITY-RELATED CONTROL SYS		LS	1	\$1,911,000	\$1,911,000	
				Line Item Total:	\$78,268,000.00	
<u>SUPPORTING FACILITIES</u>						
GENERATOR		LS	1	\$400,000	\$400,000	
LIGHTING		LS	1	\$51,000	\$51,000	
AT/FP		LS	1	\$630,000	\$630,000	
PAVEMENTS		LS	1	\$5,238,000	\$5,238,000	
UTILITIES		LS	1	\$3,639,000	\$3,639,000	
STORM DRAINAGE		LS	1	\$532,000	\$532,000	
EARTHWORK				\$825,000	\$825,000	
SITE IMPROVEMENTS		LS	1	\$932,000	\$932,000	
		LS	1			
				Line Item Total:	\$12,247,000	
PROJECT SUBTOTAL					\$90,515,000	
CONTINGENCY COST (5%)					\$4,525,750	
SUPERVISION, INSPECTION & OVERHEAD (5.7%)					\$5,417,323	
PROJECT TOTAL					\$100,458,073	
ROUNDED TOTAL COST					\$100,000,000	
10. DESCRIPTION OF PROPOSED CONSTRUCTION						
<p>Construct a Joint Operations and Mission Planning Center utilizing economical design and construction methods. The preliminary building concept design consists of a two-level structure built above grade that is primarily symmetrical and rectilinear in nature with a steel superstructure; reinforced concrete foundation walls and footings; insulated and reinforced concrete exterior walls with embedded thin brick masonry façade; and an insulated standing seam metal roof. The project includes classified storage, communications infrastructure, air conditioning, space for uninterruptable power systems, emergency backup power generator, intrusion detection, fire detection/suppression, utilities, area lighting, general site improvements, pavement and all other required supporting facilities to result in a complete and usable facility. The building footprint is approximately 7,981 SM with the elevated level roughly identical to the at-grade level, creating a building with an overall space of 15,961 SM. Facilities will be designed as permanent construction in accordance with the Department of Defense Unified Facilities Criteria (UFC) 1-200-01.</p> <p>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. Project will comply with Sensitive Compartmented Information Facilities requirements per UFC 4-010-05.</p> <p>Air Conditioning: 223 Tons</p>						
11. REQUIREMENT: 15,961 SM Adequate: 0 SM Substandard: 15,961 SM						
PROJECT: Joint Operations and Mission Planning Center						
REQUIREMENT: Joint Operations and Mission Planning Center is needed at Scott AFB, IL to support the 18th Air Force Headquarters, 618th Air Operations Center Tanker Airlift Control Center, Air Mobility Command Directorate of Intelligence (HQ Air Mobility						

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3. INSTALLATION AND LOCATION SCOTT AFB ILLINOIS		4. PROJECT TITLE: JOINT OPERATIONS & MISSION PLANNING CENTER		
5. PROGRAM ELEMENT 91211F	6. CATEGORY CODE 141461	7. PROJECT NUMBER 3255 / VDYD1055428	8. PROJECT COST (\$000) 100,000	
<p>Command/A2) and United States Transportation Command's (USTRANSCOM) TCJ3 Force Flow Planning missions. 18th AF is the numbered AF executing its mission through 618th Air Operations Center Tanker Airlift Control Center which is the air mobility planning and Command and Control center for Air Force and commercial air mobility assets for global tanker, airlift, and aeromedical evacuation missions. 18th AF also acts as the Command and Control for Task Force 294 on behalf of United States Strategic Command (USSTRATCOM) which is responsible for generating aerial-refueling tanker forces to conduct global combat and reconnaissance operations in addition to acting as an interface between Air Mobility Command and USSTRATCOM. Task Force 294 incorporates HQ Air Mobility Command/A2 as part of the process to provide classified support of USSTRATCOM operations plans for four key problem sets. USTRANSCOM's TCJ3 Force Flow Planning function provides resiliency to USTRANSCOM's Command and Control of the Defense Transportation System and hosts Force Flow Conferences and general planning conferences for Combatant Commands in order to provide strategic mobility feasibility analysis in support of contingency operations and adaptive planning requirements. A new facility built to current Air Force standards will enable the AF and USTRANSCOM to enhance full spectrum global mobility capabilities through increased mission synergy for supported customer requirements in peace and war. Integration of strategic operations, policies and planning for the Air Force's Core Rapid Global Mobility (RGM) mission executed through Air Forces Transportation enhances synchronization of airlift, aerial refueling and aeromedical evacuation planning, tasking and execution around the world.</p> <p>CURRENT SITUATION: 18th Air Force currently resides within a historic 4,317 SM facility (Building 4) that was constructed in 1940. Although the facility recently underwent a significant renovation, there are known concerns/deficiencies associated with progressive collapse and Antiterrorism and Force Protection that were not feasible to address during the renovation. 618th Air Operations Center Tanker Airlift Control Center currently occupies 7,266 SM of space within Building 1600, which was constructed in 1972 and is approximately 29,109 SM. Building 1600 currently has a BCI of 50 and is scheduled for a significant facility renovation (repair). Due to potential mission risk that would occur during an upcoming facility renovation, the 618th Air Operations Center Tanker Airlift Control Center is relocating to the recently vacated Building 3189. Building 3189 was initially scheduled to be demolished as part of a recently completed MILCON project, but due to the critical need for swing space to support the Building 1600 renovation, the facility was retained. The relocation of 618th Air Operations Center Tanker Airlift Control Center into Building 3189 is permanent until the completion of this MILCON requirement. Building 3189 is a 6,685 SM facility that was constructed in 1950 and has a current BCI of 68. Although Building 3189 is currently being repaired/renovated to support the interim relocation of 618th Air Operations Center Tanker Airlift Control Center, this facility will not meet all the required standards, to include AT/FP. Similar to 618th Air Operations Center Tanker Airlift Control Center, HQ Air Mobility Command/A2 currently occupies 1,746 SM of space within Building 1600. USTRANSCOM's TCJ3 Force Flow Planning function currently occupies approximately 1,728 SM of space within a 6,881 SM onsite temporary facility (T-1990) which was initially erected in 2007 to support the Base Realignment and Closure Military Surface Deployment and Distribution Command (SDDC) MILCON. Since the completion of the SDDC MILCON, the lease of this temporary facility has been continued to support critical space shortfalls at the installation, to include the USTRANSCOM TCJ3 Force Flow Planning function. All of the functions supported by this MILCON are critical Command and Control global missions.</p> <p>IMPACT IF NOT PROVIDED: Without this facility, these global mission partners will continue to operate within substandard/ vulnerable/ non-resilient facilities; continue to experience inefficiencies in mission planning; continue to experience shortfalls in above Secret-level processing workspace; and continue to operate at elevated risk due to Antiterrorism/Force Protection deficiencies. This directly places command and control of critical portions of the AF's and USTRANSCOM's global operations in the tough position of accepting a degree of risk that is oftentimes uncomfortable and that can be reduced if a compliant and more functional facility is constructed for the purpose of their respective missions.</p> <p>ADDITIONAL: This project meets the criteria/scope specified in Air Force Manual 32-1084, Facility Requirements. This project was not included in the Fiscal Year 2018 future-years defense plan in Fiscal Year 2020. This project does not fall within or partly within the 100-year flood plain. An economic analysis of reasonable alternatives for satisfying the requirement (status quo, facility repair/modification and new construction) is complete. The cost estimate provided in Section 9 was not developed using a parametric tool such as Parametric Cost Engineering System in accordance with Air Force Instruction 32-1021 paragraph 3.3.3. The cost estimate was developed using a combination of estimated cost data from the recently completed Requirements Document/Planning Charrette Report; UFC 3-701-01; DoD Facilities Pricing Guide; Army Facilities Pricing Guide; Programming Administration and Execution System</p>				

1. COMPONENT AIR FORCE	FY 2020 MILITARY CONSTRUCTION PROJECT DATA			2. DATE March 2019
3. INSTALLATION AND LOCATION SCOTT AFB ILLINOIS		4. PROJECT TITLE: JOINT OPERATIONS & MISSION PLANNING CENTER		
5. PROGRAM ELEMENT 91211F	6. CATEGORY CODE 141461	7. PROJECT NUMBER 3255 / VDYD1055428	8. PROJECT COST (\$000) 100,000	
<p>Newsletters; and guidance from Air Force Installation and Mission Support Center Detachment 9. This design shall conform to criteria established in the Air Force Corporate Facilities Standards, the Installation Facilities Standards, but will not employ a standard facility design because there is no AF standard facility design for this project and there is no applicable standard design from Air Force Civil Engineer Center. 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.</p> <p>Base Civil Engineer: 618-256-2701. Joint Operations & Mission Planning Center: 13,534 SM = 145,680 SF. SCIF: 2,427 SM = 26,124 SF</p> <p>JOINT USE CERTIFICATION: This facility can be used by other components on an "as available" basis; however, the scope of the project is based on Air Force requirements.</p>				

1. COMPONENT AIR FORCE	FY 2020 MILITARY CONSTRUCTION PROJECT DATA		2. DATE March 2019
3. INSTALLATION AND LOCATION SCOTT AFB ILLINOIS		4. PROJECT TITLE: JOINT OPERATIONS & MISSION PLANNING CENTER	
5. PROGRAM ELEMENT 91211F	6. CATEGORY CODE 141461	7. PROJECT NUMBER 3255 / VDYD1055428	8. PROJECT COST (\$000) 100,000

12. SUPPLEMENTAL DATA

a. Estimated Design Data:

(1) Status

(a) Date Design Started:	01-JUL-18
(b) Parametric Cost Estimates Used to Develop Costs:	NO
* (c) Percent Complete as of January 2019:	15%
* (d) Date Design 35% Complete:	01-MAY-19
(e) Date Design 100% Complete:	01-SEP-19
(f) Energy Study and Life Cycle Cost Analysis was/will be Performed:	YES

(2) Basis

(a) Standard or Definitive Design Used:	NO
(b) Where Design Was Previously Used:	N/A

(3) Total Cost (\$000)

(a) Production of Plans and Specification:	6,180
(b) All Other Design Costs:	3,090
(c) Total Cost (a + b or d + e):	9,270
(d) Contract Cost:	7,725
(e) In-House Cost:	1,545

(4) Construction Contract Award Date:	20 FEB
(5) Construction Start Date:	20 MAR
(6) Construction Completion Date:	22 MAR

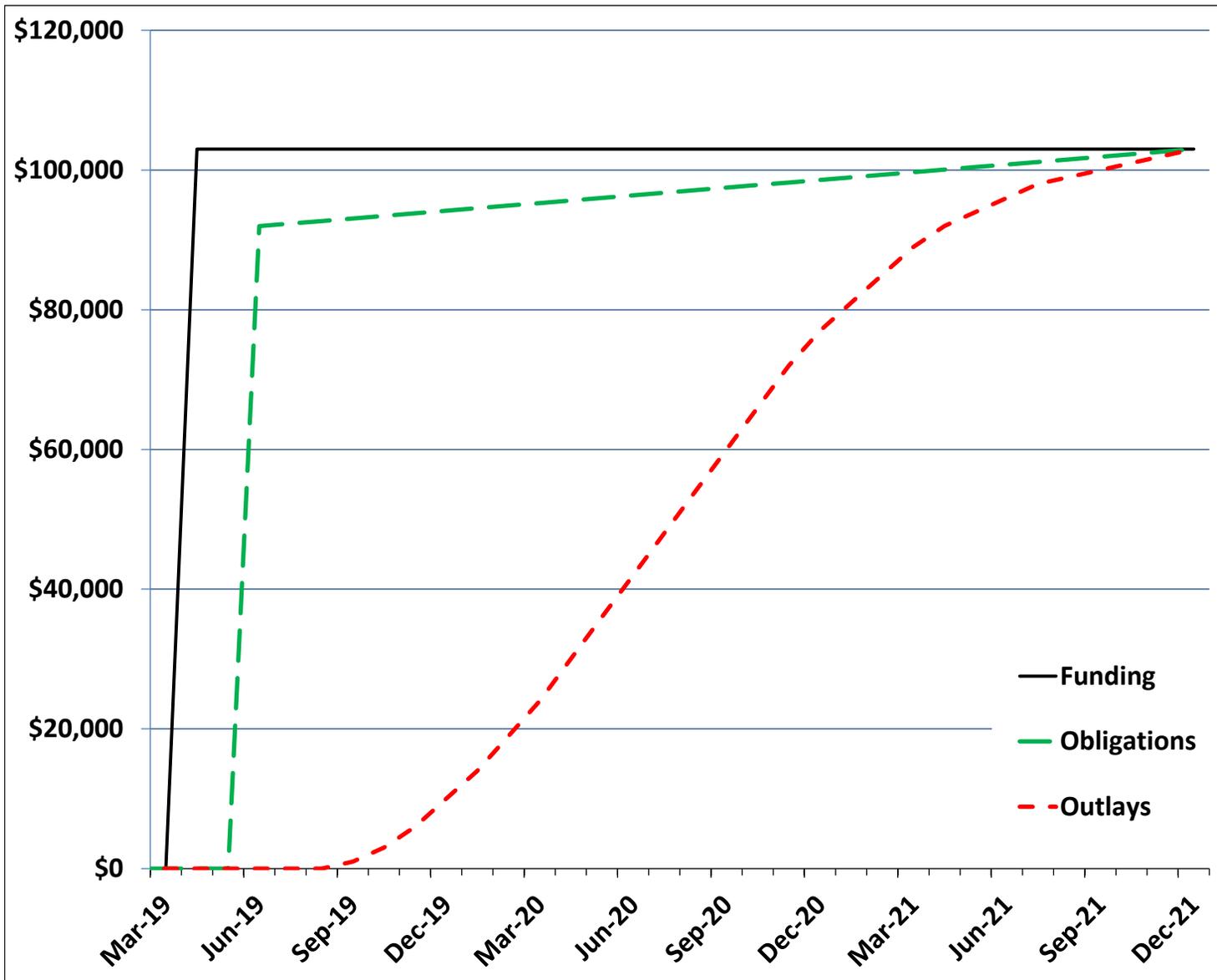
* Indicates completion of Project Definition with Parametric Cost Estimate which is comparable to traditional 35% design to ensure valid scope, cost and executability.

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

EQUIPMENT NOMENCLATURE	PROCURING APPRO	FISCAL YEAR APPROPRIATED OR REQUESTED	COST (\$000)
COMMUNICATIONS EQUIPMENT	3080	2022	3,227
SCIF-RELATED ESCORTS	3400	2020	1,500
FURNISHINGS, FIXTURES, & EQUIPMENT (FF&E)	3080	2022	5,000

PREVIOUS EDITION IS OBSOLETE

Joint Operations and Mission Planning Center, Scott AFB



Project: Joint Operations and Mission Planning Center, Scott AFB

Project Spending Plan

As of: 22-Jan-19

All Cost in thousands (\$000)

Chart Begin Jan-19	FUNDING (note 1)		OBLIGATION (note 2)		OUTLAYS (note 3)	
Month	Enacted	Cumulative	Obligated	Cumulative	Monthly	Cumulative
Jan-19	-	-	-	-	-	-
Feb-19	-	-	-	-	-	-
Mar-19	-	-	-	-	-	-
Apr-19	103,000	103,000	-	-	-	-
May-19	-	103,000	-	-	-	-
Jun-19	-	103,000	91,960	91,960	-	-
Jul-19	-	103,000	368	92,328	-	-
Aug-19	-	103,000	368	92,696	-	-
Sep-19	-	103,000	368	93,064	1,000	1,000
Oct-19	-	103,000	368	93,432	2,000	3,000
Nov-19	-	103,000	368	93,800	3,000	6,000
Dec-19	-	103,000	368	94,168	4,000	10,000
Jan-20	-	103,000	368	94,536	4,000	14,000
Feb-20	-	103,000	368	94,904	5,000	19,000
Mar-20	-	103,000	368	95,272	5,000	24,000
Apr-20	-	103,000	368	95,640	6,000	30,000
May-20	-	103,000	368	96,008	6,000	36,000
Jun-20	-	103,000	368	96,376	6,000	42,000
Jul-20	-	103,000	368	96,744	6,000	48,000
Aug-20	-	103,000	368	97,112	6,000	54,000
Sep-20	-	103,000	368	97,480	6,000	60,000
Oct-20	-	103,000	368	97,848	6,000	66,000
Nov-20	-	103,000	368	98,216	6,000	72,000
Dec-20	-	103,000	368	98,584	5,000	77,000
Jan-21	-	103,000	368	98,952	4,000	81,000
Feb-21	-	103,000	368	99,320	4,000	85,000
Mar-21	-	103,000	368	99,688	4,000	89,000
Apr-21	-	103,000	368	100,056	3,000	92,000
May-21	-	103,000	368	100,424	2,000	94,000
Jun-21	-	103,000	368	100,792	2,000	96,000
Jul-21	-	103,000	368	101,160	2,000	98,000
Aug-21	-	103,000	368	101,528	1,000	99,000
Sep-21	-	103,000	368	101,896	1,000	100,000
Oct-21	-	103,000	368	102,264	1,000	101,000
Nov-21	-	103,000	368	102,632	1,000	102,000
Dec-21	-	103,000	368	103,000	1,000	103,000

Note 1: Assumes initial appropriation is enacted by Congress January of the program year. The appropriation of follow-on increment anticipated February FY19.

Note 2: Assumes funds are available to the contracting officer for the initial obligation no earlier than April of the program year to accommodate the funding process. The obligations of follow-on obligations anticipated February 2019.

Note 3: Assumes contract award date of Sep 2018, Contract completion: Sep 2021, Duration 36 months

1. COMPONENT AIR FORCE	FY 2020 MILITARY CONSTRUCTION PROJECT DATA (computer generated)			2. DATE March 2019	
3. INSTALLATION, SITE AND LOCATION JOINT BASE ANDREWS-NAVAL AIR FACILITY WASHINGTON ANDREWS SITE # 1 MARYLAND			4. PROJECT TITLE PRESIDENTIAL AIRCRAFT RECAP (PAR) COMPLEX, INC 3		
5. PROGRAM ELEMENT 41319F	6. CATEGORY CODE 211-111	7. RPSUID/PROJECT NUMBER 1377/AJXF173021	8. PROJECT COST (\$000) Auth: 0 Appr: 86,000		
9. COST ESTIMATES					
ITEM		U/M	QUANTITY	UNIT	COST (\$000)
PRIMARY FACILITIES					161,444
LARGE AIRCRAFT HANGAR (211-111)		SM	21,328	4,797	(102,316)
ADMINISTRATIVE OFFICE SPACE (610-243)		SM	5,946	3,442	(20,465)
WAREHOUSE (COMBS) (442-758)		SM	7,276	2,206	(16,048)
ENTRY CONTROL FACILITY (730-837)		SM	387	6,577	(2,545)
TAXIWAYS (112-211)		SM	20,485	249	(5,103)
AIRCRAFT APRON (113-321)		SM	51,282	230	(11,801)
SUSTAINABILITY/ENERGY MEASURES		LS			(3,165)
SUPPORTING FACILITIES					67,430
HAZMAT STORAGE BLDG		LS			(774)
FLAMMABLE STORAGE BLDG		LS			(160)
COVERED AGE STORAGE		LS			(955)
UNCOVERED AGE YARD		LS			(32)
UTILITIES		LS			(18,474)
PAVEMENTS		LS			(3,077)
SITE IMPROVEMENTS		LS			(19,250)
AT/FP SECURITY INFRASTRUCTURE		LS			(7,266)
WETLAND/STREAM MITIGATION		LS			(1,254)
TYPE III AIRCRAFT REFUELING SYSTEM		LS			(10,051)
FUEL RECEIPT TRANSFER LINE		LS			(1,067)
GOLF COURSE MITIGATION		LS			(500)
PRIVATIZED UTILITY CONNECTION FEE		LS			(1,195)
EMERGENCY GENERATORS AND BACK UP POWER		LS			(3,375)
SUBTOTAL					228,874
CONTINGENCY (5.0%)					11,444
TOTAL CONTRACT COST					240,318
SUPERVISION, INSPECTION AND OVERHEAD (5.7%)					13,698
TOTAL REQUEST					254,016
TOTAL REQUEST (ROUNDED)					254,000
EQUIPMENT FROM OTHER APPROPRIATIONS (NON-ADD)					(66,100.0)
10. Description of Proposed Construction: Construct Presidential Aircraft Recapitalization (PAR) complex utilizing economical design and construction methods to accommodate the Presidential Airlift Group (PAG) mission. The complex will consist of an appropriately sized hangar to house two Boeing 747-8 aircraft, aircraft access taxiway/parking apron and associated airfield lighting systems including connections and necessary modifications to existing infrastructure, engine run-up pads with blast deflectors, and type III hydrant refueling system					

1. COMPONENT AIR FORCE	FY 2020 MILITARY CONSTRUCTION PROJECT DATA (computer generated)			2. DATE March 2019
3. INSTALLATION, SITE AND LOCATION JOINT BASE ANDREWS-NAVAL AIR FACILITY WASHINGTON ANDREWS SITE # 1 MARYLAND			4. PROJECT TITLE PRESIDENTIAL AIRCRAFT RECAP (PAR) COMPLEX, INC 3	
5. PROGRAM ELEMENT 41319F	6. CATEGORY CODE 211-111	7. RPSUID/PROJECT NUMBER 1377/AJXF173021	8. PROJECT COST (\$000) Auth: 0 Appr: 86,000	
<p>with secure operational fuel storage tanks. Dual bridge crane telescopic maintenance platforms will be included in one hangar bay. Typical facility construction materials will include concrete foundations, steel frame structure with concrete masonry unit veneer and standing seam metal roof. Typical airfield pavement construction materials will consist of concrete taxiway/apron pavements and asphalt shoulders. The PAR complex will also include mission driven security features with entry control, site preparation, wetland/stream mitigation, vehicle parking lot, landscaping, storm water management, electrical, communications, water and sewer utilities and connection fees, emergency generators with fuel tanks and automatic transfer switches, intrusion detection, fire detection & suppression systems, mitigation of project impact to base golf course and other items as required to make complete and usable facilities. Facilities will be designed as permanent construction in accordance with the Department of Defense Unified Facilities Criteria (UFC) 1-200-01, General Building Requirements and UFC 1-200-02, High Performance and Sustainable Building Requirements. This project will comply with Department of Defense Antiterrorism/force protection requirements per UFC 4-010-01.</p> <p>Air Conditioning: 392 Tons</p>				
<p>11. Requirement: 34937 SM Adequate: 0 SM Substandard: 17238 SM</p> <p>PROJECT: Presidential Aircraft Recapitalization (PAR) Complex. (New Mission)</p> <p>REQUIREMENT: The current Presidential Aircraft, VC-25A, will reach the end of its life cycle by 2020 and requires replacement. The Boeing 747-8 was chosen to replace the VC-25A. An adequately sized and configured PAR complex is required to support the beddown of the new Boeing 747-8 aircraft. The two-bay hangar must support efficient, safe and effective maintenance operations and provide adequate on-site aircraft maintenance and equipment storage areas to include provisions for dual bridge crane telescopic maintenance platforms in one hangar bay. The PAG requires appropriate mission planning, control, operations and administrative space, space for a Contractor Operated and Maintained Base Supply (COMBS) operations and warehouse, HAZMAT storage, flammable storage, and both covered and uncovered Aerospace Ground Equipment (AGE) storage. Due to the critical mission, security requirements and complex nature of the facilities; consideration for Intelligence Community Directive 705 compliance, enhanced commissioning, post construction award services and security escorts are required for this project.</p> <p>CURRENT SITUATION: The 747-8 size and weight exceed the capabilities of the existing VC-25A hangar. Additionally, the PAG has grown significantly since its current facilities were constructed. This growth has led to office space, equipment, spare parts storage, flight kitchen storage, and fitness area/locker room space expansion into the current hangar floor space limiting vehicle movement around the aircraft for maintenance. There are no other hangars or facilities on JB Andrews capable of meeting the new Presidential Aircraft requirements.</p> <p>IMPACT IF NOT PROVIDED: If this project is not funded the new Presidential Aircraft cannot be maintained or parked in a mission enabling securable environment at JB Andrews. The effort and cost to provide constant security for these PL-1 assets will be beyond existing capabilities and manpower of the 11th Wing. Further, lack of proper facilities would negatively impact attaining Initial</p>				

1. COMPONENT AIR FORCE	FY 2020 MILITARY CONSTRUCTION PROJECT DATA (computer generated)			2. DATE March 19
3. INSTALLATION, SITE AND LOCATION JOINT BASE ANDREWS-NAVAL AIR FACILITY WASHINGTON ANDREWS SITE # 1 MARYLAND			4. PROJECT TITLE PRESIDENTIAL AIRCRAFT RECAP (PAR) COMPLEX, INC 3	
5. PROGRAM ELEMENT 41319F	6. CATEGORY CODE 211-111	7. RPSUID/PROJECT NUMBER 1377/AJXF173021	8. PROJECT COST (\$000) Auth: 0 Appr: 86,000	
<p>Operating Capability and /or Full Operating Capability for the new mission system. VC-25A service life extension will result in unacceptable risk to the PAG mission due to the advanced age of the existing aircraft and rising operational & maintenance costs for the aircraft, current hangar and PAG mission support facilities.</p> <p>ADDITIONAL: This project meets the scope/criteria specified in Air Force Handbook 32-1084 "Facility Requirements" and Department of Defense Instruction 5305.5 Space Management Procedures, National Capital Region. An economic analysis of reasonable alternatives for accomplishing the project evaluating status quo, renovation, upgrade/removal and new construction was conducted. This analysis indicated that new construction is the only option that can adequately meet mission requirements. Flood mitigation measures will be incorporated in the project when mission needs require constructing within the 100 year floodplain. 11th Wing Base Civil Engineer: Comm: 301-981-7281. Large Aircraft Hangar: 21,328 SM = 229,573 SF; Administrative Office Space: 5946 SM = 64,002 SF; Warehouse: 7276 SM = 78,318 SF; Entry Control Facility: 387 SM = 4166 SF; Taxiways: 20,485 SM = 220,499 SF; Aircraft Apron: 51,282 SM = 551,995 SF.</p> <p>JOINT USE CERTIFICATION: This facility can be used by other components on an "as available" basis; however, the scope of the project is based on Air Force requirements.</p>				

1. COMPONENT AIR FORCE	FY 2020 MILITARY CONSTRUCTION PROJECT DATA (computer generated)		2. DATE March 19
3. INSTALLATION, SITE AND LOCATION JOINT BASE ANDREWS-NAVAL AIR FACILITY WASHINGTON ANDREWS SITE # 1 MARYLAND		4. PROJECT TITLE PRESIDENTIAL AIRCRAFT RECAP (PAR) COMPLEX, INC 3	
5. PROGRAM ELEMENT 41319F	6. CATEGORY CODE 211-111	7. RPSUID/PROJECT NUMBER 1377/AJXF173021	8. PROJECT COST (\$000) Auth: 0 Appr: 86,000
12. SUPPLEMENTAL DATA:			
a. Estimated Design Data:			
(1) Status:			
(a) Date Design Started			01-JUL-16
(b) Parametric Cost Estimates used to develop costs			YES
* (c) Percent Complete as of 01 JAN 2018			100%
* (d) Date 35% Designed			01-MAR-17
(e) Date Design Complete			01-SEP-17
(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			15,240
(b) All Other Design Costs			7,620
(c) Total			22,860
(d) Contract			19,050
(e) In-house			3,810
(4) Construction Contract Award			20 FEB
(5) Construction Start			20 MAR
(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)
SECURITY EQUIPMENT/SYSTEMS	3080	2020	14,800
WAREHOUSE EQUIPMENT	3080	2019	20,000
PERSONNEL LIFT SYSTEM	3080	2019	21,000
COMMUNICATIONS EQUIPMENT	3080	2020	4,300
FURNISHINGS FIXTURES AND EQPT	3400	2021	2,000
AUDIOVISUAL SYSTEMS	3080	2020	4,000

1. COMPONENT AIR FORCE	FY 2020 MILITARY CONSTRUCTION PROJECT DATA (computer generated)			2. DATE March 19																									
3. INSTALLATION, SITE AND LOCATION JOINT BASE ANDREWS-NAVAL AIR FACILITY WASHINGTON ANDREWS SITE # 1 MARYLAND			4. PROJECT TITLE PRESIDENTIAL AIRCRAFT RECAP (PAR) COMPLEX, INC 3																										
5. PROGRAM ELEMENT 41319F	6. CATEGORY CODE 211-111	7. RPSUID/PROJECT NUMBER 1377/AJXF173021	8. PROJECT COST (\$000) Auth: 0 Appr: 86,000																										
This project is incrementally funded.																													
<table border="0"> <thead> <tr> <th></th> <th></th> <th></th> <th style="text-align: center;">Authorization</th> <th></th> </tr> <tr> <th>FY (\$M)</th> <th>Authorization Requested</th> <th>Appropriation Requested</th> <th>of Appropriations</th> <th>Appropriation</th> </tr> </thead> <tbody> <tr> <td>2018</td> <td style="text-align: right;">254</td> <td style="text-align: right;">254</td> <td style="text-align: right;">100</td> <td style="text-align: right;">124.884</td> </tr> <tr> <td>2019</td> <td style="text-align: right;">89*</td> <td style="text-align: right;">154</td> <td style="text-align: right;">240**</td> <td style="text-align: right;">129.116</td> </tr> <tr> <td>2020</td> <td style="text-align: right;">0</td> <td style="text-align: right;">86</td> <td style="text-align: center;">-</td> <td style="text-align: center;">-</td> </tr> </tbody> </table>								Authorization		FY (\$M)	Authorization Requested	Appropriation Requested	of Appropriations	Appropriation	2018	254	254	100	124.884	2019	89*	154	240**	129.116	2020	0	86	-	-
			Authorization																										
FY (\$M)	Authorization Requested	Appropriation Requested	of Appropriations	Appropriation																									
2018	254	254	100	124.884																									
2019	89*	154	240**	129.116																									
2020	0	86	-	-																									
* Per 2 NOV 18 U.S.C. 2853 notification requesting additional authorization.																													
** Per FY 19 NDAA and 2 NOV 18 U.S.C. 2853 notification requesting additional authorization.																													

1. COMPONENT AIR FORCE			FY 2020 MILITARY CONSTRUCTION PROGRAM						2. DATE (YYYYMMDD) March 2019				
3. INSTALLATION AND LOCATION HANSCOM AIR FORCE BASE MASSACHUSETTS						4. COMMAND AIR FORCE MATERIEL COMMAND			5. AREA CONSTRUCTION COST INDEX 1.28				
6. PERSONNEL			(1) PERMANENT			(2) STUDENTS			(3) SUPPORTED			TOTAL	
			OFFICER	ENLISTED	CIVILIAN	OFFICER	ENLISTED	CIVILIAN	OFFICER	ENLISTED	CIVILIAN		
a. AS OF 30-Sep-18			551	305	1825				75	56	28	2,840	
b. END FY 2024			542	308	1849				71	55	28	2,853	
7. INVENTORY DATA (\$000)													
a. TOTAL ACREAGE			846										
b. INVENTORY TOTAL AS OF 30-Sep-18													2,062,882
c. AUTHORIZATION NOT YET IN INVENTORY													44,900
d. AUTHORIZATION REQUESTED IN THIS PROGRAM (FY 2020)													225,000
e. PLANNED IN NEXT FOUR PROGRAM YEARS (FY 2021-2024)													253,000
f. REMAINING DEFICIENCY													147,800
g. GRAND TOTAL													2,733,582
8. PROJECTS REQUESTED IN THIS PROGRAM (FY 2020)													
a. CATEGORY									b. COST (\$000)		c. DESIGN STATUS		
(1) CODE	(2) PROJECT TITLE					(3) SCOPE				(1) START	(2) COMPLETE		
317-315	MIT-LINCOLN LAB (WEST LAB CSL/MIF), INC 2					15,068 SM			135,000	07/17	09/18		
TOTAL									225,000				
9. FUTURE PROJECTS IN NEXT FOUR PROGRAM YEARS (FY2021 - FY2024)													
317-315 MIT-LINCOLN LABORATORY (WEST LAB EPF)						12,000 SM			216,000				
317-315 NC3 ACQUISITION MANAGEMENT FACILITY						3,703 SM			37,000				
FUTURE PROJECTS TOTAL									253,000				
R&M UNFUNDED REQUIREMENT (\$M)									TOTAL		41.4		
10. MISSION OR MAJOR FUNCTIONS													
Hanscom Air Force Base is home to the Air Force Life Cycle Management Center (AFLCMC), three Program Executive Offices, Massachusetts Institute of Technology (MIT) Lincoln Laboratory, and a variety of other tenant organizations as well as joint-service military housing.													
11. OUTSTANDING POLLUTION AND SAFETY DEFICIENCIES (FY 2020-2024)													
a. Air Pollution													
b. Water Pollution													
c. Occupational Safety and Health													
d. Other Environmental													
OUTSTANDING DEFICIENCIES TOTAL									0				

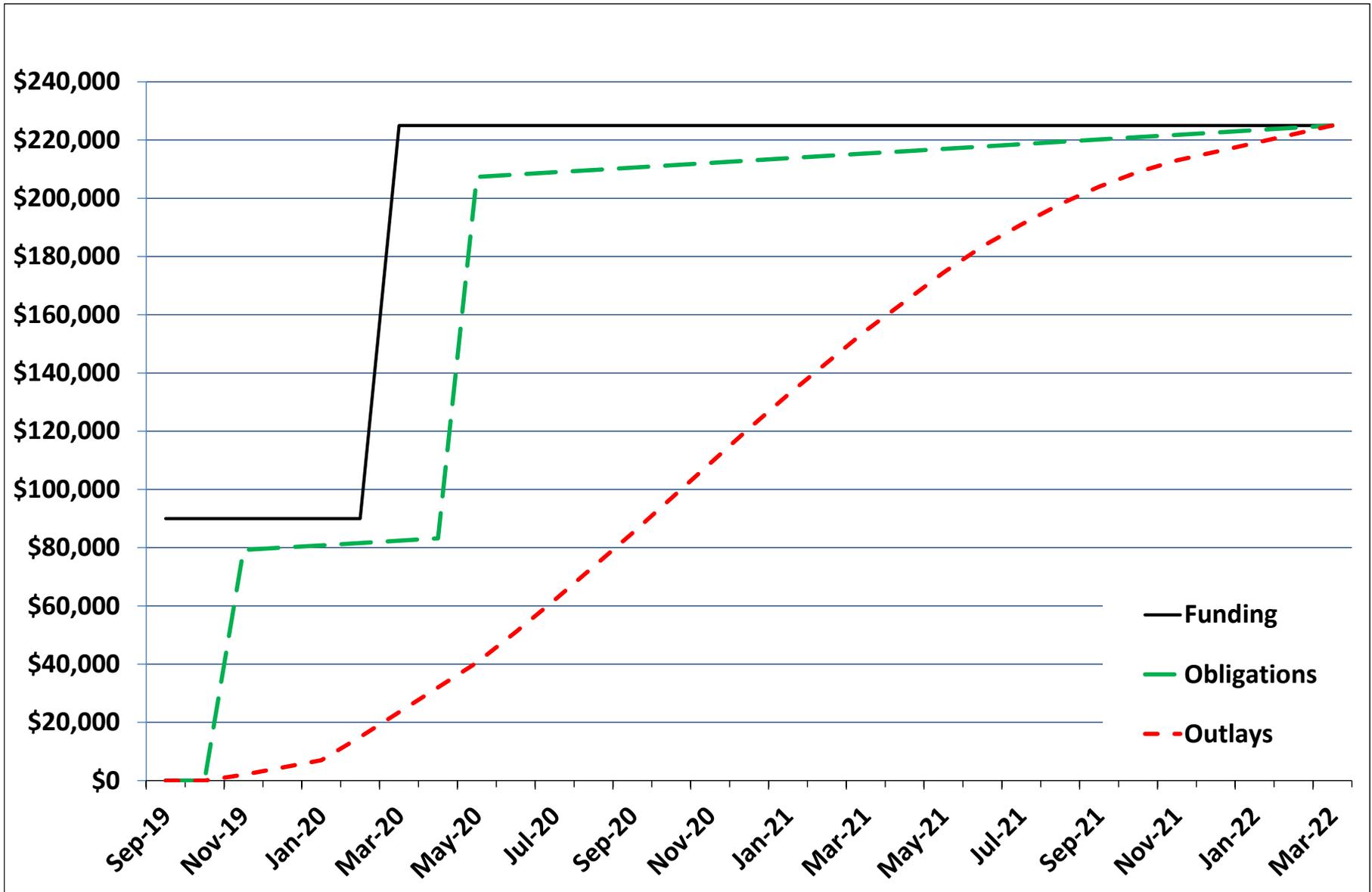
1. COMPONENT AIR FORCE	FY 2020 MILITARY CONSTRUCTION PROJECT DATA (computer generated)			2. DATE March 2019	
3. INSTALLATION, SITE AND LOCATION HANSCOM AIR FORCE BASE HANSCOM AFB SITE # 1 MASSACHUSETTS			4. PROJECT TITLE MIT-LINCOLN LABORATORY (WEST LAB CSL/ MIF), INC 2		
5. PROGRAM ELEMENT 91211F	6. CATEGORY CODE 317-315	7. RPSUID/PROJECT NUMBER 2487/MXRD153006	8. PROJECT COST (\$000) AUTH: 0 APPR: 135,000		
9. COST ESTIMATES					
ITEM		U/M	QUANTITY	UNIT	COST (\$000)
PRIMARY FACILITIES					170,330
SEMI-CONDUCTOR/MICROELETRONICS LAB FAC		SM	15,068	10,918	(164,512)
PEDESTRIAN CONNECTOR		SM	150	16,520	(2,478)
SUSTAINABILITY & ENERGY MEASURES (2.0%)		LS			(3,340)
SUPPORTING FACILITIES					32,370
SITE PREPARATION		LS			(1,425)
SITE IMPROVEMENTS		LS			(3,692)
PAVEMENTS		LS			(1,722)
SITE UTILITIES		LS			(20,191)
CW PLANT ADDITION		SM	223	2,015	(449)
COMMUNICATIONS		LS			(827)
DEMOLITION B1138, B1139, B1140, B1141, B1142		SM	5,258	773	(4,064)
SUBTOTAL					202,700
CONTINGENCY (5.0%)					10,135
TOTAL CONTRACT COST					212,835
SUPERVISION, INSPECTION AND OVERHEAD (5.7%)					12,132
TOTAL REQUEST					224,967
TOTAL REQUEST (ROUNDED)					225,000
10. Description of Proposed Construction: Construct a multi-story building and pedestrian connector using concrete foundations, steel or reinforced concrete superstructure, masonry walls, and energy efficient roofing to accommodate the mission of the facility. Site Utilities includes an addition to the existing chilled water production facility (B1301) to house additional equipment required to meet chilled water demands. The project will demolish buildings B1138 (1,949 SM), B1139 (15 SM), B1140 (1,174 SM), B1141 (1,122 SM), and B1142 (998 SM). Facilities will be designed as permanent construction in accordance with the DoD Unified Facilities Criteria (UFC) 1- 200-01, General Building Requirements and UFC 1-200-02, High Performance and Sustainable Building Requirements. This project will comply with Department of Defense (DoD) Minimum Antiterrorism Standards for Buildings requirements per UFC 4-010-01.					
Air Conditioning: 1,730 Tons					
11. Requirement: 105644 SM Adequate: 59802 SM Substandard: 30825 SM					
PROJECT: MIT Semi-Conductor/ Microelectronics Lab Facility (Current Mission)					
REQUIREMENT: A multi-story facility is required to provide space for the Advanced Microelectronics Integration Program for the Massachusetts Institute of Technology Lincoln Laboratory (MIT LL). Starting in the 1950's, MIT LL has been one of the premier Federally Funded Research and Development Centers (FFRDC) for the					

1. COMPONENT AIR FORCE	FY 2020 MILITARY CONSTRUCTION PROJECT DATA (computer generated)			2. DATE March 2019
3. INSTALLATION, SITE AND LOCATION HANSCOM AIR FORCE BASE HANSCOM AFB SITE # 1 MASSACHUSETTS			4. PROJECT TITLE MIT-LINCOLN LABORATORY (WEST LAB CSL/ MIF), INC 2	
5. PROGRAM ELEMENT 91211F	6. CATEGORY CODE 317-315	7. RPSUID/PROJECT NUMBER 2487/MXRD153006	8. PROJECT COST (\$000) AUTH: 0 APPR: 135,000	
<p>Department of Defense.</p> <p>MIT LL is the largest DoD R&D FFRDC supporting numerous federal agencies and conducting research on over 400 programs. In 2014, MIT LL performed more than \$830M in research; the Air Force was the largest customer, but the Laboratory supported 30 sponsors across the Federal Government.</p> <p>MIT LL takes projects from the initial concept stage, through simulation and analysis, to design and prototyping, and finally to field demonstration. The ability to provide development, prototyping, and field demonstrations sets MIT LL apart from other FFRDCs.</p> <p>CURRENT SITUATION:The existing buildings are functionally obsolete for the type of research and fabrication required and do not meet current building codes or industry standards for high technology facilities.</p> <p>Much of MIT LL's work involves complex and hazardous processes that utilize quantities of chemicals in excess of allowable limits identified in current building codes. An independent facility assessment completed by a consultant to MIT LL in 2008 and validated by the DoD Joint Advisory Council in 2011 concluded that current and future MIT LL research programs will require a new facility built for modern research. These same buildings also contain hundreds of research staff offices and do not have continuous fire rated corridors for the appropriate movement of hazardous chemicals to and from the semiconductor growth and fabrication facilities. This situation necessitates that hazardous chemicals and gases used in these facilities be restocked in the overnight hours utilizing special transport vessels to minimize risk of personnel exposure. In addition, current codes also require hazardous materials handling laboratories, like these, to be located at ground level to allow easier emergency response in the event of a toxic gas or chemical release event. These existing laboratories are on the 4th floor.</p> <p>IMPACT IF NOT PROVIDED:Space constraints and other facility deficiencies will continue to hamper the MIT LL mission and create unnecessary risk to high dollar DoD research. Currently, many critical programs are scattered across multiple floors of five different 1950's and 60's-era buildings. In addition to the safety and code issues associated with handling and moving hazardous materials, this</p>				

1. COMPONENT AIR FORCE	FY 2020 MILITARY CONSTRUCTION PROJECT DATA (computer generated)			2. DATE March 2019
3. INSTALLATION, SITE AND LOCATION HANSCOM AIR FORCE BASE HANSCOM AFB SITE # 1 MASSACHUSETTS			4. PROJECT TITLE MIT-LINCOLN LABORATORY (WEST LAB CSL/ MIF), INC 2	
5. PROGRAM ELEMENT 91211F	6. CATEGORY CODE 317-315	7. RPSUID/PROJECT NUMBER 2487/MXRD153006	8. PROJECT COST (\$000) AUTH: 0 APPR: 135,000	
<p>project will consolidate the distributed compound semiconductor and advanced packaging laboratories into a single purpose-built facility designed to safely handle and support complex electronic research and development functions. Without this new facility, MIT LL's ability to continue its important work will be impaired and increasingly degraded. As a result, work to provide next generation laser radar and sensing systems, low size weight and power (low-SWAP) application-specific microsystems, integrated sensor packages for unmanned air vehicles (UAVs) and unattended ground sensors (UGSs), and concealable ultra-low- power electronics will be delayed.</p> <p>ADDITIONAL: The criteria/scope for this program is not specified in Air Force Handbook (AFH) 32-1084, "Facility Requirements". AFH 32-1084 does not contain sizing criteria for Research, Development, Test, & Evaluation (RDT&E) facilities. This facility was sized based on an in-depth analysis of the user's mission and requirements performed by HDR in February 2013. This design shall conform to criteria established in the Air Force Corporate Facility Standards (AFCFS) and the Installation Facility Standards (IFS), but will not employ a standard design because there is no AF standard facility design to accommodate the facility's mission. A waiver to economic analysis has been approved. This project does not fall within or partly within the 100-year flood plain.</p> <p>Base Civil Engineer: 781 - 225 - 2999</p> <p>MIT Semi-Conductor / Microelectronics Lab Facility: 15,017 SM = 161,638 SF</p> <p>JOINT USE CERTIFICATION:</p> <p>Mission requirements, operational considerations, and location are incompatible with use by other components.</p>				

1. COMPONENT AIR FORCE	FY 2020 MILITARY CONSTRUCTION PROJECT DATA (computer generated)		2. DATE March 2019	
3. INSTALLATION AND LOCATION HANSCOM AIR FORCE BASE HANSCOM AFB SITE # 1 MASSACHUSETTS		4. PROJECT TITLE MIT-LINCOLN LABORATORY (WEST LAB CSL/MIF), INC 2		
5. PROGRAM ELEMENT 91211F	6. CATEGORY CODE 317-315	7. PROJECT NUMBER 2487/MXRD153006	8. PROJECT COST (\$000) AUTH: 0 APPR: 135,000	
12. SUPPLEMENTAL DATA:				
a. Estimated Design Data:				
(1) Status:				
(a) Date Design Started			24-JUL-17	
(b) Parametric Cost Estimates used to develop costs			YES	
* (c) Percent Complete as of 01 JAN 2018			15%	
* (d) Date 35% Designed			07-MAR-18	
(e) Date Design Complete			24-SEP-18	
(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			13,500	
(b) All Other Design Costs			6,750	
(c) Total			20,250	
(d) Contract			16,875	
(e) In-house			3,375	
(4) Construction Contract Award			19 FEB	
(5) Construction Start			19 JUN	
(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:				
FY (\$M)	Authorization Requested	Appropriation Requested	Authorization of Appropriations	Appropriation
2019	225	225	105	90
2020	0	135		

MIT-Lincoln Laboratory (West Lab CSL/MIF), Hanscom AFB



Project: MIT-Lincoln Laboratory (West Lab CSL/MIF)

Project Spending Plan

As of: 18-Aug-18

All Cost in thousands (\$000)

Chart Begin Sep-19	FUNDING (note 1)		OBLIGATION (note 2)		OUTLAYS (note 3)	
Month	Enacted	Cumulative	Obligated	Cumulative	Monthly	Cumulative
Aug-19	-	-				
Sep-19	90,000	90,000		-	-	-
Oct-19	-	90,000		-	\$ -	-
Nov-19	-	90,000	79,200	79,200	\$ 2,000	2,000
Dec-19	-	90,000	803	80,003	\$ 2,500	4,500
Jan-20	-	90,000	803	80,806	\$ 2,500	7,000
Feb-20	-	90,000	803	81,609	\$ 8,000	15,000
Mar-20	135,000	225,000	803	82,412	\$ 8,500	23,500
Apr-20	-	225,000	803	83,215	\$ 8,500	32,000
May-20	-	225,000	124,119	207,334	\$ 8,500	40,500
Jun-20	-	225,000	803	208,137	\$ 10,500	51,000
Jul-20	-	225,000	803	208,940	\$ 11,000	62,000
Aug-20	-	225,000	803	209,743	\$ 11,500	73,500
Sep-20	-	225,000	803	210,546	\$ 11,500	85,000
Oct-20	-	225,000	803	211,349	\$ 12,000	97,000
Nov-20	-	225,000	803	212,152	\$ 12,000	109,000
Dec-20	-	225,000	803	212,955	\$ 12,000	121,000
Jan-21	-	225,000	803	213,758	\$ 11,500	132,500
Feb-21	-	225,000	803	214,561	\$ 11,000	143,500
Mar-21	-	225,000	803	215,364	\$ 11,000	154,500
Apr-21	-	225,000	803	216,167	\$ 10,000	164,500
May-21	-	225,000	803	216,970	\$ 10,000	174,500
Jun-21	-	225,000	803	217,773	\$ 9,000	183,500
Jul-21	-	225,000	803	218,576	\$ 7,500	191,000
Aug-21	-	225,000	803	219,379	\$ 7,000	198,000
Sep-21	-	225,000	803	220,182	\$ 6,000	204,000
Oct-21	-	225,000	803	220,985	\$ 5,000	209,000
Nov-21	-	225,000	803	221,788	\$ 4,000	213,000
Dec-21	-	225,000	803	222,591	\$ 3,000	216,000
Jan-22	-	225,000	803	223,394	\$ 3,000	219,000
Feb-22	-	225,000	803	224,197	\$ 3,000	222,000
Mar-22	-	225,000	803	225,000	\$ 3,000	225,000

Note 1: The appropriation for the first increment is expected in October 2018. Follow-on increment are shown as being provided in January of each year.

Note 2: Assumes funds are available to contracting for the initial obligation in October to accommodate the funding process. The obligations of follow-on obligations anticipated March of each year.

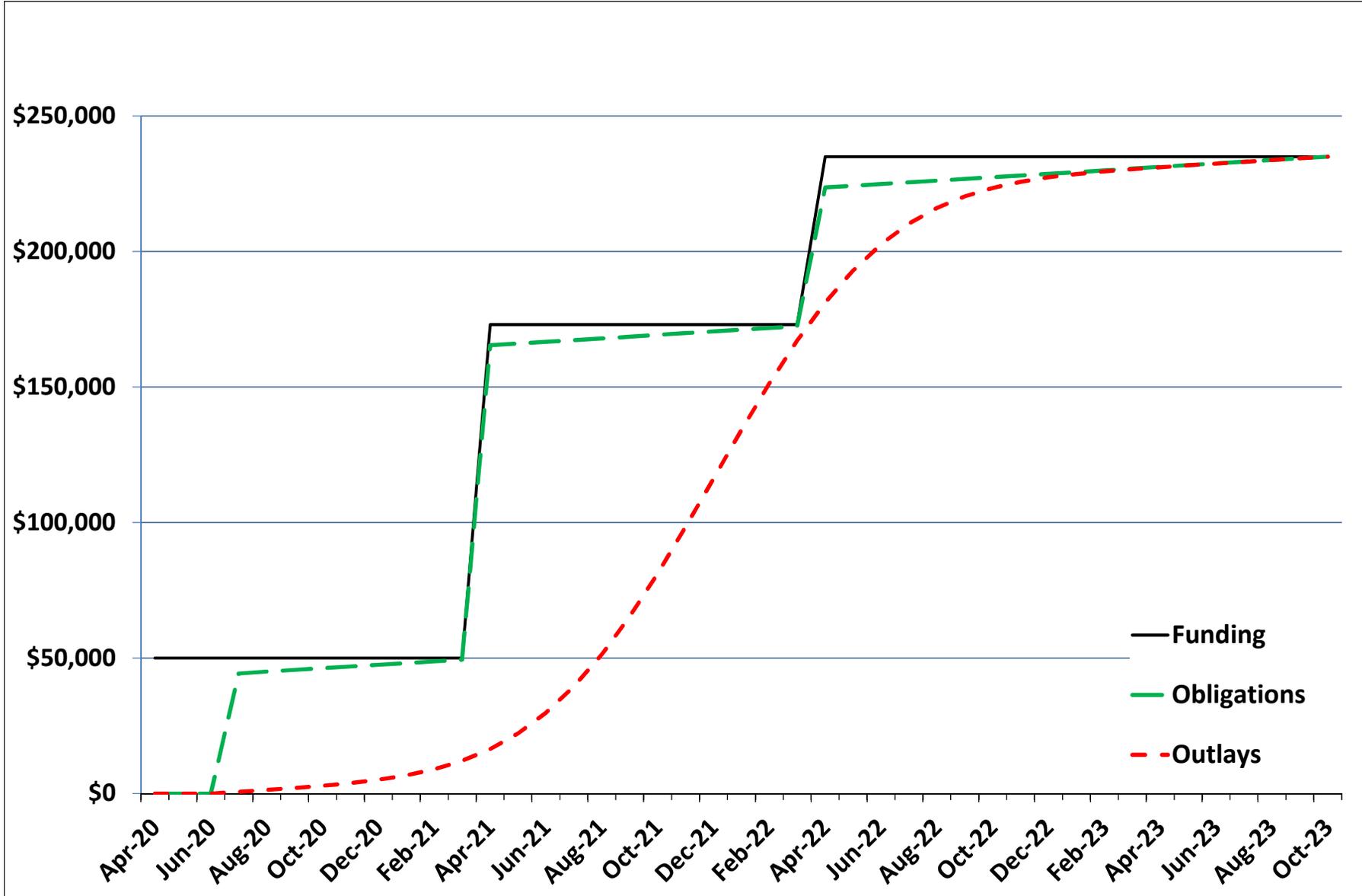
Note 3: Assumes contract award date of Oct 2018, Contract completion: Oct 2021, Duration 36 months

1. COMPONENT AIR FORCE	FY 2020 MILITARY CONSTRUCTION PROJECT DATA			2. DATE March 19	
3. INSTALLATION AND LOCATION MALMSTROM AFB MONTANA		4. PROJECT TITLE: WEAPONS STORAGE AND MAINTENANCE FACILITY			
5. PROGRAM ELEMENT 91211F	6. CATEGORY CODE 215582	7. PROJECT NUMBER 2529 / NZAS1014838	8. PROJECT COST (\$000) 235,000		
9. COST ESTIMATES					
ITEM					
		U/M	QUANTITY	UNIT COST	COST
<u>PRIMARY FACILITIES</u>					
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	\$5,750,000	\$3,609,000
SUSTAINABILITY AND ENERGY MEASURES		LS	1	\$2,878,000	\$2,880,000
Line Item Total:				\$165,843,250	
<u>SUPPORTING FACILITIES</u>					
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					
<p>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.</p> <p>Air Conditioning: 130 TONS</p>					
11. REQUIREMENT: 7,510 SM					
ADEQUATE: 0 SM					
SUBSTANDARD: 4,643 SM					
PROJECT DESCRIPTION: Construct a consolidated Weapons Storage Facility					
<p>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 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.</p>					

1. COMPONENT AIR FORCE	FY 2020 MILITARY CONSTRUCTION PROJECT DATA			2. DATE March 19
3. INSTALLATION AND LOCATION MALMSTROM AFB MONTANA		4. PROJECT TITLE: WEAPONS STORAGE AND MAINTENANCE FACILITY		
5. PROGRAM ELEMENT 91211F	6. CATEGORY CODE 215582	7. PROJECT NUMBER 2529 / NZAS1014838	8. PROJECT COST (\$000) 235,000	
<p>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 workarounds 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.</p> <p>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.</p> <p>ADDITIONAL: This project meets applicable criteria/scope specified in Air Force Manual 32-1084, 'Facility Requirements'. This project was included in the Fiscal Year 2019 future-years defense plan in FY20. 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.</p> <p>Base Civil Engineer: (406) 731-6188. Weapons Storage Facility: 7,510 SM = 80,837 SF</p> <p>JOINT USE CERTIFICATION: Mission requirements, operational considerations, and location are incompatible with use by other components.</p>				

1. COMPONENT AIR FORCE	FY 2020 MILITARY CONSTRUCTION PROJECT DATA		2. DATE March 19
3. INSTALLATION AND LOCATION MALMSTROM AFB MONTANA		4. PROJECT TITLE: WEAPONS STORAGE AND MAINTENANCE FACILITY	
5. PROGRAM ELEMENT 91211F	6. CATEGORY CODE 215582	7. PROJECT NUMBER 2529 / NZAS1014838	8. PROJECT COST (\$000) 235,000
12. SUPPLEMENTAL DATA			
a. Estimated Design Data:			
(1) Status:			
(a) Date Design Started			01-MAY-18
(b) Parametric Costs Estimates used to develop costs			Yes
* (c) Percent Complete as of 01-JAN-19			15%
* (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
(2) Basis:			
(a) Standard or Definitive Design			YES
(b) Where Design was most recently used			FE Warren
(3) Total Cost (c) = (a) + (b) or (d) + (e):			(\$000)
(a) Production of Plans and Specifications:			300
(b) All Other Design Costs:			1,700
(c) Total:			2,000
(d) Contract:			2,000
(e) In-House			0
(4) Construction Contract Award			20 FEB
(5) Construction Start			20 JUN
(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 APPRO	FISCAL YEAR APPROPRIATED OR REQUESTED	COST (\$000)
COMMUNICATION EQUIPMENT	3080	2025	1,500
SECURITY SYSTEMS	3080	2025	20,000
FURNISHINGS	3080	2025	800

Weapons Storage and Maintenance Facility, Malmstrom AFB



Project: Weapons Storage and Maintenance Facility

Project Spending Plan

As of: 16-Aug-18

All Cost in thousands (\$000)

Chart Begin/End

Apr-20	FUNDING		OBLIGATION		OUTLAYS	
Oct-23	(note 1)		(note 2)		(note 3)	
Month	Enacted	Cumulative	Obligated	Cumulative	Monthly	Cumulative
Apr-20	50,000	50,000	-	-	-	-
May-20	-	50,000	-	-	-	-
Jun-20	-	50,000	-	-	-	-
Jul-20	-	50,000	44,339.88	44,339.88	23.60	652.50
Aug-20	-	50,000	628.88	44,968.75	49.20	1,330.55
Sep-20	-	50,000	628.88	45,597.63	98.00	2,057.43
Oct-20	-	50,000	628.88	46,226.50	187.10	2,873.40
Nov-20	-	50,000	628.88	46,855.38	342.10	3,844.38
Dec-20	-	50,000	628.88	47,484.25	599.10	5,072.40
Jan-21	-	50,000	628.88	48,113.13	1,005.00	6,706.30
Feb-21	-	50,000	628.88	48,742.00	1,614.80	8,949.94
Mar-21	-	50,000	628.88	49,370.88	2,485.00	12,063.78
Apr-21	123,000	173,000	116,081.88	165,452.75	3,662.80	16,355.41
May-21	-	173,000	628.88	166,081.63	5,171.00	22,155.28
Jun-21	-	173,000	628.88	166,710.50	6,992.30	29,776.48
Jul-21	-	173,000	628.88	167,339.38	9,056.20	39,461.57
Aug-21	-	173,000	628.88	167,968.25	11,234.40	51,324.89
Sep-21	-	173,000	628.88	168,597.13	13,348.60	65,302.35
Oct-21	-	173,000	628.88	169,226.00	15,191.40	81,122.63
Nov-21	-	173,000	628.88	169,854.88	16,559.20	98,310.73
Dec-21	-	173,000	628.88	170,483.75	17,288.60	116,228.24
Jan-22	-	173,000	628.88	171,112.63	17,288.60	134,145.75
Feb-22	-	173,000	628.88	171,741.50	16,559.20	151,333.84
Mar-22	-	173,000	628.88	172,370.38	15,191.40	167,154.12
Apr-22	62,000	235,000	51,309.13	223,679.50	13,348.60	181,131.58
May-22	-	235,000	628.88	224,308.38	11,234.40	192,994.90
Jun-22	-	235,000	628.88	224,937.25	9,056.20	202,679.99
Jul-22	-	235,000	628.88	225,566.13	6,992.30	210,301.19
Aug-22	-	235,000	628.88	226,195.00	5,171.00	216,101.07
Sep-22	-	235,000	628.88	226,823.88	3,662.80	220,392.70
Oct-22	-	235,000	628.88	227,452.75	2,485.00	223,506.53
Nov-22	-	235,000	628.88	228,081.63	1,614.80	225,750.17
Dec-22	-	235,000	628.88	228,710.50	1,005.00	227,384.08

Note 1: Assumes initial appropriation is enacted by Congress January of the program year. The appropriation of follow-on increment anticipated February FY20.

Note 2: Assumes funds are available to the contracting officer for the initial obligation no earlier than April of the program year to accommodate the funding process. The obligations of follow-on obligations anticipated February 2020.

Note 3: Assumes contract award date of Jul 2020, Contract completion: Oct 2023, Duration 40 months

1. COMPONENT AIR FORCE			FY 2020 MILITARY CONSTRUCTION PROGRAM					2. DATE (YYYYMMDD) March 19			
3. INSTALLATION AND LOCATION NELLIS AIR FORCE BASE NEVADA					4. COMMAND AIR COMBAT COMMAND			5. AREA CONSTRUCTION COST INDEX 1.21			
6. PERSONNEL		(1) PERMANENT			(2) STUDENTS			(3) SUPPORTED			TOTAL
		OFFICER	ENLISTED	CIVILIAN	OFFICER	ENLISTED	CIVILIAN	OFFICER	ENLISTED	CIVILIAN	
a. AS OF	30-Sep-18	1225	5710	1235	50	11	0	79	125	197	8,632
b. END FY	2024	1261	6008	1240	50	11	0	79	125	125	8,899
7. INVENTORY DATA (\$000)											
a. TOTAL ACREAGE											11,273
b. INVENTORY TOTAL AS OF 30-Sep-18											4,693,333
c. AUTHORIZATION NOT YET IN INVENTORY											200,350
d. AUTHORIZATION REQUESTED IN THIS PROGRAM (FY 2020)											65,200
e. PLANNED IN NEXT FOUR PROGRAM YEARS (FY 2021-2024)											81,000
f. REMAINING DEFICIENCY											384,200
g. GRAND TOTAL											5,424,083
8. PROJECTS REQUESTED IN THIS PROGRAM (FY 2020)											
a. CATEGORY								b. COST (\$000)		c. DESIGN STATUS	
(1) CODE	(2) PROJECT TITLE				(3) SCOPE					(1) START	(2) COMPLETE
610-243	365TH INTEL, SURVEILLANCE & RECON (ISR) GROUP FACILITY				7,078 SM			57,000		Design/Build	
422-275	F-35A MUNITIONS ASSEMBLY CONVEYOR FACILITY				5,574 SM			8,200		Design/Build	
TOTAL								65,200			
9. FUTURE PROJECTS IN NEXT FOUR PROGRAM YEARS (FY 2021-2024)											
211-111	CLOSE AIR SUPPORT INTEGRATION GROUP MAINTENANCE HANGER/AIRCRAFT MAINTENANCE UNIT FACILITY				1,000 SM			30,000			
FUTURE PROJECTS TOTAL								30,000			
R&M UNFUNDED REQUIREMENT (\$M)								TOTAL		25.5	
10. MISSION OR MAJOR FUNCTIONS											
The "Home of the Fighter Pilot," Nellis Air Force Base is home to the U.S. Air Force Warfare Center, the largest and most demanding advanced air combat training mission in the world. At Nellis, we provide training for composite strike forces which include every type of aircraft in the Air Force inventory. Training is conducted in conjunction with air and ground units of the Army, Navy, Marine Corps and air forces from our allied nations.											
11. OUTSTANDING POLLUTION AND SAFETY DEFICIENCIES (FY 2020-2024)											
a. Air Pollution											
b. Water Pollution											
c. Occupational Safety and Health											
d. Other Environmental											
OUTSTANDING DEFICIENCIES TOTAL								0			

1. COMPONENT AIR FORCE	FY 2020 MILITARY CONSTRUCTION PROJECT DATA (computer generated)			2. DATE March 19
3. INSTALLATION, SITE AND LOCATION NELLIS AIR FORCE BASE NELLIS SITE # 1 NEVADA			4. PROJECT TITLE 365TH ISR GROUP FACILITY	
5. PROGRAM ELEMENT 91211F	6. CATEGORY CODE 610-243	7. RPSUID/PROJECT NUMBER 3056/RKMF163007	8. PROJECT COST (\$000) 57,000	
9. COST ESTIMATES				
ITEM	U/M	QUANTITY	UNIT	COST (\$000)
PRIMARY FACILITIES				43,202
365TH ISR HQ GROUP (610-243)	SM	7,078	4,248	(30,067)
THREAT TRAINING FACILITY (171-712)	SM	1,068	2,858	(3,052)
DISPLAY YARD (171-155)	SM	8,872	889	(7,887)
SUSTAINABILITY & ENERGY MEASURES	LS			(820)
CYBERSECURITY OF FACILITY-RELATED CONTROL SYS	LS			(1,375)
SUPPORTING FACILITIES				6,286
UTILITIES	LS			(1,942)
PAVEMENTS	LS			(1,851)
SITE IMPROVEMENTS	LS			(1,028)
COMMUNICATIONS SUPPORT	LS			(762)
DEMOLITION	SM	1,978	355	(703)
SUBTOTAL				49,488
CONTINGENCY (5.0%)				2,474
TOTAL CONTRACT COST				51,962
SUPERVISION, INSPECTION AND OVERHEAD (5.7%)				2,962
DESIGN/BUILD - DESIGN COST (4.0% OF SUBTOTAL)				1,980
TOTAL REQUEST				56,904
TOTAL REQUEST (ROUNDED)				57,000
EQUIPMENT FROM OTHER APPROPRIATIONS (NON-ADD)				(10,159)
10. Description of Proposed Construction: Provide a combined Intelligence, Surveillance, & Reconnaissance (ISR) Group and Squadron Operations Facility. Work will include a reinforced concrete foundation and floor slabs, structural steel frames, standing seam metal roofs, fire detection/protection, utilities, site improvements, landscaping, pedestrian hardscapes, roads/parking, and communications support. Construction includes a secure compartmented information facility (SCIF), Threat Training Facility, (with fenced exhibit yard, and corrosion control capabilities). Demolition of Buildings 469 (SM = 208), 470 (SM = 1609), and 474 (SM = 161) and any associated structures/pavilions in the footprint of new construction or needed for new construction. Facilities will be designed as permanent construction in accordance with the Unified Facilities Criteria (UFC) 1-200-01, General Building Requirements and UFC 1-200-02, High Performance and Sustainable Building Requirements. This project will comply with Department of Defense (DoD) Antiterrorism/force protection requirements per UFC 4-010-01.				
Air Conditioning: 350 Tons				
11. Requirement: 23732 SM Adequate: 16654 SM Substandard: 1145 SM				
PROJECT: Consolidated Facility for 365th Intelligence, Surveillance, & Reconnaissance (ISR) Group, 526th and 547th Intelligence Squadrons and Threat				

1. COMPONENT AIR FORCE	FY 2020 MILITARY CONSTRUCTION PROJECT DATA (computer generated)			2. DATE March 19
3. INSTALLATION, SITE AND LOCATION NELLIS AIR FORCE BASE NELLIS SITE # 1 NEVADA		4. PROJECT TITLE 365 ISR GROUP CONSOLIDATED FACILITY		
5. PROGRAM ELEMENT 91211F	6. CATEGORY CODE 610-243	7. RPSUID/PROJECT NUMBER 3056/RKMF163007	8. PROJECT COST (\$000) 57,000	

Training Facility.

REQUIREMENT: Provide a combined ISR Group and Squadron Operations Facility and Threat Training Facility with aircraft corrosion capabilities, and fenced aircraft exhibit yard. The 365th ISR Group is the Air Force lead for all-source analysis and content-dominant analysis in support of airpower employment focusing on threat tactics, characteristics and capabilities from an adversary air, air defense, cruise and ballistic missile, space and ISR perspective. The 365th ISR Group is an integrated operation to the United States Air Force (USAF) Warfare Center, USAF Weapons School, Red and Green Flag exercises, as well as Space & Cyber operations world-wide.

CURRENT SITUATION: The 365th ISR Group is the lead for all-source and content-dominant analysis in support of airpower employment, focusing on threat tactics, characteristics, and capabilities from an adversary air, air defense, cruise/ballistic missile, space, and ISR perspective. Building on its expertise and ability to perform intelligence preparation of the operational environment, the Group is critical to threat support and high-end training to enable future Air Force employment, ensuring world-class support to Red and Green Flag exercises at Nellis as well as to the Adversary Tactics Group and the U.S. Air Force Weapons School.

IMPACT IF NOT PROVIDED: The 365 ISR Group and associated squadrons will be limited in combat support and effectiveness with inadequate secure work space to support Red Flag, Green Flag, USAF Warfare Center and Close Air Support missions. The ability to expand to increase joint, coalition, and future intelligence support has direct impact on US cyber missions. Scarce funding will continue to be poured into building infrastructure and energy inefficiencies. Nellis missions have been tested by war-time operations with inadequate facilities, severely limiting the base's effectiveness to support combat air forces.

ADDITIONAL: This project meets the criteria /scope specified in Air Force Manual 32-1084, "Facility Requirements." An economic analysis of reasonable options for accomplishing this project (status quo, renovations, and new construction) was accomplished. It indicates there is only one option that will meet operational requirements, new construction. This project does not fall within or partly within the 100-year flood plain. This project was not included in the Fiscal Year 2019 future-years defense plan. This design shall conform to criteria established in the Air Force Corporate Facilities Standards (AFCFS), the Installation Facilities (IFS), but will not employ a standard facility design because there is no AF standard facility design for this project and there is no applicable standard design from the Air Force Civil Engineering Center (AFCEC).

(365 ISR Group Facility 7,078 SM = 76,198 SF) (Threat Training Facility 1,068 SM = 11,456 SF) (Display Yard 8872 SM = 95,498 SF); Base Civil Engineer: (702) 652-4833.

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

1. COMPONENT AIR FORCE	FY 2020 MILITARY CONSTRUCTION PROJECT DATA (computer generated)		2. DATE March 19
3. INSTALLATION AND LOCATION NELLIS AIR FORCE BASE NELLIS SITE # 1 NEVADA		4. PROJECT TITLE 365 ISR GROUP CONSOLIDATED FACILITY	
5. PROGRAM ELEMENT 91211F	6. CATEGORY CODE 610-243	7. PROJECT NUMBER 3056/RKMF163007	8. PROJECT COST (\$000) 57,000
12. SUPPLEMENTAL DATA:			
a. Estimated Design Data:			
(1) Project to be accomplished by design-build procedures			
(a) Date Design Started:			9 APR 18
(b) Parametric Cost Estimates Used to Develop Costs:			YES
(c) Percent Complete as of January 2019:			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:			1,710
(4) Construction Contract Award:			20 FEB
(5) Construction Start:			20 JUN
(6) Construction Completion:			22 MAR
(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)
MISSION TRAINING EQUIPMENT	3080	2021	3,700

1. COMPONENT AIR FORCE	FY 2020 MILITARY CONSTRUCTION PROJECT DATA (computer generated)			2. DATE March 19	
3. INSTALLATION, SITE AND LOCATION NELLIS AIR FORCE BASE NELLIS SITE # 1 NEVADA		4. PROJECT TITLE F-35A MUNITIONS ASSEMBLY CONVEYOR FACILITY			
5. PROGRAM ELEMENT 27142F	6. CATEGORY CODE 422-275	7. RPSUID/PROJECT NUMBER 3056/RKMF203001	8. PROJECT COST (\$000) 8,200		
9. COST ESTIMATES					
ITEM		U/M	QUANTITY	UNIT	COST (\$000)
PRIMARY FACILITIES					2,844
COVERED MUNITIONS ASSEMBLY CONVEYOR		SM	5,574	456	(2,543)
SUSTAINABILITY & ENERGY MEASURES		LS			(51)
CYBERSECURITY OF FACILITY-RELATED CONTROL SYS		LS			(250)
SUPPORTING FACILITIES					4,305
MAINTENANCE ADMINISTRATIVE BUILDING		SM	53	5,301	(281)
UTILITIES		LS			(2,570)
COMMUNICATIONS		LS			(586)
SITE IMPROVEMENTS		LS			(490)
PAVEMENTS		LS			(378)
SUBTOTAL					7,149
CONTINGENCY (5.0%)					357
TOTAL CONTRACT COST					7,507
SUPERVISION, INSPECTION AND OVERHEAD (5.7%)					428
DESIGN/BUILD - DESIGN COST (4.0% OF SUBTOTAL)					286
TOTAL REQUEST					8,221
TOTAL REQUEST (ROUNDED)					8,200
EQUIPMENT FROM OTHER APPROPRIATIONS (NON-ADD)					(277)
10. Description of Proposed Construction: Construct a covered F-35A Munitions Assembly Conveyor (MAC) facility utilizing economical design and construction methods to support the manufacture, assembly, test, overhaul and support of various armaments, including munitions, explosives, and ammunition, their subsystems, components, and support equipment. Work will include reinforced concrete foundation and floor slabs, structural steel frame, standing seam metal roof, utilities, site improvements, landscaping, roads/parking adequate for 18 wheel tractor & trailer's circular path around covered structure, and administrative facility with communications support and fire alarm system. Provide all work necessary to deliver a complete and usable facility. Facilities will be designed as permanent construction in accordance with Unified Facilities Criteria (UFC) 1-200-01, General Building Requirements and UFC 1-200-2, High Performance and Sustainable Building Requirements. This project will comply with Department of Defense (DoD) anti-terrorism/force protection requirements per UFC 4-010-01.					
Air Conditioning: 2 Tons					
11. Requirement: 8311 SM Adequate: 2684 SM Substandard: 0 SM					
<u>PROJECT:</u> Construct F-35A MAC Facility					
<u>REQUIREMENT:</u> An adequately sized and configured MAC facility to support 57 MUNS. Space is required for two personnel, restrooms, and communications inside the administrative facility. The MAC facility will have: overhead protection,					

1. COMPONENT AIR FORCE	FY 2020 MILITARY CONSTRUCTION PROJECT DATA (computer generated)			2. DATE March 19
3. INSTALLATION, SITE AND LOCATION NELLIS AIR FORCE BASE NELLIS SITE # 1 NEVADA			4. PROJECT TITLE F-35A MUNITIONS ASSEMBLY CONVEYOR FACILITY	
5. PROGRAM ELEMENT 27142F	6. CATEGORY CODE 422-275	7. RPSUID/PROJECT NUMBER 3056/RKMF203001	8. PROJECT COST (\$000) 8,200	
<p>lightning protection, grounding system, area lighting systems, concrete pad with housing for air compressor, munitions assembly conveyor package with assembly interface board, and support for two 400hz converters.</p> <p><u>CURRENT SITUATION:</u> There are no excess or adequate facilities available that can be converted to accommodate this new requirement as part of the F-35A beddown. Nellis AFB has had significant growth since 2000 with the F-22A Test and Weapons School beddown (16 aircraft), the F-16 Aggressor beddown (24 aircraft), the F-35 Test and Weapons School beddowns (36 aircraft), and the expansion of Flag exercises and other force structure actions. F-35A (and other 5th generation aircraft) require significantly more munitions assembly space than Nellis currently provides. 57 Munitions Maintenance Squadron (MUNS) is a heavily-tasked unit that prepares aircraft for Red Flag, Green Flag, and the USAF Weapons School integrated operations over the Nevada Test and Training Range. The current munitions area operates on a 24/7 schedule, lacks sufficient thoroughfare space for large tractor trailer turning radius, and restroom facilities. Personnel are subject to temperature extremes during the physically taxing goals of providing combat-ready and operational munitions-loaded aircraft.</p> <p><u>IMPACT IF NOT PROVIDED:</u> Without this facility, munitions assembly and weapons loading onto fighter aircraft will not be able to meet the necessary live-fire combat employment training scenarios for the supported weapons systems. Additionally, munitions personnel training capabilities and capacity will be unable to meet increased demand for USAF Weapons School and Red/Green Flag exercises, thus severely jeopardizing the quality of training provided to combat aircrews.</p> <p><u>ADDITIONAL:</u> This project meets the criteria/scope specified in Air Force Manual 32-1084, "Facility Requirements." An economic analysis of reasonable options for accomplishing this project (status quo, new construction, modification or addition, leasing, and other facilities on- and off-base) was accomplished. It indicates there is only one option that will meet operational requirements: new construction. This project does not fall within or partly within the 100-year flood plain. This project was not included in the Fiscal Year 2019 future-years defense plan. This design shall conform to criteria established in the Air Force Corporate Facilities Standards (AFCFS) and the Installation Facilities Standards (IFS), but will not employ a standard facility design because there is no AF standard facility design for this project and there is no applicable standard design from the Air Force Civil Engineering Center (AFCEC). Supporting facility costs are 66% higher than primary facility costs due to weapons safety constraints and the resulting distance to utility points of connection. Primary and supporting facility costs both take into account cost increases due to constructing within a munitions storage area.</p> <p>Base Civil Engineer: (702) 652-4833; Ancillary Explosives Facility (422-275): 5,574 SM = 60,000 SF; Munitions Maintenance Administration (610-144): 53 SM = 570 SF</p> <p><u>JOINT USE CERTIFICATION:</u> This facility can be used by other components on an "as available" basis; however, the scope of the project is based on Air Force requirements.</p>				

1. COMPONENT AIR FORCE	FY 2020 MILITARY CONSTRUCTION PROJECT DATA (computer generated)		2. DATE March 19
3. INSTALLATION AND LOCATION NELLIS AIR FORCE BASE NELLIS SITE # 1 NEVADA		4. PROJECT TITLE F-35A MUNITIONS ASSEMBLY CONVEYOR FACILITY	
5. PROGRAM ELEMENT 27142F	6. CATEGORY CODE 422-275	7. PROJECT NUMBER 3056/RKMF203001	8. PROJECT COST (\$000) 8,200
12. SUPPLEMENTAL DATA:			
a. Estimated Design Data:			
(1) Project to be accomplished by design-build procedures			
(a) Date Design Started:			23 APR 18
(b) Parametric Cost Estimates Used to Develop Costs:			YES
(c) Percent Complete as of January 2019:			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:			312
(4) Construction Contract Award:			20 FEB
(5) Construction Start:			20 JUN
(6) Construction Completion:			22 MAR
(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)
FURNITURE, FIXTURES, & EQUIPME	3400	2021	50
CONVEYOR & INTERFACE BOARD	3400	2021	100
400HZ FREQUENCY CONVERTERS	3400	2021	100
AIR COMPRESSOR	3400	2021	27

1. COMPONENT AIR FORCE	FY 2020 MILITARY CONSTRUCTION PROJECT DATA (computer generated)			2. DATE March 19
3. INSTALLATION, SITE AND LOCATION KIRTLAND AIR FORCE BASE KIRTLAND SITE # 1 NEW MEXICO		4. PROJECT TITLE COMBAT RESCUE HELICOPTER SIMULATOR (CRH) ADAL		
5. PROGRAM ELEMENT 27229F	6. CATEGORY CODE 171-212	7. RPSUID/PROJECT NUMBER 2445/MMMV163104	8. PROJECT COST (\$000) 15,500	
9. COST ESTIMATES				
ITEM	U/M	QUANTITY	UNIT	COST (\$000)
PRIMARY FACILITIES				10,632
ADAL FLT SIMLTR TNG (B951) (171-212)	SM	2,440	4,013	(9,792)
ADAL FLT TNG CLASSROOM (B923) (171-211)	SM	435	1,000	(435)
SUSTAINABILITY AND ENERGY MEASURES	LS			(205)
CYBERSECURITY OF FACILITY-RELATED CONTROL SYS	LS			(200)
SUPPORTING FACILITIES				3,059
UTILITIES	LS			(374)
SITE IMPROVEMENTS	LS			(215)
PAVEMENTS	LS			(506)
COMMUNICATIONS SUPPORT	LS			(350)
DEMOLITION	SM	769	300	(231)
ALLIED SUPPORT FOR INCIDENT TO CONST TRAILERS	LS			(540)
NEW MEXICO GROSS RECEIPTS TAX (NMGRT) 6.4375%	LS			(843)
SUBTOTAL				13,691
CONTINGENCY (5.0%)				685
TOTAL CONTRACT COST				14,376
SUPERVISION, INSPECTION AND OVERHEAD (5.7%)				820
DESIGN/BUILD - DESIGN COST (4.0% OF SUBTOTAL)				548
TOTAL REQUEST				15,744
TOTAL REQUEST (ROUNDED)				15,500
EQUIPMENT FROM OTHER APPROPRIATIONS (NON-ADD)				(126,030)
10. Description of Proposed Construction: Construct two 60ft X 60ft high-bay rooms addition for full motion CRH simulators with roll-up door and 2.5 ton crane for each bay. The addition will include special reinforced foundations, floors, stucco-finished reinforced block walls, and steel roof structure with insulated standing seam metal roofing to match general appearance and character of existing facility, which will be altered to continue the hallway and move the main entrance of the building. The addition includes space for the following functions: restrooms, mechanical/electrical, image generator, avionics desktop trainer, offices, classified and unclassified areas, multi-purpose to accommodate meeting, educational, and briefing functions, and other training apparatus. Work includes site preparation, seismic provisions, communications support with secure trench, plumbing, electrical, gas, heating, ventilation, and air conditioning, fire protection systems, landscaping, parking, and storm drainage to provide a complete and usable facility. Project shall demolish buildings 954 (658 SM) and 960 (111 SM) and accomplish site work and utilities connections for temporary relocatable trailers incident to Military Construction. Facilities will be designed as permanent construction in accordance with Department of Defense Unified Facilities				

1. COMPONENT AIR FORCE	FY 2020 MILITARY CONSTRUCTION PROJECT DATA (computer generated)			2. DATE March 19
3. INSTALLATION, SITE AND LOCATION KIRTLAND AIR FORCE BASE KIRTLAND SITE # 1 NEW MEXICO			4. PROJECT TITLE COMBAT RESCUE HELICOPTER SIMULATOR (CRH) ADAL	
5. PROGRAM ELEMENT 27229F	6. CATEGORY CODE 171-212	7. RPSUID/PROJECT NUMBER 2445/MHMOV163104	8. PROJECT COST (\$000) 15,500	
<p>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.</p> <p>Air Conditioning: 300 Tons</p>				
<p>11. Requirement: 20272 SM Adequate: 7471 SM Substandard: 6135 SM</p> <p><u>PROJECT:</u> Combat Rescue Helicopter (CRH) Simulator Addition and Alteration</p> <p><u>REQUIREMENT:</u> HH-60W helicopter aircraft and simulators are coming to Kirtland AFB for the 58th Special Operations Wing (58 SOW) to train students on a new airframe for Air Combat Command. The existing HH-60G aircraft and simulators that are used for current training requirements; these legacy aircraft will be replaced by the HH-60W from fiscal year 2020 to 2025.</p> <p>Adequate space is required to install and operate two HH-60W flight simulators and other training apparatus (Aircraft Systems Trainer, and Hoist Procedure Trainer) to train personnel during and after the aircraft replacement. Simulators provide realistic training and accurately portray the Mission Design Series to train and increase readiness of CRH flight crews. Without the simulators and associated training space, the Programmed Flight Training cannot be achieved.</p> <p>Buildings 954 and 960 will be demolished to clear the site for the addition to B951 and relocatable trailers will be used to temporarily house the functions displaced from these buildings including weapons training classrooms, student equipment storage, night vision goggle storage, registrar, and library. An addition to building 957 to permanently house these functions is being programmed in a following project, MHMOV173101, to build another simulator addition for a different airframe. The two simulator addition projects may occur simultaneously, therefore, the relocatable trailers will need to be large enough to accommodate personnel and functions displaced from buildings 953, 954, and 960.</p> <p>Building 923 will be partially renovated to house the Student Learning Center, which will be a space for studying and collaborative learning that is being partially displaced from building 954.</p> <p><u>CURRENT SITUATION:</u> There are currently no facilities at Kirtland AFB to house the new simulators and HH-60W supporting training spaces and equipment. The current HH-60G flight simulator facility must continue to operate until the HH-60W completely replaces legacy aircraft; training capability for the two airframes needs to occur simultaneously. As existing HH-60G aircraft and simulators are phased out, additional HH-60W simulators will replace them. The existing HH-60G simulator bays are not large enough to house the new HH-60W full motion simulators.</p>				

1. COMPONENT AIR FORCE	FY 2020 MILITARY CONSTRUCTION PROJECT DATA (computer generated)			2. DATE March 19
3. INSTALLATION, SITE AND LOCATION KIRTLAND AIR FORCE BASE KIRTLAND SITE # 1 NEW MEXICO			4. PROJECT TITLE COMBAT RESCUE HELICOPTER SIMULATOR (CRH) ADAL	
5. PROGRAM ELEMENT 27229F	6. CATEGORY CODE 171-212	7. RPSUID/PROJECT NUMBER 2445/MHMOV163104	8. PROJECT COST (\$000) 15,500	
<p>IMPACT IF NOT PROVIDED: Without this project, students will not be provided the critical training required to fly the new HH-60W aircraft, and Programmed Flight Training will be stalled. New flight simulators will be delivered without a facility to house them, and these costly and sensitive devices will have to be stored at government expense.</p> <p>ADDITIONAL: This project meets the criteria/scope specified in Air Force Manual 32-1084, "Facility Requirements." This design shall conform to criteria established in the Air Force Corporate Facility Standards (AFCFS) and the Installation Facility Standards (IFS), but will not employ a standard design because this is an ADAL to an existing facility. A preliminary analysis of reasonable options for accomplishing this project (status quo, renovation, addition, new construction) indicated that the addition option is the most cost effective option that meets operational requirements. A formal economic analysis is being prepared. This project does not fall within or partly within the 100-year flood plain. This project was included in the Fiscal Year 2019 future-years defense plan. Due to the requirement for temporary space, the additional cost has caused the Supporting Facilities to exceed 25% of the Primary Facilities cost. Base Civil Engineer: (505) 853-2043. CRH Simulator addition: 2,440 SM = 26,455 SF; FLT TNG Classroom partial renovation: 435 SM = 4,682 SF</p> <p>JOINT USE CERTIFICATION: his facility can be used by other components on an "as available" basis; however, the scope of the project is based on Air Force requirements.</p>				

1. COMPONENT AIR FORCE	FY 2020 MILITARY CONSTRUCTION PROJECT DATA (computer generated)			2. DATE March 19
3. INSTALLATION AND LOCATION KIRTLAND AIR FORCE BASE KIRTLAND SITE # 1 NEW MEXICO		4. PROJECT TITLE COMBAT RESCUE HELICOPTER SIMULATOR (CRH) ADAL		
5. PROGRAM ELEMENT 27229F	6. CATEGORY CODE 171-212	7. PROJECT NUMBER 2445/MHMV163104	8. PROJECT COST (\$000) 15,500	
12. SUPPLEMENTAL DATA:				
a. Estimated Design Data:				
(1) Project to be accomplished by design-build procedures				
(a) Date Design Started:				19 JUN 18
(b) Parametric Cost Estimates Used to Develop Costs:				YES
(c) Percent Complete as of January 2019:				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:				640
(4) Construction Contract Award:				20 FEB
(5) Construction Start:				20 MAR
(6) Construction Completion:				22 MAR
(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)	
FURNITURE, FIXTURES, & EQUIPMENT	3400	21	1,500	
COMM SWITCHES	3400	21	180	
ADVANTOR PANELS	3400	21	250	
SIMULATOR (WEAPONS SYSTEM TRAINER 1)	3010	21	35,400	
SIMULATOR (WEAPONS SYSTEM TRAINER 2)	3010	21	35,400	
AVIONICS DESKTOP TRAINER	3010	21	800	
AIRCRAFT SYSTEMS TRAINER	3600	19	48,000	
HOIST PROCEDURE TRAINER	3010	21	4,000	
INCIDENT TRAILERS	3400	20	500	

1. COMPONENT AIR FORCE	FY 2020 MILITARY CONSTRUCTION PROJECT DATA (computer generated)			2. DATE March 19
3. INSTALLATION, SITE AND LOCATION KIRTLAND AIR FORCE BASE KIRTLAND SITE # 1 NEW MEXICO			4. PROJECT TITLE UH-1 REPLACEMENT FACILITY	
5. PROGRAM ELEMENT 12110F	6. CATEGORY CODE 171-212	7. RPSUID/PROJECT NUMBER 2445/MHVMV173101	8. PROJECT COST (\$000) 22,400	
9. COST ESTIMATES				
ITEM	U/M	QUANTITY	UNIT	COST (\$000)
PRIMARY FACILITIES				15,937
FLT SIMLTR TNG ADAL TO B951	SM	3,324	3,625	(12,050)
ADDITION TO BUILDING 957	SM	450	4,272	(1,922)
SUSTAINABILITY & ENERGY MEASURES	LS			(280)
ANTITERRORISM AND FORCE PROTECTION ALLOWANCE	SM	3,774	350	(1,335)
CYBERSECURITY FOR FACILITY-RELATED CONTROL SYS	LS			(350)
SUPPORTING FACILITIES				3,542
SITE IMPROVEMENTS	LS			(500)
UTILITIES	LS			(150)
PAVEMENTS	LS			(350)
DEMOLITION B924 & B953	SM	2,715	203	(550)
B923 & B953 HAZARDOUS MATERIAL TEST & ABATE	SM	2,715	20	(55)
GENERATOR	LS			(125)
COMMUNICATIONS	LS			(750)
NEW MEXICO GROSS RECEIPTS TAX (NMGRT) 6.4375%	LS			(1,062)
SUBTOTAL				19,479
CONTINGENCY (5.0%)				974
TOTAL CONTRACT COST				20,453
SUPERVISION, INSPECTION AND OVERHEAD (5.7%)				1,166
DESIGN/BUILD - DESIGN COST (4.0% OF SUBTOTAL)				779
TOTAL REQUEST				22,398
TOTAL REQUEST (ROUNDED)				22,400
EQUIPMENT FROM OTHER APPROPRIATIONS (NON-ADD)				(73,150)
10. Description of Proposed Construction: Addition will be built to the new Combat Rescue Helicopter (CRH) simulator building 951 and an addition will be built to building 957. Building 951 is scheduled to be built in 2018 and will house one CRH simulator and other support spaces for the new HH-60W helicopters. The addition will include 60ft X 60ft high-bay rooms for UH-1 Replacement simulators with roll-up door and 2.5 ton crane for each bay. Building will have special reinforced foundations, floors, reinforced stucco-finished concrete block walls, and steel roof structure with insulated standing seam metal roofing to match appearance and character of existing facility, which will be altered to continue the hallway and move the main entrance of the building. Due to soil conditions and the sensitive nature of the building and equipment, over-excavation and special foundations will be required. Includes space for the following functions: restrooms, mechanical/electrical, image generator, instructor and contractor offices, classified and unclassified areas, multi-purpose to accommodate meeting, educational, briefing functions, and a				

1. COMPONENT AIR FORCE	FY 2020 MILITARY CONSTRUCTION PROJECT DATA (computer generated)			2. DATE March 19
3. INSTALLATION, SITE AND LOCATION KIRTLAND AIR FORCE BASE KIRTLAND SITE # 1 NEW MEXICO			4. PROJECT TITLE UH-1 REPLACEMENT FACILITY	
5. PROGRAM ELEMENT 12110F	6. CATEGORY CODE 171-212	7. RPSUID/PROJECT NUMBER 2445/MHMOV173101	8. PROJECT COST (\$000) 22,400	
<p>third bay for smaller trainers. Conduct site preparation, seismic provisions, communications support, secure communications trench, plumbing, electrical, gas, 300 tons Heating, Ventilation, and Air Conditioning capacity, fire protection systems, landscaping, parking for 130 spaces, storm drainage, and entry and access control. Building 924 (1,606 SM, 1955) will be demolished to make room for new parking spaces and building 953 (1,110 SM, 1964) will be demolished to make room for the addition to building 951. Asbestos and lead testing and abatement is anticipated due to the age of the facilities. An addition to building 957 (built 1997) will be constructed to house functions and personnel displaced from demolished buildings and will match the general appearance and character of the existing building. 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.</p> <p>Air Conditioning: 300 Tons</p>				
<p>11. Requirement: 3374 SM Adequate: 0 SM Substandard: 0 SM PROJECT: Construct UH-1 Replacement Simulator Facility</p> <p>REQUIREMENT: A replacement airframe for the UH-1 aircraft is coming to Kirtland AFB for the 58th Special Operations Wing (58 SOW) to train students for Air Force Global Strike Command. Currently, there are UH-1 aircraft and simulators that are used in training, but these legacy aircraft will be replaced by the new airframe over time. The first aircraft are scheduled to arrive end of fiscal year 2022 with the remainder to be delivered in fiscal year 2023. Adequate space is required to install and operate the UH-1N replacement aircraft flight simulators to train flight crew personnel as part of the forthcoming aircraft replacement. The facility will house the UH-1 replacement aircraft simulators that provide realistic training and accurately portray the Mission Design Series to train and increase readiness of flight crews. Building 924 will be demolished to make room for some of the parking to be constructed. Building 953 will be demolished to make room for the simulator addition and the personnel in the building will need to be relocated to trailers until the addition is complete. The trailers will be installed in a different project, MHMOV163104, which is another addition/alteration for the CRH simulators and may occur simultaneously to this project. An addition to building 957 will be constructed as part of this project to house functions and personnel displaced by demolition, which include a registrar office, library, student equipment storage, and night vision goggle storage. Co-locating these functions with building 957 is advantageous because it makes the building more of a one-stop-shop for in-processing and equipping students for multiple training programs.</p> <p>CURRENT SITUATION: There are currently no facilities at Kirtland AFB to house the new simulators and UH-1 replacement aircraft training requirements. The current</p>				

1. COMPONENT AIR FORCE	FY 2020 MILITARY CONSTRUCTION PROJECT DATA (computer generated)			2. DATE March 19
3. INSTALLATION, SITE AND LOCATION KIRTLAND AIR FORCE BASE KIRTLAND SITE # 1 NEW MEXICO			4. PROJECT TITLE UH-1 REPLACEMENT FACILITY	
5. PROGRAM ELEMENT 12110F	6. CATEGORY CODE 171-212	7. RPSUID/PROJECT NUMBER 2445/MHMOV173101	8. PROJECT COST (\$000) 22,400	
<p>UH-1 flight simulator facility must continue to operate until the replacement aircraft is phased in. As existing UH-1 aircraft and simulators are phased out, additional new aircraft simulators will replace them.</p> <p>IMPACT IF NOT PROVIDED: There are no workarounds in lieu of constructing a new facility or addition to house the new simulators. Without this project, students will not be provided the critical training needed to fly the new replacement aircraft, and Programmed Flight Training will be stalled. New flight simulators will be delivered without a facility to house them, and expensive new simulators will have to be stored at government expense.</p> <p>ADDITIONAL: This project meets the criteria/scope specified in Air Force Manual 32-1084, "Facility Requirements." This project was not included in the Fiscal Year 2019 future-years defense plan in FY20. 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, addition, new construction) indicated that the addition option is the most cost effective option that meets operational requirements. An economic analysis has been prepared and will be approved prior to president's budget submission. All buildings affected by this project, 924, 953, and 957, were inspected by the fire department in the fall of 2017 and none had any write-ups. 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: (505) 853-2043. New Simulator Facility: 3,324 SM = 35,776 SF.</p> <p>JOINT USE CERTIFICATION: This facility can be used by other components on an "as available" basis; however, the scope of the project is based on Air Force requirements.</p>				

1. COMPONENT AIR FORCE	FY 2020 MILITARY CONSTRUCTION PROJECT DATA (computer generated)			2. DATE March 19
3. INSTALLATION AND LOCATION KIRTLAND AIR FORCE BASE KIRTLAND SITE # 1 NEW MEXICO			4. PROJECT TITLE UH-1 REPLACEMENT FACILITY	
5. PROGRAM ELEMENT 12110F	6. CATEGORY CODE 171-212	7. PROJECT NUMBER 2445/MHMOV173101	8. PROJECT COST (\$000) 22,400	
12. SUPPLEMENTAL DATA:				
a. Estimated Design Data:				
(1) Project to be accomplished by design-build procedures				
(a) Date Design Started:				4 MAR 19
(b) Parametric Cost Estimates Used to Develop Costs:				YES
(c) Percent Complete as of January 2019:				0%
(d) Date Design 35% Complete:				1 MAY 19
(e) Date Design 100% Complete:				1 DEC 19
(2) Basis:				
(a) Standard or Definitive Design -				NO
(b) Where Design Was Most Recently Used -				0
(3) All Other Design Costs:				0
(4) Construction Contract Award:				20 FEB
(5) Construction Start:				20 MAR
(6) Construction Completion:				22 MAR
(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)	
SIMULATOR DEVICE (OFT 1)	3600	20	30,000	
FURNITURE, FIXTURES, & EQUIPMENT	3080	20	1,900	
ADVANTOR PANELS	3400	20	200	
COMM SWITCHES	3080	20	250	
SIMULATOR DEVICE (OFT 2)	3600	18	30,000	
SIMULATOR DEVICE (AVDTT)	3600	18	800	
GBAT/AST	3600	18	3,000	
HOIST PROCEDURE TRAINER COCKPIT	3600	18	4,000	
TRAINER	3600	18	3,000	

1. COMPONENT AIR FORCE	FY 2020 MILITARY CONSTRUCTION PROJECT DATA (computer generated)			2. DATE March 19	
3. INSTALLATION, SITE AND LOCATION MINOT AIR FORCE BASE MINOT AFB SITE # 1 NORTH DAKOTA			4. PROJECT TITLE CONSOLIDATED HELO/TRFOPS/AMU AND ALERT FACILITY		
5. PROGRAM ELEMENT 12110F	6. CATEGORY CODE 141-753	7. RPSUID/PROJECT NUMBER 2837/QJVF153001	8. PROJECT COST (\$000) Auth: 5,500 Appr: 5,500		
9. COST ESTIMATES					
ITEM		U/M	QUANTITY	UNIT	COST (\$000)
PRIMARY FACILITIES					51,325
HELICOPTER/TRF ALERT FACILITY (141-753)		SM	920	4,741	(4,361)
HELICOPTER/TRF OPERATIONS FACILITY (141-753)		SM	2,991	4,558	(13,633)
AIRCRAFT ALERT HANGAR (141-481)		SM	1,598	4,424	(7,070)
AIRCRAFT MAINTENANCE UNIT (211-175)		SM	1,412	3,962	(5,594)
AIRCRAFT MAINTENANCE HANGAR (211-111)		SM	1,598	4,424	(7,069)
AIRCRAFT SHELTER FACILITY (211-111)		SM	3,003	2,895	(8,695)
ALERT VEHICLE PARKING FACILITY (853-101)		SM	361	2,695	(973)
AIRCRAFT SIMULATOR FACILITY (171-212)		SM	511	5,956	(3,044)
SUSTAINABILITY AND ENERGY MEASURES (2%)		LS			(884)
SUPPORTING FACILITIES					7,691
SITE IMPROVEMENTS		LS			(993)
PAVEMENTS		LS			(5,868)
UTILITIES		LS			(534)
GENERATOR		LS			(277)
PRIVATIZED UTILITY CONNECTION FEE		LS			(21)
SUBTOTAL					59,017
CONTINGENCY (5.0%)					2,951
TOTAL CONTRACT COST					61,968
SUPERVISION, INSPECTION AND OVERHEAD (5.7%)					3,532
TOTAL REQUEST					65,500
TOTAL REQUEST (ROUNDED)					66,000
EQUIPMENT FROM OTHER APPROPRIATIONS (NON-ADD)					(66,000)
10. Description of Proposed Construction: Construct a new Aircraft Maintenance Unit (AMU), Aircraft Maintenance Shelter, Aircraft Alert Hangar, and Operations facility utilizing conventional design and construction methods to accommodate the mission of the facility. The facilities will include concrete foundation, floor slab, structural steel frame with insulated metal walls, a free span pitched roof, and an emergency generator. Project will include fire suppression systems, all utilities, pavements, communications, site improvements to include new taxiways, runway, and helipads, associated airfield lighting and all support facilities to provide a complete and usable facility. Facilities will be designed as permanent construction in accordance with the Department of Defense Unified Facilities Criteria (UFC) 1-200-01, General Building Requirements and UFC 1-200-02, High Performance and Sustainable Building Requirements. This project will comply with Department of Defense Antiterrorism/force protection requirements per UFC 4-010-01.					

1. COMPONENT AIR FORCE	FY 2020 MILITARY CONSTRUCTION PROJECT DATA (computer generated)			2. DATE March 19
3. INSTALLATION, SITE AND LOCATION MINOT AIR FORCE BASE MINOT AFB SITE # 1 NORTH DAKOTA			4. PROJECT TITLE CONSOLIDATED HELO/TRFOPS/AMU AND ALERT FACILITY	
5. PROGRAM ELEMENT 12110F	6. CATEGORY CODE 141-753	7. RPSUID/PROJECT NUMBER 2837/QJVF153001	8. PROJECT COST (\$000) Auth: 5,500 Appr: 5,500	
Air Conditioning: 75 Tons				
<p>11. Requirement: 12394 SM Adequate: 0 SM Substandard: 12394 SM PROJECT: Consolidated Helo/TRF Ops/AMU and Alert Fac (New Mission) REQUIREMENT: An adequately sized and configured integrated helicopter operations tactical response alert facility is needed to provide proper command and control, alert, maintenance, and fueling capabilities for helicopter security operations providing coverage to remote Intercontinental Ballistic Missile (ICBM) alert and launch facilities. A series of buildings that will become the main control point for all unit flight and flying training tasks including planning, briefing, administration, alert response, life support system maintenance, and crew equipment storage and issue. Complex must provide collocation of the squadron operations facility and alert crew sleeping quarters with aircraft to minimize crew response times and enhance rescue/security team effectiveness. Response time is critical when providing security for nuclear weapons transports and conducting search and rescue as well as civil aid missions. The complex must have flight line visibility for control of ground traffic and aircraft storage must be heated for rapid response during prolonged and often extreme winter conditions.</p> <p>CURRENT SITUATION: The 54th Helicopter Squadron (54 HS) directly supports ICBM missile alert and launch facility site security by providing rapid response/transport of 91st Tactical Response Force (TRF) Squadron Security Forces personnel and equipment from the base to the missile fields spread over the western part of the state. Helicopter operations are currently conducted from a facility constructed in 1986, but this facility has no alert function. TRF operations are currently conducted from a facility constructed in 1958 that was originally a maintenance hangar and converted several times, into its current function as a TRF. This structure is laden with asbestos containing materials, lead based paint, and is supplied with a failing utilities infrastructure. The current helicopter facility is not properly configured to accommodate the assigned UH-1 helicopters and is completely inadequate in size and configuration for the replacement UH/HH-60 helicopters anticipated for deployment at this installation. The hangar doors and interior layout will not allow for the parking and maintenance of the replacement helicopter airframes. In addition to its inferior condition and poor layout, the current facility affords few provisions for squadron operations and none for around-the-clock alert readiness. The current structure has neither sleeping quarters nor food preparation facilities. The current location is only partially adequate for the storage, maintenance, and issue of life support equipment and other provisions needed by flight crews and TRF personnel. Currently, personnel on alert stay in a dormitory about a mile from the 54 HS facility. Should personnel need to respond to a real world incident, this would greatly impact response time. Additionally, the helicopter squadron has experienced a large growth in both active duty personnel and contractor maintenance. This only compounds the already cramped office space problem.</p>				

1. COMPONENT AIR FORCE	FY 2020 MILITARY CONSTRUCTION PROJECT DATA (computer generated)			2. DATE March 19
3. INSTALLATION, SITE AND LOCATION MINOT AIR FORCE BASE MINOT AFB SITE # 1 NORTH DAKOTA			4. PROJECT TITLE CONSOLIDATED HELO/TRFOPS/AMU AND ALERT FACILITY	
5. PROGRAM ELEMENT 12110F	6. CATEGORY CODE 141-753	7. RPSUID/PROJECT NUMBER 2837/QJVF153001	8. PROJECT COST (\$000) Auth: 5,500 Appr: 5,500	
<p>IMPACT IF NOT PROVIDED:</p> <p>UH/HH-60 helicopters required to replace the UH-1. Without a new facility that allows for consolidation of Squadron Operation and Alert Crew facilities, 24-hour alert responses will continue to be impeded and expediciencies of consolidation will not be achieved. The existing UH-1 fleet is Vietnam era and does not meet required key performance parameters for performance, range, speed, or cargo capacity required to support the TRF and ICBM Security Concepts of Operations detailed in Department of Defense Directive 5210.41-M-V1, V2, V3, Security Policy for Protecting Nuclear Weapons, dated 13 July 2009. Upon contract selection, replacement helicopters can be fielded within 24 months, making this project potentially late-to-need if not approved. Without this project, existing operations will continue to progressively degrade as facilities and utility systems age and are increasingly unable to support operational requirements, and will become non-operational with delivery of replacement aircraft prior to funding and execution of this requirement. Expensive aircraft parts and equipment will continue to be exposed to outdoor weather extremes. The ability to expeditiously deploy security and/or rescue personnel under updated security criteria of nuclear weapons transports and execution of search and rescue/civil aid missions will be compromised. Continued reliance on insufficient aircraft maintenance and squadron operations facilities could ultimately result in the inability to secure the nuclear resource if taken by force.</p> <p>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 applicable standard facility design for this project and there is no applicable standard design from Air Force Civil Engineer Center.</p> <p>This project meets applicable criteria/scope specified in Air Force Handbook 32-1084, Facility Requirements. A preliminary analysis of reasonable options for accomplishing this project (status quo, renovation, new construction) was performed. Only two options, renovation and new construction, meet operational requirements. Therefore, an Economic Analysis was prepared and determined since the renovation option exceeds 75% of the replacement value, new construction is the only viable option. This project does not fall within or partly within the 100-year flood plain.</p> <p>Base Civil Engineer: 307-773-3600 Helicopter/TRF Alert Facility: 920 SM = 9,901 SF; Helicopter/TRF Operations Facility: 2,991 SM = 32,195 SF; Aircraft Alert Hangar: 1,598 SM = 17,201 SF; Aircraft Maintenance Unit: 1,412 SM = 15,199 SF; Aircraft Shelter Facility: 3,003 SM = 32,324 SF; Alert Vehicle Parking Facility: 361 SM = 3,886 SF; Aircraft Simulator Facility: 511 SM = 5,500 SF</p> <p>JOINT USE CERTIFICATION: Mission requirements, operational considerations, and location are incompatible with use by other components.</p>				

1. COMPONENT AIR FORCE	FY 2020 MILITARY CONSTRUCTION PROJECT DATA (computer generated)			2. DATE March 19																										
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<p>12. SUPPLEMENTAL DATA:</p> <p>a. Estimated Design Data:</p> <p>(1) Status:</p> <table border="0"> <tr> <td>(a) Date Design Started</td> <td>01-JUN-17</td> </tr> <tr> <td>(b) Parametric Cost Estimates used to develop costs</td> <td>YES</td> </tr> <tr> <td>* (c) Percent Complete as of 01 JAN 2018</td> <td>15%</td> </tr> <tr> <td>* (d) Date 35% Designed</td> <td>01-MAR-18</td> </tr> <tr> <td>(e) Date Design Complete</td> <td>01-SEP-18</td> </tr> <tr> <td>(f) Energy Study/Life-Cycle analysis was/will be performed</td> <td>YES</td> </tr> </table> <p>(2) Basis:</p> <table border="0"> <tr> <td>(a) Standard or Definitive Design -</td> <td>NO</td> </tr> <tr> <td>(b) Where Design Was Most Recently Used -</td> <td></td> </tr> </table> <p>(3) Total Cost (c) = (a) + (b) or (d) + (e): (\$000)</p> <table border="0"> <tr> <td>(a) Production of Plans and Specifications</td> <td>3,540</td> </tr> <tr> <td>(b) All Other Design Costs</td> <td>1,770</td> </tr> <tr> <td>(c) Total</td> <td>5,310</td> </tr> <tr> <td>(d) Contract</td> <td>4,425</td> </tr> <tr> <td>(e) In-house</td> <td>885</td> </tr> </table> <p>(4) Construction Contract Award 19 FEB</p> <p>(5) Construction Start 19 MAR</p> <p>(6) Construction Completion 21 MAR</p> <p>* Indicates completion of Project Definition with Parametric Cost Estimate which is comparable to traditional 35% design to ensure valid scope, cost and executability.</p> <p>N/A</p>					(a) Date Design Started	01-JUN-17	(b) Parametric Cost Estimates used to develop costs	YES	* (c) Percent Complete as of 01 JAN 2018	15%	* (d) Date 35% Designed	01-MAR-18	(e) Date Design Complete	01-SEP-18	(f) Energy Study/Life-Cycle analysis was/will be performed	YES	(a) Standard or Definitive Design -	NO	(b) Where Design Was Most Recently Used -		(a) Production of Plans and Specifications	3,540	(b) All Other Design Costs	1,770	(c) Total	5,310	(d) Contract	4,425	(e) In-house	885
(a) Date Design Started	01-JUN-17																													
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3. INSTALLATION AND LOCATION MINOT AIR FORCE BASE MINOT AFB SITE # 1 NORTH DAKOTA			4. PROJECT TITLE CONSOLIDATED HELO/TRFOPS/AMU AND ALERT FACILITY	
5. PROGRAM ELEMENT 12110F	6. CATEGORY CODE 141-753	7. PROJECT NUMBER 2837/QJVF153001	8. PROJECT COST (\$000) Auth: 5,500 Appr: 5,500	
b. Equipment associated with this project provided from other appropriations:				
FY (\$M)	Authorization Requested	Appropriation Requested	Authorization of Appropriations	Appropriation
2019	66	66	66	66
2020	5.5	5.5	0	0

1. COMPONENT AIR FORCE		FY 2020 PROJECT DATA		2. DATE March 2019	
3. INSTALLATION AND LOCATION WRIGHT-PATTERSON AIR FORCE BASE, OHIO			4. PROJECT TITLE ADAL INTELLIGENCE PRODUCTION FACILITY		
5. PROGRAM ELEMENT 91211F		6. CATEGORY CODE 114-456	7. RPSUID/PROJECT NUMBER 3530/ZHTV093301		8. PROJECT COST (\$000) Auth: 0 Approp: 120,900

9. COST ESTIMATE

ITEM	UOM	QTY	UNIT COST (\$)	COST (\$000)
ADD/ALTER INTELLIGENCE PRODUCTION COMPLEX				135,424
ADD INTELLIGENCE PRODUCTION COMPLEX 141-456	SM	23,781	5,500	130,796
ALTER INTEL PRODUCTION COMPLEX F10822/10828/10853	SM	650	560	364
GOLF COURSE HOLES - RELOCATION	LS	1	1,700,000	1,700
SUSTAINABLE ENERGY MEASURES	LS	1	2,564,000	2,564
SUPPORTING FACILITIES				28,463
UTILITIES	LS	1	7,147,000	7,147
PAVEMENTS	LS	1	8,147,000	8,147
SITE IMPROVEMENTS	LS	1	4,656,000	4,656
3 CHILLERS, 500 TEA & ELEC SUPPORT	LS	1	2,550,000	2,550
1 E-GENERATOR, 2,500KW, FUEL TANK & ELEC SUPPORT	LS	1	2,040,000	2,040
COMMUNICATIONS SUPPORT	LS	1	2,616,000	2,616
PASSIVE FORCE PROTECTION MEASURES	LS	1	1,307,000	1,307
SUBTOTAL				163,887
CONTINGENCY (5.0%)				8,194
TOTAL CONTRACT COST				172,081
SUPERVISION, INSPECTION, & OVERHEAD (5.7%)				9,809
TOTAL REQUEST				181,889
TOTAL REQUEST (ROUNDED)				182,000
EQUIPMENT FROM OTHER APPROPRIATIONS (NON-ADD)				24,992

10. DESCRIPTION OF PROPOSED CONSTRUCTION: Add a controlled/secured multi-floor facility to intelligence production facilities 10822, 10828 and 10853; structural frame, metal panel & pre-cast exterior walls; includes computer room with raised floor, intelligence production, freight and personnel elevators, and communications computer equipment; 2,500 KW emergency generator; and atrium. Alter facilities 10822, 10828 and 10853 to ensure code compliant facility connection to the new addition; mitigate multiple Fire Safety Deficiency (FSD) 1's by eliminating 3 dead-end corridors, 4 exit door bottlenecks, and provide required egress. Relocate San Antonio Avenue and affected existing utilities to accommodate new facility footprint. Construct in kind all golf course facilities displaced by proposed construction in support of IPC and in accordance with the WPAFB NASIC Area Development Plan (ADP). The displaced golf course holes will be consistent with the Air Force Golf Course Standards and Facilities Guide and comply with AFI 32-1022, Planning and Programming Non-Appropriated Fund Facility Construction Projects. Facilities will be designed as permanent construction in accordance with the DoD Unified Facilities Criteria (UFC) 1-200-01, General Building Requirements and UFC 1-200-02, High Performance and Sustainable Building Requirements. This project will comply with DoD antiterrorism/force protection requirements per UFC 4-010-01. Air Conditioning: 914 Tons

1. COMPONENT AIR FORCE	FY 2020 PROJECT DATA			2. DATE March 19
3. INSTALLATION AND LOCATION WRIGHT-PATTERSON AIR FORCE BASE, OHIO		4. PROJECT TITLE ADAL INTELLIGENCE PRODUCTION FACILITY		
5. PROGRAM ELEMENT 91211	6. CATEGORY CODE 114-456	7. RPSUID/PROJECT NUMBER 3530/ZHTV093301	8. PROJECT COST (\$000) Approp: 120,900	
11. REQUIREMENT: 82,257 SM Adequate: 39,172 SM Substandard: 42,961 SM				
PROJECT: ADAL intelligence Production Facility (Current Mission)				
<p>REQUIREMENT: A highly classified and secured contiguous area to enable Director for National Intelligence (DNI) and Air Force directed/endorsed mission at the National Air and Space Intelligence Center (NASIC) in areas of the highest national security. Workspaces will house intelligence analysis and production for new and expanded all-source means enabling near-real-time capabilities and missions unique to the NASIC site. Facility will support the intelligence needs of the Defense Intelligence Enterprise and the Department of the Air Force as well as other warfighting, policymaking and acquisition customers, through analysis or application. NASIC is responsible for conducting in-depth all-source analysis on foreign, air, space, cyberspace and ballistic missile forces as well as processing exploitation and dissemination, of Signals Intelligence, Measurements and Singles Intelligence and advanced Geospatial Intelligence. Analysis and production areas will be equipped with multiple secure computer and communications networks. Expand classified computer operations to receive, process and disseminate, growing petabytes of data provided by improved communications and critical to 24x7x365 mission operations and real-time reach-back capability by warfighting, policymaker, Intelligence Community, and acquisition users. Improve quality of life by relieving overcrowding, shift-work and hot-desking caused by multiple bed-downs of critical missions. Upgrade standby generator power to complete coverage of the NASIC complex and all critical, time-sensitive capabilities currently vulnerable to the loss of commercial power. Mechanical systems supporting this facility will be compatible with centralized utility distribution to be determined by the NASIC Customer Concept Document. Relocate San Antonio Avenue and golf course facilities to accommodate new facility footprint.</p>				
<p>CURRENT SITUATION: NASIC does not have the physical space to accommodate current analysts and information technology requirements to accomplish its expanded national security mission. Workspaces have been compressed to less than 65% of the authorized space and shift-work has been implemented to offset the space shortage. Where practical, some missions have been displaced into disconnected F/10280. Shift-work impedes all-source collaboration and overloading work areas require elimination of critical analytical tools and reference material to make room for personnel. NASIC as a whole is 130% over capacity, with significant areas up to 150% over capacity. Providing contiguous areas for new requirements is increasingly difficult and missions are scattered into multiple locations impairing timeliness, effectiveness and productivity. Information Technology growth has outpaced projections. The NASIC is the sole Air Force production center for all source intelligence, and has unique missions assigned by the DoD and the DNI to assess foreign air, space, cyberspace and ballistic missile capabilities that pose a threat to the nation, and to support the global engagement of combat commanders. Per Air Force Manual 32-1084 "Facility Requirements", 255,884 SF is the requirement to alleviate the current situation. Additionally, facilities 10822 and 10853 have ten FSD-1's for dead end corridors, exit door bottlenecks, and egress issues.</p>				

1. COMPONENT AIR FORCE	FY 2020 PROJECT DATA		2. DATE March 19
3. INSTALLATION AND LOCATION WRIGHT-PATTERSON AIR FORCE BASE, OHIO		4. PROJECT TITLE ADAL INTELLIGENCE PRODUCTION FACILITY	
5. PROGRAM ELEMENT 91211	6. CATEGORY CODE 114-456	7. RPSUID/PROJECT NUMBER 3530/ZHTV093301	8. PROJECT COST (\$000) Approp: 120,900

IMPACT IF NOT PROVIDED: NASIC will not be able to process critical data provided by expanded communications capabilities, in-turn degrading timely support critical to threats, intelligence shortfalls, and near real-time support for global engagement by combatant commanders. Disjointed operations will continue to inhibit the collaborative and federal intelligence production vision of the Air Force, DIA and DNI. Deficiencies degrade the ability to adapt to new world realities and significantly diminish mission capability required by DNI and Air Force. Current workarounds will be expanded in scope and new workarounds will be implemented to house known personnel and mission critical IT growth. Mission degradation and loss will increase as more complex, more costly offsets are employed. Expanding into multiple sites creates major security risks and requires sizeable overhead to manage dislocated secure facilities and transmit or courier classified between sites. In addition, at risk are robust first-of-a-kind products evolving from unique all source discoveries that provide decisive new capabilities for combatant commanders (reducing undue risk to operational forces) and other clients relying on unique NASIC products for critical combat decisions.

ADDITIONAL: All known alternative options were considered during the development of this project. No other option will meet the mission requirement. There is only one option that will meet this requirement but an economic analysis is underway. This project represents an initiative to meet a mission deficiency of 255,884 SF as allotted via criteria/scope specified in Air Force Manual 32-1084 "Facility Requirements". Sustainable principles will be integrated into the design, development, and construction of the project in accordance with Executive Order 13423 and other applicable laws and Executive orders. Future O&M or MCP projects (yet to be programmed) and MCP ZHTV063302 will address the remaining deficient scope as identified on the Detailed Deficiency Data (D3) Sheet. Mechanical systems supporting this facility will be compatible with centralized utility distribution. Wright-Patterson AFB Base Civil Engineer is Mr. David A. Perkins, Director, 88 Civil Engineer Group, (937)257-6214. This project adds 23,781SM = 255,884SF, alters 325 SM = 3,497 SF.

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

1. COMPONENT AIR FORCE		FY 2020 PROJECT DATA		2. DATE March 19	
3. INSTALLATION AND LOCATION WRIGHT-PATTERSON AIR FORCE BASE, OHIO			4. PROJECT TITLE ADAL INTELLIGENCE PRODUCTION FACILITY		
5. PROGRAM ELEMENT 91211		6. CATEGORY CODE 114-456	7. RPSUID/PROJECT NUMBER 3530/ZHTV093301		8. PROJECT COST (\$000) Approp: 120,900

12. SUPPLEMENTAL DATA:

a. Estimated Execution Data:

- (1) Acquisition Strategy DBB
- (2) Design Data
 - (a) Design of Request for Proposal (RFP) started: Jun 2018
 - (b) Percent of Design Completed as of Jan 2019 5%
 - (c) Design or RFP Complete: Nov 2019
 - (d) Total Design Cost (\$000): \$11,000
 - (e) Energy Study and/or Life Cycle Analysis Performed: No
 - (f) Standard of Definitive Design Used? No
- (3) Construction Data:
 - (a) Construction Award (Golf-Road Sitework/IPF): Dec 2018/Jun 2020
 - (b) Construction Start (Golf-Road Sitework/IPF): Mar 2019/Jun 2020
 - (c) Construction Complete (Golf-Road Sitework/IPF): Sep 2020/Nov 2022
- (4) NASIC IPC III MILCON – DD1391 Authorization & Appropriation Matrix

FY	Authorization (\$M)		Appropriation (\$M)	
	Requested	Authorized	Requested	Appropriated
FY19	116.1	182	116.1	61
FY20	N/A	N/A	120.9	

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

EQUIPMENT NOMENCLATURE	PROCURING APPRO	FISCAL YEAR APPROPRIATED OR REQUESTED	COST (\$000)
CCTV SYSTEM	3400	2019	82
SITE SECURITY MANPOWER	3400	2019	1,220
AUDIO VISUAL	3400	2022	2,500
PREWIRED WORKSTA & FURNISH	3400	2022	4,100
SITE SECURITY MANPOWER	3400	2020	1,220
UPS & SECURE FACIL SYS EQPT	3080	2022	1,600
COMPUTERS & PRINTERS	3400	2022	2,500
IT INFRASTRUCTURE	3080	2022	1,500
PHONES TS & UNCLASS - VOIP	3400	2022	800
SITE SECURITY MANPOWER	3400	2021	1,220
LABORATORY SYS EQPT	3400	2022	750
LABORATORY SYS EQPT	3080	2022	750
SECURE FAC SYSTEMS	3400	2022	150
SECURE FAC SYSTEMS	3080	2022	1,200
SCIF ESCORTING	3400	2019-22	5,400

1. COMPONENT AIR FORCE		FY 2020 MILITARY CONSTRUCTION PROGRAM						2. DATE (YYYYMMDD) March 19			
3. INSTALLATION AND LOCATION JOINT BASE SAN ANTONIO TEXAS				4. COMMAND AIR EDUCATION AND TRAINING COMMAND			5. AREA CONSTRUCTION COST INDEX 0.87				
6. PERSONNEL		(1) PERMANENT			(2) STUDENTS			(3) SUPPORTED			TOTAL
		OFFICER	ENLISTED	CIVILIAN	OFFICER	ENLISTED	CIVILIAN	OFFICER	ENLISTED	CIVILIAN	
a. AS OF	30-Sep-18	691	3330	2480	555	1356	25	1634	7557	5708	23,336
b. END FY	2024	685	3362	2460	555	1356	25	1672	7179	6630	23,924
7. INVENTORY DATA (\$000)											
a. TOTAL ACREAGE											6,835
b. INVENTORY TOTAL AS OF 30-Sep-18											14,223,462
c. AUTHORIZATION NOT YET IN INVENTORY											157,024
d. AUTHORIZATION REQUESTED IN THIS PROGRAM (FY 2020)											207,300
e. PLANNED IN NEXT FOUR PROGRAM YEARS (FY 2021-2024)											85,100
f. REMAINING DEFICIENCY											190,900
g. GRAND TOTAL											14,863,786
8. PROJECTS REQUESTED IN THIS PROGRAM (FY 2020)											
a. CATEGORY				b. COST (\$000)				c. DESIGN STATUS			
(1) CODE	(2) PROJECT TITLE			(3) SCOPE				(1) START	(2) COMPLETE		
171-157	AQUATICS TANK			7,086 SM			69,000	07/18	09/19		
721-311	Basic Military Training (BMT) RECRUIT DORMITORY 8			19,637 SM			110,000	03/18	09/19		
171-212	T-X ADAL GROUND BASED TRNG SYS (GBTS) SIM			1,621 SM			9,300	05/18	09/19		
171-625	T-X MX TRNG SYS CENTRALIZED TRNG FAC			2,787 SM			19,000	05/18	09/19		
TOTAL							207,300				
9. FUTURE PROJECTS IN NEXT FOUR PROGRAM YEARS (FY 2021-2024)											
730-773 BMT Chapel for America's Airmen				8,768 SM				30,000			
141-456 91 COS Operations Center				2,140 SM				26,100			
610-282 Replace Wing B of AFPC Facility 499				6,026 SM				29,000			
FUTURE PROJECTS TOTAL							85,100				
R&M UNFUNDED REQUIREMENT (\$M)							TOTAL	11.6			
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 Coast Guard, and 15 US Governmental Organization Mission Partners, that accomplish diverse training, flying, cyber, intelligence, medical, and installations missions every day.											
11. OUTSTANDING POLLUTION AND SAFETY DEFICIENCIES (FY 2020-2024)											
a. Air Pollution											0
b. Water Pollution											0
c. Occupational Safety and Health											0
d. Other Environmental											0
OUTSTANDING DEFICIENCIES TOTAL											0

1. COMPONENT AIR FORCE	FY 2020 MILITARY CONSTRUCTION PROJECT DATA (computer generated)			2. DATE March 19	
3. INSTALLATION, SITE AND LOCATION JOINT BASE SAN ANTONIO - LACKLAND LACKLAND AIR FORCE BASE SITE # 1 TEXAS			4. PROJECT TITLE AQUATICS TANK		
5. PROGRAM ELEMENT 91211F	6. CATEGORY CODE 171-157	7. RPSUID/PROJECT NUMBER 2461/MPYJ043895A	8. PROJECT COST (\$000) 69,000		
9. COST ESTIMATES					
ITEM		U/M	QUANTITY	UNIT	COST (\$000)
PRIMARY FACILITIES					56,210
AQUATIC SURVIVAL TRAINING FACILITY		SM	7,086	7,591	(53,789)
SUSTAINABILITY AND ENERGY MEASURES		LS			(1,076)
CYBERSECURITY OF FACILITY-RELATED CONTROL SYS		LS			(1,345)
SUPPORTING FACILITIES					5,511
UTILITIES		LS			(178)
SITE IMPROVEMENTS		LS			(270)
PAVEMENTS		LS			(250)
COMMUNICATIONS SUPPORT		LS			(1,121)
SPECIAL FOUNDATIONS		LS			(3,500)
DEMOLITION		SM	436	440	(192)
SUBTOTAL					61,721
CONTINGENCY (5.0%)					3,086
TOTAL CONTRACT COST					64,807
SUPERVISION, INSPECTION AND OVERHEAD (5.7%)					3,694
TOTAL REQUEST					68,501
TOTAL REQUEST (ROUNDED)					69,000
EQUIPMENT FROM OTHER APPROPRIATIONS (NON-ADD)					(1,100.0)
10. Description of Proposed Construction: Construct an enclosed aquatic training facility that will support two 50 meter pools for battlefield airman training with supporting classrooms and infrastructure. This project includes all site development and utilities to support the facility, and demolishes Buildings 141 and 142 totaling 436 SM (4,690 SF). Facilities will be designed as permanent construction in accordance with the Unified Facilities Criteria (UFC) 1-200-01. Sustainable principles, to include Life Cycle cost-effective practices, will be integrated into the design, development and construction of the project in accordance with UFC 1-200-02. This project will comply with Department of Defense (DoD) Antiterrorism/force protection requirements per UFC 4-010-01.					
Air Conditioning: 105 Tons					
11. Requirement: 7086 SM Adequate: 0 SM Substandard: 1752 SM					
PROJECT: Construct an enclosed aquatic survival training facility for Battlefield Airman Training.					
REQUIREMENT: The Department of Defense rebalanced the counterterrorism efforts with a renewed focus on Special Operations Forces. AETC supports the AF Special Operations Forces requirements through the production of Battlefield Airmen (BA). The current production rate is hindered by an unacceptably high attrition rate within the training pipeline, and a significant portion of this attrition is directly linked to a lack of adequate training facilities at the common-core					

1. COMPONENT AIR FORCE	FY 2020 MILITARY CONSTRUCTION PROJECT DATA (computer generated)			2. DATE March 19
3. INSTALLATION, SITE AND LOCATION JOINT BASE SAN ANTONIO - LACKLAND LACKLAND AIR FORCE BASE SITE # 1 TEXAS			4. PROJECT TITLE AQUATICS TANK	
5. PROGRAM ELEMENT 91211F	6. CATEGORY CODE 171-157	7. RPSUID/PROJECT NUMBER 2461/MPYJ043895A	8. PROJECT COST (\$000) 69,000	
<p>training location. An adequately sized and scoped aquatic survival training facility is required to provide adequate technical and physical training facilities for BA. The project represents the most urgently needed facility of those required to meet the BA Development Course facility requirements. The facility will be used to prepare Pararescue (PJ), Combat Control (CCT), Special Operation Weather (SOWT), Tactical Air Control Party (TACP), Combat Rescue Officer (CRO), Special Tactics Officer (STO), and Air Liaison Officer (ALO) for their follow-on training requirements. These facilities will support production of over 3,000 trainees per year.</p> <p>CURRENT SITUATION: The existing aquatics facilities are substandard and completely inadequate to prepare BA trainees with the advanced skills necessary to survive in a wartime environment. The assigned training pool is an old recreational pool that was closed in 2012 due to cracking and leakage so severe that the pool could no longer hold water for any significant length of time. Additionally, the pool is considerably undersized, lacks special features needed for water survival skills training, and has far exceeded its expected life span. As a result, the BA trainees must be bussed across the installation to a public shared use recreational pool for their critical training. This pool is not adequately sized to handle the course throughput required to meet the demand for AF special operations personnel and lacks specialized features needed to provide a realistic simulation of wartime scenarios and results in lower trainee performance throughout their follow-on training courses. Co-usage of the pool requires tedious scheduling arrangements and workarounds. Specialized training equipment, procedures, available training man-hours and base population frequently encroach on each other, reducing the quality of training and quality of life for both trainees and the base population.</p> <p>IMPACT IF NOT PROVIDED: The lack of adequately sized and configured aquatic training facilities adversely impacts the combat preparedness of the 350th, 352nd and 354th TRS graduates who provide the manning for the hard to fill PJ/CCT/SOWT/TACP AFSCs and are among the first to deploy in every contingency and combat operation. The training for these mission-critical Airmen is essential to on-going combat operations around the globe. Failure to provide adequate BA training facilities will have an adverse impact on the quantity and quality of production and constrain the Air Force's ability to conduct special operations on the ground in hostile, uncertain, and permissive environments under severe and austere conditions.</p> <p>ADDITIONAL: This is an AF unique facility and current policy and guidance in Air Force Manual (AFMAN) 32-1084 does not provide clear size requirements for such a facility. The size requirement in this DD1391 was developed with an A&E firm to define the facility requirements based on the training process and procedures for Battlefield Airmen. The aquatics training facility is a requirement of the 350th training squadron (initial tech training), the 352nd training squadron (CCT-SOWT-STO) and the 354rd training squadron (TACP). The training manuals and AFIs referenced in determining facility requirements for all three training squadrons are: CFETP 1C2X1, AFPD10-35, AFII16-1202 volume 2, para 5.2.4.40-42 and Attachment 3, CFETP1C4X1 and CFETP1T2XX. An economic analysis of reasonable options for accomplishing this project (status quo, renovations, and new construction) was accomplished. It indicates there is only</p>				

1. COMPONENT AIR FORCE	FY 2020 MILITARY CONSTRUCTION PROJECT DATA (computer generated)			2. DATE March 19
3. INSTALLATION, SITE AND LOCATION JOINT BASE SAN ANTONIO - LACKLAND LACKLAND AIR FORCE BASE SITE # 1 TEXAS			4. PROJECT TITLE AQUATICS TANK	
5. PROGRAM ELEMENT 91211F	6. CATEGORY CODE 171-157	7. RPSUID/PROJECT NUMBER 2461/MPYJ043895A	8. PROJECT COST (\$000) 69,000	
<p>one option that will meet operational requirements; new construction. This project does not fall within or partly within the 100-year flood plain. This project was not included in the Fiscal Year 2019 future-years defense plan. 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). Base Civil Engineer: (210) 671-2977 Demo: 436 SM = 4,709 SF Battlefield Airman Aquatics Training Facility: 7,086 SM = 76,272 SF</p> <p>JOINT USE CERTIFICATION: This facility can be used by other components on an "as available" basis; however, the scope of the project is based on Air Force requirements.</p>				

1. COMPONENT AIR FORCE	FY 2020 MILITARY CONSTRUCTION PROJECT DATA (computer generated)		2. DATE March 19
3. INSTALLATION AND LOCATION JOINT BASE SAN ANTONIO - LACKLAND LACKLAND AIR FORCE BASE SITE # 1 TEXAS		4. PROJECT TITLE AQUATICS TANK	
5. PROGRAM ELEMENT 91211F	6. CATEGORY CODE 171-157	7. PROJECT NUMBER 2461/MPYJ043895A	8. PROJECT COST (\$000) 69,000
12. SUPPLEMENTAL DATA:			
a. Estimated Design Data:			
(1) Status:			
(a) Date Design Started			31-JUL-18
(b) 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			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			4,140
(b) All Other Design Costs			2,070
(c) Total			6,210
(d) Contract			5,175
(e) In-house			1,035
(4) Construction Contract Award			20 FEB
(5) Construction Start			20 JUN
(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)
TRAINING EQUIPMENT	3400	2022	250
Furniture, Fixtures, & Equipment	3400	2022	200
UNDERWATER VIEWING CAMERAS	3080	2022	650

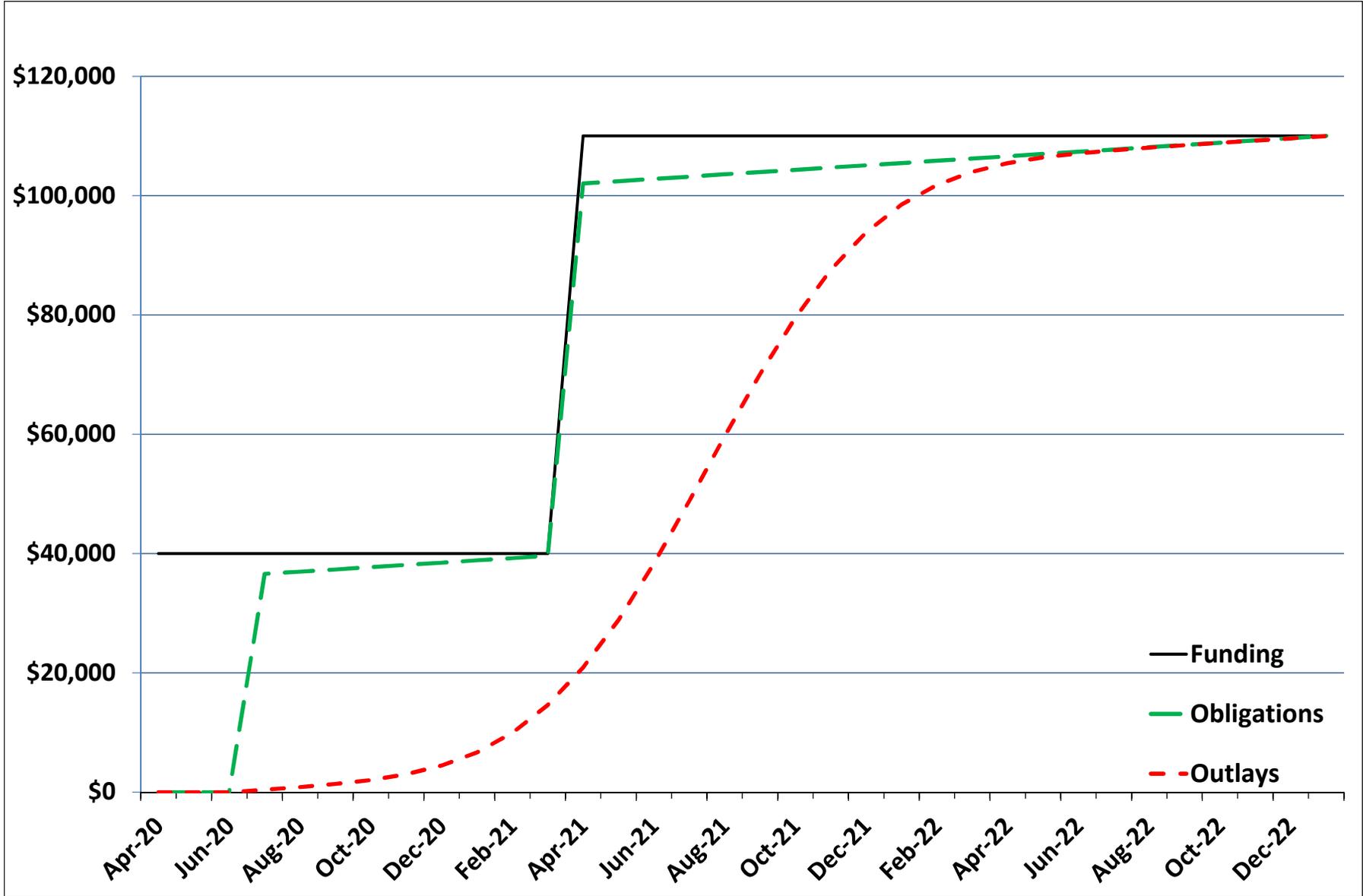
1. COMPONENT AIR FORCE	FY 2020 MILITARY CONSTRUCTION PROJECT DATA (computer generated)			2. DATE March 19	
3. INSTALLATION, SITE AND LOCATION JOINT BASE SAN ANTONIO - LACKLAND LACKLAND AIR FORCE BASE SITE # 1 TEXAS			4. PROJECT TITLE BMT RECRUIT DORMITORY 8		
5. PROGRAM ELEMENT 91211F	6. CATEGORY CODE 721-311	7. RPSUID/PROJECT NUMBER 2461/MPLS083737R8	8. PROJECT COST (\$000) 110,000		
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.					

1. COMPONENT AIR FORCE	FY 2020 MILITARY CONSTRUCTION PROJECT DATA (computer generated)			2. DATE March 19
3. INSTALLATION, SITE AND LOCATION JOINT BASE SAN ANTONIO - LACKLAND LACKLAND AIR FORCE BASE SITE # 1 TEXAS			4. PROJECT TITLE BMT RECRUIT DORMITORY 8	
5. PROGRAM ELEMENT 91211F	6. CATEGORY CODE 721-311	7. RPSUID/PROJECT NUMBER 2461/MPLS083737R8	8. PROJECT COST (\$000) 110,000	
<p>Sustainable principles, to include Life Cycle cost-effective practices, will be integrated into the design, development and construction of the project in accordance with UFC 1-200-02. This project will comply with Department of Defense (DoD) Antiterrorism/Force Protection requirements per UFC 4-010-01.</p> <p>Air Conditioning: 450 Tons</p>				
<p>11. Requirement: 219884 SF Adequate: 118629 SF Substandard: 135023 SF</p> <p>PROJECT: Construct BMT Recruit Dormitory 8</p> <p>REQUIREMENT: A major Air Force objective is to provide recruits with facilities conducive to their proper housing, dining, and training. Properly sized, sited, designed, and furnished facilities are essential to successfully train future Air Force enlisted personnel. To support current accession rates, a total of 8 Recruit Housing & Training (RH&T) facilities are required to accomplish the Basic Military Training (BMT) mission at Lackland AFB. This ATC facility will house a Basic Military Training Squadron and a Training Support Squadron (TRSS) including dormitory and administrative space. This project is designed to accommodate 1248 recruits; 48 recruits per flight, 24 flights per squadron with 4 reserve bed spaces per flight in order to address surges, gender separation and injured recruits.</p> <p>CURRENT SITUATION: RH&T facilities, the BMT program, and Lackland AFB form an initial, but lasting impression of the Air Force to all new recruits. Existing 220,000 SF RH&T facilities, originally constructed in the 1960's and 1970's, were designed to provide housing, dining, classrooms, and other training space in one facility in order to develop teamwork, discipline, and esprit de corps among the recruits. These facilities are outdated and inadequate to support current and planned accessions of Air Force Active Duty, Reserve, and Air National Guard personnel considering future force structure and strength. Due to deterioration, age, and exceeding their useful life, the RH&Ts require significant O&M capital to keep them operational -- an estimated annual average of \$2.1M per RH&T for the next 28 years according to the facility assessment study and detailed Economic Analysis.</p> <p>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.</p> <p>IMPACT IF NOT PROVIDED: One of Lackland Air Force Base's primary missions is to educate and train every Basic Military Training (BMT) enlisted recruit when entering military service in the U.S. Air Force. Without quality BMT programs and state-of-the-art, master-planned facilities, the Air Force will have difficulty recruiting, training, and retaining new recruits. BMT schedules will continue to be stretched to critical levels that risk mission loss. Facilities will continue to</p>				

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3. INSTALLATION, SITE AND LOCATION JOINT BASE SAN ANTONIO - LACKLAND LACKLAND AIR FORCE BASE SITE # 1 TEXAS			4. PROJECT TITLE BMT RECRUIT DORMITORY 8	
5. PROGRAM ELEMENT 91211F	6. CATEGORY CODE 721-311	7. RPSUID/PROJECT NUMBER 2461/MPLS083737R8	8. PROJECT COST (\$000) 110,000	
<p>age and will require increasingly more capital to keep them operational. During surge periods, or when existing RH&Ts are being repaired, maintained, or overhauled, flight sizes will increase and recruits will continue to live in space with less than the minimum standard square footage per recruit. Significant capital must be spent to convert the existing RH&T facilities to current Anti-Terrorism/Force Protection (AT/FP) criteria.</p> <p>ADDITIONAL: This project meets the criteria/scope specified in Air Force Manual 32-1084, "Facility Requirements." This design shall conform to criteria established in the Air Force Corporate Facilities Standards (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.</p> <p>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</p> <p>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</p> <p>JOINT USE CERTIFICATION: This facility can be used by other components on an "as available" basis; however, the scope of the project is based on Air Force requirements.</p>				

1. COMPONENT AIR FORCE	FY 2020 MILITARY CONSTRUCTION PROJECT DATA (computer generated)		2. DATE March 19
3. INSTALLATION AND LOCATION JOINT BASE SAN ANTONIO - LACKLAND LACKLAND AIR FORCE BASE SITE # 1 TEXAS		4. PROJECT TITLE BMT RECRUIT DORMITORY 8	
5. PROGRAM ELEMENT 91211F	6. CATEGORY CODE 721-311	7. PROJECT NUMBER 2461/MPLS083737R8	8. PROJECT COST (\$000) 110,000
12. SUPPLEMENTAL DATA:			
a. Estimated Design Data:			
(1) Status:			
(a) Date Design Started			01-MAR-18
(b) 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			20 FEB
(5) Construction Start			20 JUN
(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 APPROPRIATION	FISCAL YEAR APPROPRIATED OR REQUESTED	COST (\$000)
WALL LOCKERS AND FURNISHINGS	3400	2023	2,560
AUTOMATED DATA PROCESSING	3080	2023	190

BMT Recruit Dormitory 8, JBSA-Lackland



Project: BMT Recruit Dormitory 8

Project Spending Plan

As of: 20-Aug-18

All Cost in thousands (\$000)

Chart Begin/End	FUNDING (note 1)		OBLIGATION (note 2)		OUTLAYS (note 3)	
Month	Enacted	Cumulative	Obligated	Cumulative	Monthly	Cumulative
Apr-20	40,000	40,000	-	-	-	-
May-20	-	40,000	-	-	-	-
Jun-20	-	40,000	-	-	-	-
Jul-20	-	40,000	36,586.26	36,586.26	25.40	404.63
Aug-20	-	40,000	379.26	36,965.52	61.80	845.72
Sep-20	-	40,000	379.26	37,344.77	140.30	1,365.29
Oct-20	-	40,000	379.26	37,724.03	296.50	2,041.10
Nov-20	-	40,000	379.26	38,103.29	583.60	3,003.97
Dec-20	-	40,000	379.26	38,482.55	1,069.50	4,452.76
Jan-21	-	40,000	379.26	38,861.81	1,825.20	6,657.25
Feb-21	-	40,000	379.26	39,241.06	2,900.60	9,937.15
Mar-21	-	40,000	379.26	39,620.32	4,292.60	14,608.98
Apr-21	70,000	110,000	62,415.26	102,035.58	5,915.50	20,903.75
May-21	-	110,000	379.26	102,414.84	7,591.30	28,874.33
Jun-21	-	110,000	379.26	102,794.10	9,071.80	38,325.35
Jul-21	-	110,000	379.26	103,173.35	10,095.20	48,799.86
Aug-21	-	110,000	379.26	103,552.61	10,461.40	59,640.56
Sep-21	-	110,000	379.26	103,931.87	10,095.20	70,115.06
Oct-21	-	110,000	379.26	104,311.13	9,071.80	79,566.09
Nov-21	-	110,000	379.26	104,690.39	7,591.30	87,536.67
Dec-21	-	110,000	379.26	105,069.65	5,915.50	93,831.44
Jan-22	-	110,000	379.26	105,448.90	4,292.60	98,503.27
Feb-22	-	110,000	379.26	105,828.16	2,900.60	101,783.16
Mar-22	-	110,000	379.26	106,207.42	1,825.20	103,987.66
Apr-22	-	110,000	379.26	106,586.68	1,069.50	105,436.45
May-22	-	110,000	379.26	106,965.94	583.60	106,399.31
Jun-22	-	110,000	379.26	107,345.19	296.50	107,075.12
Jul-22	-	110,000	379.26	107,724.45	140.30	107,594.70
Aug-22	-	110,000	379.26	108,103.71	61.80	108,035.79
Sep-22	-	110,000	379.26	108,482.97	25.40	108,440.42
Oct-22	-	110,000	379.26	108,862.23	9.70	108,829.37
Nov-22	-	110,000	379.26	109,241.48	3.40	109,212.08
Dec-22	-	110,000	379.26	109,620.74	1.10	109,592.48

Note 1: Assumes initial appropriation is enacted by Congress January of the program year. The appropriation of follow-on increment anticipated February FY20.

Note 2: Assumes funds are available to the contracting officer for the initial obligation no earlier than April of the program year to accommodate the funding process. The obligations of follow-on obligations anticipated February 2020.

Note 3: Assumes contract award date of Jul 2020, Contract completion: Jan 2023, Duration 31 months

1. COMPONENT AIR FORCE	FY 2020 MILITARY CONSTRUCTION PROJECT DATA (computer generated)			2. DATE March 19	
3. INSTALLATION, SITE AND LOCATION JOINT BASE SAN ANTONIO - RANDOLPH RANDOLPH AIR FORCE BASE SITE # 1 TEXAS			4. PROJECT TITLE T-X ADAL GROUND BASED TRNG SYS (GBTS) SIM		
5. PROGRAM ELEMENT 84701F	6. CATEGORY CODE 171-212	7. RPSUID/PROJECT NUMBER 3209/TYMX170131	8. PROJECT COST (\$000) 9,300		
9. COST ESTIMATES					
ITEM		U/M	QUANTITY	UNIT	COST (\$000)
PRIMARY FACILITIES					7,053
SIMULATOR WING ADDITION		SM	1,621	4,110	(6,663)
SUSTAINABILITY & ENERGY MEASURES		LS			(141)
CYBERSECURITY OF FACILITY-RELATED CONTROL SYS		LS			(250)
SUPPORTING FACILITIES					1,370
UTILITIES		LS			(245)
SITE IMPROVEMENTS		LS			(156)
PAVEMENTS		LS			(555)
COMMUNICATIONS SUPPORT		LS			(200)
PRIVITIZED POWER SUPPORT		LS			(125)
SPECIAL FOUNDATION		LS			(90)
SUBTOTAL					8,424
CONTINGENCY (5.0%)					421
TOTAL CONTRACT COST					8,845
SUPERVISION, INSPECTION AND OVERHEAD (5.7%)					504
TOTAL REQUEST					9,349
TOTAL REQUEST (ROUNDED)					9,300
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: 80 Tons					
11. Requirement: 1621 SM Adequate: 0 SM Substandard: 1621 SM					
PROJECT: Ground Based Training System (GBTS) - Simulator					
REQUIREMENT: Facility requires four (4) bays for simulators. Space will also include administration, records, classrooms, brief/debrief rooms, classified server room, and storage space for T-X pilot flight simulator training. Area communications network will need to be upgraded to support new flight simulator and					

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3. INSTALLATION, SITE AND LOCATION JOINT BASE SAN ANTONIO - RANDOLPH RANDOLPH AIR FORCE BASE SITE # 1 TEXAS			4. PROJECT TITLE T-X ADAL GROUND BASED TRNG SYS (GBTS) SIM	
5. PROGRAM ELEMENT 84701F	6. CATEGORY CODE 171-212	7. RPSUID/PROJECT NUMBER 3209/TYMX170131	8. PROJECT COST (\$000) 9,300	
<p>associated equipment.</p> <p>CURRENT SITUATION: Head Quarters Air Education 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 AETC bases, with the APT (T-X) system comprised of 350 total aircraft, and the associated Ground-Based Training System (GBTS). T-X and GBTS contract award is anticipated 4th Qtr FY 2018. JBSA-Randolph will see the first GBTS arrive 2nd Qtr FY2022 and T-X aircraft arrive 1st Qtr FY 2023 for Initial Operational Test and Evaluation (IOT&E). Aircraft arrival date drives the need/requirement for the GBTS facility to begin training as early as 2nd Qtr FY 2022. An estimated 18 month construction window, followed by installation and certification, places construction starting in April 2020, and as early as possible in FY20.</p> <p>IMPACT IF NOT PROVIDED: This project provides critical real-world mission rehearsal and training for T-X 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 war fighter.</p> <p>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 (AFCFS) and the Installation Facility Standards (IFS) 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 reasonable alternatives was accomplished comparing status quo, renovation, and new construction. This analysis indicated new construction is the most cost effective means to meet mission requirements. 502d Joint Base Civil Engineer: 210-671-2977. Facility: 1,621 SM to 17,442 SF.</p> <p>JOINT USE CERTIFICATION: This facility can be used by other components on an "as available" basis; however, the scope of the project is based on Air Force requirements.</p>				

1. COMPONENT AIR FORCE	FY 2020 MILITARY CONSTRUCTION PROJECT DATA (computer generated)		2. DATE March 19
3. INSTALLATION AND LOCATION JOINT BASE SAN ANTONIO - RANDOLPH RANDOLPH AIR FORCE BASE SITE # 1 TEXAS		4. PROJECT TITLE T-X ADAL GROUND BASED TRNG SYS (GBTS) SIM	
5. PROGRAM ELEMENT 84701F	6. CATEGORY CODE 171-212	7. PROJECT NUMBER 3209/TYMX170131	8. PROJECT COST (\$000) 9,300
12. SUPPLEMENTAL DATA:			
a. Estimated Design Data:			
(1) Status:			
(a) Date Design Started			07-MAY-18
(b) 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			20 FEB
(5) Construction Start			20 JUN
(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)
Furniture, Fixtures, & Equipment	3400	21	250
Uninterruptible Power Supply (UPS)	3400	21	250
Flight Simulators	3010	20	15,000

1. COMPONENT AIR FORCE	FY 2020 MILITARY CONSTRUCTION PROJECT DATA (computer generated)			2. DATE March 19	
3. INSTALLATION, SITE AND LOCATION JOINT BASE SAN ANTONIO - RANDOLPH RANDOLPH AIR FORCE BASE SITE # 1 TEXAS			4. PROJECT TITLE T-X MX TRNG SYS CENTRALIZED TRNG FAC		
5. PROGRAM ELEMENT 84701F	6. CATEGORY CODE 171-625	7. RPSUID/PROJECT NUMBER 3209/TYMX170134	8. PROJECT COST (\$000) 19,000		
9. COST ESTIMATES					
ITEM		U/M	QUANTITY	UNIT	COST (\$000)
PRIMARY FACILITIES					11,408
HIGH-BAY TECH TNG		SM	2,787	3,925	(10,939)
CYBERSECURITY OF FACILITY-RELATED CONTROL SYS		LS			(250)
SUSTAINMENT & ENERGY MEASURES		LS			(219)
SUPPORTING FACILITIES					5,720
UTILITIES		LS			(676)
SITE IMPROVEMENTS		LS			(424)
PAVEMENTS		LS			(2,807)
COMMUNICATIONS SUPPORT		LS			(259)
PRIVATIZED POWER SUPPORT		LS			(150)
ACCESS ROAD		LS			(54)
RELOCATE SPORTS & RECREATION COMPLEX		LS			(1,350)
SUBTOTAL					17,128
CONTINGENCY (5.0%)					856
TOTAL CONTRACT COST					17,984
SUPERVISION, INSPECTION AND OVERHEAD (5.7%)					1,025
TOTAL REQUEST					19,009
TOTAL REQUEST (ROUNDED)					19,000
EQUIPMENT FROM OTHER APPROPRIATIONS (NON-ADD)					(3,500.0)
10. Description of Proposed Construction: Construct a high-bay aircraft maintenance training facility with administrative space, classroom space, tool crib, communications room and spaces to accommodate eight (8) trainers for the following: landing gear, fuel system, seat & canopy, avionics/cockpit, engine, hydraulics, Auxiliary Power Unit/Jet Fuel Starter (APU/JFS) and flight control. Work will include fire suppression system, steel-framed structure, concrete slab and foundation system, masonry block exterior walls, and standing seam metal roof and all associated support facilities to provide a complete and usable facilities. The project will demo/relocate the Force Support Squadron sports complex (softball field, tennis court and skateboard-park). The new facility will be designed as permanent construction in accordance with the Unified Facilities Criteria (UFC) 1-200-01. Sustainable principles, to include Life Cycle cost-effective practices, will be integrated into the design, development and construction of the project in accordance with UFC 1-200-02. This project will comply with Department of Defense (DoD) Antiterrorism/force protection requirements per UFC 4-010-01.					
Air Conditioning: 40 Tons					
11. Requirement: 2787 SM Adequate: SM Substandard: 2787 SM					
PROJECT: T-X Maintenance Training System (MTS) Centralized Training Facility (CFT)					
REQUIREMENT: Construct a new admin classroom and hi-bay lab facility with adiquate					

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3. INSTALLATION, SITE AND LOCATION JOINT BASE SAN ANTONIO - RANDOLPH RANDOLPH AIR FORCE BASE SITE # 1 TEXAS			4. PROJECT TITLE T-X MX TRNG SYS CENTRALIZED TRNG FAC	
5. PROGRAM ELEMENT 84701F	6. CATEGORY CODE 171-625	7. RPSUID/PROJECT NUMBER 3209/TYMX170134	8. PROJECT COST (\$000) 19,000	
<p>space for the MTS and CTF (2339 SM). T-X will utilize the two level maintenance (organizational and depot) concept for all aircraft (to include engines) and existing intermediate level maintenance may be utilized for supporting sub-systems (e.g., wheel and tire build, nondestructive inspection, fabrication). The facility will provide primary trade skills at a Craftsman proficiency level necessary for the MTS and Fleet Maintenance force:</p> <ul style="list-style-type: none"> -2A373 Crew Chiefs -2A374 Avionics -2A671 Propulsion -2A673 Egress -2A674 Fuels -2A676 Electrical and Environmental Systems <p>Head Quarters Air Education 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 a five existing AETC bases, with the APT (T-X) system comprised of 350 total aircraft, the associated Ground-Based Training System (GBTS), and Maintenance Training System (MTS). The CTF is required to facilitate training for APT (T-X) maintainers. Contract award for the aircraft and GBTS is anticipated 4th Qtr FY18. Demo/relocate a softball field, tennis court and skateboard park for Force Support Squadron that sits on current approved site.</p> <p><u>CURRENT SITUATION:</u> The T-38C replacement acquisition is being managed by Air Force Force Life Cycle Management Center(AFLCMC) Mobility Directorate (WL), Wright Patterson AFB, and is called the APT (T-X) Program. The T-38C is used in AETC's Specialized Undergraduate Pilot Training (SUPT) program which provides advanced training for student pilots selected for fighter and bomber assignments. Additionally, it is used for the Introduction to Fighter Fundamentals (IFF) course that provides cost efficient preparation for entry to the Fighter Formal Training Unit. MTS is a critical element of a single, integrated T-X system. MTS is a separate contracting action. MTS is codified in Capabilities Development Document (CDD), acquisition strategy document, and AETC/CC Operational Capability Memorandum. The MTS timeline is driven based on the set date for T-X IOC (FY24), and on the proposed SAF/IE basing order. Joint Base San Antonio-Randolph will see the first T-X aircraft arrive in 1st Qtr FY23 for Initial Operational Test and Evaluation (IOT&E). Aircraft arrival date drives the need/requirement for the MTS facility to begin MTS Type 1 training as early as 3rd Qtr FY22.</p> <p><u>IMPACT IF NOT PROVIDED:</u> Without this project the required T-X maintenance training facilities will not be available causing delays in the training pipeline. Workarounds do not allow the squadron to train together and significantly impact the training mission required to support the AF T-X Maintenance Training program. CY20-CY22 is a critical time in the beddown of the T-X enterprise wide because of training units standing up, all of which require maintenance training production to be at maximum available capacity.</p>				

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5. PROGRAM ELEMENT 84701F	6. CATEGORY CODE 171-625	7. RPSUID/PROJECT NUMBER 3209/TYMX170134	8. PROJECT COST (\$000) 19,000	
<p><u>ADDITIONAL:</u> This project meets the criteria/scope in Air Force Manual 32-1084 "Facility Requirements". This project does not fall within the 100-year flood plain. This design shall conform to the criteria established in the Air Force Corporate Facility Standards, but will not employ a standard facility design because there is no applicable standard design from Air Force Civil Engineer Center (AFCEC) for the T-X <u>airframe at</u> this time. The MTS will support training for government civilians, contractors and, when required, military maintenance personnel in a manner that will enable standardization and sustainability of maintenance training across the APT (T-X) aircraft fleet. Training will be provided for approximately 180 students per year for personnel in seven specialties from five Air Force bases. The CTF is required to support the CDD requirement to have maintainers trained 60 days prior to the arrival of the first aircraft, and to provide maintenance training to sustain the T-X aircraft throughout its life cycle. A full economic analysis of reasonable options comparing alternatives of status quo, renovation/reuse, addition/alteration, and new construction is complete and recommends new construction. 502d Joint Base Civil Engineer: 210-671-2977. Facility: 2,787 SM to 29,999 SF.</p> <p>JOINT USE CERTIFICATION: This facility can be used by other components on an "as available" basis; however, the scope of the project is based on Air Force requirements.</p>				

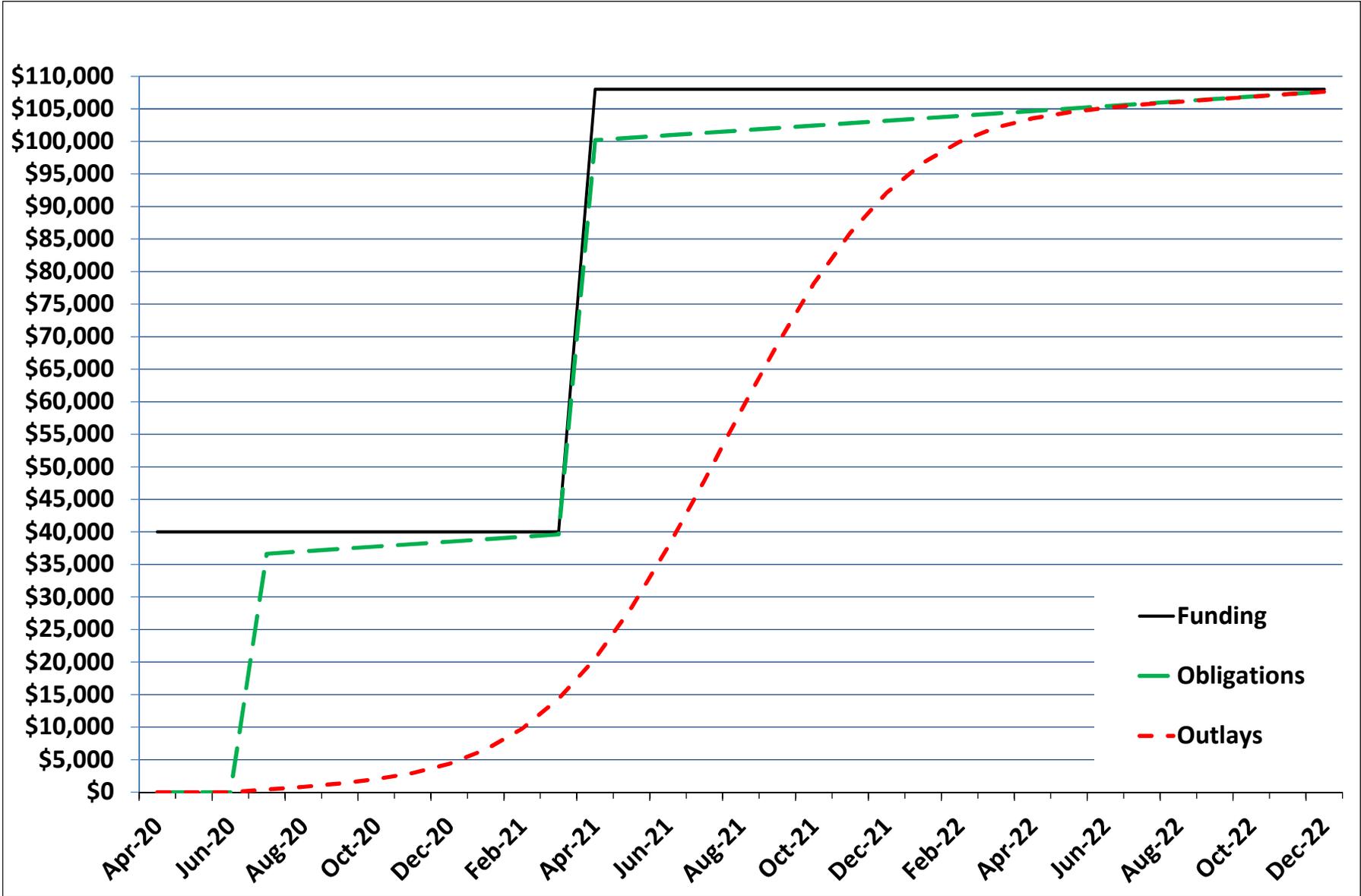
1. COMPONENT AIR FORCE	FY 2020 MILITARY CONSTRUCTION PROJECT DATA (computer generated)		2. DATE March 19
3. INSTALLATION AND LOCATION JOINT BASE SAN ANTONIO - RANDOLPH RANDOLPH AIR FORCE BASE SITE # 1 TEXAS		4. PROJECT TITLE T-X MX TRNG SYS CENTRALIZED TRNG FAC	
5. PROGRAM ELEMENT 84701F	6. CATEGORY CODE 171-625	7. PROJECT NUMBER 3209/TYMX170134	8. PROJECT COST (\$000) 19,000
12. SUPPLEMENTAL DATA:			
a. Estimated Design Data:			
(1) Status:			
(a) Date Design Started			07-MAY-18
(b) 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			1,140
(b) All Other Design Costs			570
(c) Total			1,710
(d) Contract			1,425
(e) In-house			285
(4) Construction Contract Award			20 FEB
(5) Construction Start			20 JUN
(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)
Furniture, Fixtures, & Equipment	3400	21	250
AIRCRAFT MAINTENANCE TRAINERS	3010	20	3,000
Uninterruptible Power Supply (UPS)	3400	21	250

1. COMPONENT AIR FORCE		FY 2020 MILITARY CONSTRUCTION PROJECT DATA			2. DATE March 19	
3. INSTALLATION AND LOCATION HILL AIR FORCE BASE UTAH			4. PROJECT TITLE: GBSD MISSION INTEGRATION FACILITY			
5. PROGRAM ELEMENT 11233F		6. CATEGORY CODE 141764	7. PROJECT NUMBER 2349 / KRSM1065068		8. PROJECT COST (\$000) 108,000	
9. COST ESTIMATES						
ITEM		U/M	QUANTITY	UNIT COST	COST	
<u>PRIMARY FACILITIES</u>						
MISSION INTEGRATION FACILITY (141-764)		SM	12870	\$4,925	\$63,384,750	
SENSITIVE COMPARTMENTED INFORMATION FAC (140-422)		SM	136	\$5,310	\$722,160	
MULTI-LEVEL PARKING STRUCTURE (852-261)		SM	29264	\$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	
<u>SUPPORTING FACILITIES</u>						
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						
<p>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.</p> <p>Air Conditioning: 300 TONS</p>						
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 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						

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3. INSTALLATION AND LOCATION HILL AIR FORCE BASE UTAH		4. PROJECT TITLE: GBSD MISSION INTEGRATION FACILITY		
5. PROGRAM ELEMENT 11233F	6. CATEGORY CODE 141764	7. PROJECT NUMBER 2349 / KRSM1065068	8. PROJECT COST (\$000) 108,000	
<p>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.</p> <p>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.</p> <p>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.</p> <p>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</p> <p>JOINT USE CERTIFICATION: Mission requirements, operational considerations, and location are incompatible with use by other components.</p>				

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3. INSTALLATION AND LOCATION HILL AIR FORCE BASE UTAH		4. PROJECT TITLE: GBSD MISSION INTEGRATION FACILITY	
5. PROGRAM ELEMENT 11233F	6. CATEGORY CODE 141764	7. PROJECT NUMBER 2349 / KRSM1065068	8. PROJECT COST (\$000) 108,000
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 FEB		
(5) Construction Start:	20 JUN		
(6) Construction Completion:	22 MAR		
(7) Energy Study/Life-Cycle Cost analysis was/will be performed:	YES		
b. Equipment associated with this project provided from other appropriations:			
EQUIPMENT NOMENCLATURE SENSITIVE COMPARTMENTED INFORMATION FACILITY CONSTRUCTION AND SURVEILLANCE TECHNOLOGY COMMUNICATION EQUIPMENT TELEPHONE EQUIPMENT OFFICE FURNITURE INFORMATION TECHNOLOGY EQUIPMENT LAB EQUIPMENT	PROCURING APPRO 3600 3600 3600 3600 3600 3600	FISCAL YEAR APPROPRIATED OR REQUESTED 2022 2022 2022 2022 2022 2022	COST (\$000) 10,000 612 291 1,581 159 16,614

Ground Based Strategic Deterrent Mission Integration Facility, Hill AFB



Project: Ground Based Strategic Deterrent Mission Integration Facility

Project Spending Plan

As of: 27-Feb-19

All Cost in thousands (\$000)

Chart Begin/End

Apr-20	FUNDING		OBLIGATION		OUTLAYS	
Jan-23	(note 1)		(note 2)		(note 3)	
Month	Enacted	Cumulative	Obligated	Cumulative	Monthly	Cumulative
Apr-20	40,000	40,000	-	-	-	-
May-20	-	40,000	-	-	-	-
Jun-20	-	40,000	-	-	-	-
Jul-20	-	40,000	36,646.58	36,646.58	24.90	397.49
Aug-20	-	40,000	372.58	37,019.16	60.70	830.78
Sep-20	-	40,000	372.58	37,391.74	137.80	1,341.13
Oct-20	-	40,000	372.58	37,764.32	291.20	2,004.86
Nov-20	-	40,000	372.58	38,136.90	573.00	2,950.44
Dec-20	-	40,000	372.58	38,509.48	1,050.10	4,373.11
Jan-21	-	40,000	372.58	38,882.06	1,792.00	6,537.74
Feb-21	-	40,000	372.58	39,254.65	2,847.90	9,758.22
Mar-21	-	40,000	372.58	39,627.23	4,214.50	14,345.32
Apr-21	68,000	108,000	60,548.58	100,175.81	5,808.00	20,525.86
May-21	-	108,000	372.58	100,548.39	7,453.30	28,351.74
Jun-21	-	108,000	372.58	100,920.97	8,906.80	37,631.15
Jul-21	-	108,000	372.58	101,293.55	9,911.70	47,915.42
Aug-21	-	108,000	372.58	101,666.13	10,271.20	58,559.24
Sep-21	-	108,000	372.58	102,038.71	9,911.70	68,843.52
Oct-21	-	108,000	372.58	102,411.29	8,906.80	78,122.92
Nov-21	-	108,000	372.58	102,783.87	7,453.30	85,948.80
Dec-21	-	108,000	372.58	103,156.45	5,808.00	92,129.34
Jan-22	-	108,000	372.58	103,529.03	4,214.50	96,716.45
Feb-22	-	108,000	372.58	103,901.61	2,847.90	99,936.92
Mar-22	-	108,000	372.58	104,274.19	1,792.00	102,101.55
Apr-22	-	108,000	372.58	104,646.77	1,050.10	103,524.22
May-22	-	108,000	372.58	105,019.35	573.00	104,469.80
Jun-22	-	108,000	372.58	105,391.94	291.20	105,133.54
Jul-22	-	108,000	372.58	105,764.52	137.80	105,643.89
Aug-22	-	108,000	372.58	106,137.10	60.70	106,077.17
Sep-22	-	108,000	372.58	106,509.68	24.90	106,474.66
Oct-22	-	108,000	372.58	106,882.26	9.50	106,856.76
Nov-22	-	108,000	372.58	107,254.84	3.40	107,232.73
Dec-22	-	108,000	372.58	107,627.42	1.10	107,606.43

Note 1: Assumes initial appropriation is enacted by Congress January of the program year. The appropriation of follow-on increment anticipated February FY20.

Note 2: Assumes funds are available to the contracting officer for the initial obligation no earlier than April of the program year to accommodate the funding process. The obligations of follow-on obligations anticipated February 2020.

Note 3: Assumes contract award date of Jul 2020, Contract completion: Jan 2023, Duration 31 months

1. COMPONENT AIR FORCE	FY 2020 MILITARY CONSTRUCTION PROJECT DATA (computer generated)			2. DATE March 19	
3. INSTALLATION, SITE AND LOCATION HILL AIR FORCE BASE HILL AFB SITE # 1 UTAH		4. PROJECT TITLE JOINT ADVANCED TACTICAL MISSILE STORAGE FACILITY			
5. PROGRAM ELEMENT 27248F	6. CATEGORY CODE 422-264	7. RPSUID/PROJECT NUMBER 2349/KRSM183001	8. PROJECT COST (\$000) 6,500		
9. COST ESTIMATES					
ITEM		U/M	QUANTITY	UNIT	COST (\$000)
PRIMARY FACILITIES					4,096
TACTICAL MISSILE STORAGE FACILITY		SM	1,115	3,530	(3,919)
SUSTAINABILITY AND ENERGY MEASURES (2%)		LS			(78)
CYBERSECURITY OF FACILITY-RELATED CONTROL SYS		LS			(98)
SUPPORTING FACILITIES					1,596
UTILITIES		LS			(660)
SITE IMPROVEMENTS		LS			(120)
PAVEMENTS		LS			(416)
COMMUNICATION SUPPORT		LS			(400)
SUBTOTAL					5,692
CONTINGENCY (5.0%)					285
TOTAL CONTRACT COST					5,977
SUPERVISION, INSPECTION AND OVERHEAD (5.7%)					341
DESIGN/BUILD - DESIGN COST (4.0% OF SUBTOTAL)					228
TOTAL REQUEST					6,546
TOTAL REQUEST (ROUNDED)					6,500
<p>10. Description of Proposed Construction: A 12,000 SF (1,115 SM) earth covered reinforced concrete tactical missile storage facility to have reinforced concrete footings, foundation, floor slab, and roof. Provide lightning protection, fire detection/suppression, intrusion detection, all required supporting facilities to fulfill mission requirements including: utilities, pavements, site improvements, and communication support. Facilities will be designed as permanent construction in accordance with the Department of Defense (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.</p> <p>Air Conditioning: 30 Tons</p>					
<p>11. Requirement: 66614 SM Adequate: 65499 SM Substandard: 321 SM PROJECT: Joint Advanced Tactical Missile (JATM) Storage Facility</p> <p>REQUIREMENT: This project is required to support the handling, inspection, and storing of the Airborne Intercept Missile (AIM)-260A Joint Advanced Tactical Missile (JATM) assets. The AIM-260A JATM program is rapidly expanding, highly sensitive missile program developed jointly by the Air Force and Navy to counter current and projected potential adversary aircraft, and to maintain air superiority under any war time scenario. Potential adversaries are modernizing and innovating, putting at risk America's</p>					

1. COMPONENT AIR FORCE	FY 2020 MILITARY CONSTRUCTION PROJECT DATA (computer generated)			2. DATE March 19
3. INSTALLATION, SITE AND LOCATION HILL AIR FORCE BASE HILL AFB SITE # 1 UTAH		4. PROJECT TITLE JOINT ADVANCED TACTICAL MISSILE STORAGE FACILITY		
5. PROGRAM ELEMENT 27248F	6. CATEGORY CODE 422-258	7. RPSUID/PROJECT NUMBER 2349/KRSM183001	8. PROJECT COST (\$000) 6,500	
<p>technological advantages in air and space. The AIM-260A JATM program is the number one air-delivered weapon priority for both the Air Force and the Navy; and out prioritizes other weapon system improvements and modernization efforts on any fielded aircraft. Because of the classified nature of this program, AIM 260A JATM assets cannot be housed in shared facilities with legacy munitions; and must be supported by a facility designed to meet specific operational requirements, and the stricter Special Access Program Facility security requirements.</p> <p>CURRENT SITUATION: There are currently insufficient numbers of suitable storage facilities on Air Force controlled land in Utah to support the obligated storage mission of this rapidly expanding program that is vital to the national security of the United States. The majority of existing facilities currently used to store legacy missile assets are WWII era Munitions Storage Magazines (MSM) or "Igloos" located in the munitions storage area of Hill AFB. These facilities were originally designed and constructed to store surplus artillery rounds and were slated for demolition due to their decrepit condition and due to the high cost to operate and maintain them. However, because of START treaty obligations, these facilities were refurbished, such that, they are now able to minimally provide a suitable environments to store a single ICBM booster each. None are available to be adapted to support the AIM-260A JATM storage mission.</p> <p>IMPACT IF NOT PROVIDED: Without this projects, the required rapid fielding of the AIM-260A JATM could be delayed and could put at risk our nation's efforts to maintain air superiority advantages in highly contested environments.</p> <p>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 requirement was done. Those options included renovation of existing facilities, use of DoD facilities at other bases, and new construction. The analysis indicated that new construction is the only options that will fully meet operational requirements. A formal economic analysis has been requested and will be approved prior to the president's budget submission. Project Supporting Facilities exceed 25% of total project cost due to the extensive support work for earth covered facility. 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. Tactical Missile Storage Facility: 1,115 SM = 12,000 SF.</p> <p>JOINT USE CERTIFICATION: Mission requirements, operational considerations, and location are incompatible with other components.</p>				

1. COMPONENT AIR FORCE	FY 2020 MILITARY CONSTRUCTION PROJECT DATA (computer generated)		2. DATE March 19
3. INSTALLATION AND LOCATION HILL AIR FORCE BASE HILL AFB SITE # 1 UTAH		4. PROJECT TITLE JOINT ADVANCED TACTICAL MISSILE STORAGE FACILITY	
5. PROGRAM ELEMENT 27248F	6. CATEGORY CODE 422-258	7. PROJECT NUMBER 2349/KRSM183001	8. PROJECT COST (\$000) 6,500
12. SUPPLEMENTAL DATA:			
a. Estimated Design Data:			
(1) Project to be accomplished by design-build procedures			
(a) Date Design Started:			4 MAR 19
(b) Parametric Cost Estimates Used to Develop Costs:			YES
(c) Percent Complete as of January 2019:			0%
(d) Date Design 35% Complete:			1 MAY 19
(e) Date Design 100% Complete:			1 DEC 19
(2) Basis:			
(a) Standard or Definitive Design -			NO
(b) Where Design Was Most Recently Used -			260
(3) All Other Design Costs:			20 FEB
(4) Construction Contract Award:			20 JUN
(5) Construction Start:			22 MAR
(6) Construction Completion:			YES
(7) Energy Study/Life-Cycle Cost analysis was/will be performed			
b. Equipment associated with this project provided from other appropriations: N/A			

1. COMPONENT AIR FORCE		FY 2020 MILITARY CONSTRUCTION PROJECT DATA			2. DATE March 19	
3. INSTALLATION AND LOCATION FAIRCHILD AIR FORCE BASE WASHINGTON			4. PROJECT TITLE: CONSOLIDATED TFI BASE OPERATIONS			
5. PROGRAM ELEMENT 41976F		6. CATEGORY CODE 141753	7. PROJECT NUMBER 2055/GJKZ1014550		8. PROJECT COST (\$000) 31,000	
9. COST ESTIMATES						
ITEM		U/M	QUANTITY	UNIT COST	COST	
<u>PRIMARY FACILITIES</u>						
SQUADRON OPERATIONS (141-753)		SM	4906	\$3,909	\$19,177,554	
BASE OPERATIONS (141-453)		SM	776	\$3,909	\$3,033,384	
HEADQUARTERS, GROUP (610-243)		SM	102	\$3,909	\$398,718	
CYBERSECURITY OF FACILITY-RELATED CONTROL SYS		LS	1	\$565,241	\$565,241	
SUSTAINABILITY AND ENERGY MEASURES (2%)		LS	1	\$452,193	\$452,193	
Line Item Total:					\$23,627,090	
<u>SUPPORTING FACILITIES</u>						
UTILITIES		LS	1	\$394,000	\$394,000	
SITE IMPROVEMENTS		LS	1	\$1,251,982	\$1,251,982	
PAVEMENTS		LS	1	\$1,816,000	\$1,816,000	
COMMUNICATION SUPPORT		LS	1	\$97,000	\$97,000	
DEMOLITION		SM	2026	\$358	\$726,301	
Line Item Total:					\$4,285,283	
PROJECT SUBTOTAL					\$27,912,373	
CONTINGENCY COST (5%)					\$1,395,619	
SUPERVISION, INSPECTION & OVERHEAD (5.7%)					\$1,670,556	
PROJECT TOTAL					\$30,979,000	
ROUNDED TOTAL COST					\$31,000,000	
10. DESCRIPTION OF PROPOSED CONSTRUCTION						
<p>Project will construct a permanent facility to include 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 support facilities to provide a complete and usable facility. Access to flight line will be integrated as part of this facilities' site work. Project will consolidate the functional elements of an Operations Group, Operations Squadron to include, its integral Base Operations Element, Aircraft Flight Equipment, and Air Refueling Squadron, including Air National Guard in support of an additional 12 Primary Assigned Aircraft (PAA) and the associated new squadron while maximizing Total Force Integration efficiencies. Project shall demolish building B1 (2,026 SM) and approximately 3,138 SM of parking lot. 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 Department of Defense Antiterrorism/force protection requirements per UFC 4-010-01.</p> <p>Air Conditioning 188 TONS</p>						
11. REQUIREMENT: 5,682 SM ADEQUATE: 0 SM SUBSTANDARD: 2,026 SM						
PROJECT: KC-135 Total Force Integrated Base Operations Facility and Aircraft Flight Equipment						
REQUIREMENT: Construct a facility to consolidate the functional elements of an Operations Group, Squadron Operations (with it integral Base Operations element), Aircraft Flight Equipment, and Air Refueling Squadron (Air National Guard). This facility will accommodate the 92 Operations Group, 92 Operations Support Squadron (including its Base Operations sub-function), 141 Operations Group, 141 Operations Support Squadron, 116 Aircraft Refueling Squadron, and Aircraft Flight Equipment in support of an additional 12 PAA and the associated new squadron while maximizing Total Force Integration efficiencies. The overall outcome of the project is to consolidate mission essential functions into one facility and to demolish the existing Base Operations building 1 as it has become functionally obsolete based on mission requirements and has deteriorated past a point of feasible repair. Current Mission has expanded						

1. COMPONENT AIR FORCE	FY 2020 MILITARY CONSTRUCTION PROJECT DATA			2. DATE March 19
3. INSTALLATION AND LOCATION FAIRCHILD AIR FORCE BASE WASHINGTON		4. PROJECT TITLE: CONSOLIDATED TFI BASE OPERATIONS		
5. PROGRAM ELEMENT 41976F	6. CATEGORY CODE 141753	7. PROJECT NUMBER 2055/GJKZ1014550	8. PROJECT COST (\$000) 31,000	
<p>due to the arrival of additional KC-135s, a new Air Refueling Squadron and associated maintenance and support personnel. This Current Mission expansion carries with it the requirement to integrate a Joint Worldwide Intelligent Communications System and a Flight Kitchen as part of its 24 hour operational mission alert profile. Total Force Integration reduces overall facility requirement gross area compared to currently utilized space through the shared use of common building functional elements.</p> <p>CURRENT SITUATION: With the addition of KC-135 and associated personnel to the Fairchild AFB inventory, buildings 2005 and 2007, which currently house the 92 Operations Group, 92 Operations Support Squadron, 141 Operations Group, 141 Operations Support Flight, 116 Air Refueling Squadron, and Aircraft Flight Equipment are being repurposed back to their original configuration as Squadron Ops (Air Refueling Squadron and AMXS personnel) to support the KC-135 addition. This has displaced the 92 Operations Group and 92 OSS into building 2060 until this new facility can be constructed. The existing Base Operations, building B1, cannot effectively be renovated to accommodate the 92 Operations Group and 92 Operations Support Squadron, as it would exceed statutory limits. Even after a major renovation, building 1 could not meet mission requirements without an addition and could not satisfy AT/FP requirements of UFC 1-200-01, UFC 1-200-02, UFC, and UFC 4-010-01 respectively. There is a validated Building Condition Index composite score of 68 in BUILDER that supports its poor condition and further records that the basement, superstructure, exterior enclosure, HVAC, and fire protection are in an advanced state of deterioration, failure, or are non-existent presenting Life-Health-Safety issues.</p> <p>IMPACT IF NOT PROVIDED: Fairchild AFB will not be able to accommodate the additional KC-135 PAA and associated Air Refueling Squadron, maintenance and support personnel in a manner that supports Total Force Integration. The 92 Operations Group and 92 Operations Support Squadron will remain displaced into building 2060 until a facility can be constructed and would be physically separate from its Base Operation element leading to degraded mission performance. Building 2060, which currently houses the alternate command post, is scheduled to be remodeled into a primary command post in the 2021 timeframe. This would displace the 92 Operations Group and 92 Operations Support Squadron without a permanent facility. Base operation will continue to operate within a facility that is functionally obsolete and has degraded past a point of feasible repair.</p> <p>ADDITIONAL: This project meets the criteria/scope specified in Air Force Manual 32-1084, "Standard Facility Requirements". This project does not fall within or partly within the 100-year flood plain. An economic analysis has been prepared comparing alternatives (status quo, repair, renovation, and new construction). Based on the net present values and benefits of the respective alternatives, new construction was found to be the most cost-effective over the life of the project. Passive force protection measures have been included to cover the requirement to provide restricted access from the flight line side of the facility with gates and high curbing. This design shall conform to criteria established in the Air Force Corporate Facilities Standards (AFCFS), the Installation Facilities Standards (IFS), 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 from Air Force Civil Engineer Center. 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.</p> <p>Base Civil Engineer: 509-247-2291. Squadron Operations: 4,906 SM = 52,808 SF. Base Operations: 776 SM = 8,353 SF. Headquarters, Group: 102 SM = 1,098 SF</p> <p>JOINT USE CERTIFICATION: This facility can be used by other components on an "as available" basis; however, the scope of the project is based on Air Force requirements.</p>				

1. COMPONENT AIR FORCE	FY 2020 MILITARY CONSTRUCTION PROJECT DATA			2. DATE March 19
3. INSTALLATION AND LOCATION FAIRCHILD AIR FORCE BASE WASHINGTON		4. PROJECT TITLE: CONSOLIDATED TFI BASE OPERATIONS		
5. PROGRAM ELEMENT 41976F	6. CATEGORY CODE 141753	7. PROJECT NUMBER 2055/GJKZ1014550	8. PROJECT COST (\$000) 31,000	
12. SUPPLEMENTAL DATA				
a. Estimated Design Data:				
(1) Status				
(a) Date Design Started:			01-MAR 19	
(b) Parametric Cost Estimates Used to Develop Costs:			YES	
* (c) Percent Complete as of January 2019:			15%	
* (d) Date Design 35% Complete:			01-JUN-19	
(e) Date Design 100% Complete:			01-MAR-20	
(f) Energy Study and Life Cycle Cost Analysis was/will be Performed:			YES	
(2) Basis				
(a) Standard or Definitive Design Used:			NO	
(b) Where Design Was Previously Used:			N/A	
(3) Total Cost (\$000)				
(a) Production of Plans and Specification:			1,860	
(b) All Other Design Costs:			930	
(c) Total Cost (a + b or d + e):			2,790	
(d) Contract Cost:			2,325	
(e) In-House Cost:			465	
(4) Construction Contract Award Date:			20 MAR	
(5) Construction Start Date:			20 JUN	
(6) Construction Completion Date:			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 APPRO	FISCAL YEAR APPROPRIATED OR REQUESTED	COST (\$000)	
COMMUNICATIONS	3400	2022	250	
Furnishings, Fixtures, and Equipment	3080	2022	930	

1. COMPONENT AIR FORCE	FY 2020 MILITARY CONSTRUCTION PROJECT DATA (computer generated)			2. DATE March 19
3. INSTALLATION, SITE AND LOCATION FRANCIS E WARREN AIR FORCE BASE F E WARREN AFB SITE # 1 WYOMING		4. PROJECT TITLE CONSOLIDATED HELO/TRFOPS/AMU AND ALERT FACILITY		
5. PROGRAM ELEMENT 12110F	6. CATEGORY CODE 211-111	7. RPSUID/PROJECT NUMBER 1833/GHLN983001A	8. PROJECT COST (\$000) Auth: 18,100 Appr: 18,100	
9. COST ESTIMATES				
ITEM	U/M	QUANTITY	UNIT	COST (\$000)
HELICOPTER OPERATIONS COMPLEX				43,773
HELICOPTER/TRF OPERATIONS FACILITY (141-753)	SM	3,437	3,621	(12,445)
HELICOPTER/TRF ALERT FACILITY (141-753)	SM	1,027	3,604	(3,701)
AIRCRAFT ALERT HANGAR (3 BAY) (141-181)	SM	1,598	3,592	(5,740)
AIRCRAFT MAINTENANCE UNIT (AMU) (221-175)	SM	1,161	3,190	(3,704)
AIRCRAFT MAINTENANCE HANGAR (9 BAY) (211-111)	SM	4,601	2,661	(12,243)
TACTICAL ALERT VEHICLE FACILITY (853-101)	SM	300	2,173	(652)
AIRCRAFT SIMULATOR FACILITY (171-212)	SM	420	4,752	(1,996)
AIRFIELD CRASH/RESCUE STATION (141-101)	SM	670	3,632	(2,433)
SUSTAINABILITY AND ENERGY MEASURES	LS			(858)
SUPPORTING FACILITIES				12,127
AIRFIELD PAVEMENTS AND LIGHTING	LS			(6,940)
DRIVEWAY / PARKING LOT	LS			(319)
UTILITIES	LS			(3,251)
PRIVATIZED UTILITY CONNECTION FEE (ELECT)	LS			(20)
COMMUNICATIONS	LS			(410)
BACKUP GENERATOR	LS			(200)
PASSIVE FORCE PROTECTION MEASURES	LS			(987)
SUBTOTAL				55,900
CONTINGENCY (5.0%)				2,795
TOTAL CONTRACT COST				58,695
SUPERVISION, INSPECTION AND OVERHEAD (5.7%)				3,346
TOTAL REQUEST				62,040
TOTAL REQUEST (ROUNDED)				62,000
EQUIPMENT FROM OTHER APPROPRIATIONS (NON-ADD)				(1,238)
10. Description of Proposed Construction: Construct a new complex to include Helicopter Squadron Operations, Tactical Response Force (TRF) Alert Crew Facility, Alert Aircraft Shelter, Aircraft Maintenance Unit (AMU), Aircraft Maintenance Shelter, Aircraft Simulator complex to include a satellite Fire Station utilizing conventional design and construction methods to accommodate mission requirements in support of the Minuteman III (MM III) Intercontinental Ballistic Missile (ICBM) weapons system. Facilities will be constructed with concrete foundations, structural steel frame, a combination of concrete masonry unit and prefinished metal panels exterior walls and a standing seam metal roof. Associated site improvements shall include new taxiways, runway, helipads, associated airfield lighting and all other work necessary to make a complete and usable facility. An O&M demolition project (GHLN091045C) has been developed to demolish existing facilities used for UH-1N operations (8872 SM). This project will comply with				

1. COMPONENT AIR FORCE	FY 2020 MILITARY CONSTRUCTION PROJECT DATA (computer generated)			2. DATE March 19
3. INSTALLATION, SITE AND LOCATION FRANCIS E WARREN AIR FORCE BASE F E WARREN AFB SITE # 1 WYOMING		4. PROJECT TITLE CONSOLIDATED HELO/TRFOPS/AMU AND ALERT FACILITY		
5. PROGRAM ELEMENT 12110F	6. CATEGORY CODE 211-111	7. RPSUID/PROJECT NUMBER 1833/GHLN983001A	8. PROJECT COST (\$000) Auth: 18,100 Appr: 18,100	
<p>Department of Defense antiterrorism/force protection requirements per Unified Facilities Criteria (UFC) and be designed as permanent construction in accordance with the DoD UFC 1-200-01, General Building Requirements; UFC 1-200-02, High Performance and Sustainable Building Requirements, and will comply with DoD antiterrorism/force protection requirements as defined in UFC 4-010-01.</p> <p>Air Conditioning: 75 Tons</p> <p>11. Requirement: 13214 SM Adequate: 0 SM Substandard: 8872 SM</p> <p><u>PROJECT:</u> CONSOLIDATE HELO/TRF OPS/AMU AND ALERT FACILITY (NEW MISSION)</p> <p><u>REQUIREMENT:</u> An adequately sized and configured integrated helicopter operations tactical response alert facility is needed to provide proper command and control, alert, maintenance, and fueling capabilities for helicopter-capable security operations providing coverage to remote ICBM missile alert and launch facilities. This is to be a consolidated facility that will become the main control point for all unit flight and flying training tasks including planning, briefing, administration, alert response, life support system, aircraft maintenance, crew equipment storage and issue. The complex must provide collocation of the squadron operations facility and alert crew sleeping quarters with the aircraft to minimize crew response times and enhance rescue/security team effectiveness. Response time is critical when providing security for nuclear weapons transports and conducting search and security, rescue/civil aid missions. The complex must have flight line visibility for control of ground traffic and aircraft storage must be heated for rapid response during prolonged and often extreme weather conditions. F. E. Warren Air Force Base's 37th Helicopter Flight (37 HF), 90th Tactical Response Force Squadron directly supports ICBM missile alert and launch facility site security by providing rapid response/transport of Security Forces personnel and equipment from the base to the missile fields spread over three states.</p> <p><u>CURRENT SITUATION:</u> The 37 HF directly supports MM III ICBM missile alert and launch facility site security and missile convoy operations covering 9,600 square miles. Additionally, the 37 HF conducts search and rescue missions throughout Wyoming, Colorado, and Nebraska for both military and civil authorities. Helicopter operations are currently conducted from a facility constructed in 1941 and later converted for use as an Atlas ICBM maintenance hangar in 1958. This structure is laden with asbestos-containing materials, lead based paint, and is serviced with an aged and failing utilities infrastructure. In addition, it is not properly configured to accommodate the assigned UH-1N helicopters and is completely inadequate in size and configuration for the replacement helicopters anticipated for deployment to FE Warren AFB. The structure's hangar doors and interior layout (structural support columns) will not allow for the parking and maintenance of the replacement helicopter airframes. None of the proposed replacement airframes will fit in the current facility due aircraft dimensions, rotor head diameter, and blade configuration (2 vs. 4) without impractical mechanical disassembly. If this building continues to be used for helicopter operations, a major Military Construction renovation project will be required. The renovation project cost has been estimated at over 75% of the replacement cost of a similar-sized facility. In addition to its inferior condition and poor layout, the current facility affords few</p>				

1. COMPONENT AIR FORCE	FY 2020 MILITARY CONSTRUCTION PROJECT DATA (computer generated)			2. DATE March 19
3. INSTALLATION, SITE AND LOCATION FRANCIS E WARREN AIR FORCE BASE F E WARREN AFB SITE # 1 WYOMING			4. PROJECT TITLE CONSOLIDATED HELO/TRFOPS/AMU AND ALERT FACILITY	
5. PROGRAM ELEMENT 12110F	6. CATEGORY CODE 211-111	7. RPSUID/PROJECT NUMBER 1833/GHLN983001A	8. PROJECT COST (\$000) Auth: 18,100 Appr: 18,100	
<p>provisions for squadron operations and none for around-the-clock alert readiness required for current UH-1N and TRF operations or future operations with the UH-1N replacement aircraft and a co-located TRF. The current structure has neither sleeping quarters nor food preparation facilities and is only partially adequate for the storage, maintenance and issue of life support equipment and other provisions needed by flight crews and the TRF.</p> <p>IMPACT IF NOT PROVIDED: Without a new facility that combines Helicopter Squadron Operation and Tactical Response Force facilities 24-hour alert responses to security emergencies to the nation's strategic ground-based deterrent will be impeded and expediciencies of consolidation will not be achieved. Further F. E. Warren AFB will be unable to properly bed down new helicopters proposed to replace the UH-1N airframes. The existing UH-1N fleet is Vietnam vintage and does not meet the required Key Performance Parameters for range, speed, or cargo capacity required to support the Tactical Response Force and ICBM Security Concept of Operations detailed in DoD S-5210.41-M-V1, V2, V3, and Security Policy for Protecting Nuclear Weapons, dated 13 July 2009. Without this project, existing operations will continue to progressively degrade as facilities and utility systems age and are increasingly unable to support operational requirements, and will become non-operational with delivery of replacement aircraft prior to funding and execution of this requirement. The ability to expeditiously deploy security personnel under updated security criteria of nuclear weapons transports and execution of search and rescue/civil aid missions will be compromised. Continued reliance on insufficient aircraft maintenance and squadron operations facilities could ultimately result in the inability to re-secure a nuclear resource if taken by force, resulting in a grave threat to national security.</p> <p>ADDITIONAL: This project meets applicable criteria/scope specified in Air Force Handbook 32-1084, "Facility Requirements." A preliminary analysis of reasonable options for accomplishing this project (status quo, renovation, new construction) was performed. Only two options, renovation and new construction, meet operational requirements. The renovation project exceeds 75% of the replacement of a similar sized facility, resulting in new construction being the most viable option. A formal economic analysis is in progress. 90th Missile Wing Base Civil Engineer: 307-773-3600. Helicopter/TRF Operations Facility: 3437 SM = 36,996 SF; Helicopter/TRF Alert Facility: 1027 SM = 11,055 SF; Aircraft Alert Hangar (3 Bay): 1598 SM = 17,201 SF; Aircraft Maintenance Unit: 1161 SM = 12,497 SF; Aircraft Maintenance Hangar: 4601 SM = 49,525 SF; Tactical Alert Vehicle Facility: 300 SM = 3229 SF; Aircraft Simulator Facility: 420 SM = 4521 SF; Airfield Crash/Rescue Station: 670 SM = 7212 SF.</p> <p>JOINT USE CERTIFICATION: This facility can be used by other components on an "as available" basis; however, the scope of the project is based on Air Force requirements.</p>				

1. COMPONENT AIR FORCE	FY 2020 MILITARY CONSTRUCTION PROJECT DATA (computer generated)		2. DATE March 19
3. INSTALLATION AND LOCATION FRANCIS E WARREN AIR FORCE BASE F E WARREN AFB SITE # 1 WYOMING		4. PROJECT TITLE CONSOLIDATED HELO/TRFOPS/AMU AND ALERT FACILITY	
5. PROGRAM ELEMENT 12110F	6. CATEGORY CODE 211-111	7. PROJECT NUMBER 1833/GHLN983001A	8. PROJECT COST (\$000) Auth: 18,100 Appr: 18,100
12. SUPPLEMENTAL DATA:			
a. Estimated Design Data:			
(1) Project to be accomplished by design-build procedures			
(a) Date Design Started:			20 APR 17
(b) Parametric Cost Estimates Used to Develop Costs:			YES
(c) Percent Complete as of January 2019:			100%
(d) Date Design 35% Complete:			1 JAN 18
(e) Date Design 100% Complete:			14 MAR 18
(2) Basis:			
(a) Standard or Definitive Design -			NO
(b) Where Design Was Most Recently Used -			
(3) All Other Design Costs:			1,860
(4) Construction Contract Award:			18 FEB
(5) Construction Start:			18 MAR
(6) Construction Completion:			20 MAR
(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)
FURNISHINGS, FIXTURES & EQUIP	3400	18	1,238

1. COMPONENT AIR FORCE	FY 2020 MILITARY CONSTRUCTION PROJECT DATA (computer generated)		2. DATE March 19
3. INSTALLATION AND LOCATION FRANCIS E WARREN AIR FORCE BASE F E WARREN AFB SITE # 1 WYOMING		4. PROJECT TITLE CONSOLIDATED HELO/TRFOPS/AMU AND ALERT FACILITY	
5. PROGRAM ELEMENT 12110F	6. CATEGORY CODE 211-111	7. PROJECT NUMBER 1833/GHLN983001A	8. PROJECT COST (\$000) Auth: 18,100 Appr: 18,100

FY (\$M)	Authorization Requested	Appropriation Requested	Authorization of Appropriations	Appropriation
2019	62	62	62	62
2020	18.1	18.1	0	0

1. COMPONENT AIR FORCE			FY 2020 MILITARY CONSTRUCTION PROGRAM					2. DATE (YYYYMMDD) March 19			
3. INSTALLATION AND LOCATION RAAF TINDAL AUSTRALIA					4. COMMAND PACIFIC AIR FORCES			5. AREA CONSTRUCTION COST INDEX 1.55			
6. PERSONNEL		(1) PERMANENT			(2) STUDENTS			(3) SUPPORTED			TOTAL
		OFFICER	ENLISTED	CIVILIAN	OFFICER	ENLISTED	CIVILIAN	OFFICER	ENLISTED	CIVILIAN	
a. AS OF	30-Sep-18	0	0	0	0	0	0	0	0	0	0
b. END FY	2024	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-18									
c. AUTHORIZATION NOT YET IN INVENTORY		0									
d. AUTHORIZATION REQUESTED IN THIS PROGRAM (FY 2020)		70,600									
e. PLANNED IN NEXT FOUR PROGRAM YEARS (FY 2021-2024)		105,900									
f. REMAINING DEFICIENCY		0									
g. GRAND TOTAL		176,500									
8. PROJECTS REQUESTED IN THIS PROGRAM (FY 2020)											
a. CATEGORY						b. COST (\$000)		c. DESIGN STATUS			
(1) CODE	(2) PROJECT TITLE				(3) SCOPE			(1) START	(2) COMPLETE		
411-135	JET FUEL STORAGE TANKS				50,000 BL		59,000	04/18	09/19		
422-264	EARTH COVERED MAGAZINE				218 SM		11,600	04/18	09/19		
TOTAL							70,600				
9. FUTURE PROJECTS IN NEXT FOUR PROGRAM YEARS (FY 2021-2024)											
113-321	BOMBER APRON AT TWY R				57,596 SM		92,000				
218-712	AIRCRAFT MX SUPPORT FACILITY				464 SM		5,900				
141-753	SQUADRON OPERATIONS FACILITY				648 SM		8,000				
FUTURE PROJECTS TOTAL							105,900				
R&M UNFUNDED REQUIREMENT (\$M)						TOTAL		0.0			
10. MISSION OR MAJOR FUNCTIONS											
Royal Australian Air Force Base Tindal (RAAF Tindal) is home to No. 75 Squadron and a number of non-flying units and hosts the Katherine Tindal Civilian Airport. Additionally, RAAF Tindal is a force multiplier, encompassing key bilateral training operations in the Asia-Pacific Rim.											
11. OUTSTANDING POLLUTION AND SAFETY DEFICIENCIES (FY 2020-2024)											
a. Air Pollution											
b. Water Pollution											
c. Occupational Safety and Health											
d. Other Environmental											
OUTSTANDING DEFICIENCIES TOTAL							0				

1. COMPONENT AIR FORCE	FY 2020 MILITARY CONSTRUCTION PROJECT DATA (computer generated)			2. DATE March 19	
3. INSTALLATION, SITE AND LOCATION RAAF BASE TINDAL AUSTRALIA			4. PROJECT TITLE JET FUEL STORAGE TANKS		
5. PROGRAM ELEMENT 91211F	6. CATEGORY CODE 411-135	7. RPSUID/PROJECT NUMBER PAF180200	8. PROJECT COST (\$000) 59,000		
9. COST ESTIMATES					
ITEM		U/M	QUANTITY	UNIT	COST (\$000)
PRIMARY FACILITIES					41,356
BULK FUEL STORAGE TANK (CAT CODE: 411-135)		BL	50,000	477	(23,834)
POL PUMPHOUSE (CAT CODE: 125-977)		GM	3,600	1,115	(4,014)
FILTER BUILDING (CAT CODE 125-977)		GM	4,800	1,460	(7,008)
LIQUID FUEL TRUCK FILLSTAND (126-925)		OL	2	680,500	(1,361)
LIQUID FUEL STAND, UNLOADING (126-926)		OL	4	1,020,750	(4,083)
CYBERSECURITY OF FACILITY-RELATED CONTROL SYS		LS			(250)
SUSTAINABILITY AND ENERGY MEASURES (2.0%)		LS			(806)
SUPPORTING FACILITIES					11,463
SITE IMPROVEMENTS		LS			(2,053)
UTILITIES		LS			(6,181)
PAVEMENTS		LS			(1,610)
COMMUNICATION		LS			(29)
ENVIRONMENTAL REMEDIATION		LS			(300)
ARCHAEOLOGICAL MONITORING		LS			(75)
COMMISSIONING		LS			(700)
BACKUP GENERATOR		LS			(515)
SUBTOTAL					52,819
CONTINGENCY (5.0%)					2,641
TOTAL CONTRACT COST					55,460
SUPERVISION, INSPECTION AND OVERHEAD (6.5%)					3,605
TOTAL REQUEST					59,065
TOTAL REQUEST (ROUNDED)					59,000
10. Description of Proposed Construction: Construct two 4 ML(25,000 Barrel ea) Cut-and-cover bulk fuel storage tanks using standard design and construction methods to accommodate USAF mission aircraft training at Royal Australian Air Force Base Tindal (RAAF Tindal). In addition, construct aircraft liquid fuel truck fill stands, fuel stand unloading, pumphouses, and filter building. In addition, local materials and construction techniques shall be used where cost effective. All utilities, automatic tank gauging systems, site improvements, pavements, communications infrastructure, backup generator and other work necessary to provide complete and usable facilities is included in the project. Facilities will be constructed in accordance with the DoD Unified Facilities Criteria (UFC) 1-202-01, Host Nation Facilities in Support of Military Operations. 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					

1. COMPONENT AIR FORCE	FY 2020 MILITARY CONSTRUCTION PROJECT DATA (computer generated)			2. DATE March 19
3. INSTALLATION, SITE AND LOCATION RAAF BASE TINDAL AUSTRALIA			4. PROJECT TITLE JET FUEL STORAGE TANKS	
5. PROGRAM ELEMENT 91211F	6. CATEGORY CODE 411-135	7. RPSUID/PROJECT NUMBER PAF180200	8. PROJECT COST (\$000) 59,000	
<p>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.</p> <p>Air Conditioning: 0 Tons</p>				
<p>11. Requirement: 7950 CM Adequate: 0 CM Substandard: 0 CM</p> <p>PROJECT: Jet Fuel Storage Tanks REQUIREMENT: This project provides an adequately sized and configured jet fuel receipt and distribution system. This project shall construct Cut-AND-COVER fuel tanks for a total of 7,950 CM of fuel storage and supporting infrastructure to meet mission requirements of B-52 bomber aircraft. Supporting infrastructure includes two pumphouses, a liquid fuel truck fillstand, fuel stand unloading, and filter building.</p> <p>CURRENT SITUATION:RAAF Tindal does not currently have the fuel storage capacity to support USAF mission requirements. Currently, RAAF Tindal has a useable fuel storage capacity of 166,000 Liters of JP-8 fuel at their transient aircraft area. The RAAF is constructing additional fuel storage cap city to meet their mission needs. RAAF Tindal is in a remote location with the nearest jet fuel storage complex being at the Port of Darwin 177 miles from RAAF Tindal. The jet fuel is delivered from Port Darwin via tanker trucks, with estimated travel time of between 5-6 hours. During the rainy season, most of the main road system is flooded and closed for vehicular traffic. Due to inefficiencies in the fuel delivery process, additional fuel storage is required at RAAF Tindal to ensure bomber operations.</p> <p>IMPACT IF NOT PROVIDED: If this project is not provided, bilateral Enhanced Air Cooperation training will be constrained to its current scope or be forced to relocate at additional cost. USAF will not have the capability to fully meet bilateral training exercise mission requirements at RAAF Tindal. The inability to provide fuel would drastically decrease power projection and global reach capabilities to support US-Australia bilateral exercises in the Asia-Pacific region.</p> <p>ADDITIONAL: This project meets the criteria and 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), the Installation Facilities Standards (IFS), but will not employ a standard facility design. Adequate fuel storage and dispensing infrastructure to support USAF missions does not exist on RAAF Tindal and as such, new construction is the only viable alternative which meets mission requirements. Cost estimate includes Commissioning required by Australian building codes for third-party certification. The supporting facilities are greater than 25% of the primary facilities cost due to the extensive site excavation and utility network required. An Economic Analysis Waiver will be approved prior to the president's budget submission. This project does not fall within or partly within the 100-year flood plain. This project was not included in the Fiscal Year 2019 future-years defense plan. Project Engineer: 808-448-2459. Fuel Storage: 7,950 CM = 50,000 barrels</p> <p>FOREIGN CURRENCY: FCF Budget Rate Used: AUSI-DOLLAR .75</p>				

1. COMPONENT AIR FORCE	FY 2020 MILITARY CONSTRUCTION PROJECT DATA (computer generated)		2. DATE March 19																										
3. INSTALLATION AND LOCATION RAAF BASE TINDAL AUSTRALIA		4. PROJECT TITLE JET FUEL STORAGE TANKS																											
5. PROGRAM ELEMENT 91211F	6. CATEGORY CODE 411-135	7. PROJECT NUMBER AF180200	8. PROJECT COST (\$000) 59,000																										
<p>JOINT USE CERTIFICATION: This facility can be used by other components on an "as available" basis; however, the scope of the project is based on Air Force requirements.</p> <p>12. SUPPLEMENTAL DATA:</p> <p>a. Estimated Design Data:</p> <p>(1) Status:</p> <table> <tr> <td>(a) Date Design Started</td> <td>30-APR-18</td> </tr> <tr> <td>(b) Parametric Cost Estimates used to develop costs</td> <td>YES</td> </tr> <tr> <td>* (c) Percent Complete as of 01 JAN 2019</td> <td>15%</td> </tr> <tr> <td>* (d) Date 35% Designed</td> <td>19-MAR-19</td> </tr> <tr> <td>(e) Date Design Complete</td> <td>10-SEP-19</td> </tr> <tr> <td>(f) Energy Study/Life-Cycle cost analysis was/will be performed</td> <td>YES</td> </tr> </table> <p>(2) Basis:</p> <table> <tr> <td>(a) Standard or Definitive Design -</td> <td>N</td> </tr> <tr> <td>(b) Where Design Was Most Recently Used -</td> <td></td> </tr> </table> <p>(3) Total Cost (c) = (a) + (b) or (d) + (e): (\$000)</p> <table> <tr> <td>(a) Production of Plans and Specifications</td> <td>3,540</td> </tr> <tr> <td>(b) All Other Design Costs</td> <td>1,770</td> </tr> <tr> <td>(c) Total</td> <td>5,310</td> </tr> <tr> <td>(d) Contract</td> <td>4,425</td> </tr> <tr> <td>(e) In-house</td> <td>885</td> </tr> </table> <p>(4) Construction Contract Award 20 FEB</p> <p>(5) Construction Start 20 JUN</p> <p>(6) Construction Completion 22 MAR</p> <p>* Indicates completion of Project Definition with Parametric Cost Estimate which is comparable to traditional 35% design to ensure valid scope, cost and executability.</p> <p>b. Equipment associated with this project provided from other appropriations: N/A</p>				(a) Date Design Started	30-APR-18	(b) Parametric Cost Estimates used to develop costs	YES	* (c) Percent Complete as of 01 JAN 2019	15%	* (d) Date 35% Designed	19-MAR-19	(e) Date Design Complete	10-SEP-19	(f) Energy Study/Life-Cycle cost analysis was/will be performed	YES	(a) Standard or Definitive Design -	N	(b) Where Design Was Most Recently Used -		(a) Production of Plans and Specifications	3,540	(b) All Other Design Costs	1,770	(c) Total	5,310	(d) Contract	4,425	(e) In-house	885
(a) Date Design Started	30-APR-18																												
(b) Parametric Cost Estimates used to develop costs	YES																												
* (c) Percent Complete as of 01 JAN 2019	15%																												
* (d) Date 35% Designed	19-MAR-19																												
(e) Date Design Complete	10-SEP-19																												
(f) Energy Study/Life-Cycle cost analysis was/will be performed	YES																												
(a) Standard or Definitive Design -	N																												
(b) Where Design Was Most Recently Used -																													
(a) Production of Plans and Specifications	3,540																												
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(c) Total	5,310																												
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(e) In-house	885																												

1. COMPONENT AIR FORCE	FY 2020 MILITARY CONSTRUCTION PROJECT DATA (computer generated)			2. DATE March 19	
3. INSTALLATION, SITE AND LOCATION RAAF BASE TINDAL AUSTRALIA			4. PROJECT TITLE EARTH COVERED MAGAZINE		
5. PROGRAM ELEMENT 91211F	6. CATEGORY CODE 422-264	7. RPSUID/PROJECT NUMBER PAF180300	8. PROJECT COST (\$000) 11,600		
9. COST ESTIMATES					
ITEM		U/M	QUANTITY	UNIT	COST (\$000)
PRIMARY FACILITIES					8,684
EARTH COVERED MAGAZINES (CAT 422-264)		SM	218	5,539	(1,208)
ANCILLARY EXPLOSIVES FACILITY (422-275)		EA	1	7,056,000	(7,056)
CYBERSECURITY OF FACILITY-RELATED CONTROL SYS		LS			(250)
SUSTAINABILITY AND ENERGY MEASURES (2%)		LS			(170)
SUPPORTING FACILITIES					1,645
SITE IMPROVEMENTS		LS			(108)
UTILITIES		LS			(462)
PAVEMENTS		LS			(308)
COMMUNICATIONS		LS			(482)
ENVIRONMENTAL REMEDIATION		LS			(150)
ARCHAEOLOGICAL MONITORING		LS			(75)
COMMISSIONING		LS			(60)
SUBTOTAL					10,329
CONTINGENCY (5.0%)					516
TOTAL CONTRACT COST					10,845
SUPERVISION, INSPECTION AND OVERHEAD (6.5%)					705
TOTAL REQUEST					11,550
TOTAL REQUEST (ROUNDED)					11,600
EQUIPMENT FROM OTHER APPROPRIATIONS (NON-ADD)					(60.0)
10. Description of Proposed Construction: Construct two earth covered magazines (ECMs) and an ancillary explosive facility for loading and unloading munitions. Standard design and construction methods will be used to accommodate the mission of the facility and will include all necessary supporting facilities for a complete and usable project. The facility should be compatible with applicable 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. Facility construction shall comply with Australian Building Code requirements and the Department of Defense Unified Facilities Criteria (UFC) 1-202-01. The Building Code of Australia and Manual of Fire Protection will be applied for fire protection requirements to ensure local fire services can utilize fire protection infrastructure. 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.					

1. COMPONENT AIR FORCE	FY 2020 MILITARY CONSTRUCTION PROJECT DATA (computer generated)			2. DATE March 19
3. INSTALLATION, SITE AND LOCATION RAAF BASE TINDAL AUSTRALIA			4. PROJECT TITLE EARTH COVERED MAGAZINE	
5. PROGRAM ELEMENT 91211F	6. CATEGORY CODE 422-264	7. RPSUID/PROJECT NUMBER PAF180300	8. PROJECT COST (\$000) 11,600	
Air Conditioning: 0 Tons				
11. Requirement: 218 SM Adequate: 0 SM Substandard: 0 SM				
PROJECT: Earth Covered Magazine				
<p>REQUIREMENT: This project provides adequately sized, structurally sound, and safe munitions storage capacity in the form of ECMS. Construction includes reinforced concrete floor, walls, and ceiling, metal blast doors, thermally protected roofing, and a concrete loading apron. Storage facilities need to support up to 250,000 pounds Class/Division 1.1 net explosive weight (NEW). Strict Australian regulations limit storage to 165,000 pounds of NEW in a single facility, therefore USAF will require two ECMS to accommodate their mission requirements. The Air Force Munitions Facilities Standards Guide, Volume 1 (May 2004) includes guidance on the design of a typical Hayman earth-covered magazine with 7-bar construction on the doors. Based on the standard design, the required area of each magazine is 109 GSM (1,170 GSF), which is a shorter version of the standard. In addition to the magazines, a Munitions Assembly Conveyor (MAC) shelter and concrete production pad with a catenary type lightning protection system is required for loading and unloading crated munitions. The requirement is sized based on 2 aircraft being loaded simultaneously and multiple missions per day. Security enhancements include an intrusion detection system. The facility will be located within an existing RAAF-controlled munitions area. Project will comply with UFC 4-010-06, Cybersecurity of Facility-Related Control Systems.</p>				
<p>CURRENT SITUATION: Currently the base the home of No.75 Squadron of F/A-18 aircraft. RAAF Tindal has five ECMS located in the designated munition storage area with explosive arc licenses. All existing ECMS are currently at or near maximum net explosive weight (NEW) capacity. Also RAAF munitions production areas are sized to accommodate F-18 missions. Due to the NEW capacity issue, munitions used by the proposed bomber aircraft cannot be stored in the existing ECMS. Therefore, two new ECMS are required to store USAF munitions. A new site is required to support B-52 munition's production requirements.</p>				
<p>IMPACT IF NOT PROVIDED: RAAF Tindal does not have the required munition capacity to operate six B-52 aircraft. Without this project, the USAF will be unable to support plans outlined by the bilateral United States/Australia Force Posture Agreement. Bilateral Enhanced Air Cooperation missions will not be executable without munitions storage and production capability.</p>				
<p>ADDITIONAL: This project meets the criteria/scope specified in Air Force Manual 32-1084, Facility Requirements. This design shall conform to criteria established in the Air Force Corporate Facilities Standards (AFCFS), the Installation Facilities Standards (IFS), but will not employ a standard facility design. All known alternative options were considered during the development of this project. Since the project is located on a foreign (RAAF) military installation, constructing new ECMS is the only viable option to meet operational requirements. A waiver from the requirement to perform an Economic Analysis will be approved before president's budget submission. Cost estimate includes Commissioning required by Australian building codes for third-party certification. The initial cost estimate for this project is within DoD Pricing Guide parameters modified to account for the higher area cost factor at Tindal, Northern Territory, Australia.</p>				

1. COMPONENT AIR FORCE	FY 2020 MILITARY CONSTRUCTION PROJECT DATA (computer generated)			2. DATE March 19
3. INSTALLATION, SITE AND LOCATION RAAF BASE TINDAL AUSTRALIA			4. PROJECT TITLE EARTH COVERED MAGAZINE	
5. PROGRAM ELEMENT 91211F	6. CATEGORY CODE 422-264	7. RPSUID/PROJECT NUMBER PAF180300	8. PROJECT COST (\$000) 11,600	
<p>This project does not fall within or partly within the 100-year flood plain. This project was not included in the Fiscal Year 2019 future-years defense plan. Project Engineer: 808-448-2459. Earth Covered Magazine: 218 SM = 2,340 SF</p> <p>FOREIGN CURRENCY: FCF Budget Rate Used: AUSI-DOLLAR .75</p> <p>JOINT USE CERTIFICATION: This facility can be used by other components on an "as available" basis; however, the scope of the project is based on Air Force requirements.</p>				

1. COMPONENT AIR FORCE	FY 2020 MILITARY CONSTRUCTION PROJECT DATA (computer generated)		2. DATE March 19
3. INSTALLATION AND LOCATION RAAF BASE TINDAL AUSTRALIA		4. PROJECT TITLE EARTH COVERED MAGAZINE	
5. PROGRAM ELEMENT 91211F	6. CATEGORY CODE 422-264	7. PROJECT NUMBER PAF180300	8. PROJECT COST (\$000) 11,600
12. SUPPLEMENTAL DATA:			
a. Estimated Design Data:			
(1) Status:			
(a) Date Design Started			02-APR-18
(b) Parametric Cost Estimates used to develop costs			YES
* (c) Percent Complete as of 01 JAN 2019			15%
* (d) Date 35% Designed			18-FEB-19
(e) Date Design Complete			16-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			684
(b) All Other Design Costs			342
(c) Total			1,026
(d) Contract			855
(e) In-house			171
(4) Construction Contract Award			20 FEB
(5) Construction Start			20 JUN
(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)
INTRUSION DETECTION SYSTEMS	3080	22	60

1. COMPONENT AIR FORCE				FY 2020 MILITARY CONSTRUCTION PROGRAM				2. DATE (YYYYMMDD) March 19			
3. INSTALLATION AND LOCATION RAF AKROTIRI CYPRUS						4. COMMAND UNITED STATES AIR FORCES IN EUROPE			5. AREA CONSTRUCTION COST INDEX 1.17		
6. PERSONNEL		(1) PERMANENT			(2) STUDENTS			(3) SUPPORTED			TOTAL
		OFFICER	ENLISTED	CIVILIAN	OFFICER	ENLISTED	CIVILIAN	OFFICER	ENLISTED	CIVILIAN	
a. AS OF	30-Sep-18	5	4	0	0	0	0	7	71	0	87
b. END FY	2024	6	8	0	0	0	0	9	106	0	129
7. INVENTORY DATA (\$000)											
a. TOTAL ACREAGE		0									
b. INVENTORY TOTAL AS OF		30-Sep-18									
c. AUTHORIZATION NOT YET IN INVENTORY											0
d. AUTHORIZATION REQUESTED IN THIS PROGRAM (FY 2020)											27,000
e. PLANNED IN NEXT FOUR PROGRAM YEARS (FY 2021-2024)											0
f. REMAINING DEFICIENCY											0
g. GRAND TOTAL											27,000
8. PROJECTS REQUESTED IN THIS PROGRAM (FY 2020)											
a. CATEGORY								b. COST (\$000)		c. DESIGN STATUS	
(1) CODE	(2) PROJECT TITLE				(3) SCOPE					(1) START	(2) COMPLETE
740-443	NEW DORMITORY FACILITY FOR 1ST ERS				5,833 SM			27,000		DESIGN/BUILD	
TOTAL								27,000			
9. FUTURE PROJECTS IN NEXT FOUR PROGRAM YEARS (FY2021 - FY2024)											
FUTURE PROJECTS TOTAL 0											
R&M UNFUNDED REQUIREMENT (\$M)								TOTAL		76.7	
10. MISSION OR MAJOR FUNCTIONS											
RAF Akrotiri is home to the Cyprus Operations Support Unit which provides joint support to British Forces Cyprus and operations in the region to protect the UK's strategic interests. RAF Akrotiri is an extremely busy permanent Joint Operating Base supporting ongoing operations in the region as well as support for the Sovereign Base Areas on Cyprus. It is used as a forward mounting base for overseas operations in the Middle East and for fast jet training. RAF Akrotiri's Griffin helicopters also play an important search and rescue function.											
11. OUTSTANDING POLLUTION AND SAFETY DEFICIENCIES (FY 2020-2024)											
a. Air Pollution											
b. Water Pollution											
c. Occupational Safety and Health											
d. Other Environmental											
OUTSTANDING DEFICIENCIES TOTAL										0	

1. COMPONENT AIR FORCE	FY 2020 MILITARY CONSTRUCTION PROJECT DATA (computer generated)			2. DATE March 19
3. INSTALLATION, SITE AND LOCATION RAF AKROTIRI CYPRUS		4. PROJECT TITLE 1 ERS DORM		
5. PROGRAM ELEMENT 91211F	6. CATEGORY CODE 721-312	7. RPSUID/PROJECT NUMBER 2830/QFQE193002	8. PROJECT COST (\$000) 27,000	
9. COST ESTIMATES				
ITEM	U/M	QUANTITY	UNIT	COST (\$000)
PRIMARY FACILITIES				17,611
DORM AIRMAN PERMANENT PARTY/PCS-STUDENT	SM	5,833	2,888	(16,846)
SUSTAINABILITY AND ENERGY MEASURES (2%)	LS			(344)
CYBERSECURITY OF FACILITY RELATED CONTROL SYS	LS			(421)
SUPPORTING FACILITIES				5,756
UTILITIES	LS			(2,750)
PAVEMENTS	LS			(876)
SITE IMPROVEMENTS	LS			(1,246)
COMMUNICATIONS SUPPORT	LS			(510)
DEMOLITION	SM	5,661	66	(374)
SUBTOTAL				23,366
CONTINGENCY (5.0%)				1,168
TOTAL CONTRACT COST				24,535
SUPERVISION, INSPECTION AND OVERHEAD (6.5%)				1,595
DESIGN/BUILD - DESIGN COST (4.0% OF SUBTOTAL)				935
TOTAL REQUEST				27,064
TOTAL REQUEST (ROUNDED)				27,000
EQUIPMENT FROM OTHER APPROPRIATIONS (NON-ADD)				(662)
<p>10. Description of Proposed Construction: Construct new masonry and structural steel dormitory facility with a 147 room capacity for 1st Expeditionary Reconnaissance Squadron (1 ERS) deployed assigned and transient personnel. United States Air Force (USAF) operations and facility requirements in the construction location are not to be identified and should be protected according to Security Classification Guide (SCG). Electrical works include site improvements, main power supply, main lighting, power sockets, and all other utilities, communication networks, and fire detection/alarm system necessary to provide a complete and usable facility. Make good all disturbed areas to include trench excavations, landscaping, parking and pavement reinstatement in the areas surrounding the new facility. Facilities to be demolished are 84, 85, 86A, 86C, 86D, 90, 90A and 200 totaling 5,661 SM. All work carried out is to comply with Host Nation, British Standards, USAF and National Fire Protection Association (NFPA) requirements. This project will comply 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. 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</p>				

1. COMPONENT AIR FORCE	FY 2020 MILITARY CONSTRUCTION PROJECT DATA (computer generated)			2. DATE March 19
3. INSTALLATION, SITE AND LOCATION RAF AKROTIRI CYPRUS		4. PROJECT TITLE 1 ERS DORM		
5. PROGRAM ELEMENT 35202F	6. CATEGORY CODE 721-312	7. RPSUID/PROJECT NUMBER 2830/QFQE193002	8. PROJECT COST (\$000) 27,000	
<p>applicable. This project will comply with DoD antiterrorism/force protection requirements per UFC 4-010-01.</p> <p>Air Conditioning: 78 Tons</p> <p>11. Requirement: 5833 SM Adequate: 0 SM Substandard: 5661 SM</p> <p><u>PROJECT:</u> NEW DORMITORY FACILITY FOR 1st EXPEDITIONARY RECONNAISSANCE SQUADRON</p> <p><u>REQUIREMENT:</u> Design and build 1 ERS 147 room dormitory to provide deployed assigned and transient personnel accommodation in support of current operational requirements for occupancy, deployment changeover, and projected future end strength.</p> <p><u>CURRENT SITUATION:</u> 1 ERS Single Living Accommodation (SLA) consists of 104 bed spaces in eight dispersed dormitory facilities provided by the host base, but they are over 60 years old. The current prefabricated wooden facilities were only built to last 20 years so they have far exceeded their useful life. Moreover, they are not energy efficient and are difficult to repair due to parts and components that are no longer manufactured, requiring complete system replacements. The SLA's require continuous repair and maintenance resulting in significant funds being required to ensure safe and effective living quarters can be provided and used. Approximately 4-5 rooms are closed for maintenance at any given time, therefore reducing operational capacity. Ninety percent of 1 ERS personnel are deployed. During changeover there are not enough open bed-spaces, forcing outbound personnel to stay up to three weeks off-base at a premium rate. Due to the classification and sensitivity of the mission, this raises Anti-terrorism and Force Protection (AT/FP) concerns. Additionally, the fire risk is too high due to the age and condition of the electrical system, and furthermore, several of the facilities do not have operational fire detection systems (Fire Safety Deficiency Code 1 (FSDC1)). Finally asbestos, termites and mold are present in each of the facilities and several large systems roofs/electrical/structure) are due for a full replacement/upgrade in the coming years (Risk Assessment Code 1 (RAC1)). It would be more cost effective in the long run to demolish these facilities and build new.</p> <p><u>IMPACT IF NOT PROVIDED:</u> In March 2007 an Airman and his two children were killed following a tragic fire in one of the prefabricated dormitories. A Board of Query (Inquiry) recommended that all prefabricated buildings no longer be used. However, as this is a Royal Air Force (RAF) station the availability and provision of current accommodation is limited by the RAF. If a new dormitory is not provided, 1 ERS will be forced to spend Operation and Maintenance (O&M) funds on maintenance and repairs of already dilapidated Life, Health, Safety high risk facilities which do not meet the needs for current or projected future end strength. In addition off-base lodgings will require continued utilization raising serious AT/FP concerns and safety risks to personnel. Failure to construct new accommodation will have a significant negative impact on the 1 ERS mission.</p> <p><u>ADDITIONAL:</u> A preliminary analysis of reasonable options for accomplishing this project (status quo, lease/rent, and upgrade) was accomplished. There is only one option that will meet the operational and current mission requirement and that is to construct new. A formal Economic Analysis (EA) will be approved prior to president's budget approval. This project meets the criteria/scope in Air Force</p>				

1. COMPONENT AIR FORCE	FY 2020 MILITARY CONSTRUCTION PROJECT DATA (computer generated)			2. DATE March 19
3. INSTALLATION, SITE AND LOCATION RAF AKROTIRI CYPRUS			4. PROJECT TITLE 1 ERS DORM	
5. PROGRAM ELEMENT 35202F	6. CATEGORY CODE 721-312	7. RPSUID/PROJECT NUMBER 2830/QFQE193002	8. PROJECT COST (\$000) 27,000	
<p>Handbook 32-1084, "Civil Engineering Requirements." North Atlantic Treaty Organization (NATO) Funding: All work associated with this project shall comply with USAF and Host Nation Regulations and agreements. The country-to-country agreement precludes the use of International Bid Procedure (IBP) proceedings in the United Kingdom/Cyprus. No portion of this project is eligible for NATO funding. Supporting Facilities: 25% of Total Primary Facility Cost = \$5,756,000. Supporting facilities costs exceed this due to the dispersed locations of the current facility configurations. In addition the current services, drainage, communication network, site and grounds are in a poor state and will need upgrading/repairing/relocating to fulfill this requirement. This design shall conform to criteria established in the Air Force Corporate Facilities Standards but will not employ a standard facility design. This project does not fall within or partly within the 100-year flood plain. This project was not included in the Fiscal Year 2019 future-years defense plan. 100th Civil Engineer Squadron Commander Comm Tel No: (44) 1638-542205</p> <p>JOINT USE CERTIIFICATION: Mission requirements, operational considerations, and location are incompatible with use by other components.</p> <p>Unit Conversion: CNS 5,833 SM = 62,786 SF also DEMO 5,661 SM = 60,934 SF</p>				

1. COMPONENT AIR FORCE	FY 2020 MILITARY CONSTRUCTION PROJECT DATA (computer generated)		2. DATE March 19
3. INSTALLATION AND LOCATION RAF AKROTIRI CYPRUS		4. PROJECT TITLE 1 ERS DORM	
5. PROGRAM ELEMENT 35202F	6. CATEGORY CODE 721-312	7. PROJECT NUMBER 2830/QFQE193002	8. PROJECT COST (\$000) 27,000
12. SUPPLEMENTAL DATA:			
a. Estimated Design Data:			
(1) Project to be accomplished by design-build procedures			
(a) Date Design Started:			1 MAY 18
(b) Parametric Cost Estimates Used to Develop Costs:			YES
(c) Percent Complete as of January 2019:			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:			1,080
(4) Construction Contract Award:			20 FEB
(5) Construction Start:			20 JUN
(6) Construction Completion:			22 MAR
(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)
FURNITURE, FIXTURES & EQUIPMENT	3400	22	662

1. COMPONENT AIR FORCE			FY 2020 MILITARY CONSTRUCTION PROGRAM						2. DATE (YYYYMMDD) March 19			
3. INSTALLATION AND LOCATION JOINT REGION MARIANAS - ANDERSEN GUAM						4. COMMAND PACIFIC AIR FORCES			5. AREA CONSTRUCTION COST INDEX 2.50			
6. PERSONNEL			(1) PERMANENT			(2) STUDENTS			(3) SUPPORTED			TOTAL
			OFFICER	ENLISTED	CIVILIAN	OFFICER	ENLISTED	CIVILIAN	OFFICER	ENLISTED	CIVILIAN	
a. AS OF 30-Sep-18			158	1595	376	0	0	0	0	0	0	2,129
b. END FY 2024			158	1643	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-18												6,145,097
c. AUTHORIZATION NOT YET IN INVENTORY												253,058
d. AUTHORIZATION REQUESTED IN THIS PROGRAM (FY 2020)												65,000
e. PLANNED IN NEXT FOUR PROGRAM YEARS (FY 2021-2024)												356,000
f. REMAINING DEFICIENCY												175,000
g. GRAND TOTAL												6,994,155
8. PROJECTS REQUESTED IN THIS PROGRAM (FY 2020)												
a. CATEGORY										b. COST (\$000)		c. DESIGN STATUS
(1) CODE	(2) PROJECT TITLE					(3) SCOPE					(1) START	(2) COMPLETE
422-264	MUNITIONS STORAGE IGLOOS PH 3					4,128 SM			65,000		DESIGN	BUILD
TOTAL									65,000			
9. FUTURE PROJECTS IN NEXT FOUR PROGRAM YEARS (FY 2021-2024)												
442-758		ADR FACILITY ANDERSEN				7,317 SM			23,000			
422-264		STAND OFF WEAPONS COMPLEX, MSA 2				2,831 SM			56,000			
422-264		MUNITIONS STORAGE IGLOOS PH 4				2,271 SM			29,500			
113-321		N RAMP INFRASTRUCTURE PH 1				235,140 SM			183,300			
121-122		N RAMP INFRASTRUCTURE PH 2				2,385 CM			33,200			
212-212		Missile Assembly Shop and Munitions Road				4,000 SM			31,000			
FUTURE PROJECTS TOTAL									356,000			
R&M UNFUNDED REQUIREMENT (\$M)										TOTAL		0.4
10. MISSION OR MAJOR FUNCTIONS												
Joint Region Marianas-Andersen is home to the 36th Wing (36 WG) 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 (FY 2020-2024)												
a. Air Pollution												
b. Water Pollution												
c. Occupational Safety and Health												
d. Other Environmental												
OUTSTANDING DEFICIENCIES TOTAL										0		

1. COMPONENT AIR FORCE	FY 2020 MILITARY CONSTRUCTION PROJECT DATA (computer generated)			2. DATE March 19
3. INSTALLATION, SITE AND LOCATION JOINT REGION MARIANAS - ANDERSEN ANDERSEN AF BASE SITE # 1 GUAM			4. PROJECT TITLE MUNITIONS STORAGE IGLOOS PH 3	
5. PROGRAM ELEMENT 91211F	6. CATEGORY CODE 422-264	7. RPSUID/PROJECT NUMBER 1366/AJJY073105P3	8. PROJECT COST (\$000) 65,000	
9. COST ESTIMATES				
ITEM	U/M	QUANTITY	UNIT	COST (\$000)
PRIMARY FACILITIES				33,277
MUNITIONS IGLOOS (422-264)	SM	4,128	7,770	(32,075)
UTILITY VAULT (890-187)	EA	1	300,000	(300)
CYBERSECURITY OF FACILITY-RELATED CONTROL SYS	LS			(250)
SUSTAINABILITY AND ENERGY MEASURES (2.0%)	LS			(652)
SUPPORTING FACILITIES				22,926
UTILITIES	LS			(7,100)
PAVEMENT	LS			(4,200)
SITE IMPROVEMENTS	LS			(4,800)
INFORMATION SYSTEMS	LS			(2,800)
UN-EXPLODED ORDNANCE EXPLOSIVE SAFETY SUBMISSION	LS			(2,000)
BACKUP GENERATOR	LS			(400)
ARCHAEOLOGICAL MONITORING	LS			(626)
ENVIRONMENTAL REMEDIATION	LS			(1,000)
SUBTOTAL				56,203
CONTINGENCY (5.0%)				2,810
TOTAL CONTRACT COST				59,013
SUPERVISION, INSPECTION AND OVERHEAD (6.2%)				3,659
DESIGN/BUILD - DESIGN COST (4.0% OF SUBTOTAL)				2,248
TOTAL REQUEST				64,920
TOTAL REQUEST (ROUNDED)				65,000
EQUIPMENT FROM OTHER APPROPRIATIONS (NON-ADD)				(500)
<p>10. Description of Proposed Construction: Construct Munitions Igloos to support existing missions at Andersen Air Force Base (AAFB). Igloos will be Hayman 7-bar design modified for local seismic requirements and siting. Project will include electrical power consisting of back-up generator, lighting, intrusion detection infrastructure, lightning protection system, utility vault for generator and communications equipment, aprons, and roads. In addition project will need to address natural and cultural resource issues as well as munitions and explosives of concern (MEC). 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 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.</p> <p>Air Conditioning: 0 Tons</p>				

1. COMPONENT AIR FORCE	FY 2020 MILITARY CONSTRUCTION PROJECT DATA (computer generated)			2. DATE March 19
3. INSTALLATION, SITE AND LOCATION JOINT REGION MARIANAS - ANDERSEN ANDERSEN AF BASE SITE # 1 GUAM			4. PROJECT TITLE MUNITIONS STORAGE IGLOOS PH 3	
5. PROGRAM ELEMENT 91211F	6. CATEGORY CODE 422-264	7. RPSUID/PROJECT NUMBER 1366/AJJO73105P3	8. PROJECT COST (\$000) 65,000	
11. Requirement: 35024 SM Adequate: 8401 SM Substandard: 30132 SM <u>PROJECT:</u> Munitions Storage Igloos, Phase 3 <u>REQUIREMENT:</u> Adequately sized, configured, sited, and protected munitions storage igloos are required to support forward-positioned munitions at Andersen AFB. The facilities will include reinforced concrete foundations, rated 7-bar construction, floor slabs, columns, beams, lighting and electrical support, fire protection systems, lightning protection systems, intrusion detection systems, and all necessary supporting utilities for complete and usable facilities. <u>CURRENT SITUATION:</u> In April 2002, the USAF Safety Center classified 132 existing 1950s munitions igloos as "undefined" due to faulty door design, thus downgrading these facilities to non-standard type operations. The downgraded classification compounded by deterioration of the facilities and their loss of earth cover caused by super typhoons, has resulted in a reduction of the Net Explosive Weight (NEW) to be reduced from 49.5 million pounds to 37.5 million pounds for a total reduction of 12 million pounds-- a 24% reduction in capacity. A joint Pacific Air Forces/Wing Munitions Squadron assessment of the munitions storage capability was conducted. The assessment identified a shortfall of 60 munitions storage igloos. These igloos are needed to meet the munitions mission required by the War Consumables Distribution Objectives document, Defense Planning Guidance, and Pacific Command (PACOM) Operational Plans (OPLANS). Overall, the existing facilities cannot accommodate future operational requirements and will not adequately support the mission of the 36th Munitions Squadron. <u>IMPACT IF NOT PROVIDED:</u> Lack of adequate munitions storage will continue to limit essential forward-positioned munitions storage capability needed to support missions at Andersen AFB. The inability to properly store new weapons systems will deprive PACAF of immediate access to selected munitions to meet changing taskings and bomber sortie generation. If this project is not provided, the current inadequate facilities will not support future missions that directly support INDOPACOM/PACAF's theater stability and positioning for contingency objectives. <u>ADDITIONAL:</u> This design shall conform to criteria established in the Air Force Corporate Facilities Standards but will not employ a standard facility design for 7-Bar RC box earth covered magazines. This project meets the criteria/scope specified in Air Force Manual 32-1084, "Facility Requirements." The cost estimate was based on PACES and is in line with the DoD Pricing Guide Parameters. 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. The economic analysis will be approved prior to the president's budget submission. The supporting facilities cost exceeds 25% of the primary facility cost due to the size of the project site (which requires an extensive amount of utilities and roads). Additionally, the project site improvements must address natural and cultural resource issues. This project does not fall within or partly within the 100-year flood plain.				

1. COMPONENT AIR FORCE	FY 2020 MILITARY CONSTRUCTION PROJECT DATA (computer generated)			2. DATE March 19
3. INSTALLATION, SITE AND LOCATION JOINT REGION MARIANAS - ANDERSEN ANDERSEN AF BASE SITE # 1 GUAM			4. PROJECT TITLE MUNITIONS STORAGE IGLOOS PH 3	
5. PROGRAM ELEMENT 91211F	6. CATEGORY CODE 422-264	7. RPSUID/PROJECT NUMBER 1366/AJJY073105P3	8. PROJECT COST (\$000) 65,000	
<p>This project was not included in the Fiscal Year 2019 future-years defense plan. Base Civil Engineer: 671-366-2530. Area: 4,128 SM = 44,433 SF.</p>				
<p>JOINT USE CERTIFICATION: These facilities can be used by other components on an "as available" basis; however, the scope of the project is based on Air Force requirements.</p>				

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1. COMPONENT AIR FORCE	FY 2020 MILITARY CONSTRUCTION PROJECT DATA (computer generated)		2. DATE March 19
3. INSTALLATION AND LOCATION JOINT REGION MARIANAS - ANDERSEN ANDERSEN AF BASE SITE # 1 GUAM		4. PROJECT TITLE MUNITIONS STORAGE IGLOOS PH 3	
5. PROGRAM ELEMENT 91211F	6. CATEGORY CODE 422-264	7. PROJECT NUMBER 1366/AJYY073105P3	8. PROJECT COST (\$000) 65,000
12. SUPPLEMENTAL DATA:			
a. Estimated Design Data:			
(1) Project to be accomplished by design-build procedures			
(a) Date Design Started:			20 FEB 18
(b) Parametric Cost Estimates Used to Develop Costs:			YES
(c) Percent Complete as of January 2019:			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:			2,600
(4) Construction Contract Award:			20 FEB
(5) Construction Start:			20 JUN
(6) Construction Completion:			22 MAR
(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)
ALARM SYSTEMS	3080	2022	500

1. COMPONENT AIR FORCE	FY 2020 MILITARY CONSTRUCTION PROJECT DATA (computer generated)			2. DATE March 19	
3. INSTALLATION, SITE AND LOCATION YOKOTA AIR BASE YOKOTA AB SITE # 1 JAPAN			4. PROJECT TITLE FUEL RECEIPT AND DISTRIBUTION UPGRADES		
5. PROGRAM ELEMENT 91211F	6. CATEGORY CODE 126-926	7. RPSUID/PROJECT NUMBER 3541/ZNRE2031002	8. PROJECT COST (\$000) 12,400		
9. COST ESTIMATES					
ITEM		U/M	QUANTITY	UNIT	COST (\$000)
PRIMARY FACILITIES					9,665
ALTER RAIL CAR LF UNOLADING (126-926)		OL	24	150,000	(3,600)
ADD TRUCK LF UNLOADING (126-926)		OL	9	625,000	(5,625)
CYBERSECURITY OF FACILITY-RELATED CONTROL SYS		LS			(250)
SUSTAINABILITY AND ENERGY MEASURES (2.0%)		LS			(190)
SUPPORTING FACILITIES					1,432
UTILITIES		LS			(99)
BACK-UP GENERATOR		LS			(500)
PAVEMENTS		LS			(555)
SITE IMPROVEMENTS		LS			(278)
SUBTOTAL					11,097
CONTINGENCY (5.0%)					555
TOTAL CONTRACT COST					11,651
SUPERVISION, INSPECTION AND OVERHEAD (6.5%)					757
TOTAL REQUEST					12,409
TOTAL REQUEST (ROUNDED)					12,400
10. Description of Proposed Construction: Expand and upgrade the existing liquid fuel (LF) unloading facility to accommodate rail cars (existing capability) and fuel delivery trucks, and comply with current requirements. The system includes replacing the existing 32 rail station headers with 24 new headers, plus adding nine truck offload headers. The new offload facility will include two drop tanks in below-ground concrete vaults with pumps and piping to connect to an existing nearby fuel facility. In addition, the existing back-up generator will need to be upgraded. Secondary containment with remote spill containment basin will be added. Truck access roads and an offload parking area with bypass lane and entry/exit gates will also be added. Nearby on-base roads will require improvements to accommodate the trucks. Lighting, utilities, yard piping, rail lines, and other components will be replaced or improved as needed to ensure a complete and usable facility. Demolition or relocation of some components of the existing facility will also be required, to include removing excess rail lines. The applicable standard is Unified Facilities Criteria 3-460-01. This project will comply with DoD Antiterrorism/Force Protection Requirements as per UFC 4-010-01.					
Air Conditioning: 0 Tons					
11. Requirement: 33 OL Adequate: 0 OL Substandard: 32 OL					

1. COMPONENT AIR FORCE	FY 2020 MILITARY CONSTRUCTION PROJECT DATA (computer generated)			2. DATE March 19
3. INSTALLATION, SITE AND LOCATION YOKOTA AIR BASE YOKOTA AB SITE # 1 JAPAN			4. PROJECT TITLE FUEL RECEIPT AND DISTRIBUTION UPGRADES	
5. PROGRAM ELEMENT 27576F	6. CATEGORY CODE 126-926	7. RPSUID/PROJECT NUMBER 3541/ZNRE2031002	8. PROJECT COST (\$000) 12,400	
<p>11. Requirement: 33 OL Adequate: 0 OL Substandard: 32 OL PROJECT: Fuel Receipt and Distribution Upgrades REQUIREMENT: This project increases the resiliency of the fuel delivery system at Yokota AB by adding redundancy to reduce the risk of disruption of continued operations due to loss of a single component of the system, and upgrading this key fuel facility to meet current requirements and standards. The project will need to accommodate local rail and truck standards consistent with host nation transportation requirements. The construction will need to be staged in order to ensure uninterrupted operation of this facility throughout the construction period. CURRENT SITUATION: Yokota AB is a key location for the contingency storage of fuels (JP-8 only) for DoD in the Pacific. Bulk JP-8 fuel is received primarily via rail at the south end of the base. A JP-8 truck fillstand is also located in the Logistics Readiness Squadron (LRS) fuel yard off the southwest end of the runway. These fuel delivery systems have several components/nodes that if not available would reduce or eliminate continued fueling operations at a tempo required to support the mission. IMPACT IF NOT PROVIDED: Availability of aviation fuel is critical to airbase missions; loss of a fuel system node due to natural or manmade disaster would preclude persistent air operations at a time of most critical need. This project provides redundancy that reduces risk of disruption of continued operations due to loss of any one fuel node. 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. A preliminary analysis of reasonable alternatives was accomplished to determine feasible means of increasing the resiliency of the fuel system. This analysis indicated that the proposed combination of improvements was the most cost effective means to meet mission requirements. An Economic Analysis will be approved before the president's budget submission. The cost estimate was based on a parametric cost estimate and is in line with the DoD Pricing Guide Parameters. Host Nation funding was requested, however, the project scores too low for near-term funding consideration. This project does not fall within or partly within the 100-year flood plain. This project was not included in the Fiscal Year 2019 future-years defense plan. 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. Base Civil Engineer: (011) 81-425522510 FOREIGN CURRENCY: FCF Budget Rate Used: YEN 111.1542 JOINT USE CERTIFICATION: This facility can be used by other components on an "as available" basis; however, the scope of the project is based on Air Force requirements.</p>				

1. COMPONENT AIR FORCE	FY 2020 MILITARY CONSTRUCTION PROJECT DATA (computer generated)		2. DATE March 19
3. INSTALLATION AND LOCATION YOKOTA AIR BASE YOKOTA AB SITE # 1 JAPAN		4. PROJECT TITLE FUEL RECEIPT AND DISTRIBUTION UPGRADES	
5. PROGRAM ELEMENT 27576F	6. CATEGORY CODE 126-926	7. PROJECT NUMBER 3541/ZNRE2031002	8. PROJECT COST (\$000) 12,400
12. SUPPLEMENTAL DATA:			
a. Estimated Design Data:			
(1) Status:			
(a) Date Design Started			29-JUN-18
(b) Parametric Cost Estimates used to develop costs			YES
* (c) Percent Complete as of 01 JAN 2019			15%
* (d) Date 35% Designed			28-FEB-19
(e) Date Design Complete			27-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			744
(b) All Other Design Costs			372
(c) Total			1,116
(d) Contract			930
(e) In-house			186
(4) Construction Contract Award			20 FEB
(5) Construction Start			20 JUN
(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: N/A			

1. COMPONENT AIR FORCE	FY 2020 MILITARY CONSTRUCTION PROJECT DATA (computer generated)			2. DATE March 19	
3. INSTALLATION, SITE AND LOCATION MUWAFFAQ SALT I AB JORDAN		4. PROJECT TITLE AIR TRAFFIC CONTROL TOWER			
5. PROGRAM ELEMENT 91211F	6. CATEGORY CODE 149-962	7. RPSUID/PROJECT NUMBER ASVF203110	8. PROJECT COST (\$000) 24,000		
9. COST ESTIMATES					
ITEM		U/M	QUANTITY	UNIT	COST (\$000)
PRIMARY FACILITIES					19,191
AIR TRAFFIC CONTROL TOWER		SM	1,012	18,350	(18,570)
SUSTAINABILITY & ENERGY MEASURES		LS			(371)
CYBERSECURITY OF FACILITY-RELATED CONTROL SYS		LS			(250)
SUPPORTING FACILITIES					2,559
UTILITIES		LS			(1,689)
PAVEMENTS		LS			(363)
SITE IMPROVEMENTS		LS			(50)
BACK-UP GENERATOR		EA	1	120,796	(121)
SITE LIGHTING		LS			(124)
COMMUNICATIONS		LS			(162)
SPECIAL FOUNDATIONS		LS			(50)
SUBTOTAL					21,751
CONTINGENCY (5.0%)					1,088
TOTAL CONTRACT COST					22,838
SUPERVISION, INSPECTION AND OVERHEAD (6.5%)					1,484
TOTAL REQUEST					24,323
TOTAL REQUEST (ROUNDED)					24,000
EQUIPMENT FROM OTHER APPROPRIATIONS (NON-ADD)					(3,075.0)
10. Description of Proposed Construction: Construct a 12 story Air Traffic Control Tower (ATCT) with reinforced concrete pile foundation and slab floor, masonry walls, and standing seam metal roof. This project includes an elevator, a catwalk surrounding the tower cab as well as utilities, site improvements, pavements, special foundations, a backup power generator and all other work necessary to provide a complete and useable facility. The facility will also have space to support a radar approach control system. The host nation tower facility will not be demolished at the request of the Jordanian Armed Forces (JAF). Facilities will be designed as permanent construction in accordance with the Unified Facilities Criteria (UFC) 1-200-01. Sustainable principles, to include Life Cycle cost-effective practices, will be integrated into the design, development and construction of the project in accordance with UFC 1-200-02. This project will comply with Department of Defense (DoD) Antiterrorism/force protection requirements per UFC 4-010-01.					
Air Conditioning: 25 Tons					
11. Requirement: 1012 SM Adequate: 0 SM Substandard: 0 SM					
PROJECT: Air Traffic Control Tower					
REQUIREMENT: MSAB requires an updated air traffic control tower to efficiently and safely control both active runways (RWY); a myriad of taxiways, and existing and					

1. COMPONENT AIR FORCE	FY 2020 MILITARY CONSTRUCTION PROJECT DATA (computer generated)			2. DATE March 19
3. INSTALLATION, SITE AND LOCATION MUWAFFAQ SALT I AB JORDAN			4. PROJECT TITLE AIR TRAFFIC CONTROL TOWER	
5. PROGRAM ELEMENT 91211F	6. CATEGORY CODE 149-962	7. RPSUID/PROJECT NUMBER ASVF203110	8. PROJECT COST (\$000) 24,000	
<p>future aircraft parking aprons. USCENTCOM requires at least one counter terrorist operational hub in the Levant with secured access and infrastructure to support enduring and contingency missions. Muwaffaq-Salti AB (MSAB) has been identified as the counter terrorist operational hub. The development supports realignment of U.S. Forces from an expeditionary approach at contingency basing scattered across Jordan to enduring missions supportive of a key bilateral relationship. The control tower houses air traffic control radio and landline consoles, precision approach status indicators, and work space for up to 10 air traffic controllers and staff members. The control tower supports the 332 Air Expeditionary Wing (332 AEW) and coalition partners. This project fulfills the requirement for an air control tower capable of supporting two runways in order to meet the aircraft sortie generation demands to support the contingency operations at MSAB, Jordan. The facility will include training rooms, crew briefing room, and office space for the tower chief, assistant chief controller, terminal instrument procedure specialist, training Non-Commissioned Officer NCO, Airfield Operations Flight Commander, and administrative personnel. The facility will also have space to support a radar approach control system and necessary back-up power. The tower will have the necessary supporting utilities to include communications, security fence, power, heating, ventilation, and air conditioning (HVAC), plumbing, fire protection, access roads and parking.</p> <p><u>CURRENT SITUATION:</u> Currently, MSAB has a 1950s structure built by the Host Nation designed to support Runway (RWY) 13/31 operations. Runway 08/26 was added in 2002. With the planned completion of the \$143M FY18 MSAB Development that includes a Close Air Support/Intelligence, Surveillance, Reconnaissance (CAS/ISR) Apron, Personnel Recovery/Special Operations Forces (PR/SOF) Apron, Hot Cargo Apron, and Airlift Apron off of Taxiway Lima near RWY 08/26, the tower is inadequate to support the future increases in U.S. and Mission Partner aircraft and personnel. Nearly all operations on 08/26 will be obscured from the controllers view. There have been several close calls due to the limited line of sight under existing conditions. This issue will only be compounded with the completion of the new operations town area. Additionally, multiple Fire Safety Deficiencies (FSD) are documented on the existing tower to include 13 Cat 1, seven Cat 2, and one Cat 3 FSDs.</p> <p><u>IMPACTED IF NOT PROVIDED:</u> With the entire RWY 08/26 nearly out of view, aircraft will be forced into one in, one out maneuvers, severely hampering flightline operations. As a consequence, commanders in Jordan will face unacceptable risk sustaining additional forces to support the concept of operations for MSAB.</p> <p><u>ADDITIONAL:</u> This project has been coordinated with the Jordanian Armed Forces (Host Nation government) and is fully supported. However, no funding is expected from the Host Nation for this project. This project has also been coordinated with the installation physical security plan, and all physical security measures are included. The project meets the scope/criteria contained in Air Force Handbook 32-1084, "Facility Requirements." This design shall conform to criteria established in the Air Force Corporate Facilities Standards (AFCFS), the Installation Facilities Standards (IFS) and shall employ the standard facilities design from Air Force Civil Engineer Centers (AFCEC). An economic analysis comparing alternative methods of meeting this requirement have been explored during project development to include the status quo, renovation of existing, and new construction. New construction is the only feasible option to meet the requirement and a waiver is being accomplished. This project does not fall within or partly within the 100-year flood plain.</p>				

1. COMPONENT AIR FORCE	FY 2020 MILITARY CONSTRUCTION PROJECT DATA (computer generated)			2. DATE March 19
3. INSTALLATION, SITE AND LOCATION MUWAFFAQ SALTI AB JORDAN			4. PROJECT TITLE AIR TRAFFIC CONTROL TOWER	
5. PROGRAM ELEMENT 91211F	6. CATEGORY CODE 149-962	7. RPSUID/PROJECT NUMBER ASVF203110	8. PROJECT COST (\$000) 24,000	
Base Civil Engineer POC: 803-717-7055. (Air Traffic Control Tower: 1,012 square meters = 10,893 square feet).				
<p><u>JOINT USE CERTIFICATION:</u> This facility can be used by other components on an "as available" basis; however, the scope of the project is based on Air Force requirements.</p>				

1. COMPONENT AIR FORCE	FY 2020 MILITARY CONSTRUCTION PROJECT DATA (computer generated)		2. DATE March 19
3. INSTALLATION AND LOCATION MUWAFFAQ SALTI AB JORDAN		4. PROJECT TITLE AIR TRAFFIC CONTROL TOWER	
5. PROGRAM ELEMENT 91211F	6. CATEGORY CODE 149-962	7. PROJECT NUMBER ASVF203110	8. PROJECT COST (\$000) 24,000
12. SUPPLEMENTAL DATA:			
a. Estimated Design Data:			
(1) Status:			
(a) Date Design Started			8-JAN-19
(b) Parametric Cost Estimates used to develop costs			YES
* (c) Percent Complete as of 01 JAN 2019			15%
* (d) Date 35% Designed			25-APR-19
(e) Date Design Complete			19-SEP-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 -			Lackland AFB
(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			20 FEB
(5) Construction Start			20 JUN
(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)
FURNITURE, FIXTURES, & EQUIPMENT	3400	22	150
COMMUNICATIONS	3400	22	175
AIRCRAFT CONTROL EQUIPMENT	3080	22	2,500
UNINTERRUPTIBLE POWER SUPPLY (UPS)	3400	22	250

1. COMPONENT AIR FORCE	FY 2020 MILITARY CONSTRUCTION PROJECT DATA (computer generated)			2. DATE March 19	
3. INSTALLATION, SITE AND LOCATION MUWAFFAQ SALT AB (MSAB) JORDAN			4. PROJECT TITLE MUNITIONS STORAGE AREA		
5. PROGRAM ELEMENT 91211F	6. CATEGORY CODE 422-264	7. RPSUID/PROJECT NUMBER ASVF203130	8. PROJECT COST (\$000) 42,000		
9. COST ESTIMATES					
ITEM		U/M	QUANTITY	UNIT	COST (\$000)
PRIMARY FACILITIES					22,095
STORAGE IGLOO (422-264)		SM	1,897	3,558	(6,750)
SHOP, CONVENTIONAL MUNITIONS (216-642)		SM	1,043	4,101	(4,277)
SHOP, TACTICAL MISSILE MX ADMIN (212-213)		SM	632	5,013	(3,168)
MUNITIONS MX ADMIN FACILITY (610-144)		SM	883	3,705	(3,272)
AIRCRAFT SPT EQUIP (MUNS) MX FAC (218-712)		SM	584	5,597	(3,269)
MUNITIONS AREA ENTRY CONTROL POINT (730-839)		LS			(668)
SUSTAINABILITY AND ENERGY MEASURES		LS			(442)
CYBERSECURITY OF FACILITY-RELATED CONTROL SYS		LS			(250)
SUPPORTING FACILITIES					15,905
SECURITY FENCE		LM	9,684	450	(4,358)
PERIMETER LIGHTING		LS			(461)
ACCESS ROADS		LM	9,637	828	(7,979)
GENERATORS		EA	3	163,659	(491)
UTILITIES		LS			(2,121)
FIRE PROTECTION DISTRIBUTION SYSTEM		LS			(353)
SITE IMPROVEMENTS		LS			(141)
SUBTOTAL					38,000
CONTINGENCY (5.0%)					1,900
TOTAL CONTRACT COST					39,900
SUPERVISION, INSPECTION AND OVERHEAD (6.5%)					2,593
TOTAL REQUEST					42,493
TOTAL REQUEST (ROUNDED)					42,000
EQUIPMENT FROM OTHER APPROPRIATIONS (NON-ADD)					(2,125.0)
10. Description of Proposed Construction: Construct south Munitions Storage Area (MSA) to include earth covered magazines (igloos) to store up to 3.0M Net Explosive Weight (NEW) munitions storage with the necessary associated paved roads, security fencing, and lightning protection. Additionally, munitions support facilities (Ammunitions Maintenance, Precision Guided Munitions (PGM) MX, Trailer MX, and Administration Facilities) are included in this project. The South MSA will have the necessary access roads and culverts wide enough to support typical munitions vehicles and trailers, communication and electrical, fire protection/distribution, water, wastewater utilities for a complete and useable MSA. Facilities will be designed as permanent construction in accordance with the Unified Facilities Criteria (UFC) 1-200-01. Sustainable principles, to include Life Cycle cost-effective practices, will be integrated into the design, development and construction of the project in accordance with UFC 1-200-02. This project will comply with Department of Defense (DoD) Antiterrorism/force protection requirements per UFC 4-010-01.					

1. COMPONENT AIR FORCE	FY 2020 MILITARY CONSTRUCTION PROJECT DATA (computer generated)			2. DATE March 19
3. INSTALLATION, SITE AND LOCATION MUWAFFAQ SALT I AB (MSAB) JORDAN			4. PROJECT TITLE MUNITIONS STORAGE AREA	
5. PROGRAM ELEMENT 91211F	6. CATEGORY CODE 422-264	7. RPSUID/PROJECT NUMBER ASVF203130	8. PROJECT COST (\$000) 42,000	
Air Conditioning: 80 Tons				
11. Requirement: 1897SM Adequate: 0 SM Substandard: 0 SM				
<u>PROJECT:</u> MUNITIONS STORAGE AREA				
<u>REQUIREMENT:</u> USCENTCOM requires at least one counter terrorist operational hub in the Levant with secured access and infrastructure to support enduring and contingency missions. Muwaffaq-Salti AB (MSAB) has been identified as the counter terrorist operational hub. The development supports realignment of U.S. Forces from an expeditionary approach at contingency basing scattered across Jordan to enduring missions supportive of a key bilateral relationship. This project fulfills the requirement for munitions storage in order to meet the ordnance demands for the flightline operations that are required to support the contingency operations at MSAB, Jordan. In addition, this project includes supporting access roads, utility infrastructure, associated pavements and security fencing.				
<u>CURRENT SITUATION:</u> Currently, MSAB has expeditionary open storage pads for munitions storage with no permanent facilities for munitions & trailer maintenance and munitions administration. The expeditionary arrangement cannot meet the long-term projected demand once the CAS/ISR apron is completed and additional aircraft arrive. Additionally, the outdoor storage of certain munitions reduces their shelf life requiring more frequent re-supply of these munitions. The life-span of the expeditionary pads is intended to only meet short-term mission requirements. The new aprons support an increase in operations to counter ISIS and MSAB does not have the ability to support the future missions projected for the base.				
<u>IMPACT IF NOT PROVIDED:</u> If this project is not funded, then munitions requirements needed to operate the flightline facilities will be greatly hindered and the commanders in Jordan will face unacceptable risk sustaining additional forces to support the concept of operations for MSAB.				
<u>ADDITIONAL:</u> 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 (AFCFS) and the Installation Facility Standards (IFS), and shall ensure explosives safety standards are met (DoD 6055.9-Std, DoD Ammunition and Explosives Safety Standards and AFMAN 91-201, Explosives Safety Standards.) Joint use potential will be incorporated where feasible. This project has been coordinated with the installation physical security plan, and all physical security measures are included. A preliminary analysis of reasonable alternatives was accomplished comparing status quo, renovation and new construction. This analysis indicated that new construction is the most cost effective means to meet mission requirements and a waiver is being accomplished. This project does not fall within or partly within the 100-year flood plain. This project was not included in the Fiscal Year 2019 future-years defense plan in FY20. Base Civil Engineer POC: 803-717-7055. (Munitions Igloos: 1,897 SM =20,423 SF; Munitions Mx Facility 1043 SM = 11,227 SF; PGM Mx Facility 632 SM = 6803 SF; Munitions Admin 883 SM = 9505 SF; Trailer Mx Facility 584 SM = 6286 SF).				

1. COMPONENT AIR FORCE	FY 2020 MILITARY CONSTRUCTION PROJECT DATA (computer generated)		2. DATE March 19
3. INSTALLATION, SITE AND LOCATION MUWAFFAQ SALTI AB (MSAB) JORDAN		4. PROJECT TITLE MUNITIONS STORAGE AREA	
5. PROGRAM ELEMENT 91211F	6. CATEGORY CODE 422-264	7. RPSUID/PROJECT NUMBER ASVF203130	8. PROJECT COST (\$000) 42,000
<p>JOINT USE CERTIFICATION: This facility can be used by other components on an "as available" basis; however, the scope of the project is based on Air Force requirements.</p>			

1. COMPONENT AIR FORCE	FY 2020 MILITARY CONSTRUCTION PROJECT DATA (computer generated)		2. DATE March 19
3. INSTALLATION AND LOCATION MUWAFFAQ SALTI AB (MSAB) JORDAN		4. PROJECT TITLE MUNITIONS STORAGE AREA	
5. PROGRAM ELEMENT 91211F	6. CATEGORY CODE 422-264	7. PROJECT NUMBER ASVF203130	8. PROJECT COST (\$000) 42,000
12. SUPPLEMENTAL DATA:			
a. Estimated Design Data:			
(1) Status:			
(a) Date Design Started			7-MAR-19
(b) Parametric Cost Estimates used to develop costs			YES
* (c) Percent Complete as of 01 JAN 2019			15%
* (d) Date 35% Designed			1-APR-19
(e) Date Design Complete			2-OCT-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			2,520
(b) All Other Design Costs			1,260
(c) Total			3,780
(d) Contract			3,150
(e) In-house			630
(4) Construction Contract Award			20 FEB
(5) Construction Start			20 JUN
(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)
FURNITURE, FIXTURES, & EQUIPMENT	3400	21	1,500
COMMUNICATIONS	3080	21	625

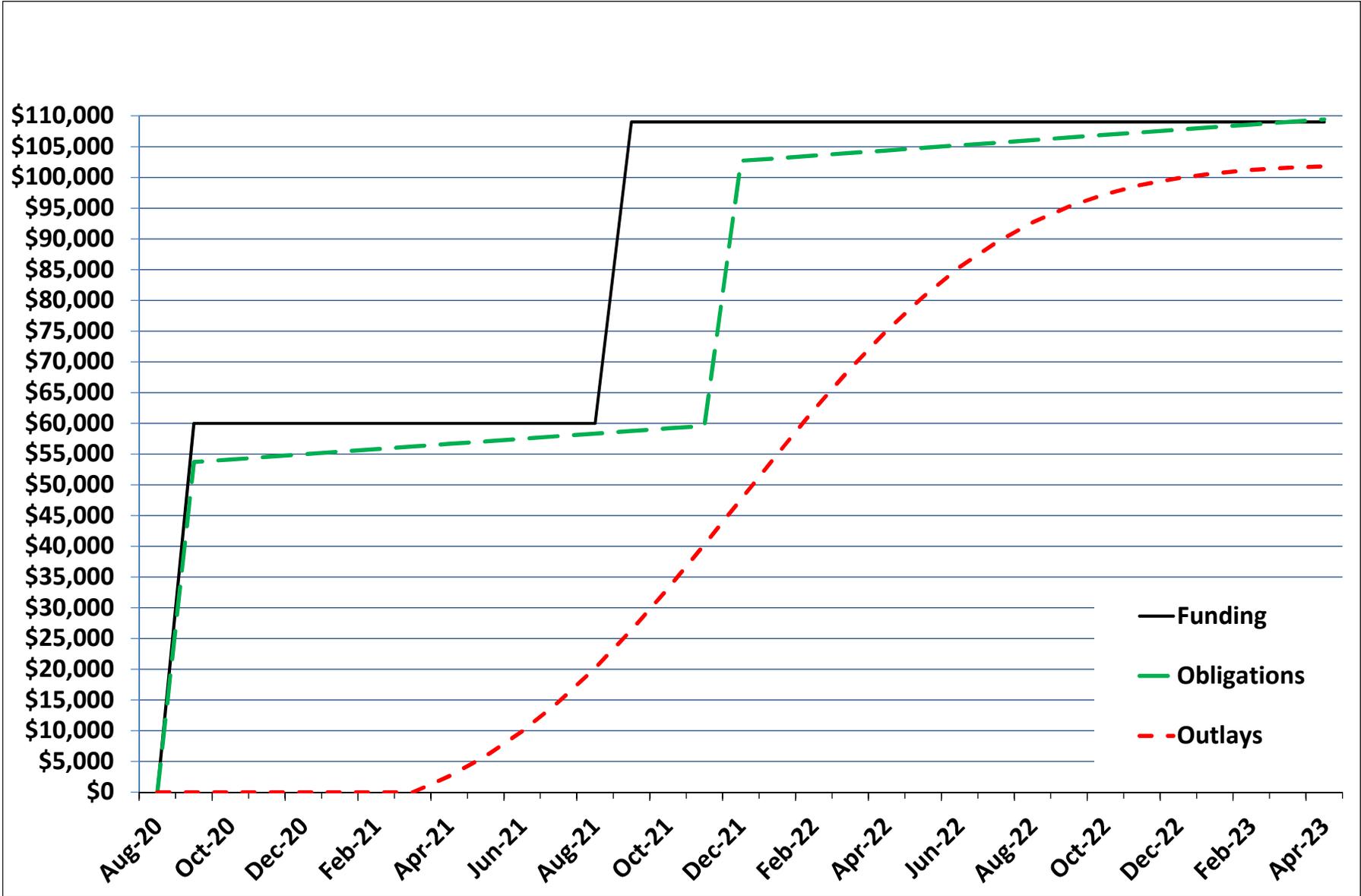
1. COMPONENT AIR FORCE	FY 2020 MILITARY CONSTRUCTION PROJECT DATA (computer generated)			2. DATE March 19	
3. INSTALLATION, SITE AND LOCATION TINIAN INTERNATIONAL AIRPORT NORTHERN MARIANA ISLANDS		4. PROJECT TITLE FUEL TANKS WITH RECEIPT PIPELINE & HYDRANT SYSTEM			
5. PROGRAM ELEMENT 91211F	6. CATEGORY CODE 411-135	7. RPSUID/PROJECT NUMBER PAF189010	8. PROJECT COST (\$000) 109,000		
9. COST ESTIMATES					
ITEM		U/M	QUANTITY	UNIT	COST (\$000)
PRIMARY FACILITIES					75,797
BULK LIQUID FUEL STORAGE (411-135)		BL	220,000	146	(32,085)
PIPELINE, LIQUID FUELS (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,					

1. COMPONENT AIR FORCE	FY 2020 MILITARY CONSTRUCTION PROJECT DATA (computer generated)			2. DATE March 19
3. INSTALLATION, SITE AND LOCATION TINIAN INTERNATIONAL AIRPORT NORTHERN MARIANA ISLANDS			4. PROJECT TITLE FUEL TANKS WITH RECEIPT PIPELINE & HYDRANT SYSTEM	
5. PROGRAM ELEMENT 91211F	6. CATEGORY CODE 411-135	7. RPSUID/PROJECT NUMBER PAF189010	8. PROJECT COST (\$000) 109,000	
<p>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.</p> <p>Air Conditioning: 18 Tons</p>				
<p>11. Requirement: 220000 BL Adequate: 0 BL Substandard: 0 BL PROJECT: Fuel Tanks with Receipt Pipeline and Hydrant System</p> <p>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.</p> <p>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.</p> <p>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.</p> <p>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.</p>				

1. COMPONENT AIR FORCE	FY 2020 MILITARY CONSTRUCTION PROJECT DATA (computer generated)			2. DATE March 19
3. INSTALLATION, SITE AND LOCATION TINIAN INTERNATIONAL AIRPORT NORTHERN MARIANA ISLANDS			4. PROJECT TITLE FUEL TANKS WITH RECEIPT PIPELINE & HYDRANT SYSTEM	
5. PROGRAM ELEMENT 91211F	6. CATEGORY CODE 411-135	7. RPSUID/PROJECT NUMBER PAF189010	8. PROJECT COST (\$000) 109,000	
<p>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. This project was included in the Fiscal Year 2019 future-years defense plan in FY20. 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.</p> <p>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.</p> <p>JOINT USE CERTIFICATION: This facility can be used by other components on an "as available" basis; however, the scope of the project is based on Air Force requirements.</p>				

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3. INSTALLATION AND LOCATION TINIAN INTERNATIONAL AIRPORT NORTHERN MARIANA ISLANDS		4. PROJECT TITLE FUEL TANKS WITH RECEIPT PIPELINE & HYDRANT SYSTEM	
5. PROGRAM ELEMENT 91211F	6. CATEGORY CODE 411-135	7. PROJECT NUMBER PAF189010	8. PROJECT COST (\$000) 109,000
12. SUPPLEMENTAL DATA:			
a. Estimated Design Data:			
(1) Status:			
(a) Date Design Started			01-JUL-18
(b) Parametric Cost Estimates used to develop costs			YES
* (c) Percent Complete as of 01 JAN 2019			15%
* (d) Date 35% Designed			30-MAR-19
(e) Date Design Complete			30-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			6,540
(b) All Other Design Costs			3,270
(c) Total			9,810
(d) Contract			8,175
(e) In-house			1,635
(4) Construction Contract Award			20 FEB
(5) Construction Start			20 JUN
(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)
FURNISHING, FIXTURES & EQUIP	3400	22	2,030

Fuel Tanks with Receipt Pipeline and /Hydrant System, CNMI



Project: Fuel Tanks With Receipt Pipeline and Hydrant System

Project Spending Plan

As of: 16-Aug-18

All Cost in thousands (\$000)

Chart Begin	FUNDING (note 1)		OBLIGATION (note 2)		OUTLAYS (note 3)	
Aug-20	Enacted	Cumulative	Obligated	Cumulative	Monthly	Cumulative
Aug-20	-	-	-	-	-	-
Sep-20	60,000	60,000	53,685	53,685	-	-
Oct-20	-	60,000	421	54,106	-	-
Nov-20	-	60,000	421	54,527	-	-
Dec-20	-	60,000	421	54,948	-	-
Jan-21	-	60,000	421	55,369	-	-
Feb-21	-	60,000	421	55,790	-	-
Mar-21	-	60,000	421	56,211	-	-
Apr-21	-	60,000	421	56,632	2,605	2,605
May-21	-	60,000	421	57,053	3,281	5,886
Jun-21	-	60,000	421	57,474	4,015	9,902
Jul-21	-	60,000	421	57,895	4,774	14,676
Aug-21	-	60,000	421	58,316	5,515	20,191
Sep-21	49,000	109,000	421	58,737	6,189	26,380
Oct-21	-	109,000	421	59,158	6,749	33,129
Nov-21	-	109,000	421	59,579	7,150	40,279
Dec-21	-	109,000	43,106	102,685	7,359	47,638
Jan-22	-	109,000	421	103,106	7,359	54,997
Feb-22	-	109,000	421	103,527	7,150	62,146
Mar-22	-	109,000	421	103,948	6,749	68,895
Apr-22	-	109,000	421	104,369	6,189	75,085
May-22	-	109,000	421	104,790	5,515	80,600
Jun-22	-	109,000	421	105,211	4,774	85,374
Jul-22	-	109,000	421	105,632	4,015	89,389
Aug-22	-	109,000	421	106,053	3,281	92,670
Sep-22	-	109,000	421	106,474	2,605	95,275
Oct-22	-	109,000	421	106,895	2,009	97,285
Nov-22	-	109,000	421	107,316	1,506	98,791
Dec-22	-	109,000	421	107,737	1,096	99,887
Jan-23	-	109,000	421	108,158	776	100,663
Feb-23	-	109,000	421	108,579	533	101,196
Mar-23	-	109,000	421	109,000	356	101,552
Apr-23	-	109,000	421	109,421	231	101,783
May-23	-	109,000	421	109,842	146	101,928
Jun-23	-	109,000	421	110,263	89	102,017
Jul-23	-	109,000	421	110,684	53	102,070
Aug-23	-	109,000	421	111,105	31	102,101
Sep-23	-	109,000	421	111,526	17	102,118
Oct-23	-	109,000	421	111,947	9	102,128
Nov-23	-	109,000	421	112,368	5	102,133
Dec-23	-	109,000	421	112,789	3	102,135

Note 1: Assumes initial appropriation is enacted by Congress January of the program year. The appropriation of follow-on increment anticipated February FY19.

Note 2: Assumes funds are available to the contracting officer for the initial obligation no earlier than April of the program year to accommodate the funding process. The obligations of follow-on obligations anticipated February 2019.

Note 3: Assumes contract award date of Sep2020, NTP Nov 2020, Contract completion: Mar 2023, Duration 28 months from NTP

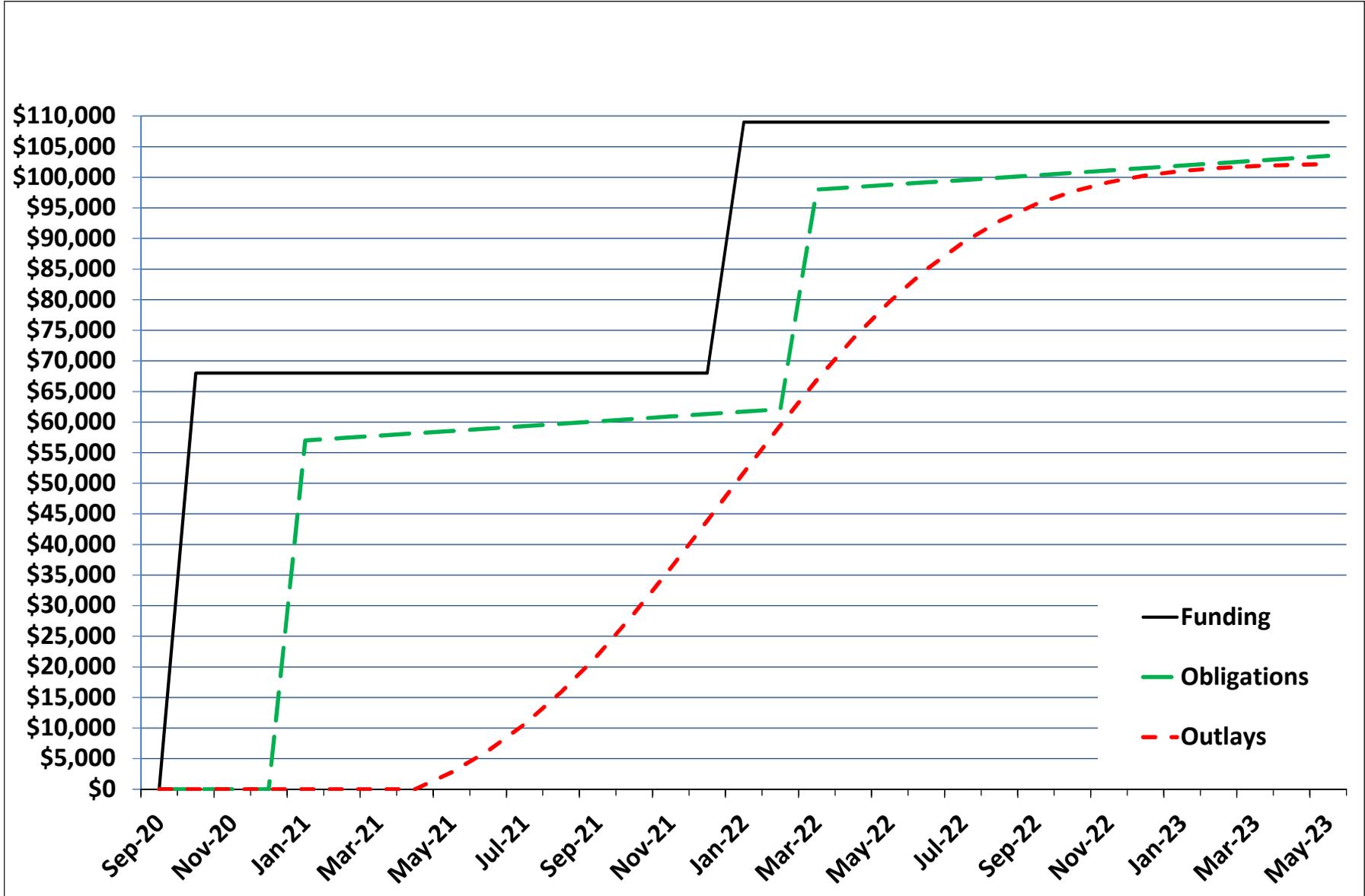
1. COMPONENT AIR FORCE	FY 2020 MILITARY CONSTRUCTION PROJECT DATA (computer generated)			2. DATE March 19	
3. INSTALLATION, SITE AND LOCATION TINIAN INTERNATIONAL AIRPORT NORTHERN MARIANA ISLANDS			4. PROJECT TITLE AIRFIELD DEVELOPMENT PHASE 1		
5. PROGRAM ELEMENT 91211F	6. CATEGORY CODE 851-147	7. RPSUID/PROJECT NUMBER PAF189021	8. PROJECT COST (\$000) 109,000		
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 (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 2020 MILITARY CONSTRUCTION PROJECT DATA (computer generated)			2. DATE March 19
3. INSTALLATION, SITE AND LOCATION TINIAN INTERNATIONAL AIRPORT NORTHERN MARIANA ISLANDS			4. PROJECT TITLE AIRFIELD DEVELOPMENT PHASE 1	
5. PROGRAM ELEMENT 91211F	6. CATEGORY CODE 851-147	7. RPSUID/PROJECT NUMBER PAF189021	8. PROJECT COST (\$000) 109,000	
<p>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.</p> <p>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.</p> <p>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.</p> <p>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.</p> <p>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</p>				

1. COMPONENT AIR FORCE	FY 2020 MILITARY CONSTRUCTION PROJECT DATA (computer generated)			2. DATE March 19
3. INSTALLATION, SITE AND LOCATION TINIAN INTERNATIONAL AIRPORT NORTHERN MARIANA ISLANDS			4. PROJECT TITLE AIRFIELD DEVELOPMENT PHASE 1	
5. PROGRAM ELEMENT 91211F	6. CATEGORY CODE 851-147	7. RPSUID/PROJECT NUMBER PAF189021	8. PROJECT COST (\$000) 109,000	
<p>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.</p> <p>JOINT USE CERTIFICATION This facility can be used by other components on an "as available" basis; however, the scope of the project is based on Air Force requirements.</p>				

1. COMPONENT AIR FORCE	FY 2020 MILITARY CONSTRUCTION PROJECT DATA (computer generated)		2. DATE March 19
3. INSTALLATION AND LOCATION TINIAN INTERNATIONAL AIRPORT NORTHERN MARIANA ISLANDS		4. PROJECT TITLE AIRFIELD DEVELOPMENT PHASE 1	
5. PROGRAM ELEMENT 91211F	6. CATEGORY CODE 851-147	7. PROJECT NUMBER PAF189021	8. PROJECT COST (\$000) 109,000
12. SUPPLEMENTAL DATA:			
a. Estimated Design Data:			
(1) Status:			
(a) Date Design Started			01-JUN-18
(b) Parametric Cost Estimates used to develop costs			YES
* (c) Percent Complete as of 01 JAN 2019			15%
* (d) Date 35% Designed			15-MAR-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			6,540
(b) All Other Design Costs			3,270
(c) Total			9,810
(d) Contract			8,175
(e) In-house			1,635
(4) Construction Contract Award			20 FEB
(5) Construction Start			20 JUN
(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: N/A			

Airfield Development Phase 1, CNMI



Project: Airfield Development Phase 1

Project Spending Plan

As of: 16-Aug-18

All Cost in thousands (\$000)

Chart Begin Sep-20	FUNDING (note 1)		OBLIGATION (note 2)		OUTLAYS (note 3)	
	Enacted	Cumulative	Obligated	Cumulative	Monthly	Cumulative
Sep-20	-	-	-	-	-	-
Oct-20	68,000	68,000	-	-	-	-
Nov-20	-	68,000	-	-	-	-
Dec-20	-	68,000	-	-	-	-
Jan-21	-	68,000	56,968	56,968	-	-
Feb-21	-	68,000	394	57,362	-	-
Mar-21	-	68,000	394	57,756	-	-
Apr-21	-	68,000	394	58,150	-	-
May-21	-	68,000	394	58,544	2,756	2,756
Jun-21	-	68,000	394	58,938	3,525	6,281
Jul-21	-	68,000	394	59,332	4,364	10,645
Aug-21	-	68,000	394	59,726	5,227	15,872
Sep-21	-	68,000	394	60,120	6,059	21,931
Oct-21	-	68,000	394	60,514	6,796	28,727
Nov-21	-	68,000	394	60,908	7,377	36,104
Dec-21	-	68,000	394	61,302	7,750	43,854
Jan-22	41,000	109,000	394	61,696	7,878	51,732
Feb-22	-	109,000	394	62,090	7,750	59,481
Mar-22	-	109,000	35,878	97,968	7,377	66,859
Apr-22	-	109,000	394	98,362	6,796	73,655
May-22	-	109,000	394	98,756	6,059	79,714
Jun-22	-	109,000	394	99,150	5,227	84,941
Jul-22	-	109,000	394	99,544	4,364	89,304
Aug-22	-	109,000	394	99,938	3,525	92,829
Sep-22	-	109,000	394	100,332	2,756	95,586
Oct-22	-	109,000	394	100,726	2,085	97,671
Nov-22	-	109,000	394	101,120	1,527	99,197
Dec-22	-	109,000	394	101,514	1,082	100,279
Jan-23	-	109,000	394	101,908	742	101,020
Feb-23	-	109,000	394	102,302	492	101,512
Mar-23	-	109,000	394	102,696	316	101,828
Apr-23	-	109,000	394	103,090	196	102,025
May-23	-	109,000	394	103,484	118	102,143

Note 1: Assumes initial appropriation is enacted by Congress January of the program year. The appropriation of follow-on increment anticipated February FY19.

Note 2: Assumes funds are available to the contracting officer for the initial obligation no earlier than April of the program year to accommodate the funding process. The obligations of follow-on obligations anticipated February 2019.

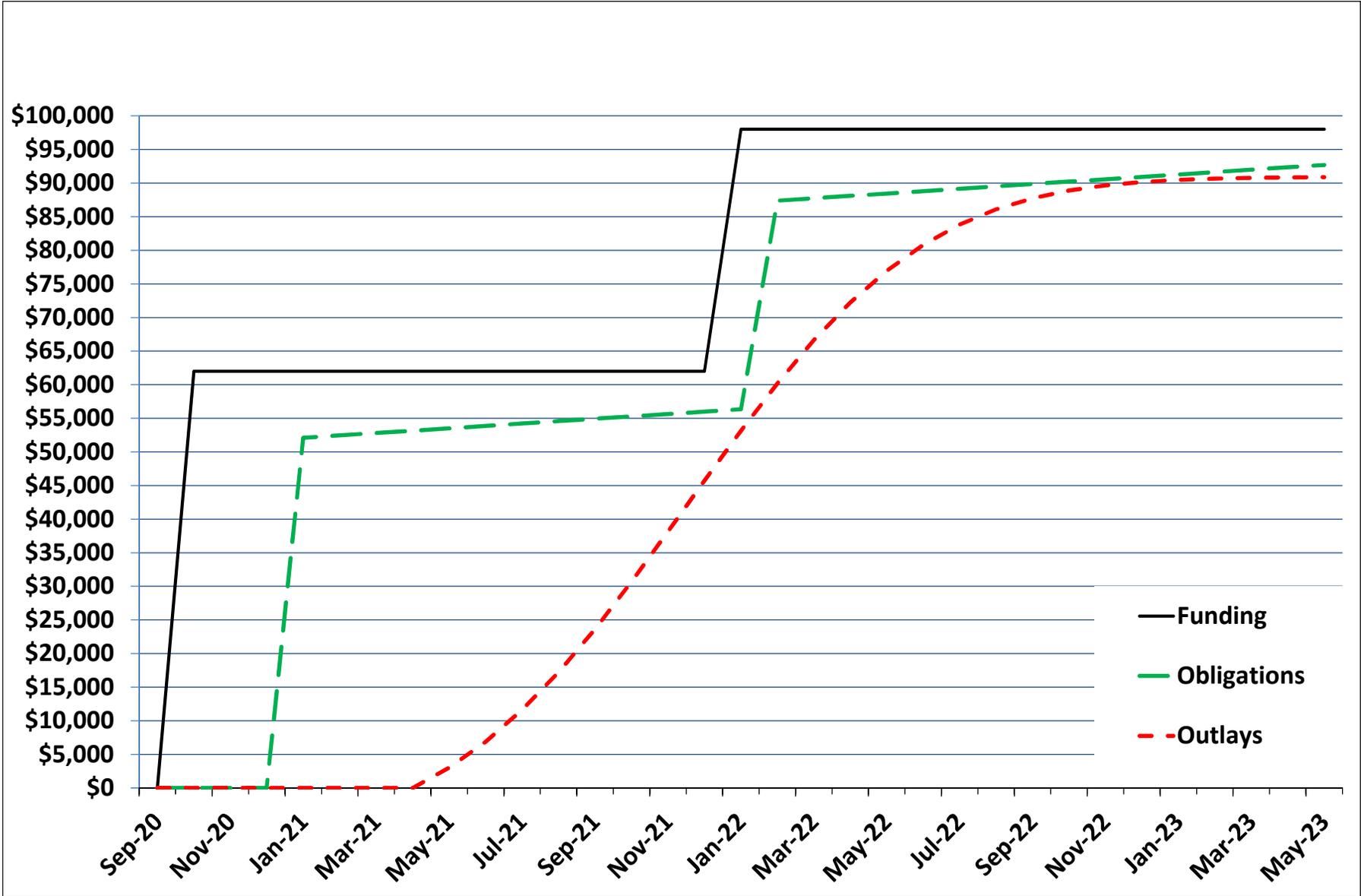
Note 3: Assumes contract award date of Sep 2018, Contract completion: Sep 2021, Duration 36 months

1. COMPONENT AIR FORCE	FY 2020 MILITARY CONSTRUCTION PROJECT DATA (computer generated)			2. DATE March 19	
3. INSTALLATION, SITE AND LOCATION TINIAN INTERNATIONAL AIRPORT NORTHERN MARIANA ISLANDS			4. PROJECT TITLE PARKING APRON		
5. PROGRAM ELEMENT 91211F	6. CATEGORY CODE 113-321	7. RPSUID/PROJECT NUMBER PAF189022	8. PROJECT COST (\$000) 98,000		
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)
AIRCRAFT PAVEMENT SHOULDER (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. 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. Air Conditioning: 0 Tons					
11. Requirement: 3,245 SM Adequate: 0 SM Substandard: 0 SM					

1. COMPONENT AIR FORCE	FY 2020 MILITARY CONSTRUCTION PROJECT DATA (computer generated)			2. DATE March 19
3. INSTALLATION, SITE AND LOCATION TINIAN INTERNATIONAL AIRPORT NORTHERN MARIANA ISLANDS			4. PROJECT TITLE PARKING APRON	
5. PROGRAM ELEMENT 91211F	6. CATEGORY CODE 113-321	7. RPSUID/PROJECT NUMBER PAF189022	8. PROJECT COST (\$000) 98,000	
<p>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.</p> <p>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.</p> <p>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.</p> <p>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." An Economic Analysis (EA) waiver has been requested and will be approved prior to the president's budget submittal. 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. This project was included in the Fiscal Year 2019 future-years defense plan in FY20. 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</p> <p>JOINT USE CERTIFICATION: This facility can be used by other components on an "as available" basis; however, the scope of the project is based on Air Force requirements.</p>				

1. COMPONENT AIR FORCE	FY 2020 MILITARY CONSTRUCTION PROJECT DATA (computer generated)		2. DATE March 19
3. INSTALLATION AND LOCATION TINIAN INTERNATIONAL AIRPORT NORTHERN MARIANA ISLANDS		4. PROJECT TITLE PARKING APRON	
5. PROGRAM ELEMENT 91211F	6. CATEGORY CODE 113-321	7. PROJECT NUMBER PAF189022	8. PROJECT COST (\$000) 98,000
12. SUPPLEMENTAL DATA:			
a. Estimated Design Data:			
(1) Status:			
(a) Date Design Started			01-JUN-18
(b) Parametric Cost Estimates used to develop costs			YES
* (c) Percent Complete as of 01 JAN 2019			15%
* (d) Date 35% Designed			15-MAR-19
(e) Date Design Complete			02-SEP-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			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			20 FEB
(5) Construction Start			20 JUN
(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: N/A			

Parking Apron, CNMI



Project: Parking Apron, CNMI

Project Spending Plan

As of: 16-Aug-18

All Cost in thousands (\$000)

Chart Begin Sep-20	FUNDING (note 1)		OBLIGATION (note 2)		OUTLAYS (note 3)	
	Enacted	Cumulative	Obligated	Cumulative	Monthly	Cumulative
Sep-20	-	-	-	-	-	-
Oct-20	62,000	62,000	-	-	-	-
Nov-20	-	62,000	-	-	-	-
Dec-20	-	62,000	-	-	-	-
Jan-21	-	62,000	52,088	52,088	-	-
Feb-21	-	62,000	354	52,442	-	-
Mar-21	-	62,000	354	52,796	-	-
Apr-21	-	62,000	354	53,150	-	-
May-21	-	62,000	354	53,504	3,015	3,015
Jun-21	-	62,000	354	53,858	3,852	6,867
Jul-21	-	62,000	354	54,212	4,739	11,605
Aug-21	-	62,000	354	54,566	5,614	17,219
Sep-21	-	62,000	354	54,920	6,405	23,624
Oct-21	-	62,000	354	55,274	7,038	30,662
Nov-21	-	62,000	354	55,628	7,447	38,110
Dec-21	-	62,000	354	55,982	7,589	45,698
Jan-22	36,000	98,000	354	56,336	7,447	53,146
Feb-22	-	98,000	31,044	87,380	7,038	60,184
Mar-22	-	98,000	354	87,734	6,405	66,589
Apr-22	-	98,000	354	88,088	5,614	72,203
May-22	-	98,000	354	88,442	4,739	76,941
Jun-22	-	98,000	354	88,796	3,852	80,793
Jul-22	-	98,000	354	89,150	3,015	83,808
Aug-22	-	98,000	354	89,504	2,273	86,081
Sep-22	-	98,000	354	89,858	1,650	87,731
Oct-22	-	98,000	354	90,212	1,154	88,884
Nov-22	-	98,000	354	90,566	777	89,661
Dec-22	-	98,000	354	90,920	504	90,165
Jan-23	-	98,000	354	91,274	314	90,479
Feb-23	-	98,000	354	91,628	189	90,668
Mar-23	-	98,000	354	91,982	110	90,778
Apr-23	-	98,000	354	92,336	61	90,839
May-23	-	98,000	354	92,690	33	90,872

Note 1: Assumes initial appropriation is enacted by Congress January of the program year. The appropriation of follow-on increment anticipated February FY19.

Note 2: Assumes funds are available to the contracting officer for the initial obligation no earlier than April of the program year to accommodate the funding process. The obligations of follow-on obligations anticipated February 2019.

Note 3: Assumes contract award date of Sep 2018, Contract completion: Sep 2021, Duration 36 months

1. COMPONENT AIR FORCE	FY 2020 MILITARY CONSTRUCTION PROJECT DATA (computer generated)			2. DATE March 19	
3. INSTALLATION, SITE AND LOCATION RAF LAKENHEATH RAF LAKENHEATH SITE # 1 UNITED KINGDOM			4. PROJECT TITLE F-35 PGM FACILITY		
5. PROGRAM ELEMENT 27142F	6. CATEGORY CODE 212-213	7. RPSUID/PROJECT NUMBER 2470/MSET173504	8. PROJECT COST (\$000) 14,300		
9. COST ESTIMATES					
ITEM		U/M	QUANTITY	UNIT	COST (\$000)
PRIMARY FACILITIES					10,778
SHOP TACTICAL MISSILE GLIDE WEAPOM MAINTENANCE		SM	1,300	7,936	(10,316)
SUSTAINABILITY AND ENERGY MEASURES (2%)		LS			(211)
CYBERSECURITY OF FACILITY-RELATED CONTROL SYS		LS			(250)
SUPPORTING FACILITIES					2,034
SITE IMPROVEMENTS		LS			(294)
PAVEMENTS		LS			(1,020)
UTILITIES		LS			(720)
SUBTOTAL					12,812
CONTINGENCY (5.0%)					641
TOTAL CONTRACT COST					13,452
SUPERVISION, INSPECTION AND OVERHEAD (2.5%)					336
DESIGN/BUILD - DESIGN COST (4.0% OF SUBTOTAL)					512
TOTAL REQUEST					14,301
TOTAL REQUEST (ROUNDED)					14,300
EQUIPMENT FROM OTHER APPROPRIATIONS (NON-ADD)					(400)
10. Description of Proposed Construction: Construct a facility with reinforced concrete foundation and walls, concrete slab, structural steel frame, standing seam metal roof and vertical cladding. This facility accommodates missile and munitions assembly and disassembly inspection, testing, and repair. This facility consists of a minimum three work bays approximately 38 feet by 70 feet with bay doors (10 feet minimum width/17 feet minimum height), a test cell room for electrical and resistance rocket motor checks, a missile sanding/paint booth, an administrative area for office space, ready and training rooms, a tool and test equipment support room, supply and equipment storage, latrines with showers, and all necessary supporting facilities. Each bay must include a 4,000 pound transverse-mounted hoist. One bay requires a drive-through paint bay, approximately 30 feet x 25 feet for missile maintenance. Bay doors require high security hasps or Internal Locking Devices. The facility must be equipped with lightning protection and electrical grounding system. The facility bays require low pressure (0 to 150 psig) and high pressure (0 to 3,500 psig) air, along with 115 VAC 60 Hz single-phase, 115 VAC 400 Hz 3-phase, and 220 VAC power. Environmental controls for humidity and temperature are necessary for protection of weapon systems and test equipment. An adjoining administrative area, with 3 enclosed offices, a support section, kitchen/common area, and latrines with showers. 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					

1. COMPONENT AIR FORCE	FY 2020 MILITARY CONSTRUCTION PROJECT DATA (computer generated)			2. DATE March 19
3. INSTALLATION, SITE AND LOCATION RAF LAKENHEATH RAF LAKENHEATH SITE # 1 UNITED KINGDOM			4. PROJECT TITLE F-35 PGM FACILITY	
5. PROGRAM ELEMENT 27142F	6. CATEGORY CODE 212-213	7. RPSUID/PROJECT NUMBER 2470/MSET173504	8. PROJECT COST (\$000) 14,300	
<p>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 (DoD) antiterrorism/force protection requirements per UFC 4-010-01.</p> <p>Air Conditioning: 30 Tons</p> <p>11. Requirement: 2199 SM Adequate: 899 SM Substandard: 0 SM</p> <p><u>PROJECT:</u> Construct New F-35 Mission Precision Guided Munitions Facility</p> <p><u>REQUIREMENT:</u> Construct a new precision guided munitions maintenance facility to support the increase in mission requirement for Precision Guided Munitions that will come with the beddown of two F35A squadrons at Royal Air Force (RAF) Lakenheath. This facility is necessary to perform organizational maintenance on precision guided weapon systems. The following documents should be utilized to determine the scope of the facility: Unit Committed Munitions List, a list that identifies munitions required by a unit to support war plans (primary munitions) and contingency operations (support munitions); Air Force Instruction (AFI) 11-212, Munitions Requirements for Aircrew Training; the Air Force Standard for Non-Expendable Air Munitions Training Authorizations; test plans; and beddown plans.</p> <p><u>CURRENT SITUATION:</u> Space in the current facility is capable of accommodating the current work load of one F-15C and two F-15E squadrons. Even though the F-15Cs are expected to leave around the arrival of the F-35s, the two additional F-35 squadrons, arriving in FY21, will increase the work load in munitions maintenance, exceeding the mission capacity of the current facility.</p> <p><u>IMPACT IF NOT PROVIDED:</u> If this project is not provided there will be insufficient precision guided maintenance space upon arrival of the F-35 squadrons in FY21 causing a potential loss in mission effectiveness and accomplishment.</p> <p><u>ADDITIONAL:</u> This project complies with the criteria/scope specified in Air Force Manual (AFMAN) 32-1084, Facility Requirements. All work associated with this project shall comply with USAF and Host Nation regulations and agreements. The country-to-country agreement precludes the use of International Competitive Bidding proceedings in the United Kingdom. Work will comply with all relevant UFCs, AFIs, and RAF Lakenheath Base Standards. All known alternative options were considered during the development of this project. Environmental study (or review) will be completed by Defence Infrastructure Organization (DIO) as part of the planning process of the F-35 beddown and all associated construction projects. A formal economic analysis will be approved before the president's budget approval. This design shall conform to criteria established in the Air Force Corporate Facilities Standards but will not employ a standard facility design. RAF Lakenheath Base Civil Engineer commercial number: 0044-1638-522100. A determination has been made that no portion is eligible for NATO funding. This project does not fall within or partly within the 100-year flood plain. This project was not included in the Fiscal Year 2019 future-years defense plan.</p> <p>Precision Guided Munitions: 1300 SM = 13,993 SF</p> <p>FOREIGN CURRENCY: FCF Budget Rate Used: POUND .7614</p>				

1. COMPONENT AIR FORCE	FY 2020 MILITARY CONSTRUCTION PROJECT DATA (computer generated)		2. DATE March 19
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5. PROGRAM ELEMENT 27142F	6. CATEGORY CODE 212-213	7. RPSUID/PROJECT NUMBER 2470/MSET173504	8. PROJECT COST (\$000) 14,300
<p><u>JOINT USE CERTIFICATION:</u> This facility can be used by other components on an "as available" basis; however, the scope of the project is based on Air Force requirements.</p>			

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3. INSTALLATION AND LOCATION RAF LAKENHEATH RAF LAKENHEATH SITE # 1 UNITED KINGDOM		4. PROJECT TITLE F-35 PGM FACILITY	
5. PROGRAM ELEMENT 27142F	6. CATEGORY CODE 212-213	7. PROJECT NUMBER 2470/MSET173504	8. PROJECT COST (\$000) 14,300
12. SUPPLEMENTAL DATA:			
a. Estimated Design Data:			
(1) Project to be accomplished by design-build procedures			
(a) Date Design Started:			10 AUG 18
(b) Parametric Cost Estimates Used to Develop Costs:			YES
(c) Percent Complete as of January 2019:			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:			584
(4) Construction Contract Award:			20 FEB
(5) Construction Start:			20 JUN
(6) Construction Completion:			22 MAR
(7) Energy Study/Life-Cycle Cost analysis was/will be performed			YES
b. Equipment associated with this project provided from other appropriations:			
	PROCURING APPRO	FISCAL YEAR APPROPRIATED OR REQUESTED	COST (\$000)
EQUIPMENT NOMENCLATURE			
COMMUNICATIONS EQUIPMENT	3080	2022	200
FURNITURE AND FURNISHINGS	3400	2022	200

1. COMPONENT AIR FORCE	FY 2020 MILITARY CONSTRUCTION PROJECT DATA (computer generated)			2. DATE March 19	
3. INSTALLATION, SITE AND LOCATION WORLDWIDE UNSPECIFIED VARIOUS LOCATIONS		4. PROJECT TITLE PLANNING AND DESIGN			
5. PROGRAM ELEMENT 91211F	6. CATEGORY CODE 961-000	7. RPSUID/PROJECT NUMBER PAYZ200002	8. PROJECT COST (\$000) 142,148		
9. COST ESTIMATES					
ITEM		U/M	QUANTITY	UNIT	COST (\$000)
PRIMARY FACILITIES					
PE 91211F					116,674
PE 27142F					24,644
PE 27597F					830
PLANNING AND DESIGN		LS			(142,148)
SUPPORTING FACILITIES					0
SUBTOTAL					<u>142,148</u>
TOTAL CONTRACT COST					<u>142,148</u>
TOTAL REQUEST					142,148
TOTAL REQUEST (ROUNDED)					142,148
10. Description of Proposed Construction:					
11. Requirement: Adequate: Substandard:					
PROJECT: As required.					
<p>REQUIREMENT: These planning and design funds are required to complete the design of facilities in the FY21 Military Construction Program, initiate design of facilities in the FY22 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.</p>					

1. COMPONENT AIR FORCE	FY 2020 MILITARY CONSTRUCTION PROJECT DATA (computer generated)			2. DATE March 19	
3. INSTALLATION, SITE AND LOCATION WORLDWIDE UNSPECIFIED VARIOUS LOCATIONS		4. PROJECT TITLE UNSPECIFIED MINOR MILITARY CONSTRUCTION			
5. PROGRAM ELEMENT 91211F	6. CATEGORY CODE 962-000	7. RPSUID/PROJECT NUMBER PAYZ200003	8. PROJECT COST (\$000) 76,382		
9. COST ESTIMATES					
ITEM		U/M	QUANTITY	UNIT	COST (\$000)
PRIMARY FACILITIES					76,382
PE 91211F					3,300
PE 84701F					(79,682)
MILCON MINOR CONSTRUCTION		LS			
SUPPORTING FACILITIES					0
SUBTOTAL					<u>79,682</u>
TOTAL CONTRACT COST					<u>79,682</u>
TOTAL REQUEST					79,682
TOTAL REQUEST (ROUNDED)					79,682
10. Description of Proposed Construction:					
11. Requirement: Adequate: Substandard:					
PROJECT: As required.					
<p>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 (subject to area cost factor adjustment). This authority provides a means of accomplishing projects that are not identified but which are anticipated to arise during FY20. Included would be projects to support new mission requirements, new equipment, and other essential support to Air Force missions.</p>					

**DEPARTMENT OF THE AIR FORCE
MILITARY CONSTRUCTION PROGRAM FISCAL YEAR 2020
NON-MILCON FUNDING**

Research and Development (RDT&E) NONE



Department of the Air Force

European Deterrence Initiative Military Construction Program

**Fiscal Year (FY) 2020
Budget Estimates**

**Justification Data Submitted to Congress
March 2019**

**DEPARTMENT OF THE AIR FORCE
OVERSEAS CONTINGENCY OPERATIONS
MILITARY CONSTRUCTION PROGRAM FISCAL YEAR 2020
TABLE OF CONTENTS**

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**DEPARTMENT OF THE AIR FORCE
OVERSEAS CONTINGENCY OPERATIONS
MILITARY CONSTRUCTION PROGRAM FISCAL YEAR 2020**

PROGRAM SUMMARY

	Authorization Request <u>(\$000s)</u>	Appropriation Request <u>(\$000s)</u>
Military Construction		
Major Construction	240,500	240,500
Unspecified Minor Construction (10 USC 2805)	-	12,800
Planning and Design (10 USC 2807)	-	61,438
Total Military Construction	240,500	314,738

OCO for Base Requirements (\$314,738,000): OCO for Base Requirements is OCO funding for base budget requirements in support of the National Defense Strategy. The Budget requests these funds in OCO to comply with the base budget defense caps included in the Budget Control Act of 2011.

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**DEPARTMENT OF THE AIR FORCE
MILITARY CONSTRUCTION PROGRAM FISCAL YEAR 2020
INDEX - OVERSEAS CONTINGENCY OPERATIONS
(DOLLARS IN THOUSANDS)**

COUNTRY	INSTALLATION	PROJECT	AUTHORIZATION	APPROPRIATION
			REQUEST	REQUEST
ICELAND	Keflavik	EDI-Airfield Upgrades - Apron Expansion	32,000	32,000
		EDI-Airfield Upgrades - Dangerous Cargo Pad	18,000	18,000
		EDI-Beddown Site Prep	7,000	7,000
		Keflavik TOTAL:	57,000	57,000
	ICELAND TOTAL:	57,000	57,000	
SPAIN	Moron	EDI-Hot Cargo Pad	8,500	8,500
		Moron TOTAL:	8,500	8,500
	SPAIN TOTAL:	8,500	8,500	
EDI WORLDWIDE UNSPECIFIED	Various Locations	EDI-Hot Cargo Pad	29,000	29,000
		EDI-Munitions Storage Area	39,000	39,000
		EDI-ECAOS DABS/FEV EMEDS Storage	107,000	107,000
		EDI-Planning And Design	-	61,438
		EDI-Unspecified Minor Military Construction	-	12,800
	EDI WORLDWIDE UNSPECIFIED TOTAL:	175,000	249,238	
EDI TOTAL:	240,500	314,738		

1. COMPONENT AIR FORCE	FY 2020 MILITARY CONSTRUCTION PROJECT DATA (computer generated)			2. DATE March 19	
3. INSTALLATION, SITE AND LOCATION KEFLAVIK NAS ICELAND		4. PROJECT TITLE EDI-AIRFIELD UPGRADES - APRON EXPANSION			
5. PROGRAM ELEMENT 27576F	6. CATEGORY CODE 113-321	7. RPSUID/PROJECT NUMBER BIKF190001	8. PROJECT COST (\$000) 32,000		
9. COST ESTIMATES					
ITEM		U/M	QUANTITY	UNIT	COST (\$000)
PRIMARY FACILITIES					19,034
APRON (113-321)		SM	73,075	240	(17,545)
PAVED SHOULDERS (116-642)		SM	6,978	163	(1,137)
SUSTAINABILITY AND ENERGY MEASURES (2.0%)		LS			(351)
SUPPORTING FACILITIES					8,372
AIRFIELD LIGHTING		LS			(1,032)
SITE IMPROVEMENTS		LS			(7,340)
SUBTOTAL					27,406
CONTINGENCY (5.0%)					1,370
TOTAL CONTRACT COST					28,776
SUPERVISION, INSPECTION AND OVERHEAD (6.5%)					1,870
DESIGN/BUILD - DESIGN COST (4.0% OF SUBTOTAL)					1,096
TOTAL REQUEST					31,743
TOTAL REQUEST (ROUNDED)					32,000
<p>10. Description of Proposed Construction: This project will provide a full-depth concrete pavement/subbase aircraft parking apron expansion that supports powered on and off operations for a squadron of US Air Force or North Atlantic Treaty Organization (NATO) aerial refueler equivalent aircraft. Mooring eyes and grounding points will be provided and storm water improvements installed as required to meet local environmental regulations.</p> <p>Airfield lighting work includes complete taxiway and apron edge lighting and visual navigation systems. System will include all conduits, high-voltage wiring, fixtures and all associated infrastructure to integrate with the Keflavik International Airport lighting systems. Site preparation includes site clearing, excavation and preparation for construction.</p> <p>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 (DoD) Antiterrorism/force protection requirements per UFC 4-010-01.</p> <p>Air Conditioning: 0 Tons</p>					
<p>11. Requirement: 73075 SM Adequate: 0 SM Substandard: 0 SM</p> <p><u>PROJECT:</u> Airfield Upgrades - Apron Expansion</p> <p><u>REQUIREMENT:</u> Construct expansion of existing aircraft parking apron to support up</p>					

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5. PROGRAM ELEMENT 27576F	6. CATEGORY CODE 113-321	7. RPSUID/PROJECT NUMBER BIKF190001	8. PROJECT COST (\$000) 32,000	
<p>to a squadron of US Air Force or NATO aerial refueler equivalent aircraft. This project supports the European Deterrence Initiative (EDI) implemented by European Command. 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 partnership exercises is infrastructure at key locations to support military activities. Iceland is a NATO member state and, as such, has a requirement to host deployed US forces in this crucial North Atlantic location.</p> <p><u>CURRENT SITUATION:</u> Aircraft taxiways, parking aprons and a Dangerous Cargo Pad (DCP) within the Icelandic Coast Guard defense controlled area are used to a limited extent by visiting and deployed US forces as well as NATO member state forces. The existing aircraft parking apron is located near Taxiway Sierra and Taxiway Delta and provides only half of the required parking to support a full squadron of US Air Force or NATO aerial refueler equivalent aircraft.</p> <p><u>IMPACT IF NOT PROVIDED:</u> Failure to expand the existing apron to support a squadron of American aerial refueler or NATO aerial refueler equivalent aircraft will reduce the air refueling capability at Keflavik. In addition, operations use of the apron by other aircraft will be significantly impaired.</p> <p><u>ADDITIONAL:</u> This project meets applicable criteria/scope specified in Air Force Manual 32-1084, Facility Requirements; and Bilateral-Strategic Command Directive 85-5, NATO Approved Criteria and Standards for Airfields. An Economic Analysis was not performed because there is only one method possible to accomplish the objective in accordance with AFI 65-501, Economic Analysis, paragraph 1.2.2.2, and a waiver will be approved prior to the president's budget. This design shall conform to criteria established in the Air Force Corporate Facilities Standards but will not employ a standard design. Elements of this program are not currently eligible for NATO Security Investment Program funding. This project will be submitted for NATO pre-financing. This project does not fall within or partly within the 100-year flood plain.</p> <p>Apron: 73,075 SM = 786,573 SF; Paved Shoulders: 6,978 SM = 75,111 SF</p> <p>UFC 4-701-01, DoD Pricing Guide, Parametric Cost Engineering System (PACES), and RS Means were used to develop the estimate for this project.</p> <p>The Area Cost Factor (ACF) for Iceland is 2.06.</p> <p>Design Build has been selected as an execution strategy based on the low level of complexity for this project and in an effort to capitalize on local contract and architectural and engineering expertise to develop efficient cost effective designs utilizing local materials and construction methodologies to the fullest extent.</p> <p>BCE commercial phone number +49 6371-47-6773.</p> <p>FOREIGN CURRENCY CONVERSION: 1 dollar = 108.8315 krona</p> <p><u>JOINT USE CERTIFICATION:</u> This project has been considered for joint use potential.</p>				

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5. PROGRAM ELEMENT 27576F	6. CATEGORY CODE 113-321	7. RPSUID/PROJECT NUMBER BIKF190001	8. PROJECT COST (\$000) 32,000
<p>These facilities can be used by other components on an 'as available' basis; however, the scope of the project is based on Air Force requirements.</p>			

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5. PROGRAM ELEMENT 27576F	6. CATEGORY CODE 113-321	7. PROJECT NUMBER BIKF190001	8. PROJECT COST (\$000) 32,000
<p>12. SUPPLEMENTAL DATA:</p> <p>a. Estimated Design Data:</p> <p>(1) Project to be accomplished by design-build procedures</p> <p>(a) Date Design Started: 18 DEC</p> <p>(b) Parametric Cost Estimates Used to Develop Costs: YES</p> <p>(c) Percent Complete as of January 2019: 10%</p> <p>(d) Date Design 35% Complete: 19 MAR</p> <p>(e) Date Design 100% Complete: 19 AUG</p> <p>(2) Basis:</p> <p>(a) Standard or Definitive Design - YES</p> <p>(b) Where Design Was Most Recently Used -</p> <p>(3) All Other Design Costs: 1,280</p> <p>(4) Construction Contract Award: 20 FEB</p> <p>(5) Construction Start: 20 JUN</p> <p>(6) Construction Completion: 22 MAR</p> <p>(7) Energy Study/Life-Cycle Cost analysis was/will be performed: YES</p> <p>b. Equipment associated with this project provided from other appropriations: N/A</p>			

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3. INSTALLATION, SITE AND LOCATION KEFLAVIK NAS ICELAND		4. PROJECT TITLE EDI-AIRFIELD UPGRADES - DANGEROUS CARGO PAD			
5. PROGRAM ELEMENT 27576F	6. CATEGORY CODE 112-211	7. RPSUID/PROJECT NUMBER BIKF190003	8. PROJECT COST (\$000) 18,000		
9. COST ESTIMATES					
ITEM		U/M	QUANTITY	UNIT	COST (\$000)
PRIMARY FACILITIES					10,300
PAD, DANGEROUS CARGO, LOAD/UNLOAD (116-662)		SM	7,600	240	(1,825)
TAXIWAY (112-211)		SM	20,400	276	(5,626)
PAVED SHOULDERS		SM	29,887	89	(2,647)
SUSTAINABILITY AND ENERGY MEASURES (2.0%)		LS			(202)
SUPPORTING FACILITIES					5,263
AIRFIELD LIGHTING		LS			(2,408)
SITE IMPROVEMENTS		LS			(2,855)
SUBTOTAL					15,563
CONTINGENCY (5.0%)					778
TOTAL CONTRACT COST					16,341
SUPERVISION, INSPECTION AND OVERHEAD (6.5%)					1,062
DESIGN/BUILD - DESIGN COST (4.0% OF SUBTOTAL)					623
TOTAL REQUEST					18,026
TOTAL REQUEST (ROUNDED)					18,000
<p>10. Description of Proposed Construction: This project will provide a full-depth concrete pavement/subbase Dangerous Cargo Pad (DCP) with paved asphalt shoulders sized for aircraft up to and including a C-5. A full depth asphalt pavement/sub-base taxiway will be provided for access from the primary taxiway to the DCP. The taxiway will be designed for the aircraft to taxi into the DCP under its own power. Tie-down/mooring eyes and grounding points will be provided.</p> <p>Airfield lighting work includes complete taxiway and apron edge lighting and visual navigation systems. It will include all conduits, high-voltage wiring, fixtures and all associated infrastructure to integrate with the Keflavik International Airport lighting systems. Site preparation includes site clearing, excavation and preparation for construction.</p> <p>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 DoD antiterrorism/force protection requirements per UFC 4-010-01.</p> <p>Air Conditioning: 0 Tons</p>					
11. Requirement: 20400 SM Adequate: 0 SM Substandard: 0 SM					

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5. PROGRAM ELEMENT 27576F	6. CATEGORY CODE 112-211	7. RPSUID/PROJECT NUMBER BIKF190003	8. PROJECT COST (\$000) 18,000	
<p>PROJECT: EDI: Airfield Upgrades - DCP</p> <p>REQUIREMENT: Construct a DCP to support a single heavy cargo aircraft up to and including a C-5 aircraft. This project is in support of the European Deterrence Initiative (EDI) implemented by European Command. 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 partnership exercises is infrastructure at key locations to support military activities. Iceland is a NATO member state and, as such, has a requirement to host deployed US forces in this crucial North Atlantic location.</p> <p>CURRENT SITUATION: Aircraft taxiways, parking aprons and a DCP within the Icelandic Coast Guard defense controlled area are used to a limited extent by visiting and deployed US forces as well as NATO member state forces. Two explosive cargo aircraft parking spots have been sited and approved by the DoD Explosives Safety Board (DDESB) on the existing parking apron. Both provide the minimal capacity for loading and unloading explosives, additionally when explosive laden aircraft are present on the existing apron operations are restricted.</p> <p>IMPACT IF NOT PROVIDED: If the DCP is not provided, personnel, aircraft and resources will continue to operate under considerable risk due to the inadequate areas for loading and unloading dangerous cargo. In addition, operational use of the apron by other aircraft will be significantly impaired.</p> <p>ADDITIONAL: This project meets applicable criteria/scope specified in Air Force Manual 32-1084, Facility Requirements; and Bilateral-Strategic Command Directive 85-5, NATO Approved Criteria and Standards for Airfields. An Economic Analysis was not performed because there is only one method possible to accomplish the objective in accordance with AFI 65-501, Economic Analysis, paragraph 1.2.2.2, and a waiver will be approved prior to the president's budget. Elements of this program are not currently eligible for NATO Security Investment Program funding. This project will be submitted for NATO pre-financing. This design shall conform to criteria established in the Air Force Corporate Facilities Standards but will not employ a standard facility design. The supporting facilities cost is greater than 25% of the primary facilities cost due to the extensive site preparation required. This project does not fall within or partly within the 100-year flood plain.</p> <p>DCP: 7,600 SM = 81,806 SF; Taxiway: 20,400 SM = 219,584 SF; Shoulders: 29,887 SM = 321,701 SF</p> <p>UFC 4-701-01, DoD Pricing Guide, PACES, and RS Means were used to develop the estimate for this project. The Area Cost Factor (ACF) for Iceland is 2.06.</p> <p>Design Build has been selected as an execution strategy based on the low level of complexity for this project and in an effort to capitalize on local contract and architectural and engineering expertise to develop efficient cost effective designs utilizing local materials and construction methodologies to the fullest extent.</p>				

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5. PROGRAM ELEMENT 27576F	6. CATEGORY CODE 112-211	7. RPSUID/PROJECT NUMBER BIKF190003	8. PROJECT COST (\$000) 18,000	
<p>Base Civil Engineer commercial phone number +49 6371-47-6773.</p> <p>FOREIGN CURRENCY: FCF Budget Rate Used: KRONA 108.8315</p> <p><u>JOINT USE CERTIFICATION:</u> These facilities can be used by other components on an 'as available' basis; however, the scope of the project is based on Air Force requirements.</p>				

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3. INSTALLATION AND LOCATION KEFLAVIK NAS ICELAND		4. PROJECT TITLE EDI-AIRFIELD UPGRADES - DANGEROUS CARGO PAD	
5. PROGRAM ELEMENT 27576F	6. CATEGORY CODE 112-211	7. PROJECT NUMBER BIKF190003	8. PROJECT COST (\$000) 18,000
<p>12. SUPPLEMENTAL DATA:</p> <p>a. Estimated Design Data:</p> <p>(1) Project to be accomplished by design-build procedures</p> <p>(a) Date Design Started: 18 DEC</p> <p>(b) Parametric Cost Estimates Used to Develop Costs: YES</p> <p>(c) Percent Complete as of January 2019: 10%</p> <p>(d) Date Design 35% Complete: 19 MAR</p> <p>(e) Date Design 100% Complete: 19 AUG</p> <p>(2) Basis:</p> <p>(a) Standard or Definitive Design - NO</p> <p>(b) Where Design Was Most Recently Used -</p> <p>(3) All Other Design Costs: 720</p> <p>(4) Construction Contract Award: 20 FEB</p> <p>(5) Construction Start: 20 JUN</p> <p>(6) Construction Completion: 22 MAR</p> <p>(7) Energy Study/Life-Cycle Cost analysis was/will be performed: YES</p> <p>b. Equipment associated with this project provided from other appropriations: N/A</p>			

1. COMPONENT AIR FORCE	FY 2020 MILITARY CONSTRUCTION PROJECT DATA (computer generated)			2. DATE March 19
3. INSTALLATION, SITE AND LOCATION KEFLAVIK NAS ICELAND		4. PROJECT TITLE EDI-BEDDOWN SITE PREP		
5. PROGRAM ELEMENT 27576F	6. CATEGORY CODE 932-681	7. RPSUID/PROJECT NUMBER BIKF190002	8. PROJECT COST (\$000) 7,000	
9. COST ESTIMATES				
ITEM	U/M	QUANTITY	UNIT	COST (\$000)
PRIMARY FACILITIES				4,713
SITE PREPARATION (932-681)	SM	40,000	109	(4,365)
ELECTRICAL/COMMUNICATIONS ENCLOSURE (891-024)	SM	30	188	(6)
CYBERSECURITY OF FACILITY-RELATED CONTROL SYS	LS			(250)
SUSTAINABILITY AND ENERGY MEASURES (2.0%)	LS			(92)
SUPPORTING FACILITIES				1,305
UTILITIES	LS			(1,305)
SUBTOTAL				6,018
CONTINGENCY (5.0%)				301
TOTAL CONTRACT COST				6,319
SUPERVISION, INSPECTION AND OVERHEAD (6.5%)				411
DESIGN/BUILD - DESIGN COST (4.0% OF SUBTOTAL)				241
TOTAL REQUEST				6,971
TOTAL REQUEST (ROUNDED)				7,000
10. Description of Proposed Construction: This project will provide a level, firm, well-drained 40,000 SM graveled area consisting of a full depth aggregate base course with crushed stone drainage course enclosed by a perimeter security fence. One vehicular entry gate will be provided to the nearest roadway along with a gravel access driveway. Electric, communications and water connections will be provided to a centralized connection point on the gravel area. This project will also provide an electrical/communications enclosure to ensure protection of centralized electrical and communications equipment and points of connections. Heating and ventilation will also be provided for this enclosure. Site preparation includes site clearing, excavation and preparation for construction. This project will adhere to Icelandic Coast Guard, North Atlantic Treaty Organization (NATO) and Air Force regulations. 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 (DoD) antiterrorism/force protection requirements per UFC 4-010-01. Air Conditioning: 0 tons				
11. Requirement: 40000 SM Adequate: 0 SM Substandard: 0 SM PROJECT: Beddown Site Preparation REQUIREMENT: Construct a level, firm, well-drained graveled area enclosed by a perimeter security fence with new centralized water, electrical and communication connections to support personnel beddown in an expeditionary environment. This project is in support of the European Deterrence Initiative (EDI) and overall European Command (EUCOM) strategy across their Area of Responsibility. This				

1. COMPONENT AIR FORCE	FY 2020 MILITARY CONSTRUCTION PROJECT DATA (computer generated)			2. DATE March 19
3. INSTALLATION, SITE AND LOCATION KEFLAVIK NAS ICELAND		4. PROJECT TITLE EDI-BEDDOWN SITE PREP		
5. PROGRAM ELEMENT 27576F	6. CATEGORY CODE 932-681	7. RPSUID/PROJECT NUMBER BIKF190002	8. PROJECT COST (\$000) 7,000	
<p>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. Iceland is a NATO member state and, as such, has a requirement to host deployed US forces in this crucial North Atlantic location.</p> <p><u>CURRENT SITUATION:</u> Currently there are no improved sites with access to critical utility infrastructure that is of sufficient size or condition to adequately support personnel beddown.</p> <p><u>IMPACT IF NOT PROVIDED:</u> If the beddown site is not provided, the ability to field expeditionary aerospace forces for joint, combined and multinational operations and exercises to Iceland, integral to EUCOM's deterrence strategy, will be severely hampered. Military exercises and training capabilities in this critical North Atlantic location would be severely limited.</p> <p><u>ADDITIONAL:</u> This project meets applicable criteria/scope specified in AFMAN 32-1084, Facility Requirements; and Bilateral-Strategic Command Directive 85-5, NATO Approved Criteria and Standards for Airfields. An Economic Analysis was not performed because there is only one method possible to accomplish the objective in accordance with AFI 65-501, Economic Analysis, paragraph 1.2.2.2, therefore a waiver will be approved prior to the president's budget. UFC 4-701-01, DoD Pricing Guide, PACES, and RS Means were used to develop the estimate for this project. The unit costs have been adjusted to reflect an area cost factor of 2.06. This design shall conform to criteria established in the Air Force Corporate Facilities Standards but will not employ a standard facility design. Design Build has been selected as an execution strategy based on the low level of complexity for this project and in an effort to capitalize on local Contract and AE expertise to develop efficient cost effective designs utilizing local materials and construction methodologies to the fullest extent. Elements of this program are not currently eligible for NATO Security Investment Program (NSIP) funding. This project will be submitted for NATO pre-financing. The supporting facilities cost is greater than 25% of the primary facilities cost due to the installation of 3 separate utilities covering a large project area. This project does not fall within or partly within the 100-year flood plain. This project was included in the Fiscal Year (FY) 2019 future-years defense plan in FY20. Site Preparation: 40,000 SM = 430,556; Electrical/Communications Enclosure: 30 SM = 323 SF BCE commercial phone number +49 6371-47-6773. FOREIGN CURRENCY CONVERSION: 1 dollar = 108.8315 krona</p> <p><u>JOINT USE CERTIFICATION:</u> This project has been considered for joint use potential. These facilities can be used by other components on an 'as available' basis; however, the scope of the project is based on Air Force requirements.</p>				

1. COMPONENT AIR FORCE	FY 2020 MILITARY CONSTRUCTION PROJECT DATA (computer generated)		2. DATE March 19
3. INSTALLATION AND LOCATION KEFLAVIK NAS ICELAND		4. PROJECT TITLE EDI-BEDDOWN SITE PREP	
5. PROGRAM ELEMENT 27576F	6. CATEGORY CODE 932-681	7. PROJECT NUMBER BIKF190002	8. PROJECT COST (\$000) 7,000
12. SUPPLEMENTAL DATA:			
a. Estimated Design Data:			
(1) Project to be accomplished by design-build procedures			
(a) Date Design Started:			18 DEC
(b) Parametric Cost Estimates Used to Develop Costs:			YES
(c) Percent Complete as of January 2019:			15%
(d) Date Design 35% Complete:			19 FEB
(e) Date Design 100% Complete:			19 AUG
(2) Basis:			
(a) Standard or Definitive Design -			NO
(b) Where Design Was Most Recently Used -			
(3) All Other Design Costs:			280
(4) Construction Contract Award:			20 FEB
(5) Construction Start:			20 JUN
(6) Construction Completion:			22 MAR
(7) Energy Study/Life-Cycle Cost analysis was/will be performed:			YES
b. Equipment associated with this project provided from other appropriations: N/A			

1. COMPONENT AIR FORCE		FY 2020 MILITARY CONSTRUCTION PROJECT DATA			2. DATE March 19	
3. INSTALLATION AND LOCATION MORON AIR BASE, SPAIN			4. PROJECT TITLE EDI-HOT CARGO PAD			
5. PROGRAM ELEMENT 27576F		6. CATEGORY CODE 116-662	7. PROJECT NUMBER 3025/QUUG023002		8. PROJECT COST (\$000) 8,500	
COST ESTIMATE						
ITEM			U/M	QUANTITY	UNIT COST	COST (\$000)
PRIMARY FACILITIES						5,940
DANGEROUS CARGO PAD (116-662)			SM	25,110	102.55	(2,575)
PAVED SHOULDER, ASPHALT (116-642)			SM	37,354	48.27	(1,803)
TAXIWAY(851-147)			SM	19,440	74.38	(1,446)
SUSTAINABILITY AND ENERGY MEASURES (2%)			LS			(116)
SUPPORTING FACILITIES						1395
PAVEMENTS			LS			(516)
UTILITIES			LS			(879)
SUBTOTAL						7,335
CONTINGENCY (5%)						(367)
TOTAL CONTRACT COST						7,702
SUPERVISION, INSPECTION AND OVERHEAD (6.2%)						(478)
DESIGN/BUILD – DESIGN COST (4.0% OF SUBTOTAL)						(293)
TOTAL REQUEST						8,473
TOTAL REQUEST ROUNDED						8,500
Foreign Currency Exchange Rate: \$1.00 = 0.8587 Euros						
10. DESCRIPTION OF PROPOSED CONSTRUCTION: Construct a dangerous cargo pad of concrete pavement over select base course to support heavy aircraft loaded with hot cargo and dangerous materials, complete with taxiway access, pavements, and utilities. Construct asphalt shoulder over crushed aggregate. Construct necessary pavements required to allow transportation of munitions from the cargo pad to the Munitions Storage Area. Provide drainage through an oil water separator for incidental washing of contaminated aircraft. Work includes grubbing, leveling, compacting, paving, testing, tie-downs, grounding, signage, drainage, electrical, associated utilities, lighting, and pavement markings. This project is in support of the European Deterrence Initiative (EDI), formerly known as the European Reassurance Initiative.						
Sustainable principles, to include Life Cycle cost-effective practices, will be integrated into the design, development and construction of the project in accordance with Unified Facility Criteria (UFC) 1-200-02. This includes preparation of a life-cycle cost analysis for energy consuming systems, or renewable energy generating systems, whenever "life-cycle cost effective" is identified as the reason any requirement of UFC 1-200-02 is partially compliant or not applicable. This project will comply with Department of Defense (DoD) antiterrorism/force protection requirements per UFC 4-010-01.						
Air Conditioning: 0 Tons						

1. COMPONENT AIR FORCE	FY 2020 MILITARY CONSTRUCTION PROJECT DATA	2. DATE March 19
3. INSTALLATION AND LOCATION MORON AIR BASE, SPAIN		
4. PROJECT TITLE EDI-HOT CARGO PAD	7. PROJECT NUMBER QUUG023002	
<p>11. REQUIREMENT: <u>25,066 SM</u> ADEQUATE: SUBSTANDARD: 12,795 PROJECT: Construct a Dangerous Cargo Pad</p> <p>REQUIREMENT: Provide an isolated parking area for Air Mobility Command large-frame aircraft loaded with dangerous cargo. Keeping such aircraft away from occupied facilities and other parked aircraft is necessary for the safety of personnel and protection of high value assets that may be parked on the ramp. This project is in support of the EDI. This initiative includes military exercises and training on land, in the air, and at sea while sustaining a rotational presence throughout Europe. A key enabler for successful training and combat operations is the acquisition and maintenance of strategic assets at key locations throughout the theater.</p> <p>CURRENT SITUATION: Primary and alternate areas are available for parking aircraft with dangerous cargo but with severe limitations. The primary area, parking spot P1 on the main ramp, has limited explosives-handling capacity, reduces area for parking other aircraft and causes evacuation of nearby Spanish Air Force facilities when used. The alternate area, taxiway C, made of asphalt, violates both primary surface and 7:1 transitional slope airfield criteria, as well as UFC 3-260-02, which requires the use of rigid pavement for dangerous cargo parking. When either the primary or alternate areas are not used for hot cargo, they are utilized for their intended aircraft parking and movement. When they are used for hot cargo, many workarounds are required which reduce the parking capabilities of the base in order to observe the quantity-distance (Q-D) requirements. United States Transportation Command (USTRANSCOM) stated Moron AB will continue to operate under increased loading for the foreseeable future. An isolated area for parking aircraft loaded with dangerous cargo is critical to sustain en-route operations.</p> <p>IMPACT IF NOT PROVIDED: The base will continue having violations of airfield criteria and reduced ramp availability. During contingency operations, Moron AB is used extensively for transporting both cargo and passengers to and from US Central Command (USCENTCOM) area of responsibility (AOR). Without a dedicated area for parking large aircraft with dangerous cargo, the badly needed ramp space will continue to be limited and will restrict Moron's capability to support contingencies. Using the asphalted taxiway C for maneuvering large aircraft greatly reduces the life of the asphalt. Having to close taxiway C creates workarounds that create traffic problems with other aircraft during take-off and landing.</p> <p>ADDITIONAL: This project is not eligible for North Atlantic Treaty Organization (NATO) funding. Project has received US/ Spanish approval. Design and construction must be completed in accordance with Spanish laws and norms and US standards. The design and construction will meet the stricter of Spanish or US standards. This design shall conform to criteria established in the Air Force Corporate Facilities Standards but will not employ a standard facility design. This project meets the criteria/ scope specified in Air Force Manual (AFMAN) 32-1084, "Facility Requirements," and in UFC 3-260-01. A preliminary analysis of reasonable options for accomplishing this project (status quo, renovation, upgrade/removal, new construction, leasing) was performed. It indicates there is only one option that will meet operational requirements. An economic analysis (EA) waiver has been prepared for this project and will be approved prior to the president's budget. This project will be submitted for NATO pre-financing. This project does not fall within or partly within the 100-year flood plain. Dangerous Cargo Pad: 25,066 SM = 269,808 SF; Paved Asphalt Shoulder: 14,485 SM = 155,915 SF; Asphalt Access Road: 41,793 SM = 449,856 SF Base Civil Engineer (BCE) commercial phone number +49 6371-47-6773 FOREIGN CURRENCY: FCF Budget Rate Used: EURO-DOLLAR .8587</p> <p>JOINT USE CERTIFICATION: This facility can be used by other components on an "as available" basis; however, the scope of the project is based on Air Force requirements.</p>		

1. COMPONENT AIR FORCE	FY 2020 MILITARY CONSTRUCTION PROJECT DATA	2. DATE March 19
3. INSTALLATION AND LOCATION MORON AIR BASE, SPAIN		
4. PROJECT TITLE EDI-HOT CARGO PAD	7. PROJECT NUMBER QUUG023002	
12. SUPPLEMENTAL DATA: a. Estimated Design Data: (1) Project to be accomplished by design-build procedures (a) Design Start Date 18 DEC (b) Parametric Cost Estimates used to develop costs YES (c) % Designed as of 1 Jan 2019 15% (d) Date 35% designed 19 APR (e) Design Completion Date 19 AUG (2) Basis: (a) Standard or Definitive Design – NO (b) Where Design Was Most Recently Used – N/A (3) All Other Design Costs: \$340 (4) Construction Contract Award 20 FEB (5) Construction Start 20 JUN (6) Construction Completion 22 MAR (7) Energy Study/Life-Cycle cost analysis was/will be performed YES b. Equipment associated with this project provided from other appropriations: N/A		

1. COMPONENT AIR FORCE			FY 2020 MILITARY CONSTRUCTION PROGRAM					2. DATE (YYYYMMDD) March 19			
3. INSTALLATION AND LOCATION EDI Worldwide Unspecified					4. COMMAND UNITED STATES AIR FORCES IN EUROPE			5. AREA CONSTRUCTION COST INDEX 1.09			
6. PERSONNEL		(1) PERMANENT			(2) STUDENTS			(3) SUPPORTED			TOTAL
		OFFICER	ENLISTED	CIVILIAN	OFFICER	ENLISTED	CIVILIAN	OFFICER	ENLISTED	CIVILIAN	
a. AS OF	30-Sep-18	0	0	0	0	0	0	5	50	0	55
b. END FY	2024	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-18									
c. AUTHORIZATION NOT YET IN INVENTORY										4,100	
d. AUTHORIZATION REQUESTED IN THIS PROGRAM (FY 2020)										29,000	
e. PLANNED IN NEXT FOUR PROGRAM YEARS (FY 2021-2024)										0	
f. REMAINING DEFICIENCY										0	
g. GRAND TOTAL										33,100	
8. PROJECTS REQUESTED IN THIS PROGRAM (FY 2020)											
a. CATEGORY								b. COST (\$000)		c. DESIGN STATUS	
(1) CODE	(2) PROJECT TITLE				(3) SCOPE			(1) START	(2) COMPLETE		
116-662	EDI - HOT CARGO PAD				9,244 SM			07/18	07/20		
TOTAL								29,000			
9. FUTURE PROJECTS IN NEXT FOUR PROGRAM YEARS (FY2021 - FY2024)											
FUTURE PROJECTS TOTAL 0											
R&M UNFUNDED REQUIREMENT (\$M)											
										TOTAL 0.0	
10. MISSION OR MAJOR FUNCTIONS											
Provides one of the primary sources for U.S. European Command (EUCOM) and its Service Component's ability to respond to an evolving European security environment.											
11. OUTSTANDING POLLUTION AND SAFETY DEFICIENCIES (FY 2018-2022)											
a. Air Pollution											
b. Water Pollution											
c. Occupational Safety and Health											
d. Other Environmental											
OUTSTANDING DEFICIENCIES TOTAL										0	

1. COMPONENT AIR FORCE	FY 2020 MILITARY CONSTRUCTION PROJECT DATA (computer generated)			2. DATE March 19	
3. INSTALLATION, SITE AND LOCATION EDI Worldwide Unspecified			4. PROJECT TITLE EDI-HOT CARGO PAD		
5. PROGRAM ELEMENT 27576F	6. CATEGORY CODE 116-662	7. RPSUID/PROJECT NUMBER EPLK190001	8. PROJECT COST (\$000) 29,000		
9. COST ESTIMATES					
ITEM		U/M	QUANTITY	UNIT	COST (\$000)
PRIMARY FACILITIES					12,282
HAZARDOUS CARGO PAD (116-662)		SM	9,244	109	(1,009)
LIVE ORDNANCE LOAD AREA (116-662)		SM	26,709	145	(3,867)
ARM/DISARM PAD (116-661)		SM	14,017	146	(2,045)
MUNITIONS HOLDING PAD W/ BERM (116-662)		SM	1,861	404	(752)
TAXIWAY (112-211)		SM	25,360	110	(2,777)
PAVED SHOULDERS (116-642)		SM	17,900	89	(1,591)
SUSTAINABILITY AND ENERGY MEASURES (2.0%)		LS			(241)
SUPPORTING FACILITIES					13,488
SITE PREPARATION/DEMOLITION		LS			(7,508)
PAVEMENTS		LS			(870)
PASSIVE ANTITERRORISM		LS			(59)
UTILITIES		LS			(4,791)
FENCING		LS			(260)
SUBTOTAL					25,770
CONTINGENCY (5.0%)					1,288
TOTAL CONTRACT COST					27,058
SUPERVISION, INSPECTION AND OVERHEAD (6.5%)					1,759
TOTAL REQUEST					28,817
TOTAL REQUEST (ROUNDED)					29,000
10. Description of Proposed Construction: Construct Hazardous Cargo Pad (HCP) and taxilane access supporting the full weight and turning radius of a Strategic Transport Aircraft (STA), using conventional design and construction methods. Construct the HCP far enough from all inhabited facilities to meet safety requirements. Construct a Live Ordinance Loading Area (LOLA) sized to support eight North Atlantic Treaty Organization (NATO) Tactical Fighter Aircraft (TFA) and two associated munitions holding pads in the FY20 NATO program. Construct an arm/disarm pad with earthen berm sized to support four NATO TFA. Construct an access road to support loaded munitions vehicles transporting munitions from the pad to the Munitions Storage Area. Expand existing NATO Ammunitions Operations Area concrete pad to support proper loading, unloading, and assembly of class 1.1 munitions, as well as access and circulation of the designated design vehicles. Construction includes base and subbase, drainage systems, taxiway pavement using medium load design, ridged strength Portland Concrete Cement, asphalt shoulders, taxiway and apron lighting, taxilane and apron pavement markings, earthen berms, earthwork, grading, utilities, and associated demolition. 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.					

1. COMPONENT AIR FORCE	FY 2020 MILITARY CONSTRUCTION PROJECT DATA (computer generated)			2. DATE March 19
3. INSTALLATION, SITE AND LOCATION EDI Worldwide Unspecified			4. PROJECT TITLE EDI-HOT CARGO PAD	
5. PROGRAM ELEMENT 27576F	6. CATEGORY CODE 116-662	7. RPSUID/PROJECT NUMBER EPLK190001	8. PROJECT COST (\$000) 29,000	
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 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 (DoD) antiterrorism/force protection requirements per UFC 4-010-01.				
Air Conditioning: 0 Tons				
11. Requirement: 37814 SM Adequate: 0 SM Substandard: 0 SM				
PROJECT: EDI Hazardous Cargo Pad				
REQUIREMENT: This project is in support of the EDI (formerly known as the European Reassurance Initiative). 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 operations is infrastructure at key locations to support military activities. A paved area with tie-downs and mooring points is required for multiple fixed wing aircraft to load and unload explosives and other hazardous cargo from aircraft. In addition, a LOLA and arm/disarm pad must be provided for loading munitions onto and arming NATO TFA. The LOLA and arm/disarm pad will simultaneously service eight (8) and four (4) aircraft, respectively, and will increase the frequency of sortie generation, directly improving airfield operation for greater responsiveness during bilateral and multilateral exercise, and training with allies and partners. The LOLA and arm/disarm pad will boost airfield presence, as well as improve airfield capability and readiness. The HCP, LOLA and associated munitions holding pads, and arm/disarm pad must be sited IAW DoD 6055.9-STD, DoD Ammunition and Explosive Safety Standards; Air Force Instruction (AFI) 91-201, Explosives Safety Standards; and Allied Ammunition Storage and Transportation Publication (AASTP)-1 Manual of NATO Safety Principles for the Storage of Military Ammunition and Explosives. This project maximizes airfield capability, readiness, and safety operations.				
CURRENT SITUATION: A dedicated, properly sized, and located HCP does not exist at the air base. Without the proposed project, the air base is not able to safely receive or ship munitions by air. Additionally, there are no designated/purpose-built safe locations for loading ordnance onto NATO TFA. While an existing arm/disarm pad improvement project is also planned with the EDI FY15 Improve Support Infrastructure project, that existing arm/disarm pad will no longer be adequately sited once the proposed parallel taxiway is constructed. Furthermore, if an aircraft breaks down on the existing undersized arm/disarm pad, the ability to quickly turn a four-ship sortie will be limited until the broken aircraft is towed out of the area. The construction of the HCP, LOLA and associated munitions holding pads, and arm/disarm pad, are essential in order to protect personnel and facilities from the damaging effects of explosions involving munitions and explosives.				
IMPACT IF NOT PROVIDED: The personnel, aircraft, and resources will continue to operate under considerable risk due to the inadequate				

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3. INSTALLATION, SITE AND LOCATION EDI Worldwide Unspecified			4. PROJECT TITLE EDI-HOT CARGO PAD	
5. PROGRAM ELEMENT 27576F	6. CATEGORY CODE 116-662	7. RPSUID/PROJECT NUMBER EPLK190001	8. PROJECT COST (\$000) 29,000	
<p>areas for unloading of hazardous cargo without suspending airfield operations and shutting down the runway. Personnel are unnecessarily compromised and the potential for injury is substantial. Furthermore, this limitation will undermine airfield presence and severely impair airfield capability and readiness response. The responsiveness for bilateral and multilateral exercises and training missions will be unequivocally compromised.</p> <p>ADDITIONAL: This project meets applicable criteria specified in Air Force Manual 32-1084, Facility Requirements. User generated cost data was used to prepare this cost estimate, utilizing local labor and material pricing, and referencing the national cost data source, Sekocenbud. This project will be submitted for NATO pre-financing. Although not eligible for infrastructure common funding, a precautionary prefinance statement will be filed for this project to allow possible future recoupment if eligibility is established. All known alternative options were considered during the development of this project. An analysis of reasonable alternatives for accomplishing this project was completed, indicating a new HCP is the only viable option. An Economic Analysis will be approved prior to the president's budget. Supporting facility cost exceeds 25 percent of the primary facilities because the site being developed not only requires significant demolition and site improvements, but a major infrastructure investment is needed to support the primary facilities. This design shall conform to criteria established in the Air Force Corporate Facilities Standards but shall not employ a standard facility design. This project does not fall within or partly within the 100-year flood plain. Hazardous Cargo Pad: 9,244 SM = 99,502 SF; LOLA: 26,709 SM = 287,493 SF; Arm/Disarm Pad: 14,017 SM = 150,878 SF; Munitions Holding Pad: 1,861 SM = 20,032 SF; Taxiway: 25,360 SM = 272,973 SF; and Paved Shoulders: 17,900 SM = 192,674 SF BCE commercial phone number +49 6371-47-6773.</p> <p>FOREIGN CURRENCY:</p> <p>JOINT USE CERTIFICATION: This facility can be used by other components on an 'as available' basis; however, the scope of the project is based on USAF requirements.</p>				

1. COMPONENT AIR FORCE	FY 2020 MILITARY CONSTRUCTION PROJECT DATA (computer generated)		2. DATE March 19																										
3. INSTALLATION AND LOCATION EDI Worldwide Unspecified		4. PROJECT TITLE EDI-HOT CARGO PAD																											
5. PROGRAM ELEMENT 27576F	6. CATEGORY CODE 116-662	7. PROJECT NUMBER EPLK190001	8. PROJECT COST (\$000) 29,000																										
<p>12. SUPPLEMENTAL DATA:</p> <p>a. Estimated Design Data:</p> <p>(1) Status:</p> <table border="0"> <tr> <td>(a) Date Design Started</td> <td>01-JAN-19</td> </tr> <tr> <td>(b) Parametric Cost Estimates used to develop costs</td> <td>YES</td> </tr> <tr> <td>* (c) Percent Complete as of 01 JAN 2019</td> <td>15%</td> </tr> <tr> <td>* (d) Date 35% Designed</td> <td>01-JUN-19</td> </tr> <tr> <td>(e) Date Design Complete</td> <td>01-JUL-20</td> </tr> <tr> <td>(f) Energy Study/Life-Cycle cost analysis was/will be performed</td> <td>YES</td> </tr> </table> <p>(2) Basis:</p> <table border="0"> <tr> <td>(a) Standard or Definitive Design -</td> <td>NO</td> </tr> <tr> <td>(b) Where Design Was Most Recently Used -</td> <td></td> </tr> </table> <p>(3) Total Cost (c) = (a) + (b) or (d) + (e): (\$000)</p> <table border="0"> <tr> <td>(a) Production of Plans and Specifications</td> <td>1,740</td> </tr> <tr> <td>(b) All Other Design Costs</td> <td>870</td> </tr> <tr> <td>(c) Total</td> <td>2,610</td> </tr> <tr> <td>(d) Contract</td> <td>2,175</td> </tr> <tr> <td>(e) In-house</td> <td>435</td> </tr> </table> <p>(4) Construction Contract Award 20 FEB</p> <p>(5) Construction Start 20 JUN</p> <p>(6) Construction Completion 22 MAR</p> <p>* Indicates completion of Project Definition with Parametric Cost Estimate which is comparable to traditional 35% design to ensure valid scope, cost and executability.</p> <p>b. Equipment associated with this project provided from other appropriations: N/A</p>				(a) Date Design Started	01-JAN-19	(b) Parametric Cost Estimates used to develop costs	YES	* (c) Percent Complete as of 01 JAN 2019	15%	* (d) Date 35% Designed	01-JUN-19	(e) Date Design Complete	01-JUL-20	(f) Energy Study/Life-Cycle cost analysis was/will be performed	YES	(a) Standard or Definitive Design -	NO	(b) Where Design Was Most Recently Used -		(a) Production of Plans and Specifications	1,740	(b) All Other Design Costs	870	(c) Total	2,610	(d) Contract	2,175	(e) In-house	435
(a) Date Design Started	01-JAN-19																												
(b) Parametric Cost Estimates used to develop costs	YES																												
* (c) Percent Complete as of 01 JAN 2019	15%																												
* (d) Date 35% Designed	01-JUN-19																												
(e) Date Design Complete	01-JUL-20																												
(f) Energy Study/Life-Cycle cost analysis was/will be performed	YES																												
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(d) Contract	2,175																												
(e) In-house	435																												

1. COMPONENT AIR FORCE			FY 2020 MILITARY CONSTRUCTION PROGRAM				2. DATE (YYYYMMDD) March 19				
3. INSTALLATION AND LOCATION EDI Worldwide Unspecified					4. COMMAND UNITED STATES AIR FORCES IN EUROPE			5. AREA CONSTRUCTION COST INDEX 1.09			
6. PERSONNEL		(1) PERMANENT			(2) STUDENTS			(3) SUPPORTED			TOTAL
		OFFICER	ENLISTED	CIVILIAN	OFFICER	ENLISTED	CIVILIAN	OFFICER	ENLISTED	CIVILIAN	
a. AS OF	30-Sep-18	0	0	0	0	0	0	5	50	0	55
b. END FY	2024	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-18									
c. AUTHORIZATION NOT YET IN INVENTORY		17,900									
d. AUTHORIZATION REQUESTED IN THIS PROGRAM (FY 2020)		149,000									
e. PLANNED IN NEXT FOUR PROGRAM YEARS (FY 2021-2024)		0									
f. REMAINING DEFICIENCY		0									
g. GRAND TOTAL		166,900									
8. PROJECTS REQUESTED IN THIS PROGRAM (FY 2020)											
a. CATEGORY						b. COST (\$000)		c. DESIGN STATUS			
(1) CODE	(2) PROJECT TITLE				(3) SCOPE			(1) START	(2) COMPLETE		
422-264	EDI - MUNITIONS STORAGE AREA				3,716 SM		39,000	07/18	11/19		
442-758	EDI - ECAOS DABS/FEV EMEDS STORAGE				32,858 SM		107,000	07/18	11/20		
TOTAL						146,000					
9. FUTURE PROJECTS IN NEXT FOUR PROGRAM YEARS (FY2021 - FY2024)											
FUTURE PROJECTS TOTAL						0					
R&M UNFUNDED REQUIREMENT (\$M)						TOTAL		0.0			
10. MISSION OR MAJOR FUNCTIONS											
This/these location(s) provides a primary source for U.S. European Command (EUCOM), and its Service Components' ability to respond to an evolving European security environment.											
11. OUTSTANDING POLLUTION AND SAFETY DEFICIENCIES (FY 2018-2022)											
a. Air Pollution											
b. Water Pollution											
c. Occupational Safety and Health											
d. Other Environmental											
OUTSTANDING DEFICIENCIES TOTAL						0					

1. COMPONENT AIR FORCE	FY 2020 MILITARY CONSTRUCTION PROJECT DATA (computer generated)			2. DATE March 19	
3. INSTALLATION, SITE AND LOCATION EDI Worldwide Unspecified			4. PROJECT TITLE EDI-MUNITIONS STORAGE AREA		
5. PROGRAM ELEMENT 27576F	6. CATEGORY CODE 422-264	7. RPSUID/PROJECT NUMBER EPPW190001	8. PROJECT COST (\$000) 39,000		
9. COST ESTIMATES					
ITEM		U/M	QUANTITY	UNIT	COST (\$000)
PRIMARY FACILITIES					26,346
STORAGE IGLOO (422-264)		SM	3,716	4,900	(18,208)
ANCILLARY EXPLOSIVE FACILITY MAINT. PAD (422-275)		EA	1	126,000	(126)
ANCILLARY EXPLOSIVES FAC. BHA (422-275) RAILROAD TRACKAGE (860-617)		EA	6	232,333	(1,394)
LM			2,130	1,519	(3,235)
ANCILLARY EXPLOSIVE FAC., RAIL HEAD (149-399)		EA	2	1,224,000	(2,448)
CONSOLIDATION/CONTAINERIZATION POINT (141-787)		SM	5,574	30	(167)
CYBERSECURITY OF FACILITY-RELATED CONTROL SYS		LS			(250)
SUSTAINABILITY AND ENERGY MEASURES (2.0%)		LS			(517)
SUPPORTING FACILITIES					8,933
UTILITIES		LS			(3,780)
SITE IMPROVEMENTS		LS			(949)
PAVEMENTS		LS			(2,009)
COMMUNICATIONS		LS			(2,195)
SUBTOTAL					35,279
CONTINGENCY (5.0%)					1,764
TOTAL CONTRACT COST					37,043
SUPERVISION, INSPECTION AND OVERHEAD (6.5%)					2,408
TOTAL REQUEST					39,450
TOTAL REQUEST (ROUNDED)					39,000
EQUIPMENT FROM OTHER APPROPRIATIONS (NON-ADD)					(2,481.0)
10. Description of Proposed Construction: Description of Proposed Construction: Construct a Joint Munitions Storage Area (MSA) using conventional design and construction methods to accommodate storage of a variety of munitions types, supporting operations within the region. Construction includes a railhead, suspect dock, barricaded holding area, earth-covered magazines, maintenance pad, and load/off-load pads. Fire protection, utility management and control system, and a security system are included. Supporting facilities include site development, utility connections, lighting, paving, storm drainage, and landscaping. Low-impact Development Integrated Management Practices (LID-IMPs) are included. The facility is intended to be compatible with applicable Department of Defense (DoD), DoD Explosives Safety Board (DDESB), Air Force, Army, NATO, and host-nation design standards. In addition, local materials and construction techniques shall be used where required and/or appropriate. Design and construction efforts will be executed in accordance with the host-nation agreements, including construction and environmental permits. 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-					

1. COMPONENT AIR FORCE	FY 2020 MILITARY CONSTRUCTION PROJECT DATA (computer generated)			2. DATE March 19
3. INSTALLATION, SITE AND LOCATION EDI Worldwide Unspecified			4. PROJECT TITLE EDI-MUNITIONS STORAGE AREA	
5. PROGRAM ELEMENT 27576F	6. CATEGORY CODE 422-264	7. RPSUID/PROJECT NUMBER EPPW190001	8. PROJECT COST (\$000) 39,000	
<p>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.</p> <p>Air Conditioning: 0 Tons</p> <p>11. Requirement: 3716 SM Adequate: 0 SM Substandard: 0 SM</p> <p>PROJECT: Construct an MSA at an unspecified worldwide location.</p> <p>REQUIREMENT:</p> <p>This project is required to achieve the objectives of the European Deterrence Initiative in support of European Command (EUCOM) requirements, 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 successful training and combat operations is the acquisition and maintenance of strategic assets at key locations throughout the theater. The Joint MSA will directly improve mission readiness, providing critical munitions storage capability to Aligned Forces and the ability to deliver a decisive response to tactical missions and contingency support operations across the entire EUCOM area of responsibility.</p> <p>CURRENT SITUATION:</p> <p>An adequate MSA capable of supporting regional operations is not available. The installation has an MSA with a gross area of approximately 33.33 hectares (82.36 acres). The existing MSA is located northeast of the airfield, outside of the installation perimeter, and is operated by host nation forces. The MSA is surrounded by two perimeter fences (approximately 60 meters apart). Existing magazines within the MSA are not in compliance with NATO governing ammunition storage and transport safety principles for the storage of military ammunition and explosives. A Demolition of the site will make it a clear site, which includes removal of all concrete structures, roads, platforms and trackage.</p> <p>IMPACT IF NOT PROVIDED:</p> <p>If this project is not provided, the DoD will not have an adequate Joint MSA capable of supporting regional air operations and contingency support operations across the entire EUCOM area of responsibility. Impacts will limit the ability of the DoD to achieve compliance with the EDI, part of the Consolidated and Further Continuing Appropriations Act of 2015 in support of EUCOM requirements. This limitation is detrimental to regional operations and will impair overall capability. It will directly limit theater presence and impair mission capability, readiness, deterrence, and contingency support to operations across the entire EUCOM AOR.</p> <p>ADDITIONAL:</p> <p>This project meets the criteria/scope specified in Air Force Manual (AFMAN) 32-1084, Facility Requirements, the Air Force Munitions Facilities Standards Guide, and Bi-SC Directive 85-5 NATO Approved Criteria and Standards for Airfields. A preliminary analysis of reasonable options for satisfying this requirement indicates only one option will meet mission needs. Therefore, a complete economic analysis was</p>				

1. COMPONENT AIR FORCE	FY 2020 MILITARY CONSTRUCTION PROJECT DATA (computer generated)			2. DATE March 19
3. INSTALLATION, SITE AND LOCATION EDI Worldwide Unspecified			4. PROJECT TITLE EDI-MUNITIONS STORAGE AREA	
5. PROGRAM ELEMENT 27576F	6. CATEGORY CODE 422-264	7. RPSUID/PROJECT NUMBER EPPW190001	8. PROJECT COST (\$000) 39,000	
<p>not performed and request for waiver will be approved prior to the president's budget. The UFC 4-701-01, DoD Pricing Guide, Parametric Cost Engineering Systems (PACES), and RS Means were used to develop the estimate for this project. Force protection measures are considered according to USAF Installation Protection Guide. This design shall conform to criteria established in the Air Force Corporate Facilities Standards but will not employ a standard facility design. Support facilities exceed 25 percent of the primary facilities costs mainly due to the large amount of land development required to build the facilities and the amount of pavement required for a large project footprint. The area of disturbance is 226.73 hectares (560.26 acres) and has tree clearing, grubbing, grading, fencing, pavements including an internal road network, electric, and exterior lighting throughout. This project will be submitted for NATO pre-financing. This project does not fall within or partly within the 100-year flood plain. Storage Igloo: 3,716 SM = 39,999 SF, railroad trackage: 2,130 LM = 6,986 SF, consolidation/containerization point: 5,574 SM = 59,998 SF.</p> <p>BCE commercial phone number +49 6371-47-6773</p> <p>FOREIGN CURRENCY RATE:</p> <p>JOINT USE CERTIFICATION: This facility can be used by other components on an "as available" basis; however, the scope of the project is based on Air Force requirements. This project will be submitted for NATO pre-financing.</p>				

1. COMPONENT AIR FORCE	FY 2020 MILITARY CONSTRUCTION PROJECT DATA (computer generated)		2. DATE March 19
3. INSTALLATION AND LOCATION EDI Worldwide Unspecified		4. PROJECT TITLE EDI-MUNITIONS STORAGE AREA	
5. PROGRAM ELEMENT 27576F	6. CATEGORY CODE 422-264	7. PROJECT NUMBER EPPW190001	8. PROJECT COST (\$000) 39,000
12. SUPPLEMENTAL DATA:			
a. Estimated Design Data:			
(1) Status:			
(a) Date Design Started			01-JUN-18
(b) Parametric Cost Estimates used to develop costs			YES
* (c) Percent Complete as of 01 JAN 2019			15%
* (d) Date 35% Designed			01-OCT-18
(e) Date Design Complete			01-NOV-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			2,340
(b) All Other Design Costs			1,170
(c) Total			3,510
(d) Contract			2,925
(e) In-house			585
(4) Construction Contract Award			20 FEB
(5) Construction Start			20 JUN
(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)
FURNITURE, FIXTURES, & EQUIPMENT	3400	22	2,481

1. COMPONENT AIR FORCE	FY 2020 MILITARY CONSTRUCTION PROJECT DATA			2. DATE March 19	
3. INSTALLATION AND LOCATION EDI Worldwide Unspecified			4. PROJECT TITLE EDI-ECAOS DABS/FEV EMEDS STORAGE		
5. PROGRAM ELEMENT 27576	6. CATEGORY CODE 442-758	7. PROJECT NUMBER EPPW203001	8. PROJECT COST (\$000) 107,000		
9. COST ESTIMATES					
ITEM		U/M	QUANTITY	UNIT COST	COST (\$000)
<u>PRIMARY FACILITIES</u>					
CONTAINER GENERAL PURPOSE WAREHOUSE (442-758)		SM	8,264	1,707.53	(14,111)
ROLLING STOCK GENERAL PURPOSE WAREHOUSE (442-758)		SM	8,198	1,690.53	(13,859)
ROLLING STOCK GENERAL PURPOSE WAREHOUSE (442-758)		SM	8,198	1,690.53	(13,859)
ROLLING STOCK GENERAL PURPOSE WAREHOUSE (442-758)		SM	8,198	1,690.53	(13,859)
EMEDS WAR RESERVE MATERIEL STORAGE (442-515)		SM	1,971	2,004.57	(3,951)
VEHICLE MAINTENANCE SHOP/SPECIAL VEHICLE STORAGE (214-425)		SM	4,965	2,806.85	(13,936)
ENTRY CONTROL BUILDING (730-837)		SM	19	4,526.32	(86)
HAZMAT STORAGE (441-257)		SM	126	5,269.84	(664)
PETROLIUM, OIL, & LUBRICANT (POL) STORAGE (441-257)		SM	126	4,746.03	(598)
VEHICLE FUELING STATION (123-335)		OL	2	1296.00	(2,592)
SUPPLIES AND EQUIPMENT SHED, FORCE TESTING (441-628)		SM	111	2,054.05	(228)
LOADING AND UNLOADING AREA, MARSHALLING (890-152)		SM	4,181	96.87	(405)
ORGANIZATIONAL PARKING (852-261)		SM	49,784	121.67	(6,057)
CYBERSECURITY		LS			(1,250)
SUSTAINABILITY/ENERGY MEASURES 2%		LS			(1,709)
<u>SUPPORTING FACILITIES</u>					
UTILITIES		LS			(861)
COMMUNICATIONS		LS			(249)
PAVEMENTS		LS			(2,147)
SITE IMPROVEMENTS		LS			(2,178)
STORM DRAINAGE, LID 2%		LS			(1,739)
ENVIRONMENTAL MITIGATION 2%		LS			(1,739)
SUBTOTAL					
CONTINGENCY (5%)					(4,804)
TOTAL CONTRACT COST					
SUPERVISION, INSPECTION AND OVERHEAD (6.5%)					(6,557)
DESIGN/BUILD – DESIGN COST					0
TOTAL REQUEST					
TOTAL REQUEST (ROUNDED)					
107,438					
107,000					
10. DESCRIPTION OF PROPOSED CONSTRUCTION:					
Construct humidity-controlled warehouses and a vehicle maintenance facility using conventional design and construction methods to accommodate airfield infrastructure Deployable Airbase Systems (DABS) – Facilities, Equipment and Vehicles (FEV)/Expeditionary Medical Support Storage (EMEDSS), in support of the European Deterrence Initiative (EDI). Construction includes humidity controlled warehouses, general purpose warehouses, and a refueling vehicle maintenance shop. In addition, the facilities will include a fire alarm system, heat and smoke detection systems, door-open monitoring system, electrical load shedding system, lightning protection, and overvoltage protection for power and telecommunications systems. Supporting facilities include utilities, pavements, site improvements, environmental mitigation, vehicle wash facilities, and information systems. Low-impact development integrated management practices are included. The facility is intended to be compatible with applicable Department of Defense (DoD), United States Air Force (USAF), and host-nation design standards. In addition, local materials and construction techniques shall be used where required and/or appropriate. Design and construction efforts will be executed in accordance with the host-nation agreements, including construction and environmental permits. 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					

1. COMPONENT AIR FORCE	FY 2020 MILITARY CONSTRUCTION PROJECT DATA	2. DATE March 19
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3. INSTALLATION AND LOCATION
EDI Worldwide Unspecified

4. PROJECT TITLE EDI-ECAOS DABS/FEV EMEDS STORAGE	5. PROJECT NUMBER EPPW203001
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12. SUPPLEMENTAL DATA:

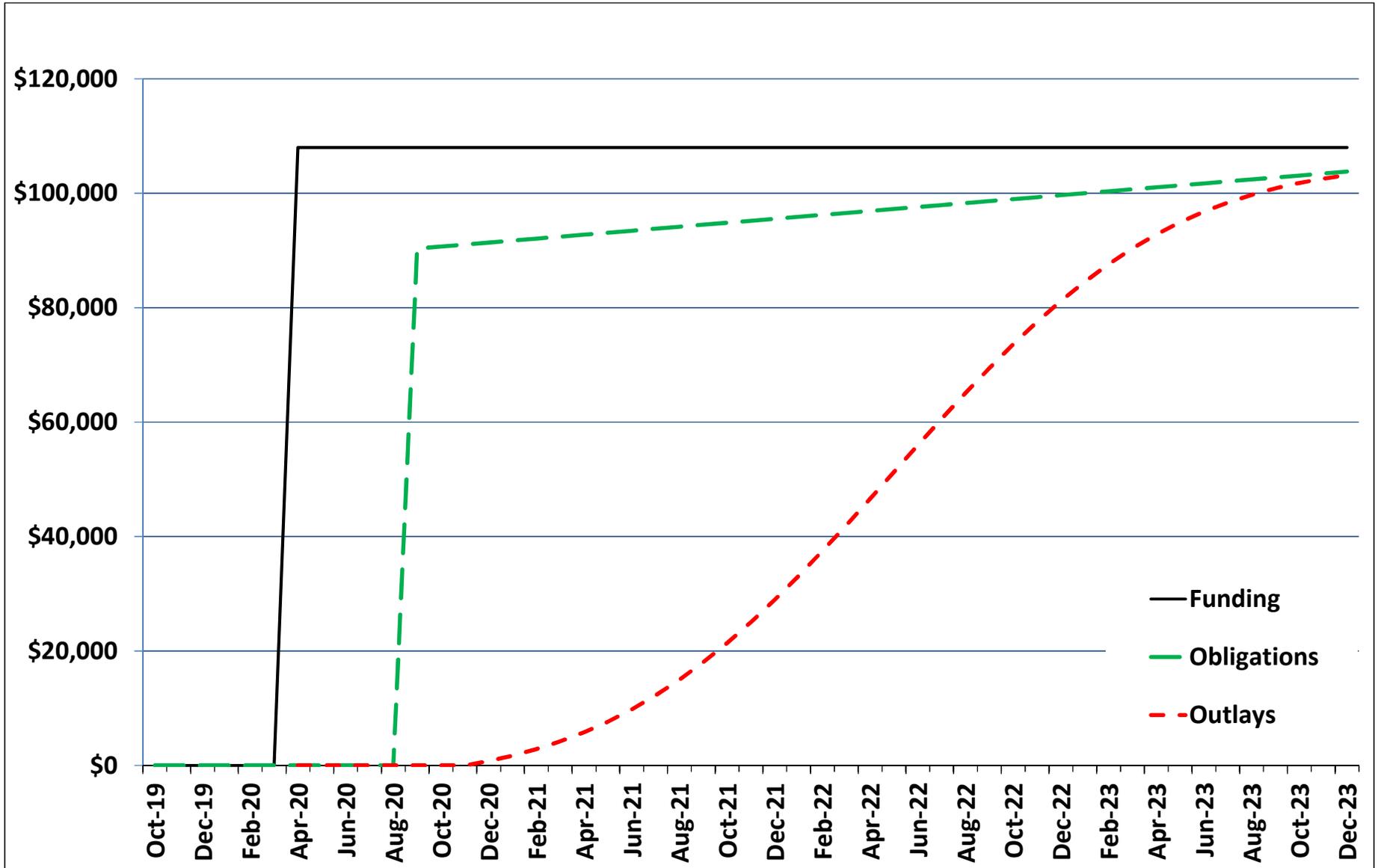
a. Estimated Design Data:

(1) Status:	
(a) Date Design Started	1-MAY-19
(b) Parametric Cost Estimates used to develop costs	YES
* (c) Percent Complete as of 01 JAN 2019	15%
* (d) Date 35% Designed	1-OCT-19
(e) Date Design Complete	1-NOV-20
(f) Energy Study/Life-Cycle analysis was/will be performed	YES
(2) Basis:	
(a) Standard or Definitive Design –	YES GENERAL PURPOSE STORAGE AND MAINTENANCE
(b) Where Design Was Most Recently Used –	UNKNOWN
(3) Total Cost (c) = (a) + (b) or (d) + (e): (\$000)	
(a) Production of Plans and Specifications	\$6,420
(b) All Other Design Costs	\$3,210
(c) Total	\$9,630
(d) Contract	\$8,025
(e) In-house	\$1,605
(4) Construction Contract Award	20 FEB
(5) Construction Start	20 JUN
(6) Construction Completion	22 MAR

* Indicates completion of Project Definition with Parameter 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

EDI - Construct DABS-FEV EMEDS, EDI Worldwide Unspecified



Project: EDI - Construct DABS - FEB/EMEDS

Project Spending Plan

As of: 15-Jan-19

All Cost in thousands (\$000)

Chart Begin	FUNDING (note 1)		OBLIGATION (note 2)		OUTLAYS (note 3)	
Apr-20	Enacted	Cumulative	Obligated	Cumulative	Monthly	Cumulative
Oct-19	0	0		0		
Nov-19	0	0		0		
Dec-19	0	0		0		
Jan-20	0	0		0		
Feb-20	0	0		0		
Mar-20	0	0		0		
Apr-20	108,000	108,000	-	-	-	-
May-20	-	108,000	-	-	-	-
Jun-20	-	108,000	-	-	-	-
Jul-20	-	108,000	-	-	-	-
Aug-20	-	108,000	-	-	-	-
Sep-20	-	108,000	90,345	90,345	-	-
Oct-20	-	108,000	345	90,690	-	-
Nov-20	-	108,000	345	91,035	-	-
Dec-20	-	108,000	345	91,380	767	767
Jan-21	-	108,000	345	91,725	938	1,705
Feb-21	-	108,000	345	92,070	1,133	2,838
Mar-21	-	108,000	345	92,415	1,353	4,191
Apr-21	-	108,000	345	92,760	1,596	5,787
May-21	-	108,000	345	93,105	1,861	7,648
Jun-21	-	108,000	345	93,450	2,144	9,792
Jul-21	-	108,000	345	93,795	2,442	12,234
Aug-21	-	108,000	345	94,140	2,748	14,981
Sep-21	-	108,000	345	94,485	3,056	18,038
Oct-21	-	108,000	345	94,830	3,359	21,397
Nov-21	-	108,000	345	95,175	3,649	25,045
Dec-21	-	108,000	345	95,520	3,917	28,962
Jan-22	-	108,000	345	95,865	4,155	33,117
Feb-22	-	108,000	345	96,210	4,356	37,473
Mar-22	-	108,000	345	96,555	4,513	41,986
Apr-22	-	108,000	345	96,900	4,621	46,607
May-22	-	108,000	345	97,245	4,676	51,283
Jun-22	-	108,000	345	97,590	4,676	55,959
Jul-22	-	108,000	345	97,935	4,621	60,581
Aug-22	-	108,000	345	98,280	4,513	65,094
Sep-22	-	108,000	345	98,625	4,356	69,450
Oct-22	-	108,000	345	98,970	4,155	73,605
Nov-22	-	108,000	345	99,315	3,917	77,521
Dec-22	-	108,000	345	99,660	3,649	81,170
Jan-23	-	108,000	345	100,005	3,359	84,529
Feb-23	-	108,000	345	100,350	3,056	87,585
Mar-23	-	108,000	345	100,695	2,748	90,333
Apr-23	-	108,000	345	101,040	2,442	92,775
May-23	-	108,000	345	101,385	2,144	94,919
Jun-23	-	108,000	345	101,730	1,861	96,780
Jul-23	-	108,000	345	102,075	1,596	98,376
Aug-23	-	108,000	345	102,420	1,353	99,729
Sep-23	-	108,000	345	102,765	1,133	100,862
Oct-23	-	108,000	345	103,110	938	101,800
Nov-23	-	108,000	345	103,455	767	102,567
Dec-23	-	108,000	345	103,800	620	103,187

Note 1: Assumes initial appropriation is enacted by Congress January of the program year. The appropriation of follow-on increment anticipated February FY19.

Note 2: Assumes funds are available to the contracting officer for the initial obligation no earlier than April of the program year to accommodate the funding process. The obligations of follow-on obligations anticipated February 2019.

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

1. COMPONENT AIR FORCE	FY 2020 MILITARY CONSTRUCTION PROJECT DATA (computer generated)			2. DATE March 19	
3. INSTALLATION, SITE AND LOCATION WORLDWIDE UNSPECIFIED VARIOUS LOCATIONS		4. PROJECT TITLE EDI-Planning & Design			
5. PROGRAM ELEMENT 91211F	6. CATEGORY CODE 961-000	7. RPSUID/PROJECT NUMBER PAYZ200001	8. PROJECT COST (\$000) 61,438		
9. COST ESTIMATES					
ITEM		U/M	QUANTITY	UNIT	COST (\$000)
PRIMARY FACILITIES					61,438
PLANNING AND DESIGN		LS			(61,438)
SUPPORTING FACILITIES					0
SUBTOTAL					<u>61,438</u>
TOTAL CONTRACT COST					<u>61,438</u>
TOTAL REQUEST					61,438
TOTAL REQUEST (ROUNDED)					61,438
10. Description of Proposed Construction:					
11. Requirement: Adequate: Substandard:					
PROJECT: As required.					
<p>REQUIREMENT: These planning and design funds are required to complete the design of facilities in the FY21 Military Construction Program, initiate design of facilities in the FY22 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.</p>					

1. COMPONENT AIR FORCE	FY 2020 MILITARY CONSTRUCTION PROJECT DATA (computer generated)			2. DATE March 19	
3. INSTALLATION, SITE AND LOCATION WORLDWIDE UNSPECIFIED VARIOUS LOCATIONS		4. PROJECT TITLE EDI - UNSPECIFIED MINOR MILITARY CONSTRUCTION			
5. PROGRAM ELEMENT 27576F	6. CATEGORY CODE 962-000	7. RPSUID/PROJECT NUMBER PAYZ200004	8. PROJECT COST (\$000) 12,800		
9. COST ESTIMATES					
ITEM		U/M	QUANTITY	UNIT	COST (\$000)
PRIMARY FACILITIES					12,800
MILCON MINOR CONSTRUCTION		LS			(12,800)
SUPPORTING FACILITIES					0
SUBTOTAL					<u>12,800</u>
TOTAL CONTRACT COST					<u>12,800</u>
TOTAL REQUEST					12,800
TOTAL REQUEST (ROUNDED)					12,800
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 FY20. Included would be projects to support new mission requirements, new equipment, and other essential support to Air Force missions.					



Department of the Air Force

**Host Nation
Military Construction Program**

**Calendar Year (CY) 2020
Budget Estimates**

**Justification Data Submitted to Congress
March 2019**

**DEPARTMENT OF THE AIR FORCE
HOST NATION MILITARY CONSTRUCTION PROGRAM CALENDAR YEAR 2020
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**DEPARTMENT OF THE AIR FORCE
HOST NATION MILITARY CONSTRUCTION PROGRAM CALENDAR YEAR 2020
PROGRAM SUMMARY**

	Authorization Request <u>(\$000s)</u>
Military Construction	
Major Construction	94,200
Total Military Construction	94,200

Strategic Narrative:

The enclosed justification book represents the air component of the United States Forces Korea (USFK) Republic of Korea Funded Construction in-kind contribution program for calendar year 2020. Although the justification book may appear to be a list of individual projects, these projects were developed in coordination between USFK components 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.

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**DEPARTMENT OF THE AIR FORCE
 HOST NATION MILITARY CONSTRUCTION PROGRAM
 CALENDAR YEAR 2020 INDEX
 (DOLLARS IN THOUSANDS)**

STATE/COUNTRY	INSTALLATION	PROJECT	COST (\$000)	
REPUBLIC OF KOREA	Gwangju Air Base	Hydrant Fuel System, Multi	35,000	
		Gwangju Air Base TOTAL:	35,000	
	Kunsan Air Base	Dining Facility	21,000	
		Upgrade Electrical Distribution System	14,200	
		Kunsan Air Base TOTAL:	35,200	
	Suwon Air Base	Hydrant Fuel System, Multi	24,000	
		Suwon Air Base TOTAL:	24,000	
	REPUBLIC OF KOREA TOTAL:			94,200
	HOST NATION FUNDED CONSTRUCTION TOTAL:			94,200

1. COMPONENT		REPUBLIC OF KOREA FUNDED CONSTRUCTION (ROKFC)			2. DATE		
AIR FORCE					22 August 2018		
3. INSTALLATION AND LOCATION				4. PROJECT TITLE			
GWANGJU AIR BASE, KOREA				HYDRANT FUEL SYSTEM, MULTI			
5. PROGRAM ELEMENT		6. CATEGORY CODE	7. PROJECT NUMBER		8. PROJECT COST (\$000)		
N/A		121-122	F17R730 (MMFZ153012)		\$35,000		
9. COST ESTIMATES							
ITEM				U/M	QUANTITY	UNIT COST	COST (\$000)
PRIMARY FACILITY:							26,340
JET FUEL OPERATING STORAGE (CONVERSION) (124-135)				GA	6,720,000	0.5	(3,381)
HYDRANT FUELING SYSTEM (121-122)				OL	11	950,509	(10,456)
HYDRANT FUEL BUILDING (121-124)				SM	357	15,796	(5,639)
LIQUID FUEL TRUCK FILL STANDS (126-925)				OL	4	219,550	(878)
CONCRETE REVETMENT (872-911)				SET	97	4,425	(429)
AIRCRAFT PARKING APRON (113-321)				SM	20,500	115	(2,353)
STEEL REVETMENT (872-911)				LM	1,305	2,059	(2,687)
SUSTAINABILITY AND ENERGY MEASURES (2%)				LS	1	516,470	(517)
SUPPORTING FACILITIES							5,396
ANTITERRORISM/FORCE PROTECTION				LS	1		(200)
UTILITIES				LS	1		(2,618)
PAVEMENTS				LS	1		(26)
SITE IMPROVEMENT				LS	1		(1,499)
DEMOLISH				SM	7,250	52.3	(379)
COMMUNICATION SUPPORT				LS	1		(675)
SUBTOTAL							31,736
CONTINGENCY (5%)							1,587
TOTAL CONTRACT COST							33,323
SUPERVISION, INSPECTION AND OVERHEAD (6.5%)							2,166
TOTAL FUNDED COST							35,489
TOTAL FUNDED COST (ROUNDED)							35,000
10. DESCRIPTION OF PROPOSED WORK:							
<p>Utilize host-nation funding to convert Tank 1311 (100,000 barrels) and Tank 1315 (60,000 barrels) to constant pressure hydrant fuel system operating tanks with 3-600 Gallon Per Minutes (GPM) pumps. Construct Control/Filter building with pump motor control centers, fuel lab. Construct hydrant loop piping and pantograph flush piping from Control/Filter building to United States Air Force (USAF) Apron 756. Construct 4 truck fill stands adjacent to Apron 756 with connection point for fuel bladder deployment and isolation valve pit for pantographs. Realign & construct steel bin revetments for 5th generation aircraft on Apron 756 consisting of 6 double cell revetments for aircraft parking & 11 single cell revetments for aircraft fueling and arming. Construct pantographs in single cell revetments with Portland Cement Concrete (PCC) airfield pavement removal and replacement as required. Construct fire hydrants along the east edge of the apron to provide coverage for the single cell revetments. Facilities will be designed as permanent construction in accordance with the Department of Defense (DoD) Unified Facilities Criteria (UFC) 1-200-01, General Building Requirements. The facilities shall support storage of prepositioned stocks of Petroleum Oil Lubricant (POL) and are needed now to meet the minimum standards for conducting current operations. This project will comply with DoD Antiterrorism/Force Protection requirements per UFC 4-010-01.</p> <p>Air Condition : Total 20 tons</p>							

1. COMPONENT AIR FORCE	REPUBLIC OF KOREA FUNDED CONSTRUCTION (ROKFC)		2. DATE 22 August 2018
3. INSTALLATION AND LOCATION GWANGJU AIR BASE, KOREA		4. PROJECT TITLE HYDRANT FUEL SYSTEM, MULTI	
5. PROGRAM ELEMENT N/A	6. CATEGORY CODE 121-122	7. PROJECT NUMBER F17R730 (MMFZ153012)	8. PROJECT COST (\$000) \$35,000
<p><u>JOINT USE CERTIFICATION:</u> This US Exclusive Use facility can be used by other Department of Defense components on an as available basis; however the scope of the project is based on Air Force requirements.</p> <p>Jet Fuel Operating Storage (Conversion); 160 MBL Hydrant Fuel System (121-122); 11 OL Aircraft Parking Apron (113-321); 20,500 SM Steel Revetment (872-911); 1,305 LM Base Civil Engineer; Maj Patrick M. Sheehan, 011-82-53-980-4985.</p>			

1. COMPONENT AIR FORCE		REPUBLIC OF KOREA FUNDED CONSTRUCTION (ROKFC)			2. DATE 22 August 2018			
3. INSTALLATION AND LOCATION KUNSAN AB, KOREA				4. PROJECT TITLE: DINING FACILITY				
5. PROGRAM ELEMENT N/A		6. CATEGORY CODE 722-351	7. PROJECT NUMBER F16R202 (MLWR083190)		8. PROJECT COST (\$000) 21,000			
9. COST ESTIMATES								
ITEM					U/M	QUANTITY	UNIT COST	COST (\$000)
PRIMARY FACILITY								15,781
DINING FACILITY (722-351)					SM	3,599	4,299	(15,472)
SUSTAINMENT & ENERGY MEASURES					LS			(309)
SUPPORTING FACILITIES								3,073
UTILITIES					LS			(868)
SITE IMPROVEMENTS					LS			(506)
PAVEMENTS					LS			(234)
COMMUNICATION SUPPORT					LS			(76)
BACKUP GENERATOR					LS			(288)
DEMOLITION					SM	4,934	178.00	(878)
PASSIVE FORCE PROTECTION MEASURES					LS			(117)
CONTAMINATED SOIL REMOVAL					CM	1,200	88.50	(106)
SUBTOTAL								18,824
CONTINGENCY (5.0%)								941
TOTAL CONTRACT COST								19,765
SUPERVISION, INSPECTION AND OVERHEAD (6.5%)								1,284
TOTAL REQUEST								21,049
TOTAL REQUEST (ROUNDED)								21,000
EQUIPMENT FROM OTHER APPROPRIATIONS								(2,742)
10. DESCRIPTION OF PROPOSED CONSTRUCTION.								
Utilize host-nation funding to construct a new dining facility (DFAC) incorporating economical design and construction methods to accommodate the mission of the facility. The facility will include a reinforced concrete foundation, floor slabs, masonry walls, stainless seam metal roof system, heating, ventilating and air conditioning (HVAC) system, fire suppression and alarm systems and mass notification system. Includes utilities, pavements, site improvements, pile foundation, communications system and other necessary support. The project includes demolition of four buildings. The facility should be compatible with applicable DoD, Air Force, and base design standards. In addition, local materials and construction techniques shall be used where cost effective. Facilities will be designed as permanent construction in accordance with the DoD Unified Facilities Criteria (UFC 1-200-01 and UFC 1-200-02). This project will comply with DoD antiterrorism/ force protection requirements per UFC 4-010-01 and an energy monitoring and control system (EMCS) will be included.								
Air Conditioning: 240 Tons								
11. REQUIREMENT: 4,179 SM			ADEQUATE: 0 SM			SUBSTANDARD: 2,177 SM		
PROJECT: Dining facility (Current Mission).								
REQUIREMENT: Construct a DFAC to accommodate currently assigned applicable installation personnel and new mission bed down US Army personnel (Grey Eagle) arriving in FY19. The current DFAC is undersized based on base population per AFMAN 32-1084, Para 7.2.9. The new DFAC will include a receipt and issue area, a kitchen area, a dining area and a serving area. The receipt and issue area is required for refrigeration and dry storage space used to store perishable and semi-perishable food prior to processing or use, a receiving platform including garbage and trash areas, and an issue point. The kitchen area is required for food preparation and support space including the kitchen proper, dish and utensil wash space, a refrigerated area for perishable food during processing, staff toilets and locker area, office, training room, storage room for expendables, and								

1. COMPONENT AIR FORCE	REPUBLIC OF KOREA FUNDED CONSTRUCTION (ROKFC)	2. DATE
3. INSTALLATION AND LOCATION KUNSAN AIR BASE, KOREA (PACAF)		
4. PROJECT TITLE DINING FACILITY	5. PROJECT NUMBER F16R202 (MLWR083190)	
<p>The dining area will includes patron seating, aisles, patron restrooms, a protected entranceway, office, and storage room. The serving area includes space for the food serving line(s) and cashier(s).</p> <p><u>CURRENT SITUATION:</u> Currently, the Kunsan AB DFAC is 33 years old (built in 1985) and has capacity to support 54% of the current armistice base population of Airmen and Soldiers. Moreover, when required, Kunsan AB will receive up to 500 additional Theater Support Package (TSP) personnel during other-than-armistice operations furthering the need for more support space. The current DFAC does not account for these personnel. Furthermore, Kunsan AB is considered a remote and isolated installation; therefore, the demand signal for adequate meal production is stressed as 80% (E-6 and below) of the base population uses the DFAC as their sole source of sustenance. Based on validated planning factors, the current DFAC facility would require a 2.3K SM addition and a complete renovation of the current facility to meet the adequate mission support space needed for the current armistice base population, future new mission bed down and TSP personnel. Additionally, the current facility underwent a \$2.1M HVAC and serving line repair in 1999; however, due to an increase in base population and a humid, high salt climate, facility components have degraded at an increased rate. This has resulted in increased facility sustainment costs. Ultimately, the current DFAC is inadequate to meet current operations in accordance with AFMAN 32-1084, Para 7.2.9 and failure to recapitalize this facility could cause potential mission failure and jeopardize Kunsan AB's ability to Fight Tonight.</p> <p><u>IMPACT IF NOT PROVIDED:</u> If a new, adequately sized DFAC is not provided, Kunsan AB will be at risk to accept and sustain TSP forces and "Take the Fight North" mission. Continually, the current facility is postured to adequately support 54% of applicable, currently assigned personnel. Moreover, Kunsan AB will continue to pay approximately \$168K annually to provide take-out meals rather than in-house dining due to an inadequately sized dining area. The \$168K consists of disposable food containers, plastic cutlery, etc. Furthermore, if the remaining 46% were placed on BAS, the Kunsan AB commissary and Base Exchange facilities are not properly sized to support this additional demand. Additionally, applicable personnel are not authorized to drive personally owned vehicles; therefore, they cannot consistently depend on the local economy. Without this project, Kunsan AB's ability to generate airpower and Fight Tonight is at risk.</p> <p><u>ADDITIONAL:</u> 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. A preliminary analysis of reasonable options for satisfying this requirement indicates that only one option will meet mission needs. A complete economic analysis was performed by FMA. 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. No Explosive Site Plan (ESP) is required for this project</p> <p>Dining Facility 3,599 SM (38,732 SF) Demolition 4,934 SM (53,112 SF) Base Civil Engineer: 011-82-63-470-5400</p>		

1. COMPONENT AIR FORCE		REPUBLIC OF KOREA FUNDED CONSTRUCTION (ROKFC)			2. DATE 22 August 2018	
3. INSTALLATION AND LOCATION KUNSAN AB, KOREA			4. PROJECT TITLE: UPGRADE ELECTRICAL DISTRIBUTION SYSTEM			
5. PROGRAM ELEMENT N/A		6. CATEGORY CODE 812-225	7. PROJECT NUMBER F12R701 (MLWR887728)		8. PROJECT COST (\$000) 14,200	
9. COST ESTIMATES						
ITEM		U/M	QUANTITY	UNIT COST	COST (\$000)	
PRIMARY FACILITY					9,738	
PRIMARY U/G ELECT DISTRIBUTION LINE (812-225)		LM	6,580	1,451	(9,547)	
SUSTAINMENT & ENERGY MEASURES		LS			(191)	
SUPPORTING FACILITIES					2,943	
UTILITIES		LS			(1,291)	
SITE IMPROVEMENTS		LS			(458)	
PAVEMENTS		LS			(862)	
DEMOLITION		LM	7,035	47.20	(332)	
SUBTOTAL					12,681	
CONTINGENCY (5%)					634	
TOTAL CONTRACT COST					13,315	
SUPERVISION, INSPECTION AND OVERHEAD (6.5%)					865	
TOTAL REQUEST					14,180	
TOTAL REQUEST (ROUNDED)					14,200	
10. DESCRIPTION OF PROPOSED CONSTRUCTION						
Utilize host-nation funding to upgrade Kunsan AB's electrical distribution system incorporating economical design and construction methods to sustain the installation's mission and add operational resiliency for theater-wide operations. This project includes the components of a complete and usable underground electrical distribution system. The underground distribution system consists of ducts, man-holes, vaults, cables, pot heads, transformers, switches, protective devices, and associated equipment. The project includes restoring disturbed pavements and landscaping. The project will demolish an existing overhead electrical distribution system (7,035 LM). The facility should be compatible with applicable DoD, Air Force, and base design standards. In addition, local materials and construction techniques shall be used where cost effective. Facilities will be designed as permanent construction in accordance with the DoD Unified Facilities Criteria (UFC 1-200-01 and UFC 1-200-02). This project will comply with DoD antiterrorism/force protection requirements per UFC 4-010-01 and an energy monitoring and control system (EMCS) will be included.						
11. REQUIREMENT : 45,684 LM ADEQUATE: 39,104 LM SUBSTANDARD: 6,580 LM						
PROJECT: Upgrade Electrical Distribution System. (Current Mission)						
<u>REQUIREMENT:</u> This project is required to upgrade and recapitalize existing overhead electric lines with higher-capacity, solid-state underground electrical lines to provide reliable, survivable, and expandable electrical service to support the installation mission set. This is the final phase of a three-phase program to upgrade the Kunsan AB electrical distribution system. Once completed, this requirement will supply operational resiliency to an antiquated, undersized overhead system that is vulnerable to severe weather events and a severely corrosive environment experienced at Kunsan AB.						
<u>CURRENT SITUATION:</u> The existing overhead electrical distribution system was installed during the Korean War and has passed its intended useful life. Additionally, the existing system poses operational challenges as its electrical capacity limits further mission expansion on Kunsan AB. Portions of Kunsan AB's overhead system are not rated for the applied voltage. Some insulators are rated at 5KV and the distribution system is 6.6KV.						

1. COMPONENT AIR FORCE- PACAF	REPUBLIC OF KOREA FUNDED CONSTRUCTION (ROKFC)	2. DATE
3. INSTALLATION AND LOCATION KUNSAN AIR BASE, KOREA		
4. PROJECT TITLE UPGRADE ELECTRICAL DISTRIBUTION SYSTEM		5. PROJECT NUMBER F12R701 (MLWR887728)
<p><u>IMPACT IF NOT PROVIDED:</u> As the demand for electrical energy continues to increase, the capacity of the distribution system will be further exceeded. This will increase the frequency of load shedding and brownouts while also increasing the potential for system damage. A substantial amount of electrical energy will continue to be lost due to undersized distribution system. If this project is not provided, mission effectiveness will be adversely impacted.</p>		
<p><u>ADDITIONAL:</u> 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 and a complete economic analysis will be 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. An Explosive Site plan (ESP) is not required for this project.</p>		
<p>New Underground Primary Electric Lines: 6,580 LM (21,590 LF) Demolition of Existing Overhead Primary Electric Lines: 7,035 LM (23,080 LF). Base Civil Engineer: 011-82-63-470-5400</p>		

1. COMPONENT AIR FORCE	REPUBLIC OF KOREA FUNDED CONSTRUCTION (ROKFC)			2. DATE 22 August 2018	
3. INSTALLATION AND LOCATION SUWON AIR BASE, KOREA			4. PROJECT TITLE HYDRANT FUEL SYSTEM, MULTI		
5. PROGRAM ELEMENT N/A	6. CATEGORY CODE 124-135	7. PROJECT NUMBER F17R731 (WNHQ093001)	8. PROJECT COST (\$000) \$ 24,000		
9. COST ESTIMATES					
ITEM		U/M	QUANTITY	UNIT COST	COST (\$000)
PRIMARY FACILITY:					
JET FUEL OPERATING STORAGE (124-135)		GA	840,000	8.3	16,547 (6,992)
HYDRANT FUELING SYSTEM (121-122)		OL	8	560,923	(4,487)
REPAIR HYDRANT FUEL BUILDING (121-124)		LS	1		(4,255)
LIQUID FUEL TRUCK FILL STANDS (126-925)		OL	2	219,550	(489)
SUSTAINABILITY AND ENERGY MEASURES (2%)		LS	1		(324)
SUPPORTING FACILITIES					
UTILITIES		LS	1	1,839,981	5,099 (1,840)
PAVEMENTS		LS	1	866,416	(866)
SITE IMPROVEMENT		LS	1	1,674,692	(1,675)
DEMOLITION		SM	3,062	94	(287)
COMMUNICATION SUPPORT		LS	1		(431)
SUBTOTAL					
21,646					
CONTINGENCY (5%)					
1,082					
TOTAL CONTRACT COST					
22,728					
SUPERVISION, INSPECTION AND OVERHEAD (6.5%)					
1,477					
TOTAL FUNDED COST					
24,205					
TOTAL FUNDED COST (ROUNDED)					
24,000					
10. DESCRIPTION OF PROPOSED WORK:					
Utilize host-nation funding to construct a hydrant fuel system consisting generally of two 10,000 Barrel fuel storage tanks and two truck fill stands with Return to Bulk (RTB) capabilities for refueling trucks. Include commercial fuel truck offload capability at truck fill stands. The facilities 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 facilities are required to withstand wind loads and seismic effects as prescribed in applicable codes and design guides. Facilities will be designed as permanent construction in accordance with the DoD Unified Facilities Criteria (UFC) 1-200-01. This project will comply with DoD antiterrorism/force protection requirements per UFC 4-101-01.					
Air Conditioning : 30 tons					
11. REQUIREMENT: 20,000 BBL		ADEQUATE: 0 BBL		SUBSTANDARD: 952 BBL	
PROJECT:					
Hydrant Fuel System, Multi (Current Mission)					
REQUIREMENT:					
Provide a Type IV hydrant fuel system to support hot pit aircraft refueling operations. System shall deliver 1200 GPM of JP-8 fuel to eight (8) hardened aircraft flow-through shelters, designed, constructed, and commissioned in accordance with the latest DoD Standard Design for Type III and IV hydrant systems. Replace hydrant loop piping with addition of hydrant flush piping at all eight pantographs. Construct new Emergency Power Down System (EPDS) with stations at each flow through shelter, truck fill stand, and door at building 2338, and security fences around fuel facilities. Install new water mains and fire hydrants around jet fuel tanks and truck fill stands. Provide unisex latrine and fuel lab in building 2338 or 2340. Install eye wash/showers in pump houses, building 2338, and at truck fill stands. Clean and decommission existing 40,000 gallon underground jet fuel tanks and remove existing jet fuel pumps from building 2338. Simultaneous					

1. COMPONENT AIR FORCE	REPUBLIC OF KOREA FUNDED CONSTRUCTION (ROKFC)		2. DATE 22 August 2018
3. INSTALLATION AND LOCATION SUWON AIR BASE, KOREA		4. PROJECT TITLE HYDRANT FUEL SYSTEM, MULTI	
5. PROGRAM ELEMENT N/A	6. CATEGORY CODE 124-135	7. PROJECT NUMBER F17R731 (WNHQ093001)	8. PROJECT COST (\$000) \$ 24,000
receipt and issue capability to support high tempo combat surge operations with redundant storage to facilitate JP-8 tank cleaning and API (American Petroleum Institute) 653 inspections every 10-years in accordance with UFC 3-460-03 is required. Construction of cut-and-cover tanks for mission-critical fuel storage is directed by PACOM. Compliance with United States Forces Korea (USFK) Environmental Governing Standards (EGS) is mandatory.			
<p><u>CURRENT SITUATION:</u></p> <p>Constructing a hydrant fuel system is required to maintain a "Fight Tonight" posture. Existing 40,000 gallon tanks violate USFK EGS (Environmental Governing Standards) requirements and are too small to handle continuous high tempo combat refueling operation, requiring constant resupply and placing a heavy burden on the limited manpower and resources at Suwon Air Base. The single 100,000 Barrels (BBL) bulk storage tank is not able to simultaneously receive jet fuel shipments and issue to the hydrant fuel system, also limiting aircraft refueling capabilities. Current Type IV hydrant fuel system is obsolete and lacks integral pantograph flush capability. Refueling trucks are currently used to flush the eight hot pit refueling pantographs, making the operation even more inefficient and resource-intensive. To support tank cleaning and API (American Petroleum Institute) 653 inspections, jet fuel must be loaded onto Defense Energy Support Center (DESC) contracted commercial fuel trucks for transfer to other bases and terminals. During those periods, Suwon AB has no bulk jet fuel storage and is unable to execute its combat aircraft refueling mission.</p>			
<p><u>IMPACT IF NOT PROVIDED:</u></p> <p>Without support for a hydrant fuel system, the operational rate of the installation will be greatly reduced and the Air Tasking Order will be affected. To sustain both War Reserve Material functional checks and sortie generations rates, contingency systems will have to be emplaced which will be out of compliance with the USFK EGS. There is also an increased risk of environmental damage due to structural tank failures or corrosion leaks, reduced service life of refueling truck fleet. Without this project we continue to incur high operating, maintenance and repair costs for bulk storage tank and the hydrant fuel system.</p>			
<p><u>ADDITIONAL:</u></p> <p>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. The project meets applicable criteria/scope specified in AF Manual 32-1084, Facility Requirements. The initial cost estimate for this project is within DoD Pricing Guide parameters. 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, dated 1 March 2013.</p>			
<p><u>JOINT USE CERTIFICATION:</u></p> <p>This US Exclusive Use facility can be used by other Department of Defense components on an as available basis; however the scope of the project is based on Air Force requirements.</p>			
<p>Jet Fuel Operating Storage (Conversion); 200 MBL Hydrant Fuel System (121-122); 8 OL Base Civil Engineer; Maj Patrick M. Sheehan, 011-82-53-980-4985.</p>			



Department of the Air Force

Military Family Housing

Fiscal Year (FY) 2020

Budget Estimate

**Justification Data Submitted to
Congress**

March 2019

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**DEPARTMENT OF THE AIR FORCE
MILITARY FAMILY HOUSING
FISCAL YEAR 2020 BUDGET REQUEST**

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**DEPARTMENT OF THE AIR FORCE
MILITARY FAMILY HOUSING
FISCAL YEAR 2020 BUDGET REQUEST**

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**DEPARTMENT OF THE AIR FORCE
MILITARY FAMILY HOUSING
FISCAL YEAR 2020 BUDGET REQUEST**

MILITARY FAMILY HOUSING

	<u>Program (\$ in Thousands)</u>
FY 2020 Budget Request	\$398,647
FY 2019 Budget Request	\$395,720

NARRATIVE SUMMARY

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

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

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

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

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**DEPARTMENT OF THE AIR FORCE
MILITARY FAMILY HOUSING
FISCAL YEAR 2020 BUDGET REQUEST**

FINANCIAL SUMMARY

AUTHORIZATION FOR APPROPRIATION REQUESTED FOR FY 2020:

	<u>(\$000)</u>
<u>FUNDING REQUEST FY 2020</u>	
Construction	\$53,584
Construction Improvements	\$46,638
Planning and Design	\$3,409
<u>Appropriation Request: Construction</u>	\$103,631
Operations, Utilities and Maintenance	\$256,655
Operating Expenses	\$96,219
Utilities	\$42,732
Maintenance	\$117,704
Housing Privatization	\$22,593
Leasing - Worldwide	\$15,768
<u>Appropriation Request: O&M, Leasing, Housing Privatization</u>	\$295,016
<u>Appropriation Request</u>	\$398,647
Reimbursement Request	\$5,715
 FY 2020 FAMILY HOUSING REQUEST	 \$404,362

DEPARTMENT OF AIR FORCE
FH-11 Inventory and Condition of Government-Owned, Family Housing Units
WORLDWIDE
(Number of Dwelling Units in Inventory)
Fiscal Year 2020

	FY 2018	FY 2019	FY 2020	FY 2021	FY 2022	FY 2023	FY 2024
Beginning of FY Adequate Inventory Total	13,096	11,796	11,811	12,115	11,511	11,400	11,339
FCI of 90% to 100% (Good Condition)	9,275	8,207	7,400	7,063	6,460	6,038	4,831
FCI of 80% to 89% (Fair Condition)	3,821	3,589	4,411	5,052	5,051	5,362	6,508
Beginning of FY Inadequate Inventory Total	3,904	3,371	3,442	3,082	3,395	3,381	3,050
FCI of 60% to 79% (Poor Condition)	3,267	2,794	1,790	1,667	2,134	2,273	1,952
FCI of 59% and below (Failing Condition)	637	577	1,652	1,415	1,261	1,108	1,098
Beginning of FY Total Inventory	17,000	15,167	15,253	15,197	14,906	14,781	14,389
Percent Adequate - Beginning of FY Inventory	77%	78%	77%	80%	77%	77%	79%
Inadequate Inventory Reduced Through:	(533)	71	(360)	313	(14)	(331)	(140)
Construction (FHCON)	(130)	(130)	(12)	(224)	(231)		-
Maintenance & Repair (FHO&M)	(77)	(114)	(205)	(151)	(139)	(29)	(140)
Privatization							
Demolition/Divestiture/Diversion/Conversion	(666)	86	(221)	(262)	(125)	(302)	
Funded by Host Nation							
Additional Inadequate Units Identified	340	229	78	950	481		
Adequate Inventory Changes:	(1,300)	15	304	(604)	(111)	(61)	142
Construction (FHCON)	130	130	88	224	231		2
Maintenance & Repair (FHO&M)	77	114	205	151	139	29	140
Privatization							
Demolition/Divestiture/Diversion/Conversion	(1,167)	-	(21)	(147)		(90)	
Funded by Host Nation			110	118			
Additional Adequate Units Identified	(340)	(229)	(78)	(950)	(481)		
End of FY Adequate Inventory Total	11,796	11,811	12,115	11,511	11,400	11,339	11,481
FCI of 90% to 100% (Good Condition)	8,207	7,400	7,063	6,460	6,038	4,831	4,973
FCI of 80% to 89% (Fair Condition)	3,589	4,411	5,052	5,051	5,362	6,508	6,508
End of FY Inadequate Inventory Total	3,371	3,442	3,082	3,395	3,381	3,050	2,890
FCI of 60% to 79% (Poor Condition)	2,794	1,790	1,667	2,134	2,273	1,952	1,952
FCI of 59% and below (Failing Condition)	577	1,652	1,415	1,261	1,108	1,098	938
End of FY Total Inventory	15,167	15,253	15,197	14,906	14,781	14,389	14,371
Percent Adequate - End of FY Inventory	78%	77%	80%	77%	77%	79%	80%
DoD Performance Goal - 90% of world-wide family housing inventory at FCI of at least 80% (Good or Fair Condition)	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 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 - Increase in units with failing FCI scores between the beginning of FY19 and FY20 is largely caused by 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 (835 on Okinawa) will be divested. The spike is the result of like-type units reaching life-cycle expiration at the same time.
- 4 - A portion of the inadequate inventory retained is due to towers at Yokota and Misawa 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 the 20 year plus mark since last renovation.

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 2020

	FY 2018	FY 2019	FY 2020	FY 2021	FY 2022	FY 2023	FY 2024
Beginning of FY Adequate Inventory Total	-	-	93	85	31	32	32
FCI of 90% to 100% (Good Condition)			19	31	31	32	32
FCI of 80% to 89% (Fair Condition)			74	54	-		
Beginning of FY Inadequate Inventory Total	109	111	18	26	71	60	60
FCI of 60% to 79% (Poor Condition)	109	111	18	26	71	60	60
FCI of 59% and below (Failing Condition)			-	-	-	-	-
Beginning of FY Total Inventory	109	111	111	111	102	92	92
Percent Adequate - Beginning of FY Inventory	0%	0%	84%	77%	30%	35%	35%
Inadequate Inventory Reduced Through:	2	(93)	8	45	(11)	-	-
Construction (FHCON)							-
Maintenance & Repair (FHO&M)			(1)		(1)		
Privatization							
Demolition/Divestiture/Diversion/Conversion	2			(9)	(10)		
Funded by Host Nation							
Additional Inadequate Units Identified:		(93)	9	54	-		
Adequate Inventory Changes:	-	93	(8)	(54)	1	-	-
Construction (FHCON)							-
Maintenance & Repair (FHO&M)			1		1		
Privatization							
Demolition/Divestiture/Diversion/Conversion							
Funded by Host Nation							
Additional Inadequate Units Identified		93	(9)	(54)	-		
End of FY Adequate Inventory Total	-	93	85	31	32	32	32
FCI of 90% to 100% (Good Condition)		19	31	31	32	32	32
FCI of 80% to 89% (Fair Condition)		74	54	0			
End of FY Inadequate Inventory Total	111	18	26	71	60	60	60
FCI of 60% to 79% (Poor Condition)	111	18	26	71	60	60	60
FCI of 59% and below (Failing Condition)					0	0	0
End of FY Total Inventory	111	111	111	102	92	92	92
Percent Adequate - End of FY Inventory	0%	84%	77%	30%	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. Based on the FY18 assessment, the majority of these units are identified as adequate at the beginning of the FYDP, and the adjustment is made in FY19 to show adequacy. However, based on many of the expected component repairs and life cycle renewals over the next few years, these units are shown to become inadequate during the FYDP. Most drop below the 80 adequate score in FY21.
- 3 - The FHMP identifies FHCON projects for 30 Key and Essential historical housing units at Wright Patterson. Sustainment is identified for 60 remaining historic units (that become inadequate during the FYDP) until a decision is reached through the Environmental Impact Study being finalized. Divestiture of 10 non-historic units is identified in FY22.
- 4 - Early termination of the USAFA privatized housing project lease of property for the two GOQ parcels (Carlton and Otis houses) and reversion of the two GOQs to the AF was completed in Jan 2018.

DEPARTMENT OF AIR FORCE
FH-11 Inventory and Condition of Government-Owned, Family Housing Units
TRANSITIONAL
(Number of Dwelling Units in Inventory)
Fiscal Year 2020

	FY 2018	FY 2019	FY 2020	FY 2021	FY 2022	FY 2023	FY 2024
Beginning of FY Adequate Inventory Total	13,096	11,796	11,718	12,030	11,480	11,368	11,307
FCI of 90% to 100% (Good Condition)	9,275	8,207	7,381	7,032	6,429	6,006	4,799
FCI of 80% to 89% (Fair Condition)	3,821	3,589	4,337	4,998	5,051	5,362	6,508
Beginning of FY Inadequate Inventory Total	3,795	3,260	3,424	3,056	3,324	3,321	2,990
FCI of 60% to 79% (Poor Condition)	3,158	2,683	1,772	1,641	2,063	2,213	1,892
FCI of 59% and below (Failing Condition)	637	577	1,652	1,415	1,261	1,108	1,098
Beginning of FY Total Inventory	16,891	15,056	15,142	15,086	14,804	14,689	14,297
Percent Adequate - Beginning of FY Inventory	78%	78%	77%	80%	78%	77%	79%
Inadequate Inventory Reduced Through:	(535)	164	(368)	268	(3)	(331)	(140)
Construction (FHCON)	(130)	(130)	(12)	(224)	(231)		
Maintenance & Repair (FHO&M)	(77)	(114)	(204)	(151)	(138)	(29)	(140)
Privatization							
Demolition/Divestiture/Diversion/Conversion	(668)	86	(221)	(253)	(115)	(302)	
Funded by Host Nation							
Additional Inadequate Units Identified:	340	322	69	896	481		
Adequate Inventory Changes:	(1,300)	(78)	312	(550)	(112)	(61)	142
Construction (FHCON)	130	130	88	224	231		2
Maintenance & Repair (FHO&M)	77	114	204	151	138	29	140
Privatization							
Demolition/Divestiture/Diversion/Conversion	(1,167)		(21)	(147)		(90)	
Funded by Host Nation			110	118			
Additional Inadequate Units Identified:	(340)	(322)	(69)	(896)	(481)		
End of FY Adequate Inventory Total	11,796	11,718	12,030	11,480	11,368	11,307	11,449
FCI of 90% to 100% (Good Condition)	8,207	7,381	7,032	6,429	6,006	4,799	4,941
FCI of 80% to 89% (Fair Condition)	3,589	4,337	4,998	5,051	5,362	6,508	6,508
End of FY Inadequate Inventory Total	3,260	3,424	3,056	3,324	3,321	2,990	2,830
FCI of 60% to 79% (Poor Condition)	2,683	1,772	1,641	2,063	2,213	1,892	1,892
FCI of 59% and below (Failing Condition)	577	1,652	1,415	1,261	1,108	1,098	938
End of FY Total Inventory	15,056	15,142	15,086	14,804	14,689	14,297	14,279
Percent Adequate - End of FY Inventory	78%	77%	80%	78%	77%	79%	80%

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 - Increase in units with failing FCI scores between the beginning of FY19 and FY20 is largely caused by 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 (835 on Okinawa) will be divested. The spike is the result of like-type units reaching life-cycle expiration at the same time.
- 4 - A portion of inadequate inventory retained is due to towers at Yokota and Misawa 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 the 20 year plus mark since last renovation.

DEPARTMENT OF AIR FORCE
FH-11 Inventory and Condition of Government-Owned, Family Housing Units
TRANSITIONAL
(Number of Dwelling Units in Inventory)
Fiscal Year 2020

	Number of Units - Foreign						
	FY 2018	FY 2019	FY 2020	FY 2021	FY 2022	FY 2023	FY 2024
Beginning of FY Adequate Inventory Total	1,073	402	301	301	161	161	-
FCI of 90% to 100% (Good Condition)	876	205	51	51	51	51	-
FCI of 80% to 89% (Fair Condition)	197	197	250	250	110	110	-
Beginning of FY Inadequate Inventory Total	1,879	493	608	545	327	259	78
FCI of 60% to 79% (Poor Condition)	1,575	493	608	545	327	259	78
FCI of 59% and below (Failing Condition)	304	-	-	-	-	-	-
Beginning of FY Total Inventory	2,952	895	909	846	488	420	78
Percent Adequate - Beginning of FY Inventory	36%	45%	33%	36%	33%	38%	0%
Inadequate Inventory Reduced Through:	(1,386)	86	(63)	(218)	(68)	(181)	-
Construction (FHCON)							
Maintenance & Repair (FHO&M)							
Privatization							
Demolition/Divestiture/Diversion/Conversion	(1,386)	86	(63)	(218)	(68)	(181)	
Funded by Host Nation							
Adequate Inventory Changes:	(671)	(72)	-	(140)	-	(161)	-
Privatization							
Demolition/Divestiture/Diversion/Conversion	(671)	(72)		(140)		(161)	
End of FY Adequate Inventory Total	402	301	301	161	161	-	-
FCI of 90% to 100% (Good Condition)	205	51	51	51	51	-	-
FCI of 80% to 89% (Fair Condition)	197	250	250	110	110	-	-
End of FY Inadequate Inventory Total	493	608	545	327	259	78	78
FCI of 60% to 79% (Poor Condition)	493	608	545	327	259	78	78
FCI of 59% and below (Failing Condition)		-	-	-	-	-	-
End of FY Total Inventory	895	909	846	488	420	78	78
Percent Adequate - End of FY Inventory	45%	33%	36%	33%	38%	0%	0%

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, RAF Feltwell, RAF Mildenhall units are being returned to the host nation as part of the European Infrastructure Consolidation (EIC). The EIC is currently being reviewed for an update, which may adjust the divestiture plan.

3 - 78 transitional units remain at the end of the FYDP at Yokota. These units are being used as swing space until other tower renovations are complete.

DEPARTMENT OF AIR FORCE
FH-11 Inventory and Condition1 of Government-Owned, Family Housing Units
TRANSITIONAL Unit Details by Location
Fiscal Year 2020

State/ Country	Installation	N/E ¹	Change in Transitional Units	Condition (FCI) ³	Explanation
FY 2018					
Germany	KMC	E	(190)	3	Surplus divestiture of inadequate units in stairwell buildings: Landstuhl (3 buildings) Ramstein (7 buildings) and Vogelweh (1 building)
Germany	Spangdahlem	E	(314)	3	Unoccupied Bitburg inadequate units to be returned to Host Nation.
Japan	Kadena AB	E	(102)	4	Land return of inadequate units at Camp Foster, Plaza
Japan	Kadena AB	E	(53)	4	Land return of inadequate units at Camp Foster, Chatan to the USMC as part of the SACO/MCB Butler development plan)
Japan	Misawa AB	N	(204)	3	Surplus divestiture of inadequate units in 3 housing towers at Main Base
Japan	Yokota AB	N	(350)	3/4	Surplus divestiture of inadequate units in 5 housing towers at South and West Neighborhoods. 4 towers to be used for Unaccompanied Housing.
Japan	Yokota AB	N	(79)	4	Surplus divestiture of inadequate townhouses at East and West Neighborhoods
Turkey	Incirlik AB	N	(671)	1	Conversion of adequate MFH units to Unaccompanied Housing
United Kingdom	RAF Ely	E	(88)	3	Divestiture of inadequate units due to EIC
United Kingdom	RAF Menwith Hill	E	(6)	3	Divestiture of inadequate units located off-base, currently used by DOS which are no longer needed.
FY 18 Transitional Unit Changes			(2,057)		
FY 2019					
Germany	KMC	E	(126)	3	Surplus divestiture of inadequate units in stairwell buildings: Landstuhl (2 buildings) and Ramstein (5 buildings)
Germany	KMC	E	(72)	2	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	E	(2)	3	Divestiture of inadequate units located off-base, currently used by DOS which are no longer needed.
FY 19 Transitional Unit Changes			14		
FY 2020					
Germany	KMC	E	(18)	3	Surplus divestiture of inadequate units in stairwell buildings: Ramstein (1 buildings)
United Kingdom	RAF Feltwell	E	(24)	3	Divestiture of inadequate units due to EIC
United Kingdom	RAF Menwith Hill	E	(21)	3	Divestiture of inadequate units located on-base, currently used by DOS which are no longer needed.
FY 20 Transitional Unit Changes			(63)		
FY 2021					
Japan	Misawa AB	N	(136)	3	Surplus divestiture of inadequate units in 2 housing towers at Main Base
United Kingdom	RAF Feltwell	N	(140)	2	Divestiture of adequate units due to EIC
United Kingdom	RAF Feltwell	E	(82)	3	Divestiture of inadequate units due to EIC
FY 21 Transitional Unit Changes			(358)		
FY 2022					
Japan	Misawa AB	N	(68)	3	Surplus divestiture of inadequate units in 1 housing tower at Main Base
FY 22 Transitional Unit Changes			(68)		
FY 2023					
Japan	Misawa AB	N	(28)	3	Surplus divestiture of inadequate townhouse units at Main Base
United Kingdom	RAF Alconbury	E	(205)	1/2/3	Divestiture of units due to EIC
United Kingdom	RAF Mildenhall	E	(8)	2	Divestiture of adequate units due to EIC
United Kingdom	RAF Mildenhall	E	(101)	3	Divestiture of inadequate units due to EIC
FY 23 Transitional Unit Changes			(342)		
FY 2024					
Total			-5406		
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 during renovations).					
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)					
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 2020 BUDGET REQUEST**

FH-8 Air Force Inadequate Family Housing Units Eliminated in FY2018

MAJCOM	Project Type	Base	Total Inventory Minus Leased & Privatized	Total Inadequate Inventory	Total Inadequate Addressed
Units at the Beginning of FY2018			17,000	3,904	
Additional Inadequate Units Identified			0	340	0
PACAF	Condition Adjustment	Okinawa		139	
PACAF	Condition Adjustment	Yokota		84	
USAFE	Condition Adjustment	KMC		108	
USAFE	Condition Adjustment	RAF Lakenheath		9	
FY2018 Family Housing Construction, Improvement, and O&M Projects to Eliminate Inadequate Units			0	(207)	207
PACAF	FHO&M	Misawa		(6)	6
PACAF	FHCON	Okinawa		(130)	130
PACAF	FHO&M	Okinawa		(68)	68
USAFE	FHO&M	RAF Croughton		(3)	3
Privatization Projects Executed				2	0
USAFA	Acquire From PH to MFH	USAFA		2	0
Units Demolished/Divested FY2018			(1,835)	(668)	668
PACAF	Divest	Misawa	(136)	(68)	68
PACAF	Demo/Divest	Okinawa	(138)	(138)	138
PACAF	Divest	Yokota	(429)	(429)	429
USAFE	Divest	Incirlik	(671)		
USAFE	Divest	Lajes Field	(350)	(10)	10
USAFE	Divest	RAF Lakenheath	(88)		
USAFE	Divest	RAF Menwith Hill	(23)	(23)	23
Units Added to Family Housing			2	2	
USAFA	Convert from PH to MFH	AF Academy	2	2	
Deficit Construction					
Host Nation Construction projects			0	0	0
Units at End of FY2018			15,167	3,371	875
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.					
3 - Early termination of the USAFA privatized housing project lease of property for the two GOQ parcels (Carlton and Otis houses) and reversion of the two GOQs to the AF in FY18.					

**DEPARTMENT OF THE AIR FORCE
MILITARY FAMILY HOUSING
FISCAL YEAR 2020 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				229	
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	FHCON	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					
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 2020 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				78	
AFMC	Condition Adjustment	Wright-Patterson		9	
PACAF	Condition Adjustment	Misawa		48	
PACAF	Condition Adjustment	Okinawa		1	
USAFE	Condition Adjustment	Spangdahlem		20	
FY2020 Family Housing Construction, Improvement, and O&M Projects to Eliminate Inadequate Units				(217)	217
PACAF	FHO&M	Okinawa		(204)	204
PACAF	FHCON	Yokota		(12)	12
USAFA	FHO&M	USAF Academy		(1)	1
Units Demolished/Divested FY2020			(242)	(221)	221
PACAF	Divest	Okinawa	(179)	(179)	179
USAFE	Divest	KMC	(18)	(18)	18
USAFE	Divest	RAF Lakenheath	(24)	(24)	24
USAFE	Divest	RAF Menwith Hill	(21)		
Deficit Construction			76	0	0
PACAF	Deficit Construction	Spangdahlem	76	0	0
Host Nation Construction projects			110	0	0
PACAF	JFIP Replacement	Okinawa	110	0	0
Units at End of FY2020			15,197	3,082	438
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.					

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**DEPARTMENT OF THE AIR FORCE
MILITARY FAMILY HOUSING
FISCAL YEAR 2020 BUDGET REQUEST**

AUTHORIZATION LANGUAGE

SEC. 2302. FAMILY HOUSING

(a) CONSTRUCTION AND ACQUISITION. – 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 construct or acquire family housing unit (including land acquisition and supporting facilities) at the installation or location, in the number of units, and in the amounts set forth in the following table:

Air Force: Family Housing

State	Installation	Units	Amount
Germany	Spangdahlem AB	Family Housing New (Deficit) Construction	\$53,584,000

(b) PLANNING AND DESIGN. – Using amounts appropriate pursuant to the authorization of appropriations in Section 2304(a) and available for military family housing functions as specified in the funding table in section 4601, the Secretary of the Air Force may carry out architectural and engineering services and construction design activities with respect to the construction or improvement of military family housing units in an amount not to exceed [\$3,199,000] \$3,409,000.

SEC. 2303. IMPROVEMENT TO MILITARY FAMILY HOUSING UNITS

Subject to section 2825 of Title 10, United States Code, and using amounts appropriated pursuant to the authorization of appropriations in Section 2304(a) and available for military family housing functions as specified in the funding table in section 4601, the Secretary of the Air Force may improve existing military family housing units in an amount not to exceed [\$75,247,000] \$46,638,000.

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, 2019, 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.

**DEPARTMENT OF THE AIR FORCE
MILITARY FAMILY HOUSING
FISCAL YEAR 2020 BUDGET REQUEST**

APPROPRIATION LANGUAGE

FAMILY HOUSING CONSTRUCTION, AIR FORCE

For expenses of family housing for the Air Force for construction, including acquisition, replacement, addition, expansion, extension, and alteration, as authorized by law, [\$78,446,000] \$103,631,000 to remain available until September 30, 2024.

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 [\$317,274,000] \$295,016,000.

**DEPARTMENT OF THE AIR FORCE
MILITARY FAMILY HOUSING
FISCAL YEAR 2020 BUDGET REQUEST**

NEW CONSTRUCTION

Budget Request (\$ in Thousands)
FY 2020 Budget Request \$53,584
FY 2019 Budget Request \$0

Purpose and Scope

This program provides for site preparation, acquisition and construction, and initial outfitting with fixtures and integral equipment of new family housing units and associated facilities such as roads, driveways, sidewalks, and utility systems.

Budget Request Summary

Authorization is requested for:

- (1) Construction of new housing at Spangdahlem AB, Germany
- (2) Appropriation of \$53,584,000 to fund the construction program

<u>Activity</u>	<u>Mission</u>	<u>No. of Homes</u>	<u>Amount (\$000)</u>
Spangdahlem AB, Germany	Current	76	\$53,584

1. COMPONENT AIR FORCE		FY 2020 MILITARY CONSTRUCTION PROGRAM						2. DATE (YYYY MMDD) 20181018			
3. INSTALLATION AND LOCATION SPANGDAHLEM AB, GERMANY					4. COMMAND USAFE			5. AREA CONSTRUCTION COST INDEX 1.00			
6. PERSONNEL		(1) PERMANENT			(2) STUDENTS			(3) SUPPORTED			(4) TOTAL
		OFFICER	ENLISTED	CIVILIAN	OFFICER	ENLISTED	CIVILIAN	OFFICER	ENLISTED	CIVILIAN	
a. AS OF 03/08/16		246	2,975	0	0	0	0	0	0	0	3,221
b. END FY		395	3,648	0	0	0	0	0	0	0	4,043
7. INVENTORY DATA (\$000)											
a. TOTAL ACREAGE										1,654	
b. INVENTORY TOTAL AS OF 10/01/2017										4,625,169.00	
c. AUTHORIZATION NOT YET IN INVENTORY										0.00	
d. AUTHORIZATION REQUESTED IN THIS PROGRAM										53,584.00	
e. AUTHORIZATION INCLUDED IN FOLLOWING PROGRAM										0.00	
f. PLANNED IN NEXT THREE PROGRAM YEARS										0.00	
g. REMAINING DEFICIENCY										26,000.00	
h. GRAND TOTAL										4,625,218.00	
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		
711	Construct Deficit Military Family Housing			76		53,584		1 Mar 19	1 Apr 20		
9. FUTURE PROJECTS											
a. Included in Following Program: 0 Homes											
b. Planned Next Three Years: 0 Homes											
c. R&M Family Housing Revitalization Requirement (Replacement, Improvements, Major Repairs): \$26.0M											
10. MISSION OR MAJOR FUNCTIONS											
Spangdahlem Air Base is home to the 52nd Fighter Wing. The Wing is responsible for the maintenance and deployment of the F-16CJ fighter aircraft, and the 726th Air Mobility Squadron, providing cargo and passenger air lift under the Air Mobility Command.											
11. OUTSTANDING POLLUTION AND SAFETY DEFICIENCIES											
N/A											

DD Form 1390

1. COMPONENT AIR FORCE	FY 2020 MILITARY CONSTRUCTION PROJECT DATA			2. DATE	
3. INSTALLATION AND LOCATION SPANGDAHLEM AIR BASE, GERMANY		4. PROJECT TITLE CONSTRUCT DEFICIT MILITARY FAMILY HOUSING			
5. PROGRAM ELEMENT 88741F	6. CATEGORY CODE 711-142	7. PROJECT NUMBER RPSUID / PROJECT VYHK1059062	8. PROJECT COST (\$000) 53,584		
9. COST ESTIMATES					
ITEM		U/M	QUANTITY	UNIT COST	COST (\$000)
<u>PRIMARY FACILITIES</u>					
FAMILY HOUSING (FGO 3 BR) DUPLEX		UN	9	484,161	35,145 (4,358)
FAMILY HOUSING (SNCO 4 BR) SINGLE (E9)		UN	6	512,650	(3,076)
FAMILY HOUSING (SNCO 4 BR) DUPLEX		UN	4	475,289	(1,901)
FAMILY HOUSING (SOQ 4 BR) SINGLE		UN	2	551,991	(1,104)
FAMILY HOUSING (FGO 4 BR) DUPLEX		UN	3	552,490	(1,657)
FAMILY HOUSING (SNCO 3 BR) DUPLEX		UN	12	468,372	(5,620)
FAMILY HOUSING (CGO 3 BR) DUPLEX		UN	20	447,352	(8,947)
FAMILY HOUSING (JNCO 3 BR) DUPLEX		UN	18	371,533	(6,688)
FAMILY HOUSING (CGO 4 BR) DUPLEX		UN	2	552,490	(1,105)
SUSTAINABILITY AND ENERGY MEASURES (2%)		LS			(689)
<u>SUPPORTING FACILITIES</u>					
UTILITIES		LS			12,773 4,048
PAVEMENTS		LS			4,170
SITE IMPROVEMENTS		LS			3,102
DEMOLITION		LS			210
COMMUNICATIONS		LS			540
ENVIORNMENTAL COMPENSATION		LS			703
SUBTOTAL					
CONTINGENCY (5%)					47,918 2,396
TOTAL CONTRACT COST					
SUPERVISION, INSPECTION AND OVERHEAD (6.5%)					50,314 3,270
TOTAL REQUEST					
TOTAL REQUEST (ROUNDED)					
ACF: 0.94					
10. DESCRIPTION OF PROPOSED CONSTRUCTION:					
<p>Construct 76 single and multi-family housing units with necessary amenities and supporting facilities at Spangdahlem Air Base, Germany. Project utilizes recent land acquisitions at Spangdahlem Air Base, and will expand the overall size of the installation to support the proposed development. Primary facilities include 8 single-family homes for senior officers and senior enlisted personnel, 34 multi-family duplexes (68 units), and sustainability and energy measures. Sustainability and energy measures include low-impact development integrated management practices (LID-IMPs) and Sustainable Design costs. All proposed housing units are of a standardized design and match existing installation housing. Supporting facilities include associated utilities, pavements, site improvements, demolitions, communications, and environmental mitigation costs. Utilities include all water, wastewater, stormwater drainage, fire-suppression, electrical, and heating distribution costs including a stormwater detention basin, sewage lift station, and electrical substation. Pavements include all streets, sidewalks, curbs, signage, street lighting, and striping costs. Pavements also include an access road provided during construction. Site improvements include clearing, grubbing, grading, and landscaping the site, as well as interior fencing, an access control gate, and perimeter fence costs. Site improvements also include housing amenities including playgrounds, community pavilions, recreation courts and sports fields, a running trail, and other shared open spaces. Demolition of existing roadways and fences required for the proposed development are included in supporting costs. Environmental mitigation includes host-nation land development, tree clearing, and other remediation costs. This project is intended to be compatible with applicable DoD, Air Force, and host-nation design standards. The facilities will be designed in accordance with Air Force Family Housing Design Guide (2004), UFC 4-711-01 Family Housing (2018), AFI 32-6002 Family Housing Planning, Programming, Design, and Construction (2015) and the Spangdahlem Air Base Installation Development Plan (2017). Local materials, construction techniques, and contractors shall be used where required</p>					

1. COMPONENT AIR FORCE	FY 2020 MILITARY CONSTRUCTION PROJECT DATA	2. DATE
3. INSTALLATION AND LOCATION SPANGDAHLEM AIR BASE, GERMANY		
4. PROJECT TITLE CONSTRUCT DEFICIT MILITARY FAMILY HOUSING	5. PROJECT NUMBER VYHK1059062	
<p>and/or appropriate. Design and construction efforts will be executed in accordance with the host-nation agreements, including construction and environmental permits. This project is exempt from DoD antiterrorism requirements per UFC 4-010-01, section 2-4.19.1 Low Occupancy Family Housing.</p> <p>76 Government owned dwelling units: 2 SOQ (O6) 4 BR, 20 CGO (O1-O3) 3 BR, 2 CGO (O1-O3) 4 BR, 9 FGO (O4-O5) 3 BR, 3 FGO (O4-O5) 4 BR, 6 SNCO (E9) 4 BR, 12 SNCO (E7-E8) 3 BR, 4 SNCO (E7-E8) 3 BR, 4 SNCO (E7-E8) 4 BR, and 18 JNCO (E5-E6) 3 BR.</p> <p>11. REQUIREMENT: 358</p> <p><u>PROJECT:</u> Construct Deficit Military Family Housing at Spangdahlem Air Base, Germany.</p> <p><u>REQUIREMENT:</u> This project is required to provide modern and efficient housing for military members and their dependents stationed at Spangdahlem Air Base, Germany. The housing units are programmed in accordance with the size standards provided by the 2016 Housing Community Profile (HCP) report and are in compliance with Air Force Family Housing Design Guide (2004) UFC 4-711-01 Family Housing, and AFI 32-6002 Family Housing Planning, Programming, Design, and Construction (2015). New construction housing design is standardized throughout the installation, and complies with standards set by the 2016 HCP, and integrated with the Spangdahlem Air Base Installation Development Plan (2017). This project will provide 76 of the 143 MFH unit validated deficit including 8 single-family homes with 4 bedrooms for senior officers and senior enlisted personnel, 9 multi-family (18 unit) duplexes with 4 bedrooms, and 25 multi-family (50 units) duplexes with 3 bedrooms. The homes have modern amenities, a kitchen, living room, family room, bathrooms, fenced yard, and ample storage. Single-family homes have an attached two-car garage, while duplexes have an attached single-car garage with exterior driveway parking for a second car in compliance with parking requirements.</p> <p><u>CURRENT SITUATION:</u> The 2016 HCP report for Spangdahlem Air Base identified severe shortages of adequate and affordable installation housing necessary for meeting future mission requirements. Spangdahlem currently has 215 housing units, 139 adequate units and 76 units which are identified as substandard. There is a validated deficit of 143 family housing units at Spangdahlem Air Base. This project will construct approximately 60 percent of the validated deficit, or 76 new units. The units will be constructed on available land within the existing perimeter of the current Housing area. Existing installation utilities are mostly adequate for supporting the proposed development, and only require the installation of new utility lines. A single sewage lift station, a stormwater detention pond, and electrical substation, the costs of which are included, will need to be built to support the proposed development.</p> <p><u>IMPACT IF NOT PROVIDED:</u> If this project is not provided, Spangdahlem Air Base will continue to have inadequate installation housing and fail to meet validated housing requirements. Long wait-times for housing applicants and limited housing options in the immediate vicinity continue to force military families to pay a premium for rent or accept inadequate living conditions.</p> <p><u>ADDITIONAL:</u> This project meets the criteria/scope specified in Air Force Manual (AFMAN) 32-1084, Facility Requirements, AFI 32-6002 Family Housing Planning, Programming, Design, and Construction (2015), and UFC 4-711-01 Family Housing. The project is not eligible for the North Atlantic Treaty Organization (NATO) security investment program. An economic analysis will be required based on AFI 65-501, Section 1.22 and is scheduled to be complete by 30 January 2019. The UFC 4-701-01, DoD Pricing Guide, PACES, and RS Means were used to develop cost estimates for this project. This project qualifies as Low Occupancy Family Housing per UFC 4-010-01 (2013) and is exempt from minimum antiterrorism standards. Force protection measures are still considered IAW USAF Installation Protection Guide. The local school authority has identified that the capability exists to accommodate an increase in the student population generated by this project. No additional school construction will be required. No work has been done based on this requirement (this would include preparing the site) and no additional work is programmed.</p>		

1. COMPONENT AIR FORCE	FY 2020 MILITARY CONSTRUCTION PROJECT DATA	2. DATE
3. INSTALLATION AND LOCATION SPANGDAHLEM AIR BASE, GERMANY		
4. PROJECT TITLE CONSTRUCT DEFICIT MILITARY FAMILY HOUSING	5. PROJECT NUMBER	
CONSTRUCT DEFICIT MILITARY FAMILY HOUSING: 76 UNITS BASE CIVIL ENGINEER: 011-49-6565-61-6302 FOREIGN CURRENCY: 0.8587 EURO / 1 USD <u>JOINT USE CERTIFICATION</u> : This facility can be used by other components on an "as available" basis; however, the scope of the project is based on Air Force requirements. 12. SUPPLEMENTAL DATA: a. Estimated Design Data: (1) Status: (a) Date Design Started 1-MAR-19 (b) Parametric Cost Estimates used to develop costs YES * (c) Percent Complete as of 01 JAN 2020 65% * (d) Date 35% Designed 1-SEP-19 (e) Date Design Complete 1-APR-20 (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 – SPANGDAHLEM AIR BASE (3) Total Cost (c) = (a) + (b) or (d) + (e): (\$000) (a) Production of Plans and Specifications \$3,217 (b) All Other Design Costs \$1,609 (c) Total \$4,826 (d) Contract \$4,021 (e) In-house \$805 (4) Construction Contract Award SEP 2020 (5) Construction Start JUN 2021 (6) Construction Completion JUN 2023 * Indicates completion of Project Definition with Parameter 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 d. Facility Condition Index: e. N/A		

DD Form 1391c

MILITARY FAMILY HOUSING JUSTIFICATION				1. DATE OF REPORT (YYMMDD) 20181002		2. FISCAL YEAR 2020		REPORT CONTROL SYMBOL DD-AT&L(AR)1716	
3. DOD COMPONENT Air Force		4. REPORTING INSTALLATION							
5. DATA AS OF 20160308		a. NAME Spangdahlem				b. LOCATION Germany			
ANALYSIS OF REQUIREMENTS AND ASSETS	CURRENT				PROJECTED				
	OFFICER (a)	E9 - E4 (b)	E3 - E1 (c)	TOTAL (c)	OFFICER (a)	E9 - E4 (b)	E3 - E1 (c)	TOTAL (c)	
6. TOTAL PERSONNEL STRENGTH	246	2,289	686	3,221	395	2,915	729	4,039	
7. PERMANENT PARTY PERSONNEL	246	2,289	686	3,221	395	2,915	729	4,039	
8. GROSS FAMILY HOUSING REQUIREMENTS	236	1,458	78	1,772	306	1,890	101	2,297	
9. TOTAL UNACCEPTABLY HOUSED (a+b+c)	0	0	0	0					
a. INVOLUNTARILY SEPARATED	0	0	0	0					
b. IN MILITARY HOUSING TO BE DISPOSED/REPLACED	0	0	0	0					
c. UNACCEPTABLY HOUSED - IN	0	0	0	0					
10. VOLUNTARY SEPARATIONS	0	0	0	0	0	0	0	0	
11. EFFECTIVE HOUSING REQUIREMENTS	236	1458	78	1772	306	1890	101	2297	
12. HOUSING ASSETS (a+b)	236	1458	78	1772	27	1787	96	2154	
a. UNDER MILITARY CONTROL	33	196	4	233	33	196	4	233	
(1) Housed in existing DoD Owned/Controlled	33	196	4	233	33	196	4	233	
(2) Under Contract/Approved					0	0	0	0	
(3) Vacant	0	0	0	0					
(4) Inactive	0	0	0	0					
b. PRIVATE HOUSING	203	1262	74	1539	238	1591	92	1921	
(1) Acceptably Housed	203	1262	74	1539					
(2) Acceptable Vacant Rental	0	0	0	0					
13. EFFECTIVE HOUSING DEFICIT	0	0	0	0	35	103	5	143	
14. PROPOSED PROJECT					36	40	0	76	
15. REMARKS (Specify item number) The Air Force Family Housing Master Plan identifies some of the existing stairwell buildings for replacement at the end of the current FYDP and in the next FYDP, and the remaining 67 unit deficit will be addressed at that time.									

**DEPARTMENT OF THE AIR FORCE
MILITARY FAMILY HOUSING
FISCAL YEAR 2020 BUDGET REQUEST**

CONSTRUCTION IMPROVEMENTS

Budget Request (\$ in Thousands)

FY 2020 Budget Request \$ 46,638

FY 2019 Budget Request \$ 75,247

Purpose and Scope

The Air Force is expected to have approximately 15,200 owned units at the end of FY 2020. 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 \$46,638 to fund projects in FY 2020

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1. COMPONENT AIR FORCE		FY 2020 MILITARY CONSTRUCTION PROJECT DATA			2. DATE		
3. INSTALLATION AND LOCATION YOKOTA AB, JAPAN AND WRIGHT-PATTERSON AB, OHIO			4. PROJECT TITLE FAMILY HOUSING CONSTRUCTION IMPROVEMENTS				
5. PROGRAM ELEMENT 88742		6. CATEGORY CODE 711-000		7. PROJECT NUMBER		8. PROJECT COST (\$000) 46,638	
9. COST ESTIMATE							
ITEM				U/M	QUANTITY	UNIT COST	COST (\$000)
CONSTRUCTION IMPROVEMENTS							
IMPROVE FAMILY HOUSING, WRIGHT-PATTERSON AFB				UN	29		35,775
IMPROVE FAMILY HOUSING (PHASE 8a), YOKOTA AB				UN	12		10,863
TOTAL REQUEST				UN	41		46,638
10. <u>DESCRIPTION OF PROPOSED CONSTRUCTION:</u> Whole house interior and exterior modernization, renovation, and repair of homes at Wright-Patterson AFB (29 units) and Yokota AB (12 units) supports current mission. Work to include, but not limited to repair of building lot, systems and functionality for the improvement construction at Wright-Patterson AFB and Yokota AB.							
11. <u>PROJECT:</u> This request is for an authorization and appropriation of \$46.638 million to improve 29 historic units at Wright-Patterson AFB and 12 units at Yokota AB.							
<u>REQUIREMENT:</u> To provide modern and efficient housing for military members and their families at each of the installations. At Wright-Patterson AFB, the historic homes support the current mission requirement for 30 Key and Essential homes not provided by Wright-Patterson's housing privatization project. The renovation of homes at Yokota is required to support the requirement for 1,922 adequate homes on the installation. The homes at Wright-Patterson and Yokota must be upgraded to meet current life safety codes and provide a comfortable and appealing living environment comparable to the off-base civilian community. Improvements will provide modern kitchen, living room, family room, bedroom and bath configurations with ample interior and exterior storage.							
<u>CURRENT SITUATION:</u> The Wright-Patterson homes, constructed in the 1930s require significant exterior and interior modernization and restoration, as well as mitigation of distressed building components/systems. Life/safety concerns require fire, electrical, and environmental upgrades to comply with current codes. The homes lack emergency exits from second story bedrooms, need proper fire detection systems, and grounded outlets. The Yokota homes, constructed in the early 1970s, require major renovation and repair to correct deterioration from age and heavy use. No major upgrades have been made since construction and the homes do not provide a functional, modern environment. Life/safety concerns include fire, electrical, and environmental issues. Electrical systems and fire detection do not meet modern construction codes. Playgrounds, parking areas, and landscaping are inadequate or nonexistent.							
<u>ADDITIONAL:</u> In accordance with Air Force Manual 32-1089, Air Force Military Construction and Family Housing Economical Analysis Guide an economic analysis will be generated to show initial cost percentage of improvement versus replacement cost for the improvement projects. All work associated with these projects will comply with USAF and Host Nation regulations and agreements, and all relevant UFCs, AFIs, and standards.							

DD FORM 1391, DEC 76

1. COMPONENT AIR FORCE	FY 2020 MILITARY CONSTRUCTION PROJECT DATA	2. DATE						
3. INSTALLATION AND LOCATION YOKOTA AB, JAPAN AND WRIGHT-PATTERSON AB, OHIO								
4. PROJECT TITLE CONSTRUCTION IMPROVEMENTS	5. PROJECT NUMBER							
<p>10. Description of work to be accomplished</p> <table border="0" style="width: 100%;"> <thead> <tr> <th style="text-align: left;">Location and Project</th> <th style="text-align: right;">Current Working Estimate (\$000)</th> </tr> </thead> <tbody> <tr> <td style="vertical-align: top;"> <p>WRIGHT-PATTERSON AFB IMPROVE FAMILY HOUSING ZHTV184001</p> <p>Provide whole-house interior and exterior modernization, renovation, and repair of 29 historic homes (19 GO 4BR, 1 GO 6BR, 8 SO 4BR and 1 FG 4 BR) and replacement of 28 detached garages. Work to include but is not limited to modernization and repair of exteriors (utilities, walks and pavements, fences, and exterior appurtenances), building system (exterior structure, roof structure, interior structure, mechanical systems, electrical systems, plumbing systems, fire and life safety improvements) and building space (patio, storage, foyer, living room, family room, dining room, kitchen, bedrooms, bathrooms, closets, laundry room, linen, hallways, basements, and mechanical spaces). Work includes functional improvement; reconfiguration of interior spaces, upgraded kitchens and bathrooms, construction of additions to provide additional living space, and replacement of detached one-car garages with two-car garages. (Separate DD Form 1391 attached)</p> <ul style="list-style-type: none"> - WORK ACCOMPLISHED IN PREVIOUS THREE YEARS: <ul style="list-style-type: none"> ZHTV1740001, Install Electric Meters Brick Quarters ZHTV164001, Repair Pavements West Side Brick Quarters (Neighborhood Improvement) ZHTV164000, Repair Pavements East Side Brick Quarters (Neighborhood Improvement) - WORK PROGRAMMED FOR NEXT THREE YEARS: None </td> <td style="vertical-align: top; text-align: right;"> <p>35,775</p> </td> </tr> <tr> <td style="vertical-align: top;"> <p>YOKOTA AB PROJECT TITLE: IMPROVE FAMILY HOUSING PHASE 8 ZNRE204308</p> <p>Provides whole house interior and exterior modernization, renovation and repair of 12 housing units at buildings 3281 and 3284, Yokota Air Base (3GAW, E9, 3BR). Modernizing finishes in kitchen, bathrooms, living room, bedrooms and family rooms, replace windows and doors, replace domestic water and sanitary plumbing, bring unit up to LHS code by installing hard wired smoke alarms and fire sprinklers. Replace mechanical systems to provide energy efficient heating and cooling. Includes life/health/safety upgrades to code compliance and asbestos/lead-based paint removal. (Separate DD Form 1391 attached)</p> <ul style="list-style-type: none"> - WORK ACCOMPLISHED IN PREVIOUS THREE YEARS: None - WORK PROGRAMMED FOR NEXT THREE YEARS: None </td> <td style="vertical-align: top; text-align: right;"> <p>10,863</p> </td> </tr> </tbody> </table>			Location and Project	Current Working Estimate (\$000)	<p>WRIGHT-PATTERSON AFB IMPROVE FAMILY HOUSING ZHTV184001</p> <p>Provide whole-house interior and exterior modernization, renovation, and repair of 29 historic homes (19 GO 4BR, 1 GO 6BR, 8 SO 4BR and 1 FG 4 BR) and replacement of 28 detached garages. Work to include but is not limited to modernization and repair of exteriors (utilities, walks and pavements, fences, and exterior appurtenances), building system (exterior structure, roof structure, interior structure, mechanical systems, electrical systems, plumbing systems, fire and life safety improvements) and building space (patio, storage, foyer, living room, family room, dining room, kitchen, bedrooms, bathrooms, closets, laundry room, linen, hallways, basements, and mechanical spaces). Work includes functional improvement; reconfiguration of interior spaces, upgraded kitchens and bathrooms, construction of additions to provide additional living space, and replacement of detached one-car garages with two-car garages. 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DD FORM 1391, DEC 76								

1. COMPONENT AIR FORCE	FY 2020 PROJECT DATA			2. DATE 4 OCT 2018
3. INSTALLATION AND LOCATION WRIGHT-PATTERSON AIR FORCE BASE, OHIO		4. PROJECT TITLE IMPROVE FAMILY HOUSING		
5. PROGRAM ELEMENT 88742	6. CATEGORY CODE 711-111	7. PROJECT NUMBER RPUSID MULTI ZHTV184001	8. PROJECT COST (\$000) 35,775	
9. COST ESTIMATE				
ITEM	UOM	QTY	UNIT COST (\$)	
PRIMARY FACILITIES				29,775
Whole House (GO 6 BR)	UN	1	1,468,624	(1,469)
Whole House (GO 4 BR)	UN	19	930,821	(17,686)
Whole House (SO 4 BR)	UN	8	1,050,166	(8,401)
Whole House (FG 4 BR)	UN	1	918,445	(918)
Environmental Mitigation (Cultural Resources)	LS			(1,301)
SUPPORTING FACILITIES				
Replace Garages	EA	28	87,837	2,459
SUBTOTAL				32,234
CONTINGENCY (5%)				1,612
TOTAL CONTRACT COST				33,846
SIOH (5.7%)				1,929
TOTAL REQUEST				35,775
ACF: .94				
<p>10. DESCRIPTION OF PROPOSED WORK: Provide whole-house interior and exterior modernization, renovation, and repair of 29 government owned dwelling units (19 GO 4BR, 1 GO 6BR, 8 SO 4BR and 1 FG 4 BR). The work shall provide all management, tools, design, supplies, equipment, transportation, labor and services necessary for the improvements to the family housing units. Work to include but is not limited to modernization and repair of exteriors (utilities, walks and pavements, fences, and exterior appurtenances), building system (exterior structure, roof structure, interior structure, mechanical systems, electrical systems, plumbing systems, fire and life safety improvements) and building space (patio, storage, foyer, living room, family room, dining room, kitchen, bedrooms, bathrooms, closets, laundry room, linen, hallways, basements, and mechanical spaces). Work includes functional improvement, including the reconfiguration of interior spaces, including kitchens, bathrooms, and closets, construction of additions to provide additional living space, and replacement of one-car with two-car garages. The facilities will be designed in accordance with UFC 4-711-01 Family Housing (2018) and the Air Force Family Housing Design Guide (2004). In addition, environmental (asbestos/lead) sampling, testing, remediation and all other related work are programmed into the project to provide complete and usable facilities.</p>				
<p>11 REQUIREMENT: 29 UN PROJECT: IMPROVE FAMILY HOUSING REQUIREMENT: This project is required to support current mission requirements and provide modern and efficient housing for key and essential military members and their dependents stationed at Wright Patterson AFB. This project is the first part of a two-part renovation project that upgrades 30 key and essential units. The Housing Privatization project at Wright-Patterson AFB does not provide housing to support the Key and Essential personnel. The 29 historic homes are part</p>				

1. COMPONENT AIR FORCE	FY 2020 PROJECT DATA			2. DATE 4 OCT 2018
3. INSTALLATION AND LOCATION WRIGHT-PATTERSON AIR FORCE BASE, OHIO		4. PROJECT TITLE IMPROVE FAMILY HOUSING		
5. PROGRAM ELEMENT 88742	6. CATEGORY CODE 711-111	7. PROJECT NUMBER RPUSID MULTI ZHTV184001	8. PROJECT COST (\$000) 35,775	
<p>of a historic district at Wright-Patterson AFB and are required housing for Air Force senior leadership to include the AFMC/CC (Special Command Position). Housing units must be repaired and restored to meet current life safety codes, replace aged infrastructure and to provide a comfortable and appealing living environment comparable to the off-base civilian community.</p> <p>All units are programmed in accordance with the 2018 Housing Community Profile and design will be coordinated with the Ohio State Historic Preservation Office. Work includes but is not limited to whole-house restoration, improvements, and neighborhood repair. Renovated housing will provide modern kitchen and bathroom configurations and fixtures; modernized utilities, functional family living spaces; and repair exterior landscaping, patios, driveways, and sidewalks. Exterior work includes the replacement of undersized garages.</p> <p><u>CURRENT SITUATION:</u> This project upgrades and modernizes housing units which were constructed in the 1930s. The exteriors of the units are experiencing issues with corroding lintels, cracking brick, and deteriorating and failing tile roofs, gutters, and downspouts. Half-timbering requires repainting. The exterior foundations leak and require sealing and exterior re-grading to eliminate water penetration. Unit HVAC, plumbing, and water/wastewater lines, and interior electrical distribution systems and system components are reaching the end of their service lives and require replacement. Disused surface-mounted telecommunications lines require removal. Fire safety is lacking; the units lack emergency exits from second story bedrooms, and do not have proper fire detection and grounded outlets. Interior and exterior doors and hardware require repair, refinishing, or replacement. Interior wall and floor finishes and trim require resurfacing or replacement. Living spaces such as kitchens, bathrooms, and closets have outdated and inefficient configurations, limiting their appeal to potential occupants. There is insufficient living space, requiring additions to be constructed to the facilities. Exterior pavements are cracking and require repair or replacement, worn and dated screened patio porches require replacement, landscaping requires updating, and utilitarian chain link fences are not in keeping with the character of the housing complex. Undersized 1930s one-car garages cannot accommodate modern vehicles. Driveways must be reconfigured to provide access to the new garages.</p> <p><u>IMPACT IF NOT PROVIDED:</u> Units will continue to deteriorate resulting in increasing operations, maintenance and repair costs to the AF. Increasingly frequent service calls will inconvenience residents. Outdated interior configuration of living spaces and undersized support facilities such as garages will continue to degrade the quality of life of housing occupants. Failure to address fire and safety considerations will put the occupants at risk in the event of a fire. Without this project repair of these units will be accomplished in a costly and piecemeal fashion with little or no improvement in living quality.</p> <p><u>WORK ACCOMPLISHED IN PREVIOUS 3 YEARS</u> ZHTV1740001, Install Electric Meters Brick Quarters ZHTV164001, Repair Pavements West Side Brick Quarters ZHTV164000, Repair Pavements East Side Brick Quarters</p>				

1. COMPONENT AIR FORCE	FY 2020 PROJECT DATA			2. DATE 4 OCT 2018																										
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<p><u>WORK PROJECTED FOR THE NEXT 3 YEARS</u> N/A</p> <p><u>ADDITIONAL:</u> An economic analysis has been prepared comparing the alternatives for new construction, improvement, and status quo operation. All work associated with this project shall comply with all relevant UFCs, AFIs, and base standards. Project covers; Wright-Patterson AFB, Brick Quarters.</p> <p><u>JOINT USE CERTIFICATION:</u> This facility can be used by other components on an "as available" basis; however, the scope of the project is based on Air Force requirements. The work proposed under this project conforms to the Housing Community Profile for Wright-Patterson AFB.</p> <p>12. SUPPLEMENTAL DATA:</p> <p>a. Estimated Design Data:</p> <p>(1) Status:</p> <table border="0" style="width: 100%;"> <tr> <td style="width: 80%;">(a) Date Design Started</td> <td style="text-align: right;">01-OCT-18</td> </tr> <tr> <td>(b) Parametric Cost Estimates used to develop costs</td> <td style="text-align: right;">Yes</td> </tr> <tr> <td>* (c) Percent Complete as of 01 JAN 2019</td> <td style="text-align: right;">10%</td> </tr> <tr> <td>* (d) Date 35% Designed</td> <td style="text-align: right;">01-Mar-19</td> </tr> <tr> <td>(e) Date Design Complete</td> <td style="text-align: right;">30-SEP-19</td> </tr> <tr> <td>(f) Energy Study/Life-Cycle analysis was/will be performed</td> <td style="text-align: right;">YES</td> </tr> </table> <p>(2) Basis:</p> <table border="0" style="width: 100%;"> <tr> <td style="width: 80%;">(a) Standard or Definitive Design</td> <td style="text-align: right;">NA</td> </tr> <tr> <td>(b) Where Design Was Most Recently Used –</td> <td></td> </tr> </table> <p>(3) Total Cost (c) = (a) + (b) or (d) + (e): (\$000)</p> <table border="0" style="width: 100%;"> <tr> <td style="width: 80%;">(a) Production of Plans and Specifications</td> <td style="text-align: right;">\$896</td> </tr> <tr> <td>(b) All Other Design Costs</td> <td style="text-align: right;">\$597</td> </tr> <tr> <td>(c) Total</td> <td style="text-align: right;">\$1,493</td> </tr> <tr> <td>(d) Contract</td> <td style="text-align: right;">\$1,493</td> </tr> <tr> <td>(e) In-house</td> <td style="text-align: right;">\$0</td> </tr> </table> <p>(4) Construction Contract Award - All actions will be dedicated to an award of 01 MAR 20</p> <p>(5) Construction Start 01 JUN 20</p> <p>(6) Construction Completion 30 SEP 21</p> <p>b. Equipment associated with this project provided from other appropriations</p> <p>c. Facility Condition Index: FY20 Score- 90, degrading to 63 in FY23</p>					(a) Date Design Started	01-OCT-18	(b) Parametric Cost Estimates used to develop costs	Yes	* (c) Percent Complete as of 01 JAN 2019	10%	* (d) Date 35% Designed	01-Mar-19	(e) Date Design Complete	30-SEP-19	(f) Energy Study/Life-Cycle analysis was/will be performed	YES	(a) Standard or Definitive Design	NA	(b) Where Design Was Most Recently Used –		(a) Production of Plans and Specifications	\$896	(b) All Other Design Costs	\$597	(c) Total	\$1,493	(d) Contract	\$1,493	(e) In-house	\$0
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DD FORM 1391c, Dec 04

1. COMPONENT AIR FORCE		FY 2020 PROJECT DATA			2. DATE	
3. INSTALLATION AND LOCATION YOKOTA AIR BASE, JAPAN (PACAF)			4. PROJECT TITLE: IMPROVE FAMILY HOUSING PHASE 8a			
5. PROGRAM ELEMENT 88746		6. CATEGORY CODE 711-171		7. PROJECT NUMBER (RPSUID) ZNRE204308		8. PROJECT COST (\$000) (P713) \$10,863
9. COST ESTIMATE						
ITEM				U/M	QTY	UNIT COST
COST (\$000)						
Primary Facilities						
IMPROVE FAMILY HOUSING – 3GAW, 3BR				UN	12	761,025
SUSTAINABILITY AND ENERGY MEASURES				LS	1	182,646
Supporting Facilities						
UTILITIES				LS	1	67,185.88
SITE ELECTRICAL				LS	1	78,768.20
SITE MECHANICAL				LS	1	138,835
LANDSCAPE/MISC SITE				LS	1	9,938.96
HAZARDOUS ABATMENT				LS	1	97,576.20
PAVEMENTS				LS	1	35,511
Subtotal						
CONTINGENCY (5%)						487,138
SIOH (6.5%)						633,279
TOTAL REQUEST						10,863
<u>AREA COST</u>						
AREA COST FACTOR				2.1		
10. DESCRIPTION OF PROPOSED WORK: Provides whole house interior and exterior modernization, renovation and repair of 12 housing units at buildings 3281 and 3284, Yokota Air Base (3GAW, E9, 3BR). Work includes but not limited to, providing all labor, materials, transportation, and performing all work necessary for the improvements of the family housing units to meet current codes and standards. Modernizing finishes in kitchen, bathrooms, living room, bedrooms and family rooms, replace windows and doors, replace domestic water and sanitary plumbing, bring unit up to LHS code by installing hard wired smoke alarms and fire sprinklers. This project will comply with applicable DoD Air Force, and base design standards. In addition, local materials and construction techniques shall be used where cost effective. The facilities will be designed in accordance with UFC 4-711-01 Family Housing (2018) and the Air Force Family Housing Design Guide (2004).						
11. REQUIREMENT: 12 UN						
PROJECT: IMPROVE FAMILY HOUSING PHASE 8.						
REQUIREMENT: This project is required to provide modern and efficient housing for E9 military members and their dependents stationed at Yokota AB. 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. All units will meet whole house standards. Renovated housing will provide modern kitchen, living room, family room, and bedroom and bath configuration with ample interior and exterior storage. The units also require heating ventilation and air conditioning. This project will remedy deficiencies identified during a 2014 DoD OIG life, health, and safety audit. This project is programmed in accordance with the Family Housing Master Plan. This project ensures continued optimum use of Government of Japan provided housing assets in accordance with the Status of Forces Agreement (SOFA).						
CURRENT SITUATION: This project upgrades and modernizes housing which was constructed in the early 1970s. These housing units require major renovation and repair to correct deterioration resulting from age and heavy use. They have had no major upgrades since construction, do not meet the needs of today's families, and do not provide a modern home environment. Kitchens do not provide adequate storage, cabinet space or countertop area, and are not functionally arranged. Plumbing and lighting fixtures are deteriorated. The electrical systems do not meet modern construction codes. Ground fault circuit interrupter protection is not provided for bathrooms, kitchens, and exterior circuits. Flooring, windows, and roofing require replacement. The units have inadequate living space and storage.						

1. COMPONENT AIR FORCE	FY 2020 PROJECT DATA			2. DATE
3. INSTALLATION AND LOCATION YOKOTA AIR BASE, JAPAN (PACAF)		4. PROJECT TITLE: IMPROVE FAMILY HOUSING PHASE 8a		
5. PROGRAM ELEMENT 88746	6. CATEGORY CODE 711-171	7. PROJECT NUMBER (RPSUID) ZNRE204308	8. PROJECT COST (\$000) (P713) \$10,863	
<p>IMPACT IF NOT PROVIDED: Units will continue to deteriorate resulting in increasing operations, maintenance and repair costs to the AF. Without this project repair of these units will be accomplished in a costly and piecemeal fashion with little or no improvement in living quality. Low morale and retention problems will result if conditions are permitted to continue.</p>				
<p>WORK ACCOMPLISHED IN PREVIOUS YEARS: None</p>				
<p>WORK PROGRAMMED FOR THE NEXT THREE YEARS: None</p>				
<p>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.</p>				
<p>FOREIGN CURRENCY FY20 RATE: \$1.00 = ¥111.1542</p>				
<p>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".</p>				
<p>12. SUPPLEMENTAL DATA:</p>				
<p>a. Estimated Design Data:</p>				
<p>(1) Status:</p>				
(a) Date Design Started				15 JUL 18
(b) Parametric Cost Estimate used to develop costs (c)				YES
Percent Complete as of Jan 2019				15
(d) Date 35% Designed				28 FEB 19
(e) Date Design Complete				30 SEP 19
(f) 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				643.3
(b) All other Design Costs				321.7
(c) Total				965.0
(d) Contract				804.2
(e) In-house				160.8
(4) Construction Contract Award				28 FEB 20
(5) Construction Start				17 APR 20
(6) Construction Completion				29 NOV 21
b. Equipment associated with this project will be provided from other appropriations: N/A				
b. Facility Condition Index: FY20 = 73				

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**DEPARTMENT OF THE AIR FORCE
MILITARY FAMILY HOUSING
FISCAL YEAR 2020 BUDGET REQUEST**

PLANNING AND DESIGN

Budget Request (\$ in Thousands)
FY 2020 Budget Request \$ 3,409
FY 2019 Budget Request \$ 3,199

Purpose and Scope

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

Budget Request Summary

Authorization is requested for:

- (1) Planning and design for future year housing programs;
- (2) FY 2020 Authorization and Appropriation of \$3,409,000 to fund this effort as outlined in the following exhibit:

1. COMPONENT AIR FORCE		FY 2020 MILITARY CONSTRUCTION PROJECT DATA			2. DATE
3. INSTALLATION AND LOCATION VARIOUS AIR FORCE BASES			4. PROJECT TITLE FAMILY HOUSING PLANNING AND DESIGN		
5. PROGRAM ELEMENT 88742	6. CATEGORY CODE 711-000	7. PROJECT NUMBER	8. PROJECT COST (\$000) 3,409		
9. COST ESTIMATE					
ITEM		U/M	QUANTITY	UNIT COST	COST (\$000)
FAMILY HOUSING PLANNING AND DESIGN		LS			3,409
SUBTOTAL					3,409
TOTAL CONTRACT COST					3,409
TOTAL REQUEST					3,409
<p>10. <u>DESCRIPTION OF PROPOSED CONSTRUCTION</u>: Architect-engineer services, survey, fees, etc., in connection with advance planning and design of family housing dwelling units and properties included in or proposed for the Air Force Family Housing Construction Account.</p> <p>11. <u>PROJECT</u>: This request is for an authorization and appropriation of \$3.409 million to provide planning and design costs in connection with family housing new construction or construction improvements programs.</p> <p><u>REQUIREMENT</u>: The funds requested are necessary to procure architect-engineer services to make site and utility investigations; one time multi-phase design, and housing community profiles (HCP) developments; and for the preparation of design and specifications of advance plans for future year family housing programs in connection with any family housing new construction or construction improvements programs.</p> <p><u>IMPACT IF NOT PROVIDED</u>: The funds requested are necessary to support the development of the housing community profile planning documents and to support the new construction and construction improvement programs. Without the requested funds, housing community profiles cannot be developed and the new construction and construction improvement programs cannot be designed and constructed.</p>					

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**DEPARTMENT OF THE AIR FORCE
MILITARY FAMILY HOUSING
FISCAL YEAR 2020 BUDGET REQUEST**

OPERATIONS, UTILITIES AND MAINTENANCE SUMMARY

(Excludes Leasing and Privatization)

Budget Request (\$ in Thousands)
FY 2020 Budget Request \$256,655
FY 2019 Budget Request \$279,237

Purpose and Scope

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

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

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

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

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

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

**DEPARTMENT OF THE AIR FORCE
MILITARY FAMILY HOUSING
FISCAL YEAR 2020 BUDGET REQUEST**

(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.

Operation and Maintenance FY 2020 Budget Request Summary – Highlights

The requested amount in FY 2020 is \$256,655,000. This amount, together with estimated reimbursements of \$5,715,000 will fund the FY 2020 Operation and Maintenance program of \$262,370,000.

A summary of the budget request for FY 2020 is as follows (\$ in thousands):

Operations Request	Utility Request	Maintenance Request	Total Direct Request	Reimburesment	Total Program
\$96,219	\$42,732	\$117,704	\$256,655	\$5,715	\$262,370

**DEPARTMENT OF THE AIR FORCE
MILITARY FAMILY HOUSING
FISCAL YEAR 2020 BUDGET REQUEST**

Inventory and Funding Summary (FH-2)

USAF FY2020 PB				Fiscal Year: 2020		
Family Housing Operation and Maintenance, Summary				Command: USAF		
Excludes Leased Units and Costs				Exhibit: FH-2		
Worldwide Summary						
Fiscal Year:	2018	2019	2020			
Inventory Data (Units)						
Units in Being Beginning of Year	17,000	15,167	15,253			
Units in Being at End of Year	15,167	15,253	15,197			
Average Inventory for Year	16,084	15,210	15,225			
Historic Units	101	101	101			
Units Requiring FHO&M Funding:						
a. Contiguous US	109	111	111			
b. U. S. Overseas	0	0	0			
c. Foreign	16,891	15,056	15,142			
d. Worldwide	- 17,000	15,167	15,253			
Funding Requirements (\$000)	Total Cost (\$000)	Unit Cost (\$)	Total Cost (\$000)	Unit Cost (\$)	Total Cost (\$000)	Unit Cost (\$)
OPERATIONS (DIRECT)						
Management	53,464	3,016	54,423	3,588	56,022	3,673
Services	13,517	665	13,669	901	7,770	509
Furnishings	29,424	1,716	30,645	2,021	30,283	1,985
Miscellaneous	1,839	110	2,171	143	2,144	141
Sub-Total Direct Operations	98,244	5,507	100,908	6,653	96,219	6,308
Anticipated Reimbursements	735	46	735	49	735	48
Gross Obligations, Operations	95,503	5,553	101,643	6,702	96,954	6,633
UTILITIES (DIRECT)						
Direct Utilities	47,504	2,954	48,566	3,214	42,732	2,802
Anticipated Reimbursements	1,477	92	1,477	98	1,477	97
Gross Obligations, Utilities	48,981	3,046	50,043	3,312	44,209	2,898
MAINTENANCE (DIRECT)						
M&R Dwelling	100,362	6,240	97,078	6,424	88,461	5,800
M&R Ext. Utilities	14,041	873	13,574	892	16,376	1,074
M&R Other Real Property	18,102	1,126	17,484	1,150	11,696	767
Alter & Add.	1,684	0	1,627	0	1,171	77
Sub-Total Direct Maintenance	134,189	8,239	129,763	8,466	117,704	7,717
Anticipated Reimbursements	3,503	218	3,503	232	3,503	230
Gross Obligations, Maintenance	137,692	8,457	133,266	8,698	121,207	7,946
GRAND TOTAL, FHO&M - Direct	279,937	16,467	279,237	18,411	256,655	16,827
Anticipated Reimbursements	5,715	355	5,715	378	5,715	375
GRAND TOTAL, FHO&M - TOA	285,652	16,822	284,952	18,789	262,370	17,201

**DEPARTMENT OF THE AIR FORCE
MILITARY FAMILY HOUSING
FISCAL YEAR 2020 BUDGET REQUEST**

USAF FY2020 PB		Fiscal Year:		2020	
Family Housing Operation and Maintenance, Summary		Command:		USAF	
Excludes Leased Units and Costs		Exhibit:		FH-2	
Contiguous US					
Fiscal Year:	2018	2019	2020		
Inventory Data (Units)					
Units in Being Beginning of Year	109	111	111		
Units in Being at End of Year	111	111	111		
Average Inventory for Year	110	111	111		
Historic Units	101	101	101		
Funding Requirements (\$000)	(\$000) Cost (\$)				
OPERATIONS (DIRECT)					
Management	28,762 N/A	35,771 N/A	36,944 N/A		
Services	244 N/A	0 N/A	46 N/A		
Furnishings	552 N/A	1,260 N/A	1,182 N/A		
Miscellaneous	478 N/A	464 N/A	424 N/A		
Sub-Total Direct Operations	30,036 N/A	37,495 N/A	38,596 N/A		
Anticipated Reimbursements	0 N/A	0 N/A	0 N/A		
Gross Obligations, Operations	30,036 N/A	37,495 N/A	38,596 N/A		
UTILITIES (DIRECT)					
Direct Utilities	243 N/A	356 N/A	370 N/A		
Anticipated Reimbursements	0 N/A	0 N/A	0 N/A		
Gross Obligations, Utilities	243 N/A	356 N/A	370 N/A		
MAINTENANCE (DIRECT)					
M&R Dwelling	600 N/A	719 N/A	733 N/A		
M&R Ext. Utilities	70 N/A	80 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	670 N/A	799 N/A	733 N/A		
Anticipated Reimbursements	0 N/A	0 N/A	0 N/A		
Gross Obligations, Maintenance	670 N/A	799 N/A	733 N/A		
GRAND TOTAL, FHO&M - Direct	30,949 N/A	38,650 N/A	39,699 N/A		
Anticipated Reimbursements	0 N/A	0 N/A	0 N/A		
GRAND TOTAL, FHO&M - TOA	30,949 N/A	38,650 N/A	39,699 N/A		

**DEPARTMENT OF THE AIR FORCE
MILITARY FAMILY HOUSING
FISCAL YEAR 2020 BUDGET REQUEST**

USAF FY2020 PB		Fiscal Year:		2020		
Family Housing Operation and Maintenance, Summary		Command:		USAF		
Excludes Leased Units and Costs		Exhibit:		FH-2		
US Overseas						
Fiscal Year:	2018	2019	2020			
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			
Funding Requirements (\$000)	Total Cost (\$000)	Unit Cost (\$)	Total Cost (\$000)	Unit Cost (\$)	Total Cost (\$000)	Unit Cost (\$)
OPERATIONS (DIRECT)						
Management	1,960	N/A	1,439	N/A	1,500	N/A
Services	0	N/A	0	N/A	0	N/A
Furnishings	744	N/A	998	N/A	1098	N/A
Miscellaneous	0	N/A	0	N/A	0	N/A
Sub-Total Direct Operations	2,704	N/A	2,437	N/A	2,598	N/A
Anticipated Reimbursements	0	N/A	0	N/A	0	N/A
Gross Obligations, Operations	2,704	N/A	2,437	N/A	2,598	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	2,704	N/A	2,437	N/A	2,598	N/A
Anticipated Reimbursements	0	N/A	0	N/A	0	N/A
GRAND TOTAL, FHO&M - TOA	2,704	N/A	2,437	N/A	2,598	N/A

**DEPARTMENT OF THE AIR FORCE
MILITARY FAMILY HOUSING
FISCAL YEAR 2020 BUDGET REQUEST**

USAF FY2020 PB						Fiscal Year: 2020	
Family Housing Operation and Maintenance, Summary						Command: USAF	
Excludes Leased Units and Costs						Exhibit: FH-2	
Foreign							
Fiscal Year:	2018		2019		2020		
Inventory Data (Units)							
Units in Being Beginning of Year	16,891		15,056		15,142		15,142
Units in Being at End of Year	15,056		15,142		15,099		15,086
Average Inventory for Year	15,974		15,099				15,114
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	22,742	1,424	17,213	1,147	17,578	1,163	
Services	13,273	831	13,669	911	7,724	511	
Furnishings	28,128	1,761	28,388	1,892	28,003	1,853	
Miscellaneous	1,361	85	1,707	114	1,720	114	
Sub-Total Direct Operations	65,504	4,101	60,977	4,065	55,025	3,641	
Anticipated Reimbursements	735	46	735	49	735	49	
Gross Obligations, Operations	66,239	4,147	61,712	4,114	55,760	3,689	
UTILITIES (DIRECT)							
Direct Utilities	47,261	2,959	48,210	6,124	42,362	2,803	
Anticipated Reimbursements	1,477	92	1,477	98	1,477	98	
Gross Obligations, Utilities	48,738	3,051	49,687	6,222	43,839	2,901	
MAINTENANCE (DIRECT)							
M&R Dwelling	99,762	6,245	96,359	6,424	87,728	5,804	
M&R Ext. Utilities	13,971	875	13,494	900	16,376	1,083	
M&R Other Real Property	18,102	244	17,484	1,166	11,696	774	
Alter & Add.	1,684	3	1,627	108	1,171	77	
Sub-Total Direct Maintenance	133,519	7,367	128,964	8,597	116,971	7,739	
Anticipated Reimbursements	3,503	219	3,503	234	3,503	232	
Gross Obligations, Maintenance	137,022	7,586	132,467	8,831	120,474	7,971	
GRAND TOTAL, FHO&M - Direct	246,284	14,427	238,151	18,786	214,358	14,183	
Anticipated Reimbursements	5,715	358	5,715	381	5,715	378	
GRAND TOTAL, FHO&M - TOA	251,999	14,785	243,866	15,745	220,073	15,745	

**DEPARTMENT OF THE AIR FORCE
MILITARY FAMILY HOUSING
FISCAL YEAR 2020 BUDGET REQUEST**

Summary Historic Housing

Fiscal Year:	2018	2019	2020
1. Historic Housing Costs, Non-GOQ Data			
a. Number of Non-GOQ units on NHRP (Inventory)	78	78	78
b. Improvement Costs (\$000)	0	0	12,723
c. Maintenance and Repair Costs (\$000)	1,242	683	696
d. Total Historic Maintenance, Repair, Improvements (\$000)	1,242	683	13,419
e. Average Cost Per Unit (\$000)	16	9	172
2. Historic Housing Costs, GOQ Data			
a. Number of GOQ units on NHRP (Inventory)	23	23	23
b. Improvement Costs (\$000)	0	847	23,052
c. Maintenance and Repair Costs (\$000)	229	214	334
d. Total Historic Maintenance, Repair, Improvements (\$000)	344	1,061	23,386
e. Average Cost Per Unit (\$000)	15	46	1,017
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)	0	847	35,775
c. Maintenance and Repair Costs (\$000)	1,471	897	1,030
d. Total Historic Maintenance, Repair, Improvements (\$000)	1,471	1,744	36,805
e. Average Cost Per Unit (\$000)	15	17	364

**DEPARTMENT OF THE AIR FORCE
MILITARY FAMILY HOUSING
FISCAL YEAR 2020 BUDGET REQUEST**

Family Housing Operations and Maintenance Reprogramming Actions

(\$ in Thousands) as of 30 Sep 2018

	FY 2018 Appropriation	Funds Reprogrammed	Percent Reprogrammed	FY 2018 End of Year
Utilities	47,504	-12,640	-26.61%	34,864
Operations				
Management	53,464	-6,548	-12.25%	46,916
Services	13,517	-151	-1.12%	13,366
Furnishings	29,424	-3,300	-11.22%	26,124
Miscellaneous	1,839	-474	-25.77%	1,365
Leasing	16,818	-8,058	-47.91%	8,760
Maintenance	134,189	4,594	3.42%	138,783
Debt	0	0	0.00%	0
Privatization	21,569	27,576	127.85%	49,145
Foreign Currency	0	3,000	N/A	3,000

**DEPARTMENT OF THE AIR FORCE
MILITARY FAMILY HOUSING
FISCAL YEAR 2020 BUDGET REQUEST**

RECONCILIATION OF INCREASES AND DECREASES

MANAGEMENT EXHIBIT OP-5

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

		(\$ in Thousands)
1.	FY 2019 President's Budget Request:	\$54,423
2.	FY 2019 Appropriated Amount:	\$54,423
3.	FY 2019 Current Estimate:	\$54,423
4.	Price Growth:	\$1,877
	a. General Inflation (2.0%)	\$1,088
	b. Realignment of Civilian Pay	\$789
5.	Program Decrease	-\$278
6.	FY 2020 Budget Request:	\$56,022

Analysis of Changes in Management. The increase to Management was driven by pricing changes for inflation and the realignment of civilian pay from privatization support.

**DEPARTMENT OF THE AIR FORCE
MILITARY FAMILY HOUSING
FISCAL YEAR 2020 BUDGET REQUEST**

RECONCILIATION OF INCREASES AND DECREASES

SERVICES EXHIBIT OP-5

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

	(\$ in Thousands)
1. FY 2019 President's Budget	\$13,669
2. FY 2019 Appropriated Amount:	\$13,669
3. FY 2019 Current Estimate	\$13,669
4. Price Growth:	-\$635
a. General Inflation (2.0%)	\$273
b. Realigned to Civilian Pay	-\$908
5. Program Decrease	-\$5,264
6. FY 2020 Budget Request:	\$7,770

Analysis of Changes in Services. The price change is due to the realignment of funds from Services into Civilian Pay resulting in a decrease in Services. The program decrease in funding required is due to the large number of homes (average 1,200 units) off-line for revitalization in Okinawa, and right-sizes the program based on prior years' requirements. Future program increases are expected as these units are revitalized and brought back on-line.

**DEPARTMENT OF THE AIR FORCE
MILITARY FAMILY HOUSING
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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 2019 President's Budget Request:	\$30,645
2. FY 2019 Appropriated Amount:	\$30,645
3. FY 2019 Current Estimate:	\$30,645
4. Price Growth:	\$376
a. General Inflation (2.0%)	\$613
b. Realignment to Civilian Pay	-\$237
5. Program Decrease	-\$738
6. FY 2020 Budget Request:	\$30,283

Analysis of Changes in Furnishings. The pricing changes reflect realignment of funds to civilian pay, and the program decrease right-sizes the program based on prior years' requirements and the divestiture of approximately 2,000 units since FY2018.

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MILITARY FAMILY HOUSING
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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 2019 President's Budget Request:	\$2,171
2. FY 2019 Appropriated Amount:	\$2,171
3. FY 2019 Current Estimate:	\$2,171
4. Price Growth:	\$43
a. General Inflation (2.0%)	\$43
5. Program Decrease	-\$70
6. FY 2020 Budget Request:	\$2,144

Analysis of Changes in Miscellaneous. The program decrease is due to right-sizing the program based on prior years' requirements.

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MILITARY FAMILY HOUSING
FISCAL YEAR 2020 BUDGET REQUEST**

RECONCILIATION OF INCREASES AND DECREASES

UTILITIES EXHIBIT OP-5

Utilities. 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.

	(\$ in Thousands)
1. FY 2019 President's Budget Request:	\$48,566
2. FY 2019 Appropriated Amount:	\$48,566
3. FY 2019 Current Estimate:	\$48,566
4. Price Growth:	\$971
a. General Inflation (2.0%)	\$971
5. Program Decrease	-\$6,805
6. FY 2020 Budget Request:	\$42,732

Analysis of Changes in Utilities. The decrease is driven by changes to right-size the program based on prior years' requirements. Program decreases were also driven by the large number of homes (average 1,200) off-line for revitalization in Okinawa and divestiture of approximately 2,000 units since FY2018. Future program increases are expected as renovation is completed and units are brought back on-line.

**DEPARTMENT OF THE AIR FORCE
MILITARY FAMILY HOUSING
FISCAL YEAR 2020 BUDGET REQUEST**

Family Housing Summary of Utilities Detail

Fiscal Year:	2018	2019	2020
TOTAL COST OF UTILITIES (\$000)	47,504	48,566	42,732
UTILITY QUANTITIES			
Electricity (KwH)	213,406,437	218,177,354	191,968,758
Heating			
Gas (CF)	607,713,810	621,299,867	546,666,102
Fuel Oil			
Residuals (BLS)			
Distillates (BLS)	29,883	24,953	20,836
Purchased Steam (MBTU)	329,522	336,889	296,420
Heat Plants Coal Fired (MBTU)	0	0	0
Heat Plants Other Than Gas, Oil, Coal (MBTU)	0	0	0
Propane (BLS)	14,253	14,572	12,821
Water (Kgal)	2,595,076	2,653,092	2,334,388
Sewage (Kgal)	2,344,808	2,397,229	2,109,261

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RECONCILIATION OF INCREASES AND DECREASES

MAINTENANCE EXHIBIT OP-5

Maintenance. 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 2019 President's Budget Request:	\$129,763
2. FY 2019 Appropriated Amount:	\$129,763
3. FY 2019 Current Estimate:	\$129,763
4. Price Growth:	\$2,595
a. General Inflation (2.0%)	\$2,595
5. Program Decrease:	-\$14,654
6. FY 2020 Budget Request:	\$117,704

Analysis of Changes in Maintenance:

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

**DEPARTMENT OF THE AIR FORCE
MILITARY FAMILY HOUSING
FISCAL YEAR 2020 BUDGET REQUEST**

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.

The requirement for the FY 2020 program was developed through the AF Family Housing Master Plan process from historical expenditures and scheduled demolition projects. The program decrease in funding is attributable to the number of homes on Okinawa (average 1,200 units) undergoing major repair that do not require routine recurring work such as service calls and change of occupancy of maintenance, and is due to the divestiture of approximately 2,000 units since FY2018. Additionally, \$11M were realigned from Maintenance to support Construction Improvements. The program decrease is driven by a rebalancing of the AF Family Housing O&M program based on prior years' requirements.

**DEPARTMENT OF THE AIR FORCE
MILITARY FAMILY HOUSING
FISCAL YEAR 2020 BUDGET REQUEST**

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

This information complies with the House of Representatives, Military Construction Appropriations Bill (Conference Report 106-221) 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								
Japan	Kadena	68	1990	314	87	5,916	21,377	0
Repair 68 apartment dwelling units (sixty-eight JNCO 2BR) in Tower 869 at USMC Camp Kinser, Okinawa. Work includes, but is not limited to kitchens, bathrooms, window and door replacement, and common areas (hallways and stairwells) repair. Life, Health, Safety issues to be addressed include installation of hard wired smoke alarms and fire suppression systems; testing and abatement of mold, asbestos, and lead; and electrical upgrades required for code compliance. Energy efficiency improvements include replacing steam-sourced domestic hot water with energy efficient electric heat-pump and centralized HVAC will be replaced with energy efficient ductless A/C.								
Germany	Spangdahlem AB	2	2008	210	1,860	3,720	420	0
Repair water and sewer pipe leakages at MFH duplex units, Buildings 6109/6110 at Spangdahlem AB, Germany. Work will include but is not limited to the removal / deactivation of the existing domestic water piping throughout the units and replacement with new piping material. Removal and replacement of sections of the sewer pipe system, including broken drain inlets at various locations (bathroom tub and shower, kitchen sink, etc.) in both units. The work on these units will include all necessary demolition, mechanical work, masonry repairs, floor and wall tile replacement, painting, as well as a final cleaning required prior to the re-occupation of the housing units.								

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**DEPARTMENT OF THE AIR FORCE
MILITARY FAMILY HOUSING
FISCAL YEAR 2020 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
OVERSEAS											
Yokota	694 Kenney Court	1986	2,260	\$5.6	\$351.6	\$357.2	\$3.1	\$0.0	\$0.0	\$360.3	\$0.0
	Repair unit Qtrs 694, GO 4BR, Single Family Unit, Yokota Air Base. Work to include but is not limited to replacement of mechanical HVAC equipment including chiller, heat exchanger, chilled and hot water circulation pump, domestic hot water tank, domestic hot water circulation pump, controls and piping.										
Ramstein AB	1012 California Avenue	1956	3,181	\$5.9	\$31.3	\$37.2	\$13.0	\$0.0	\$0.0	\$50.2	\$0.0
	Scope of work includes the replacement of an approximately 10 meter cast iron pipe and backflow preventer with a new PVC sewer system from the interior inspection chamber to the exterior main sewage manhole. The work also includes excavation work, shoring in trench, core drilling, backfilling from soil as well as all other necessary site work in order to provide a complete and usable facility. Area includes GOH 1012 at Ramstein Air Base.										
2 GOQ Units				\$11.5	\$382.9	\$394.4	\$16.1	\$0.0	\$0.0	\$410.5	\$0.0

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MILITARY FAMILY HOUSING
FISCAL YEAR 2020 BUDGET REQUEST**

GENERAL AND FLAG OFFICERS' QUARTERS

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

State/ Country	Installation	Quarters ID	Year Built	Size NSF	Total FHO&M Cost (\$000)	Alternative Use	Cost to Convert Unit	If O&M >\$35K Demolish & Rebuild Cost
Colorado	USAF Academy	6776 Carlton	1931	10,846	\$35	None	N/A	N/A
Colorado	USAF Academy	6950 Otis	1929	11,553	\$35	None	N/A	N/A
TOTAL:							\$0.0	\$0.00

**DEPARTMENT OF THE AIR FORCE
MILITARY FAMILY HOUSING
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GENERAL AND FLAG OFFICERS' QUARTERS

Privatized GFOQ Operations, Maintenance and Repair Costs Exceeding \$50,000 (FH-12)

Costs incurred per Unit by the Private Sector Developer/Partner/Owner for Fiscal Year 2018
(\$ in Thousands)

State/Country	Installation	Quarters ID	Year Built	Size NSF	Operations Cost (Note 1)	Maintenance & Repair Cost (Note 2)	Total FH O&M Cost
Alabama	Maxwell AFB	337 Sequoia*	1934	3,483	8.5	65.6	74.1
Alaska	JBER	8436 Pease*	1942	3,471	21.6	58.0	79.6
Florida	MACDILL AFB	8120 Constellation Blvd	2009	4,178	4.3	72.8	77.1
Florida	MACDILL AFB	8208 Constellation Blvd	2009	4,178	4.4	64.4	68.8
Florida	MACDILL AFB	8212 Constellation Blvd	2009	4,178	4.5	68.8	73.3
Louisiana	Barksdale AFB	201 Ira Eaker	1933	3,566	6.3	67.1	73.4
Nebraska	Offutt AFB	16 Custer Dr*	1894	6,340	11.0	42.2	53.2
Oklahoma	Tinker AFB	3005 Spaatz Ct	2012	4,061	3.2	55.4	58.6
Texas	JBSA-Randolph	1 Main*	1931	4,859	4.2	98.1	102.3
Total					68.0	592.4	660.4

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 FY18 third quarter GOQ report
- (4) This annual report complies with the FY2009 National Defense Authorization Act (NDAA), amended Section 2805 requirement.

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**DEPARTMENT OF THE AIR FORCE
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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 2019 President's Budget Request:	\$5,715
2. Congressional Adjustments:	None
3. FY 2019 Appropriated Amount:	\$0
4. Supplementals:	None
5. Price Growth:	None
6. Functional Program Transfers:	None
7. Program Increases:	None
8. Program Decreases	None
9. FY 2019 Current Estimate:	\$0
10. Price Growth:	
a. Inflation (1.7%)	\$97
11. Functional Program Transfer:	None
12. Program Increases:	None
13. Program Decreases: Standardized based on historical data	-\$97
14. FY 2020 Budget Request:	\$5,715

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**DEPARTMENT OF THE AIR FORCE
MILITARY FAMILY HOUSING
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LEASING

Budget Request (\$ in Thousands)
FY 2020 Budget Request \$15,768
FY 2019 Budget Request \$15,832

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 2020. The FY 2020 request for family housing leasing points is summarized as follows:

		<u>FY 18</u>		<u>FY 19</u>		<u>FY 20</u>	
	<u>Lease Pts</u>	<u>Used</u>	<u>Cost (\$000)</u>	<u>Used</u>	<u>Cost (\$000)</u>	<u>Used</u>	<u>Cost (\$000)</u>
Foreign:	8,988	108	\$16,371	149	\$15,376	193	\$15,518
Domestic:	3,333	2	\$447	15	\$456	10	\$250
Total:	12,321	110	\$16,818	164	\$15,832	203	\$15,768

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

**DEPARTMENT OF THE AIR FORCE
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housing is not available. Foreign leases are primarily provided at Aviano, Italy; Lakenheath, UK; 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.

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RECONCILIATION OF INCREASES AND DECREASES

EXHIBIT OP-5

Leasing

	(\$ in Thousands)
1. FY 2019 President's Budget Request:	\$15,832
2. FY 2019 Appropriated Amount:	\$15,832
3. FY 2019 Current Estimate:	\$15,832
4. Price Growth:	\$317
a. General Inflation (2.0%)	\$317
5. Program Decrease	-\$381
5. FY 2020 Budget Request:	\$15,768

Analysis of Changes in Leasing:

The decrease is due to right-sizing the program based on prior years' requirements and realigning funds to Maintenance.

**DEPARTMENT OF THE AIR FORCE
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Analysis of Leased Units Exhibit (FH-4)

LOCATION	FY 18			FY 19			FY 20		
	# UNITS	LEASE MONTHS	COST (\$000)	# UNITS	LEASE MONTHS	COST (\$000)	# UNITS	LEASE MONTHS	COST (\$000)
DOMESTIC LEASES									
CONUS-wide (AF Recruiters, ROTC staffs, & other)	2	12	\$50	15	180	\$456	15	180	\$456
Unassigned	3,331	0	\$0	3,318	0	\$0	3,318	0	\$0
TOTAL DOMESTIC LEASES	3,333	12	\$ 50	3,333	180	\$ 456	3,333	180	\$ 456
FOREIGN LEASES									
Department of State (\$2834):									
Abu Dhabi, UAE	14	168	\$1,260	22	264	\$2,430	25	300	\$2,679
Amman, Jordan	5	60	\$325	7	84	\$571	7	84	\$571
Bangkok, Thailand	1	12	\$55	1	12	\$61	2	24	\$110
Bogotá, Colombia	0	0	\$0	1	12	\$51	1	12	\$55
Brasilia, Brazil	0	0	\$0	2	24	\$189	2	24	\$190
Bucharest, Romania	1	12	\$70	1	12	\$61	1	12	\$70
Cairo, Egypt	3	36	\$195	3	36	\$275	4	48	\$374
Chiang Mai, Thailand	0	0	\$0	4	48	\$163	4	48	\$180
Classified Location	0	0	\$0	3	36	\$250	3	36	\$255
Copenhagen, Denmark	2	24	\$120	2	24	\$183	2	24	\$187
Doha, Qatar	4	48	\$360	2	24	\$173	6	72	\$540
Manama, Bahrain	0	0	\$0	1	12	\$66	1	12	\$66
Mexico City, Mexico	12	144	\$780	18	216	\$1,559	20	240	\$1,767
Muscat, Oman	1	12	\$55	1	12	\$86	1	12	\$88
Nassau, Bahamas	0	0	\$0	2	24	\$143	1	12	\$73
New Dehli, India	0	0	\$0	0	0	\$0	1	12	\$45
Oslo, Norway	0	0	\$0	1	12	\$82	1	12	\$85
Paris, France	2	24	\$160	6	72	\$642	6	72	\$642
Sofia, Bulgaria	0	0	\$0	3	36	\$244	3	36	\$255
Tel Aviv, Israel	0	0	\$0	2	24	\$163	2	24	\$170
Vilnius, Lithuania	0	0	\$0	3	36	\$244	3	36	\$255
DoS Subtotal	45	540	\$ 3,380	85	1,020	\$ 7,636	96	1,152	\$8,657
AF Foreign Leases (\$2828):									
Doha, Qatar	49	588	\$3,920	36	432	\$3,119	65	780	\$5,200
Geilenkirchen, Germany	1	12	\$65	1	12	\$65	1	12	\$65
Aviano, Italy	12	144	\$540	25	300	\$1,060	25	300	\$1,125
Wellington, India	0	0	\$0	0	0	\$0	1	12	\$45
Mayaguez, Puerto Rico	0	0	\$0	0	0	\$0	3	36	\$135
Stavanger, Norway	1	12	\$75	1	12	\$102	1	12	\$85
AF Foreign Leases Subtotal	63	756	\$ 4,600	63	756	\$ 4,346	96	1,152	\$ 6,655
Unassigned	8,880	0	\$8,788	8,840	0	\$3,394	8,796	0	\$0
TOTAL FOREIGN LEASES	8,988	1,296	\$16,768	8,988	1,776	\$15,376	8,988	2,304	\$15,312
GRAND TOTAL FH-4	12,321	1,308	\$16,818	12,321	1,956	\$15,832	12,321	2,484	\$15,768

**DEPARTMENT OF THE AIR FORCE
MILITARY FAMILY HOUSING
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Analysis of High Cost Leased Units (FH-4)

(Other than Section 801)

LOCATION	FY20 TOTAL LEASES PER LOCATION	FY18			FY19			FY20		
		HIGH COST UNITS	HIGH COST DEFINED	EST COST (\$000)	HIGH COST UNITS	HIGH COST DEFINED	EST COST (\$000)	HIGH COST UNITS	HIGH COST DEFINED	EST COST (\$000)
DOMESTIC LEASES	0	0	\$30,414	\$0	0	\$	\$0	0	\$	\$0
Sub-Total Domestic High-cost	0	0		\$0	0		\$0	0		\$0
FOREIGN LEASES										
Doha, Qatar	65	49	\$51,161	\$3,920	36	\$51,161	\$3,119	65	\$51,161	\$5,200
Geilenkirchen, Germany	1	1	\$51,161	\$65	1	\$51,161	\$65	1	\$51,161	\$65
Stavanger, Norway	1	1	\$51,161	\$75	1	\$51,161	\$102	1	\$51,161	\$85
Sub-Total Foreign High-cost	67	51		\$4,060	38		\$3,286	67		\$5,350
GRAND TOTAL FH-4A	67	51		\$4,060	38		\$3,286	67		\$5,350

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**DEPARTMENT OF THE AIR FORCE
MILITARY FAMILY HOUSING
FISCAL YEAR 2020 BUDGET REQUEST**

FAMILY HOUSING PRIVATIZATION

Budget Request (\$ in Thousands)
FY 2020 Budget Request \$22,593
FY 2019 Budget Request \$22,205

Purpose and Scope

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 22,197 new homes and 12,593 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 FY2020 funding request provides \$22,593 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 10 USC 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 \$843,957,935 in FY 2019 and \$871,819,947 in FY 2020. The number of units of military family housing upon which these estimated payments are made is 41,835 in FY 2019 and FY 2020. The number of units of military unaccompanied housing upon which these estimated payments are made is 110 in FY 2019 and FY 2020.

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

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RECONCILIATION OF INCREASES AND DECREASES

Housing Privatization Exhibit OP-5

Housing Privatization Support

	(\$ in Thousands)
1. FY 2019 President's Budget Request:	\$22,205
2. FY 2019 Appropriated Amount:	\$22,205
3. FY 2019 Current Estimate:	\$22,205
4. Price Growth:	\$429
a. General Inflation (2.0%)	\$444
b. Realignment to Civilian Pay	\$15
5. Program Decrease	-\$41
6. FY 2020 Budget Request:	\$22,593

Analysis of Changes in Privatization:

The program increase is attributed to inflation and realignment of civilian pay.

**DEPARTMENT OF THE AIR FORCE
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Air Force BAH payments to military housing privatization projects

	Inflation Factor	BAH of AF members in privatized housing (\$)	AF unaccompanied members residing in Army privatized UH (No AF residing in Navy) (\$)	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
Number of Servicemembers (annual average)	N/A	41,835	110	N/A

**DEPARTMENT OF THE AIR FORCE
MILITARY FAMILY HOUSING
FISCAL YEAR 2020 BUDGET REQUEST
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 ⁷			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 97	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 97	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 98	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	98	Improvement	Elmendorf-Improve MFH Ph 9 (82 units) HRSO to FHIF	1, 5
Aug-02	Wright-Patterson I	Wright-Patterson AFB, OH (Ph I)	1,733	1,536	10.813	02 99	Improvement Construction	Hickam-Privatize MFH Wright Patterson-Replace 40 Units	1,733	1,536	1,536	10.820 99	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	1,302	24.013 02 99	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 02	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 02	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	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	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 01	05 01	Improvement Improvement	Davis-Monthan, Repair MFH Ph 6 Hill, Privatize MFH	1, 5
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 04	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	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 02	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	02	Improvement	McGuire Privatize MFH	1, 5
Feb-07	AETC Group I	Altus AFB, OK Luke AFB, AZ Sheppard AFB, TX Tyndall AFB, FL	883 690 1,167 848	530 550 714 813	6.244	04	Improvement	Sheppard Privatize 1,288 MFH	883 690 1,167 848	530 550 714 813	530 550 714 867	6.244 04	04	Improvement	Sheppard Privatize 1,288 MFH	1, 5
		AETC Group I Total:	3,588	2,607					3,588	2,607	2,661					
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	06	Improvement	AF Academy Privatize 445 Units	1, 5
Jul-07	ACC Group II	Davis-Monthan AFB, AZ Holloman AFB, NM	1,256 1,009	929 909	27.922	05 05	Construction Construction	Davis-Monthan AFB - Replace FH Ph 6 MacDill Replace FH Ph 6	1,256 929	961 923	1,174 1,075	27.922 05	05 05	Construction Construction	Davis-Monthan AFB - Replace FH Ph 6 MacDill Replace FH Ph 6	1, 5
		ACC Group II Total:	2,265	1,838					2,185	1,884	2,249					
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	1,132	0.000 N/A	N/A	N/A	N/A	5
Sep-07	Tri-Group	Los Angeles AFB, CA Peterson AFB, CO Schriever AFB, CO	617 493 0	572 723 269	19.950	06 06	Improvement Improvement	Fort MacArthur - Improve 188 Units Peterson, Privatize 1,132 Units	617 493 0	613 669 242	613 669 242	19.945 06	06 06	Improvement Improvement	Fort MacArthur - Improve 188 Units Peterson, Privatize 1,132 Units	3, 5
		Tri-Group Total:	1,110	1,564					1,110	1,524	1,524					
Sep-07	BLB	Barksdale AFB, LA Joint Base Anacostia-Bolling (Bolling), MD Joint Base Langley-Eustis (Langley), VA	729 1,343 1,496	1,090 669 1,430	15.300	06 05 05 03	Improvement Improvement Improvement Construction	Bolling, Improve 24 Units Barksdale, Imp MFH Ph 1 Langley, Improve Electrical System Eglin, 234 MFH Ph 2A	723 1,343 1,496	1,090 672 1,430	1,090 850 1,430	15.231 05	06 05 05 03	Improvement Improvement Improvement Construction	Bolling, Improve 24 Units Barksdale, Imp MFH Ph 1 Langley, Improve Electrical System Eglin, 234 MFH Ph 2A	1, 5
		BLB Total:	3,568	3,189					3,562	3,192	3,370					
Oct-07	Robins II	Robins AFB, GA (Ph II)	563	207	10.600	05	Improvement	FY 05 Robins, Improve Family Housing	558	207	254	10.600 05	05	Improvement	FY 05 Robins, Improve Family Housing	3, 5
Oct-07	AETC Group II	Columbus AFB, MS Goodfellow AFB, TX Laughlin AFB, TX Maxwell AFB, AL JBSA-Randolph, TX Vance AFB, OK	518 98 534 729 397 230	453 241 516 501 317 229	59.000	06 05 05 03 03 03	Improvement Improvement Construction Construction Construction Improvement	Andrews-Improve 178 Units Randolph, Construct MFH Ph 1 Davis-Monthan, Repair MFH Ph 6 Hurlburt, 134 MFH Ph 2A Eglin - Hurlburt 213 MFH Improvement	517 98 534 723 397 230	453 241 451 513 317 242	453 241 451 513 317 242	59.000 06	06 05 05 03 03 03	Improvement Improvement Construction Construction Construction Improvement	Andrews-Improve 178 Units Randolph, Construct MFH Ph 1 Davis-Monthan, Repair MFH Ph 6 Hurlburt, 134 MFH Ph 2A Eglin - Hurlburt 213 MFH Improvement	3, 5
		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	N/A	5
Nov-07	AMC East	Andrews AFB, MD MacDill AFB, FL	1,480 752	887 571	0.000	N/A	N/A	N/A	1,466 752	933 572	1,143 572	0.000 N/A	N/A	N/A	N/A	3, 5
		AMC East Total:	2,232	1,458					2,218	1,505	1,715					

**DEPARTMENT OF THE AIR FORCE
MILITARY FAMILY HOUSING
FISCAL YEAR 2020 BUDGET REQUEST**

Jul-08	AMC West	Fairchild AFB, WA Tinker AFB, OK Travis AFB, CA	1,055 694 2,187	641 660 1,134	28.190	04 04	Construction Improvement	Tinker, Privatize 730 MFH Sheppard, Privatize 1,288 Units FHIF Funds	1,055 694 1,094	641 660 1,134	641 660 1,273	28.190	04 04	Construction Improvement	Tinker, Privatize 730 MFH Sheppard, Privatize 1,288 Units FHIF Funds	1,5
		AMC West Total:	3,936	2,435					2,843	2,435	2,574					
Nov-08	Falcon Group	Hanscom AFB, MA Little Rock AFB, AR Moody AFB, GA Patrick AFB, FL	726 1,295 303 991	746 999 256 616	15.723	02 01 01 00	Improvement Improvement Construction Improvement	Hickam - Privatize MFH Moody MFH Privatization Travis - Replace 64 Units Little Rock - Privatize MFH	726 1,295 303 991	731 991 287 616	731 991 287 616	15.723	02 01 01 00	Improvement Improvement Construction Improvement	Hickam - Privatize MFH Moody MFH Privatization Travis - Replace 64 Units Little Rock - Privatize MFH	1,5
		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 03 03	Improvement Improvement Improvement	Robins - Improve Family Housing Keesler - Replace 117 Ph 1 Eglin - Hurlburt 213 MFH Improve	264	465	613	21.618	05 03 03	Improvement Improvement Improvement	Robins - Improve Family Housing Keesler - Replace 117 Ph 1 Eglin - Hurlburt 213 MFH Improve	1,5
Jun-11	JBER	JB Elmendorf-Richardson	1,242	1,240	36.800	11	Improvement	Army Funds Transferred	1,242	1,240	1,240	36.798	11	Improvement	Army Funds Transferred	1,5
Sep-11	Southern Group	Arnold AFB, TN Charleston AFB, SC Keesler AFB, MS Shaw AFB, SC	40 478 1,188 681	22 345 1,188 630	23.354	07	Construction	Mountain Home - Replace 457 MFH	40 478 1,188 679	22 345 1,188 630	22 599 1,188 633	23.354	07	Construction	Mountain Home - Replace 457 MFH	1,5
		Southern Group Total:	2,387	2,185					2,385	2,185	2,442					
Mar-12	Western Group	Beale AFB, CA F.E. Warren AFB, WY Malmstrom AFB, MT Whiteman AFB, MO	884 831 1,412 920	509 749 1,116 890	20.053	07 05 04 03	Construction FHIF FHIF FHIF	Mountain Home - Replace 457 MFH Beale Beale Beale	884 831 1,168 920	509 749 1,116 890	509 749 1,116 890	20.053	07 05 04 03	Construction FHIF FHIF FHIF	Mountain Home - Replace 457 MFH Beale Beale Beale	1,5
		Western Group Total:	4,047	3,264					3,602	3,264	3,264					
Aug-13	Northern Group	Canon AFB, NM Cavalier AFB, ND Ellsworth AFB, SD Grand Forks AFB, ND Minot AFB, ND Mountain Home AFB, ID	763 14 283 833 1,746 956	1,038 14 497 547 1,606 844	37.813	09	Improvement	Kadena - Improve 614 MFH (Ph 9) Misawa - Improve 370 MFH (Ph 4)	763 14 283 833 1,746 956	1,038 14 497 547 1,606 844	993 14 497 547 1,606 844	37.576	09	Improvement	Kadena - Improve 614 MFH (Ph 9) Misawa - Improve 370 MFH (Ph 4)	1, 2, 5
		Northern Group Total:	4,595	4,546					4,595	4,546	4,501					
Sep-13	Continental Group	Edwards AFB, CA Eglin AFB, FL Eielson AFB, AK Hurlburt AFB, FL McConnell AFB, KS Seymour Johnson, NC	741 898 934 380 401 708	741 747 898 404 364 708	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)	741 894 934 380 401 686	741 747 898 404 364 686	741 881 898 421 349 686	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
		Continental Group Total:	4,062	3,862					4,036	3,840	3,976					
Sep-13	ACC Group III	Dyess AFB, TX (PH II) Moody AFB, GA (PH II)	674 0	674 184	9.617	09	Improvement	Yokota - Improve 350 MFH (Ph 7) Misawa - Improve 370 MFH (Ph 4)	674 0	674 101	674 101	6.315	09	Improvement	Yokota - Improve 350 MFH (Ph 7) Misawa - Improve 370 MFH (Ph 4)	1, 2, 5
		ACC Group III Total:	674	858					674	775	775					
Grand Totals¹⁴			61,883	53,331	617.796				60,204	53,237	55,858	611.333				

- NOTES:**
- 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).
 - 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.
 - List the MHPI project location by installation and state, including each installation/state incorporated into the integrated/grouped MHPI project.
 - 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.
 - 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.
 - 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.
 - 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:
 - 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.).
 - The fiscal year(s) of the funding sources to be used to cover the Government's cost of the MHPI project.
 - 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.
 - The project(s) that are used to source the Government's cost of the privatization project.
 - 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.
 - 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.
 - 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.
 - 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.
 - 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.
 - 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:
 - 10 USC 2873 - Government Direct Loans
 - 10 USC 2873 - Loan Guarantees
 - 10 USC 2875 - Investments, such as DoD Equity Contributions in non-governmental entities
 - 10 USC 2877 - Differential Lease Payments
 - 10 USC 2878 - Conveyance or Lease of Existing Property and Facilities
 - Totals of number of units conveyed, number of end state units, and funding amounts.

**DEPARTMENT OF THE AIR FORCE
MILITARY FAMILY HOUSING
FISCAL YEAR 2020 BUDGET REQUEST**

FOREIGN CURRENCY EXCHANGE DATA (PB-18)

(\$ in Thousands)

MFH O&M		FY 2018		FY 2019		FY 2020	
		Budget Exchange Rates	\$ U.S. Requiring Conversion	Budget Exchange Rates	\$ U.S. Requiring Conversion	Budget Exchange Rates	\$ U.S. Requiring Conversion
Country	Local Currency						
Denmark	Krone	6.9385		6.3847		6.3847	
European Comm	Euro	0.9329	\$ 42,602	0.8582	\$ 45,476	0.8587	\$ 42,430
Japan	Yen	111.3365	\$ 118,249	111.5938	\$ 115,893	111.1542	\$ 37,644
Norway	Krone	8.4115	\$ -	8.0858	\$ -	8.0858	\$ -
Singapore	Dollar	1.4132	\$ -	1.3640	\$ -	1.3640	\$ -
South Korea	Won	1156.12	\$ 7,201	1128.1127	\$ 7,263	1128.1127	\$ 4,566
Turkey	Lira	3.4789	\$ 2,755	3.6022	\$ 2,598	3.6022	\$ 717
United Kingdom	Pound	0.8072	\$ 24,720	0.7651	\$ 25,568	0.7651	\$ 18,834
Total			\$ 195,527		\$ 196,798		\$ 104,192

MFH Construction		FY 2018		FY 2019		FY 2020	
		Budget Exchange Rates	\$ U.S. Requiring Conversion	Budget Exchange Rates	\$ U.S. Requiring Conversion	Budget Exchange Rates	\$ U.S. Requiring Conversion
Country	Local Currency						
Denmark	Krone	6.9385	\$ -	6.3847	\$ -	6.3847	\$ -
European Comm	Euro	0.9329	\$ -	0.8582	\$ -	0.8587	\$ 53,584
Japan	Yen	111.3365	\$ 80,617	111.5938	\$ 72,766	111.1542	\$ 46,682
Norway	Krone	8.4115	\$ -	8.0858	\$ -	8.0858	\$ -
Singapore	Dollar	1.4132	\$ -	1.3640	\$ -	1.3640	\$ -
South Korea	Won	1156.12	\$ -	1128.1127	\$ -	1128.1127	\$ -
Turkey	Lira	3.4789	\$ -	3.6022	\$ -	3.6022	\$ -
United Kingdom	Pound	0.8072	\$ -	0.7651	\$ 3,146	0.7651	\$ -
Total			\$ 80,617		\$ 75,912		\$ 100,266