



Department of the Air Force

Military Construction Program

**Fiscal Year (FY) 2019
Budget Estimates**

**Justification Data Submitted to Congress
February 2018**

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**DEPARTMENT OF THE AIR FORCE
MILITARY CONSTRUCTION PROGRAM FISCAL YEAR 2019
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**DEPARTMENT OF THE AIR FORCE
MILITARY CONSTRUCTION AND MILITARY FAMILY HOUSING FISCAL YEAR 2019
PROGRAM SUMMARY**

	Authorization Request <u>(\$000s)</u>	Appropriation Request <u>(\$000s)</u>
Military Construction		
Major Construction	1,301,630	1,480,630
Unspecified Minor Construction (10 USC 2805)	-	38,500
Planning and Design (10 USC 2807)	-	206,577
Total Military Construction	1,301,630	1,725,707
Military Family Housing		
New Construction	-	-
Improvements	75,247	75,247
Planning and Design	3,199	3,199
Subtotal	78,446	78,446
Operations, Utilities and Maintenance		
Operations	100,908	100,908
Utilities	48,566	48,566
Maintenance	129,763	129,763
Privatization	22,205	22,205
Leasing	15,832	15,832
Subtotal	317,274	317,274
Total Military Family Housing	395,720	395,720
Grand Total Air Force	1,697,350	2,121,427

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**DEPARTMENT OF THE AIR FORCE
MILITARY CONSTRUCTION PROGRAM FISCAL YEAR 2019
INDEX - INSIDE THE US
(DOLLARS IN THOUSANDS)**

STATE	INSTALLATION	PROJECT	AUTHORIZATION REQUEST	APPROPRIATION REQUEST
ALASKA	Eielson	F-35 CATM Range	19,000	19,000
		F-35A School Age Facility	22,500	22,500
		F-35 Conventional Munitions Maintenance Facility	15,500	15,500
		F-35 Aircraft Maintenance Unit Admin Facility	6,800	6,800
		Eielson TOTAL:	63,800	63,800
		ALASKA TOTAL:	63,800	63,800
ARIZONA	Luke	F-35A Squad Ops #6	17,000	17,000
		F-35A ADAL AMU B914 Sq 6	23,000	23,000
		Luke TOTAL:	40,000	40,000
		ARIZONA TOTAL:	40,000	40,000
FLORIDA	Eglin	F-35A Integrated Trng Center Academics Bldg	34,863	34,863
		F-35A Student Dormitory II	28,000	28,000
		Eglin TOTAL:	62,863	62,863
	Macdill	KC135 Beddown Add Flt Simltr Training	3,100	3,100
		Macdill TOTAL:	3,100	3,100
		FLORIDA TOTAL:	65,963	65,963
MARYLAND	JB Andrews	PAR Relocate Haz Cargo Pad and EOD Range	37,000	37,000
		Presidential Aircraft Recap Complex - Increment 2	0	154,000
		JB Andrews TOTAL:	37,000	191,000
		MARYLAND TOTAL:	37,000	191,000
MASSACHUSETTS	Hanscom	MIT-Lincoln Laboratory (West Lab CSL/MIF)	225,000	225,000
		Hanscom TOTAL:	225,000	225,000
		MASSACHUSETTS TOTAL:	225,000	225,000
NEBRASKA	Offutt	Parking Lot, USSTRATCOM	9,500	9,500
		Offutt TOTAL:	9,500	9,500
		NEBRASKA TOTAL:	9,500	9,500
NEVADA	Creech	MQ-9 CPIP GCS Operations Facility	31,000	31,000
		MQ-9 CPIP Ops & Command Center Facility	28,000	28,000
		Creech TOTAL:	59,000	59,000
	NELLIS	CRH Simulator	5,900	5,900
		Nellis TOTAL:	5,900	5,900
		NEVADA TOTAL:	64,900	64,900
NEW MEXICO	Holloman	MQ-9 FTU Ops Facility	85,000	85,000
		Holloman TOTAL:	85,000	85,000
		NEW MEXICO TOTAL:	85,000	85,000
NORTH DAKOTA	Minot	Consolidated Helo/TRF Ops/AMU and Alert Fac	66,000	66,000
		Minot TOTAL:	66,000	66,000
		NORTH DAKOTA TOTAL:	66,000	66,000
OHIO	Wright-Patterson	ADAL Intelligence Production Complex (NASIC)	116,100	116,100
		Wright Patterson TOTAL:	116,100	116,100
		Ohio TOTAL:	116,100	116,100
OKLAHOMA	Altus	KC-46A FTU/FTC Simulator Facility Ph 3	12,000	12,000
		Altus TOTAL:	12,000	12,000
	Tinker	KC-46A Depot Maintenance Hangar	81000	81000
		KC-46A Depot Fuel Maintenance Hangar	85,000	85,000
		Tinker TOTAL:	166,000	166,000
		OKLAHOMA TOTAL:	178,000	178,000

SOUTH CAROLINA	Shaw	CPIP MQ-9 MCE Group		53,000	53,000
			Shaw TOTAL:	53,000	53,000
			SOUTH CAROLINA TOTAL:	53,000	53,000
TEXAS	Lackland	BMT Recruit Dormitory 6		0	25,000
			Lackland TOTAL:	0	25,000
			TEXAS TOTAL::	0	25,000
			INSIDE THE US TOTAL:	1,004,263	1,183,263

**DEPARTMENT OF THE AIR FORCE
MILITARY CONSTRUCTION PROGRAM FISCAL YEAR 2019
INDEX - OUTSIDE THE US
(DOLLARS IN THOUSANDS)**

COUNTRY	INSTALLATION	PROJECT	AUTHORIZATION REQUEST	APPROPRIATION REQUEST		
COMMONWEALTH OF THE NORTHERN MARIANA ISLANDS	Tinian	APR - Cargo Pad With Taxiway Extension	46,000	46,000		
		APR - Maintenance Support Facility	4,700	4,700		
	Tinian TOTAL:		50,700	50,700		
	COMMONWEALTH OF THE NORTHERN MARIANA ISLANDS TOTAL:		50,700	50,700		
GUAM	Joint Region Marianas	Hayman Munitions Storage Igloos MSA 2	9,800	9,800		
		Joint Region Marianas TOTAL:	9,800	9,800		
	GUAM TOTAL:		9,800	9,800		
QATAR	Al Udeid	Al Udeid Flightline Support Facilities	30,400	30,400		
		Al Udeid, Qatar Personnel Deployment Proc	40,000	40,000		
	Al Udeid TOTAL:		70,400	70,400		
	QATAR TOTAL:		70,400	70,400		
UNITED KINGDOM	RAF Lakenheath	F-35A Parking Apron	27,431	27,431		
		F-35A AGE Facility	12,449	12,449		
		F-35A 6 Bay Hangar	39,036	39,036		
		F-35A ADAL Parts Store	13,926	13,926		
		F-35A Fuel System Maintenance Dock 2 Bay	16,880	16,880		
		F-35A Dorm	29,541	29,541		
		F-35A ADAL Conventional Munitions MX	9,204	9,204		
		RAF Lakenheath TOTAL:	148,467	148,467		
	UNITED KINGDOM TOTAL:		148,467	148,467		
OUTSIDE THE US TOTAL:			279,367	279,367		
WORLDWIDE UNSPECIFIED	Worldwide Unspecified	TACMOR - Utilities and Infrastructure Support	18,000	18,000		
	Various Locations	Planning And Design	-	206,577		
	Various Locations	Unspecified Minor Military Construction	-	38,500		
	WORLDWIDE UNSPECIFIED TOTAL:		18,000	263,077		
INSIDE THE US TOTAL::			1,004,263	1,183,263		
OUTSIDE THE US TOTAL::			279,367	279,367		
WORLDWIDE UNSPECIFIED TOTAL:			18,000	263,077		
FY 2019 TOTAL:			1,301,630	1,725,707		

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**DEPARTMENT OF THE AIR FORCE
MILITARY CONSTRUCTION PROGRAM FISCAL YEAR 2019
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>FY19</u>	Appropriation Request <u>(\$000)</u>
NEW MISSION	1,024,830
CURRENT MISSION	455,800
PLANNING & DESIGN	206,577
MINOR CONSTRUCTION	38,500
TOTAL:	1,725,707

DEPARTMENT OF THE AIR FORCE
MILITARY CONSTRUCTION PROGRAM FISCAL YEAR 2019
INDEX - CURRENT/NEW MISSION BREAKOUT
(DOLLARS IN THOUSANDS)

STATE/COUNTRY	INSTALLATION	PROJECT	APPROPRIATION REQUEST	TYPE
MASSACHUSETTS	Hanscom	MIT-Lincoln Laboratory (West Lab CSL/MIF)	225,000	CM
NEBRASKA	Offutt	Parking Lot USSTRATCOM	9,500	CM
OHIO	Wright-Patterson	ADAL Intelligence Production Facility	116,100	CM
TEXAS	Lackland	BMT Recruit Dormitory 6	25,000	CM
GUAM	Joint Region Marianas	Hayman Munitions Storage Igloos MSA 2	9,800	CM
QATAR	Al Udeid	Al Udeid Flightline Support Facilities	30,400	CM
QATAR	Al Udeid	Al Udeid, Qatar Personnel Deployment Proc	40,000	CM
Current Mission TOTAL			455,800	
STATE/COUNTRY	INSTALLATION	PROJECT	APPROPRIATION REQUEST	TYPE
ALASKA	Eielson	F-35 CATM Range	19,000	NM
	Eielson	F-35A School Age Facility	22,500	NM
	Eielson	F-35 Conventional Munitions Maintenance Facility	15,500	NM
	Eielson	F-35 Aircraft Maintenance Unit Admin Facility	6,800	NM
ARIZONA	Luke	F-35A Squad Ops #6	17,000	NM
ARIZONA	Luke	F-35A ADAL AMU B914 Sq 6	23,000	NM
COMMONWEALTH OF THE NORTHERN MARIANA ISLANDS	Tinian	APR - Cargo Pad With Taxiway Extension	46,000	NM
COMMONWEALTH OF THE NORTHERN MARIANA ISLANDS	Tinian	APR - Maintenance Support Facility	4,700	NM
FLORIDA	Eglin	F-35A Integrated Trng Center Academics Bldg	34,863	NM
FLORIDA	Eglin	F-35A Student Dormitory II	28,000	NM
FLORIDA	Macdill	KC135 Beddown Add Flt Simltr Training	3,100	NM
MARYLAND	JB Andrews	PAR Relocate Haz Cargo Pad and EOD Range	37,000	NM
MARYLAND	JB Andrews	Presidential Aircraft Recap Complex	154,000	NM
NEVADA	Crech	MQ-9 CPIP GCS Operations Facility	31,000	NM
NEVADA	Crech	MQ-9 CPIP Ops & Command Center Facility	28,000	NM
NEVADA	Nellis	CRH Simulator	5,900	NM
NEW MEXICO	Holloman	MQ-9 FTU Ops Facility	85,000	NM
NORTH DAKOTA	Minot	Consolidated Helo/TRF Ops/AMU and Alert Fac	66,000	NM
OKLAHOMA	Altus	KC-46A FTU/FTC Simulator Facility Ph 3	12,000	NM
OKLAHOMA	Tinker	KC-46A Depot Maintenance Hangar	81,000	NM
OKLAHOMA	Tinker	KC-46A Depot Fuel Maintenance Hangar	85,000	NM
SOUTH CAROLINA	Shaw	CPMP MQ-9 MCE Group	53,000	NM
UNITED KINGDOM	RAF Lakenheath	F-35A Parking Apron	27,431	NM
UNITED KINGDOM	RAF Lakenheath	F-35A AGE Facility	12,449	NM
UNITED KINGDOM	RAF Lakenheath	F-35A 6 Bay Hangar	39,036	NM
UNITED KINGDOM	RAF Lakenheath	F-35A ADAL Parts Store	13,926	NM
UNITED KINGDOM	RAF Lakenheath	F-35A Fuel System Maintenance Dock 2 Bay	16,880	NM
UNITED KINGDOM	RAF Lakenheath	F-35A Dorm	29,541	NM
UNITED KINGDOM	RAF Lakenheath	F-35A ADAL Conventional Munitions MX	9,204	NM
WORLDWIDE CLASSIFIED	Classified - Worldwide	TACMOR - Utilities and Infrastructure Support	18,000	NM
New Mission TOTAL			1,024,830	
WORLDWIDE UNSPECIFIED	Various Locations	Planning and Design	206,577	P&D
WORLDWIDE UNSPECIFIED	Various Locations	Unspecified Minor Military Construction	38,500	UMMC
Central Program TOTAL			245,077	
Active AF Program TOTAL			1,725,707	

**DEPARTMENT OF THE AIR FORCE
MILITARY CONSTRUCTION PROGRAM FISCAL YEAR 2019
INSTALLATION INDEX**

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ACC – AIR COMBAT COMMAND
AETC – AIR EDUCATION AND TRAINING COMMAND
AFCENT – AIR FORCE CENTRAL COMMAND
AFMC – AIR FORCE MATERIEL 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 2019
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 2019
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 11, identifies each project as 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 9. 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 AIRFORCE
MILITARY CONSTRUCTION PROGRAM FISCAL YEAR 2019
APPROPRIATION SOUGHT FOR PREVIOUSLY AUTHORIZED PROJECT**

ADDITIONAL APPROPRIATION SOUGHT FOR FY17 AUTHORIZATION

In the FY2019 President's Budget, the Department is requesting additional appropriation in the amount of \$25.0M for one project that was authorized in the National Defense Authorization Act for Fiscal Year 2017 (P.L. 114-328). The Joint Base San Antonio – Lackland BMT Recruit Dormitory 6 was authorized and fully appropriated in the Continuing Appropriations and Military Construction, Veterans Affairs, and, and Related Agencies Appropriations Act, 2017 and Zika Response and Preparedness Act (P.L. 114-223). The funding shortfall is due to cost increases in the overall construction market and shortage of skilled labor resources that were unforeseen at the timing of programming/appropriation. A similar shortfall occurred on BMT 5, after appropriation for BMT 6 had already been requested. The DD Form 1391 for this project is included at page 113.

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**DEPARTMENT OF THE AIRFORCE
MILITARY CONSTRUCTION PROGRAM FISCAL YEAR 2019
APPROPRIATION LANGUAGE**

FY2019 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, \$1,725,707, to remain available until September 30, 2023: Provided that, of this amount, not to exceed \$206,577,000 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 2019 MILITARY CONSTRUCTION PROGRAM				2. DATE (YYYYMMDD)			
3. INSTALLATION AND LOCATION EIELSON AIR FORCE BASE ALASKA						4. COMMAND PACIFIC AIR FORCES				5. AREA CONSTRUCTION COST INDEX 2.3	
6. PERSONNEL		(1) PERMANENT		(2) STUDENTS			(3) SUPPORTED			TOTAL	
		OFFICER	ENLISTED	CIVILIAN	OFFICER	ENLISTED	CIVILIAN	OFFICER	ENLISTED	CIVILIAN	
a. AS OF	30-Sep-17	172	1707	404	4	21	0	163	654	137	3,262
b. END FY	2023	189	2479	516	4	21	0	163	654	137	4,163
7. INVENTORY DATA (\$000)											
a. TOTAL ACREAGE		19,789									
b. INVENTORY TOTAL AS OF		30-Sep-17									
										8,485,738	
c. AUTHORIZATION NOT YET IN INVENTORY										115,300	
d. AUTHORIZATION REQUESTED IN THIS PROGRAM (FY 2019)										63,300	
e. PLANNED IN NEXT FOUR PROGRAM YEARS (FY 2020-2023)										0	
f. REMAINING DEFICIENCY										0	
g. GRAND TOTAL										8,664,338	
8. PROJECTS REQUESTED IN THIS PROGRAM (FY 2019)											
a. CATEGORY							b. COST (\$000)		c. DESIGN STATUS		
(1) CODE	(2) PROJECT TITLE				(3) SCOPE				(1) START	(2) COMPLETE	
171-475	F-35 CATM Range				1,387 SM		19,000		06/17	09/18	
740-883	F-35A School Age Facility				1,891 SM		22,500		06/17	09/18	
216-642	F-35 Conventional Munitions Maintenance Facility				874 SM		15,500		07/17	09/18	
211-154	F-35 Aircraft Maintenance Unit Admin Facility				456 SM		6,800		07/17	09/18	
TOTAL							63,800				
9. FUTURE PROJECTS IN NEXT FOUR PROGRAM YEARS											
FUTURE PROJECTS TOTAL							0				
R&M UNFUNDED REQUIREMENT (\$M)							TOTAL	27.5			
10. MISSION OR MAJOR FUNCTIONS											
Eielson AFB is home to the 354th Fighter Wing. Its mission is to train and support combat power across the globe while taking care of our people, their families, and our infrastructure; it is host to an operations group with an F-16 Squadron, and maintenance, mission support and medical groups, as well as 10 tenant units, to include Alaska's Air National Guard 168th Refueling Wing and the future F-35 mission.											
11. OUTSTANDING POLLUTION AND SAFETY DEFICIENCIES (FY 2017-2021)											
a. Air Pollution											
b. Water Pollution											
c. Occupational Safety and Health											
d. Other Environmental											
OUTSTANDING DEFICIENCIES TOTAL							0				

1. COMPONENT AIR FORCE		FY2019 MILITARY CONSTRUCTION PROJECT DATA		2. DATE	
3. INSTALLATION AND LOCATION EIELSON AIR FORCE BASE, ALASKA			4. PROJECT TITLE F-35 CATM RANGE		
5. PROGRAM ELEMENT 14494		6. CATEGORY CODE 171-475		7. PROJECT NUMBER 1703/FTQW180110	
				8. PROJECT COST (\$000) 19,000	
9. COST ESTIMATE					
ITEM		U/M	QUANTITY	UNIT COST	COST (\$000)
PRIMARY FACILITY					13,854
INDOOR SMALL ARMS RANGE (171-475)		SM	1,387	9,792	(13,582)
SUSTAINABILITY		LS			(272)
SUPPORTING FACILITIES					2,538
UTILITIES		LS			(364)
PAVEMENTS		LS			(606)
SITE IMPROVEMENTS		LS			(1,262)
DEMOLITION		LS			(30)
COMMUNICATIONS		LS			(52)
ENVIRONMENTAL		LS			(150)
ARCHEOLOGICAL		LS			(75)
SUBTOTAL					16,392
CONTINGENCY (5%)					820
TOTAL CONTRACT COST					17,212
SUPERVISION, INSPECTION, AND OVERHEAD (6.5%)					1,119
DESIGN BUILD - DESIGN COST (4%)					688
TOTAL REQUEST					19,019
TOTAL REQUEST (ROUNDED)					19,000
10. DESCRIPTION OF PROPOSED CONSTRUCTION: Construct a Combat Arms Training and Maintenance (CATM) Indoor Small Arms Range using conventional design and construction methods to accommodate the mission of the facility in support of the F-35 stationing. The facility should be compatible with applicable DoD, Air Force, and base design standards. In addition, local materials and construction techniques shall be used cost effectively. The facility must also be able to withstand wind loads and seismic effects as prescribed in applicable codes and design guides. The facility 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.					
11. REQUIREMENT: 1,387 SM Adequate: 1,600 SM Substandard: 0 SM					
PROJECT: Construct Indoor Small Arms Range					
REQUIREMENT: Eielson Air Force Base (AFB) is the preferred beddown alternative for the second Main Operating Base (MOB) for the F-35A aircraft. Construct a new 14 firing point Indoor Small Arms Range to adequately support F-35 operations. The newly constructed facility will provide a 14-lane indoor small arms range and associated support areas that include a vestibule/corridor, mechanical room, electrical room, telecommunications room, and mechanical yard.					
CURRENT SITUATION: Currently there is not an indoor small arms range at Eielson AFB. Due to the extreme climate, the opportunity to utilize the outdoor range is limited by the elements. Active Duty Air Force are required to train and qualify once a year and prior to deployment. The anticipated increase in population associated with the F-35 beddown will result in 1,400 additional personnel (a 116% increase) to use the range and associated facilities to fulfil training requirements for the F-35 mission.					
IMPACT IF NOT PROVIDED: The combination of the increase in population associated with the F-35 beddown and extreme arctic weather conditions will limit range operations and the ability for the growing population to properly train and qualify. This will negatively impact the F-35 mission and increase the risk of untrained personnel.					

1. Component AIR FORCE	FY 2019 MILITARY CONSTRUCTION PROGRAM			2. Date																				
3. Installation and Location/UIC: EIELSON AIR FORCE BASE, ALASKA, USA			4. Project Title F-35A CATM RANGE																					
5. Program Element 14494	6. Category Code 171-475	7. Project Number 1703/FTQW180110	8. Project Cost (\$000) 19,000																					
ADDITIONAL: This project meets the applicable criteria/scope specified in Air Force Manual 32-1084, "Facility Requirements". F-35 CATM Range: 1387 SM = 14,925 SF. Civil Engineer: Comm. (907) 377-5213 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.																								
12. Supplemental Data: a. Estimated Execution Data (1) Project to be accomplished by design-build procedures (2) Basis <table style="width: 100%; border: none;"> <tr> <td style="padding-left: 20px;">(a) Total Design Cost (\$000):</td> <td style="text-align: right;">\$880</td> </tr> <tr> <td style="padding-left: 20px;">(b) Energy Study and/or Life Cycle Analysis Performed:</td> <td style="text-align: right;">Yes</td> </tr> <tr> <td style="padding-left: 20px;">(c) Standard or Definitive Design Used?</td> <td style="text-align: right;">No</td> </tr> </table> (3) Construction Data: <table style="width: 100%; border: none;"> <tr> <td style="padding-left: 20px;">(a) Construction Award:</td> <td style="text-align: right;">02/2019</td> </tr> <tr> <td style="padding-left: 20px;">(b) Construction Start:</td> <td style="text-align: right;">04/2019</td> </tr> <tr> <td style="padding-left: 20px;">(c) Construction Complete:</td> <td style="text-align: right;">12/2020</td> </tr> </table> b. Equipment associated with this project provided from other appropriations: <table style="width: 100%; border: none; margin-top: 20px;"> <thead> <tr> <th style="text-align: left;">EQUIPMENT NOMENCLATURE</th> <th style="text-align: center;">PROCURING APPROPRIATION</th> <th style="text-align: center;">FISCAL YEAR APPROPRIATED OR REQUESTED</th> <th style="text-align: center;">COST (\$000)</th> </tr> </thead> <tbody> <tr> <td>FURNITURE, FIXTURES AND EQUIPMENT</td> <td style="text-align: center;">3400</td> <td style="text-align: center;">2021</td> <td style="text-align: center;">50</td> </tr> </tbody> </table>					(a) Total Design Cost (\$000):	\$880	(b) Energy Study and/or Life Cycle Analysis Performed:	Yes	(c) Standard or Definitive Design Used?	No	(a) Construction Award:	02/2019	(b) Construction Start:	04/2019	(c) Construction Complete:	12/2020	EQUIPMENT NOMENCLATURE	PROCURING APPROPRIATION	FISCAL YEAR APPROPRIATED OR REQUESTED	COST (\$000)	FURNITURE, FIXTURES AND EQUIPMENT	3400	2021	50
(a) Total Design Cost (\$000):	\$880																							
(b) Energy Study and/or Life Cycle Analysis Performed:	Yes																							
(c) Standard or Definitive Design Used?	No																							
(a) Construction Award:	02/2019																							
(b) Construction Start:	04/2019																							
(c) Construction Complete:	12/2020																							
EQUIPMENT NOMENCLATURE	PROCURING APPROPRIATION	FISCAL YEAR APPROPRIATED OR REQUESTED	COST (\$000)																					
FURNITURE, FIXTURES AND EQUIPMENT	3400	2021	50																					

1. Component AIR FORCE	FY 2019 MILITARY CONSTRUCTION PROGRAM			2. Date
3. Installation and Location/UIC: EIELSON AIR FORCE BASE EIELSON SITE #1 ALASKA			4. Project Title F-35A SCHOOL AGE FACILITY	
5. Program Element 27142F	6. Category Code 740-883	7. Project Number 1703/FTQW180109	8. Project Cost (\$000) \$22,500	
9. COST ESTIMATES				
Item	U/M	Quantity	Unit Cost	Cost (\$000)
PRIMARY FACILITIES				
SCHOOL AGE PROGRAM FACILITY (740-883)	SM	1,891	7,063	13,722 (13,455)
SUSTAINABILITY AND ENERGY MEASURES	LS			(267)
SUPPORTING FACILITIES				
SITE IMPROVEMENTS	LS			5,585 (3,098)
UTILITIES	LS			(873)
PAVEMENTS	LS			(1,013)
COMMUNICATIONS	LS			(39)
ENVIRONMENTAL	LS			(150)
ARCHAEOLOGICAL MONITORING	LS			(75)
DEMOLITION	SM	668	.5	(337)
SUBTOTAL				19,307
CONTINGENCY (5.0%)				960
TOTAL CONTRACT COST				20,268
SUPERVISION, INSPECTION, & OVERHEAD (6.5%)				1,311
DESIGN BUILD - DESIGN COST (4%)				807
TOTAL REQUEST				22,385
TOTAL REQUEST (ROUNDED)				22,500
10. Description of Proposed Construction				
Construct a school age program facility utilizing conventional design and construction methods to accommodate the mission of the facility. The facility should be compatible with applicable DoD, Air Force, and base design standards. In addition, local materials and construction techniques should be used. The facility must also be able to withstand wind loads and seismic effects as prescribed in applicable codes and design guides. Project shall demolish building 3303 (668 SM). The facility 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 Load: 50 tons				
11. Requirement: 1,891 SM Adequate: 0 SM Substandard: 668 SM				
PROJECT:				
F-35 School Age Program Facility				
REQUIREMENT: Eielson AFB is the beddown location for the second Main Operating				

1. Component AIR FORCE		FY 2019 MILITARY CONSTRUCTION PROGRAM		2. Date	
3. Installation and Location/UIC: EIELSON AIR FORCE BASE, ALASKA, USA			4. Project Title F-35A SCHOOL AGE FACILITY		
5. Program Element 27142	6. Category Code 211-154	7. Project Number 1703/FTQW180109	8. Project Cost (\$000) \$22,500		
Base (MOB) for the F-35A aircraft. To support the new mission, a School Age Program facility capable of supporting an enrollment of 240 additional children in a remote arctic climate is required. Design should comply with the USAF Services Design Guide for Youth/School Age Center and UFC 4-740-6, Youth Centers. CURRENT SITUATION: The increase in population at Eielson AFB associated with the new F-35 stationing will increase the number of children that the School Age Program will need to serve. The existing School Age Program facility is at maximum capacity of 108 enrolled, and there is an extensive waiting list of children that are in need of care at the School Age Program facility. The existing facility lacks space to effectively serve the number of children enrolled in the facility based on the mission. The mission requires that children have the choice to move freely throughout the facility for activities; however, all activity rooms are at maximum capacity, which limits the movement of children throughout the facility. IMPACT IF NOT PROVIDED: If the School Age Program facility is not built, Eielson AFB will have a shortage of space to serve the dependents of active duty Air Force and Air Force civilian employees. Children will be turned away and wait listed from a program that will keep them safely occupied when not in school, directly impacting support of the F-35 mission, morale, and welfare. ADDITIONAL: The project meets the criteria/scope specified in UFC 4-740-6, Youth Centers. This project meets applicable criteria/scope specified in Air Force Manual 32-1084, "Facility Requirements" and Air Force Instruction 34-144, "Child and Youth Programs." 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 the standard facility design for School Age Program facilities is currently undergoing substantial revision. As such the design was fully coordinated with the AF Civil Engineering Center and AF Services Agency. A preliminary analysis of 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. Supporting Facilities costs are estimated to exceed 25% of the Primary Facility costs due to the extensive site improvements required for installation of outdoor play and classroom areas that meet applicable health, safety and AT requirements. School Age Program Facility: 1,891 SM = 20,351 SF. Base Civil Engineer: Comm (907) 377-5213 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 2019 MILITARY CONSTRUCTION PROGRAM			2. Date
3. Installation and Location/UIC: EIELSON AIR FORCE BASE, ALASKA, USA			4. Project Title F-35A SCHOOL AGE FACILITY	
5. Program Element 27142	6. Category Code 211-154	7. Project Number 1703/FTQW180109	8. Project Cost (\$000) \$22,500	
12. Supplemental Data: A. Estimated Execution Data (1) Project to be accomplished by design-build procedures (2) Basis (a) Total Design Cost (\$000): \$880 (b) Energy Study and/or Life Cycle Analysis Performed: Yes (c) Standard or Definitive Design Used? No (3) Construction Data: (a) Construction Award: 02/2019 (b) Construction Start: 04/2019 (c) Construction Complete: 12/2020				

1. Component AIR FORCE	FY 2019 MILITARY CONSTRUCTION PROGRAM			2. Date
3. Installation and Location/UIC: EIELSON AIR FORCE BASE EIELSON SITE #1 ALASKA		4. Project Title F-35 CONVENTIONAL MUNITIONS MAINTENANCE FACILITY		
5. Program Element 27142	6. Category Code 216-642	7. Project Number 1703/FTQW1054329	8. Project Cost (\$000) \$15,500	
9. COST ESTIMATES				
Item	U/M	Quantity	Unit Cost	Cost (\$000)
PRIMARY FACILITIES				7,092
CONVENTIONAL MUNS MAINT. FACILITY (216-642)	SM	874	7,955	(6,953)
SUSTAINABILITY AND ENERGY MEASURES	LS			(139)
SUPPORTING FACILITIES				6,779
SITE IMPROVEMENTS	LS			(1,536)
UTILITIES	LS			(371)
PAVEMENTS	LS			(1,636)
COMMUNICATIONS	LS			(77)
ENVIRONMENTAL REMEDIATION	LS			(125)
ARCHAEOLOGICAL MONITORING	LS			(75)
DEMOLITION	SM	1,380	1,535	(2,119)
SPECIAL CONSTRUCTION FEATURES	LS			(840)
SUBTOTAL				13,871
CONTINGENCY (5.0%)				694
TOTAL CONTRACT COST				14,565
SUPERVISION, INSPECTION, & OVERHEAD (6.5%)				947
TOTAL REQUEST				15,511
TOTAL REQUEST (ROUNDED)				15,500
10. Description of Proposed Construction				
Construct a Conventional Munitions Maintenance facility for the beddown of the first F-35 squadron at Eielson AFB using conventional design and construction methods to accommodate the mission of the facility. This project will also demolish existing Building (Bldg) 6385 (712 SM) and Bldg 1303 (530 SM). The new facility will be compatible with applicable DoD, Air Force, and base design standards. The facility must also be able to withstand wind loads and seismic effects as prescribed in applicable codes and design guides. Work includes, but is not limited to, the construction of a facility with deep pile special foundation system, steel structure with CMU and metal panel exterior, and standing seam metal roof for the administrative portion and single ply roof for the munitions bays. Project includes upgraded mechanical systems, interior and exterior lighting, lightning and surge protection, electrical grounding, and concrete loading apron. A 5,000 gallon domestic water storage tank and pump house is also required. Special foundations are included for arctic conditions. This facility 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 4-101-01.				

Previous editions are obsolete.

1. Component AIR FORCE	FY 2019 MILITARY CONSTRUCTION PROGRAM			2. Date
3. Installation and Location/UIC: EIELSON AIR FORCE BASE, ALASKA, USA			4. Project Title F-35 CONVENTIONAL MUNITIONS MAINTENANCE FACILITY	
5. Program Element 27142	6. Category Code 216-642	7. Project Number 1703/FTQW1054329	8. Project Cost (\$000) \$15,500	

Air Conditioning: 15.7 tons

11.Requirement: 874 SM Adequate: 0 SM Substandard: 1380 SM

PROJECT:
F-35 Conventional Munitions Maint Facility

REQUIREMENT:
This project demolishes existing Bldg 6385 and constructs a new Munitions Maintenance Facility on the same site. The facility provides three maintenance bays and an administrative area which includes space for NCOIC and Assistant NCOIC shared office, crew chief workstations, a production workroom, break area, and large tool storage room. The project also provides building support space such as restrooms, locker area, and adequately sized utility rooms.

Design requirements will conform to AFMAN 32-1084 (26 February 2016) and *Air Force Munitions Facilities Standards Guide, Volume 1*. Demolition of Bldg 6385 (712 SM) and Bldg 1303 (530 SM) is included in this project.

CURRENT SITUATION:
The existing Conventional Munitions Maintenance facility (Bldg 6385) has severe settlement issues as a result of permafrost degradation/melting. These settlement issues have caused the foundation to crack and the last maintenance bay to begin separating from the rest of the facility. In order for a facility in this location to avoid settling over time it must be placed on a deep pile foundation system. It was also discovered that the well providing water to the existing facility had been contaminated with arsenic and that the occupants of the facility could no longer drink the water or use the water to wash their hands. A new water filtration system needs to be installed and all the existing pipes within the facility need to be replaced so that the water can be used again. Because the costs associated with tying a new deep pile foundation system into an old structure are extremely high, and because the costs of renovating the facility to address the damage that has already been done by the permafrost settlement is so high, the recommendation is to demolish the existing facility and build a new facility in-place on top of a new deep pile foundation. This new facility will enable the MALS-24 to perform their mission in a facility that is safe and appropriately sized for the increased mission of the F-35 squadrons.

IMPACT IF NOT PROVIDED:
Eielson AFB is the third Main Operating Base (MOB) for the F-35A aircraft. The existing Conventional Munitions Maintenance facility at Eielson AFB is experiencing severe settlement issues due to thawing of permafrost beneath the facility. If this facility is not replaced, the facility's foundation will continue to fail, causing a potentially dangerous work environment for a mission that handles munitions and other explosives. The MALS-24 will not have

Previous editions are obsolete.

1. Component AIR FORCE	FY 2019 MILITARY CONSTRUCTION PROGRAM			2. Date
3. Installation and Location/UIC: EIELSON AIR FORCE BASE, ALASKA, USA			4. Project Title F-35 CONVENTIONAL MUNITIONS MAINTENANCE FACILITY	
5. Program Element 27142	6. Category Code 216-642	7. Project Number 1703/FTQW1054329	8. Project Cost (\$000) \$15,500	
a facility suitable for performing maintenance operations including assembly, disassembly, testing, troubleshooting, and repair of various munitions. This will severely hinder the readiness of the two incoming F-35 squadrons. ADDITIONAL: This project meets the criteria/scope specified in AFMAN 32-1084, Facility Requirements. This project was originally evaluated in the February 2016 F-35A Operational Beddown - Pacific Final Environmental Impact Statement as a renovation project that would add administrative space onto the existing Bldg 6385 to provide sufficient work space for 35 incoming F-35 personnel, however, it has been determined that demolition of existing facility and replacement with a new munitions facility is the most feasible option. This design shall conform to criteria established in the Air Force Corporate Facilities Standards (AFCFS), the Installation Facilities Standards (IFS), and will employ a standard facility design. Additional cost has been included in Site Improvements and Special Construction Features to cover the high cost of installing a deep pile foundation system to address the permafrost settlement issues at this site. This cost, as well as the inclusion of Demolition costs in the "Supporting Facilities" section of Block 9 result in an unusually high Supporting Facilities/Primary Facilities cost ratio. The initial cost estimate for this project is within DoD Pricing Guide parameters. Base Civil Engineer: Comm (907) 377-5213 F-35 Conventional Munitions Maintenance Facility: 874 SM=9,408 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.				

Previous editions are obsolete.

1. Component AIR FORCE	FY 2019 MILITARY CONSTRUCTION PROGRAM			2. Date
3. Installation and Location/UIC: EIELSON AIR FORCE BASE, ALASKA, USA			4. Project Title F-35 CONVENTIONAL MUNITIONS MAINTENANCE FACILITY	
5. Program Element 27142	6. Category Code 216-642	7. Project Number 1703/FTQW1054329	8. Project Cost (\$000) \$15,500	
12. Supplemental Data: A. Estimated Execution Data (1) Acquisition Strategy DBB (2) Design Data (a) Design or Request for Proposal (RFP) started: 07/2017 (b) Percent of Design Completed as of Jan 2018 15% (c) Design or RFP Complete: 09/2018 (d) Total Design Cost (\$000): \$620 (e) Energy Study and/or Life Cycle Analysis Performed: No (f) Standard or Definitive Design Used? (3) Construction Data: 02/2019 (a) Construction Award: 04/2019 (b) Construction Start: 01/2021 (c) Construction Complete:				

1. Component AIR FORCE	FY 2019 MILITARY CONSTRUCTION PROGRAM			2. Date
3. Installation and Location/UIC: EIELSON AIR FORCE BASE Eielson Site #1 ALASKA			4. Project Title F-35 AIRCRAFT MAINTENANCE UNIT ADMIN FACILITY	
5. Program Element 27142	6. Category Code 211-154	7. Project Number 1703/FTQW1053834	8. Project Cost (\$000) \$6,800	
9. COST ESTIMATES				
Item	U/M	Quantity	Unit Cost	Cost (\$000)
PRIMARY FACILITIES				3,979
AMU ADMIN FACILITY (211-154)	SM	456	8,555	(3,901)
SUSTAINABILITY AND ENERGY MEASURES	LS			(78)
SUPPORTING FACILITIES				2,144
SITE IMPROVEMENTS	LS			(468)
UTILITIES	LS			(52)
PAVEMENTS	LS			(53)
COMMUNICATIONS	LS			(9)
ENVIRONMENTAL REMEDIATION	LS			(920)
ARCHAEOLOGICAL MONITORING	LS			(75)
DEMOLITION	SM	507	1,118	(567)
SUBTOTAL				6,123
CONTINGENCY (5.0%)				306
TOTAL CONTRACT COST				6,429
SUPERVISION, INSPECTION, & OVERHEAD (6.5%)				418
TOTAL REQUEST				6,847
TOTAL REQUEST (ROUNDED)				6,800
10. Description of Proposed Construction				
Construct an Aircraft Maintenance Unit (AMU) Admin facility for the beddown of the first F-35 squadron at Eielson AFB using conventional design and construction methods to accommodate the mission of the facility. This project will also demolish Bldg 1307 (448 SM). The new facility will be compatible with applicable DoD, Air Force, and base design standards. In addition, local materials and construction techniques shall be used when 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. This facility 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 4-101-01. Air Conditioning Load: 8.2 tons				
11. Requirement: 1,817 SM Adequate: 1,361 SM Substandard: 507 SM				
PROJECT:				
F-35 Aircraft Maintenance Unit Admin Facility				

Previous editions are obsolete.

1. Component AIR FORCE		FY 2019 MILITARY CONSTRUCTION PROGRAM		2. Date	
3. Installation and Location/UIC: EIELSON AIR FORCE BASE, ALASKA, USA			4. Project Title F-35 AIRCRAFT MAINTENANCE UNIT ADMIN FACILITY		
5. Program Element 27142	6. Category Code 211-154	7. Project Number 1703/FTQW1053834	8. Project Cost (\$000) \$6,800		
<u>REQUIREMENT:</u> An adequately sized and configured AMU facility is required to support the incoming F-35A squadrons. This facility will provide area for the administrative spaces required to support the aircraft and contains space for flight planning, training, ALIS, and administration. The facility will also provide space for the storage, care, and issue of flight crew life support system equipment. Work includes, but is not limited to construction of a slab-on-grade concrete foundation, pre-engineered steel frame, batt insulation, and metal siding, and standing seam metal roof. Additionally, the facility will provide personal space for changing into and out of flight clothing. The site for the facility is located adjacent to the existing AMU facility (Bldg 1338). An enclosed connection will be provided between the new administrative facility and its operational counterpart. The facility is required to be operational no later than April 2020 to support the arrival of the first F-35A squadron. Design requirements will conform to AFMAN 32-1084 (26 February 2016) and the <i>Air Combat Command (ACC) Squadron Operations & Aircraft Maintenance Unit Design Guide</i>. 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 the facility will only be a portion of a standard AMU facility since the remainder of the functions reside in the existing adjacent building. Demolition of existing Bldg 1307, including its connection to Bldg 1306, is included in this project. Additional cost has been included in Environmental Remediation to deal with the contaminated soil on site. The cost to dispose of contaminated soil at Eielson AFB is extremely high due to lack of proximity to soil incineration facilities. This cost, as well as the inclusion of Demolition costs in the "Supporting Facilities" section of Block 9 result in an unusually high Supporting Facilities/Primary Facilities cost ratio. The initial cost estimate for this project is within DoD Pricing Guide parameters. <u>CURRENT SITUATION:</u> Bldg 1307 is past its service life (wood frame construction circa 1965) and the costs associated with renovating the building to correct deficiencies and support the F-35 AMU admin functions exceed the facility replacement cost. Therefore, Bldg 1307 will be demolished and the site will be used for the construction of an AMU admin facility. The site is adjacent to the AMU facility that will be utilized by the first Eielson F-35 squadron. There are currently no facilities on the installation available to house the administrative function associated with the F-35 squadron. <u>IMPACT IF NOT PROVIDED:</u> Eielson AFB is the third Main Operating Base (MOB) for the F-35A aircraft. Eielson AFB does not have an adequate AMU administrative facility available for the beddown of the F-35 squadrons. If this project is not provided, the USAF will not be able to receive the first F-35A squadron					

1. Component AIR FORCE	FY 2019 MILITARY CONSTRUCTION PROGRAM			2. Date
3. Installation and Location/UIC: EIELSON AIR FORCE BASE, ALASKA, USA			4. Project Title F-35 AIRCRAFT MAINTENANCE UNIT ADMIN FACILITY	
5. Program Element 27142	6. Category Code 211-154	7. Project Number 1703/FTQW1053834	8. Project Cost (\$000) \$6,800	
and fighter aircraft mission readiness will be compromised. ADDITIONAL: This project meets the criteria/scope specified in AFMAN 32-1084, Facility Requirements. All known alternative options were considered during the development of this project. A waiver from the requirement to perform an Economic Analysis will be obtained. 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 the facility will only be a portion of a standard AMU facility since the remainder of the functions reside in the existing adjacent building. Additional cost has been included in Environmental Remediation to deal with the contaminated soil on site. Cost has been included to haul the soil offsite after it has been tested. The initial cost estimate for this project is within DoD Pricing Guide parameters. Base Civil Engineer: Comm (907) 377-5213 F-35 Aircraft Maintenance Unit Admin Facility: 456 SM/4,908 SF JOINT USE CERTIFICATION: Mission Requirements, operational considerations and location are compatible with use by other components on an as available basis.				

Previous editions are obsolete.

1. Component AIR FORCE	FY 2019 MILITARY CONSTRUCTION PROGRAM			2. Date
3. Installation and Location/UIC: EIELSON AIR FORCE BASE, ALASKA, USA			4. Project Title F-35 AIRCRAFT MAINTENANCE UNIT ADMIN FACILITY	
5. Program Element 27142	6. Category Code 211-154	7. Project Number 1703/FTQW1053834	8. Project Cost (\$000) \$6,800	

12. Supplemental Data:

A. Estimated Execution Data

(1) Acquisition Strategy	DBB
(2) Design Data	
(a) Design of Request for Proposal (RFP) started:	07/2017
(b) Percent of Design Completed as of Jan 2019	15%
(c) Design or RFP Complete:	09/2018
(d) Total Design Cost (\$000):	\$272
(e) Energy Study and/or Life Cycle Analysis Performed:	No
(f) Standard or Definitive Design Used?	No
(3) Construction Data:	
(a) Construction Award:	02/2019
(b) Construction Start:	04/2019
(c) Construction Complete:	01/2021

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

1. COMPONENT AIR FORCE			FY 2019 MILITARY CONSTRUCTION PROGRAM						2. DATE (YYYYMMDD)		
3. INSTALLATION AND LOCATION LUKE AIR FORCE BASE ARIZONA						4. COMMAND AIR EDUCATION AND TRAINING COMMAND:			5. AREA CONSTRUCTION COST INDEX 0.96		
6. PERSONNEL		(1) PERMANENT			(2) STUDENTS			(3) SUPPORTED			TOTAL
		OFFICER	ENLISTED	CIVILIAN	OFFICER	ENLISTED	CIVILIAN	OFFICER	ENLISTED	CIVILIAN	
a. AS OF	30-Sep-17	347	3073	856	119	627	0	934	6232	907	13,095
b. END FY	2023	398	4001	736	119	627	0	934	6232	907	13,954
7. INVENTORY DATA (\$000)											
a. TOTAL ACREAGE		5,588									
b. INVENTORY TOTAL AS OF		30-Sep-17									
										5,962,233	
c. AUTHORIZATION NOT YET IN INVENTORY										46,800	
d. AUTHORIZATION REQUESTED IN THIS PROGRAM (FY 2019)										40,000	
e. PLANNED IN NEXT FOUR PROGRAM YEARS (FY 2020-2023)										0	
f. REMAINING DEFICIENCY										0	
g. GRAND TOTAL										6,049,033	
8. PROJECTS REQUESTED IN THIS PROGRAM (FY 2019)											
a. CATEGORY								b. COST (\$000)		c. DESIGN STATUS	
(1) CODE	(2) PROJECT TITLE				(3) SCOPE					(1) START	(2) COMPLETE
141-753	F-35A Squad Ops #6				2,123 SM			17,000		Design/Build	
211-154	F-35A ADAL AMU B914 Sq 6				4,520 SM			23,000		Design/Build	
TOTAL								40,000			
9. FUTURE PROJECTS IN NEXT FOUR PROGRAM YEARS (FY2020 - FY2023)											
FUTURE PROJECTS TOTAL										0	
R&M UNFUNDED REQUIREMENT (\$M)										TOTAL 31.4	
10. MISSION OR MAJOR FUNCTIONS											
LAFB is home to the largest fighter wing in the USAF, and it is the only active-duty F-16/F-35 training base in the world. The host command is the 56 FW under AETC. The wing comprises four groups, the 56th Range Management Office (RMO), and 24 squadrons, including six flying squadrons (2 F-35 & 4 F-16). There are several tenant units on base, including the 944th Fighter Wing, assigned to 10th Air Force and Air Force Reserve Command (AFRC), U.S. Marine Corps (USMC) Bulk Fuel Company C, and the U.S. Navy Reserves.											
11. OUTSTANDING POLLUTION AND SAFETY DEFICIENCIES (FY 2019-2023)											
a. Air Pollution											
b. Water Pollution											
c. Occupational Safety and Health											
d. Other Environmental											
OUTSTANDING DEFICIENCIES TOTAL										0	

1. COMPONENT AIR FORCE	FY 2019 MILITARY CONSTRUCTION PROJECT DATA (computer generated)			2. DATE
3. INSTALLATION, SITE AND LOCATION LUKE AIR FORCE BASE LUKE A F BASE SITE # 1 ARIZONA		4. PROJECT TITLE F-35A SQUAD OPS #6		
5. PROGRAM ELEMENT 27597	6. CATEGORY CODE 141-753	7. RPSUID/PROJECT NUMBER 2517/NUEX133001A	8. PROJECT COST (\$000) 17,000	
9. COST ESTIMATES				
ITEM	U/M	QUANTITY	UNIT	COST (\$000)
PRIMARY FACILITIES				10,230
SQUADRON OPERATIONS FACILITY	SM	2,123	4,724	(10,029)
SUSTAINABILITY AND ENERGY MEASURES	LS			(201)
SUPPORTING FACILITIES				4,410
UTILITIES	LS			(1,726)
PAVEMENTS	LS			(183)
SITE IMPROVEMENTS	LS			(412)
COMMUNICATIONS REQUIREMENTS	LS			(276)
DEMOLITION	SM	4,034	294	(1,186)
ARIZONA TRANSACTION PRIVILEGE TAX (6.25%)	LS			(627)
SUBTOTAL				14,640
CONTINGENCY (5.0%)				732
TOTAL CONTRACT COST				15,372
SUPERVISION, INSPECTION AND OVERHEAD (5.7%)				876
DESIGN/BUILD - DESIGN COST (4.1% OF SUBTOTAL)				600
TOTAL REQUEST				16,848
TOTAL REQUEST (ROUNDED)				17,000
EQUIPMENT FROM OTHER APPROPRIATIONS (NON-ADD)				(1,349)
10. Description of Proposed Construction: Construct an F-35A Squadron Operations Facility using conventional design and construction methods to accommodate the mission of the facility. Construction will include the construction of a steel-framed structure, concrete slab and foundation system, masonry block exterior walls, and standing seam metal roof. The project will include all necessary utilities, site improvements, pavements, communications support infrastructure, and all necessary supporting work for a complete and usable facility. The project will demolish buildings 904, 983, and 30917 (4,034 SM). Facilities will be designed as permanent construction in accordance with the DoD Unified Facilities Criteria (UFC) 1-200-01, General Building Requirements and UFC 1-200-02, High Performance and Sustainable Building Requirements. This project will comply with DoD antiterrorism/force protection requirements per UFC 4-010-01. Air Conditioning: 100 Tons				
11. Requirement: 26548 SM Adequate: 21007 SM Substandard: 5541 SM <u>PROJECT:</u> F--35A Squad Ops #6 <u>REQUIREMENT:</u> An adequately sized and configured Squadron Operations Facility to support the beddown of the Joint Strike Fighter (JSF) F-35A aircraft. The facility is required to support the operations of an F-35A squadron and contains the space for flight planning, secure air crew briefing and debriefing, as well as training and administration of the squadron. Space must be provided for the storage, care				

1. COMPONENT AIR FORCE	FY 2019 MILITARY CONSTRUCTION PROJECT DATA (computer generated)			2. DATE
3. INSTALLATION, SITE AND LOCATION LUKE AIR FORCE BASE LUKE A F BASE SITE # 1 ARIZONA			4. PROJECT TITLE F-35A SQUAD OPS #6	
5. PROGRAM ELEMENT 27597	6. CATEGORY CODE 141-753	7. RPSUID/PROJECT NUMBER 2517/NUEX133001A	8. PROJECT COST (\$000) 17,000	
and issue of flight crew life support system equipment and personal space for changing into and out of flight clothing. Portions of the facility must meet Special Access Program Facility (SAPF) security certification. The facility is required to be operational no later than Mar 2021 in preparation for the F-35A squadron arrival in Jun 2021. <u>CURRENT SITUATION:</u> The current F-16 legacy Squadron Operations facilities are in poor condition, do not contain sufficient secure Special Access Program space for pilot briefings and space for fifth generation fighter aircraft Squadron Operating Units kits and are not configured properly for the F-35A training needs. <u>IMPACT IF NOT PROVIDED:</u> Without this project being funded and executed in 2019, the required operations functions and personnel will not be operationally ready to receive a sixth squadron of F-35A's in Jun of 2021. Work-arounds would not allow the squadron to train together and would significantly impact the training mission required to support the F-35A program at the Pilot Training Center. <u>ADDITIONAL:</u> This Project meets applicable criteria/scope specified in the AFMAN 32-1084 Facility Requirements and the Lockheed-Martin Aeronautics Company F-35 Lightning II Facilities Requirement Document. This design shall conform to criteria established in the Air Force Corporate Facility Standards (AFCFS) and the Installation Facility Standards (IFS), but will not employ a standard design because there is no AF standard facility design. However, it may be possible to harvest a similar design from other facilities. An economic analysis has been accomplished comparing status quo, renovation/reuse, addition/alteration, and new construction. This analysis indicates that new construction is the most cost effective alternative that meets mission requirements. The cost of supporting facilities is more than 25% of the cost of primary facilities and is due to the Arizona Transaction Privilege Tax of 6.25% that the State of Arizona charges all construction projects as well as demolition and environmental remediation expenses. 56th Fighter Wing Base Civil Engineer: Comm (623)856-6135. Squadron Operations: 2,123 SM (22,850SF). <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.				

1. COMPONENT AIR FORCE	FY 2019 MILITARY CONSTRUCTION PROJECT DATA (computer generated)		2. DATE																
3. INSTALLATION AND LOCATION LUKE AIR FORCE BASE LUKE A F BASE SITE # 1 ARIZONA		4. PROJECT TITLE F-35A SQUAD OPS #6																	
5. PROGRAM ELEMENT 27597	6. CATEGORY CODE 141-753	7. PROJECT NUMBER 2517/NUEX133001A	8. PROJECT COST (\$000) 17,000																
12. SUPPLEMENTAL DATA: a. Estimated Design Data: (1) Project to be accomplished by design-build procedures (2) Basis: (a) Standard or Definitive Design - NO (b) Where Design Was Most Recently Used - (3) All Other Design Costs 680 (4) Construction Contract Award 19 FEB (5) Construction Start 19 MAR (6) Construction Completion 20 SEP (7) Energy Study/Life-Cycle analysis was/will be performed YES b. Equipment associated with this project provided from other appropriations: <table border="1"> <thead> <tr> <th>EQUIPMENT NOMENCLATURE</th> <th>PROCURING APPRC</th> <th>FISCAL YEAR APPROPRIATED OR REQUESTED</th> <th>COST (\$000)</th> </tr> </thead> <tbody> <tr> <td>COMM</td> <td>3400</td> <td>19</td> <td>500</td> </tr> <tr> <td>AV EQUIPMENT</td> <td>3400</td> <td>19</td> <td>400</td> </tr> <tr> <td>FF&E</td> <td>3400</td> <td>19</td> <td>449</td> </tr> </tbody> </table>				EQUIPMENT NOMENCLATURE	PROCURING APPRC	FISCAL YEAR APPROPRIATED OR REQUESTED	COST (\$000)	COMM	3400	19	500	AV EQUIPMENT	3400	19	400	FF&E	3400	19	449
EQUIPMENT NOMENCLATURE	PROCURING APPRC	FISCAL YEAR APPROPRIATED OR REQUESTED	COST (\$000)																
COMM	3400	19	500																
AV EQUIPMENT	3400	19	400																
FF&E	3400	19	449																

1. COMPONENT AIR FORCE	FY 2019 MILITARY CONSTRUCTION PROJECT DATA (computer generated)			2. DATE
3. INSTALLATION, SITE AND LOCATION LUKE AIR FORCE BASE LUKE A F BASE SITE # 1 ARIZONA		4. PROJECT TITLE F-35A AIRCRAFT MAINTENANCE UNIT FACILITY		
5. PROGRAM ELEMENT 27597	6. CATEGORY CODE 211-154	7. RPSUID/PROJECT NUMBER 2517/NUEX133001B	8. PROJECT COST (\$000) 23,000	
9. COST ESTIMATES				
ITEM	U/M	QUANTITY	UNIT	COST (\$000)
PRIMARY FACILITIES				15,190
ADD AMU SOUTH B914 (211-154)	SM	415	6,745	(2,799)
ALTER AMU B914 (211-154)	SM	2,230	2,025	(4,516)
HANGAR RENOVATION (211-177)	SM	1,875	4,041	(7,577)
SUSTAINABILITY AND ENERGY MEASURES	LS			(299)
SUPPORTING FACILITIES				4,856
UTILITIES	LS			(1,088)
SITE IMPROVEMENTS	LS			(250)
PAVEMENTS	LS			(1,398)
COMMUNICATIONS	LS			(125)
ACCESS CONTROL/FACILITY STANDOFF	LS			(127)
DEMOLITION/ENVIRONMENTAL REMEDIATION	SM	2,295	405	(929)
ARIZONA TRANSACTION PRIVILEGE TAX (6.25%)	LS			(939)
SUBTOTAL				20,047
CONTINGENCY (5.0%)				1,002
TOTAL CONTRACT COST				21,049
SUPERVISION, INSPECTION AND OVERHEAD (5.7%)				1,200
DESIGN/BUILD - DESIGN COST (4.0% OF SUBTOTAL)				802
TOTAL REQUEST				23,051
TOTAL REQUEST (ROUNDED)				23,000
EQUIPMENT FROM OTHER APPROPRIATIONS (NON-ADD)				(1,422)
10. Description of Proposed Construction: Renovate an existing Aircraft Maintenance Unit (AMU) facility and construct an addition using conventional design and construction methods to accommodate the mission of the facility. Work will include upgrading AMU maintenance space to accommodate the F-35A and repair the roof as well as add a steel-framed structure, concrete slab and foundation system, masonry block exterior walls, and standing seam metal roof to the existing facility. The project will include all necessary utilities, site improvements, pavements, communications support infrastructure, and all necessary supporting work for a complete and usable facility. The project will demolish buildings 961, 917, and 956 (2295 SM). Facilities will be designed as permanent construction in accordance with the DoD Unified Facilities Criteria (UFC) 1-200-01, General Building Requirements and UFC 1-200-02, High Performance and Sustainable Building Requirements. This project will comply with DoD antiterrorism/force protection requirements per UFC 4-010-01. Air Conditioning: 60 Tons				
11. Requirement: 14135 SM Adequate: 9757 SM Substandard: 4378 SM PROJECT: F-35A ADAL AMU B914 Sq 6				

1. COMPONENT AIR FORCE	FY 2019 MILITARY CONSTRUCTION PROJECT DATA (computer generated)			2. DATE
3. INSTALLATION, SITE AND LOCATION LUKE AIR FORCE BASE LUKE A F BASE SITE # 1 ARIZONA			4. PROJECT TITLE F-35A AIRCRAFT MAINTENANCE UNIT FACILITY	
5. PROGRAM ELEMENT 27597	6. CATEGORY CODE 211-154	7. RPSUID/PROJECT NUMBER 2517/NUEX133001B	8. PROJECT COST (\$000) 23,000	
REQUIREMENT: An adequately sized and configured AMU facility is required to beddown the Joint Strike Fighter (JSF) F-35A aircraft. The facility will contain a vault for classified parts storage, COMSEC vault, unclassified maintenance debrief room, larger conference room, more administrative space, upgraded electrical service, and a larger tool crib. Work includes installation of F-35 unique electrical receptacles at each aircraft position and aircraft cooling units (ACUs) at each aircraft position with associated power distribution infrastructure for both aircraft and ACUs. The facility is required to be operational no later than March 2021 in preparation for sixth F-35A squadron aircraft arrival in June 2021. CURRENT SITUATION: The current F-16 legacy AMU facility is in poor condition and does not contain adequate space to house an F-35A AMU and all associated functions. The existing facility tool crib is undersized and does not contain classified parts storage or adequately sized secure communications vault. The hangar does not have the required ACUs necessary for maintaining the F-35. The existing electrical system does not provide the required power for proper aircraft maintenance. The existing fire suppression system is out of compliance and requires repairs/upgrades while the existing hangar lighting is deficient and must be replaced. The existing hangar roof is in need of replacement due to age and condition in the harsh Arizona weather conditions. IMPACT IF NOT PROVIDED: Without this project, the required maintenance and operations functions and personnel will not be operationally ready to receive the F-35A aircraft in March 2021. The current AMU facility is inadequate and outdated to conduct maintenance operations for the F-35 mission. ADDITIONAL: This project meets the applicable criteria/scope specified in the AFMAN 32-1084 Facility Requirements and the Lockheed-Martin Aeronautics Company F-35 Lightning II Facilities Requirement Document. This design shall conform to criteria established in the Air Force Corporate Facility Standards (AFCFS) and the Installation Facility Standards (IFS), but will not employ a standard design because there is no AF standard facility design for "addition/alterations" projects. An economic analysis has been accomplished comparing status quo, renovation, addition/alteration, and new construction. This analysis indicates that addition/alteration is the most cost effective alternative that meets mission requirements. The cost of supporting facilities is more than 25% of the cost of primary facilities is due to the Arizona Transaction Privilege Tax of 6.25% that the State of Arizona charges all construction projects was well demolition and environmental remediation expenses. Base Civil Engineer: (623) 856-6135. Add AMU South 415 SM (4467 SF); Alter AMU 2,230 SM (24,003 SF); Hanger Renovation 1,875 SM (20,182 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 2019 MILITARY CONSTRUCTION PROJECT DATA (computer generated)		2. DATE
3. INSTALLATION AND LOCATION LUKE AIR FORCE BASE LUKE A F BASE SITE # 1 ARIZONA		4. PROJECT TITLE F-35A AIRCRAFT MAINTENANCE UNIT FACILITY	
5. PROGRAM ELEMENT 27597	6. CATEGORY CODE 211-154	7. PROJECT NUMBER 2517/NUEX133001B	8. PROJECT COST (\$000) 23,000
12. SUPPLEMENTAL DATA: a. Estimated Design Data: (1) Project to be accomplished by design-build procedures (2) Basis: (a) Standard or Definitive Design - NO (b) Where Design Was Most Recently Used - (3) All Other Design Costs 920 (4) Construction Contract Award 19 FEB (5) Construction Start 19 MAR (6) Construction Completion 21 SEP (7) Energy Study/Life-Cycle analysis was/will be performed YES b. Equipment associated with this project provided from other appropriations:			
EQUIPMENT NOMENCLATURE	PROCURING APPRC	FISCAL YEAR APPROPRIATED OR REQUESTED	COST (\$000)
COMM EQUIPMENT	3400	20	110
AV EQUIPMENT	3400	20	75
MMHS	3080	20	375
FF&E	3400	20	862

1. COMPONENT AIR FORCE				FY 2019 MILITARY CONSTRUCTION PROGRAM				2. DATE (YYYYMMDD)			
3. INSTALLATION AND LOCATION EGLIN AIR FORCE BASE FLORIDA						4. COMMAND AIR FORCE MATERIEL COMMAND			5. AREA CONSTRUCTION COST INDEX 0.88		
6. PERSONNEL		(1) PERMANENT			(2) STUDENTS			(3) SUPPORTED			TOTAL
		OFFICER	ENLISTED	CIVILIAN	OFFICER	ENLISTED	CIVILIAN	OFFICER	ENLISTED	CIVILIAN	
a. AS OF 30-Sep-17		725	2607	3540	0	0	0	496	1020	622	9,010
b. END FY 2023		748	2598	3620	0	0	0	490	1000	602	9,058
7. INVENTORY DATA (\$000)											
a. TOTAL ACREAGE 453,516											
b. INVENTORY TOTAL AS OF 30-Sep-16											4,447,994
c. AUTHORIZATION NOT YET IN INVENTORY											44,275
d. AUTHORIZATION REQUESTED IN THIS PROGRAM (FY 2019)											37,800
e. PLANNED IN NEXT FOUR PROGRAM YEARS (FY 2021-2023)											56,200
f. REMAINING DEFICIENCY											11,400
g. GRAND TOTAL											4,597,669
8. PROJECTS REQUESTED IN THIS PROGRAM (FY 2019)											
a. CATEGORY								b. COST (\$000)		c. DESIGN STATUS	
(1) CODE	(2) PROJECT TITLE					(3) SCOPE				(1) START	(2) COMPLETE
171-621	F-35A Integrated Trng Center Academics Bldg					7,947 SM		34,863		Design/Build	
721-313	F-35A Student Dormitory II					7,258 SM		28,000		Design/Build	
TOTAL								62,863			
9. FUTURE PROJECTS IN NEXT FOUR PROGRAM YEARS (FY2020 - FY2023)											
722-351 F-35A Tech Trng Dining Facility Addition						1,329 SM		11,000			
721-312 Dormitories Replace Dorm 19						9,679 SM		44,000			
317-315 Long-Range Stand-Off Acquisition Fac						4,587 SM		9,600			
FUTURE PROJECTS TOTAL								64,600			
R&M UNFUNDED REQUIREMENT (\$M)								TOTAL		67.2	
10. MISSION OR MAJOR FUNCTIONS											
Eglin is an Air Force Materiel Command (AFMC) base serving as the focal point for all Air Force armaments. Eglin is responsible for the development, acquisition, testing, deployment and sustainment of all air-delivered non nuclear weapons. The base plans, directs and conducts test and evaluation of U.S. and allied air armament, navigation and guidance systems, and command and control systems.											
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 2019 MILITARY CONSTRUCTION PROJECT DATA (computer generated)			2. DATE
3. INSTALLATION, SITE AND LOCATION EGLIN AIR FORCE BASE EGLIN AFB SITE # 1 (EGLIN MAIN AND RESERVATION) FLORIDA			4. PROJECT TITLE F-35A INTEGRATED TRNG CENTER ACADEMICS BLDG	
5. PROGRAM ELEMENT 27597	6. CATEGORY CODE 171-621	7. RPSUID/PROJECT NUMBER 1695/FTFA143913	8. PROJECT COST (\$000) 34,863	
9. COST ESTIMATES				
ITEM	U/M	QUANTITY	UNIT	COST (\$000)
PRIMARY FACILITIES				24,167
TECHNICAL TRAINING CLASSROOM	SM	7,947	2,983	(23,707)
SUSTAINABILITY AND ENERGY MEASURES	LS			(460)
SUPPORTING FACILITIES				6,237
UTILITIES	LS			(1,404)
PAVEMENTS	LS			(3,351)
SITE IMPROVEMENTS	LS			(1,022)
COMMUNICATIONS	LS			(460)
SUBTOTAL				30,404
CONTINGENCY (5.0%)				1,520
TOTAL CONTRACT COST				31,924
SUPERVISION, INSPECTION AND OVERHEAD (5.7%)				1,820
DESIGN/BUILD - DESIGN COST (4.0% OF SUBTOTAL)				1,216
TOTAL REQUEST				34,960
TOTAL REQUEST (ROUNDED)				34,863
EQUIPMENT FROM OTHER APPROPRIATIONS (NON-ADD)				(3,500)
10. Description of Proposed Construction: Construct a new F-35A Tech Training classroom using conventional design and construction methods. Construction will include reinforced concrete foundation, structural steel frame, split-face concrete masonry unit veneer and a standing seam metal roof. The project will include all necessary utilities, site improvements, pavements, communications infrastructure, and all necessary supporting work for a complete and usable facility. 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: 200 Tons				
11. Requirement: 25953 SM Adequate: 0 SM Substandard: 18006 SM <u>PROJECT:</u> Construct F-35A Integrated Training Center Academics Building <u>REQUIREMENT:</u> This consolidated maintenance training center is required to support projected maintenance student loads with a ready for training date of March 2022. This facility will support training requirements for three US services (Air Force, Navy, and Marines) and eight international partners. The facility contains academic classrooms, virtual trainers, and various aircraft mockups (all non-deployable training components), as well as administrative/operations, instructor and engineering personnel required to conduct initial and replenishment training for maintenance personnel. Training in the Integrated Training Center will be				

1. COMPONENT AIR FORCE	FY 2019 MILITARY CONSTRUCTION PROJECT DATA (computer generated)			2. DATE
3. INSTALLATION, SITE AND LOCATION EGLIN AIR FORCE BASE EGLIN AFB SITE # 1 (EGLIN MAIN AND RESERVATION) FLORIDA			4. PROJECT TITLE F-35A INTEGRATED TRNG CENTER ACADEMICS BLDG	
5. PROGRAM ELEMENT 27597	6. CATEGORY CODE 171-621	7. RPSUID/PROJECT NUMBER 1695/FTFA143913	8. PROJECT COST (\$000) 34,863	
accomplished through the use of instructor-led classroom activities, independent study via Interactive Courseware Workstations, and hands-on training using aircraft mockups. <u>CURRENT SITUATION:</u> Projected maintenance training activities are projected to exceed the capacity in the current Integrated Training Center at Eglin AFB starting in March 2022. <u>IMPACT IF NOT PROVIDED:</u> Without this project in 2019, the F-35 training mission at Eglin AFB cannot maintain projected demand for maintenance training. Project BOD required by Sept 2021 to allow 6 months for LM training system installation to meet the Ready-for-Training of March 2022. Without this facility, Eglin AFB cannot house the training classrooms, trainers, and instructors required to accomplish training for the maintenance personnel needed to support F-35 operations of the three US services and eight international partner countries. Workarounds are not viable, so a delay in this project would significantly impact the training mission required to support the F-35 operations worldwide. <u>ADDITIONAL:</u> This project meets the scope/criteria specified in Air Force Manual 32-1084 and the Joint Strike Fighter Facility Requirements Document (FRD) developed by the Lockheed Martin Aeronautics Company. 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 mission. A preliminary analysis of reasonable options was accomplished comparing status quo, addition/alteration, and new construction and recommends new construction due to its the best cost-benefit ratio. 96th Test Wing Base Civil Engineer: Comm: 850-882-2876 (ext. 200). F-35A Integrated Tech Training Center Academic Building 7,947 SM = 85,510 SF <u>JOINT USE CERTIFICATION:</u> The facility is programmed for joint use with the Department of Navy.				

1. COMPONENT AIR FORCE	FY 2019 MILITARY CONSTRUCTION PROJECT DATA (computer generated)		2. DATE																
3. INSTALLATION AND LOCATION EGLIN AIR FORCE BASE EGLIN AFB SITE # 1 (EGLIN MAIN AND RESERVATION) FLORIDA		4. PROJECT TITLE F-35A INTEGRATED TRNG CENTER ACADEMICS BLDG																	
5. PROGRAM ELEMENT 27597	6. CATEGORY CODE 171-621	7. PROJECT NUMBER 1695/FTFA143913	8. PROJECT COST (\$000) 34,863																
12. SUPPLEMENTAL DATA: a. Estimated Design Data: (1) Project to be accomplished by design-build procedures (2) Basis: (a) Standard or Definitive Design - NO (b) Where Design Was Most Recently Used - (3) All Other Design Costs 1,400 (4) Construction Contract Award 19 FEB (5) Construction Start 19 MAR (6) Construction Completion 21 MAR (7) Energy Study/Life-Cycle analysis was/will be performed NO b. Equipment associated with this project provided from other appropriations: <table border="1"> <thead> <tr> <th>EQUIPMENT NOMENCLATURE</th> <th>PROCURING APPRC</th> <th>FISCAL YEAR APPROPRIATED OR REQUESTED</th> <th>COST (\$000)</th> </tr> </thead> <tbody> <tr> <td>COMMUNICATIONS EQUIPMENT</td> <td>3080</td> <td>2020</td> <td>900</td> </tr> <tr> <td>EQUIPMENT</td> <td>3080</td> <td>2020</td> <td>2,400</td> </tr> <tr> <td>SECURITY</td> <td>3400</td> <td>2020</td> <td>200</td> </tr> </tbody> </table>				EQUIPMENT NOMENCLATURE	PROCURING APPRC	FISCAL YEAR APPROPRIATED OR REQUESTED	COST (\$000)	COMMUNICATIONS EQUIPMENT	3080	2020	900	EQUIPMENT	3080	2020	2,400	SECURITY	3400	2020	200
EQUIPMENT NOMENCLATURE	PROCURING APPRC	FISCAL YEAR APPROPRIATED OR REQUESTED	COST (\$000)																
COMMUNICATIONS EQUIPMENT	3080	2020	900																
EQUIPMENT	3080	2020	2,400																
SECURITY	3400	2020	200																

1. COMPONENT AIR FORCE	FY 2019 MILITARY CONSTRUCTION PROJECT DATA (computer generated)			2. DATE
3. INSTALLATION, SITE AND LOCATION EGLIN AIR FORCE BASE EGLIN AFB SITE # 1 (EGLIN MAIN AND RESERVATION) FLORIDA			4. PROJECT TITLE F-35A STUDENT DORMITORY II	
5. PROGRAM ELEMENT 27597	6. CATEGORY CODE 721-313	7. RPSUID/PROJECT NUMBER 1695/FTFA093965	8. PROJECT COST (\$000) 28,000	
9. COST ESTIMATES				
ITEM	U/M	QUANTITY	UNIT	COST (\$000)
PRIMARY FACILITY				19,891
TECHNICAL TRAINING STUDENT HOUSING	SM	7,258	2,687	(19,501)
SUSTAINABILITY AND ENERGY MEASURES	LS			(390)
SUPPORTING FACILITIES				4,376
COMMUNICATIONS	LS			(398)
UTILITIES	LS			(1,243)
PAVEMENTS	LS			(1,989)
SITE IMPROVEMENTS	LS			(746)
SUBTOTAL				24,267
CONTINGENCY (5.0%)				1,213
TOTAL CONTRACT COST				25,480
SUPERVISION, INSPECTION AND OVERHEAD (5.7%)				1,452
DESIGN/BUILD - DESIGN COST (4.0% OF SUBTOTAL)				971
TOTAL REQUEST				27,903
TOTAL REQUEST (ROUNDED)				28,000
EQUIPMENT FROM OTHER APPROPRIATIONS (NON-ADD)				(2,800)
10. Description of Proposed Construction: Construct a new F-35A student pipeline dormitory using conventional design and construction methods. Construction will include reinforced concrete foundation, structural steel frame, split-face concrete masonry unit veneer and a standing seam metal roof. The project will include all necessary utilities, site improvements, pavements, communications infrastructure, elevators and all other work necessary for a complete and useable facility for 288 students (144 room-bath modules). 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: 250 Tons				
11. Requirement: 37768 SM Adequate: 16101 SM Substandard: 4991 SM <u>PROJECT:</u> F-35A Student Dormitory II <u>REQUIREMENT:</u> This project is required to properly house F-35A beddown pipeline students associated with the maintenance training function of the program. This project will provide a facility allowing pipeline students to concentrate on their studies. Properly designed and furnished quarters are essential to successful accomplishment of the increasingly complicated and important jobs our airmen must perform. <u>CURRENT SITUATION:</u> The current dormitory capacity for F-35A Maintenance students is 288 bed spaces. The Average Daily Student Load at the Eglin JSF Integrated				

1. COMPONENT AIR FORCE	FY 2019 MILITARY CONSTRUCTION PROJECT DATA (computer generated)			2. DATE
3. INSTALLATION, SITE AND LOCATION EGLIN AIR FORCE BASE EGLIN AFB SITE # 1 (EGLIN MAIN AND RESERVATION) FLORIDA			4. PROJECT TITLE F-35A STUDENT DORMITORY II	
5. PROGRAM ELEMENT 27597	6. CATEGORY CODE 721-313	7. RPSUID/PROJECT NUMBER 1695/FTFA093965	8. PROJECT COST (\$000) 28,000	
Training Center is projected to exceed 288 students during 2019 and continues to grow annually until 2036, when the estimated ADSL will exceed 900. The second 144 room dorm will accommodate maintenance student growth until approximately 2024, when the ADSL will exceed 600 and a third dorm is required. There is no additional dormitory space at Eglin AFB to house the projected student load. <u>IMPACT IF NOT PROVIDED:</u> Without this dormitory, some F-35A maintenance training students will not have adequate housing at the Eglin Integrated Training Center, thereby negatively impacting their training and the support they are to receive and the support they will be able to provide to this new weapon system. Pipeline students could be required to house off-base, geographically separating students from the JSF campus and limiting Training Instructor interaction and oversight. Alternatively, pipeline students could be required to triple bunk, violating the minimum space standards for pipeline training dormitories. Both of these options would negatively impact training effectiveness and ultimately mission effectiveness for the JSF program. <u>ADDITIONAL:</u> This project is within the scope criteria specified in Air Force Manual 32-1084, Facility Requirements and the 2006 Air Force Unaccompanied Housing Design Guide. 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 for this project. 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 will satisfy F-35 mission requirements. Sustainable principles, to include life cycle 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. 96th Test Wing Base Civil Engineer: Comm: 850-882-2876 (ext. 200). Technical Training/Pipeline Student Housing 7,258 SM = 78,096 SF BY-2 Unaccompanied Housing R&M Conducted: \$0 BY-1 Unaccompanied Housing R&M Conducted: \$0 Future Unaccompanied Housing R&M Requirements: \$440K JOINT USE CERTIFICATION: The facility is programmed for joint use with the Department of Navy				

1. COMPONENT AIR FORCE	FY 2019 MILITARY CONSTRUCTION PROJECT DATA (computer generated)		2. DATE																
3. INSTALLATION AND LOCATION EGLIN AIR FORCE BASE EGLIN AFB SITE # 1 (EGLIN MAIN AND RESERVATION) FLORIDA		4. PROJECT TITLE F-35A STUDENT DORMITORY II																	
5. PROGRAM ELEMENT 27597	6. CATEGORY CODE 721-313	7. PROJECT NUMBER 1695/FTFA093965	8. PROJECT COST (\$000) 28.000																
12. SUPPLEMENTAL DATA: a. Estimated Design Data: (1) Project to be accomplished by design-build procedures (2) Basis: (a) Standard or Definitive Design - YES (b) Where Design Was Most Recently Used - EGLIN AFB (3) All Other Design Costs 1,120 (4) Construction Contract Award 19 FEB (5) Construction Start 19 MAR (6) Construction Completion 21 MAR (7) Energy Study/Life-Cycle analysis was/will be performed YES b. Equipment associated with this project provided from other appropriations: <table border="1"> <thead> <tr> <th>EQUIPMENT NOMENCLATURE</th> <th>PROCURING APPRC</th> <th>FISCAL YEAR APPROPRIATED OR REQUESTED</th> <th>COST (\$000)</th> </tr> </thead> <tbody> <tr> <td>FURNISHINGS</td> <td>3400</td> <td>2020</td> <td>2,000</td> </tr> <tr> <td>COMMUNICATION EQUIPMENT</td> <td>3080</td> <td>2020</td> <td>400</td> </tr> <tr> <td>SECURITY</td> <td>3400</td> <td>2020</td> <td>400</td> </tr> </tbody> </table>				EQUIPMENT NOMENCLATURE	PROCURING APPRC	FISCAL YEAR APPROPRIATED OR REQUESTED	COST (\$000)	FURNISHINGS	3400	2020	2,000	COMMUNICATION EQUIPMENT	3080	2020	400	SECURITY	3400	2020	400
EQUIPMENT NOMENCLATURE	PROCURING APPRC	FISCAL YEAR APPROPRIATED OR REQUESTED	COST (\$000)																
FURNISHINGS	3400	2020	2,000																
COMMUNICATION EQUIPMENT	3080	2020	400																
SECURITY	3400	2020	400																

1. COMPONENT AIR FORCE			FY 2019 MILITARY CONSTRUCTION PROGRAM						2. DATE (YYYYMMDD) 20170911		
3. INSTALLATION AND LOCATION MACDILL AIR FORCE BASE FLORIDA				4. COMMAND AIR MOBILITY COMMAND				5. AREA CONSTRUCTION COST INDEX 0.96			
6. PERSONNEL		(1) PERMANENT			(2) STUDENTS			(3) SUPPORTED			TOTAL
		OFFICER	ENLISTED	CIVILIAN	OFFICER	ENLISTED	CIVILIAN	OFFICER	ENLISTED	CIVILIAN	
a. AS OF 30-Sep-17		295	1967	441	0	0	0	2881	3867	1379	10,830
b. END FY 2023		295	1967	441	0	0	0	2881	3867	1379	10,830
7. INVENTORY DATA (\$000)											
a. TOTAL ACREAGE		5,767									
b. INVENTORY TOTAL AS OF 30-Sep-17		2,260,301									
c. AUTHORIZATION NOT YET IN INVENTORY		50,294									
d. AUTHORIZATION REQUESTED IN THIS PROGRAM (FY 2019)		3,100									
e. PLANNED IN NEXT FOUR PROGRAM YEARS (FY 2020-2023)		0									
f. REMAINING DEFICIENCY		146,200									
g. GRAND TOTAL		2,459,895									
8. PROJECTS REQUESTED IN THIS PROGRAM (FY 2019)											
a. CATEGORY							b. COST (\$000)		c. DESIGN STATUS		
(1) CODE	(2) PROJECT TITLE				(3) SCOPE			(1) START		(2) COMPLETE	
171-212	KC135 Beddown Add Flt Simltr Training				460 SM		3,100	Design/Build			
TOTAL							3,100				
9. FUTURE PROJECTS IN NEXT FOUR PROGRAM YEARS											
FUTURE PROJECTS TOTAL 0											
R&M UNFUNDED REQUIREMENT (\$M)							TOTAL		12.9		
10. MISSION OR MAJOR FUNCTIONS											
The 6th Air Mobility Wing is comprised of the 6th Operations Group, the 6th Maintenance Group, the 6th Mission Support Group and the 6th Medical Group. In addition to the 6th Air Mobility Wing, MacDill Air Force Base, Florida, is also home to 28 mission partners, including U.S. Central Command and U.S. Special Operations Command. The presence of these two unified commands and other mission partners creates a unique multi-service community at MacDill, with all branches of the armed forces represented.											
11. OUTSTANDING POLLUTION AND SAFETY DEFICIENCIES (FY 2017-2021)											
a. Air Pollution b. Water Pollution c. Occupational Safety and Health d. Other Environmental											
OUTSTANDING DEFICIENCIES TOTAL							0				

1. COMPONENT AIR FORCE	FY 2019 MILITARY CONSTRUCTION PROJECT DATA (computer generated)			2. DATE
3. INSTALLATION, SITE AND LOCATION MACDILL AIR FORCE BASE MACDILL AFB SITE # 1 FLORIDA		4. PROJECT TITLE KC135 BEDDOWN ADD FLT SIMLTR TRAINING		
5. PROGRAM ELEMENT 41976	6. CATEGORY CODE 171-212	7. RPSUID/PROJECT NUMBER 2521/NVZR153710	8. PROJECT COST (\$000) 3,100	
9. COST ESTIMATES				
ITEM	U/M	QUANTITY	UNIT	COST (\$000)
PRIMARY FACILITIES				2,373
ADD BLDG FOR 1 WST	SM	460	4,777	(2,197)
ALTER BLDG FOR 1 WST	SM	36	3,628	(131)
SUSTAINABILITY AND ENERGY MEASURES	LS			(45)
SUPPORTING FACILITIES				336
PAVEMENT	LS			(201)
SITE IMPROVEMENTS	LS			(53)
UTILITIES	LS			(83)
SUBTOTAL				2,708
CONTINGENCY (5.0%)				135
TOTAL CONTRACT COST				2,844
SUPERVISION, INSPECTION AND OVERHEAD (5.7%)				162
DESIGN/BUILD - DESIGN COST (4.0% OF SUBTOTAL)				108
TOTAL REQUEST				3,114
TOTAL REQUEST (ROUNDED)				3,100
10. Description of Proposed Construction: Construct steel frame high-bay facility addition including administration space, training areas and one (1) additional simulator bay consisting of reinforced concrete foundation and floor slab, structural steel frame, split faced masonry walls, stucco exterior walls, standing seam metal roof, fire detection/suppression, utilities, site improvements, landscaping and all other necessary work as required. Alteration work includes floor reconfigurations and building infrastructure to accept building addition. Project complies with DoD antiterrorism/force protection requirements per unified facilities criteria. Facility addition will be designated permanent construction. Special site conditions account for fill required to elevate facility above flood plain. Air Conditioning: 30 Tons				
11. Requirement: 1943 SM Adequate: 1391 SM Substandard: SM <u>PROJECT:</u> Add to and Alter Flight Simulator, B295 <u>REQUIREMENT:</u> Flight simulator facilities must be adequately sized and configured to support the training requirements of the base. The beddown of additional tankers requires the existing facility be added to and altered to meet the increased training requirements. This project constructs an additional simulator bay, reconfigures building hallways for proper egress and realigns support areas to Bldg 295 as required to install one additional KC-135R Weapons System Trainer (WST). <u>CURRENT SITUATION:</u> MacDill AFB, located in Tampa, FL, is home to the 6th Air				

1. COMPONENT AIR FORCE	FY 2019 MILITARY CONSTRUCTION PROJECT DATA (computer generated)			2. DATE
3. INSTALLATION, SITE AND LOCATION MACDILL AIR FORCE BASE MACDILL AFB SITE # 1 FLORIDA			4. PROJECT TITLE KC135 BEDDOWN ADD FLT SIMLTR TRAINING	
5. PROGRAM ELEMENT 41976	6. CATEGORY CODE 171-212	7. RPSUID/PROJECT NUMBER 2521/NVZR153710	8. PROJECT COST (\$000) 3,100	
Mobility Wing and the 927th Air Reserve Wing and was selected to receive eight (8) additional KC-135 tankers scheduled to be redeployed to MacDill Air Force Base once the new KC-46A refueling tanker begins deployment. The current flight simulator facility is a 14,978 square foot/1,391 square meter facility consisting of one (1) simulator bay with Boom Operator Weapon System Trainer (BOWST) bay, administration space and training areas. The existing facility cannot support the training requirements of the added air crews associated with this beddown. The added air crews require the construction 4,946 square feet = 460 square meter addition consisting of one (1) additional flight simulator bay, added administration space and realignment of existing facility to meet air crew training and proficiency requirements. <u>IMPACT IF NOT PROVIDED:</u> 11 AFB will be unable to provide timely aircrew training necessary for the continued operation of the KC-135R aircraft. The lack of this addition will greatly increase training costs by requiring the use of aircraft for training which would otherwise be assigned to operational missions. This will place active KC-135R assets at higher risk of damage due to training accidents. On-the-job training will also result in higher fuel costs. MacDill AFB 6th Air Mobility Wings ability to support strategic en-route refueling of KC-135 tankers will be severely degraded. <u>ADDITIONAL</u> This project meets the scope/criteria specified in Air Force Handbook 32-1084, "Facility Requirements." An economic analysis was prepared comparing alternatives of new construction, alteration, leasing and status quo operations. New construction was found to be the most cost efficient over the life of the project. 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: Comm. (813) 828-3577. This project meets all applicable DoD criteria. 460 SM = 4,951 SF; 36 SM = 388 SF <u>JOINT USE CERTIFICATION:</u> Mission requirements, operational considerations, and locations are incompatible with use by other components.				

1. COMPONENT AIR FORCE	FY 2019 MILITARY CONSTRUCTION PROJECT DATA (computer generated)		2. DATE																
3. INSTALLATION AND LOCATION MACDILL AIR FORCE BASE MACDILL AFB SITE # 1 FLORIDA		4. PROJECT TITLE KC135 BEDDOWN ADD FLT SIMLTR TRAINING																	
5. PROGRAM ELEMENT 41976	6. CATEGORY CODE 171-212	7. PROJECT NUMBER 2521/NVZR153710	8. PROJECT COST (\$000) 3,100																
12. SUPPLEMENTAL DATA: a. Estimated Design Data: (1) Project to be accomplished by design-build procedures (2) Basis: (a) Standard or Definitive Design - NO (b) Where Design Was Most Recently Used - (3) All Other Design Costs 0 (4) Construction Contract Award 19 FEB (5) Construction Start 19 APR (6) Construction Completion 20 JUL (7) Energy Study/Life-Cycle analysis was/will be performed NO b. Equipment associated with this project provided from other appropriations: <table border="1"> <thead> <tr> <th>EQUIPMENT NOMENCLATURE</th> <th>PROCURING APPRO</th> <th>FISCAL YEAR APPROPRIATED OR REQUESTED</th> <th>COST (\$000)</th> </tr> </thead> <tbody> <tr> <td>COMMUNICATIONS EQUIPMENT</td> <td>3400</td> <td>2020</td> <td>40</td> </tr> <tr> <td>FURNISHINGS</td> <td>3400</td> <td>2020</td> <td>50</td> </tr> <tr> <td>FLIGHT SIMULATOR</td> <td>3080</td> <td>2020</td> <td>40,000</td> </tr> </tbody> </table>				EQUIPMENT NOMENCLATURE	PROCURING APPRO	FISCAL YEAR APPROPRIATED OR REQUESTED	COST (\$000)	COMMUNICATIONS EQUIPMENT	3400	2020	40	FURNISHINGS	3400	2020	50	FLIGHT SIMULATOR	3080	2020	40,000
EQUIPMENT NOMENCLATURE	PROCURING APPRO	FISCAL YEAR APPROPRIATED OR REQUESTED	COST (\$000)																
COMMUNICATIONS EQUIPMENT	3400	2020	40																
FURNISHINGS	3400	2020	50																
FLIGHT SIMULATOR	3080	2020	40,000																

1. COMPONENT AIR FORCE				FY 2019 MILITARY CONSTRUCTION PROGRAM				2. DATE (YYYYMMDD) 20171218			
3. INSTALLATION AND LOCATION JOINT BASE ANDREWS-NAF WASHINGTON ANDREWS SITE #1, MARYLAND						4. COMMAND AIR MOBILITY COMMAND				5. AREA CONSTRUCTION COST INDEX 1.0	
6. PERSONNEL		(1) PERMANENT			(2) STUDENTS			(3) SUPPORTED			TOTAL
		OFFICER	ENLISTED	CIVILIAN	OFFICER	ENLISTED	CIVILIAN	OFFICER	ENLISTED	CIVILIAN	
a. AS OF 30-Sep-17		440	2009	1001	0	448	0	2078	1859	0	7,835
b. END FY 2023		442	2017	979	0	448	0	2078	1859	0	7,823
7. INVENTORY DATA (\$000)											
a. TOTAL ACREAGE 7,770											
b. INVENTORY TOTAL AS OF 30-Sep-17										3,178,364	
c. AUTHORIZATION NOT YET IN INVENTORY										301,000	
d. AUTHORIZATION REQUESTED IN THIS PROGRAM (FY 2019)										191,000	
e. PLANNED IN NEXT FOUR PROGRAM YEARS (FY 2019-2022)										13,000	
f. REMAINING DEFICIENCY										288,500	
g. GRAND TOTAL										3,971,864	
8. PROJECTS REQUESTED IN THIS PROGRAM (FY 2019)											
a. CATEGORY								b. COST (\$000)		c. DESIGN STATUS	
(1) CODE	(2) PROJECT TITLE				(3) SCOPE					(1) START	(2) COMPLETE
112-211	PAR RELOCATE HAZ CARGO PAD AND EOD RANGE				61,043 SM			37,000		11/17	09/18
211-111	PRESIDENTIAL AIRCRAFT RECAP COMPLEX				106,704 SM			154,000		07/17	09/17
TOTAL								191,000			
9. FUTURE PROJECTS IN NEXT FOUR PROGRAM YEARS											
740-884 CHILD DEVELOPMENT CENTER 2,711 SM 13,000											
FUTURE PROJECTS TOTAL 13,000											
R&M UNFUNDED REQUIREMENT (\$M) TOTAL 58.9											
10. MISSION OR MAJOR FUNCTIONS											
Andrews Air Force Base provides contingency response capability critical to National Security to include emergency reaction rotary-wing airlift for the National Capitol Region, combat-ready Airmen to Air and Space Expeditionary Forces, and a secure installation and robust infrastructure to support base operations.											
11. OUTSTANDING POLLUTION AND SAFETY DEFICIENCIES (FY 2017-2021)											
a. Air Pollution											
b. Water Pollution											
c. Occupational Safety and Health											
d. Other Environmental											
OUTSTANDING DEFICIENCIES TOTAL 0											

1. COMPONENT AIR FORCE	FY 2019 MILITARY CONSTRUCTION PROJECT DATA (computer generated)			2. DATE
3. INSTALLATION, SITE AND LOCATION JOINT BASE ANDREWS-NAVAL AIR FACILITY WASHINGTON ANDREWS SITE # 1 MARYLAND			4. PROJECT TITLE PAR RELOCATE HAZ CARGO PAD AND EOD RANGE	
5. PROGRAM ELEMENT 41319	6. CATEGORY CODE 112-211	7. RPSUID/PROJECT NUMBER 1377/AJXF163002	8. PROJECT COST (\$000) 37,000	
9. COST ESTIMATES				
ITEM	U/M	QUANTITY	UNIT	COST (\$000)
PRIMARY FACILITIES				12,704
ACCESS TAXIWAY (112-211)	SM	28,533	232	(6,620)
HAZARDOUS CARGO PAD (116-662)	SM	7,791	232	(1,808)
HCP/TAXIWAY PAVED SHOULDERS (116-642)	SM	24,682	156	(3,850)
EOD PROFICIENCY RANGE (831-173)	SM	37	5,310	(196)
SUSTAINABILITY/ENERGY MEASURES	LS			(230)
SUPPORTING FACILITIES				20,476
ACTIVE/PASSIVE BARRIERS	EA	2	90,630	(181)
PERIMETER FENCING	LS			(759)
LIGHTING	LS			(1,314)
ACCESS ROAD	LS			(766)
UTILITIES	LS			(2,117)
SITE PREPARATION	LS			(15,339)
SUBTOTAL				33,180
CONTINGENCY (5.0%)				1,659
TOTAL CONTRACT COST				34,839
SUPERVISION, INSPECTION AND OVERHEAD (5.7%)				1,986
TOTAL REQUEST				36,825
TOTAL REQUEST (ROUNDED)				37,000
10. Description of Proposed Construction: Construct a Hazardous Cargo Pad (HCP) and Access Taxiway that complies with Airfield and Explosive Safety criteria. Construct Explosive Ordnance Disposal (EOD) proficiency range and supporting infrastructure in compliance with AF standards for safe training of EOD technicians and maintaining EOD qualifications. Add to and alter base perimeter fencing and install security/traffic control barriers. HCP consists of a concrete aircraft parking apron, asphalt shoulders, aircraft grounding system, and aircraft tie down points. HCP also requires a concrete access taxiway with asphalt shoulders. Project also includes site preparation, airfield taxiway and HCP lighting and markings, HCP and EOD range access roads, site improvements, necessary utilities rerouting and installation, airfield storm drainage features, required demolition, and all other necessary work. All work will utilize economical design and construction methods to accommodate the mission of the facilities and will be compatible with applicable DoD, Air Force, and base design standards. Facilities will be designed as permanent construction in accordance with 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.				

1. COMPONENT AIR FORCE	FY 2019 MILITARY CONSTRUCTION PROJECT DATA (computer generated)			2. DATE
3. INSTALLATION, SITE AND LOCATION JOINT BASE ANDREWS-NAVAL AIR FACILITY WASHINGTON ANDREWS SITE # 1 MARYLAND			4. PROJECT TITLE PAR RELOCATE HAZ CARGO PAD AND EOD RANGE	
5. PROGRAM ELEMENT 41319	6. CATEGORY CODE 112-211	7. RPSUID/PROJECT NUMBER 1377/AJXF163002	8. PROJECT COST (\$000) 37,000	
11. Requirement: 7791 SM Adequate: 0 SM Substandard: 0 SM PROJECT: Relocate Hazardous Cargo Pad and Explosive Ordnance Disposal Proficiency Range REQUIREMENT A hazardous cargo pad is required to load/unload explosives or other dangerous materials on cargo aircraft. This mission requires a location that meets both Airfield and Explosive Safety requirements. The pad will be sited to accommodate 30,000 pounds of net explosive weight (NEW). The taxiway provides aircraft access to the cargo pad. Pavement will be medium load with tie down anchors and grounding points. Maintaining qualified EOD technicians necessitates construction of an appropriately sited proficiency range. CURRENT SITUATION: The Secretary of the Air Force approved basing the PAR program at Joint Base Andrews (JBA), MD pending National Environmental Policy Act analysis. As a direct result of this bed down, the existing HCP and JADOC Satellite sites at JBA were displaced to allow construction of the new PAR Complex. The JADOC Satellite site construction caused relocation of the EOD Proficiency Range site. Siting the EOD range next to the HCP and the new Munitions Storage Area (MSA) makes the most functional sense as it allows for overlap of the explosive quantity-distance arcs associated with those facilities. IMPACT IF NOT PROVIDED: A temporary HCP will provided on taxiway Charlie for use during the construction of the new HCP (limited to 450 pound NEW, far below the required 30,000 pound NEW). Failing to replace the HCP will cause JBA to have enduring systemic weaknesses in its ability to support required military activities. Lack of an EOD proficiency range will adversely impact EOD training and force training to be accomplished at an off-base location at an increased cost. ADDITIONAL: This project meets the criteria/scope specified in Air Force Handbook 32-1084, Facility Requirements, UFC 3-260-01, Airfield and Heliport Planning and Design. An analysis of reasonable options for accomplishing this project indicates construction of the HCP on the selected southeast corner of the airfield will economically meet mission needs. The economic analysis of reasonable options for this project (status quo, and various new construction options) indicated new construction is required to meet mission needs. The analysis concluded that construction on the south east side of the airfield provided the greatest cost benefit without adversely impacting airfield safety. This option requires land acquisition and restrictive easements included in an FY18 MILCON, AJXF163002A - PAR Land Acquisition/Easement. Significant supporting facility costs are associated with development of off base land. Base Civil Engineer (11 CES/CC): 301-981-7281. Access Taxiway 28,533 SM equals 307,015 SF Pa ed Shoulders 24,682 SM equals 265,578 SF EOD Range 37 SM equals 398 SF				

1. COMPONENT AIR FORCE	FY 2019 MILITARY CONSTRUCTION PROJECT DATA (computer generated)			2. DATE
3. INSTALLATION, SITE AND LOCATION JOINT BASE ANDREWS-NAVAL AIR FACILITY WASHINGTON ANDREWS SITE # 1 MARYLAND			4. PROJECT TITLE PAR RELOCATE HAZ CARGO PAD AND EOD RANGE	
5. PROGRAM ELEMENT 41319	6. CATEGORY CODE 112-211	7. RPSUID/PROJECT NUMBER 1377/AJXF163002	8. PROJECT COST (\$000) 37,000	
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 AFCEC. Sustainable principles, to include Life Cycle cost-effective practices, will be integrated into the design, development, and construction of the project and will follow the guidance detailed in the AF Sustainable Design and Development Implementing Guidance Memorandum (dated June 2, 2011) in accordance with applicable laws and Executive Orders. 11th Wing Base Civil Engineer: Comm:. 301-981-7281. 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 2019 MILITARY CONSTRUCTION PROJECT DATA (computer generated)		2. DATE																										
3. INSTALLATION AND LOCATION JOINT BASE ANDREWS-NAVAL AIR FACILITY WASHINGTON ANDREWS SITE # 1 MARYLAND		4. PROJECT TITLE PAR RELOCATE HAZ CARGO PAD AND EOD RANGE																											
5. PROGRAM ELEMENT 41319	6. CATEGORY CODE 112-211	7. PROJECT NUMBER 1377/AJXF163002	8. PROJECT COST (\$000) 37,000																										
12. SUPPLEMENTAL DATA: 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 AFCEC. a. Estimated Design Data: (1) Status: <table> <tr> <td>(a) Date Design Started</td> <td>01-NOV-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>30-MAR-18</td> </tr> <tr> <td>(e) Date Design Complete</td> <td>03-SEP-18</td> </tr> <tr> <td>(f) Energy Study/Life-Cycle analysis was/will be performed</td> <td>NO</td> </tr> </table> (2) Basis: <table> <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> (3) Total Cost (c) = (a) + (b) or (d) + (e): (\$000) <table> <tr> <td>(a) Production of Plans and Specifications</td> <td>2,220</td> </tr> <tr> <td>(b) All Other Design Costs</td> <td>1,110</td> </tr> <tr> <td>(c) Total</td> <td>3,330</td> </tr> <tr> <td>(d) Contract</td> <td>2,775</td> </tr> <tr> <td>(e) In-house</td> <td>555</td> </tr> </table> (4) Construction Contract Award 19 SEP (5) Construction Start 19 OCT (6) Construction Completion 21 OCT * 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				(a) Date Design Started	01-NOV-17	(b) Parametric Cost Estimates used to develop costs	YES	* (c) Percent Complete as of 01 JAN 2018	15%	* (d) Date 35% Designed	30-MAR-18	(e) Date Design Complete	03-SEP-18	(f) Energy Study/Life-Cycle analysis was/will be performed	NO	(a) Standard or Definitive Design -	NO	(b) Where Design Was Most Recently Used -		(a) Production of Plans and Specifications	2,220	(b) All Other Design Costs	1,110	(c) Total	3,330	(d) Contract	2,775	(e) In-house	555
(a) Date Design Started	01-NOV-17																												
(b) Parametric Cost Estimates used to develop costs	YES																												
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(f) Energy Study/Life-Cycle analysis was/will be performed	NO																												
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1. COMPONENT AIR FORCE	FY 2018 MILITARY CONSTRUCTION PROJECT DATA (computer generated)			2. DATE
3. INSTALLATION, SITE AND LOCATION JOINT BASE ANDREWS-NAVAL AIR FACILITY WASHINGTON ANDREWS SITE # 1 MARYLAND			4. PROJECT TITLE PRESIDENTIAL AIRCRAFT RECAP COMPLEX	
5. PROGRAM ELEMENT 41319	6. CATEGORY CODE 211-111	7. RPSUID/PROJECT NUMBER 1377/AJXF173021	8. PROJECT COST (\$000) Auth: 0 Appr: 154,000	
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				

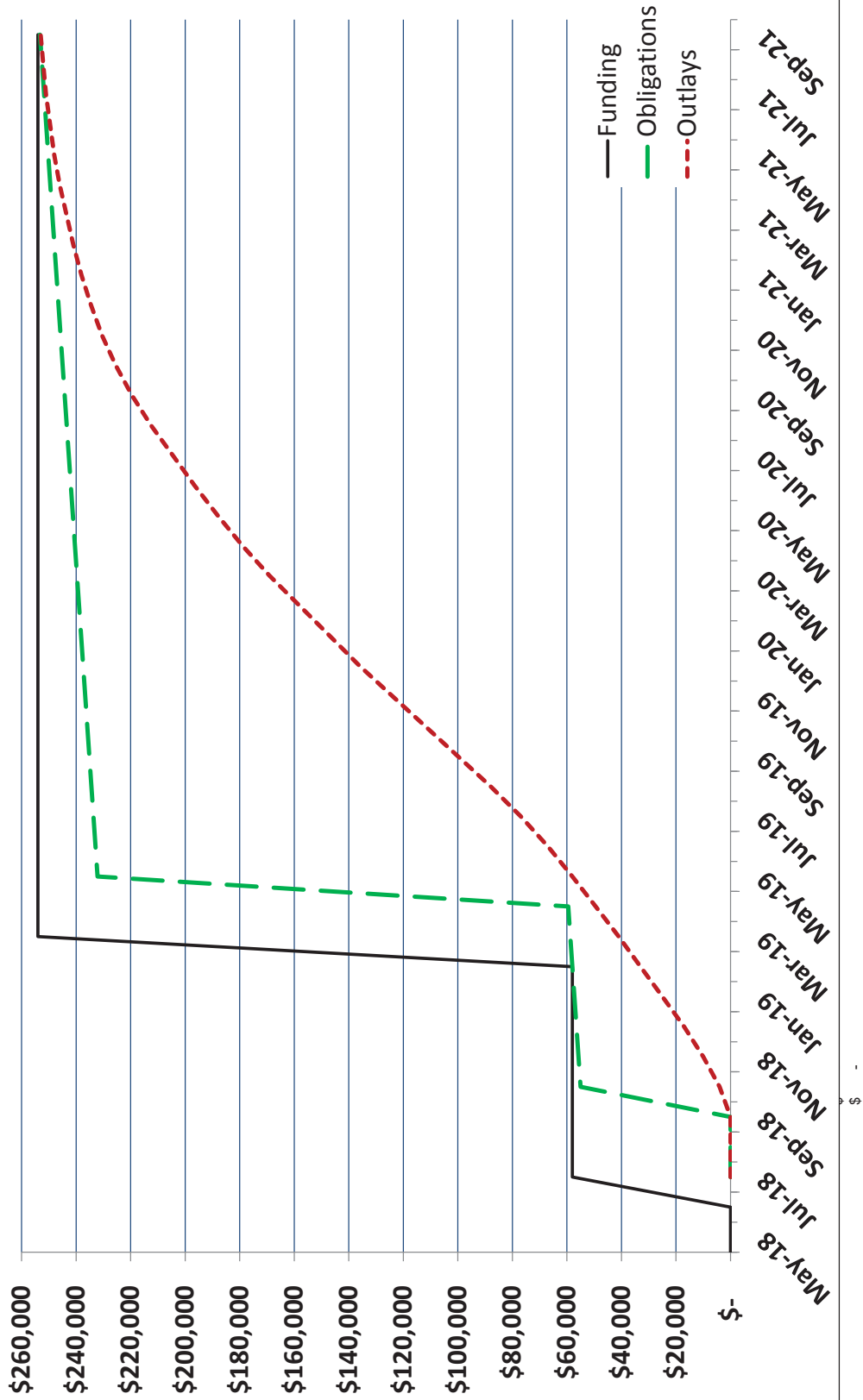
1. COMPONENT AIR FORCE	FY 2018 MILITARY CONSTRUCTION PROJECT DATA (computer generated)			2. DATE
3. INSTALLATION, SITE AND LOCATION JOINT BASE ANDREWS-NAVAL AIR FACILITY WASHINGTON ANDREWS SITE # 1 MARYLAND			4. PROJECT TITLE PRESIDENTIAL AIRCRAFT RECAP COMPLEX	
5. PROGRAM ELEMENT 41319	6. CATEGORY CODE 211-111	7. RPSUID/PROJECT NUMBER 1377/AJXF173021	8. PROJECT COST (\$000) Auth: 0 Appr: 154,000	
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 useable facilities. 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: 392 Tons				
11. Requirement: 34937 SM Adequate: 0 SM Substandard: 17238 SM PROJECT: Presidential Aircraft Recapitalization (PAR) Complex. (New Mission) 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 ICD 705 compliance, enhanced commissioning, post construction award services and security escorts are required for this project. 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. 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				

1. COMPONENT AIR FORCE	FY 2018 MILITARY CONSTRUCTION PROJECT DATA (computer generated)			2. DATE
3. INSTALLATION, SITE AND LOCATION JOINT BASE ANDREWS-NAVAL AIR FACILITY WASHINGTON ANDREWS SITE # 1 MARYLAND			4. PROJECT TITLE PRESIDENTIAL AIRCRAFT RECAP COMPLEX	
5. PROGRAM ELEMENT 41319	6. CATEGORY CODE 211-111	7. RPSUID/PROJECT NUMBER 1377/AJXF173021	8. PROJECT COST (\$000) Auth: 0 Appr: 154,000	
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. ADDITIONAL: This project meets the scope/criteria specified in Air Force Handbook 32-1084 "Facility Requirements" and DoDI 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. 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 2018 MILITARY CONSTRUCTION PROJECT DATA (computer generated)		2. DATE
3. INSTALLATION AND LOCATION JOINT BASE ANDREWS-NAVAL AIR FACILITY WASHINGTON ANDREWS SITE # 1 MARYLAND		4. PROJECT TITLE PRESIDENTIAL AIRCRAFT RECAP COMPLEX	
5. PROGRAM ELEMENT 41319	6. CATEGORY CODE 211-111	7. PROJECT NUMBER 1377/AJXF173021	8. PROJECT COST (\$000) Auth: 0 Appr: 154,000
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		18 FEB	
(5) Construction Start		18 MAR	
(6) Construction Completion		20 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

Attachment: Project Spending Plan

Presidential Aircraft Recap Complex, JB Andrews



PREVIOUS EDITION IS OBSOLETE.

1. COMPONENT AIR FORCE	FY 2019 MILITARY CONSTRUCTION PROJECT DATA (computer generated)			2. DATE
3. INSTALLATION, SITE AND LOCATION HANSCOM AIR FORCE BASE HANSCOM AFB SITE # 1 MASSACHUSETTS			4. PROJECT TITLE MIT-LINCOLN LABORATORY (WEST LAB CSL/MIF)	
5. PROGRAM ELEMENT 72976	6. CATEGORY CODE 317-315	7. RPSUID/PROJECT NUMBER 2487/MXRD153006	8. PROJECT COST (\$000) 225,000	
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	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 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 Fac (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				

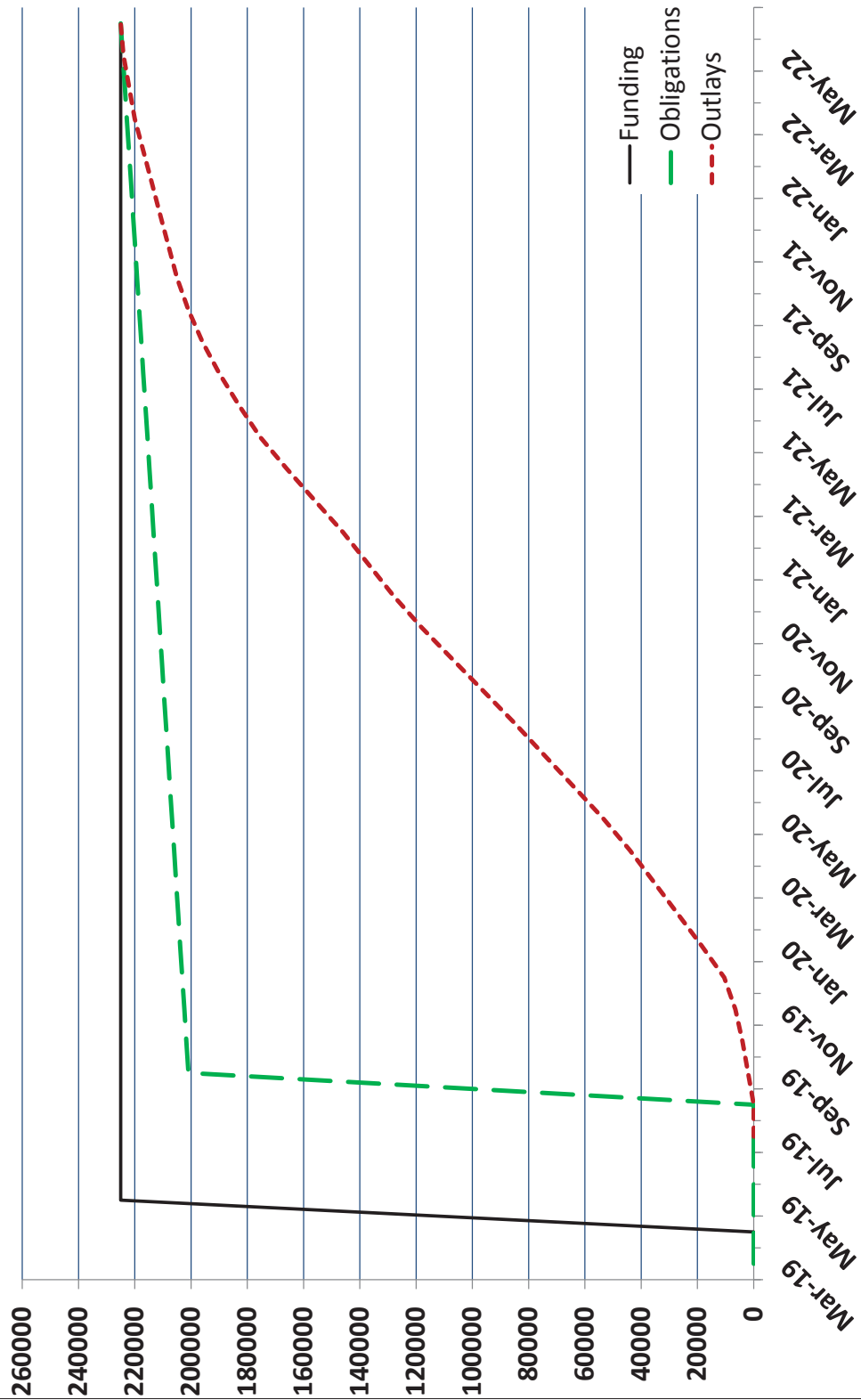
1. COMPONENT AIR FORCE	FY 2019 MILITARY CONSTRUCTION PROJECT DATA (computer generated)			2. DATE
3. INSTALLATION, SITE AND LOCATION HANSCOM AIR FORCE BASE HANSCOM AFB SITE # 1 MASSACHUSETTS			4. PROJECT TITLE MIT-LINCOLN LABORATORY (WEST LAB CSL/MIF)	
5. PROGRAM ELEMENT 72976	6. CATEGORY CODE 317-315	7. RPSUID/PROJECT NUMBER 2487/MXRD153006	8. PROJECT COST (\$000) 225,000	
Department of Defense. 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. 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. In many cases, MIT LL manufactures its own microelectronic materials and integrates them into system prototypes for field testing. There are typically nine to twelve large system programs underway at MIT LL, two-thirds of which are often space flight projects. The majority of the facilities that MIT LL utilizes were constructed in the 1950's. MIT LL has a long history of designing, fabricating and fielding specialized advanced electronic prototypes to enable a wide range of ground, air, and spaced-based missions of importance to our national security. From the co-invention of the diode laser in the 1960's, to the seminal work on 193-nm lithography, which is currently used to make most modern integrated circuits (ICs), to the specialized 3D laser-radar arrays which have flown over 900 mapping sorties in Afghanistan, MIT LL continues to leverage its specialized facilities to the benefit of the nation. MIT LL develops technology that protects DoD's space based communications and intelligence assets. 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. 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. 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				

1. COMPONENT AIR FORCE	FY 2019 MILITARY CONSTRUCTION PROJECT DATA (computer generated)			2. DATE
3. INSTALLATION, SITE AND LOCATION HANSCOM AIR FORCE BASE HANSCOM AFB SITE # 1 MASSACHUSETTS			4. PROJECT TITLE MIT-LINCOLN LABORATORY (WEST LAB CSL/MIF)	
5. PROGRAM ELEMENT 72976	6. CATEGORY CODE 317-315	7. RPSUID/PROJECT NUMBER 2487/MXRD153006	8. PROJECT COST (\$000) 225,000	
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. MIT LL also works on technology that has, and continues to protect ground forces from threats such as IED's and provides improved situational awareness and protection to forces located at forward operating bases. 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. ADDITIONAL: The criteria/scope for this program is not specified in Air Force Handbook 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. Base Civil Engineer: 781 - 225 - 2999 MIT Semi-Conductor / Microelectronics Lab Fac: 15,017 SM = 161,638 SF JOINT USE CERTIFICATION: Mission requirements, operational considerations, and location are incompatible with use by other components.				

1. COMPONENT AIR FORCE	FY 2019 MILITARY CONSTRUCTION PROJECT DATA (computer generated)			2. DATE
3. INSTALLATION AND LOCATION HANSCOM AIR FORCE BASE HANSCOM AFB SITE # 1 MASSACHUSETTS			4. PROJECT TITLE MIT-LINCOLN LABORATORY (WEST LAB CSL/MIF)	
5. PROGRAM ELEMENT 72976	6. CATEGORY CODE 317-315	7. PROJECT NUMBER 2487/MXRD153006	8. PROJECT COST (\$000) 225,000	
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 APR (6) Construction Completion 22 APR * 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:				

Attachment: Project Spending Plan

MIT-Lincoln Laboratory (West lab CSL/MIF)



1. COMPONENT AIR FORCE			FY 2019 MILITARY CONSTRUCTION PROGRAM						2. DATE (YYYYMMDD) 20171219		
3. INSTALLATION AND LOCATION OFFUTT AIR FORCE BASE NEBRASKA						4. COMMAND AIR COMBAT COMMAND			5. AREA CONSTRUCTION COST INDEX 0.98		
6. PERSONNEL		(1) PERMANENT			(2) STUDENTS			(3) SUPPORTED			TOTAL
		OFFICER	ENLISTED	CIVILIAN	OFFICER	ENLISTED	CIVILIAN	OFFICER	ENLISTED	CIVILIAN	
a. AS OF 30-Sep-17		1838	5627	4038	81	101	68	427	208	453	12,841
b. END FY 2023		1815	5467	3347	81	101	68	427	208	453	11,967
7. INVENTORY DATA (\$000)											
a. TOTAL ACREAGE 3,644											
b. INVENTORY TOTAL AS OF 30-Sep-17										4,129,666	
c. AUTHORIZATION NOT YET IN INVENTORY										0	
d. AUTHORIZATION REQUESTED IN THIS PROGRAM (FY 2019)										9,500	
e. PLANNED IN NEXT FOUR PROGRAM YEARS (FY 2020-2023)										0	
f. REMAINING DEFICIENCY										308,100	
g. GRAND TOTAL										4,447,266	
8. PROJECTS REQUESTED IN THIS PROGRAM (FY 2019)											
a. CATEGORY								b. COST (\$000)		c. DESIGN STATUS	
(1) CODE	(2) PROJECT TITLE						(3) SCOPE		(1) START	(2) COMPLETE	
852262	PARKING LOT, USSTRATCOM						24,963 SM	9,500	Design	Build	
TOTAL								9,500			
9. FUTURE PROJECTS IN NEXT FOUR PROGRAM YEARS											
FUTURE PROJECTS TOTAL								0			
R&M UNFUNDED REQUIREMENT (\$M)								TOTAL		15.4	
10. MISSION OR MAJOR FUNCTIONS											
Headquarters USSTRATCOM; A STRATEGIC AERIAL RECONNAISSANCE WING WITH 5 FLYING SQUADRONS FLYING THE OC/RC/TC/WC-135 CLASS AIRCRAFT AND 1 STRATEGIC COMMAND AND CONTROL SQUADRON FLYING THE E-4B, THE AIR FORCE WEATHER AGENCY, USAF HEARTLAND OF AMERICA BAND AND A STRATEGIC INTELLIGENCE SQUADRON.											
11. OUTSTANDING POLLUTION AND SAFETY DEFICIENCIES (FY 2017-2021)											
a. Air Pollution											
b. Water Pollution											
c. Occupational Safety and Health											
d. Other Environmental											
OUTSTANDING DEFICIENCIES TOTAL								0			

1. COMPONENT AIR FORCE		FY 2019 MILITARY CONSTRUCTION PROJECT DATA		2. DATE	
3. INSTALLATION AND LOCATION OFFUTT AIR FORCE BASE, NE			4. PROJECT TITLE: PARKING LOT, USSTRATCOM		
5. PROGRAM ELEMENT 27576F	6. CATEGORY CODE 852262	7 RPSUIDPROJECT NUMBER 3100/SGBP1047602	8. PROJECT COST (\$000) \$9,500		
9. COST ESTIMATES					
ITEM	U/M	QUANTITY	UNIT COST	COST (\$000)	
<u>PRIMARY FACILITIES</u>				3295	
CONSTRUCT PARKING STALLS	SM	24963	132	(3295)	
<u>SUPPORTING FACILITIES</u>				4960	
UTILITIES	LS	1	500	(500)	
CONSTRUCT LED LIGHT POLES	LS	30	15	(450)	
CONSTRUCT STORM SEWER	LS	1	1000	(1000)	
SITE IMPROVEMENTS	LS	1	1200	(1200)	
LANDSCAPING	LS	1	1200	(1200)	
CONSTRUCT PARKING LIGHTING AT EXISITING	LS	1	610	(610)	
SUBTOTAL				8,255	
CONTINGENCY (5%)				(413)	
DESIGN/BUILD DESIGN COST (4%)				(330)	
TOTAL CONTRACT COST				8,998	
SUPERVISION, INSPECTION AND OVERHEAD (5.7%)				(513)	
TOTAL REQUEST				9,511	
TOTAL REQUEST (ROUNDED)				9,500	
10. DESCRIPTION OF PROPOSED CONSTRUCTION:					
Construct a new parking lot in support of USSTRATCOM Command and Control Facility (C2F) (Building 1000). The facility will include ground level pavement parking, utilities, overhead lighting, storm water runoff mitigation, landscaping, site improvements, and associated supporting to provide a complete and usable facility. Facilities will be designed as permanent construction in accordance with 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: 0 Tons					
11 REQUIREMENT: 24,963 SM		ADEQUATE: 785,573 SM		SUBSTANDARD: 26,017 SM	
<u>PROJECT:</u> PARKING LOT, USSTRATCOM					
<u>REQUIREMENT:</u> USSTRATCOM is tasked with the vital roles of strategic deterrence, space operations, and cyberspace operations in our nation's defense. Nuclear, space, and network command and control operations require secure and survivable infrastructure. The USSTRATCOM C2F final MILCON construction omitted portions of the USSTRATCOM parking facility in the FY2012 MILCON project to ensure no compromise in the primary facilities critical aspects (Secret Compartmentalized Information Facility (SCIF) criteria for open storage, C2 Notes, High Altitude Electro Magnetic Pulse (HEMP) Shielded and survive an EF-5 tornado.)					

1. COMPONENT AIR FORCE	FY 2018 MILITARY CONSTRUCTION PROJECT DATA	2. DATE
3. INSTALLATION AND LOCATION OFFUTT AIR FORCE BASE, NE		
4. PROJECT TITLE PARKING LOT, USSTRATCOM		5. PROJECT NUMBER 3100/SGBP1047602
<u>CURRENT SITUATION:</u> The USSTRATCOM C2F will relocate 4,000 full-time employees from other facilities on base and centralize in a single location to optimize the USSTRATCOM mission. Existing parking at the old USSTRATCOM facility is located too far from the new facility to effectively re-utilize the existing parking. Other nearby parking location were sized for their facility occupancy IAW appropriate traffic code standards and cannot meet this new demand for parking. <u>IMPACT IF NOT PROVIDED:</u> There is currently not enough parking space at or near the new USSTRATCOM C2F to properly support the function of this facility. This project restores the parking lot scope that was removed from the USSTRATCOM facility contract when the project cost exceeded available FY2012 MILCON budget and ensures adequate parking to meet mission demands of the new USSTRATCOM C2F. <u>ADDITIONAL:</u> This project meets the applicable criteria/scope specified in Air Force Manual 32-1084, "Facility Requirements". An analysis of reasonable alternatives was accomplished as part of the original FY2012 MILCON and that new construction is the most cost effective means to meet the overall mission requirement. Offutt Base Civil Engineer: Comm. 402-294 -5501. Parking Lot: 24,963 SM = 268,699SF. <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.		

1. COMPONENT AIR FORCE	FY 2018 MILITARY CONSTRUCTION PROJECT DATA	2. DATE
3. INSTALLATION AND LOCATION OFFUTT AIR FORCE BASE, NE		
4. PROJECT TITLE PARKING LOT, USSTRATCOM		5. PROJECT NUMBER 3100/SGBP1047602
12. SUPPLEMENTAL DATA: a. Estimated Design Data: (1) Project to be accomplished by design-build procedures (2) Basis (a) Standard or Definitive Design (b) Where Design Was Most Recently Used (3) All Other Design Costs (4) Construction Contract Award (5) Construction Start Date (6) Construction Completion (7) Energy Study/Life-Cycle Analysis was/will be performed YES Shaw AFB 380 19 FEB 19 FEB 20 SEP YES b. Equipment associated with this project provided from other appropriations: N/A		

1. COMPONENT AIR FORCE			FY 2019 MILITARY CONSTRUCTION PROGRAM						2. DATE (YYYYMMDD) 20170911		
3. INSTALLATION AND LOCATION NELLIS AIR FORCE BASE CREECH AIR FORCE BASE SITE # 1 NEVADA						4. COMMAND AIR COMBAT COMMAND			5. AREA CONSTRUCTION COST INDEX 1.16		
6. PERSONNEL		(1) PERMANENT		(2) STUDENTS			(3) SUPPORTED			TOTAL	
		OFFICER	ENLISTED	CIVILIAN	OFFICER	ENLISTED	CIVILIAN	OFFICER	ENLISTED		CIVILIAN
a. AS OF	30-Sep-17	1223	5707	1234	50	11	0	79	125	197	8,626
b. END FY	2023	1251	5998	1233	50	11	0	79	125	125	8,872
7. INVENTORY DATA (\$000)											
a. TOTAL ACREAGE		2,318									
b. INVENTORY TOTAL AS OF		30-Sep-17									
c. AUTHORIZATION NOT YET IN INVENTORY		832,238									
d. AUTHORIZATION REQUESTED IN THIS PROGRAM (FY 2019)		0									
e. PLANNED IN NEXT FOUR PROGRAM YEARS (FY 2020-2023)		59,000									
f. REMAINING DEFICIENCY		0									
g. GRAND TOTAL		N/A									
8. PROJECTS REQUESTED IN THIS PROGRAM (FY 2019)											
a. CATEGORY								b. COST (\$000)	c. DESIGN STATUS		
(1) CODE	(2) PROJECT TITLE				(3) SCOPE				(1) START	(2) COMPLETE	
149-511	MQ-9 CPIP GCS OPERATIONS FACILITY				5,200 SM			31,000	Design/Build		
149-511	MQ-9 CPIP OPS & COMMAND CENTER FACILITY				4,000 SM			28,000	Design/Build		
TOTAL								59,000			
9. FUTURE PROJECTS IN NEXT FOUR PROGRAM YEARS (FY2020 - FY2023)											
N/A											
FUTURE PROJECTS TOTAL 0											
R&M UNFUNDED REQUIREMENT (\$M)								TOTAL	\$16.5M		
10. MISSION OR MAJOR FUNCTIONS											
The Nellis & Creech AFB complex manages advanced pilot training, operations, test and tactics development in air, pace and cyberspace. The 432nd Wing consists of combat-ready Airmen who fly the MQ-1 Predator and MQ-9 Reaper aircraft to support American and Coalition warfighters. The unmanned aircraft systems provide real-time reconnaissance, surveillance, and precision attack against fixed and time-critical targets. The Hunters conduct unmanned aircraft system initial qualification training for aircrew, intelligence, weather, and maintenance personnel.											
11. OUTSTANDING POLLUTION AND SAFETY DEFICIENCIES (FY 2019-2023)											
a. Air Pollution b. Water Pollution c. Occupational Safety and Health d. Other Environmental											
OUTSTANDING DEFICIENCIES TOTAL								0			

1. COMPONENT AIR FORCE	FY 2019 MILITARY CONSTRUCTION PROJECT DATA (computer generated)			2. DATE
3. INSTALLATION, SITE AND LOCATION NELLIS AIR FORCE BASE CREECH AIR FORCE BASE SITE # 1 NEVADA			4. PROJECT TITLE MQ-9 CPIP GCS OPERATIONS FACILITY	
5. PROGRAM ELEMENT 25219	6. CATEGORY CODE 149-511	7. RPSUID/PROJECT NUMBER 2374/LKTC203101	8. PROJECT COST (\$000) 31,000	
9. COST ESTIMATES				
ITEM	U/M	QUANTITY	UNIT	COST (\$000)
PRIMARY FACILITIES				23,877
RPA GUIDANCE CONTROL STATION SCIF (149-511)	SM	2,800	6,459	(18,085)
RPA SQUADRON OPERATIONS NON-SCIF (141-753)	SM	1,200	3,229	(3,875)
RENOVATE B1005	SM	1,200	1,200	(1,440)
SUSTAINABILITY & ENERGY MEASURES	LS			(477)
SUPPORTING FACILITIES				2,877
UTILITIES	LS			(400)
PAVEMENTS	LS			(100)
SITE IMPROVEMENTS	LS			(450)
STANDBY POWER	LS			(200)
FENCING	LS			(60)
COMMUNICATIONS SUPPORT	LS			(825)
CONSTRUCTION SURVEILLANCE TECHNICIANS	LS			(100)
DEMOLITION	SM	1,440	515	(742)
SUBTOTAL				26,754
CONTINGENCY (5.0%)				1,338
TOTAL CONTRACT COST				28,091
SUPERVISION, INSPECTION AND OVERHEAD (5.7%)				1,601
DESIGN/BUILD - DESIGN COST (4.0% OF SUBTOTAL)				1,070
TOTAL REQUEST				30,763
TOTAL REQUEST (ROUNDED)				31,000
EQUIPMENT FROM OTHER APPROPRIATIONS (NON-ADD)				(17,050)
10. Description of Proposed Construction: Description of Proposed Construction: Construct a MQ-9 Ground Control Station (GCS) Operations Facility in support of Remotely Piloted Aircraft (RPA) Operations Squadron Operations and renovate B1005 for the 732 OG/OSS Command Center Facility will be constructed with reinforced concrete foundation/floor slab, structural steel frame, split faced concrete masonry unit or precast concrete exterior, standing seam metal roof, fire detection/protection, special security enhancements, utilities, site improvements, landscaping, communications support, electrical infrastructure, backup generator, automatic transfer switch, manual transfer switch, UPS, and all other necessary support for a complete and usable facility. Bldgs. 1006, 1007, and 1008 (1,440 SM) will be demolished as part of this MILCON project. A higher-than-normal primary unit cost is required for the MQ-9 CPIP GCS Operations Facility, SCIF certified facility due to the unique requirements including raised floors, premise wiring for critical mission hardware and software, and ICD 503/705 SCIF accreditations and certifications due to real-world combat operations. Facilities will be designed as permanent construction in accordance with the DoD Unified Facilities Criteria (UFC)				

1. COMPONENT AIR FORCE	FY 2019 MILITARY CONSTRUCTION PROJECT DATA (computer generated)			2. DATE
3. INSTALLATION, SITE AND LOCATION NELLIS AIR FORCE BASE CREECH AIR FORCE BASE SITE # 1 NEVADA			4. PROJECT TITLE MQ-9 CPIP GCS OPERATIONS FACILITY	
5. PROGRAM ELEMENT 25219	6. CATEGORY CODE 149-511	7. RPSUID/PROJECT NUMBER 2374/LKTC203101	8. PROJECT COST (\$000) 31,000	
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 Unified Facility Criteria 4-010-01. Air Conditioning: 315 Tons				
11. Requirement: 5200 SM Adequate: 2270 SM Substandard: 9039 SM				
PROJECT: MQ-9 CPIP GCS Operations Facility				
REQUIREMENT: New ground control station (GCS) design for MQ-9 Operations facility, adequately sized and configured with appropriate security and redundant utility systems, is required to support personnel in support of the MQ-9 remotely piloted aircraft (RPA). Construct new facilities and renovate current facility to support MQ-9 operations. SCIF certified Squadron Operations/SOC are required. These operational facilities directly supports the warfighter in the Area of Responsibility (AOR) by allowing command and control of RPA weapons system operations from locations within the United States. This project provides the critical mission planning space required to operate fixed GCSs. The operations facility supports mission planning, flight operations, mission briefs/de-briefs, intelligence, and unit training devices. Non-SCIF areas support squadron support staff and administrative functions. This facility requires redundant communications, power, and critical utility systems to ensure sustained 24/7 operations.				
CURRENT SITUATION: RPA operations will continue to grow worldwide, as intelligence, surveillance and reconnaissance continue to be the most critical capability requested by combatant commanders.				
IMPACT IF NOT PROVIDED: Failure to provide adequate facilities for the new Block 9 GCSs in a timely manner will negatively impact the installation's ability to professionally perform critical wartime mission requirements. Lack of properly configured facilities for the Block 9 will adversely impact overall combat capabilities in support of worldwide combatant commanders.				
ADDITIONAL: This project meets the criteria/scope specified 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 for "renovation" projects. However, new construction shall employ a standard "modular facilities" design approach based upon other GSC facilities. A preliminary analysis of reasonable options for accomplishing this project (Status Quo, Add/Alter, Conversion, New Construction) was accomplished. It indicates there is only one option that will meet operational requirements: New Construction. A higher-than-normal prime unit cost is required for the Sensitive Compartmentalized Information Facility (SCIF) area due to the unique requirements of the facility including raised floors, premise wiring for critical mission hardware and software, construction surveillance technicians, and ICD 503/705 SCIF accreditations and certifications due to real-world combat operations.				
Base Civil Engineer: Comm(702) 652-4833: RPA Guidance Control Station SCIF 2,800 SM = 30,139 SF; RPA Squadron Operations Non-SCIF 1,200 SM = 12,917 SF;				

1. COMPONENT AIR FORCE	FY 2019 MILITARY CONSTRUCTION PROJECT DATA (computer generated)			2. DATE
3. INSTALLATION, SITE AND LOCATION NELLIS AIR FORCE BASE CREECH AIR FORCE BASE SITE # 1 NEVADA			4. PROJECT TITLE MQ-9 CPIP GCS OPERATIONS FACILITY	
5. PROGRAM ELEMENT 25219	6. CATEGORY CODE 149-511	7. RPSUID/PROJECT NUMBER 2374/LKTC203101	8. PROJECT COST (\$000) 31,000	
Renovation 1,200 SM = 12,917 SF JOINT USE CERTIFICATION: The facility can be used by other components on an "as available" basis; however, the scope of the project is based on Air Force requirements.				

1. COMPONENT AIR FORCE	FY 2019 MILITARY CONSTRUCTION PROJECT DATA (computer generated)		2. DATE																								
3. INSTALLATION AND LOCATION NELLIS AIR FORCE BASE CREECH AIR FORCE BASE SITE # 1 NEVADA		4. PROJECT TITLE MQ-9 CPIP GCS OPERATIONS FACILITY																									
5. PROGRAM ELEMENT 25219	6. CATEGORY CODE 149-511	7. PROJECT NUMBER 2374/LKTC203101	8. PROJECT COST (\$000) 31,000																								
12. SUPPLEMENTAL DATA: a. Estimated Design Data: (1) Project to be accomplished by design-build procedures (2) Basis: (a) Standard or Definitive Design - NO (b) Where Design Was Most Recently Used - (3) All Other Design Costs 1,240 (4) Construction Contract Award 19 FEB (5) Construction Start 19 MAR (6) Construction Completion 21 MAR (7) Energy Study/Life-Cycle analysis was/will be performed YES b. Equipment associated with this project provided from other appropriations:																											
<table> <thead> <tr> <th>EQUIPMENT NOMENCLATURE</th> <th>PROCURING APPRO</th> <th>FISCAL YEAR APPROPRIATED OR REQUESTED</th> <th>COST (\$000)</th> </tr> </thead> <tbody> <tr> <td>UNINTERRUPTABLE POWER SUPPLY</td> <td>3080</td> <td>2020</td> <td>200</td> </tr> <tr> <td>CONST SURVEILLANCE TECHS</td> <td>3400</td> <td>2019</td> <td>100</td> </tr> <tr> <td>FLIGHT SIMULATOR EQUIPMENT</td> <td>3010</td> <td>2020</td> <td>15,000</td> </tr> <tr> <td>MISSION EQUIPMENT</td> <td>3080</td> <td>2020</td> <td>1,000</td> </tr> <tr> <td>FURNISHINGS</td> <td>3400</td> <td>2020</td> <td>750</td> </tr> </tbody> </table>				EQUIPMENT NOMENCLATURE	PROCURING APPRO	FISCAL YEAR APPROPRIATED OR REQUESTED	COST (\$000)	UNINTERRUPTABLE POWER SUPPLY	3080	2020	200	CONST SURVEILLANCE TECHS	3400	2019	100	FLIGHT SIMULATOR EQUIPMENT	3010	2020	15,000	MISSION EQUIPMENT	3080	2020	1,000	FURNISHINGS	3400	2020	750
EQUIPMENT NOMENCLATURE	PROCURING APPRO	FISCAL YEAR APPROPRIATED OR REQUESTED	COST (\$000)																								
UNINTERRUPTABLE POWER SUPPLY	3080	2020	200																								
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Note: This is one of two Creech Air Force Base projects for which the project amount provided in the C-1 Exhibit is incorrect. The 1391s in this justification book accurately reflect the updated military construction project amounts; the revisions do not impact total Air Force major construction requested amount.																											

1. COMPONENT AIR FORCE	FY 2019 MILITARY CONSTRUCTION PROJECT DATA (computer generated)			2. DATE
3. INSTALLATION, SITE AND LOCATION NELLIS AIR FORCE BASE CREECH AIR FORCE BASE SITE # 1 NEVADA			4. PROJECT TITLE MQ-9 CPIP OPS & COMMAND CENTER FACILITY	
5. PROGRAM ELEMENT 25219	6. CATEGORY CODE 149-511	7. RPSUID/PROJECT NUMBER 2374/LKTC203102	8. PROJECT COST (\$000) 28,000	
9. COST ESTIMATES				
ITEM	U/M	QUANTITY	UNIT	COST (\$000)
PRIMARY FACILITIES				22,399
RPA GUIDANCE CONTROL STATION SCIF (149-511)	SM	2,800	6,459	(18,085)
RPA SQUADRONS OPERATIONS NON SCIF (149-511)	SM	1,200	3,229	(3,875)
SUSTAINABILITY & ENERGY	LS			(439)
SUPPORTING FACILITIES				2,035
UTILITIES	LS			(400)
PAVEMENTS	LS			(100)
SITE IMPROVEMENTS	LS			(450)
STANDBY POWER	LS			(200)
COMMUNICATIONS SUPPORT	LS			(825)
FENCING	LS			(60)
SUBTOTAL				24,434
CONTINGENCY (5.0%)				1,222
TOTAL CONTRACT COST				25,656
SUPERVISION, INSPECTION AND OVERHEAD (5.7%)				1,462
DESIGN/BUILD - DESIGN COST (4.0% OF SUBTOTAL)				977
TOTAL REQUEST				28,095
TOTAL REQUEST (ROUNDED)				28,000)
EQUIPMENT FROM OTHER APPROPRIATIONS (NON-ADD)				(18,330
10. Description of Proposed Construction: Construct a MQ-9 Culture and Process Improvement Program (CPIP) GCS Operations Facility to support the MQ-9 Squadron Operations. Facility will be constructed with reinforced concrete foundation/floor slab, structural steel frame, split faced CMU block or precast concrete exterior, standing seam metal roof, fire detection/protection, special security enhancements, utilities, site improvements, landscaping, communications support, electrical infrastructure, backup generator, automatic transfer switch, manual transfer switch, UPS, and all other necessary support. A higher-than-normal primary unit cost is required for the MQ-9 CPIP GCS Operations Facility, SCIF Certified SOC due to the unique requirements of the facility including raised floors, premise wiring for critical mission hardware and software, and ICD 503/705 SCIF accreditations and certifications due to real-world combat operations. This project will comply with DoD antiterrorism/force protection requirements per Unified Facility Criteria 4-010-01. Air Conditioning: 315 Tons				
11. Requirement: 4000 SM Adequate: 0 SM Substandard: 0 SM <u>PROJECT:</u> Construct MQ-9 Squadron Operations Facility/Command Center. (New Mission) <u>REQUIREMENT:</u> A permanent MQ-9 Operations facility, adequately sized and configured with appropriate security and redundant utility systems, is required to support two				

1. COMPONENT AIR FORCE	FY 2019 MILITARY CONSTRUCTION PROJECT DATA (computer generated)			2. DATE
3. INSTALLATION, SITE AND LOCATION NELLIS AIR FORCE BASE CREECH AIR FORCE BASE SITE # 1 NEVADA			4. PROJECT TITLE MQ-9 CPIP OPS & COMMAND CENTER FACILITY	
5. PROGRAM ELEMENT 25219	6. CATEGORY CODE 149-511	7. RPSUID/PROJECT NUMBER 2374/LKTC203102	8. PROJECT COST (\$000) 28,000	
Squadrons of 188 personnel supporting 5 MQ-9 combat lines each. Construct facilities to support MQ-9 operations. SCIF certified Squadron Operations/SOC are required. This operational facility directly supports the warfighter in the Area of Responsibility (AOR) by allowing command and control of unmanned aerial vehicle weapons system operations from locations within the United States. This project provides the critical mission planning space required to operate fixed Ground Control Station facilities that are used for the RPA weapon system in the AOR from home station. The operations facility supports mission planning, flight operations, mission briefs/de-briefs, intelligence, and unit training devices. This facility requires redundant communications, power, and critical utility systems to ensure sustained 24/7 operations. CURRENT SITUATION: The MQ-9 mission at Creech AFB does not have available facilities to support this mission beddown to establish critical RPA operational capabilities at Creech AFB. Unmanned aircraft operations will continue to grow worldwide, as intelligence, surveillance and reconnaissance continue to be the most critical capability requested by combatant commanders. Increased water storage, pump capacity is required to support personnel and firefighting capabilities. IMPACT IF NOT PROVIDED: Failure to provide permanent facilities in a timely manner to support downward-directed force structure actions will negatively impact the installation's ability to professionally perform critical wartime mission requirements. Lack of permanent facilities to accommodate new GCS platforms will adversely impact overall combat capabilities in support of worldwide combatant commanders. ADDITIONAL: This project meets the criteria/scope specified Air Force Manual 321084 "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 for "renovation" projects. However, new construction shall employ a standard "modular facilities" design approach based upon other GSC facilities. A preliminary analysis of reasonable options for accomplishing this project (Status Quo, Add/Alter, Conversion, New Construction) was accomplished. It indicates there is only one option that will meet operational requirements: New Construction. A higher-than-normal prime unit cost is required for the Sensitive Compartmentalized Information Facility (SCIF) area due to the unique requirements of the facility including raised floors, premise wiring for critical mission hardware and software, construction surveillance technicians, and ICD 503/705 SCIF accreditations and certifications due to real-world combat operations. Base Civil Engineer: (702) 652-4833 RPA Squadron Guidance Control Station SCIF (149-511) 2,800 SM = 20,139 SF; RPA Squadron Operations NON SCIF (149-511) 1,200 SM = 12,917 SF JOINT USE CERTIFICATION: The facility can be used by other components on an "as available" basis; however the scope of the project is based on Air Force requirements.				

1. COMPONENT AIR FORCE	FY 2019 MILITARY CONSTRUCTION PROJECT DATA (computer generated)		2. DATE																				
3. INSTALLATION AND LOCATION NELLIS AIR FORCE BASE CREECH AIR FORCE BASE SITE # 1 NEVADA		4. PROJECT TITLE MQ-9 CPIP OPS & COMMAND CENTER FACILITY																					
5. PROGRAM ELEMENT 25219	6. CATEGORY CODE 149-511	7. PROJECT NUMBER 2374/LKTC203102	8. PROJECT COST (\$000) 28,000																				
12. SUPPLEMENTAL DATA: a. Estimated Design Data: (1) Project to be accomplished by design-build procedures (2) Basis: (a) Standard or Definitive Design - NO (b) Where Design Was Most Recently Used - (3) All Other Design Costs 1,120 (4) Construction Contract Award 19 FEB (5) Construction Start 19 MAR (6) Construction Completion 21 MAR (7) Energy Study/Life-Cycle analysis was/will be performed YES b. Equipment associated with this project provided from other appropriations:																							
<table> <thead> <tr> <th>EQUIPMENT NOMENCLATURE</th> <th>PROCURING APPRO</th> <th>FISCAL YEAR APPROPRIATED OR REQUESTED</th> <th>COST (\$000)</th> </tr> </thead> <tbody> <tr> <td>UNINTERRUPTABLE POWER SUPPLY</td> <td>3080</td> <td>2020</td> <td>200</td> </tr> <tr> <td>FLIGHT SIMULATOR</td> <td>3010</td> <td>2020</td> <td>15,000</td> </tr> <tr> <td>EQUIPMENT MISSION EQUIPMENT</td> <td>3080</td> <td>2020</td> <td>2,000</td> </tr> <tr> <td>FURNISHINGS</td> <td>3400</td> <td>2020</td> <td>1,030</td> </tr> </tbody> </table>				EQUIPMENT NOMENCLATURE	PROCURING APPRO	FISCAL YEAR APPROPRIATED OR REQUESTED	COST (\$000)	UNINTERRUPTABLE POWER SUPPLY	3080	2020	200	FLIGHT SIMULATOR	3010	2020	15,000	EQUIPMENT MISSION EQUIPMENT	3080	2020	2,000	FURNISHINGS	3400	2020	1,030
EQUIPMENT NOMENCLATURE	PROCURING APPRO	FISCAL YEAR APPROPRIATED OR REQUESTED	COST (\$000)																				
UNINTERRUPTABLE POWER SUPPLY	3080	2020	200																				
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FURNISHINGS	3400	2020	1,030																				
Note: This is one of two Creech Air Force Base projects for which the project amount provided in the C-1 Exhibit is incorrect. The 1391s in this justification book accurately reflect the updated military construction project amounts; the revisions do not impact total Air Force major construction requested amount.																							

1. COMPONENT AIR FORCE				FY 2019 MILITARY CONSTRUCTION PROGRAM				2. DATE (YYYYMMDD) 20171218			
3. INSTALLATION AND LOCATION NELLIS AIR FORCE BASE Nevada						4. COMMAND AIR COMBAT COMMAND				5. AREA CONSTRUCTION COST INDEX 1.2	
6. PERSONNEL		(1) PERMANENT		(2) STUDENTS			(3) SUPPORTED			TOTAL	
		OFFICER	ENLISTED	CIVILIAN	OFFICER	ENLISTED	CIVILIAN	OFFICER	ENLISTED	CIVILIAN	
a. AS OF	30-Sep-17	1223	5707	1234	50	11	0	79	125	197	8,626
b. END FY	2023	1251	5998	1233	50	11	0	79	125	125	8,872
7. INVENTORY DATA (\$000)											
a. TOTAL ACREAGE		11,273									
b. INVENTORY TOTAL AS OF		30-Sep-17									
										5,579,426,799	
c. AUTHORIZATION NOT YET IN INVENTORY										211,400	
d. AUTHORIZATION REQUESTED IN THIS PROGRAM (FY 2019)										3,800	
e. PLANNED IN NEXT FOUR PROGRAM YEARS (FY 2020-2023)										52,000	
f. REMAINING DEFICIENCY										67,000	
g. GRAND TOTAL										5,579,760,999	
8. PROJECTS REQUESTED IN THIS PROGRAM (FY 2019)											
a. CATEGORY								b. COST (\$000)		c. DESIGN STATUS	
(1) CODE	(2) PROJECT TITLE				(3) SCOPE					(1) START	(2) COMPLETE
171-212	CRH SIMULATOR				763 SM			5,900		DESIGN/BUILD	
TOTAL								5,900			
9. FUTURE PROJECTS IN NEXT FOUR PROGRAM YEARS											
141-456 365TH ISR GROUP FACILITY					6,922 SM			52,000			
FUTURE PROJECTS TOTAL								52,000			
R&M UNFUNDED REQUIREMENT (\$M)								TOTAL		14.3	
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 2017-2021)											
a. Air Pollution											
b. Water Pollution											
c. Occupational Safety and Health											
d. Other Environmental											
OUTSTANDING DEFICIENCIES TOTAL								0			

1. COMPONENT AIR FORCE	FY 2019 MILITARY CONSTRUCTION PROJECT DATA (computer generated)			2. DATE
3. INSTALLATION, SITE AND LOCATION NELLIS AIR FORCE BASE NELLIS SITE # 1 NEVADA			4. PROJECT TITLE CRH SIMULATOR	
5. PROGRAM ELEMENT 27229	6. CATEGORY CODE 171-212	7. RPSUID/PROJECT NUMBER 3056/RKMF123009	8. PROJECT COST (\$000) 5,900	
9. COST ESTIMATES				
ITEM	U/M	QUANTITY	UNIT	COST (\$000)
PRIMARY FACILITIES				4,209
FLIGHT SIMULATION FACILITY	SM	763	5,408	(4,126)
SUSTAINABILITY & ENERGY MEASURES	LS			(83)
SUPPORTING FACILITIES				931
UTILITIES	LS			(432)
SITE IMPROVEMENTS	LS			(112)
PAVEMENTS	LS			(308)
COMMUNICATIONS SUPPORT	LS			(79)
SUBTOTAL				5,140
CONTINGENCY (5.0%)				257
TOTAL CONTRACT COST				5,396
SUPERVISION, INSPECTION AND OVERHEAD (5.7%)				308
DESIGN/BUILD - DESIGN COST (4.0% OF SUBTOTAL)				206
TOTAL REQUEST				5,910
TOTAL REQUEST (ROUNDED)				5,900
EQUIPMENT FROM OTHER APPROPRIATIONS (NON-ADD)				(14,740)
10. Description of Proposed Construction: Construct a new Combat Rescue Helicopter (CRH) simulator facility utilizing conventional design and construction methods to accommodate the mission of the facility. Construction will include reinforced concrete foundation, structural steel frame, split-face concrete masonry unit veneer and a standing seam metal roof. The project will include all necessary utilities, site improvements, pavements, communications support infrastructure, and all necessary supporting work for a complete and usable facility. 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: 50 Tons				
11. Requirement: 763 SM Adequate: 13389 SM Substandard: 0 SM PROJECT: CRH Simulator Facility REQUIREMENT: An adequately sized and configured fixed flight simulator facility to support the new CRH aircraft scheduled for delivery in FY21. The flight trainer facility is required to provide realistic aircrew training and aircraft developmental testing in a networked simulated airspace. The flight trainer facility will contain a high-bay simulator room to house full crew operational				

1. COMPONENT AIR FORCE	FY 2019 MILITARY CONSTRUCTION PROJECT DATA (computer generated)			2. DATE
3. INSTALLATION, SITE AND LOCATION NELLIS AIR FORCE BASE NELLIS SITE # 1 NEVADA			4. PROJECT TITLE CRH SIMULATOR	
5. PROGRAM ELEMENT 27229	6. CATEGORY CODE 171-212	7. RPSUID/PROJECT NUMBER 3056/RKMF123009	8. PROJECT COST (\$000) 5,900	
flight simulator with a 2.5 ton overhead hoist/crane, computer and audio visual/image generator systems, office and multi-purpose rooms to accommodate secure/classified briefing, de-briefing and mission planning functions, and other devices necessary to provide realistic flight operations in a simulated environment as well as restrooms and mechanical systems/rooms. CURRENT SITUATION: Nellis AFB does not have personnel recovery and rescue (PR) flight trainer facilities or excess space to be reconfigured to meet flight training and aircraft developmental test requirements. The high OPSTEMPO of the 66 Rescue Squadron, 88 Test and Evaluation Squadron, and 34 Weapons School Squadron make it necessary to have a flight simulator capability to meet in-aircraft mission training requirements and alleviate high utilization rates (UTE) and heavy maintenance load of aging weapon systems. The simulator provides a training capability that increases familiarization and proficiency in handling aircraft emergencies that cannot be accomplished during live flight. Additionally it provides critical combat PR simulations that cannot be replicated during live flight or at military training ranges, thereby increasing overall combat effectiveness. IMPACT IF NOT PROVIDED: Without this facility, it will not be possible to conduct current simulator training/new mission testing/flight training for air crews and associated maintenance personnel of the legacy HH-60 and the new CRH aircraft. Aircrew members will have to utilize resources at Kirtland AFB for required simulation events and would drive increased temporary duty travel and per diem costs. Current HH-60 pilots would not have access to the simulator device, resulting in increased aircraft UTE rates, and saturated maintenance work loads. ADDITONAL: This project meets the scope/criteria specified in Air Force Manual 32-1084, "Facility Requirements" and the HH-60 Facility Requirements Plan. 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 AFCEC. An Economic Analysis of reasonable options for accomplishing this project (status quo, new construction, renovation/repair) was accomplished and recommended new construction. 99th Air Base Wing Base Civil Engineer: (702) 652-4833 Flight Trainer Facility: 763 SM = 8,213 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 2019 MILITARY CONSTRUCTION PROJECT DATA (computer generated)		2. DATE																
3. INSTALLATION AND LOCATION NELLIS AIR FORCE BASE NELLIS SITE # 1 NEVADA		4. PROJECT TITLE CRH SIMULATOR																	
5. PROGRAM ELEMENT 27229	6. CATEGORY CODE 171-212	7. PROJECT NUMBER 3056/RKMF123009	8. PROJECT COST (\$000) 5,900																
12. SUPPLEMENTAL DATA: a. Estimated Design Data: (1) Project to be accomplished by design-build procedures (2) Basis: (a) Standard or Definitive Design - NO (b) Where Design Was Most Recently Used - (3) All Other Design Costs 236 (4) Construction Contract Award 19 FEB (5) Construction Start 19 MAR (6) Construction Completion 20 SEP (7) Energy Study/Life-Cycle analysis was/will be performed YES b. Equipment associated with this project provided from other appropriations: <table border="1"> <thead> <tr> <th>EQUIPMENT NOMENCLATURE</th> <th>PROCURING APPRC</th> <th>FISCAL YEAR APPROPRIATED OR REQUESTED</th> <th>COST (\$000)</th> </tr> </thead> <tbody> <tr> <td>FLIGHT SIMULATOR EQUIPMENT</td> <td>3010</td> <td>2019</td> <td>14,600</td> </tr> <tr> <td>COMMUNICATIONS-ELECTRONIC EQUI</td> <td>3400</td> <td>2020</td> <td>80</td> </tr> <tr> <td>FURNISHINGS</td> <td>3400</td> <td>2020</td> <td>60</td> </tr> </tbody> </table>				EQUIPMENT NOMENCLATURE	PROCURING APPRC	FISCAL YEAR APPROPRIATED OR REQUESTED	COST (\$000)	FLIGHT SIMULATOR EQUIPMENT	3010	2019	14,600	COMMUNICATIONS-ELECTRONIC EQUI	3400	2020	80	FURNISHINGS	3400	2020	60
EQUIPMENT NOMENCLATURE	PROCURING APPRC	FISCAL YEAR APPROPRIATED OR REQUESTED	COST (\$000)																
FLIGHT SIMULATOR EQUIPMENT	3010	2019	14,600																
COMMUNICATIONS-ELECTRONIC EQUI	3400	2020	80																
FURNISHINGS	3400	2020	60																

1. COMPONENT AIR FORCE				FY 2019 MILITARY CONSTRUCTION PROGRAM				2. DATE (YYYYMMDD) 20171219			
3. INSTALLATION AND LOCATION HOLLOMAN AIR FORCE BASE NEW MEXICO						4. COMMAND AIR COMBAT COMMAND				5. AREA CONSTRUCTION COST INDEX 0.99	
6. PERSONNEL		(1) PERMANENT			(2) STUDENTS			(3) SUPPORTED			TOTAL
		OFFICER	ENLISTED	CIVILIAN	OFFICER	ENLISTED	CIVILIAN	OFFICER	ENLISTED	CIVILIAN	
a. AS OF	30-Sep-17	333	2741	522	0	60	0	96	359	226	4,337
b. END FY	2020	322	2495	464	0	60	0	96	359	226	4,022
7. INVENTORY DATA (\$000)											
a. TOTAL ACREAGE		58,723									
b. INVENTORY TOTAL AS OF		30-Sep-17									
										4,001,838	
c. AUTHORIZATION NOT YET IN INVENTORY										45,050	
d. AUTHORIZATION REQUESTED IN THIS PROGRAM (FY 2017)										85,000	
e. PLANNED IN NEXT FOUR PROGRAM YEARS (FY 2018-2021)										0	
f. REMAINING DEFICIENCY										213,250	
g. GRAND TOTAL										4,345,138	
8. PROJECTS REQUESTED IN THIS PROGRAM (FY 2017)											
a. CATEGORY								b. COST (\$000)		c. DESIGN STATUS	
(1) CODE	(2) PROJECT TITLE				(3) SCOPE				(1) START		(2) COMPLETE
149511	MQ-9 FTU OPS FACILITY				19,702 SM				85,000		01/19 03/21
TOTAL								85,000			
9. FUTURE PROJECTS IN NEXT FOUR PROGRAM YEARS											
FUTURE PROJECTS TOTAL 0											
R&M UNFUNDED REQUIREMENT (\$M)								TOTAL		29.4	
10. MISSION OR MAJOR FUNCTIONS											
AIR COMBAT COMMAND INSTALLATION SUPPORTING T-38 TALON DEPOT MAINTENANCE; MQ-1 PREDATOR AND MQ-9 REAPER FORMAL TRAINING UNITS; F-16 FORMAL TRAINING UNIT; GERMAN AIR FORCE TORNADO FIGHTER SQUADRON; QF-4/QF-16 FULL SCALE AERIAL TARGETS MISSION; 10-MILE TEST TRACK (AFMC), ARMY AIR AND THE WAR RESERVE MATERIAL (WRM) BARE BASE SUPPORT GROUP.											
11. OUTSTANDING POLLUTION AND SAFETY DEFICIENCIES (FY 2017-2021)											
a. Air Pollution											
b. Water Pollution											
c. Occupational Safety and Health											
d. Other Environmental											
OUTSTANDING DEFICIENCIES TOTAL								0			

1. COMPONENT AIR FORCE		FY 2019 MILITARY CONSTRUCTION PROJECT DATA		2. DATE	
3. INSTALLATION AND LOCATION HOLLOMAN AIR FORCE BASE, HOLLOMAN SITE #1 NEW MEXICO			4. PROJECT TITLE: MQ-9 FTU OPS FACILITY		
5. PROGRAM ELEMENT 27576F	6. CATEGORY CODE 149511	7. PROJECT NUMBER 2352/KWRD163000	8. PROJECT COST (\$000) 85,000		
9. COST ESTIMATES					
ITEM	U/M	QUANTITY	UNIT COST	COST (\$000)	
PRIMARY FACILITIES				<u>65,332</u>	
MQ-9 FTU OPS FACILITY	SM	19,702	3,251	(64,051)	
SUSTAINABILITY AND ENERGY MEASURES	LS	1	1,281	(1,281)	
SUPPORTING FACILITIES				<u>4,394</u>	
COMMUNICATIONS SUPPORT	LS			(439)	
PAVEMENTS	SM	6500	87	(566)	
BACKUP POWER GENERATION	EA			(598)	
SITE IMPROVEMENTS	LS			(1,100)	
DEMOLITION	SM	3026	199	(602)	
UTILITIES	LS			(1,089)	
SUBTOTAL	LS			<u>69,726</u>	
CONTINGENCY (5.0%)				3,486	
TOTAL CONTRACT COST				<u>73,212</u>	
SUPERVISION, INSPECTION AND OVERHEAD (5.7%)				4,173	
DESIGN/BUILD - DESIGN COST (4.0% OF SUBTOTAL)				2,789	
NM TRANSACTION PRIVILEGE TAX (6.3125%)				<u>4,401</u>	
TOTAL REQUEST				84,715	
TOTAL REQUEST (ROUNDED)				<u>85,000</u>	
EQUIPMENT FROM OTHER APPROPRIATIONS (NON-ADD)					
10. DESCRIPTION OF PROPOSED CONSTRUCTION: Construct an MQ-9 Formal Training Unit (FTU) operations facility to house three MQ-9 Attack Squadrons, to include administrative space, academic space, Fixed Ground Control Stations (FGCS), FGCS maintenance functions, training simulators and all secure spaces required to support the mission. The facility shall be constructed in accordance with all applicable DoD, Air Force, and base facility design standards. In addition, local materials and construction techniques shall be used where cost effective. Facility shall be constructed with reinforced concrete foundation, structural steel frame, masonry walls, standing seam metal roof, utilities, pavements, site improvements, backup power generation, specialized computer flooring, communications support, and all other aspects necessary. Facilities will be designed as permanent construction in accordance with 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: 300 Tons					
11. REQUIREMENT: 18,587 SM ADEQUATE: 0SM SUBSTANDARD: 2,790 SM PROJECT: MQ-9 FTU Ops Facility REQUIREMENT: The MQ-9 airframe provides highly sought after combat capabilities to Combatant Commanders around the globe. The MQ-9 FTU at Holloman AFB trains 100% of the Active Duty Air Force and Air Force Reserve MQ-9 aircrews (pilots and sensor operators), international students, as well as Air National Guard (ANG) aircrews when needed to support ANG student demands. In order to generate qualified MQ-9 aircrews, student pilots and sensor operators are required to perform all aspects of the rigorous training syllabus. The syllabus includes months of academic classroom instruction, extensive simulator missions and numerous live flight sorties controlling aircraft flying in restricted airspace of White Sands Missile Range. In order to effectively train these aircrews, the MQ-9 FTU requires the three Attack					

1. COMPONENT AIR FORCE	FY 2019 MILITARY CONSTRUCTION PROJECT DATA	2. DATE
3. INSTALLATION AND LOCATION HOLLOMAN AIR FORCE BASE, HOLLOMAN SITE #1 NEW MEXICO		
4. PROJECT TITLE MQ-9 FTU OPS FACILITY		5. PROJECT NUMBER 2352/KWRD163000
Squadrons (6th, 9th and 29th) to each have five FGCS, six simulators, four classified training classrooms, twenty classified brief/debrief rooms, a secure server room, classified student study/mission planning rooms and adequate space for squadron administrative functions for 120 personnel and 32 contractors. Additionally, 16th Training Squadron, 429th Air Combat Training Squadron and support contractors must be collocated with the Attack Squadrons to maximize efficiencies throughout the full duration of the syllabus. <u>CURRENT SITUATION:</u> The 2008 RPA beddown hinged on use of vacant facilities at the time in order meet CSAF-directed aircrew production. B302, a 1943-vintage Sqd Ops, was used to house the MQ-1 Predator FTU (6 RS) with only minor modifications. The 6th ATKS is now transitioning to the MQ-9 without facility modifications. B302 is in a severe state of disrepair, including bat infestation, sink holes and is only partially covered by functional fire alarms. The 50-person ACMU currently operates out of B303 (2,727 sf) maintaining all mobile (current) and fixed (future) GCS equipment. The space in B318 renovated during the beddown to house the 9th and 29th Attack Squadrons, while in good physical condition, has become extremely limited in mission capability by the stand-up of an informal "International Schoolhouse", focused on training aircrews from partner nations, such as: Italy, UK and France. Expansion capability adjacent to B318 is not possible in the near future due to environmental contamination present on the site. MQ-9 formal training sorties are currently flown from Mobile Ground Control Stations (MGCS) located within a fenced compound, but will transition to FGCS equipment in 2020/2021. This conversion will free up the existing MGCS equipment to be transferred to forward locations as the equipment was designed to operate. The Block 50 FGCS is 30% larger than previous versions, rendering the space renovated during initial beddown to house the 9th/29th ATKS useless. Additionally, the MQ-9 FTU is the only combat airframe FTU operating 100% in an Unclassified environment, while the airframe's mission is conducted nearly exclusively in a Top Secret environment. Not only does this fact limit the ability to train aircrews to realistically train for their future mission, it also prevents the MQ-9 FTU from participating in electronically-linked training scenarios with other airframes/resources from other training units around the globe (via Distributed Mission Operations). Most importantly, a classified environment enables the use of Link-16 and Blue Force Tracker to provide significantly enhanced safety in the airspace and on the ranges. Link-16 allows aircraft to see each other even with radar outages – enhancing flight safety by providing adequate de-confliction. Blue Force Tracker allows MQ-9 aircrew to see JTAC position on the ground – enhancing life-safety by verifying JTAC position prior to employing live/inert weapons. Academic portions of the formal training syllabus are routinely held in a relocatable trailer. The trailer was originally purchased to provide swing space during the execution of initial beddown renovations in B318, but recurring explosive growth and the lack of fixed space alternatives has driven the continued use of the trailer with no end to the requirement in sight. Additionally, there are insufficient classrooms to execute the syllabus optimally. Likewise, the FTU squadrons currently operate in a severe shortage of brief/debrief spaces dispersed throughout the existing facilities. While this shortfall could be addressed through scheduling in a traditional FTU, the MQ-9 training flow requires students to rotate through "sorties" flying an aircraft already airborne during and after their mission. While one aircrew is flying the aircraft for a training sortie, the last aircrew to fly the aircraft is debriefing their mission and the next aircrew is briefing for their mission to follow. This cyclical flow requires reliable availability of brief/debrief rooms to enable smooth transition between flights. Lastly, students currently have no access to classified mission planning/study space. This limits their ability to focus on the classified aspects of the training requirements of the syllabus. These critical facility condition, capacity and classification shortfalls severely limit the overall effectiveness and efficiency of the FTU in performing its core task of generating properly trained aircrews to feed CAF demands. <u>IMPACT IF NOT PROVIDED:</u> If properly configured MQ-9 FTU facilities are not provided, the quantity and/or timeliness of aircrew produced will be less than HHQ expects while artificially increasing PERSTEMPO to make up for lack of appropriate equipment and facilities. Low quantity and late graduations negatively impact US power projection for multiple CCDRs. Additionally, due to the lack of secure operational spaces, the newly trained aircrews will continue to be thrust into Top Secret environments with little to no experience operating in these types of situations. Additionally, failure to enable use of Link-16 and BFT will inhibit improvements to safety margins in airspace and ranges. <u>ADDITIONAL:</u> This project meets the criteria/scope in Air Force Manual 32-1084, Facility Requirements. A preliminary analysis of alternatives indicates that constructing a new facility to house MQ-9 FTU Operations is the only feasible option. This is a new mission beddown (MQ-9) specific to the mission and no other suitable facilities exist on Holloman AFB. A certification of exception is being prepared. Sustainable principles, to include life cycle cost effective practices, will be integrated into the design, development, and construction of the project. Base Civil Engineer: Comm. (575) 572-3071; (MQ-9 Ops Facility: 19702 SM = 212,000 SF) <u>JOINT USE CERTIFICATION:</u> This facility can be used by other components on an "as available" basis; however, the scope of this project is based on Air Force requirements.		

1. COMPONENT AIR FORCE	FY 2019 MILITARY CONSTRUCTION PROJECT DATA		2. DATE																																
3. INSTALLATION AND LOCATION HOLLOMAN AIR FORCE BASE, HOLLOMAN SITE #1 NEW MEXICO																																			
4. PROJECT TITLE MQ-9 FTU OPS FACILITY		5. PROJECT NUMBER 2352/KWRD163000																																	
12. SUPPLEMENTAL DATA: a. Estimated Design Data: (1) Project to be accomplished by design-build procedures (2) Basis <table> <tr> <td>(a) Standard or Definitive Design</td> <td>YES</td> </tr> <tr> <td>(b) Where Design Was Most Recently Used</td> <td>YES</td> </tr> <tr> <td>(3) All Other Design Costs</td> <td>\$380</td> </tr> <tr> <td>(4) Construction Start Date</td> <td>19 FEB</td> </tr> <tr> <td>(5) Construction Completion</td> <td>21 FEB</td> </tr> <tr> <td>(6) Energy Study/Life-Cycle Analysis was/will be performed</td> <td>YES</td> </tr> </table> <table> <tr> <td>EQUIPMENT</td> <td>PROCURING</td> <td>FISCAL YEAR</td> <td></td> </tr> <tr> <td>NOMENCLATURE</td> <td>APPROPRIATION</td> <td>APPROPRIATED</td> <td></td> </tr> <tr> <td>COMMUNICATIONS</td> <td></td> <td>OR REQUESTED</td> <td>COST</td> </tr> <tr> <td>FF&E</td> <td></td> <td></td> <td>(\$000)</td> </tr> <tr> <td>SIMULATORS</td> <td></td> <td></td> <td></td> </tr> </table>				(a) Standard or Definitive Design	YES	(b) Where Design Was Most Recently Used	YES	(3) All Other Design Costs	\$380	(4) Construction Start Date	19 FEB	(5) Construction Completion	21 FEB	(6) Energy Study/Life-Cycle Analysis was/will be performed	YES	EQUIPMENT	PROCURING	FISCAL YEAR		NOMENCLATURE	APPROPRIATION	APPROPRIATED		COMMUNICATIONS		OR REQUESTED	COST	FF&E			(\$000)	SIMULATORS			
(a) Standard or Definitive Design	YES																																		
(b) Where Design Was Most Recently Used	YES																																		
(3) All Other Design Costs	\$380																																		
(4) Construction Start Date	19 FEB																																		
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COMMUNICATIONS		OR REQUESTED	COST																																
FF&E			(\$000)																																
SIMULATORS																																			

1. COMPONENT AIR FORCE			FY 2019 MILITARY CONSTRUCTION PROGRAM						2. DATE (YYYYMMDD) 20171218			
3. INSTALLATION AND LOCATION MINOT AIR FORCE BASE NORTH DAKOTA						4. COMMAND GLOBAL STRIKE COMMAND			5. AREA CONSTRUCTION COST INDEX 1.15			
6. PERSONNEL			(1) PERMANENT			(2) STUDENTS			(3) SUPPORTED			
			OFFICER	ENLISTED	CIVILIAN	OFFICER	ENLISTED	CIVILIAN	OFFICER	ENLISTED	CIVILIAN	TOTAL
a. AS OF 30-Sep-17			1223	5707	1234	0	0	0	0	0	0	8,164
b. END FY 2023			1251	5998	1233	0	0	0	0	0	0	8,482
7. INVENTORY DATA (\$000)												
a. TOTAL ACREAGE			13,585									
b. INVENTORY TOTAL AS OF 30-Sep-17			3,214,706,204									
c. AUTHORIZATION NOT YET IN INVENTORY			31,100									
d. AUTHORIZATION REQUESTED IN THIS PROGRAM (FY 2019)			59,000									
e. PLANNED IN NEXT FOUR PROGRAM YEARS (FY 2020-2023)			0									
f. REMAINING DEFICIENCY			342,460									
g. GRAND TOTAL			3,215,138,764									
8. PROJECTS REQUESTED IN THIS PROGRAM (FY 2019)												
a. CATEGORY						b. COST (\$000)		c. DESIGN STATUS				
(1) CODE	(2) PROJECT TITLE					(3) SCOPE				(1) START	(2) COMPLETE	
141-753	CONSOLIDATED HELO/TRF OPS/AMU AND ALERT FAC					12,394 SM		66,000		06/17	09/18	
TOTAL						66,000						
9. FUTURE PROJECTS IN NEXT FOUR PROGRAM YEARS												
FUTURE PROJECTS TOTAL 0												
R&M UNFUNDED REQUIREMENT (\$M)						TOTAL		21.7				
10. MISSION OR MAJOR FUNCTIONS												
Minot AFB is the only dual-wing nuclear capable base in the Air Force, hosting two legs of the Strategic Triad. The 5th Bomb Wing operates 26 B-52 aircraft, and the 91st Missile Wing Operates 150 ICBM sites.												
11. OUTSTANDING POLLUTION AND SAFETY DEFICIENCIES (FY 2017-2021)												
a. Air Pollution b. Water Pollution c. Occupational Safety and Health d. Other Environmental OUTSTANDING DEFICIENCIES TOTAL 0												

1. COMPONENT AIR FORCE	FY 2019 MILITARY CONSTRUCTION PROJECT DATA (computer generated)			2. DATE
3. INSTALLATION, SITE AND LOCATION MINOT AIR FORCE BASE MINOT AFB SITE # 1 NORTH DAKOTA		4. PROJECT TITLE CONSOLIDATED HELO/TRF OPS/AMU AND ALERT FAC		
5. PROGRAM ELEMENT 12110	6. CATEGORY CODE 141-753	7. RPSUID/PROJECT NUMBER 2837/QJVF153001	8. PROJECT COST (\$000) 66,000	
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 TOTAL (5.7%)				3,532
REQUEST				65,500
TOTAL REQUEST (ROUNDED)				66,000
EQUIPMENT FROM OTHER APPROPRIATIONS (NON-ADD)				(1,500)
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 useable facility. 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.				

1. COMPONENT AIR FORCE	FY 2019 MILITARY CONSTRUCTION PROJECT DATA (computer generated)			2. DATE
3. INSTALLATION, SITE AND LOCATION MINOT AIR FORCE BASE MINOT AFB SITE # 1 NORTH DAKOTA			4. PROJECT TITLE CONSOLIDATED HELO/TRF OPS/AMU AND ALERT FAC	
5. PROGRAM ELEMENT 12110	6. CATEGORY CODE 141-753	7. RPSUID/PROJECT NUMBER 2837/QJVF153001	8. PROJECT COST (\$000) 66,000	
Air Conditioning: 75 Tons				
11. Requirement: 12394 SM Adequate: 0 SM Substandard: 12394 SM PROJECT: Consolidated Helo/TRF Ops/AMU and Alert Fac REQUIREMENT: A properly sized and configured 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. This series of buildings 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. CURRENT SITUATION: 54th Helicopter Squadron (54HS) 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.				

1. COMPONENT AIR FORCE	FY 2019 MILITARY CONSTRUCTION PROJECT DATA (computer generated)			2. DATE
3. INSTALLATION, SITE AND LOCATION MINOT AIR FORCE BASE MINOT AFB SITE # 1 NORTH DAKOTA			4. PROJECT TITLE CONSOLIDATED HELO/TRF OPS/AMU AND ALERT FAC	
5. PROGRAM ELEMENT 12110	6. CATEGORY CODE 141-753	7. RPSUID/PROJECT NUMBER 2837/QJVF153001	8. PROJECT COST (\$000) 66,000	
IMPACT IF NOT PROVIDED: Minot AFB will be unable to properly beddown the programmed 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 DoDD 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. 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 AFCEC. 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 which substantiates the renovation option exceeds 75% of the replacement value, so new construction is the only viable option. Base Civil Engineer: Comm: 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 JOINT USE CERTIFICATION: Mission requirements, operational considerations, and location are incompatible with use by other components.				

1. COMPONENT AIR FORCE	FY 2019 MILITARY CONSTRUCTION PROJECT DATA (computer generated)		2. DATE
3. INSTALLATION AND LOCATION MINOT AIR FORCE BASE MINOT AFB SITE # 1 NORTH DAKOTA		4. PROJECT TITLE CONSOLIDATED HELO/TRF OPS/AMU AND ALERT FAC	
5. PROGRAM ELEMENT 12110	6. CATEGORY CODE 141-753	7. PROJECT NUMBER 2837/QJVF153001	8. PROJECT COST (\$000) 66,000
12. SUPPLEMENTAL DATA:			
a. Estimated Design Data:			
(1) Status:			
(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
(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			3,540
(b) All Other Design Costs			1,770
(c) Total			5,310
(d) Contract			4,425
(e) In-house			885
(4) Construction Contract Award			19 FEB
(5) Construction Start			19 MAR
(6) Construction Completion			21 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)
EQUIPMENT	3080	20	1,500

1. COMPONENT AIR FORCE		FY 2019 MILITARY CONSTRUCTION PROGRAM					2. DATE (YYYYMMDD) 20180130			
3. INSTALLATION AND LOCATION WRIGHT PATTERSON AIR FORCE BASE OHIO				4. COMMAND: AIR FORCE MATERIEL COMMAND:			5. AREA CONSTRUCTION COST INDEX 0.95			
6. Personnel	(1) PERMANENT			(2) STUDENTS			(3) SUPPORTED			TOTAL
	OFF	ENL	CIV	OFF	ENL	CIV	OFF	ENL	CIV	
AS OF 30 SEP 16	2632	2567	14334	9122	4953	685				34,293
End of FY 2021	2632	2567	14334	9539	5175	1619				35,866
7. INVENTORY DATA (\$000)										
a. TOTAL ACREAGE 8,145										
b. INVENTORY (PRV) Total AS OF (30 Sep 17)										7,661,255,250
c. AUTHORIZATION NOT YET IN INVENTORY (FY 2018)										6,600,000
d. AUTHORIZATION REQUESTED IN THIS PROGRAM (FY 2019)										116,100,000
e. PLANNED IN NEXT FOUR YEARS PROGRAM (FY2020-2024)										96,000,000
f. REMAINING DEFICIENCY										0
g. GRAND TOTAL										7,879,955,250
8. PROJECTS REQUESTED IN THIS PROGRAM (FY2019)										
a. CATEGORY						b. COST		c. DESIGN STATUS		
(1) CODE	(2) PROJECT TITLE				(3) SCOPE (SM)	(\$000)		(1) START	(2) COMPLETE	
114-456	ADAL Intelligence Production Complex, Phase I				13,838	116,100		05/18	12/19	
TOTAL						116,100				
9. FUTURE PROJECTS IN NEXT FOUR PROGRAM YEARS (FY2020-FY2023)										
114-456	ADAL Intelligence Production Complex, Phase II				9,943	66,000				
310-922	Human Performance Center Laboratory				3,938	30,000				
FUTURE PROJECTS TOTAL						96,000				
R&M UNFUNDED REQUIREMENT (\$M)										
TOTAL						9.8				
10. MISSION OF MAJOR FUNCTIONS										
Air Force Materiel Command headquarters which is responsible for management, control, and direction of research, acquisition and logistics support for air and space weapon systems and related components; Aeronautical Systems Center; Air Force Research Laboratory including directorates for Materials, Sensors, Air Vehicles, Human Effectiveness, and propulsion; Air Force Institute of Technology; Air Force Museum; Air Force Security Assistance Center; National Aerospace Intelligence Center; National Airborne Operations Center; and air base wing; Air Force Reserve Command airlift wing with C5 aircraft; and an AMC airlift flight with C-21 aircraft.										
11. Outstanding pollution and Safety (OSHA Deficiencies:										
a. Air pollution								0		
b. Water Pollution								0		
c. Occupational Safety and Health								0		
d. Other Environmental								0		
Total								0		

1. COMPONENT AIR FORCE	FY 2019 PROJECT DATA			2. DATE	
3. INSTALLATION AND LOCATION WRIGHT-PATTERSON AIR FORCE BASE, OHIO			4. PROJECT TITLE ADAL INTELLIGENCE PRODUCTION COMPLEX (NASIC)		
5. PROGRAM ELEMENT 72976	6. CATEGORY CODE 114-456	7. RPSUID/PROJECT NUMBER 3530/ZHTV093301		8. PROJECT COST (\$000) 116,100	
9. COST ESTIMATE					
ITEM		UOM	QTY	UNIT COST (\$)	COST (\$000)
ADD/ALTER INTELLIGENCE PRODUCTION COMPLEX					79,483
ADD INTELLIGENCE PRODUCTION COMPLEX 141-456		SM	13,838	5500.00	76,109
ALTER INTEL PRODUCTION COMPLEX F10822/10828/10853		SM	325	560.00	182
GOLF COURSE HOLES - RELOCATION		LS	1	1700000.00	1,700
SUSTAINABLE ENERGY MEASURES		LS	1	1492000.00	1,492
SUPPORTING FACILITIES					25,132
UTILITIES		LS	1	7157000.00	7,157
PAVEMENTS		LS	1	8149000.00	8,149
SITE IMPROVEMENTS		LS	1	2709000.00	2,709
2 CHILLERS, 500 T EA & ELEC SUPPORT		LS	1	1700000.00	1,700
1 E-GENERATOR, 2,500KW, FUEL TANK & ELEC SUPPORT		LS	1	2040000.00	2,040
COMMUNICATIONS SUPPORT		LS	1	2616000.00	2,616
PASSIVE FORCE PROTECTION MEASURES		LS	1	761000.00	761
SUBTOTAL					104,615
CONTINGENCY (5.0%)					5,231
TOTAL CONTRACT COST					109,846
SUPERVISION, INSPECTION, & OVERHEAD (5.7%)					6,261
TOTAL REQUEST					116,107
TOTAL REQUEST (ROUNDED)					116,100
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 2019 PROJECT DATA			2. DATE
3. INSTALLATION AND LOCATION WRIGHT-PATTERSON AIR FORCE BASE, OHIO		4. PROJECT TITLE ADAL INTELLIGENCE PRODUCTION COMPLEX (NASIC)		
5. PROGRAM ELEMENT 72976	6. CATEGORY CODE 114-456	7. RPSUID/PROJECT NUMBER 3530/ZHTV093301	8. PROJECT COST (\$000) 116,100	
11. REQUIREMENT: 82,257 SM Adequate: 39,172 SM Substandard: 42,961 SM PROJECT: ADAL intelligence Production Facility 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 CCD. Relocate San Antonio Avenue and golf course facilities to accommodate new facility footprint. 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.				

1. COMPONENT AIR FORCE	FY 2019 PROJECT DATA		2. DATE
3. INSTALLATION AND LOCATION WRIGHT-PATTERSON AIR FORCE BASE, OHIO		4. PROJECT TITLE ADAL INTELLIGENCE PRODUCTION COMPLEX (NASIC)	
5. PROGRAM ELEMENT 72976	6. CATEGORY CODE 114-456	7. RPSUID/PROJECT NUMBER 3530/ZHTV093301	8. PROJECT COST (\$000) 116,100

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 information technology 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 sizable 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 the first of a two phase initiative to meet a mission deficiency of 255,884 SF as allotted via criteria/scope specified in Air Force Manual 32-1084 "Facility Requirements". The remainder requirement (106,987 SF) for this initiative will be accomplished via ZHTV203301 (Tririga: 1059940) ADAL IPC Ph II. 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.

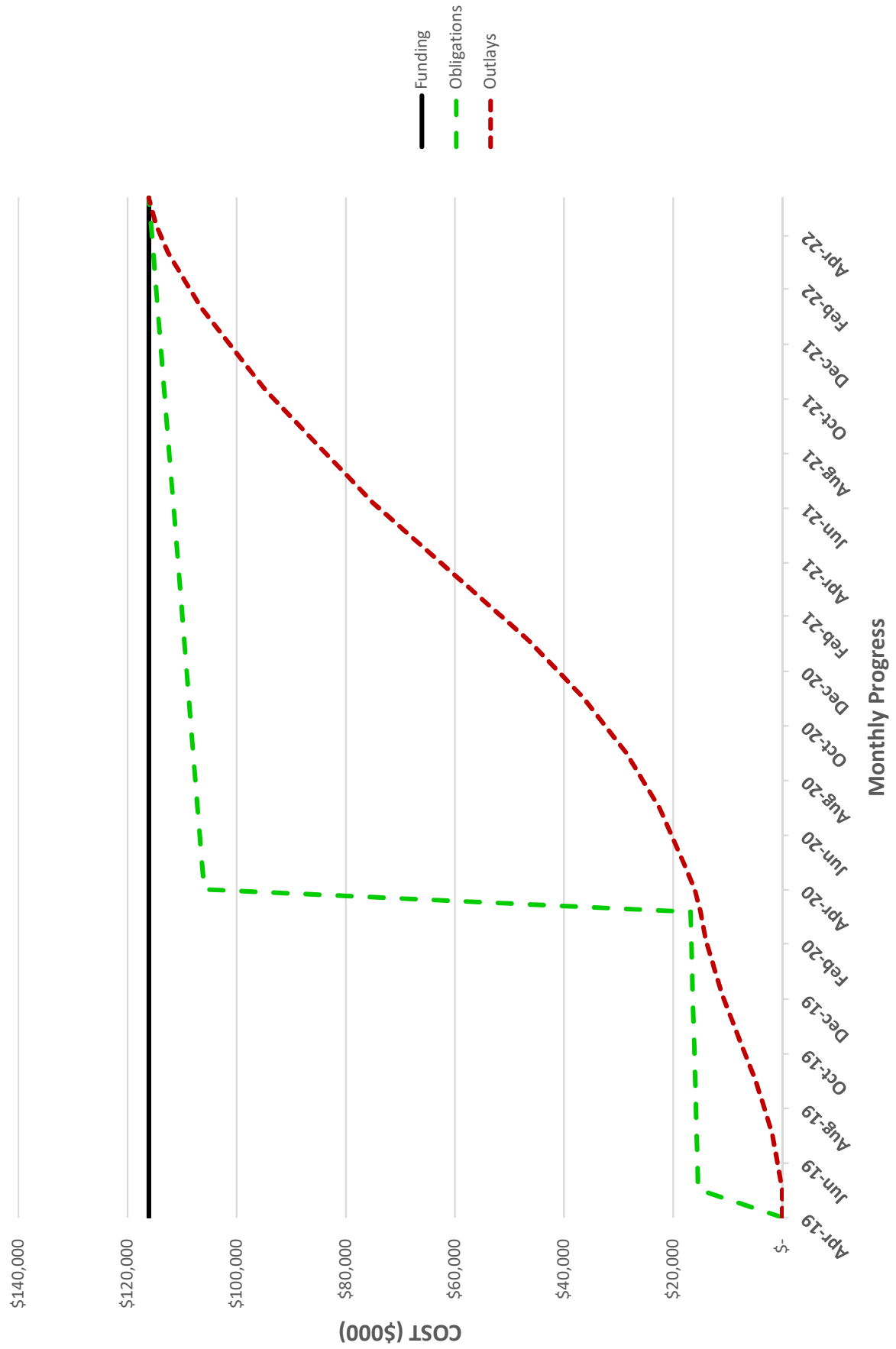
Base Civil Engineer: Comm. (937)257-6214.

This project adds 13,838, SM = 148,897 SF, 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 2019 PROJECT DATA		2. DATE
3. INSTALLATION AND LOCATION WRIGHT-PATTERSON AIR FORCE BASE, OHIO		4. PROJECT TITLE ADAL INTELLIGENCE PRODUCTION COMPLEX (NASIC)	
5. PROGRAM ELEMENT 72976	6. CATEGORY CODE 114-456	7. RPSUIT/PROJECT NUMBER 3530/ZHTV093301	8. PROJECT COST (\$000) 116,100
12. SUPPLEMENTAL DATA:			
a. Estimated Design Data:			
(1) Project to be accomplished by design-build procedures			
(2) Basis:			
(a) Standard or Definitive Design -			NO
(b) Where Design Was Most Recently Used -			
(3) All Other Design Costs			0
(4) Construction Contract Award			19 MAY
(5) Construction Start			19 JUN
(6) Construction Completion			22 MAY
(7) Energy Study/Life-Cycle analysis was/will be performed			NO
b. Equipment associated with this project provided from other appropriations:			
<u>EQUIPMENT NOMENCLATURE</u>	<u>PROCURING APPRO</u>	<u>FISCAL YEAR APPROPRIATED OR REQUESTED</u>	<u>COST (\$000)</u>
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

ADAL Intelligence Production Facility - PH I



1. COMPONENT AIR FORCE				FY 2019 MILITARY CONSTRUCTION PROGRAM				2. DATE (YYYYMMDD) 20170911				
3. INSTALLATION AND LOCATION ALTUS AIR FORCE BASE OKLAHOMA						4. COMMAND AIR EDUCATION TRAINING COMMAND			5. AREA CONSTRUCTION COST INDEX 0.89			
6. PERSONNEL		(1) PERMANENT			(2) STUDENTS			(3) SUPPORTED			TOTAL	
		OFFICER	ENLISTED	CIVILIAN	OFFICER	ENLISTED	CIVILIAN	OFFICER	ENLISTED	CIVILIAN		
a. AS OF	30-Sep-17	262	1073	1188	277	160	18	0	0	546	3,524	
b. END FY	2023	249	1064	1212	1149	604	79	0	0	596	4,953	
7. INVENTORY DATA (\$000)												
a. TOTAL ACREAGE		6,836										
b. INVENTORY TOTAL AS OF		30-Sep-17										
										1,329,522		
c. AUTHORIZATION NOT YET IN INVENTORY										22,000		
d. AUTHORIZATION REQUESTED IN THIS PROGRAM (FY 2019)										12,000		
e. PLANNED IN NEXT FOUR PROGRAM YEARS (FY 2019-2022)										16,000		
f. REMAINING DEFICIENCY										58,100		
g. GRAND TOTAL										1,437,622		
8. PROJECTS REQUESTED IN THIS PROGRAM (FY 2019)												
a. CATEGORY												
(1) CODE		(2) PROJECT TITLE					(3) SCOPE		b. COST (\$000)		c. DESIGN STATUS	
171-212		KC-46A FTU/FTC Simulator FacilityhPh 3					2,063 SM		12,000		(1) START 07/17 (2) COMPLETE 09/18	
TOTAL								12,000				
9. FUTURE PROJECTS IN NEXT FOUR PROGRAM YEARS												
130-142 Fire Rescue Center						3,205 SM			16,000			
FUTURE PROJECTS TOTAL								16,000				
R&M UNFUNDED REQUIREMENT (\$M)										TOTAL 2.1		
10. MISSION OR MAJOR FUNCTIONS												
The 97th Air Mobility Wing (AMW) at Altus AFB is responsible for form training for C-17, KC-135, and KC-46 aircraft for active duty, Guard, and Reserve aircrew, while maintaining worldwide capability to augment Global Reach contingency support. The 97 AMW has complete responsibility for all refueling of military aircraft in its assigned sector of the Continental United States. In addition, the 97 AMW is an integral part of two Strategic Homeland Defense Missions, Coastal Defense and Mari												
11. OUTSTANDING POLLUTION AND SAFETY DEFICIENCIES (FY 2017-2021)												
a. Air Pollution												
b. Water Pollution												
c. Occupational Safety and Health												
d. Other Environmental												
OUTSTANDING DEFICIENCIES TOTAL										0		

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1. COMPONENT AIR FORCE	FY 2019 MILITARY CONSTRUCTION PROJECT DATA (computer generated)			2. DATE
3. INSTALLATION AND LOCATION ALTUS AIR FORCE BASE ALTUS AIR FORCE BASE, SITE # 1, OKLAHOMA		4. PROJECT TITLE KC-46A FTU/FTC SIMULATOR FACILITY PH 3		
5. PROGRAM ELEMENT 41221	6. CATEGORY CODE 171-212	7. PROJECT NUMBER 1361/AGGN213001	8. PROJECT COST (\$000) 12,000	
9. COST ESTIMATES				
ITEM	U/M	QUANTITY	UNIT COST	COST (\$000)
PRIMARY FACILITIES				8,899
ADD FLIGHT SIMULATOR TRAINING FAC	SM	2,035	4,228	(8,604)
ALTER FLIGHT SIMULATOR TRAINING FAC	SM	28	4,214	(118)
SUSTAINABILITY AND ENERGY MEASURES	LS			(177)
SUPPORTING FACILITIES				1,931
UTILITIES	LS			(534)
PAVEMENTS	LS			(601)
SITE IMPROVEMENTS	LS			(464)
COMMUNICATIONS	LS			(152)
SPECIAL FOUNDATIONS	LS			(180)
SUBTOTAL				10,830
CONTINGENCY (5.0%)				542
TOTAL CONTRACT COST				11,372
SUPERVISION, INSPECTION AND OVERHEAD (5.7%)				648
TOTAL REQUEST				12,020
TOTAL REQUEST ROUNDED				12,000
EQUIPMENT FROM OTHER APPROPRIATIONS (NON-ADD)				(50,510)
10. DESCRIPTION OF PROPOSED WORK: Adds to and alters existing Flight Training Center (FTC) to house high bay, Weapons System Trainers (WST), Boom Operator Trainers (BOT), and Part Task Trainers (PTT), using economical design and construction methods to accomplish the classified training mission of the facility. Work includes an overhead crane, parking and pavements. In addition, local materials and construction techniques shall be used where cost effective. Work also includes all utilities, mechanical systems, communications support and fire detection/suppression systems 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, 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: 120 Tons				
11. REQUIREMENT: 6,905 SM Adequate: 4,842 SM Substandard: 0 SM PROJECT: Add Alter KC-46A FTU FTC Simulator Facility Phase 3 (New Mission) REQUIREMENT: The AF has designated Altus AFB, OK as the Formal Training Unit (FTU) for the KC-46A tanker aircraft. This facility will support enterprise training and beddown of a KC-46A training squadron comprised of eight aircraft scheduled for delivery from FY18 through FY22. An adequately sized, configured and conditioned Flight Training Center (FTC) is required to support flight training, mission planning, flight operations in a secure environment, aircrew mission briefs and debriefs, and communications. CURRENT SITUATION: Existing facilities are not configured to support the 50 ft x 50 ft x 50 ft WST bay space requirements and security needs. Additionally, an existing C-17 WST facility does not meet current ATRP set-back requirements. Estimated costs to harden portions of the existing facility to meet ATRP requirements and to increase the height of the roof so the WST would fit inside the facility would increase the project cost by an additional \$6M. This 2,063 SM flight training center add/alter project is the third of a three phase construction of the 6,905 SM FTC. IMPACT IF NOT PROVIDED: Without this project, the Air Force will be unable to provide timely aircrew training necessary to continue training and operation of the KC-46A aircraft. The lack of this facility addition and its equipment greatly increases training costs by requiring the use of actual aircraft to provide this training, placing KC-46A aircraft at higher risk of damage due to training accidents. Without the alteration of the wall, entry and ceiling/fixtures between the 2nd and 3rd phases of the FTC, the facility will not be complete				

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3. INSTALLATION AND LOCATION ALTUS AIR FORCE BASE ALTUS AIR FORCE BASE, SITE # 1, OKLAHOMA		4. PROJECT TITLE KC-46A FTU/FTC SIMULATOR FACILITY PH 3																																											
5. PROGRAM ELEMENT 41221	6. CATEGORY CODE 171-212	7. PROJECT NUMBER 1361/AGGN213001	8. PROJECT COST(\$000) 12,000																																										
and useable. Without the simulators, this alternative training will result in higher fuel, maintenance, and operational costs to the Air Force. ADDITIONAL: The scope for this project meets the criteria of Air Force Manual 32-1084 "Facility Requirements" and the KC-46A Formal Training Unit Beddown Program Plan 14-01. An economic analysis of reasonable alternatives was accomplished in November 2015 comparing status quo, phased-approach, new-construction and renovation alternatives. It indicated that a phased-approach is the most cost effective alternative that meets all operational requirements and allows for immediate bed down of the KC-46A aircraft at Altus AFB. Additionally, the facility WSTs and BOTs require an overhead crane for installation and maintenance. requirements. Base Civil Engineer: Comm. 580-481-6530 Add KC-46A FTU FTC Simulator Facility Phase 3: 2,035 SM = 21,905 SF Alter KC-46A FTU FTC Simulator Facility Phase 3: 28 SM = 301 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. 12. SUPPLEMENTAL DATA: a. Estimated Design Data: (1) Status: <table style="width:100%;"> <tr> <td>(a) Date Design Started</td> <td align="right">31-Jul-17</td> </tr> <tr> <td>(b) Parametric Cost Estimate used to develop costs</td> <td align="right">YES</td> </tr> <tr> <td>* (c) Percent Complete as of 01 JAN 2018</td> <td align="right">15%</td> </tr> <tr> <td>* (d) Date 35% Designed</td> <td align="right">28-Feb-18</td> </tr> <tr> <td>(e) Date Design Complete</td> <td align="right">26-Sep-18</td> </tr> <tr> <td>(f) Energy Study/Life-Cycle analysis was/will be performed</td> <td align="right">YES</td> </tr> </table> Basis: <table style="width:100%;"> <tr> <td>(a) Standard or Definitive Design -</td> <td align="right">YES</td> </tr> <tr> <td>(b) Where Design Was Most Recently Used -</td> <td align="right">Developed for KC-46A</td> </tr> </table> (2) Total Cost (c) = (a) + (b) or (d) + (e): (\$000) <table style="width:100%;"> <tr> <td>(a) Production of Plans and Specifications</td> <td align="right">0</td> </tr> <tr> <td>(b) All Other Design Costs</td> <td align="right">204</td> </tr> <tr> <td>(c) Total</td> <td align="right">204</td> </tr> <tr> <td>(d) Contract</td> <td align="right">204</td> </tr> <tr> <td>(e) In-house</td> <td align="right">0</td> </tr> </table> (3) Construction Contract Award 19 FEB (4) Construction Start 19 MAR (5) Construction Completion 20 JUN (6) Energy Study/Life-Cycle analysis was/will be performed YES * 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: <table style="width:100%; margin-top: 10px;"> <thead> <tr> <th style="text-align: left;">EQUIPMENT NOMENCLATURE</th> <th style="text-align: center;">PROCURING APPRO</th> <th style="text-align: center;">FISCAL YEAR APPROPRIATED OR REQUESTED</th> <th style="text-align: center;">COST (\$000)</th> </tr> </thead> <tbody> <tr> <td>WST (2)</td> <td align="center">3600</td> <td align="center">18</td> <td align="right">30,000</td> </tr> <tr> <td>FURNITURE, FIXTURE & EQUIP</td> <td align="center">3400</td> <td align="center">20</td> <td align="right">510</td> </tr> <tr> <td>BOT (2)</td> <td align="center">3600</td> <td align="center">18</td> <td align="right">20,000</td> </tr> </tbody> </table>				(a) Date Design Started	31-Jul-17	(b) Parametric Cost Estimate used to develop costs	YES	* (c) Percent Complete as of 01 JAN 2018	15%	* (d) Date 35% Designed	28-Feb-18	(e) Date Design Complete	26-Sep-18	(f) Energy Study/Life-Cycle analysis was/will be performed	YES	(a) Standard or Definitive Design -	YES	(b) Where Design Was Most Recently Used -	Developed for KC-46A	(a) Production of Plans and Specifications	0	(b) All Other Design Costs	204	(c) Total	204	(d) Contract	204	(e) In-house	0	EQUIPMENT NOMENCLATURE	PROCURING APPRO	FISCAL YEAR APPROPRIATED OR REQUESTED	COST (\$000)	WST (2)	3600	18	30,000	FURNITURE, FIXTURE & EQUIP	3400	20	510	BOT (2)	3600	18	20,000
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DD FORM 1391, DEC 99

Previous editions are obsolete

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1. COMPONENT AIR FORCE	FY 2019 MILITARY CONSTRUCTION PROJECT DATA (computer generated)			2. DATE
3. INSTALLATION AND LOCATION ALTUS AIR FORCE BASE ALTUS AIR FORCE BASE, SITE # 1, OKLAHOMA			4. PROJECT TITLE KC-46A FTU/FTC SIMULATOR FACILITY PH 3	
5. PROGRAM ELEMENT 41221	6. CATEGORY CODE 171-212	7. PROJECT NUMBER 1361/AGGN213001	8. PROJECT COST(\$000) 12,000	
Concurrence Section				
This design shall conform to criteria established in the Air Force Corporate Facilities Standards (AFCFS), the Installation Facilities Standards and shall employ the standard facility design for the Large Airframe Flight Training Center.				

DD FORM 1391, DEC 99

Previous editions are obsolete

1. COMPONENT AIR FORCE			FY 2019 MILITARY CONSTRUCTION PROGRAM						2. DATE (YYYYMMDD) 20170911		
3. INSTALLATION AND LOCATION TINKER AIR FORCE BASE OKLAHOMA						4. COMMAND AIR FORCE MATERIEL COMMAND:			5. AREA CONSTRUCTION COST INDEX 0.92		
6. PERSONNEL		(1) PERMANENT			(2) STUDENTS			(3) SUPPORTED			TOTAL
		OFFICER	ENLISTED	CIVILIAN	OFFICER	ENLISTED	CIVILIAN	OFFICER	ENLISTED	CIVILIAN	
a. AS OF	30-Sep-17	259	804	14587	0	0	0	1028	4718	623	22,019
b. END FY	2023	259	808	14398	0	0	0	983	4462	537	21,447
7. INVENTORY DATA (\$000)											
a. TOTAL ACREAGE		5,588									
b. INVENTORY TOTAL AS OF		30-Sep-17									
c. AUTHORIZATION NOT YET IN INVENTORY		203,917									
d. AUTHORIZATION REQUESTED IN THIS PROGRAM (FY 2019)		166,000									
e. PLANNED IN NEXT FOUR PROGRAM YEARS (FY 2020-2023)		104,000									
f. REMAINING DEFICIENCY		36,400									
g. GRAND TOTAL		6,472,550									
8. PROJECTS REQUESTED IN THIS PROGRAM (FY 2019)											
a. CATEGORY								b. COST (\$000)		c. DESIGN STATUS	
(1) CODE	(2) PROJECT TITLE				(3) SCOPE					(1) START	(2) COMPLETE
211-116	KC-46A DEPOT MAINTENANCE HANGAR				11,300			81,000		Design/Build	
211-116	KC-46A DEPOT FUEL MAINTENANCE HANGAR				8,361			85,000		Design/Build	
TOTAL								166,000			
9. FUTURE PROJECTS IN NEXT FOUR PROGRAM YEARS (FY2020 - FY2023)											
KC-46A Depot MX Complex - Ph 3								135,150			
FUTURE PROJECTS TOTAL								135,150			
R&M UNFUNDED REQUIREMENT (\$M)								TOTAL 49.3			
10. MISSION OR MAJOR FUNCTIONS											
Tinker Air Force Base combined mission includes operations, supply, maintenance and management in support of the 76th Maintenance Wing, 552nd ACW, 327th Air Sustainment Wing, 448th Combat Sustainment Wing, 3rd Combat Comm, Air Force Reserves, Navy Stratcomm Wing One, 72nd Air Base Wing, Defense Logistics Agency and Defense Information Systems Agency.											
11. OUTSTANDING POLLUTION AND SAFETY DEFICIENCIES (FY 2019-2023)											
a. Air Pollution											
b. Water Pollution											
c. Occupational Safety and Health											
d. Other Environmental											
OUTSTANDING DEFICIENCIES TOTAL								0			

1. COMPONENT AIR FORCE	FY 2019 MILITARY CONSTRUCTION PROJECT DATA (computer generated)			2. DATE
3. INSTALLATION, SITE AND LOCATION TINKER AIR FORCE BASE TINKER AFB SITE # 1 OKLAHOMA		4. PROJECT TITLE KC-46A DEPOT MAINTENANCE HANGAR		
5. PROGRAM ELEMENT 41221	6. CATEGORY CODE 211-116	7. RPSUID/PROJECT NUMBER 3342/WWYK193001	8. PROJECT COST (\$000) 81,000	
9. COST ESTIMATES				
ITEM	U/M	QUANTITY	UNIT	COST (\$000)
PRIMARY FACILITIES				58,593
HIGH BAY DEPOT MAINTENANCE DOCKS (211-116)	SM	9,402	5,367	(50,463)
PROGRAM OFFICE ADMIN (610-675)	SM	1,898	3,044	(5,777)
SUSTAINABILITY AND ENERGY MEASURES	LS			(1,125)
SPECIAL FOUNDATIONS	LS			(1,228)
SUPPORTING FACILITIES				11,603
UTILITIES	LS			(2,768)
COMMUNICATIONS	LS			(300)
SITE IMPROVEMENTS	LS			(1,743)
PAVEMENTS	LS			(5,802)
PASSIVE FORCE PROTECTION MEASURES	LS			(134)
AIRCRAFT FUEL PIPING	LS			(456)
UTILITIES CONNECTION FEE (ELECTRICAL)	LS			(400)
SUBTOTAL				70,196
CONTINGENCY (5.0%)				3,510
TOTAL CONTRACT COST				73,706
SUPERVISION, INSPECTION AND OVERHEAD (5.7%)				4,201
DESIGN/BUILD - DESIGN COST (4.0% OF SUBTOTAL)				2,808
TOTAL REQUEST				80,715
TOTAL REQUEST (ROUNDED)				81,000
EQUIPMENT FROM OTHER APPROPRIATIONS (NON-ADD)				(9,973)
10. Description of Proposed Construction: Construct a single high bay aircraft maintenance hangar on reinforced concrete foundation consisting of concrete masonry backup wall with brick veneer and metal panel exterior, structural steel frame and metal roof. Functional spaces include two aircraft docks, plant equipment maintenance support, associated back shop, administrative and facility support spaces, program management office space is also included in the project scope. Includes clearing and grading site, storm drainage, aircraft parking apron, hangar access aircraft ramps and movement area, utility infrastructure systems, electrical, water, sewer, industrial waste, fueling system, communications, roads, parking, curb and gutter, walks and all other necessary support to produce a complete and useable facility. Passive force protection consists of fencing to isolate the hangars. Dock spaces will include design for fall protection and cranes. 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.				

1. COMPONENT AIR FORCE	FY 2019 MILITARY CONSTRUCTION PROJECT DATA (computer generated)			2. DATE
3. INSTALLATION, SITE AND LOCATION TINKER AIR FORCE BASE TINKER AFB SITE # 1 OKLAHOMA			4. PROJECT TITLE KC-46A DEPOT MAINTENANCE HANGAR	
5. PROGRAM ELEMENT 41221	6. CATEGORY CODE 211-116	7. RPSUID/PROJECT NUMBER 3342/WWYK193001	8. PROJECT COST (\$000) 81,000	
Air Conditioning: 90 Tons				
11. Requirement: 76174 SM Adequate: 17210 SM Substandard: 0 SM				
<u>PROJECT:</u> KC-46A Depot Maintenance Hangar (New Mission)				
<u>REQUIREMENT:</u> Tinker AFB currently supports depot maintenance for multiple USAF aircraft and has been designated source of repair for the depot maintenance of the KC-46A aircraft. A depot maintenance complex is required to provide a reliable and responsive source for repair and maintenance for these first line weapons systems. This project provides a hangar facility of two additional dock spaces for performing programmed depot maintenance toward the total of fourteen docks required to support continued growth of the KC-46A depot maintenance mission as additional aircraft are accepted into the AF inventory. Full depot maintenance production is projected to be 90 aircraft per year.				
<u>CURRENT SITUATION:</u> Only 17,210 SM (3 docks) of the required 14 hangar docks are currently available at this site to support the future KC-46A depot maintenance workload. Phased depot maintenance ensures aircraft are properly, timely, and efficiently maintained & repaired to ensure safety for the pilots and longevity of the aircraft. This project and WWYK193014 will provide an additional 4 docks.				
<u>IMPACT IF NOT PROVIDED:</u> Failure to construct this project would critically impact the Air Force's ability to quickly, safely, and efficiently repair and maintain this new weapon system. Phased depot maintenance is critical to the KC-46A mission.				
<u>ADDITIONAL:</u> This project meets applicable criteria/scope specified in AF 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) and shall employ the standard facilities design from Air Force Civil Engineer Centers (AFCEC). An Economic Analysis was prepared based on a Master Plan Study that considered four options for bed down of this depot mission at Tinker AFB. Alternatives considered were: (1) Build new on Burlington Northern Santa Fe (BNSF) railroad yard; (2) Maintenance Repair Overhaul & Technology Center; (3) Cross Wind Runway; (4) Defense Logistics Agency Infill; and (5) Current Facilities. Alternative 1, BNSF Railroad Yard, provided the lowest non-recurring cost, lowest Present Value, and best alternative to meet the mission requirement. Base Civil Engineer: Comm. (405) 734-3451. Maintenance Docks: 9,402 SM = 101,202 SF. Administrative: 1,898 SM = 20,430 SF.				
<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.				

1. COMPONENT AIR FORCE	FY 2019 MILITARY CONSTRUCTION PROJECT DATA (computer generated)		2. DATE
3. INSTALLATION AND LOCATION TINKER AIR FORCE BASE TINKER AFB SITE # 1 OKLAHOMA		4. PROJECT TITLE KC-46A DEPOT MAINTENANCE HANGAR	
5. PROGRAM ELEMENT 41221	6. CATEGORY CODE 211-116	7. PROJECT NUMBER 3342/WWYK193001	8. PROJECT COST (\$000) 81,000
12. SUPPLEMENTAL DATA: a. Estimated Design Data: (1) Project to be accomplished by design-build procedures (2) Basis: (a) Standard or Definitive Design - YES (b) Where Design Was Most Recently Used - Altus AFB (3) All Other Design Costs 3,240 (4) Construction Contract Award 19 FEB (5) Construction Start 19 MAR (6) Construction Completion 21 MAR (7) Energy Study/Life-Cycle analysis was/will be performed YES b. Equipment associated with this project provided from other appropriations:			
EQUIPMENT NOMENCLATURE	PROCURING APPRC	FISCAL YEAR APPROPRIATED OR REQUESTED	COST (\$000)
COMPUTERS	3400	2021	200
COMMUNICATIONS	3400	2021	600
FURNISHINGS	3400	2021	700
PERSONAL PROTECTIVE EQUIPMENT	3010	2021	123
AGE & SUPPORT EQUIPMENT	3010	2021	4,425
MX & TEST STANDS/TESTERS	3010	2021	3,925

1. COMPONENT AIR FORCE	FY 2019 MILITARY CONSTRUCTION PROJECT DATA (computer generated)			2. DATE
3. INSTALLATION, SITE AND LOCATION TINKER AIR FORCE BASE TINKER AFB SITE # 1 OKLAHOMA			4. PROJECT TITLE KC-46A DEPOT FUEL MAINTENANCE HANGAR	
5. PROGRAM ELEMENT 41221	6. CATEGORY CODE 211-116	7. RPSUID/PROJECT NUMBER 3342/WWYK193014	8. PROJECT COST (\$000) 85,000	
9. COST ESTIMATES				
ITEM	U/M	QUANTITY	UNIT	COST (\$000)
PRIMARY FACILITIES				42,412
DEPOT FUEL MAINTENANCE HANGAR	SM	8,361	4,845	(40,509)
SUSTAINABILITY AND ENERGY MEASURES	LS			(810)
SPECIAL FOUNDATIONS	LS			(1,092)
SUPPORTING FACILITIES				31,547
UTILITIES	LS			(8,118)
COMMUNICATIONS	LS			(311)
SITE IMPROVEMENTS	LS			(2,030)
PAVEMENTS	LS			(8,388)
PASSIVE FORCE PROTECTION MEASURES	LS			(134)
AIRCRAFT FUEL PIPING	LS			(12,366)
UTILITIES CONNECTION FEE (ELECTRICAL)	LS			(200)
SUBTOTAL				73,958
CONTINGENCY (5.0%)				3,698
TOTAL CONTRACT COST				77,656
SUPERVISION, INSPECTION AND OVERHEAD (5.7%)				4,426
DESIGN/BUILD - DESIGN COST (4.0% OF SUBTOTAL)				2,958
TOTAL REQUEST				85,041
TOTAL REQUEST (ROUNDED)				85,000
EQUIPMENT FROM OTHER APPROPRIATIONS (NON-ADD)				(8,500)
10. Description of Proposed Construction: Construct a single high bay fuel/defuel aircraft maintenance hangar on reinforced concrete foundation consisting of concrete masonry backup wall with brick veneer and metal panel exterior, structural steel frame and metal roof. Functional spaces include two fuel/defuel maintenance docks, plant equipment maintenance support facility and associated back shop, and administrative and facility support spaces. Includes clearing and grading site, storm drainage, aircraft parking apron, hangar access aircraft ramps and movement area, utility infrastructure systems, electrical, water, sewer, industrial waste, fueling system, communications, roads, parking, curb and gutter, walks, and all other necessary support to produce a complete and useable facility. Passive force protection consists of fencing to isolate the hangars. Dock spaces will include design for fall protection and cranes. 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: 25 Tons				
11. Requirement: 76174 Adequate: 17210 Substandard: 0				

1. COMPONENT AIR FORCE	FY 2019 MILITARY CONSTRUCTION PROJECT DATA (computer generated)			2. DATE
3. INSTALLATION, SITE AND LOCATION TINKER AIR FORCE BASE TINKER AFB SITE # 1 OKLAHOMA			4. PROJECT TITLE KC-46A DEPOT FUEL MAINTENANCE HANGAR	
5. PROGRAM ELEMENT 41221	6. CATEGORY CODE 211-116	7. RPSUID/PROJECT NUMBER 3342/WWYK193014	8. PROJECT COST (\$000) 85,000	
<u>PROJECT:</u> KC-46A Depot Fuel Maintenance Hangar (New Mission) <u>REQUIREMENT:</u> Tinker AFB currently supports depot maintenance for multiple USAF aircraft and has been designated source of repair for the depot maintenance of the KC-46A aircraft. A depot maintenance complex is required to provide a reliable and responsive source for repair and maintenance for these first line weapons systems. This project provides a hangar facility of two additional dock spaces for performing fuel and defuel depot maintenance toward the total of fourteen docks required to support continued growth of the KC-46A depot maintenance mission as additional aircraft are accepted into the AF inventory. Full depot maintenance production is projected to be 90 aircraft per year. <u>CURRENT SITUATION:</u> Only 17,210 SM (3 docks) of the required 14 hangar docks are currently available at this site to support the future KC-46A depot maintenance workload. Phased depot maintenance ensures aircraft are properly, timely, and efficiently maintained & repaired to ensure safety for the pilots and longevity of the aircraft. This project and WWYK193001 will provide an additional 4 docks. <u>IMPACT IF NOT PROVIDED:</u> Failure to construct this project would critically impact the Air Force's ability to quickly, safely, and efficiently repair and maintain this new weapon system. Phased depot maintenance is critical to the KC-46A mission. <u>ADDITIONAL:</u> This project meets applicable criteria/scope specified in AF 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) and shall employ the standard facilities design from Air Force Civil Engineer Centers (AFCEC). An Economic Analysis was prepared based on a Master Plan Study that considered four options for bed down of this depot mission at Tinker AFB. Alternatives considered were: (1) Build new on Burlington Northern Santa Fe (BNSF) railroad yard; (2) Maintenance Repair Overhaul & Technology Center; (3) Cross Wind Runway; (4) Defense Logistics Agency Infill; and (5) Current Facilities. Alternative 1, BNSF Railroad Yard, provided the lowest non-recurring cost, lowest Present Value, and best alternative to meet the mission requirement. Base Civil Engineer: Comm. (405) 734-3451. Depot Fuel Maint Dock: 8,361 SM = 89,997 SF. <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.				

1. COMPONENT AIR FORCE	FY 2019 MILITARY CONSTRUCTION PROJECT DATA (computer generated)		2. DATE																												
3. INSTALLATION AND LOCATION TINKER AIR FORCE BASE TINKER AFB SITE # 1 OKLAHOMA		4. PROJECT TITLE KC-46A DEPOT FUEL MAINTENANCE HANGAR																													
5. PROGRAM ELEMENT 41221	6. CATEGORY CODE 211-116	7. PROJECT NUMBER 3342/WWYK193014	8. PROJECT COST (\$000) 85,000																												
12. SUPPLEMENTAL DATA: a. Estimated Design Data: (1) Project to be accomplished by design-build procedures (2) Basis: (a) Standard or Definitive Design - YES (b) Where Design Was Most Recently Used - N/A (3) All Other Design Costs 3,400 (4) Construction Contract Award 19 FEB (5) Construction Start 19 MAR (6) Construction Completion 21 MAR (7) Energy Study/Life-Cycle analysis was/will be performed YES b. Equipment associated with this project provided from other appropriations: <table border="1"> <thead> <tr> <th>EQUIPMENT NOMENCLATURE</th> <th>PROCURING APPRC</th> <th>FISCAL YEAR APPROPRIATED OR REQUESTED</th> <th>COST (\$000)</th> </tr> </thead> <tbody> <tr> <td>COMPUTERS</td> <td>3400</td> <td>2021</td> <td>25</td> </tr> <tr> <td>COMMUNICATIONS</td> <td>3400</td> <td>2021</td> <td>50</td> </tr> <tr> <td>FURNISHINGS</td> <td>3400</td> <td>2021</td> <td>50</td> </tr> <tr> <td>PERSONAL PROTECTIVE EQUIPMENT</td> <td>3400</td> <td>2021</td> <td>25</td> </tr> <tr> <td>AGE & SUPPORT EQUIPMENT</td> <td>3010</td> <td>2021</td> <td>4,425</td> </tr> <tr> <td>MX & TEST STAND/TESTERS</td> <td>3010</td> <td>2021</td> <td>3,925</td> </tr> </tbody> </table>				EQUIPMENT NOMENCLATURE	PROCURING APPRC	FISCAL YEAR APPROPRIATED OR REQUESTED	COST (\$000)	COMPUTERS	3400	2021	25	COMMUNICATIONS	3400	2021	50	FURNISHINGS	3400	2021	50	PERSONAL PROTECTIVE EQUIPMENT	3400	2021	25	AGE & SUPPORT EQUIPMENT	3010	2021	4,425	MX & TEST STAND/TESTERS	3010	2021	3,925
EQUIPMENT NOMENCLATURE	PROCURING APPRC	FISCAL YEAR APPROPRIATED OR REQUESTED	COST (\$000)																												
COMPUTERS	3400	2021	25																												
COMMUNICATIONS	3400	2021	50																												
FURNISHINGS	3400	2021	50																												
PERSONAL PROTECTIVE EQUIPMENT	3400	2021	25																												
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MX & TEST STAND/TESTERS	3010	2021	3,925																												

1. COMPONENT AIR FORCE			FY 2019 MILITARY CONSTRUCTION PROGRAM						2. DATE (YYMMDD) 20171218		
3. INSTALLATION AND LOCATION SHAW AFB SOUTH CAROLINA						4. COMMAND AIR COMBAT COMMAND			5. AREA CONSTRUCTION COST INDEX 0.91		
6. PERSONNEL		(1) PERMANENT			(2) STUDENTS			(3) SUPPORTED			TOTAL
		OFFICER	ENLISTED	CIVILIAN	OFFICER	ENLISTED	CIVILIAN	OFFICER	ENLISTED	CIVILIAN	
a. AS OF	30-Sep-17	1498	6018	1007	0	0	0	0	0	0	8,523
b. END FY	2023	1600	7000	1300	0	0	0	0	0	0	9,900
7. INVENTORY DATA (\$000)											
a. TOTAL ACREAGE		3,481									
b. INVENTORY TOTAL AS OF		30-Sep-17									
										1,747,026	
c. AUTHORIZATION NOT YET IN INVENTORY										0	
d. AUTHORIZATION REQUESTED IN THIS PROGRAM (FY 2019)										53,000	
e. PLANNED IN NEXT FOUR PROGRAM YEARS (FY 2020-2023)										0	
f. REMAINING DEFICIENCY										0	
g. GRAND TOTAL										1,800,026	
8. PROJECTS REQUESTED IN THIS PROGRAM (FY 2019)											
a. CATEGORY								b. COST (\$000)		c. DESIGN STATUS	
(1) CODE	(2) PROJECT TITLE						(3) SCOPE			(1) START	(2) COMPLETE
141-753	CPIP MQ-9 MCE GROUP						9,383 SM	53,000		Design/Build	
TOTAL								53,000			
9. FUTURE PROJECTS IN NEXT FOUR PROGRAM YEARS (FY2020 - FY2023)											
FUTURE PROJECTS TOTAL 0											
R&M UNFUNDED REQUIREMENT (\$M)								TOTAL		56.9	
10. MISSION OR MAJOR FUNCTIONS											
Provide combat-ready airpower and combat-ready Airmen to meet any challenge, anytime, anywhere. Shaw AFB is home to the 20 FW F-16 fighter aircraft; HQ 9th AF; HQ AFCEM; and HQ 3rd US Army.											
11. OUTSTANDING POLLUTION AND SAFETY DEFICIENCIES (FY 2019-2023)											
a. Air Pollution b. Water Pollution c. Occupational Safety and Health d. Other Environmental											
OUTSTANDING DEFICIENCIES TOTAL								0			

1. COMPONENT AIR FORCE	FY 2019 MILITARY CONSTRUCTION PROJECT DATA (computer generated)			2. DATE
3. INSTALLATION, SITE AND LOCATION SHAW AIR FORCE BASE SHAW AIR FORCE BASE SITE 1 SOUTH CAROLINA		4. PROJECT TITLE CPIP MQ-9 MCE GROUP		
5. PROGRAM ELEMENT 25219	6. CATEGORY CODE 141-753	7. RPSUID/PROJECT NUMBER 3269/VLSB193001	8. PROJECT COST (\$000) 53,000	
9. COST ESTIMATES				
ITEM	U/M	QUANTITY	UNIT	COST (\$000)
PRIMARY FACILITIES				39,952
SQ OPS (SCIF CERTIFIED)/SOC (141-753)	SM	5,667	4,484	(25,410)
SIMULATOR/TRAINING (171-212)	SM	1,115	3,643	(4,062)
HQ OSS/DWELL (610-243)	SM	2,601	3,728	(9,697)
SUSTAINABILITY AND ENERGY	LS			(783)
SUPPORTING FACILITIES				5,739
UTILITIES	LS			(286)
GCS STAND-BY POWER	LS			(1,500)
PAVEMENTS/GCS PAD	SM	12,800	50	(640)
PARKING	LS			(513)
FENCE	LM	600	200	(120)
SITE IMPROVEMENTS	HE	4	20,000	(80)
COMMUNICATIONS SUPPORT	LS			(2,500)
DEMOLITION	SM	372	269	(100)
SUBTOTAL				45,690
CONTINGENCY (5.0%)				2,285
TOTAL CONTRACT COST				47,975
SUPERVISION, INSPECTION AND OVERHEAD (5.7%)				2,735
DESIGN/BUILD - DESIGN COST (4.0% OF SUBTOTAL)				1,828
TOTAL REQUEST				52,537
TOTAL REQUEST (ROUNDED)				53,000
EQUIPMENT FROM OTHER APPROPRIATIONS (NON-ADD)				(112,500)
10. Description of Proposed Construction: Construct facilities to support MQ-9 operations. The facility will include reinforced concrete foundation/floor slab, structural steel frame, split faced concrete masonry unit or precast concrete exterior, standing seam metal roof, fire detection/protection, special security enhancements, utilities, site improvements, landscaping, roads/parking, ground control station concrete pad, communications support, electrical infrastructure, stand-by generator, switchgear, uninterrupted power supply, and all other necessary support for a complete and usable facility. Demolish facility (B1842, 372 SM) that is in the way of construction. 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: 170 Tons				
11. Requirement: 25460 SM Adequate: 5067 SM Substandard: 11010 SM				
<u>PROJECT:</u> CPIP MQ-9 Mission Control Element Group				

Previous editions are obsolete.

1. COMPONENT AIR FORCE	FY 2019 MILITARY CONSTRUCTION PROJECT DATA (computer generated)			2. DATE
3. INSTALLATION, SITE AND LOCATION SHAW AIR FORCE BASE SHAW AIR FORCE BASE SITE 1 SOUTH CAROLINA			4. PROJECT TITLE CPIP MQ-9 MCE GROUP	
5. PROGRAM ELEMENT 25219	6. CATEGORY CODE 141-753	7. RPSUID/PROJECT NUMBER 3269/VLSB193001	8. PROJECT COST (\$000) 53,000	
REQUIREMENT: A permanent MQ-9 Operations facility, adequately sized and configured with appropriate security and redundant utility systems, is required to support new mission beddown for personnel in support of the MQ-9 remotely piloted aircraft (RPA), per PPlan 17-05. Construct facilities to support MQ-9 operations. SCIF certified Squadron Operations/SOC, HQ OSS/DWELL, and simulator training capabilities are required. This operational facility directly supports the warfighter in the Area of Responsibility (AOR) by allowing command and control of unmanned aerial vehicle weapons system operations from locations within the United States. This project provides the critical mission planning space required to operate fixed Ground Control Station facilities that are used for the unmanned aerial weapon system in the AOR from home station. The operations facility supports mission planning, flight operations, mission briefs/de-briefs, intelligence, and unit training devices. This facility requires redundant communications, power, and critical utility systems to ensure sustained 24/7 operations. CURRENT SITUATION: There is no MQ-9 mission at Shaw AFB and the installation does not have excess facilities to support this mission beddown to establish critical RPA operational capabilities at Shaw AFB. The MQ-9 mission will initially operate out of temporary facilities that are funded by other appropriations (FY18) until this permanent solution can be accomplished. Unmanned aircraft operations will continue to grow worldwide, as intelligence, surveillance and reconnaissance continue to be the most critical capability requested by combatant commanders. IMPACT IF NOT PROVIDED: It has become increasingly difficult to retain experienced RPA pilots and sensor operators that contribute to critical MQ-9 combat missions. For retention purposes, additional MQ-9 assignment locations are required as part of the Air Combat Command's Culture and Process Improvement Program (CPIP). CPIP is designed to address the vital challenges and stresses uniquely associated with the RPA weapons systems communities. Failure to provide permanent facilities in a timely manner to support downward-directed force structure actions will negatively impact the installation's ability to professionally perform critical wartime mission requirements. Lack of permanent facilities will adversely impact overall combat capabilities in support of worldwide combatant commanders as they prosecute the Global War on Terrorism. 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) and shall employ a standard "modular facilities" design approach from Air Force Civil Engineer Centers (AFCEC). A higher-than-normal prime unit cost is required for the Sq Ops (SCIF Certified)/SOC due to the unique requirements of the facility including raised floors, premise wiring for critical mission hardware and software, and ICD 503/705 SCIF accreditations and certifications due to real-world combat operations. An analysis of reasonable options for accomplishing this project (Alternative 1: Status Quo. Alternative 2: New Construction. Alternative 3: B1411 Add/Alter. Alternative 4: B1411 Alter & New Construction) was accomplished. It indicates there is only one option that will meet operational requirements: New Construction. Base Civil Engineer: (803) 895-				

1. COMPONENT AIR FORCE	FY 2019 MILITARY CONSTRUCTION PROJECT DATA (computer generated)			2. DATE
3. INSTALLATION, SITE AND LOCATION SHAW AIR FORCE BASE SHAW AIR FORCE BASE SITE 1 SOUTH CAROLINA			4. PROJECT TITLE CPIP MQ-9 MCE GROUP	
5. PROGRAM ELEMENT 25219	6. CATEGORY CODE 141-753	7. RPSUID/PROJECT NUMBER 3269/VLSB193001	8. PROJECT COST (\$000) 53,000	
9564. 9,383 SM = 101,000 SF. <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.				

1. COMPONENT AIR FORCE	FY 2019 MILITARY CONSTRUCTION PROJECT DATA (computer generated)		2. DATE																
3. INSTALLATION AND LOCATION SHAW AIR FORCE BASE SHAW AIR FORCE BASE SITE 1 SOUTH CAROLINA		4. PROJECT TITLE CPIP MQ-9 MCE GROUP																	
5. PROGRAM ELEMENT 25219	6. CATEGORY CODE 141-753	7. PROJECT NUMBER 3269/VLSB193001	8. PROJECT COST (\$000) 53,000																
12. SUPPLEMENTAL DATA: a. Estimated Design Data: (1) Project to be accomplished by design-build procedures (2) Basis: (a) Standard or Definitive Design - YES (b) Where Design Was Most Recently Used - (3) All Other Design Costs 2 (4) Construction Contract Award 19 FEB (5) Construction Start 19 MAR (6) Construction Completion 21 MAR (7) Energy Study/Life-Cycle analysis was/will be performed YES b. Equipment associated with this project provided from other appropriations: <table border="1"> <thead> <tr> <th>EQUIPMENT NOMENCLATURE</th> <th>PROCURING APPRC</th> <th>FISCAL YEAR APPROPRIATED OR REQUESTED</th> <th>COST (\$000)</th> </tr> </thead> <tbody> <tr> <td>MISSION EQUIPMENT</td> <td>3300</td> <td>19</td> <td>65,000</td> </tr> <tr> <td>FFE</td> <td>3300</td> <td>19</td> <td>40,000</td> </tr> <tr> <td>RELOCATABLE FAC 20K SF (LEASE)</td> <td>3400</td> <td>18</td> <td>7,500</td> </tr> </tbody> </table>				EQUIPMENT NOMENCLATURE	PROCURING APPRC	FISCAL YEAR APPROPRIATED OR REQUESTED	COST (\$000)	MISSION EQUIPMENT	3300	19	65,000	FFE	3300	19	40,000	RELOCATABLE FAC 20K SF (LEASE)	3400	18	7,500
EQUIPMENT NOMENCLATURE	PROCURING APPRC	FISCAL YEAR APPROPRIATED OR REQUESTED	COST (\$000)																
MISSION EQUIPMENT	3300	19	65,000																
FFE	3300	19	40,000																
RELOCATABLE FAC 20K SF (LEASE)	3400	18	7,500																

1. COMPONENT AIR FORCE			FY 2019 MILITARY CONSTRUCTION PROGRAM						2. DATE (YYMMDD) 20171218			
3. INSTALLATION AND LOCATION JOINT BASE SAN ANTONIO - LACKLAND AIR FORCE BASE TEXAS						4. COMMAND AIR EDUCATION AND TRAINING COMMAND			5. AREA CONSTRUCTION COST INDEX 0.86			
6. PERSONNEL			(1) PERMANENT			(2) STUDENTS			(3) SUPPORTED			TOTAL
			OFFICER	ENLISTED	CIVILIAN	OFFICER	ENLISTED	CIVILIAN	OFFICER	ENLISTED	CIVILIAN	
a. AS OF 30-Sep-17			691	3335	2465	555	1356	25	1634	7557	5708	23,326
b. END FY 2022			679	3362	2453	555	1356	25	1672	7179	6630	23,911
7. INVENTORY DATA (\$000)												
a. TOTAL ACREAGE			6,835									
b. INVENTORY TOTAL AS OF 30-Sep-17												
c. AUTHORIZATION NOT YET IN INVENTORY			380,230									
d. AUTHORIZATION REQUESTED IN THIS PROGRAM (FY 2019)			67,300									
e. PLANNED IN NEXT FOUR PROGRAM YEARS (FY 2020-2023)			219,100									
f. REMAINING DEFICIENCY			384,830									
g. GRAND TOTAL			5,661,899									
8. PROJECTS REQUESTED IN THIS PROGRAM (FY 2019)												
a. CATEGORY									b. COST (\$000)		c. DESIGN STATUS	
(1) CODE	(2) PROJECT TITLE					(3) SCOPE					(1) START	(2) COMPLETE
721-311	BMT Recruit Dormitory 6					26,537 SM			25,000		06/15	09/16
TOTAL									25,000			
9. FUTURE PROJECTS IN NEXT FOUR PROGRAM YEARS (FY2020-2023)												
721-311 BMT Recruit Dormitory 8						26,065 SM			110,100			
730-773 BMT Chapel for America's Airmen						8,768 SM			30,000			
141-456 91 COS Operations Center						2,140 SM			25,000			
BA Aquatics Tank						SM			68,500			
FUTURE PROJECTS TOTAL									233,600			
R&M UNFUNDED REQUIREMENT (\$M)									TOTAL 56.3			
10. MISSION OR MAJOR FUNCTIONS												
A training wing which includes Basic Military Training, Security Forces, Combat Convoy/Arms/Control, Pararescue, Survival Evasion Resistance Escape, Logistics, Enlisted Aircrew, Services, Contracting, Vehicle Maintenance, Military Training Instructor, Defense Language Institute English Language Center, Inter-American Air Forces Academy, and DoD Military Working Dog Training. Additional missions include Air Force Security Forces Center, Recruiting, Cryptographic maintenance, Reserve C-5 training, and a major medical center.												
11. OUTSTANDING POLLUTION AND SAFETY DEFICIENCIES (FY2020-2024)												
a. Air Pollution												
b. Water Pollution												
c. Occupational Safety and Health												
d. Other Environmental												
OUTSTANDING DEFICIENCIES TOTAL									0			

1. COMPONENT AIR FORCE	FY 2017 MILITARY CONSTRUCTION PROJECT DATA (computer generated)			2. DATE
3. INSTALLATION, SITE AND LOCATION JOINT BASE SAN ANTONIO - LACKLAND LACKLAND AIR FORCE BASE SITE # 1 TEXAS			4. PROJECT TITLE BMT RECRUIT DORMITORY 6	
5. PROGRAM ELEMENT 85976	6. CATEGORY CODE 721-311	7. RPSUID/PROJECT NUMBER 2461/MPLS083737R6	8. PROJECT COST (\$000) 25,000	
9. COST ESTIMATES				
ITEM	U/M	QUANTITY	UNIT	COST (\$000)
PRIMARY FACILITIES				(47,267)
RECRUIT DORMITORY (1248 PN - 721-311)	SM	19,637	1,774	(34,836)
MTI ADMINISTRATIVE SPACE (610-241)	SM	1,261	2,227	(2,808)
TRAINING/FORMATION OPEN SPACE (179-371)	SM	3,283	1,469	(4,823)
PENTHOUSE FOR MECHANICAL EQUIPMENT (721-311)	SM	1,891	1,537	(2,906)
WEAPONS CLEANING PAVILION (145-921)	SM	465	2,202	(1,024)
SUSTAINABILITY & ENERGY MEASURES	LS			(870)
SUPPORTING FACILITIES				13,462
SITE IMPROVEMENTS PLUS EISA AND STORM WATER	LS			(1,868)
EXERCISE/DRILL PAD AND RUNNING TRACK(750-177)	LS			(3,162)
UTILITIES	LS			(2,687)
PAVEMENTS	LS			(1,412)
SPECIAL DRILLED PIER FOUNDATION	LS			(957)
COMMUNICATIONS INFRASTRUCTURE	LS			(194)
DEMOLITION	SM	20,050	159	(3,182)
SUBTOTAL				60,729
CONTINGENCY (5.0%)				3,036
TOTAL CONTRACT COST				63,766
SUPERVISION, INSPECTION AND OVERHEAD (5.7%)				3,635
COST INCREASE				25,000
TOTAL REQUEST				92,400
TOTAL REQUEST (ROUNDED)				92,300
EQUIPMENT FROM OTHER APPROPRIATIONS (NON-ADD)				(2,750.0)
10. Description of Proposed Construction: Construction includes a multi-story facility consisting of a drilled pier foundation, concrete floor slabs, structural steel frame, masonry walls, standing seam metal roof, and an elevator. Areas include administrative support, open-bay dormitories, central latrines, drill pad, weapons cleaning pavilion, physical training areas, and storage. Demolishes facilities totaling 20,050 SM. Facilities will be designed as permanent construction in accordance with the DoD Unified Facilities Criteria (UFC) 1-200-01, General Building Requirements and UFC 1-200-02, High Performance and Sustainable Building Requirements. This project will comply with DoD antiterrorism/force protection requirements per UFC 4-010-01.				
Air Conditioning: 450 Tons				
11. Requirement: 26537 SM Adequate: 0 SM Substandard: 20521 SM				
PROJECT: Construct Basic Military Training (BMT) Recruit Dormitory				
REQUIREMENT: A major Air Force objective is to provide recruits with facilities				

1. COMPONENT AIR FORCE	FY 2017 MILITARY CONSTRUCTION PROJECT DATA (computer generated)			2. DATE
3. INSTALLATION, SITE AND LOCATION JOINT BASE SAN ANTONIO - LACKLAND LACKLAND AIR FORCE BASE SITE # 1 TEXAS			4. PROJECT TITLE BMT RECRUIT DORMITORY 6	
5. PROGRAM ELEMENT 85976	6. CATEGORY CODE 721-311	7. RPSUID/PROJECT NUMBER 2461/MPLS083737R6	8. PROJECT COST (\$000) 25,000	
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 BMT mission at Lackland AFB. This project provides the fifth Airmen Training Complex (ATC) dormitory building in the RH&T Replacement program. This ATC facility will house a Basic Military Training Squadron including dormitory and administrative space. This project is designed to accommodate 1,248 recruits; 48 recruits per flight, 24 flights per squadron with 4 reserve bed spaces per flight in order to address surges, gender separation and injured recruits. This project will also construct a new drill pad, running track, exercise areas, war skills training areas, and a pavilion for training weapons cleaning, storage, and latrines. Constructs the sixth BMT dormitory building. 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 215,824 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 are 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 (\$16.8M for today's 8 RH&Ts) for the next 28 years according to the facility assessment study and detailed Economic Analysis. Available training hours, training quality, cohesiveness, and Esprit de corps are degraded as a direct result of decentralized BMT facilities and functions. A centralized, master planned, BMT campus does not exist. BMT has difficulty accommodating summer recruit surges while accomplishing maintenance, repair and renovation projects of the aging, inadequate, and substandard RH&Ts. Recruits do not have the minimum standard square footage during surge and overhaul periods forcing as many as 65 recruits per flight in facilities designed for 50 recruits per flight. This further stresses infrastructure systems and accelerates deterioration. The fire protection system is inadequate and obsolete. The mechanical, electrical, and lighting systems and interior finishes are at the end of their useful lives and require replacement. IMPACT IF NOT PROVIDED: One of Lackland Air Force Base's primary missions is to educate and train every BMT enlisted recruit when entering military service in the U.S. Air Force. Without quality BMT programs and state-of-the-art, master-planned facilities, the Air Force will have difficulty recruiting, training, and retaining new recruits. BMT schedules will continue to be stretched to critical levels that risk mission loss. Facilities will continue to age and will require increasingly more capital to keep them operational. During surge periods, or when existing RH&Ts are being repaired, maintained, or overhauled, flight sizes will increase and recruits will continue to live in space with less than the minimum standard square footage per recruit. Significant capital must be spent to convert the existing RH&T facilities to current antiterrorism/force protection (AT/FP) criteria.				

1. COMPONENT AIR FORCE	FY 2017 MILITARY CONSTRUCTION PROJECT DATA (computer generated)			2. DATE																									
3. INSTALLATION, SITE AND LOCATION JOINT BASE SAN ANTONIO - LACKLAND LACKLAND AIR FORCE BASE SITE # 1 TEXAS			4. PROJECT TITLE BMT RECRUIT DORMITORY 6																										
5. PROGRAM ELEMENT 85976	6. CATEGORY CODE 721-311	7. RPSUID/PROJECT NUMBER 2461/MPLS083737R6	8. PROJECT COST (\$000) 25,000																										
ADDITIONAL: This project meets the criteria/scope for recruit housing specified in Air Force Handbook 32-1084, "Standard Facility Requirements Handbook". The new OSD Dormitory standard does not apply to this facility. It is excluded as a recruit dormitory. A full Economic Analysis was performed demonstrating the economic advantage of new construction to meet the program requirements. Base Civil Engineer: (210) 671-2977. BMT Recruit Dormitory : 19,637 SM = 211,364 SF; MTI Admin: 1,261 SM = 13,573 SF; Training/Formation: 3,283 SM = 35,337 SF; Weapons Cleaning: 465 SM = 5,005 SF; Penthouse for Mechanical Equipment: 1891 SM = 20,347 SF. This project was submitted to Congress as part of the FY2017 President's Budget Request. The scope was correct but the estimated cost was inadequate. Therefore, the FY2019 President's Budget Request includes a request for a FY2019 appropriation of \$25.0M to fully fund this project. <table border="0"> <tr> <td></td> <td></td> <td colspan="2">Authorization of</td> <td></td> </tr> <tr> <td>FY (\$M)</td> <td>Authorization</td> <td colspan="2">Appropriation</td> <td>Appropriation</td> </tr> <tr> <td>2017 Enacted</td> <td>67.3</td> <td colspan="2">67.3</td> <td>67.3</td> </tr> <tr> <td>2019 Request</td> <td>*</td> <td colspan="2">25.0</td> <td>25.0</td> </tr> <tr> <td>Total</td> <td>92.3</td> <td colspan="2">92.3</td> <td>92.3</td> </tr> </table> * FY2019 Division B requests full cost of \$92.3M BASE CIVIL ENGINEER: Comm. 210-395-8826 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.							Authorization of			FY (\$M)	Authorization	Appropriation		Appropriation	2017 Enacted	67.3	67.3		67.3	2019 Request	*	25.0		25.0	Total	92.3	92.3		92.3
		Authorization of																											
FY (\$M)	Authorization	Appropriation		Appropriation																									
2017 Enacted	67.3	67.3		67.3																									
2019 Request	*	25.0		25.0																									
Total	92.3	92.3		92.3																									

1. COMPONENT AIR FORCE	FY 2017 MILITARY CONSTRUCTION PROJECT DATA (computer generated)		2. DATE
3. INSTALLATION AND LOCATION JOINT BASE SAN ANTONIO - LACKLAND LACKLAND AIR FORCE BASE SITE # 1 TEXAS		4. PROJECT TITLE BMT RECRUIT DORMITORY 6	
5. PROGRAM ELEMENT 85976	6. CATEGORY CODE 721-311	7. PROJECT NUMBER 2461/MPLS083737R6	8. PROJECT COST (\$000) 25,000
12. SUPPLEMENTAL DATA:			
a. Estimated Design Data:			
(1) Status:			
(a) Date Design Started			15-JUN-15
(b) Parametric Cost Estimates used to develop costs			YES
* (c) Percent Complete as of 01 JAN 2016			15%
* (d) Date 35% Designed			31-MAR-16
(e) Date Design Complete			30-SEP-16
(f) Energy Study/Life-Cycle analysis was/will be performed			YES
(2) Basis:			
(a) Standard or Definitive Design -			NO
(b) Where Design Was Most Recently Used -			
(3) Total Cost (c) = (a) + (b) or (d) + (e):			(\$000)
(a) Production of Plans and Specifications			893
(b) All Other Design Costs			447
(c) Total			1,340
(d) Contract			1,117
(e) In-house			223
(4) Construction Contract Award			17 FEB
(5) Construction Start			17 MAR
(6) Construction Completion			19 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)
WALL LOCKERS AND FURNISHING	3400	2018	2,560
ADPE	3080	2018	190

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1. COMPONENT AIR FORCE				FY 2019 MILITARY CONSTRUCTION PROGRAM				2. DATE (YYYYMMDD) 20171218			
3. INSTALLATION AND LOCATION JOINT REGION MARIANAS - TINIAN NORTHERN MARIANA ISLANDS (CNMI)						4. COMMAND PACIFIC AIR FORCES				5. AREA CONSTRUCTION COST INDEX 2.63	
6. PERSONNEL		(1) PERMANENT			(2) STUDENTS			(3) SUPPORTED			TOTAL
		OFFICER	ENLISTED	CIVILIAN	OFFICER	ENLISTED	CIVILIAN	OFFICER	ENLISTED	CIVILIAN	
a. AS OF 30-Sep-17		0	0	0	0	0	0	0	0	0	0
b. END FY 2023		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-17											0
c. AUTHORIZATION NOT YET IN INVENTORY											0
d. AUTHORIZATION REQUESTED IN THIS PROGRAM (FY 2019)											43,000
e. PLANNED IN NEXT FOUR PROGRAM YEARS (FY 2019-2022)											311,000
f. REMAINING DEFICIENCY											0
g. GRAND TOTAL											354,000
8. PROJECTS REQUESTED IN THIS PROGRAM (FY 2019)											
a. CATEGORY								b. COST (\$000)		c. DESIGN STATUS	
(1) CODE	(2) PROJECT TITLE				(3) SCOPE				(1) START	(2) COMPLETE	
112-211	APR - CARGO PAD WITH TAXIWAY EXTENSION				84,570 SM			46,000	07/17	09/18	
218-712	APR - MAINTENANCE SUPPORT FACILITY				652 SM			4,700	07/17	09/18	
TOTAL								50,700			
9. FUTURE PROJECTS IN NEXT FOUR PROGRAM YEARS											
124-135 APR - FUEL TANKS WITH PIPELINE/HYDRANT SYSTEM				35,000 CM				109,000			
113-321 APR - AIRFIELD DEVELOPMENT WITH APRON/TAXIWAY				230,010 SM				202,000			
FUTURE PROJECTS TOTAL 311,000											
R&M UNFUNDED REQUIREMENT (\$M)								TOTAL		0.0	
10. MISSION OR MAJOR FUNCTIONS											
Protect and defend, in concert with other U.S. Government agencies, the territory of the United States, its people, and its interests. With allies and partners, commitment to enhancing stability in the Asia-Pacific region by promoting security cooperation, encouraging peaceful development, responding to contingencies, deterring aggression, and, when necessary, fighting to win.											
11. OUTSTANDING POLLUTION AND SAFETY DEFICIENCIES (FY 2017-2021)											
a. Air Pollution											
b. Water Pollution											
c. Occupational Safety and Health											
d. Other Environmental											
OUTSTANDING DEFICIENCIES TOTAL								0			

1. COMPONENT AIR FORCE	FY 2019 MILITARY CONSTRUCTION PROJECT DATA (computer generated)			2. DATE
3. INSTALLATION, SITE AND LOCATION JOINT REGION MARIANAS - TINIAN NORTHERN MARIANA ISLANDS (CNMI)		4. PROJECT TITLE APR - CARGO PAD WITH TAXIWAY EXTENSION		
5. PROGRAM ELEMENT 27576	6. CATEGORY CODE 112-211	7. RPSUID/PROJECT NUMBER 672/PAF189030	8. PROJECT COST (\$000) 46,000	
9. COST ESTIMATES				
ITEM	U/M	QUANTITY	UNIT	COST (\$000)
PRIMARY FACILITIES				20,652
CARGO PAD (113-321)	SM	26,595	277	(8,689)
TAXIWAY (112-211)	SM	30,273	277	(9,891)
SHOULDER (116-642)	SM	27,702	51	(1,667)
SUSTAINABILITY AND ENERGY MEASURES	LS			(405)
SUPPORTING FACILITIES				20,475
SITE IMPROVEMENTS	LS			(12,048)
UTILITIES	LS			(2,354)
ENVIRONMENTAL REMEDIATION	LS			(177)
ARCHEOLOGICAL MONITORING	LS			(88)
EXPLOSIVE SAFETY SUBMISSION COMPLIANCE	LS			(5,808)
SUBTOTAL				41,127
CONTINGENCY (5.0%)				2,056
TOTAL CONTRACT COST				43,183
SUPERVISION, INSPECTION AND OVERHEAD (6.2%)				2,677
TOTAL REQUEST				45,860
TOTAL REQUEST (ROUNDED)				46,000
10. Description of Proposed Construction: Construct a Cargo Pad using Portland Cement Concrete including taxiway connections to the airfield runway and other taxiways, NAVAIDS (e.g., lighting and markings), and all necessary supporting facilities for a complete and usable facility. The facility must comply Seismic Zone 3 design criteria. 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.				
11. Requirement: 84570 SM Adequate: 0 SM Substandard: 0 SM PROJECT:Asia Pacific Resiliency (APR) - Cargo Pad with Taxiway Extension REQUIREMENT: The USAF proposes to construct a cargo pad 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 provides an appropriately sized cargo pad and connecting taxiway to the airfield to support USAF operations from the CNMI. The Cargo Pad will be made of Portland Concrete Cement and be able to accommodate a single C-5 Galaxy aircraft (alternatively, it will be able to accommodate up to four KC-135 or KC-46 when the pad is not being utilized by the C-5). The purpose is				

1. COMPONENT AIR FORCE	FY 2019 MILITARY CONSTRUCTION PROJECT DATA (computer generated)			2. DATE
3. INSTALLATION, SITE AND LOCATION JOINT REGION MARIANAS - TINIAN NORTHERN MARIANA ISLANDS (CNMI)			4. PROJECT TITLE APR - CARGO PAD WITH TAXIWAY EXTENSION	
5. PROGRAM ELEMENT 27576	6. CATEGORY CODE 112-211	7. RPSUID/PROJECT NUMBER 672/PAF189030	8. PROJECT COST (\$000) 46,000	
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 operations 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 (FAA) regulations including Orders and Advisory Circulars applicable to commercial airports. In addition, project will comply with CNMI Public Law 06-45 building codes. CURRENT SITUATION: A single airfield with facilities for the safe exercise of military activities does not exist in the CNMI. IMPACT IF NOT PROVIDED: Without the Cargo Pad there is not adequate parking area for the Air Force to receive and unload cargo in support of exercises or mission operations. A separate MILCON project is planned to provide a parking apron and refueling area for tanker aircraft, however, use of this area for C-5 loading/unloading would significantly limit refueling operations. AMC has identified the Cargo Pad in the CNMI as part of its en route infrastructure to maintain a global presence and rapidly project military power worldwide. ADDITIONAL: This project complies with the criteria/scope specified in AFMAN 32-1084, "Facility Requirements". Supporting Facilities costs are about half of total project costs due to extensive excavation/in-fill requirements. In addition, explosive safety submission costs for all projects in the Mariana Islands are high due to potential for UXO and are based on the extent of land used and depth of construction. Base Civil Engineer: Comm. 808-449-3810. Cargo Pad: 26,595 SM = 286,266 SF; Taxiway: 30,273 SM = 325,856 SF; Shoulder: 27,702 SM = 298,182 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 2019 MILITARY CONSTRUCTION PROJECT DATA (computer generated)		2. DATE																										
3. INSTALLATION AND LOCATION JOINT REGION MARIANAS - TINIAN NORTHERN MARIANA ISLANDS (CNMI)		4. PROJECT TITLE APR - CARGO PAD WITH TAXIWAY EXTENSION																											
5. PROGRAM ELEMENT 27576	6. CATEGORY CODE 112-211	7. PROJECT NUMBER /672PAF189030	8. PROJECT COST (\$000) 46,000																										
12. SUPPLEMENTAL DATA: 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 design because there is no AF standard facility design for this project and there is no applicable standard design from the Air Force Civil Engineer Center. a. Estimated Design Data: (1) Status: <table> <tr> <td>(a) Date Design Started</td> <td>01-JUL-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> (2) Basis: <table> <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> (3) Total Cost (c) = (a) + (b) or (d) + (e): (\$000) <table> <tr> <td>(a) Production of Plans and Specifications</td> <td>2,340</td> </tr> <tr> <td>(b) All Other Design Costs</td> <td>1,170</td> </tr> <tr> <td>(c) Total</td> <td>3,510</td> </tr> <tr> <td>(d) Contract</td> <td>2,925</td> </tr> <tr> <td>(e) In-house</td> <td>585</td> </tr> </table> (4) Construction Contract Award 19 FEB (5) Construction Start 19 MAR (6) Construction Completion 21 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: N/A				(a) Date Design Started	01-JUL-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	2,340	(b) All Other Design Costs	1,170	(c) Total	3,510	(d) Contract	2,925	(e) In-house	585
(a) Date Design Started	01-JUL-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																												
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1. COMPONENT AIR FORCE	FY 2019 MILITARY CONSTRUCTION PROJECT DATA (computer generated)			2. DATE
3. INSTALLATION, SITE AND LOCATION JOINT REGION MARIANAS - TINIAN NORTHERN MARIANA ISLANDS (CNMI)		4. PROJECT TITLE APR - MAINTENANCE SUPPORT FACILITY		
5. PROGRAM ELEMENT 27576	6. CATEGORY CODE 218-712	7. RPSUID/PROJECT NUMBER 672/PAF189040	8. PROJECT COST (\$000) 4,700	
9. COST ESTIMATES				
ITEM	U/M	QUANTITY	UNIT	COST (\$000)
PRIMARY FACILITIES				2,715
MAINTENANCE SUPPORT FACILITY (218-712)	SM	652	3,214	(2,662)
SUSTAINABILITY AND ENERGY MEASURES	LS			(53)
SUPPORTING FACILITIES				1,515
SITE IMPROVEMENTS	LS			(132)
PAVEMENTS	LS			(461)
UTILITIES	LS			(390)
ENVIRONMENTAL REMEDIATION	LS			(191)
ARCHEOLOGICAL MONITORING	LS			(95)
EXPLOSIVE SAFETY SUBMISSION COMPLIANCE	LS			(246)
SUBTOTAL				4,230
CONTINGENCY (5.0%)				212
TOTAL CONTRACT COST				4,442
SUPERVISION, INSPECTION AND OVERHEAD (6.2%)				276
TOTAL REQUEST				4,718
TOTAL REQUEST (ROUNDED)				4,700
EQUIPMENT FROM OTHER APPROPRIATIONS (NON-ADD)				(80.0)
10. Description of Proposed Construction: Construct a maintenance support facility with a slab on grade foundation, cast in place, tilt up or pre-cast concrete walls with typhoon shutters and a cast in place or pre-cast concrete roof. The facility must be able to withstand 190 mile per hour winds for structural elements and Seismic Zone 3 design criteria. The project includes site improvements, pavements, utilities, environmental remediation, archaeological monitoring, explosive safety monitoring as well as all other supporting work necessary for a complete and usable facility. 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 anti-terrorism/force protection requirements per UFC 4-010-01. Air Conditioning: 14 Tons				
11. Requirement: 652 SM Adequate: 0 SM Substandard: 0 SM PROJECT:Asia Pacific Resiliency (APR) - Maintenance Support Facility REQUIREMENT: The USAF proposes to construct this facility 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. The purpose is to support and conduct current, emerging, and future				

1. COMPONENT AIR FORCE	FY 2019 MILITARY CONSTRUCTION PROJECT DATA (computer generated)			2. DATE
3. INSTALLATION, SITE AND LOCATION JOINT REGION MARIANAS - TINIAN NORTHERN MARIANA ISLANDS (CNMI)			4. PROJECT TITLE APR - MAINTENANCE SUPPORT FACILITY	
5. PROGRAM ELEMENT 27576	6. CATEGORY CODE 218-712	7. RPSUID/PROJECT NUMBER 672/PAF189040	8. PROJECT COST (\$000) 4,700	
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. This project will provide a 652 SM maintenance support facility with storage space, ready room, office, janitor closet, restroom, and other supporting facilities, adjacent to the apron and cargo pad to support mission needs. 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 operations 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 (FAA) regulations including Orders and Advisory Circulars applicable to commercial airports. In addition, project will comply with CNMI Public Law 06-45 building codes. CURRENT SITUATION: A single airfield with facilities for the safe exercise of military activities does not exist in the CNMI. IMPACT IF NOT PROVIDED Without this facility, there is not adequate maintenance space to conduct USAF missions from the CNMI, which precludes use of the CNMI for emerging and future exercise missions or to divert tanker aircraft or respond effectively to natural disaster in the area; USAF equipment, supplies, and temporary facility will need to be brought in for each exercise or divert event. ADDITIONAL: This project complies with the criteria/scope specified in AFMAN 32-1084, "Facility Requirements." Supporting facility costs are approximately one half the value of primary facility costs due to lack of existing utilities. In addition, explosive safety submission costs for all projects in the Mariana Islands are high due to the potential for UXO and are based on the extent of land used and depth of construction. Base Civil Engineer: 808-449- 3810. Maintenance Support Facility: 652 SM = 7018 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 2019 MILITARY CONSTRUCTION PROJECT DATA (computer generated)			2. DATE												
3. INSTALLATION AND LOCATION JOINT REGION MARIANAS - TINIAN NORTHERN MARIANA ISLANDS (CNMI)			4. PROJECT TITLE APR - MAINTENANCE SUPPORT FACILITY													
5. PROGRAM ELEMENT 27576	6. CATEGORY CODE 218-712	7. PROJECT NUMBER 672/PAF189040	8. PROJECT COST (\$000) 4,700													
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 design because there is no AF standard facility design for this project and there is no applicable standard design from the Air Force Civil Engineer Center. 12. SUPPLEMENTAL DATA: a. Estimated Design Data: (1) Status: (a) Date Design Started 01-JUL-17 (b) Parametric Cost Estimates used to develop costs YES * (c) Percent Complete as of 01 JAN 2018 15% * (d) Date 35% Designed 01-FEB-18 (e) Date Design Complete 01-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 222 (b) All Other Design Costs 111 (c) Total 333 (d) Contract 278 (e) In-house 56 (4) Construction Contract Award 19 FEB (5) Construction Start 19 MAR (6) Construction Completion 20 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: <table border="1"> <thead> <tr> <th>EQUIPMENT NOMENCLATURE</th> <th>PROCURING APPROPRIATION</th> <th>FISCAL YEAR APPROPRIATED OR REQUESTED</th> <th>COST (\$000)</th> </tr> </thead> <tbody> <tr> <td>FURNITURE, FIXTURES & EQUIP</td> <td>3400</td> <td>2020</td> <td>50</td> </tr> <tr> <td>COMMUNICATIONS EQUIPMENT</td> <td>3400</td> <td>2020</td> <td>30</td> </tr> </tbody> </table>					EQUIPMENT NOMENCLATURE	PROCURING APPROPRIATION	FISCAL YEAR APPROPRIATED OR REQUESTED	COST (\$000)	FURNITURE, FIXTURES & EQUIP	3400	2020	50	COMMUNICATIONS EQUIPMENT	3400	2020	30
EQUIPMENT NOMENCLATURE	PROCURING APPROPRIATION	FISCAL YEAR APPROPRIATED OR REQUESTED	COST (\$000)													
FURNITURE, FIXTURES & EQUIP	3400	2020	50													
COMMUNICATIONS EQUIPMENT	3400	2020	30													

1. COMPONENT AIR FORCE	FY 2019 MILITARY CONSTRUCTION PROJECT DATA (computer generated)			2. DATE
3. INSTALLATION, SITE AND LOCATION JOINT REGION MARIANAS - ANDERSEN ANDERSEN AF BASE SITE # 1 GUAM			4. PROJECT TITLE HAYMAN MUNITIONS STORAGE IGLOOS, MSA 2	
5. PROGRAM ELEMENT 27576	6. CATEGORY CODE 422-264	7. RPSUID/PROJECT NUMBER 1366/AJJY183003	8. PROJECT COST (\$000) 9,800	
9. COST ESTIMATES				
ITEM	U/M	QUANTITY	UNIT	COST (\$000)
MUNITIONS STORAGE IGLOOS				4,731
CONSTRUCT 3 HAYMAN STORAGE MAGAZINES	SM	621	7,493	(4,653)
SDD & EP ACT 05 (2%)	LS			(78)
SUPPORTING FACILITIES				3,725
UTILITIES	LS			(797)
SITE PREPARATION/ IMPROVEMENTS	LS			(414)
COMMUNICATIONS	LS			(334)
ENVIRONMENTAL REMEDIATION (ESS) MEC/UXO	LS			(400)
ARCHEOLOGICAL MONITORING	LS			(100)
PAVEMENTS (ACCESS ROAD & LOADING APRONS)	SM	3,000	435	(1,305)
DEMOLITION	SM	580	474	(275)
CYBERSECURITY COMMISSIONING	LS			(100)
SUBTOTAL				8,456
CONTINGENCY (5.0%)				423
TOTAL CONTRACT COST				8,879
SUPERVISION, INSPECTION AND OVERHEAD (6.2%)				550
DESIGN/BUILD - DESIGN COST (4.0% OF SUBTOTAL)				338
TOTAL REQUEST				9,768
TOTAL REQUEST (ROUNDED)				9,800
EQUIPMENT FROM OTHER APPROPRIATIONS (NON-ADD)				(1,332)
10. Description of Proposed Construction: Construct three new Hayman munitions storage igloos for a total of 621 SM utilizing conventional design and construction methods to accommodate the mission. Demolish three substandard earth covered munitions (ECM) storage igloos, B-51260, B-51261, and B-51261 for a total of 580 SM located in MSA 2. The facilities will include reinforced concrete foundations, rated 7-bar construction, floor slabs, columns, beams, lighting and electrical support, fire protection systems, lightning protection systems, intruder detection systems, and all necessary supporting utilities for complete and usable facilities. The facilities should be compatible with applicable DoD, Air Force, and base design standards. The facilities must also be able to withstand wind loads and seismic effects as prescribed in applicable codes and design guides. In addition, local materials and construction techniques shall be used where cost effective. The 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 as per UFC 4-010-01.				

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3. INSTALLATION, SITE AND LOCATION JOINT REGION MARIANAS - ANDERSEN ANDERSEN AF BASE SITE # 1 GUAM			4. PROJECT TITLE HAYMAN MUNITIONS STORAGE IGLOOS, MSA 2	
5. PROGRAM ELEMENT 27576	6. CATEGORY CODE 422-264	7. RPSUID/PROJECT NUMBER 1366/AJJY183003	8. PROJECT COST (\$000) 9,800	
Air Conditioning: 0 Tons				
11. Requirement: 35437 SM Adequate: 8401 SM Substandard: 30132 SM				
<u>PROJECT:</u> Construct munitions storage igloos.				
<u>REQUIREMENT:</u> This project will demolish three antiquated munitions storage igloos adjacent to the flight line and construct three adequately sized, configured, protected, and sited munitions storage igloos required to support the bed-down requirement (and/or transition) of munitions assets in the Pacific Area of Operations (AOR). Supporting facilities include site development, utilities and connections, road construction, and loading aprons. Project will utilize economical design and construction methods to accommodate the mission of the facility. Facilities will be designed as permanent construction in accordance with the DoD Unified Facilities Criteria UFC 1-200-02. This project will comply with DoD antiterrorism/force protection requirements per UFC 4-010-01.				
<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. This, compounded by deterioration of the facilities and their loss of earth cover caused by super typhoons, caused 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. The new igloos will provide an increase in NEW for some of the igloos replaced and replace many of the most degraded existing igloos. These igloos are needed to meet the munitions mission required by the War Consumables Distribution Objectives document, Defense Planning Guidance, and PACOM 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> Failure to provide this project will prevent PACAF from increasing its force presence and/or transitioning aircraft within the AOR to support operations in Pacific Command. Lack of adequate munitions storage will continue to adversely impact essential forward-positioned munitions storage capability needed to support operations. The inability to properly store the new state of the art weapons systems at Andersen AFB will deprive PACAF of immediate access to critical munitions necessary to meet changing taskings and bomber sortie generation. These munitions support on-going operations. If this project is not provided, the current inadequate facilities will not support future missions that directly support PACOM/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 (AFCFS), the Munitions Facilities Standards Guides Volumes 1 and 2 and shall employ the standard facility design for 7-Bar RC box				

1. COMPONENT AIR FORCE	FY 2019 MILITARY CONSTRUCTION PROJECT DATA (computer generated)			2. DATE
3. INSTALLATION, SITE AND LOCATION JOINT REGION MARIANAS - ANDERSEN ANDERSEN AF BASE SITE # 1 GUAM			4. PROJECT TITLE HAYMAN MUNITIONS STORAGE IGLOOS, MSA 2	
5. PROGRAM ELEMENT 27576	6. CATEGORY CODE 422-264	7. RPSUID/PROJECT NUMBER 1366/AJJY183003	8. PROJECT COST (\$000) 9,800	
earth covered magazines. This project meets the criteria/scope specified in AFH 32-1084, "Facility Requirements." Costs to comply with UFC 3-210-10 Low Impact Development are included. A preliminary analysis of reasonable options for satisfying this requirement indicates that only one option will meet mission needs. The initial cost estimate for this project is within DoD Pricing Guide parameters. The supporting costs for this project are higher than usual due to the distance necessary to run the utilities and the large associated pavements, demolition and site work, and environmental remediation, MEC/UXO. 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. Any hazardous materials must be disposed of in accordance to all Federal and Local Regulations. Civil Engineer: Comm. 671-366-7101. Munitions Igloos 621 SM = 6684 SF; Demolition 580 SM = 6243 JOINT USE CERTIFICATION: Mission requirements, operational considerations, and location are incompatible with use by other components.				

1. COMPONENT AIR FORCE	FY 2019 MILITARY CONSTRUCTION PROJECT DATA (computer generated)		2. DATE												
3. INSTALLATION AND LOCATION JOINT REGION MARIANAS - ANDERSEN ANDERSEN AF BASE SITE # 1 GUAM		4. PROJECT TITLE HAYMAN MUNITIONS STORAGE IGLOOS, MSA 2													
5. PROGRAM ELEMENT 27576	6. CATEGORY CODE 422-264	7. PROJECT NUMBER 1366/AJJY183003	8. PROJECT COST (\$000) 9,800												
12. SUPPLEMENTAL DATA: a. Estimated Design Data: (1) Project to be accomplished by design-build procedures (2) Basis: (a) Standard or Definitive Design - YES (b) Where Design Was Most Recently Used - (3) All Other Design Costs 0 (4) Construction Contract Award 19 FEB (5) Construction Start 19 APR (6) Construction Completion 21 NOV (7) Energy Study/Life-Cycle analysis was/will be performed YES b. Equipment associated with this project provided from other appropriations: <table border="1"> <thead> <tr> <th>EQUIPMENT NOMENCLATURE</th> <th>PROCURING APPRC</th> <th>FISCAL YEAR APPROPRIATED OR REQUESTED</th> <th>COST (\$000)</th> </tr> </thead> <tbody> <tr> <td>INTRUSION DETECTION SYS (IDS)</td> <td>3080</td> <td>2019</td> <td>1,330</td> </tr> <tr> <td>COMMUNICATIONS (TELEPHONE)</td> <td>3400</td> <td>2020</td> <td>2</td> </tr> </tbody> </table>				EQUIPMENT NOMENCLATURE	PROCURING APPRC	FISCAL YEAR APPROPRIATED OR REQUESTED	COST (\$000)	INTRUSION DETECTION SYS (IDS)	3080	2019	1,330	COMMUNICATIONS (TELEPHONE)	3400	2020	2
EQUIPMENT NOMENCLATURE	PROCURING APPRC	FISCAL YEAR APPROPRIATED OR REQUESTED	COST (\$000)												
INTRUSION DETECTION SYS (IDS)	3080	2019	1,330												
COMMUNICATIONS (TELEPHONE)	3400	2020	2												

1. COMPONENT AIR FORCE				FY 2019 MILITARY CONSTRUCTION PROGRAM				2. DATE (YYMMDD) 20171218			
3. INSTALLATION AND LOCATION AL UDEID QATAR						4. COMMAND AIR COMBAT COMMAND				5. AREA CONSTRUCTION COST INDEX 1.23	
6. PERSONNEL		(1) PERMANENT			(2) STUDENTS			(3) SUPPORTED			TOTAL
		OFFICER	ENLISTED	CIVILIAN	OFFICER	ENLISTED	CIVILIAN	OFFICER	ENLISTED	CIVILIAN	
a. AS OF 30-Sep-16		45	42	0	0	0	0	134	6434	350	7,005
b. END FY 2022		45	42	0	0	0	0	134	6434	350	7,005
7. INVENTORY DATA (\$000)											
a. TOTAL ACREAGE										13,534	
b. INVENTORY TOTAL AS OF										18-Dec-17	
										1,594,298	
c. AUTHORIZATION NOT YET IN INVENTORY										15,000	
d. AUTHORIZATION REQUESTED IN THIS PROGRAM (FY 2019)										70,400	
e. PLANNED IN NEXT FOUR PROGRAM YEARS (FY 2020-2023)										0	
f. REMAINING DEFICIENCY										14,000	
g. GRAND TOTAL										1,693,698	
8. PROJECTS REQUESTED IN THIS PROGRAM (FY 2019)											
a. CATEGORY								b. COST (\$000)		c. DESIGN STATUS	
(1) CODE	(2) PROJECT TITLE					(3) SCOPE				(1) START	(2) COMPLETE
211-111	Flightline Support Facilities					21,243 SM		30,400		01/18	10/18
141-784	Personnel Deployment Processing Facility					6,960 SM		40,000		01/18	10/18
TOTAL								70,400			
9. FUTURE PROJECTS IN NEXT FOUR PROGRAM YEARS (FY2020-2023)											
FUTURE PROJECTS TOTAL											
R&M UNFUNDED REQUIREMENT (\$M)								TOTAL		0.0	
10. MISSION OR MAJOR FUNCTIONS											
The 379th Air Expeditionary Wing provides combat airpower and support for Operations Inherent Resolve and Freedom's Sentinel. The wing and associate units operate more than 100 aircraft, making the base a hub for humanitarian airlift activity while providing combat power, aeromedical evacuation, airlift, air refueling, and intelligence gathering for multiple theaters of operations.											
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 2019 MILITARY CONSTRUCTION PROJECT DATA (computer generated)			2. DATE
3. INSTALLATION, SITE AND LOCATION AL UDEID AIR BASE QATAR		4. PROJECT TITLE FLIGHTLINE SUPPORT FACILITIES		
5. PROGRAM ELEMENT 27576	6. CATEGORY CODE 211-111	7. RPSUID/PROJECT NUMBER 170454/ALUA213100	8. PROJECT COST (\$000) 30,400	
9. COST ESTIMATES				
ITEM	U/M	QUANTITY	UNIT	COST (\$000)
PRIMARY FACILITIES				20,880
(1) ENTRY CONTROL POINT ROAD (851-147)	SM	7,900	223	(1,762)
(2) C-130 AIRCRAFT MAINTENANCE UNIT (211-111)	SM	1,210	2,936	(3,553)
(3) HIGH MAST LIGHTING (211-111)	EA	8	318,970	(2,552)
(4) C-17 SPARE PARTS FACILITY (211-601)	SM	1,112	2,936	(3,265)
(5) ELRS STORAGE FACILITY (211-601)	SM	1,112	2,936	(3,265)
(6) FUEL TRUCK PARKING (852-269)	SM	9,325	262	(2,443)
(7) FUELS LABORATORY (141-766)	SM	314	6,941	(2,179)
(8) CRYOGENICS FACILITY (442-258)	SM	270	6,895	(1,862)
SUPPORTING FACILITIES				6,270
UTILITIES	LS			(2,360)
PAVEMENTS	LS			(1,318)
SITE IMPROVEMENTS	LS			(1,572)
DEMOLITION	LS			(532)
COMMUNICATIONS	LS			(227)
FENCING	LS			(251)
DESIGN DURING CONSTRUCTION (DDC 0.5%)	LS			(10)
SUBTOTAL				27,150
CONTINGENCY (5.0%)				1,357
TOTAL CONTRACT COST				28,507
SUPERVISION, INSPECTION AND OVERHEAD (6.5%)				1,853
TOTAL REQUEST				30,360
TOTAL REQUEST (ROUNDED)				30,400
10. Description of Proposed Construction: The following eight projects comprise the Flightline Support Facilities Project: (1) Entry Control Point, (2) C-130 Air Mobility Unit, (3) High Mast Lighting, (4) C-17 Spare Parts Facility, (5) Expeditionary Logistics Readiness Squadron Storage Facility, (6) Fuel Truck Parking, (7) Fuels Laboratory and (8) Cryogenics Facility. The existing facilities and functions for these projects are located within a land area that the Host Nation has mandated returned for Qatar Emiri Air Force development. Work will include site demolition, pavements, fire detection/protection, communications, site improvements, electrical installation and all necessary work to produce a complete and useable facility. This project will comply with DoD antiterrorism/force protection requirements per Unified Facilities Criteria.				
11. Requirement: 1112 SM Adequate: SM Substandard: 1112 SM PROJECT: The following eight projects comprise the Flightline Support Facilities Project: (1) Entry Control Point, (2) C-130 Air Mobility Unit, (3) High Mast				

1. COMPONENT AIR FORCE	FY 2019 MILITARY CONSTRUCTION PROJECT DATA (computer generated)			2. DATE
3. INSTALLATION, SITE AND LOCATION AL UDEID AIR BASE QATAR			4. PROJECT TITLE FLIGHTLINE SUPPORT FACILITIES	
5. PROGRAM ELEMENT 27576	6. CATEGORY CODE 211-111	7. RPSUID/PROJECT NUMBER 170454/ALUA213100	8. PROJECT COST (\$000) 30,400	
Lighting, (4) C-17 Spare Parts Facility, (5) Expeditionary Logistics Readiness Squadron Storage Facility, (6) Fuel Truck Parking, (7) Fuels Laboratory and (8) Cryogenics Facility. The existing facilities and functions for these projects are located within a land area that the Host Nation has mandated returned for Qatar Emiri Air Force development. Work will include site demolition, pavements, fire detection/protection, communications, site improvements, electrical installation and all necessary work to produce a complete and useable facility. This project will comply with DoD antiterrorism/force protection requirements per Unified Facilities Criteria. REQUIREMENT: Al Udeid Air Base requires: (1) An ECP and road between the life support area and the operational portion of the base to eliminate safety concerns and improve traffic flow. (2) A C-130 Aircraft Maintenance Unit facility to replace their expeditionary facilities, primarily consisting of tents. (3) Installation of lighting along the west side of the North Ramp to light the apron and taxiway. (4) An adequately sized, pre-engineered building to support 8th Expeditionary Air Mobility squadron C-17 spare parts storage on the Main Ramp. (5) The construction of a warehouse for storing aircraft and vehicle parts. (6) The construction of a POL storage area, IAW AFI 31-101, with controlled access, secure fencing and security lighting. (7) A fuels testing laboratory to consolidate operations into a single facility and provide necessary environmental controls for accurate testing. (8) Construction of a cryogenic generating facility with maintenance and storage yard, concrete pad and a sunshade. CURRENT SITUATION: (1) The existing ECP lacks adequate vehicle controls, barriers to prevent unauthorized access to the life support area and does not meet minimum AT/FP standards. (2) Operations conducted out of six California tents, with no fire suppression capability or environmental controls. (3) Existing lights do not adequately light the parking apron which directly support named and ongoing missions. (4) Over 16,000 spare parts are stored in connexes on a dirt lot making them very susceptible to rapid degradation due to dirt, sand and heat. Additionally, C-17 engines cannot be stored on Al Udeid because no storage facility is available. Consequently, all C-17 engines must be shipped to Al Udeid once a requirement is identified. (5) There is not enough adequate storage in the Northeast Ramp areas to house parts for routine maintenance and supply operations. Parts constantly degrade to the point where they are no longer serviceable. (6) 20 fuel trucks are not properly secured, are parked away from the flightline in an unsecured and poorly lit parking lot. (7) The laboratory operates out of multiple geographically-separated, expandable shelters which do not meet the safety, operational, and space requirements. The lack of dust control and High mid-day temperatures prevent testing from 1000hrs to 1600hrs in the summer and impact the accuracy of several laboratory tests. (8) The facility is not large enough forcing work to be performed outside in the harsh elements and exposing sensitive parts to sand and dust. The existing sunshade is not large enough to fully cover the 6K gallon tanks used to refill the smaller, palletized tanks. IMPACT IF NOT PROVIDED: Over \$75M in parts and equipment required for those operations will continue to degrade due to inadequate facilities and undue exposure to the harsh desert environment. Unserviceable parts and equipment due to lack of				

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3. INSTALLATION, SITE AND LOCATION AL UDEID AIR BASE QATAR			4. PROJECT TITLE FLIGHTLINE SUPPORT FACILITIES	
5. PROGRAM ELEMENT 27576	6. CATEGORY CODE 211-111	7. RPSUID/PROJECT NUMBER 170454/ALUA213100	8. PROJECT COST (\$000) 30,400	
compliance with AFOS Std 91-38 and AFI 31-101 storage requirements, insufficient airfield lighting for Level-4 assets IAW AFI 31-101, and degraded/temporally constructed facilities that are not IAW AT/FP, fire suppression and environmental control to preserve tools, parts and personnel present a huge risk to providing downrange support. In addition, the functions these facilities represent are currently located within an area the HN has requested returned. This can lead to potential tensions within the Qatari government toward the Air Base. Civil Engineer: Comm. 803-717-7055. 7,900 SM = 85,035 SF; 1,210 SM = 13,024 SF; 1,112 SM = 11,970 SF; 9,325 SM = 100,373 SF; 314 SM = 3,380 SF; 270 SM = 2,906 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.				

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3. INSTALLATION AND LOCATION AL UDEID AIR BASE QATAR			4. PROJECT TITLE FLIGHTLINE SUPPORT FACILITIES	
5. PROGRAM ELEMENT 27576	6. CATEGORY CODE 211-111	7. PROJECT NUMBER 170454/ALUA213100	8. PROJECT COST (\$000) 30,400	
12. SUPPLEMENTAL DATA:				
a. Estimated Design Data:				
(1) Status:				
(a) Date Design Started				10-JAN-18
(b) Parametric Cost Estimates used to develop costs				YES
* (c) Percent Complete as of 01 JAN 2018				35
* (d) Date 35% Designed				17-MAR-17
(e) Date Design Complete				23-OCT-18
(f) Energy Study/Life-Cycle analysis was/will be performed				NO
(2) Basis:				
(a) Standard or Definitive Design -				NO
(b) Where Design Was Most Recently Used -				
(3) Total Cost (c) = (a) + (b) or (d) + (e):				(\$000)
(a) Production of Plans and Specifications				0
(b) All Other Design Costs				0
(c) Total				0
(d) Contract				0
(e) In-house				0
(4) Construction Contract Award				19 MAY
(5) Construction Start				19 JUL
(6) Construction Completion				21 MAY
* Indicates completion of Project Definition with Parametric Cost Estimate which is comparable to traditional 35% design to ensure valid scope, cost and executability.				
b. Equipment associated with this project provided from other appropriations: N/A				

1. COMPONENT AIR FORCE	FY 2019 MILITARY CONSTRUCTION PROJECT DATA (computer generated)			2. DATE
3. INSTALLATION, SITE AND LOCATION AL UDEID AIR BASE QATAR			4. PROJECT TITLE PERSONNEL DEPLOYMENT PROCESSING FACILITY	
5. PROGRAM ELEMENT 27596	6. CATEGORY CODE 141-784	7. RPSUID/PROJECT NUMBER 170454/ALUA083018	8. PROJECT COST (\$000) 40,000	
9. COST ESTIMATES				
ITEM	U/M	QUANTITY	UNIT	COST (\$000)
PRIMARY FACILITIES				24,905
LANDSIDE PASSENGER TERMINAL (2-STORY)	SM	3,210	3,734	(11,986)
AIRSIDE PASSENGER TERMINAL (1-STORY)	SM	3,750	3,445	(12,919)
SUPPORTING FACILITIES				10,680
PAVEMENT	LS			(4,282)
COMMUNICATIONS	LS			(1,081)
UTILITIES	LS			(3,667)
SUNSHADES & FENCING	LS			(1,500)
DEMOLITION	LS			(150)
SUBTOTAL				35,585
CONTINGENCY (5.0%)				1,779
TOTAL CONTRACT COST				37,364
SUPERVISION, INSPECTION AND OVERHEAD (6.5%)				2,429
TOTAL REQUEST				39,793
TOTAL REQUEST (ROUNDED)				40,000
10. Description of Proposed Construction: Construct a two-story facility with reinforced concrete frames and infill exterior CMU walls. The personnel deployment processing facility will have the capability for receiving and returning baggage, processing and briefing personnel, and will include associated parking, access to loading dock and pedestrian connections. The parking areas will be bituminous concrete with concrete curbing, area lighting system, and pavement markings. The project includes all civil, electrical, and mechanical work to make the facility complete and usable. This project will comply with DoD antiterrorism/force protection requirements per Unified Facilities Criteria.				
11. Requirement: 6960 SM Adequate: 0 SM Substandard: 690 SM PROJECT: Personnel Deployment Processing Facility REQUIREMENT: Construct a two-story personnel deployment processing facility with airside and landside terminals capable of supporting 380 inbound and 380 outbound personnel simultaneously. The facility must maintain separation of passengers who have passed through customs, either outbound or inbound from those who have not yet processed. Facility will also include Personnel Support (PERSCO) offices for control of personnel entering and exiting the country to support Host Nation Customs requirements. CURRENT SITUATION: Al Udeid AB serves as a key hub for all Army, Navy, Marines, Air Force, and Coalition personnel and cargo arriving, departing, and transiting through the CENTCOM Area of Responsibility (AOR). Currently, these personnel are required to transit through some combination of expeditionary tents, sunshades, storage space on the parking ramp, and a 690 SM pre-engineered building. The				

1. COMPONENT AIR FORCE	FY 2019 MILITARY CONSTRUCTION PROJECT DATA (computer generated)			2. DATE
3. INSTALLATION, SITE AND LOCATION AL UDEID AIR BASE QATAR			4. PROJECT TITLE PERSONNEL DEPLOYMENT PROCESSING FACILITY	
5. PROGRAM ELEMENT 27596	6. CATEGORY CODE 141-784	7. RPSUID/PROJECT NUMBER 170454/ALUA083018	8. PROJECT COST (\$000) 40,000	
passengers are often required to wait for up to 4 hours or more, often sitting outside while the temperature surpasses 125F. The lack of adequate space and facilities requires groups of passengers to remain on the ramp while other groups are processed through customs and PERSCO, creating additional challenges for host nation customs and immigration. Many of the current facilities are fabric shelters that do not provide significant anti-terrorism/ force protection (AT/FP) measures. The facilities do not have adequate standoff distance from parking areas, roads, and other facilities. The structures and associated infrastructure are degrading rapidly due to the expeditionary nature of the original construction. IMPACT IF NOT PROVIDED: Passenger operations affecting theater-wide operations will remain inefficient. The existing expeditionary structure and infrastructure will continue to degrade at a rapid pace due to the high volume of passengers. Army, Navy, Marine, and Air Force personnel will continue to be staged outside on the tarmac and other areas while waiting to process through customs. AT/FP standards will not be met, placing all occupants and personnel in the area at risk. ADDITIONAL: This project meets the criteria/scope specified in Air Force Handbook 32-1084, Facility Requirements and the regulation 415-1, Sand Book. A preliminary analysis of reasonable options for meeting this requirement (status quo, renovation, new construction) was done. It indicates there is only one option that will meet the operational requirements: new construction. Therefore, a certificate of exception is being prepared. Sustainable principles, to include Life Cycle cost-effective practices, will be integrated into 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 Implementing Agreement signed in November 2002 between the United States Government and the Government of Qatar did not cover construction of the passenger terminal. Civil Engineer: 803-717-7055: (Passenger Terminal; 6,960 SM = 74,917 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 2019 MILITARY CONSTRUCTION PROJECT DATA (computer generated)			2. DATE
3. INSTALLATION AND LOCATION AL UDEID AIR BASE QATAR			4. PROJECT TITLE PERSONNEL DEPLOYMENT PROCESSING FACILITY	
5. PROGRAM ELEMENT 27596	6. CATEGORY CODE 141-784	7. PROJECT NUMBER 170454/ALUA083018	8. PROJECT COST (\$000) 40,000	
12. SUPPLEMENTAL DATA: a. Estimated Design Data: (1) Status: (a) Date Design Started 30-JAN-18 (b) Parametric Cost Estimates used to develop costs YES * (c) Percent Complete as of 01 JAN 2018 * (d) Date 35% Designed 12-APR-18 (e) Date Design Complete 29-OCT-18 (f) Energy Study/Life-Cycle analysis was/will be performed NO (2) Basis: (a) Standard or Definitive Design - NO (b) Where Design Was Most Recently Used - (3) Total Cost (c) = (a) + (b) or (d) + (e): (\$000) (a) Production of Plans and Specifications 0 (b) All Other Design Costs 0 (c) Total 0 (d) Contract 0 (e) In-house 0 (4) Construction Contract Award 19 JUN (5) Construction Start 19 AUG (6) Construction Completion 21 FEB * Indicates completion of Project Definition with Parametric Cost Estimate which is comparable to traditional 35% design to ensure valid scope, cost and executability. b. Equipment associated with this project provided from other appropriations: N/A				

1. COMPONENT AIR FORCE				FY 2019 MILITARY CONSTRUCTION PROGRAM				2. DATE (YYYYMMDD) 20170911			
3. INSTALLATION AND LOCATION RAF LAKENHEATH UNITED KINGDOM						4. COMMAND UNITED STATES AIR FORCES IN EUROPE				5. AREA CONSTRUCTION COST INDEX 1.24	
6. PERSONNEL		(1) PERMANENT		(2) STUDENTS			(3) SUPPORTED			TOTAL	
		OFFICER	ENLISTED	CIVILIAN	OFFICER	ENLISTED	CIVILIAN	OFFICER	ENLISTED	CIVILIAN	
a. AS OF	30-Sep-17	518	4069	637	0	0	0	6	58	15	5,303
b. END FY	2023	493	3910	723	0	0	0	6	58	15	5,205
7. INVENTORY DATA (\$000)											
a. TOTAL ACREAGE		2,007									
b. INVENTORY TOTAL AS OF		30-Sep-17									
										3,072,621	
c. AUTHORIZATION NOT YET IN INVENTORY											
										0	
d. AUTHORIZATION REQUESTED IN THIS PROGRAM (FY 2019)											
										148,300	
e. PLANNED IN NEXT FOUR PROGRAM YEARS (FY 2020-2023)											
										0	
f. REMAINING DEFICIENCY											
										40,200	
g. GRAND TOTAL											
										3,261,121	
8. PROJECTS REQUESTED IN THIS PROGRAM (FY 2019)											
a. CATEGORY							b. COST		c. DESIGN STATUS		
(1) CODE	(2) PROJECT TITLE				(3) SCOPE		(\$000)		(1) START (2) COMPLETE		
113-321	F-35A PARKING APRON				38,165		27,431		Design/Build		
218-712	F-35A AGE FACILITY				2,750		12,449		Design/Build		
211-177	F-35A 6 BAY HANGAR				4,288		39,036		Design/Build		
442-758	F-35A ADAL PARTS STORE				7,247		13,926		Design/Build		
211-179	F-35A FUEL SYSTEM MAINTENANCE DOCK 2 BAY				1,691		16,880		Design/Build		
721-312	F-35A DORM				4,752		29,541		Design/Build		
216-142	F-35A ADAL CONVENTIONAL MUNITIONS MX				1,147		9,204		Design/Build		
TOTAL							148,467				
9. FUTURE PROJECTS IN NEXT FOUR PROGRAM YEARS (FY2020 - FY2023)											
FUTURE PROJECTS TOTAL 0											
R&M UNFUNDED REQUIREMENT (\$M)							TOTAL		40.2		
10. MISSION OR MAJOR FUNCTIONS RAF Lakenheath is home to the 48th Fighter Wing, the largest fighter wing in USAFE. Its mission is to train, support, and employ a Combat Fighter Wing, including one F-15C (493rd FS) and two F-15E squadrons (492nd and 494th FS) together with a squadron of HH-60 helicopters (56 RQS). Future missions include the F-35A.											
11. OUTSTANDING POLLUTION AND SAFETY DEFICIENCIES (FY 2020-2023)											
a. Air Pollution											
b. Water Pollution											
c. Occupational Safety and Health											
d. Other Environmental											
OUTSTANDING DEFICIENCIES TOTAL										0	

1. COMPONENT AIR FORCE	FY 2019 MILITARY CONSTRUCTION PROJECT DATA (computer generated)			2. DATE
3. INSTALLATION, SITE AND LOCATION RAF LAKENHEATH RAF LAKENHEATH SITE # 1 UNITED KINGDOM		4. PROJECT TITLE F-35A PARKING APRON		
5. PROGRAM ELEMENT 27142	6. CATEGORY CODE 113-321	7. RPSUID/PROJECT NUMBER 2470/MSET153504	8. PROJECT COST (\$000) 27,431	
9. COST ESTIMATES				
ITEM	U/M	QUANTITY	UNIT	COST (\$000)
PRIMARY FACILITIES				19,110
APRON (113-321)	SM	38,165	410	(16,556)
JET BLAST DEFLECTOR (116-945)	LS			(513)
PAVED SHOULDER (116-642)	LS			(1,606)
SUSTAINABILITY AND ENERGY MEASURES	LS			(434)
SUPPORTING FACILITIES				5,170
UTILITIES	LS			(497)
SITE IMPROVEMENTS	LS			(785)
COMMUNICATIONS SUPPORT	LS			(688)
SECURITY FENCE	LS			(550)
AREA LIGHTING	LS			(1,258)
PAVEMENT	LS			(1,693)
SUBTOTAL				24,380
CONTINGENCY (5.0%)				1,219
TOTAL CONTRACT COST				25,599
SUPERVISION, INSPECTION AND OVERHEAD (2.5%)				637
DESIGN/BUILD - DESIGN COST (4.0% OF SUBTOTAL)				1,128
TOTAL REQUEST				27,364
TOTAL REQUEST (ROUNDED)				27,431
EQUIPMENT FROM OTHER APPROPRIATIONS (NON-ADD)				(12,300)
10. Description of Proposed Construction: Construct an F-35A Parking Apron utilizing conventional design and construction methods to accommodate the mission of the facility. Construction includes a Portland Cement Concrete (PCC) aircraft parking apron, utilities, security fencing, area lighting, navigation aids, site improvements and all necessary supporting work to make a complete and useable facility. 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: 0 Tons				
11. Requirement: 103581 SM Adequate: 47625 SM Substandard: 0 SM <u>PROJECT:</u> F-35A Parking Apron <u>REQUIREMENT:</u> Expand the Charlie Ramp on RAF Lakenheath to accommodate 42 F-35s with space available to install aircraft covers. Ramp will need to be large enough to accommodate all aircraft with a taxiway running through the middle and along the outer edge and enough space for the jet blast. Project will include airfield				

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3. INSTALLATION, SITE AND LOCATION RAF LAKENHEATH RAF LAKENHEATH SITE # 1 UNITED KINGDOM			4. PROJECT TITLE F-35A PARKING APRON	
5. PROGRAM ELEMENT 27142	6. CATEGORY CODE 113-321	7. RPSUID/PROJECT NUMBER 2470/MSET153504	8. PROJECT COST (\$000) 27,431	
lighting, airfield markings and all necessary drainage apparatuses. Additionally, aircraft shelters will be purchased and installed with 3080 funds to provide long term UV protection, lightning protection, and rain protection for line maintenance and will be integrated into the MILCON project. <u>CURRENT SITUATION:</u> Currently RAF Lakenheath has 48 Primary Aircraft Authorization (PAA) F-15Es and 18 PAA F-15Cs. In order to provide adequate ramp maintenance space for both new F-35 squadrons Charlie ramp needs to be significantly expanded. <u>IMPACT IF NOT PROVIDED:</u> There is not currently enough parking apron space for the additional 2 squadrons of F-35s. Without this project there will be no reasonable location to park the F-35s on the airfield at RAF Lakenheath. <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), but will not employ a standard design because there is no AF standard facility design for horizontal construction. A preliminary analysis of reasonable alternatives was accomplished comparing status quo and new construction. This analysis indicated that new construction was the most means to meet mission requirements. The project is not within an established NATO Infrastructure capability package for common funding, nor is it expected to become eligible. Current NATO policy indicates that this item will continue to be a user responsibility. Sunshade shelters are purchased with equipment dollars. 48th Fighter Wing Base Civil Engineer: Comm 0044-1638-522100. Apron: 38,165 SM = 41,0804 SF FOREIGN CURRENCY: FCF Budget Rate Used: POUND .8072 <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.				

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3. INSTALLATION AND LOCATION RAF LAKENHEATH RAF LAKENHEATH SITE # 1 UNITED KINGDOM		4. PROJECT TITLE F-35A PARKING APRON													
5. PROGRAM ELEMENT 27142	6. CATEGORY CODE 113-321	7. PROJECT NUMBER 2470/MSET153504	8. PROJECT COST (\$000) 27,431												
12. SUPPLEMENTAL DATA: a. Estimated Design Data: (1) Project to be accomplished by design-build procedures (2) Basis: (a) Standard or Definitive Design - NO (b) Where Design Was Most Recently Used - (3) All Other Design Costs 1,040 (4) Construction Contract Award 19 FEB (5) Construction Start 19 MAR (6) Construction Completion 21 SEP (7) Energy Study/Life-Cycle analysis was/will be performed YES b. Equipment associated with this project provided from other appropriations: <table border="1"> <thead> <tr> <th>EQUIPMENT NOMENCLATURE</th> <th>PROCURING APPRC</th> <th>FISCAL YEAR APPROPRIATED OR REQUESTED</th> <th>COST (\$000)</th> </tr> </thead> <tbody> <tr> <td>COMM EQUIPMENT AND ELECTRICS</td> <td>3080</td> <td>19</td> <td>300</td> </tr> <tr> <td>AIRCRAFT SHELTERS</td> <td>3080</td> <td>19</td> <td>12,000</td> </tr> </tbody> </table>				EQUIPMENT NOMENCLATURE	PROCURING APPRC	FISCAL YEAR APPROPRIATED OR REQUESTED	COST (\$000)	COMM EQUIPMENT AND ELECTRICS	3080	19	300	AIRCRAFT SHELTERS	3080	19	12,000
EQUIPMENT NOMENCLATURE	PROCURING APPRC	FISCAL YEAR APPROPRIATED OR REQUESTED	COST (\$000)												
COMM EQUIPMENT AND ELECTRICS	3080	19	300												
AIRCRAFT SHELTERS	3080	19	12,000												

1. COMPONENT AIR FORCE	FY 2019 MILITARY CONSTRUCTION PROJECT DATA (computer generated)			2. DATE
3. INSTALLATION, SITE AND LOCATION RAF LAKENHEATH RAF LAKENHEATH SITE # 1 UNITED KINGDOM		4. PROJECT TITLE F-35A AGE FACILITY		
5. PROGRAM ELEMENT 27142	6. CATEGORY CODE 218-712	7. RPSUID/PROJECT NUMBER 2470/MSET153505	8. PROJECT COST (\$000) 12,449	
9. COST ESTIMATES				
ITEM	U/M	QUANTITY	UNIT	COST (\$000)
PRIMARY FACILITIES				9,413
AGE FACILITY	SM	2,750	3,181	(9,228)
SUSTAINABILITY AND ENERGY MEASURES	LS			(185)
SUPPORTING FACILITIES				1,656
UTILITIES	LS			(311)
SITE IMPROVEMENTS	LS			(474)
PAVEMENTS	LS			(660)
COMMUNICATIONS SUPPORT	LS			(211)
SUBTOTAL				11,069
CONTINGENCY (5.0%)				554
TOTAL CONTRACT COST				11,622
SUPERVISION, INSPECTION AND OVERHEAD (2.5%)				290
DESIGN/BUILD - DESIGN COST (4.0% OF SUBTOTAL)				443
TOTAL REQUEST				12,355
TOTAL REQUEST (ROUNDED)				12,449
EQUIPMENT FROM OTHER APPROPRIATIONS (NON-ADD)				(400)
10. Description of Proposed Construction: Description of Proposed Construction: Construct an Aircraft Generation Equipment (AGE) shop and covered storage facility utilizing conventional design and construction methods to accommodate the mission of the facility. The project will include reinforced concrete foundation, concrete slab, structural steel frame, standing seam metal roof/exterior, electrical work, site improvements, landscaping, pavement, parking, utilities, fire detection/protection, and all necessary supporting facilities for a complete and usable facility. The project will demolish two small supporting buildings 1336 and 1337 (6 SM) as well as miscellaneous horizontal items across the construction site. 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: 0 Tons				
11. Requirement: 2750 SM Adequate: 1908 SM Substandard: 6 SM <u>PROJECT:</u> Construct an F-35A AGE Facility (New Mission) <u>REQUIREMENT:</u> Construct an AGE facility on RAF Lakenheath. This facility is needed to provide the maintenance and storage space for the F-35A AGE equipment that will be in place prior to arrival of two F-35A squadrons that in first quarter FY22. Storage and shop space shall be sized to accommodate the 338 pieces of AGE equipment that are expected in support of the F-35s. <u>CURRENT SITUATION:</u> The current AGE facility is not large enough to accommodate the				

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3. INSTALLATION, SITE AND LOCATION RAF LAKENHEATH RAF LAKENHEATH SITE # 1 UNITED KINGDOM			4. PROJECT TITLE F-35A AGE FACILITY	
5. PROGRAM ELEMENT 27142	6. CATEGORY CODE 218-712	7. RPSUID/PROJECT NUMBER 2470/MSET153505	8. PROJECT COST (\$000) 12,449	
additional AGE equipment that will be brought in by the F-35s. All new facilities will need to be constructed to minimize the impact to current mission AGE maintenance and storage. <u>IMPACT IF NOT PROVIDED:</u> Without the construction of a new F-35A AGE Facility there will not be sufficient maintenance and covered storage space for the new AGE supplied for the F-35s. <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), but will not employ a standard design because there is no AF standard facility design. However, may be possible to harvest a similar design from other facilities. A preliminary analysis of reasonable alternatives was accomplished comparing status quo, renovation and new construction. This analysis indicated that new construction was the most cost effective means to meet mission requirements. The project is not within an established NATO Infrastructure capability package for common funding, nor is it expected to become eligible. Current NATO policy indicates that this item will continue to be a user responsibility. 48th Fighter Wing Base Civil Engineer: Comm 0044-1638-522100. AGE Facility: 2750 SM = 29,601SF FOREIGN CURRENCY: FCF Budget Rate Used: POUND .8072 <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.				

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3. INSTALLATION AND LOCATION RAF LAKENHEATH RAF LAKENHEATH SITE # 1 UNITED KINGDOM		4. PROJECT TITLE F-35A AGE FACILITY													
5. PROGRAM ELEMENT 27142	6. CATEGORY CODE 218-712	7. PROJECT NUMBER 2470/MSET153505	8. PROJECT COST (\$000) 12,449												
12. SUPPLEMENTAL DATA: a. Estimated Design Data: (1) Project to be accomplished by design-build procedures (2) Basis: (a) Standard or Definitive Design - NO (b) Where Design Was Most Recently Used - (3) All Other Design Costs 472 (4) Construction Contract Award 19 FEB (5) Construction Start 19 MAR (6) Construction Completion 20 DEC (7) Energy Study/Life-Cycle analysis was/will be performed YES b. Equipment associated with this project provided from other appropriations: <table border="1"> <thead> <tr> <th>EQUIPMENT NOMENCLATURE</th> <th>PROCURING APPRC</th> <th>FISCAL YEAR APPROPRIATED OR REQUESTED</th> <th>COST (\$000)</th> </tr> </thead> <tbody> <tr> <td>FF&E</td> <td>3400</td> <td>19</td> <td>300</td> </tr> <tr> <td>COMMUNICATIONS EQUIPMENT</td> <td>3080</td> <td>19</td> <td>100</td> </tr> </tbody> </table>				EQUIPMENT NOMENCLATURE	PROCURING APPRC	FISCAL YEAR APPROPRIATED OR REQUESTED	COST (\$000)	FF&E	3400	19	300	COMMUNICATIONS EQUIPMENT	3080	19	100
EQUIPMENT NOMENCLATURE	PROCURING APPRC	FISCAL YEAR APPROPRIATED OR REQUESTED	COST (\$000)												
FF&E	3400	19	300												
COMMUNICATIONS EQUIPMENT	3080	19	100												

1. COMPONENT AIR FORCE	FY 2019 MILITARY CONSTRUCTION PROJECT DATA (computer generated)			2. DATE
3. INSTALLATION, SITE AND LOCATION RAF LAKENHEATH RAF LAKENHEATH SITE # 1 UNITED KINGDOM		4. PROJECT TITLE F-35A 6-BAY HANGAR		
5. PROGRAM ELEMENT 27142	6. CATEGORY CODE 211-177	7. RPSUID/PROJECT NUMBER 2470/MSET153508	8. PROJECT COST (\$000) 39,036	
9. COST ESTIMATES				
ITEM	U/M	QUANTITY	UNIT	COST (\$000)
PRIMARY FACILITIES				24,069
SMALL AIRCRAFT MAINTENANCE DOCK	SM	4,288	5,221	(23,597)
SUSTAINABILITY AND ENERGY MEASURES	LS			(472)
SUPPORTING FACILITIES				10,499
UTILITIES	LS			(1,591)
SITE IMPROVEMENTS	LS			(999)
PAVEMENTS	LS			(6,612)
COMMUNICATIONS SUPPORT	LS			(527)
DEMOLITION	SM	1,548	472	(769)
SUBTOTAL				34,568
CONTINGENCY (5.0%)				1,729
TOTAL CONTRACT COST				36,296
SUPERVISION, INSPECTION AND OVERHEAD (2.5%)				908
DESIGN/BUILD - DESIGN COST (4.0% OF SUBTOTAL)				1,383
TOTAL REQUEST				38,586
TOTAL REQUEST (ROUNDED)				39,036
EQUIPMENT FROM OTHER APPROPRIATIONS (NON-ADD)				(650)
10. Description of Proposed Construction: Construct a 6-bay hangar facility utilizing conventional design and construction methods to accommodate the mission of the facility. The project will include reinforced concrete foundation, concrete slab, structural steel frame, standing seam metal roof and exterior. Includes electrical work site improvements, landscaping, pavement, parking, utilities, fire detection/protection, and all necessary supporting facilities for a complete and usable facility. Building 1281 (94 SM), 1290 (524 SM) and 6023 (930 SM) will be demolished as part of this project. Facilities will be designed as permanent construction in accordance with 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: 0 Tons				
11. Requirement: 20569 SM Adequate: 10302 SM Substandard: 0 SM <u>PROJECT:</u> Construct a 6-bay F-35A hangar. (New Mission) <u>REQUIREMENT:</u> Construct a 6-bay hangar on RAF Lakenheath to house one of the new F-35A squadrons coming to RAF Lakenheath starting in first quarter FY22. Hangar will include 6 hangar bays, Low Observance (LO) material maintenance, engine maintenance, gun maintenance, and collateral storage. Facility will also need a bridge crane and 2 gantry cranes for loading and unloading parts. Each hangar bay will supply aircraft cooling air, Aircraft and Aerospace Ground Equipment (AGE)				

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5. PROGRAM ELEMENT 27142	6. CATEGORY CODE 211-177	7. RPSUID/PROJECT NUMBER 2470/MSET153508	8. PROJECT COST (\$000) 39,036	

power, and a Local Area Network (LAN) drop.

CURRENT SITUATION: The currently assigned F-15 squadrons are maintained out of Protective Aircraft Shelters (PASSs) spread out around a quarter of the airfield. The unique maintenance requirements of F-35s precludes this as a workable maintenance solution, so a hangar needs to be constructed for each of the squadrons. The other squadron hangar (4,288 SM) will be constructed as part of MSET 153513, and the remaining deficiency (1,691 SM) is met by MSET 153503 F-35A Fuel Cell. There is not a suitable facility available for F-35 engine, gun, and LO maintenance.

IMPACT IF NOT PROVIDED: Without this project there will not be sufficient dedicated F-35 maintenance space as well as adequate facilities to do engine, gun, and LO maintenance, or a good location for engine storage. Mission operations will be negatively impacted by this lack of supporting facilities.

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 Facilities Standards (AFCFS), the Installation Facilities Standards (IFS) and shall employ a standard "modular facilities" design approach from Air Force Civil Engineer Centers (AFCEC). A preliminary analysis of reasonable alternatives was accomplished comparing status quo, renovation and new construction. This analysis indicated that new construction was the most effective means to meet all mission requirements. The project is not within an established NATO Infrastructure capability package for common funding, nor is it expected to become eligible. Current NATO policy indicates this item will continue to be a user responsibility. The Supporting Facilities costs are approximately 44% of the Primary Facilities due to the extra concrete paving around the area to allow easy access for aircraft and vehicles. 48th FW Base Civil Engineer: Comm 0044-1638-522100. 6-Bay Hangar 4288 SM = 46,156 SF

FOREIGN CURRENCY: FCF Budget Rate Used: POUND .8072

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.

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12. SUPPLEMENTAL DATA: a. Estimated Design Data: (1) Project to be accomplished by design-build procedures (2) Basis: (a) Standard or Definitive Design - YES (b) Where Design Was Most Recently Used - RAF Lakenheath (3) All Other Design Costs 1,480 (4) Construction Contract Award 19 FEB (5) Construction Start 19 MAR (6) Construction Completion 21 SEP (7) Energy Study/Life-Cycle analysis was/will be performed YES b. Equipment associated with this project provided from other appropriations: <table border="1"> <thead> <tr> <th>EQUIPMENT NOMENCLATURE</th> <th>PROCURING APPRC</th> <th>FISCAL YEAR APPROPRIATED OR REQUESTED</th> <th>COST (\$000)</th> </tr> </thead> <tbody> <tr> <td>FURNITURE</td> <td>3400</td> <td>19</td> <td>500</td> </tr> <tr> <td>COMMUNICATIONS EQUIPMENT</td> <td>3080</td> <td>19</td> <td>150</td> </tr> </tbody> </table>				EQUIPMENT NOMENCLATURE	PROCURING APPRC	FISCAL YEAR APPROPRIATED OR REQUESTED	COST (\$000)	FURNITURE	3400	19	500	COMMUNICATIONS EQUIPMENT	3080	19	150
EQUIPMENT NOMENCLATURE	PROCURING APPRC	FISCAL YEAR APPROPRIATED OR REQUESTED	COST (\$000)												
FURNITURE	3400	19	500												
COMMUNICATIONS EQUIPMENT	3080	19	150												

1. COMPONENT AIR FORCE	FY 2019 MILITARY CONSTRUCTION PROJECT DATA (computer generated)			2. DATE
3. INSTALLATION, SITE AND LOCATION RAF LAKENHEATH RAF LAKENHEATH SITE # 1 UNITED KINGDOM		4. PROJECT TITLE F-35A ADAL PARTS STORE		
5. PROGRAM ELEMENT 27142	6. CATEGORY CODE 442-758	7. RPSUID/PROJECT NUMBER 2470/MSET153507	8. PROJECT COST (\$000) 13,926	
9. COST ESTIMATES				
ITEM	U/M	QUANTITY	UNIT	COST (\$000)
PRIMARY FACILITIES				10,295
ADD AIRCRAFT PARTS STORE/SUPPLY WAREHOUSE	SM	2,788	2,328	(6,834)
ALTER AIRCRAFT PARTS STORE/SUPPLY WAREHOUSE	SM	4,459	694	(3,259)
SUSTAINABILITY AND ENERGY MEASURES	LS			(202)
SUPPORTING FACILITIES				2,095
UTILITIES	LS			(579)
SITE IMPROVEMENTS	LS			(388)
PAVEMENTS	LS			(688)
COMMUNICATIONS SUPPORT	LS			(378)
DEMOLITION	SM	192	500	(101)
SUBTOTAL				12,429
CONTINGENCY (5.0%)				619
TOTAL CONTRACT COST				13,048
SUPERVISION, INSPECTION AND OVERHEAD (2.5%)				325
DESIGN/BUILD - DESIGN COST (4.0% OF SUBTOTAL)				496
TOTAL REQUEST				13,868
TOTAL REQUEST (ROUNDED)				13,926
EQUIPMENT FROM OTHER APPROPRIATIONS (NON-ADD)				(300)
10. Description of Proposed Construction: Add/Alter an existing aircraft hangar into an aircraft parts store / supply warehouse with reinforced concrete foundation, concrete slab, structural steel frame, standing seam metal roof and exterior, and fire detection/protection utilizing conventional design and construction methods to accommodate the mission of the facility. The project includes electrical work site improvements, fencing, landscaping, pavement, parking, utilities, and all necessary supporting facilities for a complete and usable facility. The project will demolish buildings 1302 and 1303 (192 SM) and miscellaneous horizontal items across the construction site. The facility will be compatible with applicable DoD, Air Force, USAFE and base design standards and 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: 0 Tons				
11. Requirement: 14711 SM Adequate: 10838 SM Substandard: 615 SM <u>PROJECT:</u> Add/Alter Aircraft Parts Store / Supply Warehouse (New Mission) <u>REQUIREMENT:</u> Construct an aircraft parts store as an addition to hangar 1304 in the flightline area of the base for the beddown of the incoming F-35s and additionally to support the bases existing F-15 missions. The project will				

1. COMPONENT AIR FORCE	FY 2019 MILITARY CONSTRUCTION PROJECT DATA (computer generated)			2. DATE
3. INSTALLATION, SITE AND LOCATION RAF LAKENHEATH RAF LAKENHEATH SITE # 1 UNITED KINGDOM			4. PROJECT TITLE F-35A ADAL PARTS STORE	
5. PROGRAM ELEMENT 27142	6. CATEGORY CODE 442-758	7. RPSUID/PROJECT NUMBER 2470/MSET153507	8. PROJECT COST (\$000) 13,926	
construct additions to the facility to incorporate warehousing, classified storage, Hazmat, wood shop and associated timber storage, loading docks and additional office accommodation. It will also repair and expand the existing administrative space in support of expanded mission. Externally the project will include for controlled area storage. The existing hangar area will be modified to allow for the installation of AFMC funded Mechanized Material Handling System (MMHS). The existing utilities will be modified to suit the new layout of both this project and the F-35 complex. The project additionally demolishes two existing facilities and other infrastructure. <u>CURRENT SITUATION:</u> The current supply warehouse on RAF Lakenheath does not have the necessary space to accommodate the storage requirements of two additional F-35 squadrons. Currently there is not a parts store in the maintenance area to hold working spares for the current mission F-15s. <u>IMPACT IF NOT PROVIDED:</u> Without the construction of a new aircraft parts store there will not be available space for the increased storage requirements that will accompany the bed down of two new F-35 squadrons. Also, there will not be a parts storage location that is easily accessed from the flight line maintenance shops. <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), but will not employ a standard design because there is no AF standard facility design for "addition/alteration" projects. A preliminary analysis of reasonable alternatives was accomplished comparing status quo, addition/alteration, renovation and new construction. This analysis indicated that facility addition/alteration was the most cost effective means to meet mission requirements. The project is not within an established NATO Infrastructure capability package for common funding, nor is it expected to become eligible. Current NATO policy indicates that this item will continue to be a user responsibility. The reason for the cost of supporting facilities is more than 25% of the cost of a primary facility due to extensive apron/taxiway required connect the facility to the airfield. 48th Fighter Wing Base Civil Engineer: Comm 0044-1638-522100. Add Aircraft Parts Store / Supply Warehouse: 2,788 SM = 30,000 SF; Alter Aircraft Parts Store / Supply Warehouse: 4,459 SM = 48,000 SF FOREIGN CURRENCY: FCF Budget Rate Used: POUND .8072 <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.				

1. COMPONENT AIR FORCE	FY 2019 MILITARY CONSTRUCTION PROJECT DATA (computer generated)		2. DATE												
3. INSTALLATION AND LOCATION RAF LAKENHEATH RAF LAKENHEATH SITE # 1 UNITED KINGDOM		4. PROJECT TITLE F-35A ADAL PARTS STORE													
5. PROGRAM ELEMENT 27142	6. CATEGORY CODE 442-758	7. PROJECT NUMBER 2470/MSET153507	8. PROJECT COST (\$000) 13,926												
12. SUPPLEMENTAL DATA: a. Estimated Design Data: (1) Project to be accomplished by design-build procedures (2) Basis: (a) Standard or Definitive Design - NO (b) Where Design Was Most Recently Used - (3) All Other Design Costs 528 (4) Construction Contract Award 19 FEB (5) Construction Start 19 MAR (6) Construction Completion 20 DEC (7) Energy Study/Life-Cycle analysis was/will be performed YES b. Equipment associated with this project provided from other appropriations: <table border="1"> <thead> <tr> <th>EQUIPMENT NOMENCLATURE</th> <th>PROCURING APPRC</th> <th>FISCAL YEAR APPROPRIATED OR REQUESTED</th> <th>COST (\$000)</th> </tr> </thead> <tbody> <tr> <td>FURNITURE</td> <td>3400</td> <td>19</td> <td>200</td> </tr> <tr> <td>COMMUNICATIONS EQUIPMENT</td> <td>3080</td> <td>19</td> <td>100</td> </tr> </tbody> </table>				EQUIPMENT NOMENCLATURE	PROCURING APPRC	FISCAL YEAR APPROPRIATED OR REQUESTED	COST (\$000)	FURNITURE	3400	19	200	COMMUNICATIONS EQUIPMENT	3080	19	100
EQUIPMENT NOMENCLATURE	PROCURING APPRC	FISCAL YEAR APPROPRIATED OR REQUESTED	COST (\$000)												
FURNITURE	3400	19	200												
COMMUNICATIONS EQUIPMENT	3080	19	100												

1. COMPONENT AIR FORCE	FY 2019 MILITARY CONSTRUCTION PROJECT DATA (computer generated)			2. DATE
3. INSTALLATION, SITE AND LOCATION RAF LAKENHEATH RAF LAKENHEATH SITE # 1 UNITED KINGDOM		4. PROJECT TITLE F-35A FUEL SYSTEM MAINTENANCE DOCK 2 BAY		
5. PROGRAM ELEMENT 27142	6. CATEGORY CODE 211-179	7. RPSUID/PROJECT NUMBER 2470/MSET153503	8. PROJECT COST (\$000) 16,880	
9. COST ESTIMATES				
ITEM	U/M	QUANTITY	UNIT	COST (\$000)
PRIMARY FACILITIES				11,281
MAINTENANCE DOCK, FUEL SYSTEM	SM	1,691	6,540	(11,060)
SUSTAINABILITY AND ENERGY MEASURES	LS			(221)
SUPPORTING FACILITIES				2,968
UTILITIES	LS			(731)
SITE IMPROVEMENTS	LS			(534)
PAVEMENTS	LS			(1,923)
COMMUNICATIONS SUPPORT	LS			(300)
FACILITY DEMOLITION	SM	525	533	(280)
SUBTOTAL				15,249
CONTINGENCY (5.0%)				812
TOTAL CONTRACT COST				15,861
SUPERVISION, INSPECTION AND OVERHEAD (2.5%)				374
DESIGN/BUILD - DESIGN COST (4.0% OF SUBTOTAL)				570
TOTAL REQUEST				16,805
TOTAL REQUEST (ROUNDED)				16,880
EQUIPMENT FROM OTHER APPROPRIATIONS (NON-ADD)				(300)
10. Description of Proposed Construction: Construct a two bay fuel system maintenance dock with fuel exhaust system utilizing conventional design and construction methods to accommodate the mission of the facility. Construction will consist of reinforced concrete foundation, concrete slab, structural steel frame, standing seam metal roof and exterior. Includes electrical work, site improvements, landscaping, pavement, parking, utilities, fire detection/protection and all necessary supporting facilities for a complete and usable facility. Project will demolish building 1230 (525 SM). Facilities will be designed as permanent construction in accordance with the DoD Unified Facilities Criteria (UFC) 1-200-01, General Building Requirements and UFC 1-200-02, High Performance and Sustainable Building Requirements. This project will comply with DoD antiterrorism/force protection requirements per UFC 4-101-01. Air Conditioning: 0 Tons				
11. Requirement: 3601 SM Adequate: 1910 SM Substandard: 0 SM <u>PROJECT:</u> Construct a F-35A Fuel System Maintenance Dock, 2 Bay (New Mission) <u>REQUIREMENT:</u> Construct a 2 bay fuel system maintenance dock on RAF Lakenheath to service the F-35A aircraft that are due to arrive starting in first quarter FY22. Fuel system maintenance dock shall include a built in fuel exhaust system for the general space of the hangar and localized exhaust at the fuel tanks. <u>CURRENT SITUATION:</u> Currently there is a 2 bay fuel system maintenance dock for F-15s on RAF Lakenheath. The existing fuel cell maintenance dock will not provide				

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3. INSTALLATION, SITE AND LOCATION RAF LAKENHEATH RAF LAKENHEATH SITE # 1 UNITED KINGDOM			4. PROJECT TITLE F-35A FUEL SYSTEM MAINTENANCE DOCK 2 BAY	
5. PROGRAM ELEMENT 27142	6. CATEGORY CODE 211-179	7. RPSUID/PROJECT NUMBER 2470/MSET153503	8. PROJECT COST (\$000) 16,880	
sufficient throughput capacity to support two additional F-35A squadrons. <u>IMPACT IF NOT PROVIDED:</u> There is not currently enough fuel system maintenance dock space on RAF Lakenheath to properly maintain 2 F-15E squadrons and 2 F-35A squadrons simultaneously. Without this project aircraft maintenance personnel will not have adequate facility space to conduct necessary fuel cell maintenance operations for all assigned aircraft. <u>ADDITIONAL:</u> This project meets the criteria/scope Air Force Handbook 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 for this project from the Air Force Civil Engineer Centers (AFCEC). A preliminary analysis of reasonable alternatives evaluating status quo, renovation and new construction was accomplished. This analysis indicated new construction as the most economical option that meets mission requirements. This project is not within an established NATO Infrastructure capability package for common funding, nor is it expected to become eligible. Current NATO policy indicates this item will continue to be a user responsibility. The reason for the cost of supporting facilities is more than 25% of the cost of a primary facility due to extensive apron/taxiway required connect the facility to the airfield. 48th Fighter Wing Base Civil Engineer: Comm 0044-1638-522100. Fuel System Maintenance Dock, 2 Bay: 1,691 SM = 18,202 SF. FOREIGN CURRENCY: FCF Budget Rate Used: POUND .8072 <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.				

1. COMPONENT AIR FORCE	FY 2019 MILITARY CONSTRUCTION PROJECT DATA (computer generated)		2. DATE												
3. INSTALLATION AND LOCATION RAF LAKENHEATH RAF LAKENHEATH SITE # 1 UNITED KINGDOM		4. PROJECT TITLE F-35A FUEL SYSTEM MAINTENANCE DOCK 2 BAY													
5. PROGRAM ELEMENT 27142	6. CATEGORY CODE 211-179	7. PROJECT NUMBER 2470/MSET153503	8. PROJECT COST (\$000) 16,880												
12. SUPPLEMENTAL DATA: a. Estimated Design Data: (1) Project to be accomplished by design-build procedures (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 18 FEB (5) Construction Start 18 MAR (6) Construction Completion 19 DEC (7) Energy Study/Life-Cycle analysis was/will be performed YES b. Equipment associated with this project provided from other appropriations: <table border="1"> <thead> <tr> <th>EQUIPMENT NOMENCLATURE</th> <th>PROCURING APPRC</th> <th>FISCAL YEAR APPROPRIATED OR REQUESTED</th> <th>COST (\$000)</th> </tr> </thead> <tbody> <tr> <td>FURNISHINGS, FIXTURES & EQUIP</td> <td>3400</td> <td>2019</td> <td>200</td> </tr> <tr> <td>COMMUNICATIONS EQUIPMENT</td> <td>3080</td> <td>2019</td> <td>100</td> </tr> </tbody> </table>				EQUIPMENT NOMENCLATURE	PROCURING APPRC	FISCAL YEAR APPROPRIATED OR REQUESTED	COST (\$000)	FURNISHINGS, FIXTURES & EQUIP	3400	2019	200	COMMUNICATIONS EQUIPMENT	3080	2019	100
EQUIPMENT NOMENCLATURE	PROCURING APPRC	FISCAL YEAR APPROPRIATED OR REQUESTED	COST (\$000)												
FURNISHINGS, FIXTURES & EQUIP	3400	2019	200												
COMMUNICATIONS EQUIPMENT	3080	2019	100												

1. COMPONENT AIR FORCE	FY 2019 MILITARY CONSTRUCTION PROJECT DATA (computer generated)			2. DATE
3. INSTALLATION, SITE AND LOCATION RAF LAKENHEATH RAF LAKENHEATH SITE # 1 UNITED KINGDOM		4. PROJECT TITLE F-35A DORM		
5. PROGRAM ELEMENT 27142	6. CATEGORY CODE 721-312	7. RPSUID/PROJECT NUMBER 2470/MSET153511	8. PROJECT COST (\$000) 29,541	
9. COST ESTIMATES				
ITEM	U/M	QUANTITY	UNIT	COST (\$000)
PRIMARY FACILITIES				21,833
DORM AM PP/PCS-STD	SM	4,752	4,224	(21,244)
SUSTAINABILITY AND ENERGY MEASURES	LS			(389)
SUPPORTING FACILITIES				4,475
UTILITIES	LS			(1,216)
SITE IMPROVEMENTS	LS			(730)
PAVEMENTS	LS			(1,973)
FACILITY DEMOLITION	SM	70	403	(29)
COMMUNICATIONS SUPPORT	LS			(527)
SUBTOTAL				26,508
CONTINGENCY (5.0%)				1,300
TOTAL CONTRACT COST				27,308
SUPERVISION, INSPECTION AND OVERHEAD (2.5%)				682
DESIGN/BUILD - DESIGN COST (4.0% OF SUBTOTAL)				1,041
TOTAL REQUEST				29,531
TOTAL REQUEST (ROUNDED)				29,541
EQUIPMENT FROM OTHER APPROPRIATIONS (NON-ADD)				(3,000)
10. Description of Proposed Construction: Construct a 144 bed dormitory with reinforced concrete foundation, concrete slab, structural steel frame, standing seam metal roof and exterior. Includes electrical work site improvements, landscaping, pavement, parking, utilities, fire detection/protection, and all necessary supporting facilities for a complete and usable facility. Building 824 (70 SM) will be demolished as part of this project. In addition, local materials and construction techniques shall be used where cost effective. Facilities will be designed as permanent construction in accordance with 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: 0 Tons				
11. Requirement: 45341 SM Adequate: 36365 SM Substandard: 5716 SM <u>PROJECT:</u> Construct a 144 bed Dormitory (New Mission). <u>REQUIREMENT:</u> Construct a 144 bed dormitory to house the increase in enlisted personnel from the bed down of 2 squadrons of F-35s. A major Air Force objective provides unaccompanied enlisted personnel with housing conducive to their proper rest, relaxation, and personal well-being. Properly designed and furnished quarters providing some degree of individual privacy are essential to the successful accomplishment of the increasingly complicated and important jobs these people must perform. The retention of these highly trained airmen is essential to our readiness				

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3. INSTALLATION, SITE AND LOCATION RAF LAKENHEATH RAF LAKENHEATH SITE # 1 UNITED KINGDOM			4. PROJECT TITLE F-35A DORM	
5. PROGRAM ELEMENT 27142	6. CATEGORY CODE 721-312	7. RPSUID/PROJECT NUMBER 2470/MSET153511	8. PROJECT COST (\$000) 29,541	
posture and continuing worldwide presence. The dormitory also should include appropriate sound attenuation to reduce noise to required levels. <u>CURRENT SITUATION:</u> With the influx of airmen due to the bed down of the F-35s and the loss of the dormitory space on RAF Mildenhall there is a significant deficiency in the amount of unaccompanied housing available for E-4s and below. <u>IMPACT IF NOT PROVIDED:</u> Adequate living quarters which provide a level of privacy required for today's airmen will not be available, resulting in degradation of morale, productivity, and career satisfaction for unaccompanied enlisted personnel. <u>ADDITIONAL:</u> This project complies with Air Force Handbook 32-1084, "Facility Requirements" and the 2006 Air Force Unaccompanied Housing Design Guide. This design shall conform to criteria established in the Air Force Corporate Facility Standards (AFCFS) and the Installation Facility Standards (IFS), and the Dynamic Prototype for Enlisted Dormitory. A preliminary analysis of reasonable alternatives comparing new construction, repair and status quo was conducted. This analysis indicated that new construction is the only feasible option to meet all mission requirements. A certificate of exemption is being prepared. This project is not eligible for NATO funding. BCE: 0044-1638-522100; 4,752 SM = 51,150 SF BY-2 Unaccompanied Housing R&M Conducted: \$0 2BY-1 Unaccompanied Housing R&M Conducted: \$0 Future Unaccompanied Housing R&M Requirements: \$4.3M (MSET 092037 Rpr Dorm 943; scheduled FY18, MSET 153004 CNS 128 bed Dorm to replace 800 series) FOREIGN CURRENCY: FCF Budget Rate Used: POUND .8072 <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.				

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5. PROGRAM ELEMENT 27142	6. CATEGORY CODE 721-312	7. PROJECT NUMBER 2470/MSET153511	8. PROJECT COST (\$000) 29,541												
12. SUPPLEMENTAL DATA: a. Estimated Design Data: (1) Project to be accomplished by design-build procedures (2) Basis: (a) Standard or Definitive Design - YES (b) Where Design Was Most Recently Used - (3) All Other Design Costs 1,120 (4) Construction Contract Award 19 FEB (5) Construction Start 19 MAR (6) Construction Completion 21 SEP (7) Energy Study/Life-Cycle analysis was/will be performed YES b. Equipment associated with this project provided from other appropriations: <table border="1"> <thead> <tr> <th>EQUIPMENT NOMENCLATURE</th> <th>PROCURING APPRC</th> <th>FISCAL YEAR APPROPRIATED OR REQUESTED</th> <th>COST (\$000)</th> </tr> </thead> <tbody> <tr> <td>FF&E</td> <td>3400</td> <td>19</td> <td>2,500</td> </tr> <tr> <td>COMMUNICATIONS EQUIPMENT</td> <td>3080</td> <td>19</td> <td>500</td> </tr> </tbody> </table>				EQUIPMENT NOMENCLATURE	PROCURING APPRC	FISCAL YEAR APPROPRIATED OR REQUESTED	COST (\$000)	FF&E	3400	19	2,500	COMMUNICATIONS EQUIPMENT	3080	19	500
EQUIPMENT NOMENCLATURE	PROCURING APPRC	FISCAL YEAR APPROPRIATED OR REQUESTED	COST (\$000)												
FF&E	3400	19	2,500												
COMMUNICATIONS EQUIPMENT	3080	19	500												

1. COMPONENT AIR FORCE	FY 2019 MILITARY CONSTRUCTION PROJECT DATA (computer generated)			2. DATE
3. INSTALLATION, SITE AND LOCATION RAF LAKENHEATH RAF LAKENHEATH SITE # 1 UNITED KINGDOM		4. PROJECT TITLE F-35A ADAL CONVENTIONAL MUNITIONS MX		
5. PROGRAM ELEMENT 27142	6. CATEGORY CODE 216-642	7. RPSUID/PROJECT NUMBER 2470/MSET153515	8. PROJECT COST (\$000) 9,204	
9. COST ESTIMATES				
ITEM	U/M	QUANTITY	UNIT	COST (\$000)
PRIMARY FACILITIES				6,517
CONVENTIONAL MUNITIONS SHOP	SM	485	4,919	(5,933)
RENOVATION MUNITIONS SHOP	SM	662	278	(457)
SUSTAINABILITY AND ENERGY MEASURES	LS			(127)
SUPPORTING FACILITIES				1,688
UTILITIES	LS			(366)
SITE IMPROVEMENTS	LS			(219)
PAVEMENTS	LS			(855)
COMMUNICATIONS SUPPORT	LS			(249)
SUBTOTAL				8,205
CONTINGENCY (5.0%)				410
TOTAL CONTRACT COST				8,615
SUPERVISION, INSPECTION AND OVERHEAD (2.5%)				209
DESIGN/BUILD - DESIGN COST (4.0% OF SUBTOTAL)				328
TOTAL REQUEST				9,160
TOTAL REQUEST (ROUNDED)				9,204)
EQUIPMENT FROM OTHER APPROPRIATIONS (NON-ADD)				(550
10. Description of Proposed Construction: Construct an addition to the conventional munition maintenance facility with reinforced concrete foundation and walls, concrete slab, structural steel frame, standing seam metal roof and vertical cladding, utilizing construction methods to accommodate the mission of the facility. The project will renovate the existing offices and construct an administration addition to house the incoming personnel together with modifications to the existing bays to ensure compliance with AFMAN 91-201. In addition the project upgrades and extends fire suppression systems, lightning protection, all utilities, pavements for both GOV and POVs, communications, site improvements, and associated support 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, 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 4-101-01. Air Conditioning: 0 Tons				
11. Requirement: 1147 SM Adequate: 662 SM Substandard: 0 SM <u>PROJECT:</u> F-35A ADAL Conventional Munitions Maintenance <u>REQUIREMENT:</u> Construct an addition onto the conventional munitions maintenance facility on RAF Lakenheath. The addition will include a supplementary maintenance bay, administration space and GOV parking to manage the increase in assigned munitions trucks, trailers, and equipment.				

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5. PROGRAM ELEMENT 27142	6. CATEGORY CODE 216-642	7. RPSUID/PROJECT NUMBER 2470/MSET153515	8. PROJECT COST (\$000) 9,204	
<u>CURRENT SITUATION:</u> Currently the conventional munitions maintenance facility has only two maintenance bays, a tool room and a small admin area. The space in the current facility is capable of accommodating the current work load of one F-15C and two F-15E squadrons. The arrival of two additional F-35 squadrons will trigger a work load increase in conventional munitions maintenance, exceeding the mission capacity of the current facility. Additionally, the current GOV parking for this munitions area is at capacity and needs expansion. <u>IMPACT IF NOT PROVIDED:</u> If this project is not provided there will be insufficient conventional munitions maintenance space upon arrival of the F-35s. In addition there will be a significant shortage of munitions GOV parking in the vicinity of the munitions area causing a potential loss in mission effectiveness and accomplishment. <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), but will not employ a standard design because there is no AF standard facility design for this project. A preliminary analysis of reasonable alternatives was accomplished comparing status quo, an addition and new construction. This analysis indicated that an addition to an existing facility is the most cost effective means to meet mission requirements. The project is not within an established NATO Infrastructure capability package for common funding, nor is it expected to become eligible for reasons stated. Current NATO policy indicates that this item will continue to be a user responsibility. Conventional Munitions Maintenance: 485 SM = 5220; Renovation: 662SM = 7125 SF; Base Civil Engineer: Comm 0044-1638-522100 FOREIGN CURRENCY: FCF Budget Rate Used: POUND .8072 <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.				

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5. PROGRAM ELEMENT 27142	6. CATEGORY CODE 216-642	7. PROJECT NUMBER 2470/MSET153515	8. PROJECT COST (\$000) 9,204												
12. SUPPLEMENTAL DATA: a. Estimated Design Data: (1) Project to be accomplished by design-build procedures (2) Basis: (a) Standard or Definitive Design - NO (b) Where Design Was Most Recently Used - (3) All Other Design Costs 360 (4) Construction Contract Award 19 FEB (5) Construction Start 19 MAR (6) Construction Completion 20 JUN (7) Energy Study/Life-Cycle analysis was/will be performed YES b. Equipment associated with this project provided from other appropriations: <table border="1"> <thead> <tr> <th>EQUIPMENT NOMENCLATURE</th> <th>PROCURING APPRC</th> <th>FISCAL YEAR APPROPRIATED OR REQUESTED</th> <th>COST (\$000)</th> </tr> </thead> <tbody> <tr> <td>FURNISHINGS</td> <td>3400</td> <td>2019</td> <td>400</td> </tr> <tr> <td>COMMUNICATIONS EQUIPMENT</td> <td>3080</td> <td>2019</td> <td>150</td> </tr> </tbody> </table>				EQUIPMENT NOMENCLATURE	PROCURING APPRC	FISCAL YEAR APPROPRIATED OR REQUESTED	COST (\$000)	FURNISHINGS	3400	2019	400	COMMUNICATIONS EQUIPMENT	3080	2019	150
EQUIPMENT NOMENCLATURE	PROCURING APPRC	FISCAL YEAR APPROPRIATED OR REQUESTED	COST (\$000)												
FURNISHINGS	3400	2019	400												
COMMUNICATIONS EQUIPMENT	3080	2019	150												

1. COMPONENT AIR FORCE				FY 2019 MILITARY CONSTRUCTION PROGRAM				2. DATE (YYYYMMDD) 20170911			
3. INSTALLATION AND LOCATION Unspecified Location Worldwide						4. COMMAND PACIFIC AIR FORCES				5. AREA CONSTRUCTION COST INDEX Not Specified	
6. PERSONNEL		(1) PERMANENT			(2) STUDENTS			(3) SUPPORTED			TOTAL
		OFFICER	ENLISTED	CIVILIAN	OFFICER	ENLISTED	CIVILIAN	OFFICER	ENLISTED	CIVILIAN	
a. AS OF 30-Sep-17		0	0	0	0	0	0	0	0	0	0
b. END FY 2023		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-17 0											
c. AUTHORIZATION NOT YET IN INVENTORY 0											
d. AUTHORIZATION REQUESTED IN THIS PROGRAM (FY 2019) 18,000											
e. PLANNED IN NEXT FOUR PROGRAM YEARS (FY 2019-2022) 0											
f. REMAINING DEFICIENCY 0											
g. GRAND TOTAL 18,000											
8. PROJECTS REQUESTED IN THIS PROGRAM (FY 2019)											
a. CATEGORY								b. COST (\$000)		c. DESIGN STATUS	
(1) CODE	(2) PROJECT TITLE				(3) SCOPE					(1) START	(2) COMPLETE
390-311	TACMOR UTILITIES AND INFRASTRUCTURE SUPPORT				2 EA			18,000		07/17	09/18
TOTAL								18,000			
FUTURE PROJECTS TOTAL 0											
R&M UNFUNDED REQUIREMENT (\$M)								TOTAL		0.0	
10. MISSION OR MAJOR FUNCTIONS											
Protect and defend, in concert with other U.S. Government agencies, the territory of the United States, its people, and its interests. With allies and partners, commitment to enhancing stability in the Asia-Pacific region by promoting security cooperation, encouraging peaceful development, responding to contingencies, deterring aggression, and, when necessary, fighting to win.											
11. OUTSTANDING POLLUTION AND SAFETY DEFICIENCIES (FY 2017-2021)											
a. Air Pollution											
b. Water Pollution											
c. Occupational Safety and Health											
d. Other Environmental											
OUTSTANDING DEFICIENCIES TOTAL								0			

1. COMPONENT AIR FORCE	FY 2019 MILITARY CONSTRUCTION PROJECT DATA (computer generated)			2. DATE
3. INSTALLATION, SITE AND LOCATION UNSPECIFIED LOCATION UNKNOWN		4. PROJECT TITLE TACMOR UTILITIES AND INFRASTRUCTURE SUPPORT		
5. PROGRAM ELEMENT 35124	6. CATEGORY CODE 390-311	7. RPSUID/PROJECT NUMBER /PAF198127	8. PROJECT COST (\$000) 18,000	
9. COST ESTIMATES				
ITEM	U/M	QUANTITY	UNIT	COST (\$000)
PRIMARY FACILITIES				2,736
ELECTRONIC RESEARCH RADAR (390311)	EA	2	1,341,303	(2,683)
SUSTAINABILITY & ENERGY MEASURES	LS			(54)
SUPPORTING FACILITIES				13,521
PAVEMENTS AND ROADS	LS			(2,598)
SITE IMPROVEMENTS	LS			(9,744)
UTILITIES	LS			(75)
ENVIRONMENTAL MITIGATION	LS			(150)
ARCHEOLOGICAL MONITORING	LS			(75)
EXPLOSIVE SAFETY/MUNS OF CONCERN (ESS/MEC)	LS			(880)
SUBTOTAL				16,258
CONTINGENCY (5.0%)				813
TOTAL CONTRACT COST				17,070
SUPERVISION, INSPECTION AND OVERHEAD (6.2%)				1,058
TOTAL REQUEST				18,129
TOTAL REQUEST (ROUNDED)				18,000
10. Description of Proposed Construction: Construct infrastructure and utilities to support a system of research antennas to accommodate the mission of the facility. The facilities include electrical utilities, reinforced concrete pads and foundations, tie downs for equipment, water and wastewater, access roads, paved parking and turnaround areas, two levels of security fencing, and extensive site work to provide a complete and usable project in support of the installation of Tactical Mobile Over-the-Horizon Radar (TACMOR) equipment. The equipment includes transmission and receiver antennas at two locations, and some additional equipment for calibration and Maritime Domain Surveillance System (MDSS). The facilities will be designed as semi-permanent construction in accordance with the DoD Unified Facilities Criteria (UFC) 1-201-01, Non-Permanent DoD Facilities in Support of Military Operations. This project will comply with DoD Antiterrorism/ Force Protection Requirements as per UFC 4-010-01. Air Conditioning: 0 Tons				
11. Requirement: 2 EA Adequate: 0 EA Substandard: 0 EA PROJECT: TACMOR Utilities and Infrastructure Support REQUIREMENT: The Air Force requires the installation of TACMOR equipment in the western Pacific to provide the United States Pacific Command (USPACOM) with greater air domain awareness for aviation safety and security. This equipment requires the construction of unique infrastructure (e.g., large concrete pad, electrical lines, and security fencing) at two locations in order to collect and transit the data required. TACMOR will also strengthen key partnerships in the region to help				

1. COMPONENT AIR FORCE	FY 2019 MILITARY CONSTRUCTION PROJECT DATA (computer generated)			2. DATE
3. INSTALLATION, SITE AND LOCATION UNSPECIFIED LOCATION UNKNOWN			4. PROJECT TITLE TACMOR UTILITIES AND INFRASTRUCTURE SUPPORT	
5. PROGRAM ELEMENT 35124	6. CATEGORY CODE 390-311	7. RPSUID/PROJECT NUMBER /PAF198127	8. PROJECT COST (\$000) 18,000	
maintain peace and promote security. The equipment supports civil aviation and Host Nation needs for greater maritime situational awareness, and the ability to detect illegal, unreported and unregulated fishing activities within the Host Nation's exclusive economic zone (EEZ). CURRENT SITUATION: The existing utilities and infrastructure in the unspecified location are not adequate to meet PACOM requirements. IMPACT IF NOT PROVIDED: Without construction of these utilities and infrastructure support facilities, the Air Force will continue to have inadequate information to assure aviation safety and security in the region, impacting PACOM's mission in the region. ADDITIONAL: This project meets applicable criteria/scope specified in AF 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 from the Navy design agent. The cost of supporting facilities exceeds the cost of the primary facilities due to the extensive earthwork required to provide a level surface for the equipment, and for the construction of roads to reach the remote sites. Under the Compact of Free Association (CoFA), these facilities will be located on new defense sites established in support of the US government's responsibility to provide for security and defense matters. Environmental planning will be addressed bilaterally under section 163(c) of the CoFA. Civil Engineer: 808-449-3810. 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 2019 MILITARY CONSTRUCTION PROJECT DATA (computer generated)		2. DATE
3. INSTALLATION AND LOCATION UNSPECIFIED LOCATION UNKNOWN		4. PROJECT TITLE TACMOR UTILITIES AND INFRASTRUCTURE SUPPORT	
5. PROGRAM ELEMENT 35124	6. CATEGORY CODE 390-311	7. PROJECT NUMBER /PAF198127	8. PROJECT COST (\$000) 18,000
12. SUPPLEMENTAL DATA:			
a. Estimated Design Data:			
(1) Status:			
(a) Date Design Started			17-JUL-17
(b) Parametric Cost Estimates used to develop costs			YES
* (c) Percent Complete as of 01 JAN 2018			15%
* (d) Date 35% Designed			19-FEB-18
(e) Date Design Complete			17-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			354
(b) All Other Design Costs			168
(c) Total			522
(d) Contract			522
(e) In-house			0
(4) Construction Contract Award			19 FEB
(5) Construction Start			19 APR
(6) Construction Completion			21 JAN
* Indicates completion of Project Definition with Parametric Cost Estimate which is comparable to traditional 35% design to ensure valid scope, cost and executability.			
b. Equipment associated with this project provided from other appropriations:			
EQUIPMENT NOMENCLATURE	PROCURING APPROPRIATION	FISCAL YEAR APPROPRIATED OR REQUESTED	COST (\$000)
TBD	3600	2019	0

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1. COMPONENT AIR FORCE	FY 2019 MILITARY CONSTRUCTION PROJECT DATA (computer generated)			2. DATE
3. INSTALLATION, SITE AND LOCATION WORLDWIDE UNSPECIFIED VARIOUS LOCATIONS		4. PROJECT TITLE PLANNING AND DESIGN		
5. PROGRAM ELEMENT 91211	6. CATEGORY CODE 961-000	7. RPSUID/PROJECT NUMBER /PAYZ190002	8. PROJECT COST (\$000) 195,577	
9. COST ESTIMATES				
ITEM		U/M	QUANTITY	UNIT
PRIMARY FACILITIES				COST (\$000)
PLANNING AND DESIGN		LS		195,577 (195,577)
SUPPORTING FACILITIES				0
SUBTOTAL				<u>195,577</u>
TOTAL CONTRACT COST				<u>195,577</u>
TOTAL REQUEST				195,577
TOTAL REQUEST (ROUNDED)				195,577
10. Description of Proposed Construction:				
11. Requirement: Adequate: Substandard:				
PROJECT: As required.				
REQUIREMENT: These planning and design funds are required to complete the design of facilities in the FY20 Military Construction Program, initiate design of facilities in the FY21 Military Construction Program, and accomplish planning and design for major and complex technical projects with long lead-times to be included in subsequent Military Construction programs. These funds may be used for value engineering and for support of the design and construction management of projects that are funded by foreign governments and for design of classified and special programs. The funds may also be used for developing the Tri-Services Cost Estimating Guide and Unified Facilities Criteria.				

1. COMPONENT AIR FORCE	FY 2019 MILITARY CONSTRUCTION PROJECT DATA (computer generated)			2. DATE
3. INSTALLATION, SITE AND LOCATION WORLDWIDE UNSPECIFIED VARIOUS LOCATIONS			4. PROJECT TITLE PLANNING AND DESIGN	
5. PROGRAM ELEMENT 91211	6. CATEGORY CODE 961-000	7. RPSUID/PROJECT NUMBER /PAYZ190002IP	8. PROJECT COST (\$000) 11,000	
9. COST ESTIMATES				
ITEM		U/M	QUANTITY	UNIT
PRIMARY FACILITIES				COST (\$000) 11,000
PLANNING AND DESIGN		LS		(11,000)
SUPPORTING FACILITIES				0
SUBTOTAL				<u>11,000</u>
TOTAL CONTRACT COST				11,000
TOTAL REQUEST				11,000
TOTAL REQUEST (ROUNDED)				11,000
10. Description of Proposed Construction:				
11. Requirement: Adequate: Substandard:				
PROJECT: As required.				
REQUIREMENT: These planning and design funds are required to complete the design of NASIC projects ADAL Intelligence Production Facility, Phase 1 and Phase II.				

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1. COMPONENT AIR FORCE	FY 2019 MILITARY CONSTRUCTION PROJECT DATA (computer generated)			2. DATE	
3. INSTALLATION, SITE AND LOCATION WORLDWIDE UNSPECIFIED VARIOUS LOCATIONS			4. PROJECT TITLE UNSPECIFIED MINOR MILITARY CONSTRUCTION		
5. PROGRAM ELEMENT 91211	6. CATEGORY CODE 962-000	7. RPSUID/PROJECT NUMBER /PAYZ190003	8. PROJECT COST (\$000) 38,500		
9. COST ESTIMATES					
ITEM		U/M	QUANTITY	UNIT	COST (\$000)
PRIMARY FACILITIES					38,500
MILCON MINOR CONSTRUCTION		LS			(38,500)
SUPPORTING FACILITIES					0
SUBTOTAL					<u>38,500</u>
TOTAL CONTRACT COST					<u>38,500</u>
TOTAL REQUEST					38,500
TOTAL REQUEST (ROUNDED)					38,500
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 FY19. Included would be projects to support new mission requirements, new equipment, and other essential support to Air Force missions.					

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FEBRUARY 2018

“Parking issues at DOD facilities - Military construction budget constraints are negatively affecting the ability of the Department of Defense to address urgent parking requirements at certain U.S. military installations. The lack of parking is a safety issue and a detriment to the well-being of the employees, both civilian and military. The committee is concerned that many DOD facilities in the Departments inventory do not have sufficient parking to meet installation requirements. Furthermore, these deficiencies can contribute to traffic congestion and are serious problems on base. The Committee is concerned that the Department does not have a coherent strategy to address the growing parking requirements at installations that have significant growth. For example, Fort Meade, which already was home to the National Security Agency (NSA), became the headquarters for the newly formed U.S. Cyber Command in 2010. By 2011, the Defense Information Systems Agency, which handles the Pentagon’s IT and communications needs, had moved onto the base. In 2005, the base had just over 33,500 employees. Today it has about 57,000, more than double the numbers of the workers at the Pentagon. As a result of this growth, parking at Fort Meade has become a serious issue. Therefore, the Secretary of Defense is directed to submit to the Committee with the fiscal year 2019 military construction budget request: an updated list of unfunded requirements for parking facilities, access control points, and road construction at DOD facilities that have serious parking, access, and road congestion issues. Finally, the Secretary is further directed to submit, with the fiscal year 2019 military construction budget request, a list of how those requirements will be incorporated into their construction requests for fiscal years 2019 through 2023.”

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Department of the Air Force

Research and Development (RDT&E) Military Construction Program

**Fiscal Year (FY) 2019
Budget Estimates**

**Justification Data Submitted to Congress
February 2018**

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**DEPARTMENT OF THE AIR FORCE
FISCAL YEAR 2019 RESEARCH AND DEVELOPMENT(RDT&E) REQUEST
TABLE OF CONTENTS**

<u>ITEM</u>	PAGE NUMBER
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3. INDEX (LIST OF PROJECTS)	182
4. MILITARY CONSTRUCTION PROJECTS	184

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**DEPARTMENT OF THE AIR FORCE
FISCAL YEAR 2019 RESEARCH AND DEVELOPMENT(RDT&E)
PROGRAM SUMMARY
PROGRAM SUMMARY**

	<u>AUTHORIZATION REQUEST (\$000s)</u>	<u>APPROPRIATION REQUEST (\$000s)</u>
Military Construction		
Major Construction	111,000	0
 Total Military Construction	 111,000	 0

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DEPARTMENT OF THE AIR FORCE
MILITARY CONSTRUCTION PROGRAM FISCAL YEAR 2019
INDEX - RESEARCH AND DEVELOPMENT (RDT&E)
(DOLLARS IN THOUSANDS)

STATE / COUNTRY	INSTALLATION	PROJECT	AUTHORIZATION REQUEST	APPROPRIATION REQUEST
CALIFORNIA	Edwards	Joint Simulation Environment Facility - Edwards	43,000	0
		Edwards TOTAL:	43,000	0
		CALIFORNIA TOTAL:	43,000	0
FLORIDA	Eglin	Cyberspace Test Facility	38,000	0
		Eglin TOTAL:	38,000	0
		FLORIDA TOTAL	38,000	0
NEVADA	Nellis	Joint Simulation Environment Facility - Nellis	30,000	0
		Nellis TOTAL:	30,000	0
		NEVADA TOTAL:	30,000	0
RESEARCH AND DEVELOPMENT (RDT&E) TOTAL:			111,000	0

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1. COMPONENT AIR FORCE	FY 2020 MILITARY CONSTRUCTION PROJECT DATA (computer generated)			2. DATE
3. INSTALLATION, SITE AND LOCATION EDWARDS AIR FORCE BASE EDWARDS AFB SITE # 1 CALIFORNIA		4. PROJECT TITLE JOINT SIMULATION ENVIRONMENT FACILITY -EDWARDS		
5. PROGRAM ELEMENT 64759	6. CATEGORY CODE 317-932	7. RPSUID/PROJECT NUMBER 1684/FSPM173504	8. PROJECT COST (\$000) 43,000	
9. COST ESTIMATES				
ITEM	U/M	QUANTITY	UNIT	COST (\$000)
PRIMARY FACILITIES				31,929
AVIONICS RESEARCH LABORATORY (317-932)	SM	6,702	4,669	(31,290)
FACILITY SUSTAINABILITY & ENERGY MEASURES SUPPORTING FACILITIES	SM	6,702	95	(639)
				5,852
DEMOLITION	SM	12	587	(7)
PAVEMENTS	LS			(2,310)
SITE IMPROVEMENTS	LS			(1,430)
UTILITIES	LS			(1,055)
COMMUNICATIONS INFRASTRUCTURE	LS			(300)
EMERGENCY GENERATOR	LS			(750)
SUBTOTAL				37,781
CONTINGENCY (5.0%)				1,889
TOTAL CONTRACT COST				39,670
SUPERVISION, INSPECTION AND OVERHEAD (5.7%)				2,261
DESIGN/BUILD - DESIGN COST (4.0% OF SUBTOTAL)				1,511
TOTAL REQUEST				43,442
TOTAL REQUEST (ROUNDED)				43,000
EQUIPMENT FROM OTHER APPROPRIATIONS (NON-ADD)				(72,800)
10. Description of Proposed Construction: Construct a two story 6,702 SM Joint Simulation Environment Facility with reinforced concrete foundation and slab floor, structural steel frame, split-face masonry unit walls, standing seam metal roof, sensitive compartmentalized information facilities (SCIF), special access program facilities (SAPF), fire detection and protection systems, utilities, emergency generator, communication support, pavements, site improvements including covered walkways to buildings 1020 and 1030, and all other necessary support. Facilities will be designed as permanent construction in accordance with DoD Unified Facilities Criteria 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. Demolish one 12 SM facility, building 1019, and demolish two modular structures. Air Conditioning: 300 Tons				
11. Requirement: 14112 SM Adequate: 0 SM Substandard: 7410 SM PROJECT: Joint Simulation Environment Facility - Edwards REQUIREMENT: Adequate facilities are required for/to accommodate F-35 Block C2/D2 developmental test and early operational test and evaluation and F-22 Sensor Enhancement developmental testing. This will require a Joint Simulation Environment (JSE) capability including integration with F-22 and other platforms and capabilities. The JSE will provide a unique capability, providing a				

1. COMPONENT AIR FORCE	FY 2020 MILITARY CONSTRUCTION PROJECT DATA (computer generated)			2. DATE
3. INSTALLATION, SITE AND LOCATION EDWARDS AIR FORCE BASE EDWARDS AFB SITE # 1 CALIFORNIA			4. PROJECT TITLE JOINT SIMULATION ENVIRONMENT FACILITY -EDWARDS	
5. PROGRAM ELEMENT 64759	6. CATEGORY CODE 317-932	7. RPSUID/PROJECT NUMBER 1684/FSPM173504	8. PROJECT COST (\$000) 43,000	
government owned simulation environment supporting multi-platform integrated testing. The collaborative JSE facility will include up to four F-35 simulator cockpits, four F-22 simulator cockpits, six adversary (Red) simulator cockpits, and two hardware-in-the-loop cockpits. This capability will provide a unique opportunity to create a non-proprietary AF multi-platform domain. The United States Navy, Marine Corps, Army, Defense Advanced Research Project Agency and defense contractor teams all stand to benefit from this unique capability and the feedback gathered from this collaborative JSE. Future A2/AD weapons systems (including B-21, PCA, and others) would also use this facility when available. Additionally, this facility will house Tactical Command & Control (TAC/C2) capabilities for both blue (Air Force) and red forces, and working areas for the integration of Space and Cyber capabilities, tactical data links, augmented reality and Joint Interoperability initiatives research and development activities. This facility project exceeds the section 2805 limit of \$6M. 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 design from Air Force Civil Engineer Center (AFCEC). <u>CURRENT SITUATION:</u> It is becoming increasingly difficult to create an operationally realistic environment, and upcoming 5th Generation aircraft testing cannot be fully performed in open air ranges. Additionally, emerging USAF high-priority programs limit open air range access. These factors drive the requirement for a ground test facility that can accommodate multi-level security, with multiple airframes and weapon systems. Aircraft simulators that are currently available are based on proprietary hardware and software, and are aircraft specific. They cannot be readily reconfigured to simulate different aircraft which limits their effectiveness for supporting developmental and operational testing. <u>IMPACT IF NOT PROVIDED:</u> F-35 and 5th generation integrated testing cannot be accomplished. Testing will continue to be constrained by the limits of open air ranges. <u>ADDITIONAL:</u> Funding authority for this project is FY 2017 National Defense Authorization Act, Section 2806, which amends FY 2016 NDAA language to include DOD research, development, test and evaluations facilities not designated as a Science and Technology Reinvention Laboratory under Section 2803 Defense Laboratory Modernization Pilot Program, subsection (a). It authorizes the Secretary of Defense to fund military construction projects using amounts appropriated or otherwise made available to the Department of Defense for research, development, test, and evaluation. This project will support research, development, testing, and evaluation in accordance with NDAA Section 2803, subsection (d) (1) (2) (3) (4). This project meets the criteria/scope specified in Part II of Military Handbook 1190, Facility Planning and Design Guide, Air Force Manual 32-1084, "Facility Requirements", and the weapon system Facility Requirement Plan. A preliminary economic analysis has been accomplished comparing new construction to an add/alter option and it was determined that new construction is the most cost effective alternative. Sustainable principles, to include Life Cycle cost effective				

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3. INSTALLATION, SITE AND LOCATION EDWARDS AIR FORCE BASE EDWARDS AFB SITE # 1 CALIFORNIA			4. PROJECT TITLE JOINT SIMULATION ENVIRONMENT FACILITY -EDWARDS	
5. PROGRAM ELEMENT 64759	6. CATEGORY CODE 317-932	7. RPSUID/PROJECT NUMBER 1684/FSPM173504	8. PROJECT COST (\$000) 43,000	
practices, will be integrated into the design, development and construction of the project in accordance with UFC 1-200-02, dated 1 March 2013. Base Civil Engineer: 661-277-2910. Joint Simulation Environment Facility: 6,702 SM = 72,140 SF. <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.				

1. COMPONENT AIR FORCE	FY 2020 MILITARY CONSTRUCTION PROJECT DATA (computer generated)		2. DATE																
3. INSTALLATION AND LOCATION EDWARDS AIR FORCE BASE EDWARDS AFB SITE # 1 CALIFORNIA		4. PROJECT TITLE JOINT SIMULATION ENVIRONMENT FACILITY -EDWARDS																	
5. PROGRAM ELEMENT 64759	6. CATEGORY CODE 317-932	7. PROJECT NUMBER 1684/FSPM173504	8. PROJECT COST (\$000) 43,000																
12. SUPPLEMENTAL DATA: a. Estimated Design Data: (1) Project to be accomplished by design-build procedures (2) Basis: (a) Standard or Definitive Design - NO (b) Where Design Was Most Recently Used - (3) All Other Design Costs 1,680 (4) Construction Contract Award 20 FEB (5) Construction Start 20 APR (6) Construction Completion 22 APR (7) Energy Study/Life-Cycle analysis was/will be performed NO b. Equipment associated with this project provided from other appropriations: <table border="1"> <thead> <tr> <th>EQUIPMENT NOMENCLATURE</th> <th>PROCURING APPRC</th> <th>FISCAL YEAR APPROPRIATED OR REQUESTED</th> <th>COST (\$000)</th> </tr> </thead> <tbody> <tr> <td>FLIGHT SIMULATOR EQUIPMENT</td> <td>3600</td> <td>2022</td> <td>72,000</td> </tr> <tr> <td>FURNISHINGS</td> <td>3600</td> <td>2022</td> <td>500</td> </tr> <tr> <td>COMMUNICATIONS EQUIPMENT</td> <td>3600</td> <td>2022</td> <td>300</td> </tr> </tbody> </table> c. Pursuant to the FY 2016 NDAA, Section 2803(d)3, endorsement by more than one military department for this project is provided in the FY 2019 3600 budget exhibit under PE 0604759F.				EQUIPMENT NOMENCLATURE	PROCURING APPRC	FISCAL YEAR APPROPRIATED OR REQUESTED	COST (\$000)	FLIGHT SIMULATOR EQUIPMENT	3600	2022	72,000	FURNISHINGS	3600	2022	500	COMMUNICATIONS EQUIPMENT	3600	2022	300
EQUIPMENT NOMENCLATURE	PROCURING APPRC	FISCAL YEAR APPROPRIATED OR REQUESTED	COST (\$000)																
FLIGHT SIMULATOR EQUIPMENT	3600	2022	72,000																
FURNISHINGS	3600	2022	500																
COMMUNICATIONS EQUIPMENT	3600	2022	300																

1. COMPONENT AIR FORCE	FY 2020 MILITARY CONSTRUCTION PROJECT DATA (computer generated)			2. DATE
3. INSTALLATION, SITE AND LOCATION EGLIN AIR FORCE BASE EGLIN AFB SITE # 1 (EGLIN MAIN AND RESERVATION) FLORIDA		4. PROJECT TITLE CYBERSPACE TEST FACILITY		
5. PROGRAM ELEMENT 64759	6. CATEGORY CODE 311-173	7. RPSUID/PROJECT NUMBER 1695/FTFA163007	8. PROJECT COST (\$000) 38,000	
9. COST ESTIMATES				
ITEM	U/M	QUANTITY	UNIT	COST (\$000)
PRIMARY FACILITIES				27,074
AIRCRAFT RESEARCH ENGINEERING FAC (311-173)	SM	4,833	5,492	(26,543)
SUSTAINABILITY AND ENERGY MEASURES	LS			(531)
SUPPORTING FACILITIES				7,314
UTILITIES	LS			(1,440)
PAVEMENTS	LS			(2,455)
SITE IMPROVEMENTS	LS			(1,015)
PRIVATIZED UTILITY CONNECTION FEE	LS			(300)
COMMUNICATIONS	LS			(1,354)
EMERGENCY GENERATOR	LS			(750)
SUBTOTAL				34,388
CONTINGENCY (5.0%)				1,719
TOTAL CONTRACT COST				36,107
SUPERVISION, INSPECTION AND OVERHEAD (5.7%)				2,058
TOTAL REQUEST				38,165
TOTAL REQUEST (ROUNDED)				38,000
EQUIPMENT FROM OTHER APPROPRIATIONS (NON-ADD)				(5,000.0)
10. Description of Proposed Construction: Construct a cyberspace security test facility utilizing conventional design and construction methods to accomodate the mission of the facility. A sprinkler-equipped facility consisting of a concrete foundation, split-faced concrete block over a steel frame and sloped standing seam metal roof. Approximately half of the facility will need to be SCIF rated. Project provides utilities, HVAC, secure communications, site improvements, landscaping, parking, emergency generator capabilities, and all support facilities to provide a complete and usable facility. Facility will be designed as permanent construction in accordance with the Department of Defense (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. A temporary facility (aproximately 14,000 SF) will be required interim to this facility and will not be funded as part of this effort. Air Conditioning: 400 Tons				
11. Requirement: 4833 SM Adequate: 0 SM Substandard: 0 SM PROJECT: Cyberspace Test Facility REQUIREMENT: The recently approved 96CTG and associate units require secure, networked laboratories to accomplish critical integrated weapons system test execution, Cybersecurity, and Command, Control, Communications, Computers, Intelligence, Surveillance and Reconnaissance (C4ISR) testing. As additional tools				

1. COMPONENT AIR FORCE	FY 2020 MILITARY CONSTRUCTION PROJECT DATA (computer generated)			2. DATE
3. INSTALLATION, SITE AND LOCATION EGLIN AIR FORCE BASE EGLIN AFB SITE # 1 (EGLIN MAIN AND RESERVATION) FLORIDA			4. PROJECT TITLE CYBERSPACE TEST FACILITY	
5. PROGRAM ELEMENT 64759	6. CATEGORY CODE 311-173	7. RPSUID/PROJECT NUMBER 1695/FTFA163007	8. PROJECT COST (\$000) 38,000	
and test capabilities are brought on line, this state-of-the-art facility will provide the critical Developmental Test and Evaluation, Operational Test and Evaluation, and training and exercise capabilities currently unavailable. This facility will bring all weapons cybersecurity test expertise into a unified environment including expertise from academic, industrial, and other federal agencies. This facility will also benefit Special Operations Command AFSOC 18FTS, Redstone Test Center, and Naval Air Station Patuxent. This facility project exceeds the section 2805 limit of \$6M. CURRENT SITUATION: There are no existing facilities on Eglin AFB with the capability to collocate the number of personnel that the 96 CTG will need to house at Eglin AFB or support the necessary testing equipment needed for the growth in cyber testing requirements to be executed by the 96 CTG. While Eglin AFB may have facilities that could be remodeled/refurbished to accommodate these personnel or the required equipment; using several, geographically separated facilities would debilitate the effectiveness of the required Developmental Test & Evaluation / Operational Test & Evaluation. IMPACT IF NOT PROVIDED: Test and Evaluation is one of AFMC's core mission areas. Without this facility, new Cybersecurity and C4ISR testing will be extremely impeded. The AFTC mission to conduct DT&E of air, space and cyberspace systems, and provide timely, objective and accurate information to acquisition decision makers will be diminished. There will be a direct negative impact to the warfighter's need to maintain C4ISR, Cybersecurity, and information superiority while minimizing risks to fielding warfighter weapons systems. ADDITIONAL: This project meets applicable criteria/scope specified in AF Manual 32-1084, Facility Requirements. Economic analysis is being processed and a preliminary review has been accomplished, with a new facility being the recommendation. This project will be accomplished using RDT&E (3600) funds to support the 96/TS Cyberspace Test facility requirements Under title 10 USC SEC 2358 DEFENSE LABORATORY MODERNIZATION PILOT PROGRAM "(d)(4) cannot be fully funded within the thresholds specified in section 2805 of title 10, United States Code. "(e) Funding Limitation - The maximum amount of funds appropriated or otherwise made available for research, development, test, and evaluation that may be obligated in any fiscal year for military construction projects under this section is \$150,000,000. "(f) Termination of Authority - The authority provided by this section to fund military construction projects using funds appropriated or otherwise made available for research, development, test, and evaluation shall terminate on October 1, 2020." This expansion of required manning and test facilities requires proximity to B85 on Eglin AFB (current location of the 46TS) for reach back into secure networks and integration of C4ISR systems. 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 design from Air Force Civil Engineer Center (AFCEC). The Supporting Facility costs exceed the Primary				

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facility costs by more than 25% due to the inclusion of an emergency generator, otherwise, the costs fall within the 25% criteria. 96th Test Wing Base Civil Engineer: (850) 882-2876. Cyberspace Facility: 4,833 SM = 52,003 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.				

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5. PROGRAM ELEMENT 64759	6. CATEGORY CODE 311-173	7. PROJECT NUMBER 1695/FTFA163007	8. PROJECT COST (\$000) 38,000
12. SUPPLEMENTAL DATA:			
a. Estimated Design Data:			
(1) Status:			
(a) Date Design Started			06-OCT-18
(b) Parametric Cost Estimates used to develop costs			YES
* (c) Percent Complete as of 01 JAN 2018			15%
* (d) Date 35% Designed			11-JAN-19
(e) Date Design Complete			16-NOV-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			0
(b) All Other Design Costs			2,280
(c) Total			2,280
(d) Contract			0
(e) In-house			0
(4) Construction Contract Award			20 JAN
(5) Construction Start			20 MAR
(6) Construction Completion			21 MAY
* Indicates completion of Project Definition with Parametric Cost Estimate which is comparable to traditional 35% design to ensure valid scope, cost and executability.			
b. Equipment associated with this project provided from other appropriations:			
EQUIPMENT NOMENCLATURE	PROCURING APPROPRIATION	FISCAL YEAR APPROPRIATED OR REQUESTED	COST (\$000)
FF&E	3600	2020	2,100
AUDIO VISUAL EQUIPMENT	3600	2020	2,900
c. Pursuant to the FY 2016 NDAA, Section 2803(d)3, endorsement by more than one military department for this project is provided in the FY 2019 3600 budget exhibit under PE 0604759F.			

1. COMPONENT AIR FORCE	FY 2020 MILITARY CONSTRUCTION PROJECT DATA (computer generated)			2. DATE
3. INSTALLATION, SITE AND LOCATION NELLIS AIR FORCE BASE NELLIS SITE # 1 NEVADA			4. PROJECT TITLE JOINT SIMULATION ENVIRONMENT FACILITY- NELLIS	
5. PROGRAM ELEMENT 64759	6. CATEGORY CODE 317-932	7. RPSUID/PROJECT NUMBER 3056/RKMF203007	8. PROJECT COST (\$000) 30,000	
9. COST ESTIMATES				
ITEM	U/M	QUANTITY	UNIT	COST (\$000)
PRIMARY FACILITIES				22,088
AVIONICS RESEARCH LABORATORY (317-932)	SM	4,735	4,573	(21,655)
SUSTAINABILITY & ENERGY MEASURES (2.0%)	LS			(433)
SUPPORTING FACILITIES				3,879
UTILITIES	LS			(883)
SITE IMPROVEMENTS	LS			(635)
PAVEMENTS	LS			(850)
COMMUNICATIONS SUPPORT	LS			(861)
EMERGENCY GENERATOR SYSTEM	LS			(650)
SUBTOTAL				25,967
CONTINGENCY (5.0%)				1,298
TOTAL CONTRACT COST				27,265
SUPERVISION, INSPECTION AND OVERHEAD (5.7%)				1,554
DESIGN/BUILD - DESIGN COST (4.0% OF SUBTOTAL)				1,039
TOTAL REQUEST				29,858
TOTAL REQUEST (ROUNDED)				30,000
EQUIPMENT FROM OTHER APPROPRIATIONS (NON-ADD)				(94,450)
10. Description of Proposed Construction: Provide a 4,735 SM, Joint Simulation Environment Facility (JSE) to house the Joint Simulation Environment (JSE). Work will include reinforced concrete foundation and floor slab, structural steel frames, split-face masonry unit walls, standing metal seam roofing system with parapet, sensitive compartmentalized information facilities (SCIF), special access program facilities (SAPF), fire detection and protection system, utilities, emergency generator, communication support, pavements and all other necessary support. 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: 300 Tons				
11. Requirement: 4735 SM Adequate: 0 SM Substandard: 0 SM <u>PROJECT:</u> Joint Simulation Environment Facility - Nellis <u>REQUIREMENT:</u> Adequate facilities are required for/to accommodate F-35 C2/D2 developmental test and early operational test and evaluation and F-22 Sensor Enhancement developmental testing. This will require a Joint Simulation Environment (JSE) capability including integration with F-22 and other platforms and capabilities. The JSE will provide a unique capability, providing a government owned simulation environment supporting multi-platform integrated				

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5. PROGRAM ELEMENT 64759	6. CATEGORY CODE 317-932	7. RPSUID/PROJECT NUMBER 3056/RKMF203007	8. PROJECT COST (\$000) 30,000	
testing. The collaborative JSE facility will include up to eight F-35 simulator cockpits, a minimum four F-22 simulator cockpits, and up to eight adversary (Red) simulator cockpits. This capability will provide a unique opportunity to create a non-proprietary AF multi-platform domain. The United States Navy, Marine Corps, Army, Defense Advanced Research Project Agency and defense contractor teams all stand to benefit from this unique capability and the feedback gathered from this collaborative JSE. Future C2/D2 weapons systems (including B-21, PCA and others) could also use this facility. Additionally, this facility will house Tactical Command & Control (TAC/C2) capabilities for both blue and red forces, and working areas for the integration of Space and Cyber capabilities, tactical data links, augmented reality and Joint Interoperability initiatives research and development activities. This facility project exceeds the section 2805 limit of \$6M. <u>CURRENT SITUATION:</u> It is becoming increasingly difficult to create an operationally realistic environment, and upcoming 5th Generation aircraft testing cannot be fully performed in open air ranges. Additionally, emerging USAF high priority programs limit open air range access. These factors drive the requirement for a ground test facility that can accommodate multi-level security, with multiple airframes and weapon systems. Aircraft simulators that are currently available are based on proprietary hardware and software, and are aircraft specific. They cannot be readily reconfigured to simulate different aircraft which limits their effectiveness for supporting developmental and operational testing. <u>IMPACT IF NOT PROVIDED:</u> F-35 and 5th generation integrated testing cannot be accomplished. Nellis will continue to be limited in our ability to test 5th generation aircraft, and will be unable to realize the increased test capability the JSE can provide. Testing will continue to be constrained by the limits of open air ranges. Building an JSE facility at Nellis and integrating into an already established plan for a Virtual Test and Training Center - Nellis provides an unprecedented level of synergy/warfighter advanced readiness benefit across testing, tactics development and advanced training. <u>ADDITIONAL:</u> Funding authority for this project is FY 2017 National Defense Authorization Act, Section 2806, which amends FY 2016 NDAA language to include DOD research, development, test and evaluations facilities not designated as a Science and Technology Reinvention Laboratory under Section 2803 Defense Laboratory Modernization Pilot Program, subsection (a). It authorizes the Secretary of Defense to fund military construction projects using amounts appropriated or otherwise made available to the Department of Defense for research, development, test, and evaluation. This project will support research, development, testing, and evaluation in accordance with NDAA Section 2803, subsection (d) (1) (2) (3) (4). This project meets the criteria/scope specified in Part II of Military Handbook 1190, Facility Planning and Design Guide, Air Force Manual 32-1084, "Facility Requirements" and the weapon system Facility Requirement Plan. An analysis of reasonable options for accomplishing this project (status quo, renovations, and new construction) was done. It indicates there is only one option that will meet operational requirements; new construction. A certificate of exception has been				

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prepared. 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. 99th Air Base Wing Base Civil Engineer: 702-652-4833. (Joint Simulation Environment Facility - Nellis: 4,735 SM = 50,967 SF) <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.				

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5. PROGRAM ELEMENT 64759	6. CATEGORY CODE 317-932	7. PROJECT NUMBER 3056/RKMF203007	8. PROJECT COST (\$000) 30,000																
12. SUPPLEMENTAL DATA: a. Estimated Design Data: (1) Project to be accomplished by design-build procedures (2) Basis: (a) Standard or Definitive Design - NO (b) Where Design Was Most Recently Used - (3) All Other Design Costs 1,400 (4) Construction Contract Award 20 FEB (5) Construction Start 20 MAR (6) Construction Completion 22 MAR (7) Energy Study/Life-Cycle analysis was/will be performed YES b. Equipment associated with this project provided from other appropriations: <table border="1"> <thead> <tr> <th>EQUIPMENT NOMENCLATURE</th> <th>PROCURING APPRC</th> <th>FISCAL YEAR APPROPRIATED OR REQUESTED</th> <th>COST (\$000)</th> </tr> </thead> <tbody> <tr> <td>FLIGHT SIMULATOR EQUIPMENT</td> <td>3600</td> <td>2020</td> <td>94,000</td> </tr> <tr> <td>FURNISHINGS</td> <td>3600</td> <td>2020</td> <td>300</td> </tr> <tr> <td>COMMUNICATIONS-ELECTRONIC EQUI</td> <td>3600</td> <td>2020</td> <td>150</td> </tr> </tbody> </table> c. Pursuant to the FY 2016 NDAA, Section 2803(d)3, endorsement by more than one military department for this project is provided in the FY 2019 3600 budget exhibit under PE 0604759F.				EQUIPMENT NOMENCLATURE	PROCURING APPRC	FISCAL YEAR APPROPRIATED OR REQUESTED	COST (\$000)	FLIGHT SIMULATOR EQUIPMENT	3600	2020	94,000	FURNISHINGS	3600	2020	300	COMMUNICATIONS-ELECTRONIC EQUI	3600	2020	150
EQUIPMENT NOMENCLATURE	PROCURING APPRC	FISCAL YEAR APPROPRIATED OR REQUESTED	COST (\$000)																
FLIGHT SIMULATOR EQUIPMENT	3600	2020	94,000																
FURNISHINGS	3600	2020	300																
COMMUNICATIONS-ELECTRONIC EQUI	3600	2020	150																

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Department of the Air Force

European Deterrence Initiative Military Construction Program

**Fiscal Year (FY) 2019
Budget Estimates**

**Justification Data Submitted to Congress
February 2018**

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**DEPARTMENT OF THE AIR FORCE
EUROPEAN DETERRENCE INITIATIVE
MILITARY CONSTRUCTION PROGRAM FISCAL YEAR 2019
TABLE OF CONTENTS**

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**DEPARTMENT OF THE AIR FORCE
EUROPEAN DETERRENCE INITIATIVE
MILITARY CONSTRUCTION PROGRAM FISCAL YEAR 2019
PROGRAM SUMMARY**

	<u>AUTHORIZATION</u> <u>REQUEST</u> <u>(\$000s)</u>	<u>APPROPRIATION</u> <u>REQUEST</u> <u>(\$000s)</u>
Military Construction		
Major Construction	297,800	297,800
Planning and Design (10 USC 2807)	0	48,000
 Total Military Construction	 297,800	 345,800

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DEPARTMENT OF THE AIR FORCE
MILITARY CONSTRUCTION PROGRAM FISCAL YEAR 2019
INDEX - EUROPEAN DETERRENCE INITIATIVE
(DOLLARS IN THOUSANDS)

COUNTRY	INSTALLATION	PROJECT	AUTHORIZATION REQUEST	APPROPRIATION REQUEST
GERMANY	Ramstein Air Base	EDI: KMC DABS-FEV/RH Storage Warehouses	119,000	119,000
		Ramstein Air Base TOTAL:	119,000	119,000
		GERMANY TOTAL:	119,000	119,000
NORWAY	Rygge Air Station	EDI: Construct Taxiway	13,800	13,800
		Rygge Air Station TOTAL:	13,800	13,800
		NORWAY TOTAL:	13,800	13,800
SLOVAKIA	Malacky Air Base	EDI: Regional Munitions Storage Area	59,000	59,000
		Malacky Air Base TOTAL:	59,000	59,000
		SLOVAKIA TOTAL:	59,000	59,000
UNITED KINGDOM	RAF Fairford	EDI-Munitions Holding Area	19,000	19,000
		EDI: Construct DABS-FEV Storage	87,000	87,000
		RAF Fairford TOTAL:	106,000	106,000
		UNITED KINGDOM TOTAL:	106,000	106,000
		Planning & Design TOTAL:	0	48,000
		EUROPEAN DETERRENCE INITIATIVE TOTAL:	297,800	345,800

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1. COMPONENT AIR FORCE		FY 2019 MILITARY CONSTRUCTION PROJECT DATA		2. DATE	
3. INSTALLATION AND LOCATION RAMSTEIN AIR BASE PIRMASENS/HUSTERHOEHE, GERMANY			4. PROJECT TITLE: EDI: KMC DABS-FEV/RH STORAGE WAREHOUSES		
5. PROGRAM ELEMENT 27576	6. CATEGORY CODE 442-758	7. PROJECT NUMBER LGGK 19-3542	8. PROJECT COST (\$000) 119,000		
9. COST ESTIMATES					
ITEM		U/M	QUANTITY	UNIT COST	COST (\$000)
PRIMARY FACILITIES					86,935
WAREHOUSE SUPPLY AND EQUIPMENT (442-758)		SM	34,500	1,710	(58,995)
MEDICAL WRM STORAGE FACILITY (442-515)		SM	1,171	4,516	(5,288)
VEHICLE OPERATIONS HEATED PARKING (214-426)		SM	3,625	1,988	(7,206)
REFUELING VEHICLE SHOP (214-467)		SM	2,359	1,917	(4,524)
MATERIAL PROCESSING DEPOT (141-821)		SM	2,518	3,536	(8,904)
SECURITY ENTRY CONTROL BUILDING (730-837)		SM	28	11,259	(315)
SUSTAINABLE DESIGN (2%)		LS			(1,705)
SUPPORTING FACILITIES					15,569
UTILITIES		LS			(4,952)
SITE IMPROVEMENTS		LS			(6,695)
DEMOLITION		LS			(2,478)
COMMUNICATIONS		LS			(1,364)
ENVIRONMENTAL MONITORING		LS			(80)
SUBTOTAL					102,504
CONTINGENCY (5%)					(5,215)
TOTAL CONTRACT COST					107,629
SUPERVISION, INSPECTION AND OVERHEAD (6.5%)					(6,996)
DESIGN/BUILD – DESIGN COST (4.0%)					(4,305)
TOTAL REQUEST					118,931
TOTAL REQUEST (ROUNDED)					119,000
EQUIPMENT FROM OTHER APPROPRIATIONS (NON-ADD)					330
10. DESCRIPTION OF PROPOSED CONSTRUCTION:					
Construct storage and maintenance facilities for War Reserve Materiel (WRM). WRM accommodates two (2) Deployable Airbase Systems (DABS), two (2) Expeditionary Medical Support System (E-MEDS), and two (2) Rapid Engineer Deployable Heavy Operational Squadron (RED HORSE) assets at Pirmasens, Germany in support of the European Deterrence Initiative (EDI). Facilities constructed will include two humidity controlled warehouses, a medical WRM storage facility, a vehicle operations heated storage building, a refueling vehicle shop, a material processing depot, and a security entry control building. These facilities will include a fire alarm system, heat and smoke detection systems, door-open monitoring system, electrical load shedding system, grounding and lightning protection, and overvoltage protection for power and tele-communications systems. Supporting facilities include utilities, pavements, site improvements, environmental mitigation, and information systems. Low-impact development (LID) integrated management practices are included. Local materials and construction techniques shall be used where required and/or appropriate. Design and construction efforts will be executed in accordance with the host-nation agreements, including construction and environmental permits. The facility will be permanent construction and will comply with construction guidance in accordance with DoD Unified Facilities Criteria (UFC) 1-202-01, Host Nation Facilities in Support of Military Operations; UFC 3-600-01, Fire Protection Engineering for Facilities; and UFC 4-010-01, DoD Minimum Antiterrorism Standards for Buildings. Air conditioning estimated cooling load is 0 Tons. Demolish 9 buildings at Pirmasens, Germany totaling 32,891 SM (354,036 SF).					

1. COMPONENT AIR FORCE	FY 2019 MILITARY CONSTRUCTION PROJECT DATA	2. DATE
3. INSTALLATION AND LOCATION PIRMASENS/HUSTERHOEHE, GERMANY		
4. PROJECT TITLE EDI: KMC DABS-FEV/RH STORAGE WAREHOUSES	5. PROJECT NUMBER LGGK 19-3542	
11. REQUIREMENT: 44,201 SM (475,776 SF) ADEQUATE: 0 SM (0 SF) SUBSTANDARD: 0 SM (0 SF) <u>PROJECT:</u> EDI: KMC DABS-FEV/RH Storage Warehouses (New Mission)		
<u>REQUIREMENT:</u> This project is required to support compliance with the EDI, part of the Consolidated and Further Continuing Appropriations Act of 2015 in support of Operation Atlantic Resolve, which includes military exercises and training on land, in the air, and at sea while sustaining a rotational presence throughout Europe. A key enabler for increasing the responsiveness of U.S. forces to reinforce the North Atlantic Treaty Organization (NATO) is by prepositioning equipment and improving infrastructure in Europe USAFE requires humidity-controlled warehouses, general purpose warehouses, and refueler maintenance bays for storage and maintenance of DABS, E-MEDS and RED HORSE assets. These assets support tactical missions and contingency support operations within Europe. This project will improve USAFE's mission readiness by ensuring that the equipment and vehicles comprising DABS, E-MEDS, and RED HORSE are protected from the elements and maintained in a condition of constant readiness.		
<u>CURRENT SITUATION:</u> As part of the EDI, USAFE will store additional DABS, E-MEDS, and RED HORSE assets in the European theater. Based on the current warehouse area of 32,891 SM (354,036 SF) and the project requirement of 44,201 SM (475,776 SF), there is currently an 11,310 SM (121,740 SF) deficit in WRM capacity at Ramstein to support current and future operations. Though the nine vacant warehouses at Pirmasens can be used to partially accommodate the increased volume of materiel, they are not suitable for storing the type and quantity of equipment required to be stored given height restrictions, insufficient access aisles widths, and limited clear spaces for maneuvering.		
<u>IMPACT IF NOT PROVIDED:</u> If this project is not provided, there will be no covered and humidity-controlled space at the Pirmasens in which USAFE can store additional DABS, E-MEDS and RED HORSE assets. The lack of properly sized and configured humidity-controlled and covered warehouse space will force USAFE to make use of available open storage areas and expedient shelters that will not fully protect these valuable assets from climatic conditions. Exposure to excessive moisture will degrade and potentially damage the DABS equipment and vehicles. Deployment and use of the DABS, E-MEDS and RED HORSE will potentially be delayed while urgent repairs are made to restore the equipment and vehicles to their required operability standards.		
<u>ADDITIONAL:</u> This project meets applicable criteria/scope specified in Air Force Manual 32-1084, Facility Requirements, and the applicable DoD, Air Force, and base design standards. In addition, local materials and construction techniques shall be used when cost effective. Sustainable principles, to include life cycle cost-effective practices, will be integrated into the design, development, and construction of the project and will follow the guidance detailed in the AF Sustainable Design and Development Implementing Guidance Memorandum (dated June 2, 2011) in accordance with applicable laws and Executive Orders. The UFC 4-701-01, DoD Pricing Guide, PACES, and RSMeans were used to develop the estimate for this project. All known alternative options were considered during the development of this project. An analysis of reasonable options for accomplishing this project was completed, indicating a new facility to be the best solution. Other courses of action were considered for the site, that included varying approaches to repurposing existing warehouses and constructing new facilities in phases; however, these alternatives were eliminated because they were not able to accommodate the full facility requirement, limited building/site operations and freedom of movement on the site, and required partial access through the adjacent German-owned site to the north. The proposed project is the only alternative that eliminates restrictions posed by the other alternatives considered. The area cost factor is 1.07 for Pirmasens, Germany. Warehouse supply facility 44,201 SM = 475,776 SF		

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4. PROJECT TITLE EDI: KMC DABS-FEV/RH STORAGE WAREHOUSES		5. PROJECT NUMBER LGGK 19-3542																																																							
JOINT USE CERTIFICATION: These facilities can be used by other components on an 'as available' basis; however, the scope of the project is based on Air Force requirements. This project will be submitted for NATO prefinancing.																																																									
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1. COMPONENT AIR FORCE		FY 2019 MILITARY CONSTRUCTION PROJECT DATA		2. DATE	
3. INSTALLATION AND LOCATION RYGGE AIR STATION, NORWAY			4. PROJECT TITLE: EDI: CONSTRUCT TAXIWAY		
5. PROGRAM ELEMENT 27576	6. CATEGORY CODE 122-211	7. PROJECT NUMBER ENRY 19-0004	8. PROJECT COST (\$000) 13,800		
9. COST ESTIMATES					
ITEM	U/M	QUANTITY	UNIT COST	COST (\$000)	
<u>PRIMARY FACILITIES</u>				5,427	
TAXIWAY (122-211)	SM	9,945	310	(3,082)	
PAVED SHOULDERS (116-642)	SM	9,098	179	(1,628)	
TAXIWAY LIGHTING (136-667)	LS			(717)	
<u>SUPPORTING FACILITIES</u>				6,464	
UTILITIES	LS			(1,168)	
SITE IMPROVEMENTS	LS			(5,296)	
SUBTOTAL				11,891	
CONTINGENCY (5%)				(594)	
TOTAL CONTRACT COST				12,845	
SUPERVISION, INSPECTION AND OVERHEAD (6.5%)				(812)	
DESIGN/BUILD – DESIGN COST (4%)				(476)	
TOTAL REQUEST				13,773	
TOTAL REQUEST (ROUNDED)				13,800	
10. DESCRIPTION OF PROPOSED CONSTRUCTION:					
Realign Taxiway T at Rygge Air Station to accommodate U.S. and North Atlantic Treaty Organization (NATO) operational capabilities. The taxiway shall be sized to accommodate Unified Facilities Criteria (UFC) 3-260-01, Airfield and Heliport Planning and Design, Class A criteria for U.S. and NATO aircraft of various sizes, enabling quick access to runway. Taxiway infrastructure includes taxiway pavement, taxiway shoulder, taxiway lighting, and taxiway signage. Supporting facilities include site development, utilities and connections, and storm drainage. The electrical utilities will connect to adjoining existing taxiway infrastructure. The project will include using conventional design and construction methods to accommodate U.S. and NATO fighter aircraft in support of the European Deterrence Initiative (EDI) AF.5 Improve Airfield Infrastructure. The facility is intended to comply with applicable Department of Defense (DoD), Air Force, and NATO 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 UFC 1-202-01, Host Nation Facilities in Support of Military Operations, and Bilateral-Strategic Command (Bi-SC) Directive 85-5, NATO Approved Criteria and Standards for Airfields. This project will also comply with DoD antiterrorism requirements per UFC 4-010-01, DoD Minimum Antiterrorism Standards for Buildings.					

1. COMPONENT AIR FORCE	FY 2019 MILITARY CONSTRUCTION PROJECT DATA	2. DATE
3. INSTALLATION AND LOCATION RYGGE AIR STATION, NORWAY		
4. PROJECT TITLE: EDI: CONSTRUCT TAXIWAY		5. PROJECT NUMBER ENRY 19-0004
11. REQUIREMENT: 19,043 SM ADEQUATE: 0 SUBSTANDARD: 0 SM <u>PROJECT:</u> Construct Taxiway (EDI) <u>REQUIREMENT:</u> This project is in support of the European Deterrence Initiative (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 and combat operations is infrastructure at key locations to support military activities. To ensure mission performance is conducted in a safe and professional manner, adequate training is required, as NATO member nations deploy their assets to RAS on a rotational basis. A key enabler for training and combat operations is substantial infrastructure, including force protection and antiterrorism measures, at key locations to support military activities. To support this initiative, a Taxiway realignment sized to accommodate UFC 3-260-01 Class A criteria for US and NATO aircraft of various sizes. This project will directly improve airfield presence, and bolster airfield capability and readiness to support bilateral and multilateral operations, exercises, and training with allies and partners for Operation Atlantic Resolve. <u>CURRENT SITUATION:</u> Due to site constraints on the area provided to US Forces by Norway, the taxiway in its current configuration significantly impacts US/NATO operations. <u>IMPACT IF NOT PROVIDED:</u> If this project is not provided, adequate taxiway access for U. S. and NATO aircraft will not be available to the Department of Defense (DoD) or its allies and partners. This limitation will impede sortie generation and flying schedules, directly limiting airfield presence and impairing airfield capability and readiness to support deterrence operations and the Baltic Policing mission. Therefore, responsiveness for bilateral and multilateral exercises and training missions would be compromised, impairing mission capability, readiness, and support for ongoing and future operations. <u>ADDITIONAL:</u> This project is included in the European Deterrence Initiative (EDI). This project has been coordinated with the Host Nation and meet Host Nation and Air Force requirements. The initial cost estimate was based on local construction pricing data. This project meets applicable criteria/scope specified in AF Manual 32-1084, Facility Requirements, Bi-SC Directive 85-5 NATO Approved Criteria and Standards for Airfields Sustainable principles, to include Life Cycle cost-effective practices, will be integrated into the design, development, and construction of the project and will follow the guidance detailed in the AF Sustainable Design and Development Implementing Guidance Memorandum (dated June 2, 2011) in accordance with applicable laws and Executive Orders. The UFC 4-701-01, DoD Pricing Guide, PACES, and RS Means were used to develop the estimate for this project. All known alternative options were considered during the development of this project. An analysis of reasonable options for accomplishing this project was completed, indicating a new facility to be the best solution. 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).		

1. COMPONENT AIR FORCE	FY 2019 MILITARY CONSTRUCTION PROJECT DATA	2. DATE
3. INSTALLATION AND LOCATION RYGGE AIR STATION, NORWAY		
4. PROJECT TITLE: EDI: CONSTRUCT TAXIWAY		5. PROJECT NUMBER ENRY 19-0004
<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. Elements of this program are not currently eligible for NATO Security Investment Program (NSIP) funding. This project will be submitted for NATO pre-financing.		
12. SUPPLEMENTAL DATA: a. Estimated Design Data: (1) Project to be accomplished by design-build procedures (2) Basis: (a) Standard or Definitive Design – NO (b) Where Design Was Most Recently Used – (3) All other design costs (\$000) 0 (4) Construction Contract Award 19 JUL (5) Construction Start 20 JUL (6) Construction Completion 22 JUL (7) Energy Study/Life Cycle Analysis was/will be performed NO b. Equipment associated with this project provided from other appropriations: NONE		

1. COMPONENT AIR FORCE		FY 2019 MILITARY CONSTRUCTION PROJECT DATA		2. DATE	
3. INSTALLATION AND LOCATION MALACKY AIR BASE, SLOVAKIA			4. PROJECT TITLE EDI: REGIONAL MUNITIONS STORAGE AREA		
5. PROGRAM ELEMENT 27576	6. CATEGORY CODE 422-264	7. PROJECT NUMBER LZMC 19-0001	8. PROJECT COST (\$000) 59,000		
9. COST ESTIMATES					
ITEM	U/M	QUANTITY	UNIT COST	COST (\$000)	
PRIMARY FACILITIES					
STORAGE IGLOOS (422-264)	SM	5,790	3,832	32,176	
SECURE ENTRY CONTROL BUILDING (730-837)	SM	79	4,040	22,187	
CONVENTIONAL MUNITIONS SHOP (216-642)	SM	364	2,786	319	
INERT SPARES STORAGE (422-265)	SM	465	1,312	1,014	
ANCILLIARY EXPLOSIVES FACILITY (422-275)	SM	32,994	210	610	
ENVIRONMENTAL MITIGATION (2%)	LS	--	--	6,932	
SUSTAINABLE DESIGN AND DEVELOPMENT	LS	--	--	631	
				483	
SUPPORTING FACILITIES					
UTILITIES	LS	--	--	18,752	
PAVEMENTS	LS	--	--	5,952	
SITE IMPROVEMENTS	LS	--	--	10,876	
				1,924	
SUBTOTAL				50,929	
CONTINGENCY (5%)				<u>2,546</u>	
TOTAL CONTRACT COST				53,475	
SUPERVISION, INSPECTION AND OVERHEAD (6.5%)				3,476	
DESIGN/BUILD – DESIGN COST (4%)				<u>2,037</u>	
TOTAL REQUEST				58,989	
TOTAL REQUEST (ROUNDED)				59,000	
EQUIPMENT FROM OTHER APPROPRIATIONS (NON-ADD)				0	
10. DESCRIPTION OF PROPOSED CONSTRUCTION:					
Construct a Regional Munitions Storage Area (MSA) using conventional design and construction methods to accommodate munitions at Malacky Air Base (AB), Slovakia. Primary Facilities include earth-covered magazines (ECMs), security entry control building, conventional munitions shop, inert spares storage, munitions maintenance pad, bomb preload station, holding yard (barricaded), and empty container yard. Supporting facilities include site development, utility connections, lighting, paving, parking, storm drainage, berm, landscaping, and signage. Low-impact development integrated management practices are included. The facility is intended to be compatible with applicable Department of Defense (DoD), Air Force, 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. The facility will be designed as permanent construction in accordance with the Unified Facilities Criteria (UFC) 1-202-01, Host Nation Facilities in Support of Military Operations. This project will comply with DoD antiterrorism requirements per UFC 4-010-01, DoD Minimum Antiterrorism Standards for Buildings.					

1. COMPONENT AIR FORCE	FY 2019 MILITARY CONSTRUCTION PROJECT DATA	2. DATE								
3. INSTALLATION AND LOCATION KUCHYNA AIR BASE, SLOVAKIA										
4. PROJECT TITLE EDI: REGIONAL MUNITIONS STORAGE AREA		5. PROJECT NUMBER LZMC 19-0001								
12. SUPPLEMENTAL DATA: a. Estimated Design Data: (1) Status: (a) Date Design Started 26-JUN-2017 (b) Parametric Cost Estimates used to develop costs YES * (c) Percent Complete as of 01 APR 2018 10% * (d) Date 35% Designed 31-AUG-2018 (e) Date Design Complete JAN-2019 (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 – UNKNOWN (3) Total Cost (c) = (a) + (b) or (d) + (e): (\$000) (a) Production of Plans and Specifications \$0 (b) All Other Design Costs \$0 (c) Total \$0 (d) Contract \$0 (e) In-house \$0 (4) Construction Contract Award 19 JUL (5) Construction Start 20 MAR (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: <table style="width: 100%; margin-top: 20px;"> <thead> <tr> <th style="text-align: left;">EQUIPMENT NOMENCLATURE</th> <th style="text-align: center;">PROCURING APPROPRIATION</th> <th style="text-align: center;">FISCAL YEAR APPROPRIATED OR REQUESTED</th> <th style="text-align: center;">COST (\$000)</th> </tr> </thead> <tbody> <tr> <td>FURNITURE, FIXTURES, & EQUIPMENT</td> <td style="text-align: center;">--</td> <td style="text-align: center;">--</td> <td style="text-align: center;">--</td> </tr> </tbody> </table>			EQUIPMENT NOMENCLATURE	PROCURING APPROPRIATION	FISCAL YEAR APPROPRIATED OR REQUESTED	COST (\$000)	FURNITURE, FIXTURES, & EQUIPMENT	--	--	--
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FURNITURE, FIXTURES, & EQUIPMENT	--	--	--							

1. COMPONENT AIR FORCE		FY 2019 MILITARY CONSTRUCTION PROJECT DATA		2. DATE	
3. INSTALLATION AND LOCATION RAF FAIRFORD, UNITED KINGDOM			4. PROJECT TITLE EDI - MUNITIONS HOLDING AREA		
5. PROGRAM ELEMENT 27576	6. CATEGORY CODE 422-275	7. PROJECT NUMBER GKVB 19-3029	8. PROJECT COST (\$000) 19,000		
9. COST ESTIMATES					
ITEM		U/M	QUANTITY	UNIT COST	COST (\$000)
PRIMARY FACILITIES					11,155
ANCILLARY EXPLOSIVE FACILITY (422-275)		SM	5,054	1785	9,022
STORAGE IGLOO (422-264)		SM	290	4,943	1,433
ENTRY CONTROL BUILDING (730-837)		SM	90	5,369	483
SUSTAINABLE DESIGN AND DEVELOPMENT		LS	--	--	217
SUPPORTING FACILITIES					6,051
UTILITIES		LS	--	--	720
SITE IMPROVEMENTS		LS	--	--	50
PAVEMENTS		LS	--	--	3,776
COMMUNICATIONS		LS	--	--	890
ENVIRONMENTAL MITIGATION		LS	--	--	70
LOW IMPACT DEVELOPMENT		LS			145
SUBTOTAL					17,206
CONTINGENCY (5%)					860
TOTAL CONTRACT COST					18,066
SUPERVISION, INSPECTION AND OVERHEAD (2.5%)					451
DESIGN/BUILD – DESIGN COST (4%)					688
TOTAL REQUEST					19,206
TOTAL REQUEST (ROUNDED)					19,000
10. DESCRIPTION OF PROPOSED CONSTRUCTION: Construct a Flightline Munitions Holding Area (MHA) using conventional design and construction methods to accommodate storage of a variety of munition types, supporting operations within the region. Construction includes earth-covered magazines (ECM), barricaded holding areas, ancillary explosive facilities, and circulation pavements. Fire protection, utility management and control, closed-circuit television (CCTV), and intrusion detection systems (IDS) are included. Supporting facilities include site development, utility connections, lighting, paving, storm drainage, landscaping, and signage. Low-impact development integrated management practices (LID-IMPs) are included. The facility is intended to be compatible with applicable DoD, 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. The facilities will be designed as permanent construction in accordance with the DoD Unified Facilities Criteria (UFC) 1-202-01, Host Nation Facilities in Support of Military Operations. This project will comply with DoD antiterrorism requirements per UFC 4-010-01.					

1. COMPONENT AIR FORCE	FY 2019 MILITARY CONSTRUCTION PROJECT DATA	2. DATE
3. INSTALLATION AND LOCATION RAF FAIRFORD, UNITED KINGDOM		
4. PROJECT TITLE EDI - MUNITIONS HOLDING AREA		5. PROJECT NUMBER GKVB 19-3029
12. SUPPLEMENTAL DATA: a. Estimated Design Data: (1) Status: (a) Date Design Started 1-NOV-18 (b) Parametric Cost Estimates used to develop costs YES (2) (c) Percent Complete as of 01 APR 2019 15% (3) (d) Date 35% Designed (e) Date Design Complete 1-JUL-19 (f) Energy Study/Life-Cycle analysis was/will be performed YES (4) Basis: NO (a) Standard or Definitive Design – UNKNOWN (b) Where Design Was Most Recently Used – (\$000) (5) Total Cost (c) = (a) + (b) or (d) + (e): \$0 (a) Production of Plans and Specifications \$0 (b) All Other Design Costs \$0 (c) Total \$0 (d) Contract \$0 (e) In-house 19 JUL (6) Construction Contract Award 20 JUL (7) Construction Start 21 OCT (8) Construction Completion * 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:		
EQUIPMENT NOMENCLATURE	PROCURING APPROPRIATION	FISCAL YEAR APPROPRIATED OR REQUESTED
		COST (\$000)

1. COMPONENT AIR FORCE		FY 2019 MILITARY CONSTRUCTION PROJECT DATA			2. DATE	
3. INSTALLATION AND LOCATION RAF FAIRFORD, UNITED KINGDOM			4. PROJECT TITLE EDI-CONSTRUCT DABS-FEV STORAGE			
5. PROGRAM ELEMENT 27576		6. CATEGORY CODE 442-758		7. PROJECT NUMBER GKVB 19-3028		8. PROJECT COST (\$000) 87,000
9. COST ESTIMATES						
ITEM				U/M	QUANTITY	COST (\$000)
PRIMARY FACILITIES						67,925
WAREHOUSE SUPPLY AND EQUIPMENT (442-758)				SM	24,271	44,028
VEHICLE MAINTENANCE AND STORAGE (214-425)				SM	3,644	15,086
HAZMAT STORAGE (442-257)				SM	168	1,287
EMEDS WAR RESERVE MATERIEL STORAGE (442-515)				SM	2,699	6,610
ENTRY CONTROL BUILDING (730-837)				SM	74	397
VEHICLE FUELING STATION (123-335)				LS	--	517
SUSTAINABLE DESIGN AND DEVELOPMENT (2%)				LS		1,260
SUPPORTING FACILITIES						10,055
UTILITIES				LS	--	246
SITE IMPROVEMENTS				LS	--	299
PAVEMENTS				LS	--	4,955
COMMUNICATIONS				LS	--	789
ENVIRONMENTAL MITIGATION				LS	--	1,260
LOW IMPACT DEVELOPMENT				LS	--	1,260
SUBTOTAL						77,980
CONTINGENCY (5%)						3,899
TOTAL CONTRACT COST						81,879
SUPERVISION, INSPECTION AND OVERHEAD (2.5%)						2,047
DESIGN/BUILD – DESIGN COST (4%)						3,119
TOTAL REQUEST						87,046
TOTAL REQUEST (ROUNDED)						87,000
EQUIPMENT FROM OTHER APPROPRIATIONS (NON-ADD)						
10. DESCRIPTION OF PROPOSED CONSTRUCTION: Construct a Deployable Air Base System- Facilities, Equipment and Vehicles (DABS-FEV) storage complex using conventional design and construction methods to accommodate equipment storage and maintenance for equipment. This project is in support of the European Deterrence Initiative (EDI) formerly known as the European Reassurance Initiative. The complex includes humidity controlled materiel and vehicle storage, humidity controlled and ventilated refueler vehicle storage, humidity controlled and ventilated medical war reserve materiel storage, climate controlled administrative support, and petroleum oil lubricant (POL) and hazardous material storage. In addition, the facilities include loading docks, a bridge crane, fire protection, utility management and control, closed circuit television and intrusion detection(DS). Supporting facilities include site work (Landscaping, grading and paving), signage, security fencing, a manned gate and guard booth, and site utility systems (electrical, communications, geothermal, water, sanitary sewer, and storm water). Low impact development integrated management practices are included. The facility is intended to be compatible with applicable DoD, Air Force, and host-nation design standards. In addition, local materials and construction techniques shall be used where required and/or appropriate. Design and construction efforts will be executed in accordance with the host-nation agreements, including construction and environmental permits. The facilities will be designed as permanent construction in accordance with the DoD Unified Facilities Criteria (UFC) 1-202-01, Host Nation Facilities in Support of Military Operations. This project will comply with DoD antiterrorism requirements per UFC 4-010-01.						

1. COMPONENT AIR FORCE	FY 2019 MILITARY CONSTRUCTION PROJECT DATA	2. DATE
3. INSTALLATION AND LOCATION RAF FAIRFORD, UNITED KINGDOM		
4. PROJECT TITLE EDI-CONSTRUCT DABS-FEV STORAGE		5. PROJECT NUMBER GKV B 19-3028
12. SUPPLEMENTAL DATA: a. Estimated Design Data: (1) Status: (a) Date Design Started 1-NOV-18 (b) Parametric Cost Estimates used to develop costs YES * (c) Percent Complete as of 01 APR 2019 15% * (d) Date 35% Designed (e) Date Design Complete 1-JUL-19 (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 \$0 (b) All Other Design Costs \$0 (c) Total \$0 (d) Contract \$0 (e) In-house \$0 (4) Construction Contract Award 19 SEP (5) Construction Start 20 MAR (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: EQUIPMENT NOMENCLATURE PROCURING APPROPRIATION FISCAL YEAR APPROPRIATED OR REQUESTED COST (\$000)		

1. COMPONENT AIR FORCE		FY 2019 MILITARY CONSTRUCTION PROJECT DATA		2. DATE	
3. INSTALLATION AND LOCATION HQ USAFE-AFAFRICA			4. PROJECT TITLE: EDI: PLANNING AND DESIGN (P&D)		
5. PROGRAM ELEMENT 91211	6. CATEGORY CODE 961-000	7. PROJECT NUMBER PAYZ190004	8. PROJECT COST (\$000) 48,000		
9. COST ESTIMATES					
ITEM		U/M	QUANTITY	UNIT COST	COST (\$000)
PRIMARY FACILITIES					48,000
PLANNING AND DESIGN		LS			(48,000)
SUPPORTING FACILITIES					0
SUBTOTAL					<u>48,000</u>
TOTAL CONTRACT COST					<u>48,000</u>
TOTAL REQUEST					48,000
TOTAL REQUEST (ROUNDED)					48,000
10. DESCRIPTION OF PROPOSED CONSTRUCTION:					
11. REQUIREMENT: ADEQUATE: SUBSTANDARD: PROJECT: As required. REQUIREMENT: These European Deterrence Initiative planning and design funds are required to complete the design of facilities in the United States European Command in the FY20 Military Construction Program, initiate design of facilities in the FY21 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.					

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Department of the Air Force

Host Nation Military Construction Program

**Calendar Year (CY) 2019
Budget Estimates**

**Justification Data Submitted to Congress
February 2018**

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**DEPARTMENT OF THE AIR FORCE
HOST NATION MILITARY CONSTRUCTION PROGRAM CALENDAR YEAR 2019
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DEPARTMENT OF THE AIR FORCE
HOST NATION MILITARY CONSTRUCTION PROGRAM CALENDAR YEAR 2019
PROGRAM SUMMARY
PROGRAM SUMMARY

AUTHORIZATION REQUEST
(\$000s)

Military Construction

Major Construction	132,400
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Total Military Construction	132,400
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Strategic Narrative:

The enclosed justification book represents the United States Air Forces Korea (USFK) Republic of Korea Funded Construction (ROKFC) program for calendar year 2019. Although the justification book may appear to be a list of individual projects, these projects were developed in coordination between both countries to form an overall consolidated program to meet USFK priorities and Theater Infrastructure Master Plan - Armistice objectives. These projects have been through a detailed scoring and prioritization process with involvement of the component commanders and represent the most critical and urgent USFK operational requirements.

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DEPARTMENT OF THE AIR FORCE

HOST NATION MILITARY CONSTRUCTION PROGRAM

CALENDAR YEAR 2019 INDEX

(DOLLARS IN THOUSANDS)

STATE / COUNTRY	INSTALLATION	PROJECT	COST (\$000)
REPUBLIC OF KOREA	Gimhae Air Base	Airfield Damage Repair Warehouse	7,600
		Gimhae Air Base TOTAL:	7,600
	Gwangju Air Base	Airfield Damage Repair Warehouse	7,600
		Gwangju Air Base TOTAL:	7,600
	Kunsan Air Base	Upgrade Flow Through Fuel System	23,000
		Explosive Ordnance Disposal Facility	8,000
		Kunsan Air Base TOTAL:	31,000
	Osan Air Base	5th Reconnaissance Squadron Aircraft Shelter	12,000
		Communications HQ Building	45,000
		Airfield Damage Repair Warehouse	22,000
		Osan Air Base TOTAL:	79,000
	Suwon Air Base	Airfield Damage Repair Warehouse	7,200
		Suwon Air Base TOTAL:	7,200
	REPUBLIC OF KOREA TOTAL:		132,400
HOST NATION FUNDED CONSTRUCTION TOTAL:		132,400	

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1. COMPONENT AIR FORCE		REPUBLIC OF KOREA FUNDED CONSTRUCTION (ROKFC)		2. DATE	
3. INSTALLATION AND LOCATION GIMHAE AIR BASE, KOREA			4. PROJECT TITLE AIRFIELD DAMAGE REPAIR WAREHOUSE		
5. PROGRAM ELEMENT N/A	6. CATEGORY CODE 442-758	7. PROJECT NUMBER MEPZ173401 (F19R623)	8. PROJECT COST (\$000) \$7,600		
9. COST ESTIMATES					
ITEM		U/M	QUANTITY	UNIT COST	COST (\$000)
PRIMARY FACILITIES					6,107
ADR Equipment and Material Storage (442-758)		SM	2,601	2,201	(5,723)
Concrete Pad (132-133)		SM	2,200	119.8	(264)
Sustainability and Energy Measures (2%)		LS	1		(120)
SUPPORTING FACILITIES					724
Utilities		LS	1		(505)
Pavements		LS	1		(131)
Site Improvements		LS	1		(51)
Communications		LS	1		(37)
SUBTOTAL					6,831
CONTINGENCY (5.0%)					342
TOTAL CONTRACT COST					7,173
SUPERVISION, INSPECTION AND OVERHEAD (6.5%)					466
TOTAL PROJECT COST					7,639
TOTAL REQUEST (ROUNDED)					7,600
10. DESCRIPTION OF PROPOSED WORK: Utilize host-nation funding to construct an Airfield Damage Repair Warehouse with a concrete slab and foundation, sheet metal walls, standing seam metal roof system, four roll-up doors for ADR vehicles, four personnel doors, electrical system, exhaust fan system, climate control for fire suppression system, concrete pad for ISO containers and all other necessary supporting facilities. The warehouse shall include office space, latrine and shower for male & female; office and latrines shall include HVAC and communication systems. 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. 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 : 10 Tons					
11. Requirement: 2,601 SM Adequate: 0 Substandard: 0 PROJECT: Airfield Damage Repair Warehouse. (Current Mission) REQUIREMENT: Construct an Airfield Damage Repair (ADR) Warehouse facility and a concrete pad utilizing conventional design and construction methods indicative of the mission regarding expedient airfield repairs. This project will enable the storage of all ADR vehicles and equipment which are projected to arrive at Gimhae Air Base by 2019. This project will directly support the United States Forces Korea's (USFK) resiliency and ability to "Fight Tonight." This facility will ensure all assets are protected from the elements and are mission capable if required in contingency or armistice operations. CURRENT SITUATION: Gimhae AB does not have any facilities capable of accommodating the storage of the incoming 113 vehicles and 48 ISO containers of Airfield Damage Repair assets. Currently, 79 of the vehicles and 27 of the ISO containers have arrived and will be receiving 34 more heavy equipment vehicles as well as 21 more ISO containers containing consumable materials that require enclosed storage to ensure preservation for future operations. Due to the lack of enclosed storage, the ADR assets are currently stored without any protection from the weather elements causing accelerated deterioration as well as					

1. COMPONENT		2. DATE	
AIR FORCE		REPUBLIC OF KOREA FUNDED CONSTRUCTION (ROKFC)	
3. INSTALLATION AND LOCATION		4. PROJECT TITLE	
GIMHAE AIR BASE, KOREA		AIRFIELD DAMAGE REPAIR WAREHOUSE	
5. PROGRAM ELEMENT	6. CATEGORY CODE	7. PROJECT NUMBER	8. PROJECT COST (\$000)
N/A	442-758	MEPZ173401 (F19R623)	\$7,600

potential theft of critically controlled wartime assets.

IMPACT IF NOT PROVIDED:
 If ADR assets are not stored inside of a facility, they will deteriorate well before their expected life cycle, and cause a gap in airfield damage repair capabilities. In addition, deterioration and potential theft of wartime assets will result in a shortage of operable Airfield Damage Repair assets. This will have a detrimental effect on overall readiness and war fighting capability.

ADDITIONAL:
 This project meets the criteria/scope specified in Air Force Manual 32-1084, "Facility Requirement". Maximum attainable cube space is being used. All known alternatives were considered during development of this project. No other feasible alternative could meet mission requirements. Therefore, a complete economic analysis was not performed. 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 13693, 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, 18 Oct 2013) and to conform to the current USFK level of threat. This project is located on an installation which will be retained by United States Forces Korea (USFK) for the foreseeable future.

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.

ADR Storage (442-758): 2,601 SM = 27,997 SF
 Concrete Pad (132-133): 2,200 SM = 23,681 SF
 Base Civil Engineer; Comm., 011-82-53-980-4985

1. COMPONENT AIR FORCE		REPUBLIC OF KOREA FUNDED CONSTRUCTION (ROKFC)		2. DATE	
3. INSTALLATION AND LOCATION GWANGJU AIR BASE, KOREA			4. PROJECT TITLE AIRFIELD DAMAGE REPAIR WAREHOUSE		
5. PROGRAM ELEMENT N/A	6. CATEGORY CODE 442-758	7. PROJECT NUMBER MMFZ173301 (F19R622)	8. PROJECT COST (\$000) \$7,600		
9. COST ESTIMATES					
ITEM		U/M	QUANTITY	UNIT COST	COST (\$000)
PRIMARY FACILITIES					5,966
ADR Equipment and Material Storage (442-758)		SM	2,601	2,147	(5,585)
Concrete Pad (132-133)		SM	2,200	119.8	(264)
Sustainability and Energy Measures (2%)		LS	1		(117)
SUPPORTING FACILITIES					815
Utilities		LS	1		(350)
Pavements		LS	1		(131)
Site Improvements		LS	1		(52)
Demolition		SM	460	207	(95)
Communications		LS	1		(37)
Asbestos abatement (402 SM)		LS	1		(150)
SUBTOTAL					6,781
CONTINGENCY (5.0%)					339
TOTAL CONTRACT COST					7,120
SUPERVISION, INSPECTION AND OVERHEAD (6.5%)					463
TOTAL PROJECT COST					7,583
TOTAL REQUEST (ROUNDED)					7,600
10. DESCRIPTION OF PROPOSED WORK: Utilize host-nation funding to construct an Airfield Damage Repair Warehouse with a concrete slab and foundation, sheet metal walls, standing seam metal roof system, four roll-up doors for ADR vehicles, four personnel doors, electrical system, exhaust fan system, climate control for fire suppression system, concrete pad for International Standards Organization (ISO) containers and all other necessary supporting facilities. The warehouse shall include office space, latrine and shower for male & female; office and latrines shall include HVAC and communication systems. 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. Asbestos at Building 700 shall be removed by certified asbestos removal and disposal personnel. Project shall demolish three facilities (460 SM) and relocate a loading dock. 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 : 10 Tons					
11. Requirement: 2,601 SM		Adequate: 0 SM		Substandard: 0	
PROJECT: Airfield Damage Repair Warehouse. (Current Mission)					
REQUIREMENT: Construct an Airfield Damage Repair (ADR) Warehouse facility and a concrete pad utilizing conventional design and construction methods indicative of the mission regarding expedient airfield repairs. This project will enable the storage of all ADR vehicles and equipment which are projected to arrive at Gwangju Air Base by 2019. This project will directly support the United States Forces Korea's (USFK) resiliency and ability to "Fight Tonight." This facility will ensure all assets are protected from the elements and are mission capable if required in contingency or armistice operations.					
CURRENT SITUATION: Gwangju AB does not have any facilities capable of accommodating the storage of the incoming 113 vehicles and 48 ISO containers of Airfield Damage Repair assets. Currently, 60 of the vehicles and 27 of the ISO containers have arrived and					

1. COMPONENT		2. DATE	
AIR FORCE		REPUBLIC OF KOREA FUNDED CONSTRUCTION (ROKFC)	
3. INSTALLATION AND LOCATION		4. PROJECT TITLE	
GWANGJU AIR BASE, KOREA		AIRFIELD DAMAGE REPAIR WAREHOUSE	
5. PROGRAM ELEMENT	6. CATEGORY CODE	7. PROJECT NUMBER	8. PROJECT COST (\$000)
N/A	442-758	MMFZ173301 (F19R622)	\$7,600

will be receiving 53 more heavy equipment vehicles as well as 21 more ISO containers containing consumable materials that require enclosed storage to ensure preservation for future operations. Due to the lack of enclosed storage, the ADR assets are currently stored without any protection from the weather elements causing accelerated deterioration as well as potential theft of critically controlled wartime assets.

IMPACT IF NOT PROVIDED:
If ADR assets are not stored inside of a facility, they will deteriorate well before their expected life cycle, and cause a gap in airfield damage repair capabilities. In addition, deterioration and potential theft of wartime assets will result in a shortage of operable Airfield Damage Repair assets. This will have a detrimental effect on overall readiness and war fighting capability.

ADDITIONAL:
This project meets the criteria/scope specified in Air Force Manual 32-1084, "Facility Requirement". Maximum attainable cube space is being used. All known alternatives were considered during development of this project. No other feasible alternative could meet mission requirements. Therefore, a complete economic analysis was not performed. 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 13693, 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, 18 Oct 2013) and to conform to the current USFK level of threat. This project is located on an installation which will be retained by United States Forces Korea (USFK) for the foreseeable future.

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.

ADR Storage (442-758): 2,601 SM = 27,997 SF
Concrete Pad (132-133): 2,200 SM = 23,681 SF
Base Civil Engineer; Comm., 011-82-53-980-4985

1. COMPONENT AIR FORCE		REPUBLIC OF KOREA FUNDED CONSTRUCTION (ROKFC)			2. DATE	
3. INSTALLATION AND LOCATION KUNSAN AIR BASE, KOREA				4. PROJECT TITLE: UPGRADE FLOW-THROUGH FUEL SYSTEM		
5. PROGRAM ELEMENT N/A		6. CATEGORY CODE 121-122		7. PROJECT NUMBER MLWR183195 (F18R560)		8. PROJECT COST (\$000) 23,000
9. COST ESTIMATES						
ITEM		U/M	QUANTITY	UNIT COST	COST (\$000)	
PRIMARY FACILITIES					11,735	
OPERATING FUEL STOR TANK (124-135)		GA	420,000	11.96	(5,023)	
CONTROL & FILTER BUILDING (125-977)		GM	1,800	2,756	(4,961)	
PRODUCT RECOVERY TANK, VAULT & PAD (831-157)		KG	4	73,250	(293)	
UPGRADE HYDRANT FUELING SPOTS (121-122)		OL	12	30,000	(360)	
NEW PANTOGRAPH (121-122)		OL	2	125,000	(250)	
CONCRETE CHAMBER REVETMENT (872-911)		EA	250	2,520	(630)	
SUSTAINABILITY AND ENERGY MEASURES		LS			(218)	
SUPPORT FACILITIES					8,675	
UTILITIES		LS			(5,548)	
SITE IMPROVEMENTS		LS			(438)	
PAVEMENTS		SM	1,983	61.50	(122)	
COMMUNICATIONS SUPPORT		LM	220	506	(111)	
BACKUP GENERATOR		LS			(200)	
DEMOLITION		SM	2,360	125.40	(296)	
ENVIRONMENTAL REMEDIATION		CM	8,200	239	(1,960)	
ESTIMATED CONTRACT COST					20,410	
CONTINGENCY (5%)					1,021	
SUBTOTAL					21,431	
SUPERVISION, INSPECTION AND OVERHEAD (6.5%)					1,393	
TOTAL REQUEST					22,824	
TOTAL REQUEST (ROUNDED)					23,000	
10. DESCRIPTION OF PROPOSED CONSTRUCTION: Utilize host-nation funding to upgrade fuel system for aircraft turn-around/flow-through at "Wolf Pack Flow" area with economical design and construction methods to accommodate the mission of the facility. The facility will 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. 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 energy-monitoring and control system (EMCS) will be included. Air Conditioning: 3 Tons						
11. REQUIREMENT: 32 EA ADEQUATE: 20 EA SUBSTANDARD: 12 EA <u>PROJECT</u> : Upgrade flow-through fuel system. (Current Mission) <u>REQUIREMENT</u> : This project is required to provide adequate aircraft quick turn fuel capability to support mission requirements. The project will provide a fuel capable area to load munitions and service aircraft concurrently. The work will include construction of two 5,000 barrel cut-and-cover storage tanks with pump houses, filter/control building, a product recovery tank with vault and concrete pad and underground jet fuel supply line to upgrade the existing Type IV hydrant fueling system. Also includes utilities, back-up generator, site improvements, replacement of steel revetment with concrete revetment, pavements, communications support, demolition, environmental remediation and all other necessary support. <u>CURRENT SITUATION</u> : Currently there are 12 fueling spots at the "Wolfpack Flow" quick turn facility. Ten existing fuel spots require upgrade, but have pantographs previously installed that will be reused. The remaining two existing fueling points require both upgrade and new pantographs.						

1. COMPONENT AIR FORCE	REPUBLIC OF KOREA FUNDED CONSTRUCTION (ROKFC)		2. DATE
3. INSTALLATION AND LOCATION KUNSAN AIR BASE, KOREA			
4. PROJECT TITLE UPGRADE FLOW-THROUGH FUEL SYSTEM		5. PROJECT NUMBER MLWR183195 (F18R560)	
Due to lack of adequate infrastructure, the 8th Fighter Wing (8FW) cannot provide a practical turnaround for regular missions as well as follow-on forces and Theater Support Packages (TSP) that deploy to the 8FW. Also this upgrade is necessary for the fighter wing to provide a fuel area to concurrently load munitions and service aircraft to meet the minimum times required to support a viable close air support and defensive counter air alert program. <u>IMPACT IF NOT PROVIDED:</u> Without this project, "Fight Tonight" aircraft response capabilities will be severely impacted. The 8FW will continue to have insufficient quick turnaround capability, hindering the base's mission. In addition, follow-on forces and TSPs have limited space to park their aircraft, fuel up, perform maintenance, and generate offensive sorties. This will not enable the 8FW to meet the minimum turnaround times required to produce viable close air support and a defensive counter-air alert program. If this project is not provided, the response time for multiple units working on and with the airfield will be impeded, limiting OPLAN execution. <u>ADDITIONAL:</u> No portion of this facility is intended for Republic of Korea personnel exclusive or primary use. The project is located on an enduring installation which will be retained by United States Forces Korea (USFK) for the foreseeable future. This project meets the criteria/scope specified in Air Force Manual 32-1084, "Facility Requirements." All known alternatives were considered during development of this project. No other feasible alternative could meet mission requirements. Therefore, a complete economic analysis was not performed. This design shall conform to criteria established in the Air Force Corporate Facilities Standards (AFCFS), the Installation Facilities Standards, Type IV Hydrant Fueling System design with the latest versions of DOD Standard Design, AW 78-24-29 Pressurized Hydrant Direct Fueling System (Type IV), DOD Standard Design for Cut-and-Cover tanks, UFC-3-460-01 Design Petroleum Fuel Facilities, 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 13693, 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, 18 Oct 2013) and to conform to the current USFK level of threat. Upgrade Flow-Through Fuel System for Type IV Hydrant: 12 OL Demolition: 2,360 SM (25,400 SF) Base Civil Engineer: Comm. 011-82-63-470-5400			

1. COMPONENT AIR FORCE		REPUBLIC OF KOREA FUNDED CONSTRUCTION (ROKFC)		2. DATE	
3. INSTALLATION AND LOCATION KUNSAN AIR BASE, KOREA			4. PROJECT TITLE: EXPLOSIVE ORDNANCE DISPOSAL FACILITY		
5. PROGRAM ELEMENT N/A	6. CATEGORY CODE 141-165	7. PROJECT NUMBER MLWR043126 (F19R660)	8. PROJECT COST (\$000) 8,000		
9. COST ESTIMATES					
ITEM	U/M	QUANTITY	UNIT COST	COST (\$000)	
PRIMARY FACILITIES				5,626	
EOD FACILITY (141-165)	SM	1,413	3,744	(5,290)	
COVERED PARKING AREA (145-921)	SM	176	1,308	(230)	
SDD & EP ACT 05 (2%)	LS			(106)	
SUPPORTING FACILITIES				1,529	
UTILITIES	LS			(587)	
SITE IMPROVEMENTS	LS			(439)	
PAVEMENTS	SM	2,936	60	(175)	
COMMUNICATIONS SUPPORT	LS			(123)	
DEMOLITION	SM	1,315	155	(204)	
SUBTOTAL				7,154	
CONTINGENCY (5.0%)				358	
TOTAL CONTRACT COST				7,513	
SUPERVISION, INSPECTION & OVERHEAD (6.5%)				489	
TOTAL REQUEST				8,001	
TOTAL REQUEST (ROUNDED)				8,000	
EQUIPMENT FROM OTHER APPROPRIATIONS				(195)	
10. DESCRIPTION OF PROPOSED CONSTRUCTION: Utilize host-nation funding to construct an Explosive Ordnance Disposal (EOD) facility incorporating economical design and construction methods to accommodate the mission of the facility. 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. The project includes demolition of three buildings at 1,315 SM (Bldg 2823, 2837 & 2857). Air Conditioning: 50 Tons					
11. REQUIREMENT : 1,413 SM ADEQUATE: 0 SUBSTANDARD: 714 SM <u>PROJECT:</u> Explosive Ordnance Disposal (EOD) Facility (Current Mission). <u>REQUIREMENT:</u> With the new high tech equipment and expanding EOD mission, a properly sized and configured EOD facility is necessary to house all explosive materials, some hazardous materials, classified information, EOD equipment, firearms and shift personnel. This facility is also required to provide continuous proficiency training in applying EOD tools and techniques and in handling, set-up, and detonating explosives and explosively operated tools. It is also required to train base personnel in explosive ordnance reconnaissance. The facility will include reinforced concrete foundation and floor slab, masonry walls, and roof system, fire protection system, utilities, and all necessary support. Functional areas will include administrative offices, a training room for classes/briefings, storage for special purpose clothing and equipment, and equipment testing room and workshop, storage for mobility equipment, a climate controlled garage for emergency vehicles, secure storage for firearms and sensitive equipment, sleeping quarters, latrine facilities, and a kitchenette.					

1. COMPONENT AIR FORCE	REPUBLIC OF KOREA FUNDED CONSTRUCTION (ROKFC)		2. DATE
3. INSTALLATION AND LOCATION KUNSAN AIR BASE, KOREA			
4. PROJECT TITLE EXPLOSIVE ORDNANCE DISPOSAL FACILITY		5. PROJECT NUMBER MLWR043126 (F19R660)	
<u>CURRENT SITUATION:</u> The current facilities were built in 1964, and are severely degraded and require continuous maintenance and repair to keep functional. The existing facilities cannot meet AFI 32-3001 7.1.1.4 which requires climate control for EOD robotics, response vehicles, and shelf life materials. B2837 which stores \$5M of sensitive equipment and shelf life material has severely degraded HVAC and plumbing systems and has suffered from multiple water line breaks subjecting the equipment and materials to water damage. In addition, \$1.1M of robotics and response vehicles are currently stored in a non-climate controlled facility reducing equipment life and emergency response readiness. The authorized manning for EOD is 17 personnel in a non-contingency and 32 personnel in a contingency operation. Presently EOD personnel are forced to work in substandard conditions and 6 personnel are forced share 3 workspaces due to inadequate space, which directly affects productivity and morale. <u>IMPACT IF NOT PROVIDED:</u> The facility will continue to degrade until it is no longer safe to occupy. EOD functions would then be hampered, directly affecting sortie generation and overall mission success of the fighter wing. EOD personnel will not adequately be able to respond to multiple calls concurrently. Without a new facility to adequately house EOD personnel and equipment, emergency response capability will be compromised. This will result in mission degradation and negatively affect the ability of the base to accept and support follow on forces and the large amount of explosives and weapons that will arrive in the event of a conflict or contingency build up situation. <u>ADDITIONAL:</u> This project meets the criteria/scope specified in Air Force Manual 32-1084, "Facility Requirement". All known alternatives were considered during development of this project. No other feasible alternative could meet mission requirements. Therefore, a complete economic analysis was not performed. 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 13693, 10 USC 2802 (c), and other applicable laws and Executive orders. The supporting facilities cost is over 25% of primary cost (27%) due to demolition of all three existing facilities by this project. Also \$195K of furniture and furnishings will be provided by user from other appropriations. EOD Facility: 1,413 SM (15,200 SF) DEMOLITION: 1,315 SM (14,152 SF) Base Civil Engineer: 011-82-63-470-5400. <u>JOINT USE CERTIFICATION:</u> 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.			

1. COMPONENT AIR FORCE		REPUBLIC OF KOREA FUNDED CONSTRUCTION (ROKFC)		2. DATE	
3. INSTALLATION AND LOCATION OSAN AIR BASE, KOREA			4. PROJECT TITLE: 5TH RECONNAISSANCE SQUADRON AIRCRAFT SHELTER		
5. PROGRAM ELEMENT N/A	6. CATEGORY CODE 141-181	7. PROJECT NUMBER SMYU153009 (F17R502)	8. PROJECT COST (\$000) 12,000		
9. COST ESTIMATES					
ITEM		U/M	QUANTITY	UNIT COST	COST (\$000)
PRIMARY FACILITY					6,969
AIRCRAFT SHELTER (141-181)		SM	1,580	4,324	(6,832)
SUSTAINABILITY AND ENERGY MEASURES		LS			(137)
SUPPORTING FACILITIES					3,762
UTILITIES		LS			(2,166)
PAVEMENTS		SM	4,848	161	(780)
SITE IMPROVEMENTS		LS			(310)
PASSIVE FORCE PROTECTION MEASURES		LS			(150)
COMMUNICATIONS SUPPORT		LS			(179)
TAXIWAY LIGHTING		LM	400	375	(150)
DEMOLITION		SM	15	200	(3)
BIKE RACK FAC		LS			(24)
SUBTOTAL					10,731
CONTINGENCY (5%)					<u>537</u>
TOTAL CONTRACT COST					11,268
SUPERVISION, INSPECTION AND OVERHEAD (6.5%)					<u>732</u>
TOTAL REQUEST					12,000
TOTAL REQUEST (ROUNDED)					12,000
10. DESCRIPTION OF PROPOSED CONSTRUCTION:					
Utilize host-nation funding to construct an aircraft shelter utilizing conventional design and construction methods to accommodate the mission of the facility. 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. The facility will be designed as permanent construction in accordance with the DoD Unified Facilities Criteria (UFC) 1-200-01, <i>General Building Requirements</i>, and UFC 1-200-02, <i>High Performance and Sustainable Building Requirements</i>. This project will also comply with DoD antiterrorism/force protection requirements per UFC 4-010-01, <i>DoD Minimum Antiterrorism Standards for Buildings</i>. This project fulfills US requirements only and will be designed and constructed for US exclusive use. Air Conditioning: 10 Tons					
11. REQUIREMENT: 9,009 SM		ADEQUATE: 7,429 SM		SUBSTANDARD: 0	
<u>PROJECT:</u> Construct an aircraft shelter to expand 5th RS operations. (Current Mission) <u>REQUIREMENT:</u> This project is required to provide an adequately configured aircraft shelter with a reinforced concrete foundation and floor slab, structural steel frame with walls, and a pitched roof system, including all utilities, HVAC, force protection measures, fire detection/protection system, pavements, site preparation and improvements. The functional areas include space to accommodate and perform minor work on aircraft and a mechanical room in compliance with current Air Force standards and criteria. The project also includes relocating a sewer lift station location, replacing an underground storm drainage, and installation of security fence and Intrusion Detection System (IDS) as part of this project.					

1. COMPONENT AIR FORCE	REPUBLIC OF KOREA FUNDED CONSTRUCTION (ROKFC)	2. DATE
3. INSTALLATION AND LOCATION OSAN AIR BASE, KOREA		
4. PROJECT TITLE 5TH RECONNAISSANCE SQUADRON AIRCRAFT SHELTER		5. PROJECT NUMBER SMYU153009
(Continued from Page 1) <u>CURRENT SITUATION:</u> The 5th RS will have an increase in mission requirements, assets, and personnel to fulfill an AF mission expansion. Currently, the 5th RS secure compound (2 aircraft launch hangar bays and 2 maintenance hangars) does not have enough aircraft hangar locations to support the expansion. These assets are PLII (Protection Level 2) and require hangar entry to comply with Force Protection measures and ensure Operations Security. <u>IMPACT IF NOT PROVIDED:</u> No existing facility on the base is available to support the increase in 5th RS missions and additional aircraft. If this project is not provided, the 5th RS will not be able to support classified missions for the Combined Forces Air Component, 7th AF, and the 51st Fighter Wing missions. <u>ADDITIONAL:</u> No portion of the facility being constructed is intended for Republic of Korea personnel exclusive or primary use. The project is located on an enduring installation which will be retained by United States Forces Korea (USFK) for the foreseeable future. This project meets applicable criteria/scope specified in Air Force Manual 32-1084, <i>Facility Requirements</i>. A preliminary study has been performed through programming, site visits, and interviews. A preliminary analysis of reasonable options for accomplishing this project (status quo, renovation, new construction, and /or leasing) was done. Construction of a new 5th RS Aircraft Shelter is the most economical option according to the preliminary analysis of reasonable options. The supporting facilities costs exceed 25% of the primary facilities costs due to rerouting and culverting a main storm channel. This project also includes expansion of airfield taxiway, requiring substantial air field pavements materials, extend utilities and communication runs, as well as associated site improvements. Base Civil Engineer: 011-82-31-661-4312. Aircraft shelter: 1,580 SM = 17,000 SF. Demolition: 15 SM = 156 SF. <u>JOINT USE CERTIFICATION:</u> For US exclusive use but can be used on an “as available” basis; however, the scope of the project is based on Air Force requirements.		

1. COMPONENT AIR FORCE		REPUBLIC OF KOREA FUNDED CONSTRUCTION (ROKFC)		2. DATE	
3. INSTALLATION AND LOCATION OSAN AIR BASE, KOREA			4. PROJECT TITLE: COMMUNICATIONS HQ BUILDING		
5. PROGRAM ELEMENT N/A	6. CATEGORY CODE 131-111	7. PROJECT NUMBER SMYU213002 (F20R600)	8. PROJECT COST (\$000) 45,000		
9. COST ESTIMATES					
ITEM		U/M	QUANTITY	UNIT COST	COST (\$000)
PRIMARY FACILITY					25,203
COMMUNICATIONS FACILITY (131-111)		SM	6,683	3,550	(23,725)
COLLECTIVE PROTECTION SYSTEM		SM	2,500	391	(978)
SUSTAINABILITY AND ENERGY MEASURES		LS			(500)
SUPPORTING FACILITIES					15,039
UTILITIES		LS			(3,410)
PAVEMENTS		SM	7,500	168.3	(1,262)
SITE IMPROVEMENTS		LS			(2,992)
RETAINING WALL		LM	550	5,500	(3,025)
COMMUNICATIONS SUPPORT		LS			(3,000)
PASSIVE FORCE PROTECTION MEASURES		LS			(400)
BACKUP POWER GENERATOR		LS			(950)
SUBTOTAL					40,242
CONTINGENCY (5%)					<u>2,012</u>
TOTAL CONTRACT COST					42,254
SUPERVISION, INSPECTION AND OVERHEAD (6.5%)					<u>2,746</u>
TOTAL REQUEST					45,000
EQUIPMENT FROM OTHER APPROPRIATIONS					(1,325)
10. DESCRIPTION OF PROPOSED CONSTRUCTION:					
Utilize host-nation funding to construct a communications HQ facility utilizing conventional design and construction methods to accommodate the mission of the facility. 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. The facility will be designed as permanent construction in accordance with the DoD Unified Facilities Criteria (UFC) 1-200-01, <i>General Building Requirements</i>, and UFC 1-200-02, <i>High Performance and Sustainable Building Requirements</i>. This project will also comply with DoD antiterrorism/force protection requirements per UFC 4-010-01, <i>DoD Minimum Antiterrorism Standards for Buildings</i>. This project fulfills US requirements only and will be designed and constructed for US exclusive use. Air Conditioning: 250 Tons					
11. REQUIREMENT: 13,138SM		ADEQUATE: 6,555 SM		SUBSTANDARD: 6,683 SM	
<u>PROJECT:</u> Construct Communication HQ Building. (Current Mission) <u>REQUIREMENT:</u> This project is required to provide an adequately sized, configured, secured, semi-hardened, and survivable communications HQ building. This project will provide a modern, efficient, consolidated Communications Squadron (CS) and alternate emergency operations center (EOC) facility to enhance management and mission effectiveness as well as effectively support contingency operations at this joint, warfighting installation. The HQ facility includes Network Control Center (NCC), Telecommunications Center (TCC), and administration areas. The project will provide internal communication systems, elevators, fire protection system, collective protection system (CPS), backup and redundant power supplies, communication vault, concrete encased outside plant (OSP) and manhole duct system (MHDS), and force protection measures. Improve and expand an access road from a single lane to a two-lane. The relocation of a grave to off-base is also included to make way for construction.					

1. COMPONENT AIR FORCE	REPUBLIC OF KOREA FUNDED CONSTRUCTION (ROKFC)	2. DATE
3. INSTALLATION AND LOCATION OSAN AIR BASE, KOREA		
4. PROJECT TITLE COMMUNICATIONS HQ BUILDING		5. PROJECT NUMBER SMYU213002 (F20R600)
(Continued from Page 1) <u>CURRENT SITUATION:</u> The Communications Squadron (CS) HQ building 949 provides little protection from an enemy attack, which leaves critical base and peninsula-wide communications and computer systems extremely vulnerable, especially during contingencies. Many functional areas in the current facility are inadequate, overcrowded, and cannot accommodate the additional communications requirements, ultimately degrading overall mission effectiveness. Upon completion of this project, the current facility will be retained and used for the 607th Air and Operations Center, as well as act as a redundant communications focal point. A \$15M project, SMYU083003 (F13R101), is currently in place to repair and upgrade the electrical and HVAC systems to accommodate the facility's current and future needs; however, the growing space requirements will remain deficient and the current data center will continue to be a single point of failure. The new facility will serve as the 51 Communications Squadron command suite, a hardened communications focal point, and house the alternate emergency operations center (EOC) during contingency operations. <u>IMPACT IF NOT PROVIDED:</u> Lack of an adequate facility protection increases the chances of sustaining damage or losing the use of the facility during an enemy attack. The current communications building is the alternate EOC sustaining base operations during contingencies. Any impact to this weakened facility could significantly impact both peacetime and war-fighting capabilities in the Korean theater. If this project is not provided, network security, reliability, and dependability will suffer. The existing facilities will continue to degrade, causing maintenance costs to rise, furthering the possibility of vital network communications loss. <u>ADDITIONAL:</u> No portion of the facility being constructed is intended for Republic of Korea personnel exclusive or primary use. The project is located on an enduring installation which will be retained by United States Forces Korea (USFK) for the foreseeable future. This project meets applicable criteria/scope specified in Air Force Manual 32-1084, <i>Facility Requirements</i>. A preliminary analysis of reasonable options for accomplishing this project (status quo, renovation, new construction, and/or leasing) was done. It indicates there is only one option, new construction, will meet operational requirements. The supporting facilities costs exceed 25% of the primary facilities costs due to the facility being built in on an undeveloped high hill site, requiring substantial back-fill materials, extensive utilities and communication runs as well as associated site improvements by high retaining walls. This design shall conform to criteria established in the Air Force Corporate Facilities Standards (AFCFS), the Installation Facilities Standards (IFS), Osan AB Architectural Compatibility Plan, and shall employ the standard facility design for Communications Squadron Facilities. The supporting facility also includes the reconfiguration of the current access road from a single lane to a two-lane road. Base Civil Engineer: 011-82-31-661-4312. Construct Communications HQ Building: 6,683 SM = 71,935 SF <u>JOINT USE CERTIFICATION:</u> For US exclusive use but can be used on an "as available" basis; however, the scope of the project is based on Air Force requirements.		

1. COMPONENT AIR FORCE		REPUBLIC OF KOREA FUNDED CONSTRUCTION (ROKFC)		2. DATE	
3. INSTALLATION AND LOCATION OSAN AIR BASE, KOREA			4. PROJECT TITLE: AIRFIELD DAMAGE REPAIR FACILITY		
5. PROGRAM ELEMENT N/A	6. CATEGORY CODE 442-758	7. PROJECT NUMBER SMYU173003 (F19R621)	8. PROJECT COST (\$000) 22,000		
9. COST ESTIMATES					
ITEM		U/M	QUANTITY	UNIT COST	COST (\$000)
PRIMARY FACILITY					15,778
AIRFIELD DAMAGE REPAIR FACILITY (442-758)		SM	8,356	1,724	(14,405)
OPEN STORAGE (452-252)		SM	2,601	190	(494)
ENTRY CONTROL BUILDING (730-837)		SM	20	29,510	(590)
SUSTAINABILITY AND ENERGY MEASURES		LS			(289)
SUPPORTING FACILITIES					3,936
PAVEMENTS		LS			(1,588)
SITE IMPROVEMENTS		LS			(1,308)
UTILITIES		LS			(433)
COMMUNICATIONS SUPPORT		LS			(227)
CONTAMINATED SOIL REMEDIATION		LS			(380)
SUBTOTAL					19,714
CONTINGENCY (5%)					986
TOTAL CONTRACT COST					20,700
SUPERVISION, INSPECTION AND OVERHEAD (6.5%)					1,345
TOTAL REQUEST					22,045
TOTAL REQUEST (ROUNDED)					22,000
10. DESCRIPTION OF PROPOSED CONSTRUCTION:					
Utilize host-nation funding to construct an Airfield Damage Repair (ADR) facility utilizing conventional design and construction methods to accommodate the mission of the facility. 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. The facility will be designed as permanent construction in accordance with the DoD Unified Facilities Criteria (UFC) 1-200-01, <i>General Building Requirements</i> , and UFC 1-200-02, <i>High Performance and Sustainable Building Requirements</i> . This project will also comply with DoD antiterrorism/force protection requirements per UFC 4-010-01, <i>DoD Minimum Antiterrorism Standards for Buildings</i> . This project fulfills US requirements only and will be designed and constructed for US exclusive use.					
11. REQUIREMENT: 10,958 SM ADEQUATE: 0 SM SUBSTANDARD: 0 SM <u>PROJECT:</u> Airfield Damage Repair Facility (Current Mission) <u>REQUIREMENT:</u> This project is required to construct an Airfield Damage Repair Facility consisting of climate-controlled warehouses and a covered open storage pad which aim to provide covered storage for pre-positioned war reserve material (WRM) ADR assets. This project also includes area lighting and an entry control building with a vehicle gate. The pavement at the southwest end of the Draggins Lair will be expanded, and the affected fence line and golf cart path areas will be relocated. The facility will have a reinforced concrete foundation and floor slab, including all utilities, HVAC, force protection measures, fire detection/protection systems, pavements, site preparation and improvements. Climate control is not required for the open storage area. All other miscellaneous work necessary to provide a complete and useable facility will be accomplished.					

1. COMPONENT AIR FORCE	REPUBLIC OF KOREA FUNDED CONSTRUCTION (ROKFC)	2. DATE
3. INSTALLATION AND LOCATION OSAN AIR BASE, KOREA		
4. PROJECT TITLE AIRFIELD DAMAGE REPAIR FACILITY		5. PROJECT NUMBER SMYU173003 (F19R621)
(Continued from Page 1) <u>CURRENT SITUATION:</u> PACAF is required to bring in fighter/bomber/tanker Theater Security Package (TSP)/Continuous Bomber Presence (CBP) forces in order for PACOM to be prepared to counter potential hostile actions of enemy countries in the PACOM area of responsibility. Currently, these TSP/CBP forces cannot complete this mission if their basing locations are attacked and the base cannot recover and regenerate their combat sortie capability. A total of 140, 20-ft shipping containers full of ADR materials arrived on Feb 2016 with no appropriate storage areas to keep the equipment from rapid deterioration. Within a year, the equipment has shown large amounts of corrosion with conditions worsening. In 2017, Osan AB has increased the ADR fleet to a total of 338 vehicles in addition to the containers, all currently staged in an open and paved area exposed to weather elements. Some assets are stored in other units' vehicle storage facilities hindering lateral mission capabilities. Osan AB is warranted a very large ADR configuration and does not have any facilities that can properly house and store all ADR assets. <u>IMPACT IF NOT PROVIDED:</u> The ADR Facility is needed to combat existing and future threats to Osan AB by providing the capability to rapidly deploy repair teams within a 7 minute response time to repair up to 150 craters. This project will permanently house all ADR vehicles and equipment as well as the incoming expansion kits which are projected to arrive at Osan by December 2018, directly supporting Asia Pacific Resiliency. Without this project, Osan AB will not be able to permanently secure nearly 118,000 square feet of ADR assets in climate controlled facilities, greatly diminishing their effectiveness and useful shelf life. This will have a detrimental effect on 51 FW readiness and war-fighting capability, as repair teams would be working with expired and poorly preserved construction material and deteriorated equipment assets. Repair capabilities will be significantly reduced with a drastic increase in repair times, negatively affecting the success of airfield pavement repairs and ultimately the recovery of the runway during contingency operations. <u>ADDITIONAL:</u> This project meets applicable criteria/scope specified in Air Force Manual 32-1084, "Facility Requirements." Maximum attainable cube is being used. No portion of the facility being constructed 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. A preliminary analysis of reasonable options for accomplishing this project (status quo, partial repair, replace, and/or leasing) was done. It indicates there is only one option; to construct new Airfield Damage Repair (ADR) facilities, which will meet operational requirements. The supporting facilities costs exceed 25% of the primary facilities costs due to the underdeveloped lowland area requiring extensive utilities and communications runs, as well as associated site improvements by backfilling and piling. Base Civil Engineer: 011-82-31-661-4312. Construct Airfield Damage Repair (ADR) Facility: 10,958 SM = 117,947 SF. <u>JOINT USE CERTIFICATION:</u> This facility can be used on an "as available" basis. However, the scope of the project is based on USAF, USFK, CFC and UNC requirements.		

1. COMPONENT AIR FORCE		REPUBLIC OF KOREA FUNDED CONSTRUCTION (ROKFC)		2. DATE	
3. INSTALLATION AND LOCATION SUWON AIR BASE, KOREA			4. PROJECT TITLE AIRFIELD DAMAGE REPAIR WAREHOUSE		
5. PROGRAM ELEMENT N/A	6. CATEGORY CODE 442-758	7. PROJECT NUMBER WNHQ173101 (F19R624)		8. PROJECT COST (\$000) \$7,200	
9. COST ESTIMATES					
ITEM		U/M	QUANTITY	UNIT COST	COST (\$000)
PRIMARY FACILITIES					5,916
ADR Equipment and Material Storage (442-758)		SM	2,601	2,128	(5,536)
Concrete Pad (132-133)		SM	2,200	119.8	(264)
Sustainability and Energy Measures (2%)		LS	1		(116)
SUPPORTING FACILITIES					532
Utilities		LS	1		(350)
Pavements		LS	1		(118)
Site Improvements		LS	1		(27)
Communications		LS	1		(37)
SUBTOTAL					6,448
CONTINGENCY (5.0%)					322
TOTAL CONTRACT COST					6,770
SUPERVISION, INSPECTION AND OVERHEAD (6.5%)					440
TOTAL PROJECT COST					7,210
TOTAL REQUEST (ROUNDED)					7,200
10. DESCRIPTION OF PROPOSED WORK: Utilize host-nation funding to construct an Airfield Damage Repair Warehouse with a concrete slab and foundation, sheet metal walls, standing seam metal roof system, four roll-up doors for ADR vehicles, four personnel doors, electrical system, exhaust fan system, climate control for fire suppression system, concrete pad for ISO containers and all other necessary supporting facilities. The warehouse shall include office space, latrine and shower for male & female; office and latrines shall include HVAC and communication systems. 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. 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 : 10 Tons					
11. Requirement: 2,601 SM Adequate: 0 Substandard: 0 PROJECT: Airfield Damage Repair Warehouse. (Current Mission) REQUIREMENT: Construct an Airfield Damage Repair (ADR) Warehouse facility and a concrete pad utilizing conventional design and construction methods indicative of the mission regarding expedient airfield repairs. This project will enable the storage of all ADR vehicles and equipment which are projected to arrive at Suwon Air Base by 2019. This project will directly support the United States Forces Korea's (USFK) resiliency and ability to "Fight Tonight." This facility will ensure all assets are protected from the elements and are mission capable if required in contingency or armistice operations. CURRENT SITUATION: Suwon AB does not have any facilities capable of accommodating the storage of the incoming 119 vehicles and 60 ISO containers of Airfield Damage Repair assets. Currently, 86 of the vehicles and 48 of the ISO containers have arrived and will be receiving 33 more heavy equipment vehicles as well as 12 more ISO containers containing consumable materials that require enclosed storage to ensure preservation for future operations. Due to the lack of enclosed storage, the ADR					

1. COMPONENT AIR FORCE	REPUBLIC OF KOREA FUNDED CONSTRUCTION (ROKFC)		2. DATE
3. INSTALLATION AND LOCATION SUWON AIR BASE, KOREA		4. PROJECT TITLE AIRFIELD DAMAGE REPAIR WAREHOUSE	
5. PROGRAM ELEMENT N/A	6. CATEGORY CODE 442-758	7. PROJECT NUMBER WNHQ173101 (F19R624)	8. PROJECT COST (\$000) \$7,200

assets are currently stored without any protection from the weather elements causing accelerated deterioration as well as potential theft of critically controlled wartime assets.

IMPACT IF NOT PROVIDED:
If ADR assets are not stored inside of a facility, they will deteriorate well before their expected life cycle, and cause a gap in airfield damage repair capabilities. In addition, deterioration and potential theft of wartime assets will result in a shortage of operable Airfield Damage Repair assets. This will have a detrimental effect on overall readiness and war fighting capability.

ADDITIONAL:
This project meets the criteria/scope specified in Air Force Manual 32-1084, "Facility Requirement". Maximum attainable cube space is being used. All known alternatives were considered during development of this project. No other feasible alternative could meet mission requirements. Therefore, a complete economic analysis was not performed. 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 13693, 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, 18 Oct 2013) and to conform to the current USFK level of threat. This project is located on an installation which will be retained by United States Forces Korea (USFK) for the foreseeable future.

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.

ADR Storage (442-758): 2,601 SM = 27,997 SF
Concrete Pad (132-133): 2,200 SM = 23,681 SF
Base Civil Engineer; Comm., 011-82-53-980-4985.

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Department of the Air Force

Military Family Housing

Fiscal Year (FY) 2019

Budget Estimates

Justification Data Submitted to Congress

February 2018

**DEPARTMENT OF THE AIR FORCE
MILITARY FAMILY HOUSING
FISCAL YEAR 2019 BUDGET REQUEST**

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**DEPARTMENT OF THE AIR FORCE
MILITARY FAMILY HOUSING
FISCAL YEAR 2019 BUDGET REQUEST**

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**DEPARTMENT OF THE AIR FORCE
MILITARY FAMILY HOUSING
FISCAL YEAR 2019 BUDGET REQUEST**

MILITARY FAMILY HOUSING

	<u>Program (\$ in Thousands)</u>
FY 2019 Budget Request	\$395,720
FY 2018 President's Budget Request	\$403,386
FY 2018 Annualized Continuing Resolution (CR) Adjustments	-\$69,886
*Total FY 2018 PB Request with Annualized CR Adjustments	\$333,500

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.

*Reflects the FY 2018 President's Budget Request with an undistributed adjustment to match the Annualized Continuing Resolution funding level by appropriation.

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**DEPARTMENT OF THE AIR FORCE
MILITARY FAMILY HOUSING
FISCAL YEAR 2019 BUDGET REQUEST**

FY 2019 FINANCIAL SUMMARY

AUTHORIZATION FOR APPROPRIATION REQUESTED FOR FY 2019:

		<u>(\$000)</u>
<u>FUNDING REQUEST FY 2019</u>		
Construction		\$0
Construction Improvements		\$75,247
Planning and Design		\$3,199
<u>Appropriation Request: Construction</u>		\$78,446
Operations, Utilities and Maintenance		\$279,237
Operating Expenses	\$100,908	
Utilities	\$48,566	
Maintenance	\$129,763	
Housing Privatization		\$22,205
Leasing - Worldwide		\$15,832
<u>Appropriation Request: O&M, Leasing, Housing Privatization</u>		\$317,274
<u>Appropriation Request</u>		\$395,720
Reimbursement Request		\$5,715
FY 2019 FAMILY HOUSING REQUEST		\$401,435

DEPARTMENT OF AIR FORCE
FH-11 Inventory and Condition of Government-Owned, Family Housing Units
WORLDWIDE
(Number of Dwelling Units in Inventory)
Fiscal Year 2019

	FY 2017	FY 2018	FY 2019	FY 2020	FY 2021	FY 2022	FY 2023
Beginning of FY Adequate Inventory Total	13,125	13,096	11,796	11,646	12,060	11,543	11,411
FCI of 90% to 100% (Good Condition)	10,022	9,275	8,207	7,309	7,041	6,471	6,049
FCI of 80% to 89% (Fair Condition)	3,103	3,821	3,589	4,337	5,019	5,072	5,362
Beginning of FY Inadequate Inventory Total	4,497	3,904	3,371	3,411	2,895	3,189	3,274
FCI of 60% to 79% (Poor Condition)	3,759	3,267	2,794	1,691	1,425	1,928	2,166
FCI of 59% and below (Failing Condition)	738	637	577	1,720	1,470	1,261	1,108
Beginning of FY Total Inventory	17,622	17,000	15,167	15,057	14,955	14,732	14,685
Percent Adequate - Beginning of FY Inventory	74%	77%	78%	77%	81%	78%	78%
Inadequate Inventory Reduced Through:	(593)	(533)	40	(516)	294	85	(352)
Construction (FHCON)	(216)	(130)	(130)	(69)	(198)	(231)	-
Maintenance & Repair (FHO&M)	(287)	(77)	(114)	(205)	(138)	(139)	(29)
Privatization	-	2	-	-	-	-	-
Demolition/Divestiture/Diversion/Conversion	(622)	(668)	(38)	(311)	(194)	(47)	(323)
Funded by Host Nation	-	-	-	-	-	-	-
Additional Inadequate Units Identified	532	340	322	69	824	502	-
Adequate Inventory Changes:	(29)	(1,300)	(150)	304	(635)	(132)	(61)
Construction (FHCON)	216	130	130	168	198	231	-
Maintenance & Repair (FHO&M)	287	77	114	205	138	139	29
Privatization	-	-	-	-	-	-	-
Demolition/Divestiture/Diversion/Conversion	-	(1,167)	(72)	-	(147)	-	(90)
Funded by Host Nation	-	-	-	-	-	-	-
Additional Inadequate Units Identified	(532)	(340)	(322)	(69)	(824)	(502)	-
End of FY Adequate Inventory Total	13,096	11,796	11,646	12,060	11,543	11,411	11,350
FCI of 90% to 100% (Good Condition)	9,275	8,207	7,309	7,041	6,471	6,049	4,842
FCI of 80% to 89% (Fair Condition)	3,821	3,589	4,337	5,019	5,072	5,362	6,508
End of FY Inadequate Inventory Total	3,904	3,371	3,411	2,895	3,189	3,274	2,922
FCI of 60% to 79% (Poor Condition)	3,267	2,794	1,691	1,425	1,928	2,166	1,824
FCI of 59% and below (Failing Condition)	637	577	1,720	1,470	1,261	1,108	1,098
End of FY Total Inventory	17,000	15,167	15,057	14,955	14,732	14,685	14,272
Percent Adequate - End of FY Inventory	77%	78%	77%	81%	78%	78%	80%
DoD Performance Goal - 90% of world-wide family housing inventory at FCI of at least 80% (Good or Fair Condition)	90%	90%	90%	90%	90%	90%	90%

NOTES:

1 - Facility Condition Index (FCI) is a general measure at a specific point in time with respect to physical condition and ability to support the current occupant or mission. FCI is calculated as the ratio of Plant Replacement Value (PRV) minus the estimated cost of maintenance and repair requirements, divided by PRV. This provides a FCI from 0% to 100% with 100% representing good 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. Improvements in percent adequate during the FYDP reflect investment and divestiture plans in Okinawa, divestiture at Misawa and Yokota in support of the Japan Optimization Plan, and improvements and divestiture in support of the European Infrastructure Consolidation (EIC) plan.

3 - Increase in units with failing FCI scores between 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. Additionally, the spike is the result of like-type units reaching life-cycle expiration at the same time.

4 - Drop in percent adequacy in FY21 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 2019

	<u>FY 2017</u>	<u>FY 2018</u>	<u>FY 2019</u>	<u>FY 2020</u>	<u>FY 2021</u>	<u>FY 2022</u>	<u>FY 2023</u>
Beginning of FY Adequate Inventory Total	-	-	-	-	19	19	20
FCI of 90% to 100% (Good Condition)	-	-	-	-	19	19	20
FCI of 80% to 89% (Fair Condition)	-	-	-	-	-	-	-
Beginning of FY Inadequate Inventory Total	109	109	111	111	92	83	82
FCI of 60% to 79% (Poor Condition)	109	109	111	111	92	83	82
FCI of 59% and below (Failing Condition)	-	-	-	-	-	-	-
Beginning of FY Total Inventory	109	109	111	111	111	102	102
Percent Adequate - Beginning of FY Inventory	0%	0%	0%	0%	17%	19%	20%
Inadequate Inventory Reduced Through:	-	2	-	(19)	(9)	(1)	-
Construction (FHCON)	-	-	-	(18)	-	-	-
Maintenance & Repair (FHO&M)	-	-	-	(1)	-	(1)	-
Privatization	-	2	-	-	-	-	-
Demolition/Divestiture/Diversion/Conversion	-	-	-	-	(9)	-	-
Funded by Host Nation	-	-	-	-	-	-	-
Additional Inadequate Units Identified:	-	-	-	-	-	-	-
Adequate Inventory Changes:	-	-	-	19	-	1	-
Construction (FHCON)	-	-	-	18	-	-	-
Maintenance & Repair (FHO&M)	-	-	-	1	-	1	-
Privatization	-	-	-	-	-	-	-
Demolition/Divestiture/Diversion/Conversion	-	-	-	-	-	-	-
Funded by Host Nation	-	-	-	-	-	-	-
Additional Inadequate Units Identified	-	-	-	-	-	-	-
End of FY Adequate Inventory Total	-	-	-	19	19	20	20
FCI of 90% to 100% (Good Condition)	-	-	-	19	19	20	20
FCI of 80% to 89% (Fair Condition)	-	-	-	-	-	-	-
End of FY Inadequate Inventory Total	109	111	111	92	83	82	82
FCI of 60% to 79% (Poor Condition)	109	111	111	92	83	82	82
FCI of 59% and below (Failing Condition)	-	-	-	-	-	-	-
End of FY Total Inventory	109	111	111	111	102	102	102
Percent Adequate - End of FY Inventory	0%	0%	0%	17%	19%	20%	20%

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 - Decision to privatize the remaining 90 historic-eligible and 10 non-historic units at Wright-Patterson AFB is still pending. If privatization is the way forward, it will be delayed to FY21. The 9 Eglin units are planned for divestiture in FY21.
- 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 was completed in Jan 2018.

DEPARTMENT OF AIR FORCE
FH-11 Inventory and Condition of Government-Owned, Family Housing Units
FOREIGN (includes U.S. Territories)
(Number of Dwelling Units in Inventory)
Fiscal Year 2019

	FY 2017	FY 2018	FY 2019	FY 2020	FY 2021	FY 2022	FY 2023
Beginning of FY Adequate Inventory Total	13,125	13,096	11,796	11,646	12,041	11,524	11,391
FCI of 90% to 100% (Good Condition)	10,022	9,275	8,207	7,309	7,022	6,452	6,029
FCI of 80% to 89% (Fair Condition)	3,103	3,821	3,589	4,337	5,019	5,072	5,362
Beginning of FY Inadequate Inventory Total	4,388	3,795	3,260	3,300	2,803	3,106	3,192
FCI of 60% to 79% (Poor Condition)	3,650	3,158	2,683	1,580	1,333	1,845	2,084
FCI of 59% and below (Failing Condition)	738	637	577	1,720	1,470	1,261	1,108
Beginning of FY Total Inventory	17,513	16,891	15,056	14,946	14,844	14,630	14,583
Percent Adequate - Beginning of FY Inventory	75%	78%	78%	78%	81%	79%	78%
Inadequate Inventory Reduced Through:	(593)	(535)	40	(497)	303	86	(352)
Construction (FHCON)	(216)	(130)	(130)	(51)	(198)	(231)	-
Maintenance & Repair (FHO&M)	(287)	(77)	(114)	(204)	(138)	(138)	(29)
Privatization	-	-	-	-	-	-	-
Demolition/Divestiture/Diversion/Conversion	(622)	(668)	(38)	(311)	(185)	(47)	(323)
Funded by Host Nation	-	-	-	-	-	-	-
Additional Inadequate Units Identified:	532	340	322	69	824	502	-
Adequate Inventory Changes:	(29)	(1,300)	(150)	285	(635)	(133)	(61)
Construction (FHCON)	216	130	130	150	198	231	-
Maintenance & Repair (FHO&M)	287	77	114	204	138	138	29
Privatization	-	-	-	-	-	-	-
Demolition/Divestiture/Diversion/Conversion	-	(1,167)	(72)	-	(147)	-	(90)
Funded by Host Nation	-	-	-	-	-	-	-
Additional Inadequate Units Identified:	(532)	(340)	(322)	(69)	(824)	(502)	-
End of FY Adequate Inventory Total	13,096	11,796	11,646	12,041	11,524	11,391	11,330
FCI of 90% to 100% (Good Condition)	9,275	8,207	7,309	7,022	6,452	6,029	4,822
FCI of 80% to 89% (Fair Condition)	3,821	3,589	4,337	5,019	5,072	5,362	6,508
End of FY Inadequate Inventory Total	3,795	3,260	3,300	2,803	3,106	3,192	2,840
FCI of 60% to 79% (Poor Condition)	3,158	2,683	1,580	1,333	1,845	2,084	1,742
FCI of 59% and below (Failing Condition)	637	577	1,720	1,470	1,261	1,108	1,098
End of FY Total Inventory	16,891	15,056	14,946	14,844	14,630	14,583	14,170
Percent Adequate - End of FY Inventory	78%	78%	78%	81%	79%	78%	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 - Increase in units with failing FCI scores between 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. Additionally, the spike is the result of like-type units reaching life-cycle expiration at the same time.

3 - Host Nation construction beginning in FY20 is at Okinawa, Japan.

**DEPARTMENT OF THE AIR FORCE
MILITARY FAMILY HOUSING
FISCAL YEAR 2019 BUDGET REQUEST**

FH-8 Air Force Inadequate Family Housing Units Eliminated in FY2017

MAJCOM	Project Type	Base	Total Inventory Minus Leased & Privatized	Total Inadequate Inventory	Total Inadequate Addressed
Units at the Beginning of FY2017			17,622	4,497	
Additional Inadequate Units Identified			0	532	0
PACAF	Condition Adjustment	Misawa		212	
PACAF	Condition Adjustment	Okinawa		4	
PACAF	Condition Adjustment	Yokota		140	
USAFE	Condition Adjustment	KMC		96	
USAFE	Condition Adjustment	RAF Croughton		8	
USAFE	Condition Adjustment	RAF Lakenheath		72	
FY2017 Family Housing Construction, Improvement, and O&M Projects to Eliminate Inadequate Units			0	(503)	503
PACAF	FHCON	Okinawa		(214)	214
PACAF	FHO&M	Okinawa		(287)	287
USAFE	FHCON	Moron		(2)	2
Privatization Projects Executed			0	0	0
Units Demolished/Divested FY2017			(622)	(622)	622
USAFE	Divest	Misawa	(68)	(68)	68
USAFE	Demolish	Okinawa	(155)	(155)	155
USAFE	Divest	Incirlik	(67)	(67)	67
USAFE	Demo	Spangdahlem (Bitburg)	(332)	(332)	332
Deficit Construction			0	0	0
Host Nation Construction projects			0	0	0
Units at End of FY2017			17,000	3,904	1,125
NOTES:					
1 - FHO&M and FHCON investment in Okinawa to support the Japan Optimization Plan as incorporated in the Family Housing Master Plan.					
2 - Divestiture based on Family Housing Master Plan.					

**DEPARTMENT OF THE AIR FORCE
MILITARY FAMILY HOUSING
FISCAL YEAR 2019 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			0	2	0
USAFA	Acquire From PH to MFH	USAFA	0	2	0
Units Demolished/Divested FY2018			(1,167)	(668)	668
PACAF	Divest	Misawa	(68)	(68)	68
PACAF	Demo/Divest	Okinawa		(138)	138
PACAF	Divest	Yokota		(429)	429
USAFE	Divest	Incirlik	(671)		
USAFE	Divest	Lajes Field	(340)	(10)	10
USAFE	Divest	RAF Lakenheath	(88)		
USAFE	Divest	RAF Menwith Hill		(23)	23
Deficit Construction			0	0	0
Host Nation Construction projects			0	0	0
Units at End of FY2018			15,833	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 2019 BUDGET REQUEST**

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

MAJCOM	Project Type	Base	Total Inventory Minus Leased & Privatized	Total Inadequate Inventory	Total Inadequate Addressed
Units at the Beginning of FY2019			15,167	3,371	
Additional Inadequate Units Identified			0	322	0
PACAF	Condition Adjustment	Misawa		113	
PACAF	Condition Adjustment	Okinawa		136	
PACAF	Condition Adjustment	Yokota		1	
USAFE	Condition Adjustment	KMC		64	
USAFE	Condition Adjustment	RAF Croughton		2	
USAFE	Condition Adjustment	RAF Lakenheath		4	
USAFE	Condition Adjustment	Spangdahlem		2	
FY2019 Family Housing Construction, Improvement, and O&M Projects to Eliminate Inadequate Units			0	(244)	244
PACAF	FHO&M	Misawa		(68)	68
PACAF	FHCON	Okinawa		(130)	130
PACAF	FHO&M	Okinawa		(46)	46
Units Demolished/Divested FY2019			(72)	(38)	38
USAFE	Demo	KMC	(72)	(36)	36
PACAF	Divest	RAF Menwith Hill		(2)	2
Deficit Construction			0	0	0
Host Nation Construction projects			0	0	0
Units at End of FY2019			15,095	3,411	282
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 2019 BUDGET REQUEST**

FY 2019 AUTHORIZATION LANGUAGE

SEC. 2302. FAMILY HOUSING

Using amounts appropriate pursuant to the authorization of appropriations in Section 2304(a)(5)(A), 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 [\$4,445,000] \$3,199,000.

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)(5)(A), the Secretary of the Air Force may improve existing military family housing units in an amount not to exceed [\$80,617,000] \$75,247,000.

SEC. 2304. AUTHORIZATION OF APPROPRIATIONS, AIR FORCE

(a) IN GENERAL

(5) For Military Family Housing functions –

(A) For planning and design, and improvement of military family housing and facilities, [\$85,062,000] \$78,446,000.

(B) For support of military family housing (including functions described in section 2831 of Title 10, United States Code), [\$318,324,000] \$317,274,000.

**DEPARTMENT OF THE AIR FORCE
MILITARY FAMILY HOUSING
FISCAL YEAR 2019 BUDGET REQUEST**

FY 2019 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, [\$85,062,000] \$78,446,000 to remain available until September 30, 2023.

Family Housing Operations and Maintenance, Air Force

For expenses of family housing for the Air Force for operations and maintenance, including, leasing, minor construction, principal and interest charges, and insurance premiums, as authorized by law, [\$318,324,000] \$317,274,000.

**DEPARTMENT OF THE AIR FORCE
MILITARY FAMILY HOUSING
FISCAL YEAR 2019 BUDGET REQUEST**

FAMILY HOUSING CONSTRUCTION

	<u>Program (\$ in Thousands)</u>
FY 2019 Budget Request	\$78,446
FY 2018 President's Budget Request	\$85,062
FY 2018 Annualized Continuing Resolution (CR) Adjustments	-\$24,127
*Total FY 2018 PB Request with Annualized CR Adjustments	\$60,935

FY 2019 CONSTRUCTION IMPROVEMENTS

Budget Request (\$ in Thousands)

FY 2019 Budget Request \$75,247

FY 2018 Budget Request \$80,617

Purpose and Scope

The Air Force has approximately 15,200 owned units in the beginning of FY 2019. 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 public quarters as described on DD Form 1391
- (2) Appropriation of \$75,247,000 to fund projects in FY 2019

*Reflects the FY 2018 President's Budget Request with an undistributed adjustment to match the Annualized Continuing Resolution funding level by appropriation.

1. COMPONENT AIR FORCE		FY 2019 MILITARY CONSTRUCTION PROJECT DATA			2. DATE	
3. INSTALLATION AND LOCATION KADENA AB, OKINAWA, JAPAN AND RAF LAKENHEATH, UNITED KINGDOM				4. PROJECT TITLE FAMILY HOUSING CONSTRUCTION IMPROVEMENTS		
5. PROGRAM ELEMENT 88742		6. CATEGORY CODE 711-000		7. PROJECT NUMBER		8. PROJECT COST (\$000) 75,247
9. COST ESTIMATE						
ITEM				U/M	QUANTITY	COST (\$000)
CONSTRUCTION IMPROVEMENTS IMPROVE STEARLY HEIGHTS HOUSING UNITS AND IMPROVE LIBERTY VILLAGE PARKING				UN LS	130	72,129 3,118
TOTAL REQUEST						75,247
10. DESCRIPTION OF PROPOSED CONSTRUCTION: Provide whole house interior and exterior modernization, renovation, and repair of 130 dwelling units in the Stearly Heights neighborhood at Kadena AB. Work to include but not limited to restoration and repair of unit lot, building systems, building space, and functional improvements. Neighborhood repairs include handicap access and markings on street system/sidewalks, common areas lighting. Improve parking includes widening of existing driveways and 290 additional parking spaces in the Liberty Village neighborhood at RAF Lakenheath. 11. <u>PROJECT</u>: This request is for an authorization and appropriation of \$75.247 million to accomplish improvements in family housing in the Stearly Heights neighborhood at Kadena AB and improvement of car parking at RAF Lakenheath. <u>REQUIREMENT</u>: To provide modern and efficient housing and parking for military members and their families at Kadena AB on Okinawa, Japan and RAF Lakenheath. The housing at Kadena AB must be upgraded to meet current life safety codes and to provide a comfortable and appealing living conditions. All units will meet the "whole house" standards are programmed in accordance with requirements identified in the Housing Community Profile. Whole house improvements include restoration and neighborhood repair. Renovated housing will provide modern kitchen and bathroom configurations and fixtures; functional family living spaces; and repair exterior patios, driveways, and, sidewalks. Improve 290 parking spaces at RAF Lakenheath that will include widening existing driveways and creating new parking spaces throughout the neighborhood. <u>CURRENT SITUATION</u>: The Stearly Heights, Kadena AB project updates and modernizes housing that was either built or last renovated in the 1950s. These housing units require major renovation and repair to correct deterioration resulting from age and heavy use, most do not meet the needs of today's families, nor do they provide a modern living environment. This program will extend the useful life of many of our older, less modern units by enhancing livability, functionality, reducing operation costs and improving safety standards. Visitor parking was not authorized under the previous local authority parking regulations at RAF Lakenheath. Due to these restrictions, visitors and residents are parking on grassed areas or footpaths, which results in broken utilities, access issues for emergency vehicles and increased maintenance costs to replace damaged grass areas. <u>ADDITIONAL</u>: In accordance with Air Force Manual 32-1089, Air Force Military Construction and Family Housing Economical Analysis Guide an economic analysis shall be generated to show initial cost percentage of improvement versus replacement cost. Kadena Air Base, Stearly Heights project: All work associated with this project shall comply with USAF and Host Nation regulations and agreements. RAF Lakenheath, Liberty Village Parking project: Work will comply with all relevant UFCs, AFIs, and RAF Lakenheath base standards.						

1. COMPONENT AIR FORCE	FY 2019 MILITARY CONSTRUCTION PROJECT DATA		2. DATE
3. INSTALLATION AND LOCATION KADENA AB, OKINAWA, JAPAN			
4. PROJECT TITLE CONSTRUCTION IMPROVEMENTS		5. PROJECT NUMBER	
10. Description of work to be accomplished			
Location and Project		Current Working Estimate (\$000)	
KADENA AB IMPROVE FAMILY HOUSING (STEARLY HEIGHTS) LXEZ194643		72,129	
Provide whole house interior and exterior modernization, renovation and repair of 130 housing units. Work to include, but not limited to, restoration and repair of Unit Lot (utilities, pavement and trash enclosure), Building Systems (mechanical and electrical system, plumbing system, fire and life safety, environmental improvement, etc.), Building Space (living and family room, dining room, kitchen, bedrooms, bathrooms, etc.), and functional Improvements. Neighborhood repairs include handicap access and markings on sidewalk and common area lighting. (Separate DD Form 1391 attached)			
- WORK ACCOMPLISHED IN PREVIOUS THREE YEARS: None - WORK PROGRAMMED FOR NEXT THREE YEARS: None			
RAF LAKENHEATH IMPROVE LIBERTY VILLAGE PARKING MSET164003		3,118	
Construct and improve parking in military family housing area. Work to include, but not limited to, widening existing driveways and provide additional parking (total of 290 parking spaces), suitable drainage system, and soak-ways. (Separate DD Form 1391 attached)			
- WORK ACCOMPLISHED IN PREVIOUS THREE YEARS: None - WORK PROGRAMMED FOR NEXT THREE YEARS: None			

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1. COMPONENT AIR FORCE	FY 2019 MILITARY CONSTRUCTION PROJECT DATA (computer generated)			2. DATE
3. INSTALLATION, SITE AND LOCATION KADENA AIR BASE KADENA AIR BASE SITE # 1 JAPAN			4. PROJECT TITLE IMPROVE MFH, KAB STEARLY HEIGHTS (130UN)	
5. PROGRAM ELEMENT 88742	6. CATEGORY CODE 711-143	7. RPSUID/PROJECT NUMBER 2405/LXEZ194643	8. PROJECT COST (\$000) 72,129	
9. COST ESTIMATES				
ITEM	U/M	QUANTITY	UNIT COST	COST (\$000)
PRIMARY FACILITIES				64,502
WHOLE HOUSE D3-53 (FGO 3BR)	UN	51	497,815	(25,389)
WHOLE HOUSE G3-53 (CGO 3BR)	UN	36	446,735	(16,082)
WHOLE HOUSE H4-53 (FGO 4BR)	UN	1	571,615	(572)
WHOLE HOUSE L3-53 (FGO 3BR)	UN	36	496,100	(17,860)
WHOLE HOUSE N3-53 (FGO 3BR)	UN	6	555,685	(3,334)
SUSTAINABILITY & ENERGY MEASURES (2%)	LS			(1,266)
SUPPORTING FACILITIES				0
SUBTOTAL				64,502
CONTINGENCY (5.0%)				3,225
TOTAL CONTRACT COST				67,727
SUPERVISION, INSPECTION AND OVERHEAD (6.5%)				4,402
TOTAL REQUEST				72,129
AREA COST FACTOR	2.12			
10. Description of Proposed Work: Provide whole-house interior and exterior modernization, renovation, and repair of 130 single family dwelling units (51UN D3-53 FGO 3BR, 36UN G3-53 CGO 3BR, 1UN H4-53 FGO 4BR, 36UN L3-53 FGO 3BR and 6UN N3-53 FGO 3BR). 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 restoration and repair of Unit Lot (utilities, pavement and trash enclosure), Building System (exterior structure, roof structure, interior structure, mechanical systems, electrical systems, plumbing systems, fire and life safety, and environmental improvements) and Building Space (patio, storage, foyer, living room, family room, dining room, kitchen, bedrooms, bathrooms, laundry room, linen, hallways, mechanical rooms), and Functional Improvement. Neighborhood repairs include handicap access and markings on street system/sidewalk and common area lighting. 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. In addition; environmental (asbestos/lead) sampling, testing, remediation and all other related work are programmed into the project to provide complete and usable facilities.				
11. Requirement: 6928 UN Adequate: 5602 UN Substandard: 1919 UN PROJECT: IMPROVE MFH, KAB STEARLY HEIGHTS (130UN) REQUIREMENT: This project is required to provide modern and efficient housing for military members and their dependents stationed in Okinawa. Housing units must be repaired and restored to meet current life safety codes and to provide a comfortable and appealing living environment comparable to the off-base civilian community. All units are programmed in accordance with the 2015 Housing Community Profile. Work includes but is not limited to whole-house restoration and				

1. COMPONENT AIR FORCE	FY 2019 MILITARY CONSTRUCTION PROJECT DATA (computer generated)		2. DATE
3. INSTALLATION, SITE AND LOCATION KADENA AIR BASE KADENA AIR BASE SITE # 1 JAPAN		4. PROJECT TITLE IMPROVE MFH, KAB STEARLY HEIGHTS (130UN)	
5. PROGRAM ELEMENT 88742	6. CATEGORY CODE 711-143	7. RPSUID/PROJECT NUMBER 2405/LXEZ194643	8. PROJECT COST (\$000) 72,129
neighborhood repair. Renovated housing will provide modern kitchen and bathroom configurations and fixtures; functional family living spaces; and repair exterior patios, driveways, and sidewalks. <u>CURRENT SITUATION:</u> This project upgrades and modernizes housing units which were constructed in the early 1950s. These housing units require major renovation and repair to correct deterioration resulting from age and heavy use, most do not meet the needs of today's families, nor do they provide a modern living environment. Kitchen and bathroom cabinets and fixtures are obsolete and deteriorated. Lighting fixtures, floor coverings, and interior finishes are out-dated and deteriorated. Utilities are aged with decreasing functionality expected. Several locations around the units require appropriate drainage. Walkways do not meet the minimum width requirement. Existing cracking in some areas of walkways/driveways are a safety concern. The trash enclosure does not meet size requirements. Windows are single pane and do not meet energy standards. Mechanical systems do not have humidity control or outside ventilation components. The electrical and plumbing systems do not meet modern standards and codes. The smoke detectors are not hard-wired and interconnected and some are battery powered only. Kadena has reported radon gas issues in most of the housing areas. The doors do not meet current energy ratings and the weather sealing is deteriorating. Base reported termites have been found in the wood truss framing. <u>IMPACT IF NOT PROVIDED:</u> 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. <u>ADDITIONAL:</u> In accordance with Air Force Manual 32-1089, Air Force Military Construction and Family Housing Economic Analysis Guide an economic analysis shall be generated to show initial cost percentage of improvement versus replacement cost. Project covers; Kadena Air Base, Stearly Heights. FOREIGN CURRENCY: FCF Budget Rate Used: YEN 111.5938 <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.			

1. COMPONENT AIR FORCE	FY 2019 MILITARY CONSTRUCTION PROJECT DATA (computer generated)			2. DATE
3. INSTALLATION AND LOCATION KADENA AIR BASE KADENA AIR BASE SITE # 1 JAPAN			4. PROJECT TITLE IMPROVE MFH, KAB STEARLY HEIGHTS (130UN)	
5. PROGRAM ELEMENT 88742	6. CATEGORY CODE 711-143	7. PROJECT NUMBER 2405/LXEZ194643	8. PROJECT COST (\$000) 72,129	
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 01 JAN 2018			15%	
(d) Date 35% Designed			30-APR-18	
(e) Date Design Complete			30-SEP-18	
(f) Energy Study/Life-Cycle analysis was/will be performed			NO	
(2) Basis:				
(a) Standard or Definitive Design -			NO	
(b) Where Design Was Most Recently Used -				
(3) Total Cost (c) = (a) + (b) or (d) + (e):			(\$000)	
(a) Production of Plans and Specifications			0	
(b) All Other Design Costs			2,885	
(c) Total			2,885	
(d) Contract			2,885	
(e) In-house			0	
(4) Construction Contract Award			18 DEC	
(5) Construction Start			19 FEB	
(6) Construction Completion			20 AUG	
* Indicates completion of Project Definition with Parametric Cost Estimate as part of the FY17 Housing Community Profile for Okinawa, Japan, which is comparable to traditional 15% design to ensure valid scope, cost and executability.				
b. Equipment associated with this project provided from other appropriations: N/A				

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1. COMPONENT AIR FORCE	FY 2019 MILITARY CONSTRUCTION PROJECT DATA (computer generated)			2. DATE
3. INSTALLATION, SITE AND LOCATION RAF LAKENHEATH RAF LAKENHEATH SITE # 1 UNITED KINGDOM			4. PROJECT TITLE IMPROVE LIBERTY VILLAGE PARKING	
5. PROGRAM ELEMENT 88742	6. CATEGORY CODE 852-262	7. RPSUID/PROJECT NUMBER 2470/MSET164003	8. PROJECT COST (\$000) 3,118	
9. COST ESTIMATES				
ITEM	U/M	QUANTITY	UNIT COST	COST (\$000)
PRIMARY FACILITIES				2,928
WIDEN DRIVEWAYS	LS			(1,464)
ADDITIONAL PARKING SPACES (GREEN SECTION)	LS			(1,464)
SUPPORTING FACILITIES				0
SUBTOTAL				2,928
TOTAL CONTRACT COST				2,928
SUPERVISION, INSPECTION AND OVERHEAD (2.5%)				73
DESIGN/BUILD - DESIGN COST (4.0% OF SUBTOTAL)				117
TOTAL REQUEST				3,118
AREA COST FACTOR	1.24			
10. Description of Proposed Work: This project will improve parking at the Liberty Village Military Family Housing (MFH) area, RAF Lakenheath. This project will include widening of the existing driveways and will provide a total of 290 additional parking spaces. Project will incorporate lifecycle-cost-effective sustainable design and procurement including impact on energy and water conservation when applicable Air Conditioning: 0 Tons				
11. Requirement: LS Adequate: LS Substandard: LS <u>PROJECT:</u> Improve car parking at Liberty Village, Military Family Housing area RAF Lakenheath <u>REQUIREMENT:</u> Provide additional parking in Lakenheath military family housing area. The work will include widening existing driveways and provide a total of 290 additional spaces in green areas throughout the neighborhood. The additional parking spaces will include a suitable drainage system, soakways and all necessary work that comply with AFI 32-1023, UFC 3-201-01 Civil Engineering, UFC 3-250-01FA Pavement Design for Roads, Streets, Walks, and Open Storage Areas, and all other UK/US compliance standards and Base Standards. The 2016 HCP has identified the requirement for additional parking and the widening of roads to alleviate the current problem of on-street parking. <u>CURRENT SITUATION:</u> During initial design, the Local Authority restricted parking spaces to 1.5 per household to include the garage and driveway. Visitor parking was not authorized under the previous Local Authority parking regulations. Due to these restrictions visitors and residents are parking on grassed areas or footpaths, which has resulted in broken utilities, access issues for emergency vehicles and increased maintenance costs for the green areas to replace damaged/worn grass. There are also safety issues for children crossing roads, as parked vehicles may obstruct the view of drivers. <u>IMPACT IF NOT PROVIDED:</u> 606 military families will remain at risk, as access by emergency response vehicles is restricted. The current risk of vehicular accidents or those involving pedestrians will remain a viable concern due to parked vehicles causing obstructions to both drivers and residents. Finally, the general				

1. COMPONENT AIR FORCE	FY 2019 MILITARY CONSTRUCTION PROJECT DATA (computer generated)		2. DATE
3. INSTALLATION, SITE AND LOCATION RAF LAKENHEATH RAF LAKENHEATH SITE # 1 UNITED KINGDOM		4. PROJECT TITLE IMPROVE LIBERTY VILLAGE PARKING	
5. PROGRAM ELEMENT 88742	6. CATEGORY CODE 852-262	7. RPSUID/PROJECT NUMBER 2470/MSET164003	8. PROJECT COST (\$000) 3,118
appearance of the 2011 \$215M housing area will continue to decline and increased maintenance costs will be required to repair the repetitive damage caused by parked vehicles. <u>WORK ACCOMPLISHED IN PREVIOUS THREE YEARS:</u> Non applicable <u>WORK PROGRAMMED FOR NEXT THREE YEARS:</u> Non applicable <u>ADDITIONAL:</u> 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 (ICB) proceedings in the United Kingdom. Work will comply with all relevant UFCs, AFIs, and RAF Lakenheath Base Standards. This project is not affected by the 50% rule for AT measures. This project is not affected by the 50% rule for Fire Protection. This project is not affected by the 50% rule for bringing the facility into compliance with LEED. This project is not affected by the 75% rule for repair vs replacement. RAF Lakenheath BCE: DSN 314-226-2100, COMM 0044-1638-522100. FOREIGN CURRENCY: FCF Budget Rate Used: POUND .7651			

1. COMPONENT AIR FORCE	FY 2019 MILITARY CONSTRUCTION PROJECT DATA (computer generated)		2. DATE
3. INSTALLATION AND LOCATION RAF LAKENHEATH RAF LAKENHEATH SITE # 1 UNITED KINGDOM		4. PROJECT TITLE IMPROVE LIBERTY VILLAGE PARKING	
5. PROGRAM ELEMENT 88742	6. CATEGORY CODE 852-262	7. PROJECT NUMBER 2470/MSET164003	8. PROJECT COST (\$000) 3,118
12. SUPPLEMENTAL DATA: a. Estimated Design Data: (1) Project to be accomplished by Design-Build procedures (2) Basis: (a) Standard or Definitive Design - NO (b) Where Design Was Most Recently Used - (3) All Other Design Costs 117 (4) Construction Contract Award 19 MAR (5) Construction Start 19 MAY (6) Construction Completion 20 JUL (7) Energy Study/Life-Cycle analysis was/will be performed YES b. Equipment associated with this project provided from other appropriations: N/A			

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**DEPARTMENT OF THE AIR FORCE
MILITARY FAMILY HOUSING
FISCAL YEAR 2019 BUDGET REQUEST**

FY 2019 PLANNING AND DESIGN

Budget Request (\$ in Thousands)

FY 2019 Budget Request \$3,199

FY 2018 Budget Request \$4,445

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 2019 Authorization and Appropriation of \$3,199,000 to fund this effort as outlined in the following exhibit:

1. COMPONENT AIR FORCE		FY 2019 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) 3,199
9. COST ESTIMATE						
ITEM				U/M	QUANTITY	COST (\$000)
FAMILY HOUSING PLANNING AND DESIGN				LS		
SUBTOTAL						3,199
TOTAL CONTRACT COST						3,199
TOTAL REQUEST						3,199
10. DESCRIPTION OF PROPOSED CONSTRUCTION: Architect-engineer services, survey, fees, etc., in connection with advance planning and design of family housing dwelling units and properties included in or proposed for the Air Force Family Housing Construction Account. 11. <u>PROJECT</u>: This request is for an authorization and appropriation of \$3.199 million to provide planning and design costs in connection with family housing new construction or construction improvements programs. <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. <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.						

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**DEPARTMENT OF THE AIR FORCE
MILITARY FAMILY HOUSING
FISCAL YEAR 2019 BUDGET REQUEST**

FAMILY HOUSING O&M

	<u>Program (In Thousands)</u>
FY 2019 Budget Request	\$317,274
FY 2018 President's Budget Request	\$318,324
FY 2018 Annualized Continuing Resolution (CR) Adjustments	-\$45,759
*Total FY 2018 PB Request with Annualized CR Adjustments	\$272,565

OPERATIONS, UTILITIES AND MAINTENANCE

(Excludes Leasing and Privatization)

<u>Budget Request (\$ in Thousands)</u>
FY 2019 Budget Request \$279,237
FY 2018 Budget Request \$279,937

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.

*Reflects the FY 2018 President's Budget Request with an undistributed adjustment to match the Annualized Continuing Resolution funding level by appropriation.

**DEPARTMENT OF THE AIR FORCE
MILITARY FAMILY HOUSING
FISCAL YEAR 2019 BUDGET REQUEST**

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 and implements the Fair Housing Act. It supports the housing referral and relocation program to assist military families in locating suitable housing. 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) and General Officer Quarters' Master Plan efforts.

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

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

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

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

c. Maintenance. Privatized housing units do not receive funding from this account. Provides the following:

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

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

**DEPARTMENT OF THE AIR FORCE
MILITARY FAMILY HOUSING
FISCAL YEAR 2019 BUDGET REQUEST**

(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 2019 Budget Request Summary – Highlights

The requested amount in FY 2019 is \$279,237,000. This amount, together with estimated reimbursements of \$5,715,000 will fund the FY 2019 Operation and Maintenance program of \$284,952,000.

A summary of the budget request for FY 2019 is as follows (\$ in thousands):

<u>Operations Request</u>	<u>Utility Request</u>	<u>Maintenance Request</u>	<u>Total Direct Request</u>	<u>Reimburse- ment</u>	<u>Total Program</u>
\$100,908	\$48,566	\$129,763	\$279,237	\$5,715	\$284,952

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**DEPARTMENT OF THE AIR FORCE
MILITARY FAMILY HOUSING
FISCAL YEAR 2019 BUDGET REQUEST**

USAF FY2019 PB						Fiscal Year:		2019	
Family Housing Operation and Maintenance, Summary						Command:		USAF	
Excludes Leased Units and Costs						Exhibit:		FH-2	
Worldwide Summary									
Fiscal Year:		2017		2018		2019			
Inventory Data (Units)									
Units in Being Beginning of Year		17,622		17,000		15,167			
Units in Being at End of Year		17,000		15,167		15,057			
Average Inventory for Year		17,311		16,084		15,112			
Historic Units		99		101		101			
Units Requiring FHO&M Funding:									
a. Contiguous US		109		109		111			
b. U. S. Overseas		0		0		0			
c. Foreign		17,513		16,891		15,056			
d. Worldwide		17,622		17,000		15,167			
Funding Requirements (\$000)		Total Cost (\$000)	Unit Cost (\$)	Total Cost (\$000)	Unit Cost (\$)	Total Cost (\$000)	Unit Cost (\$)		
OPERATIONS (DIRECT)									
Management		44,077	2,546	53,464	3,016	54,423	3,576		
Services		8,428	487	13,517	665	13,669	767		
Furnishings		28,480	1,645	29,424	1,716	30,645	2,169		
Miscellaneous		1,739	100	1,839	110	2,171	128		
Sub-Total Direct Operations		82,724	4,779	98,244	5,507	100,908	6,640		
Anticipated Reimbursements		202	12	735	46	735	49		
Gross Obligations, Operations		82,926	4,790	98,979	5,553	101,643	6,689		
UTILITIES (DIRECT)									
Direct Utilities		28,926	1,671	47,504	2,954	48,566	3,214		
Anticipated Reimbursements		406	23	1,477	92	1,477	98		
Gross Obligations, Utilities		29,332	1,694	48,981	3,045	50,043	3,311		
MAINTENANCE (DIRECT)									
M&R Dwelling		90,431	5,224	100,362	6,240	97,078	6,424		
M&R Ext. Utilities		12,646	731	14,041	873	13,574	898		
M&R Other Real Property		16,337	944	18,102	1,126	17,484	1,157		
Alter & Add.		1,520	0	1,684	0	1,627	0		
Sub-Total Direct Maintenance		120,934	6,986	134,189	8,343	129,763	8,587		
Anticipated Reimbursements		963	56	3,503	218	3,503	232		
Gross Obligations, Maintenance		121,897	7,042	137,692	8,561	133,266	8,819		
GRAND TOTAL, FHO&M - Direct		232,584	13,199	279,937	16,467	279,237	18,411		
Anticipated Reimbursements		1,571	91	5,715	355	5,715	378		
GRAND TOTAL, FHO&M - TOA		234,155	13,526	285,652	17,761	284,952	18,856		

**DEPARTMENT OF THE AIR FORCE
MILITARY FAMILY HOUSING
FISCAL YEAR 2019 BUDGET REQUEST**

USAF FY2019 PB				Fiscal Year:		2019
Family Housing Operation and Maintenance, Summary				Command:		USAF
Excludes Leased Units and Costs				Exhibit:		FH-2
Contiguous US						
Fiscal Year:	2017		2018		2019	
Inventory Data (Units)						
Units in Being Beginning of Year	109		109		111	
Units in Being at End of Year	109		111		111	
Average Inventory for Year	109		110		111	
Historic Units	99		101		101	
Funding Requirements (\$000)	Total Cost (\$000)	Unit Cost (\$)	Total Cost (\$000)	Unit Cost (\$)	Total Cost (\$000)	Unit Cost (\$)
OPERATIONS (DIRECT)						
Management	23,680	N/A	28,762	N/A	35,771	N/A
Services	155	N/A	244	N/A	0	N/A
Furnishings	534	N/A	552	N/A	1,260	N/A
Miscellaneous	399	N/A	478	N/A	464	N/A
Sub-Total Direct Operations	24,768	N/A	30,036	N/A	37,494	N/A
Anticipated Reimbursements	0	0	0	N/A	0	N/A
Gross Obligations, Operations	24,768	N/A	30,036	N/A	37,494	N/A
UTILITIES (DIRECT)						
Direct Utilities	193	N/A	243	N/A	356	N/A
Anticipated Reimbursements	0	N/A	0	N/A	0	N/A
Gross Obligations, Utilities	193	N/A	243	N/A	356	N/A
MAINTENANCE (DIRECT)						
M&R Dwelling	400	N/A	600	N/A	719	N/A
M&R Ext. Utilities	38	N/A	70	N/A	80	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	438	N/A	670	N/A	799	N/A
Anticipated Reimbursements	0	N/A	0	N/A	0	N/A
Gross Obligations, Maintenance	438	N/A	670	N/A	799	N/A
GRAND TOTAL, FHO&M - Direct	25,399	N/A	30,949	N/A	38,649	N/A
Anticipated Reimbursements	0	N/A	0	N/A	0	N/A
GRAND TOTAL, FHO&M - TOA	25,399	N/A	30,949	N/A	38,649	N/A

**DEPARTMENT OF THE AIR FORCE
MILITARY FAMILY HOUSING
FISCAL YEAR 2019 BUDGET REQUEST**

USAF FY2019 PB				Fiscal Year:		2019
Family Housing Operation and Maintenance, Summary				Command:		USAF
Excludes Leased Units and Costs				Exhibit:		FH-2
US Overseas						
Fiscal Year:	2017		2018		2019	
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	1,614	N/A	1,960	N/A	1,439	N/A
Services	0	N/A	0	N/A	0	N/A
Furnishings	623	N/A	744	N/A	998	N/A
Miscellaneous	0	N/A	0	N/A	0	N/A
Sub-Total Direct Operations	2,237	N/A	2,704	N/A	2,437	N/A
Anticipated Reimbursements	0	N/A	0	N/A	0	N/A
Gross Obligations, Operations	2,237	N/A	2,704	N/A	2,437	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	2,237	N/A	2,704	N/A	2,437	N/A
Anticipated Reimbursements	0	N/A	0	N/A	0	N/A
GRAND TOTAL, FHO&M - TOA	2,237	N/A	2,704	N/A	2,437	N/A

**DEPARTMENT OF THE AIR FORCE
MILITARY FAMILY HOUSING
FISCAL YEAR 2019 BUDGET REQUEST**

USAF FY2019 PB				Fiscal Year: 2019	
Family Housing Operation and Maintenance, Summary				Command: USAF	
Excludes Leased Units and Costs				Exhibit: FH-2	
Foreign					
Fiscal Year:	2017		2018		2019
Inventory Data (Units)					
Units in Being Beginning of Year	17,513		16,891		15,056
Units in Being at End of Year	16,891		15,056		14,946
Average Inventory for Year	17,202		15,974		15,001
Historic Units	0		0		0
	Total Cost	Unit Cost	Total Cost	Unit Cost	Total Cost Unit Cost
Funding Requirements (\$000)	(\$000)	(\$)	(\$000)	(\$)	(\$000) (\$)
OPERATIONS (DIRECT)					
Management	18,782	1,092	22,742	1,424	17,213 1,147
Services	8,273	481	13,273	831	13,669 911
Furnishings	27,323	1,588	28,128	1,761	28,388 1,892
Miscellaneous	1,340	78	1,361	85	1,707 114
Sub-Total Direct Operations	55,719	3,239	65,504	4,101	60,977 4,065
Anticipated Reimbursements	202	12	735	46	735 49
Gross Obligations, Operations	55,921	3,251	66,239	4,147	61,712 4,114
UTILITIES (DIRECT)					
Direct Utilities	28,733	1,670	47,261	2,959	48,210 6,124
Anticipated Reimbursements	406	24	1,477	92	1,477 98
Gross Obligations, Utilities	29,139	1,694	48,738	3,051	49,687 6,222
MAINTENANCE (DIRECT)					
M&R Dwelling	90,031	5,234	99,762	6,245	96,359 6,424
M&R Ext. Utilities	12,608	733	13,971	875	13,494 900
M&R Other Real Property	16,337	950	18,102	244	17,484 1,166
Alter & Add.	1,520	88	1,684	3	1,627 108
Sub-Total Direct Maintenance	120,496	7,005	133,519	7,367	128,964 8,597
Anticipated Reimbursements	963	56	3,503	219	3,503 234
Gross Obligations, Maintenance	121,459	7,061	137,022	7,586	132,467 8,831
GRAND TOTAL, FHO&M - Direct	204,948	11,914	246,284	14,427	238,151 18,786
Anticipated Reimbursements	1,571	91	5,715	358	5,715 381
GRAND TOTAL, FHO&M - TOA	206,519	12,006	251,999	14,784	243,866 15,745

**DEPARTMENT OF THE AIR FORCE
MILITARY FAMILY HOUSING
FISCAL YEAR 2019 BUDGET REQUEST**

Summary of Historic Housing Detail				
Fiscal Year:		2017	2018	2019
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	0
c. Maintenance and Repair Costs (\$000)		974	974	974
d. Total Historic Maintenance, Repair, Improvements (\$000)		974	974	974
e. Average Cost Per Unit (\$000)		12	12	12
2. Historic Housing Costs, GOQ Data				
a. Number of GOQ units on NHRP (Inventory)		21	23	23
b. Improvement Costs (\$000)		0	0	0
c. Maintenance and Repair Costs (\$000)		305	334	334
d. Total Historic Maintenance, Repair, Improvements (\$000)		305	334	334
e. Average Cost Per Unit (\$000)		15	15	15
3. Total Historic Inventory & Costs (Non-GOQ & GOQ)				
a. Number of Non-GOQ and GOQ units on NHRP (Inventory)		99	101	101
b. Improvement Costs (\$000)		0	0	0
c. Maintenance and Repair Costs (\$000)		1,279	1,308	1,308
d. Total Historic Maintenance, Repair, Improvements (\$000)		1,279	1,308	1,308
e. Average Cost Per Unit (\$000)		13	13	13

**DEPARTMENT OF THE AIR FORCE
MILITARY FAMILY HOUSING
FISCAL YEAR 2019 BUDGET REQUEST**

**Family Housing Operation and Maintenance Reprogramming Actions
(\$ in Thousands)
as of 30 Sep 2017**

	FY 2017 Appropriation	Funds Reprogrammed	Percent Reprogrammed	FY 2017 End of Year
Utilities	37,241	-6,962	-18.70%	30,279
Operations				
Management	42,919	3,442	8.02%	46,361
Services	13,026	-3,779	-29.01%	9,247
Furnishings	31,690	-2,655	-8.38%	29,035
Miscellaneous	1,745	-17	-0.95%	1,728
Leasing	20,530	-7,911	-38.54%	12,619
Maintenance	85,469	39,344	46.03%	124,813
Debt	0	0	0.00%	0
Privatization	41,809	-21,461	-51.33%	20,348
Foreign Currency	0	3,000	N/A	3,000
Total	274,429	3,000		277,429

**DEPARTMENT OF THE AIR FORCE
MILITARY FAMILY HOUSING
FISCAL YEAR 2019 BUDGET REQUEST**

RECONCILIATION OF INCREASES AND DECREASES

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 2018 President's Budget Request:	\$53,464
2.	FY 2018 Appropriated Amount:	\$53,464
3.	FY 2018 Current Estimate:	\$53,464
4.	Price Growth:	\$959
	a. General Inflation (1.7%)	\$819
	b. Foreign Currency Adjustments	\$311
	c. Civilian Pay Adjustments	-\$171
5.	FY 2019 Budget Request:	\$54,423

Analysis of Changes in Management

The pricing changes for inflation and foreign currency drove the increase to Management.

**DEPARTMENT OF THE AIR FORCE
MILITARY FAMILY HOUSING
FISCAL YEAR 2019 BUDGET REQUEST**

RECONCILIATION OF INCREASES AND DECREASES

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 2018 President's Budget	\$13,517
2.	FY 2018 Appropriated Amount:	\$13,517
3.	FY 2018 Current Estimate	\$13,517
4.	Price Growth:	\$152
	a. General Inflation (1.7%)	\$115
	b. Foreign Currency Adjustments	\$37
5.	FY 2019 Budget Request:	\$13,669

Analysis of Changes in Services

The price change for FY 2019 is due to inflation and changes in foreign currency rates.

**DEPARTMENT OF THE AIR FORCE
MILITARY FAMILY HOUSING
FISCAL YEAR 2019 BUDGET REQUEST**

RECONCILIATION OF INCREASES AND DECREASES

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 2018 President's Budget Request:	\$29,424
2.	FY 2018 Appropriated Amount:	\$29,424
3.	FY 2018 Current Estimate:	\$29,424
4.	Price Growth:	\$1,221
	a. General Inflation (1.7%)	\$501
	b. Foreign Currency Adjustments	\$855
	c. Civilian Pay Adjustments	-\$135
5.	FY 2019 Budget Request:	\$30,645

Analysis of Changes in Furnishings

The pricing changes for inflation and foreign currency drove the increase to Furnishings.

**DEPARTMENT OF THE AIR FORCE
MILITARY FAMILY HOUSING
FISCAL YEAR 2019 BUDGET REQUEST**

RECONCILIATION OF INCREASES AND DECREASES

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 2018 President's Budget Request:	\$1,839
2.	FY 2018 Appropriated Amount:	\$1,839
3.	FY 2018 Current Estimate:	\$1,839
4.	Price Growth:	\$332
	a. General Inflation (1.7%)	\$19
	b. Foreign Currency Adjustments	\$313
5.	FY 2019 Budget Request:	\$2,171

Analysis of Changes in Miscellaneous

The price growth is due to inflation and changes in foreign currency rates.

**DEPARTMENT OF THE AIR FORCE
MILITARY FAMILY HOUSING
FISCAL YEAR 2019 BUDGET REQUEST**

RECONCILIATION OF INCREASES AND DECREASES

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 2018 President's Budget Request:	\$47,504
2.	FY 2018 Appropriated Amount:	\$47,504
3.	FY 2018 Current Estimate:	\$47,504
4.	Price Growth:	\$1,062
	a. General Inflation (1.7%)	\$121
	b. Fuel pricing	-\$92
	c. Foreign Currency Adjustments	\$1,033
5.	FY 2019 Budget Request:	\$48,566

Analysis of Changes in Utilities

The price increase is driven by inflation and foreign currency rate changes.

**DEPARTMENT OF THE AIR FORCE
MILITARY FAMILY HOUSING
FISCAL YEAR 2019 BUDGET REQUEST**

Family Housing Summary of Utility Detail FH-10 Exhibit			
Fiscal Year:	2017	2018	2019
TOTAL COST OF UTILITIES (\$000)	28,926	47,504	48,566
UTILITY QUANTITIES			
Electricity (KwH)	225,095,488	213,406,437	218,177,354
Heating			
Gas (CF)	641,000,517	607,713,810	621,299,867
Fuel Oil			
Residuals (BBLs)			
Distillates (BBLs)	31,250	29,883	24,953
Purchased Steam (MBTU)	347,571	329,522	336,889
Heat Plants Coal Fired (MBTU)	0	0	0
Heat Plants Other Than Gas, Oil, Coal (MBTU)	0	0	0
Propane (BBLs)	15,034	14,253	14,572
Water (Kgal)	2,737,218	2,595,076	2,653,092
Sewage (Kgal)	2,473,242	2,344,808	2,397,229

**DEPARTMENT OF THE AIR FORCE
MILITARY FAMILY HOUSING
FISCAL YEAR 2019 BUDGET REQUEST**

RECONCILIATION OF INCREASES AND DECREASES

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 2018 President's Budget Request:	\$134,189
2.	FY 2018 Appropriated Amount:	\$134,189
3.	FY 2018 Current Estimate:	\$134,189
4.	Price Growth:	-\$640
	a. General Inflation (1.7%)	\$965
	b. Foreign Currency Adjustments	-\$1,605
5.	Program Decrease: Program rebalance	-\$3,786
6.	FY 2019 Budget Request:	\$129,763

**DEPARTMENT OF THE AIR FORCE
MILITARY FAMILY HOUSING
FISCAL YEAR 2019 BUDGET REQUEST**

Analysis of Changes in Maintenance:

As the Air Force meets its goals to eliminate inadequate housing, we will transition our focus from sustaining housing units to maintaining an adequate steady-state inventory. This funding amount is necessary to prevent deterioration of current housing at those installations that have not undergone housing privatization. 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, and avoid additional financial outlays in the out years.

The requirement for the FY 2019 program was developed through the AF FHMP process from historical expenditures and scheduled demolition projects. These amounts were then adjusted for a standard inflation rate of 1.7%. This account supports requirements to maintain and repair assets to prevent deterioration of the adequate inventory.

Maintenance funding is also required to sustain and repair government-owned housing referral offices to include those that support the privatized housing at CONUS installations. Overseas adequate units not requiring conversion or suitability corrections will not be replaced nor improved. They will be retained within the inventory and sustained using Family Housing O&M funds. The program decrease is driven by a rebalancing of the AF Family Housing O&M program.

**DEPARTMENT OF THE AIR FORCE
MILITARY FAMILY HOUSING
FY 2019 BUDGET REQUEST
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								
United Kingdom	RAF Croughton	21	1988	151	124	2,608	1,525	0
Provides general interior and exterior modernization and renovation of 21 housing units. Upgrades ceilings, walls and floor finishes throughout, replaces exterior doors and undertakes miscellaneous repairs specific to each unit. Completely replaces the gas heating boiler and distribution system, installs smoke and carbon Monoxide detectors. In two housing units additional works shall include installation of new wall and ceiling coverings, also replacement of kitchen and bathrooms in one unit. The units 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 accommodation.								
Japan	Kadena	24	1956	518	123	3,003	12,893	171
Repair a total of 24 MFH units at North Terrace, Kadena Air Base. Work to include but is not limited to restoration and repair of Building System: (Electrical Systems, Environmental, Exterior Structure, Fire and Life Safety, Interior Structure, Mechanical Systems, Plumbing Systems and Roof Structure); Lot (Landscape, Pavement and Trash Enclosure); Space (Bathrooms, Bedrooms, Dining Room, Family Rooms, Foyer, Hallway, Interior Storage, Kitchen, Laundry, Linen Closet, Living Room, Exterior storage, Mechanical Room, Patio and Porch).								
Japan	Kadena	22	1964	332	133	2,931	7,653	183
Repair 22 MFH units at Plaza, Camp Foster Okinawa (twenty-two FGO 4 BR). Work to include but is not limited to restoration and repair of: Building System: (Electrical Systems, Environmental, Exterior Structure, Fire and Life Safety, Interior Structure, Mechanical Systems and Plumbing Systems); Lot (Utilities); Space (Bathrooms, Bedrooms, Dining Room, Exterior Storage, Foyer, Hallway, Interior Storage, Kitchen, Laundry Room, Living Room, Mechanical Room and Porch).								

**DEPARTMENT OF THE AIR FORCE
MILITARY FAMILY HOUSING
FY 2019 BUDGET REQUEST
Non-GOQ Units Exceed \$20,000 Threshold**

Location	Base	Number of Units	Year Built	High Unit Cost (\$000)	Unit (NSM)	Project (NSM)	Total Cost (\$000)	Significant O&M FY2014-2018 (\$000)
Japan	Misawa	68	1995	497	123	8,364	33,800	43
Repair 68 apartment units in high-rise MFH Tower 117, Misawa AB (sixty-eight JNCO 3BR). Work to include but is not limited to restoration and repair of: Building System: (Electrical Systems, Environmental, Exterior Structure, Roof structure, Windows, Communications Systems, Life Safety, Interior Structure, Mechanical Systems and Plumbing Systems; Lot (Utilities, Parking); Space (Bathrooms, Bedrooms, Kitchen, Living Room, Common Area hallways, stairwells, trash room, basement storage); Steam-sourced domestic hot water will be replaced with energy efficient electric heat-pump. Project includes utility upgrades to meet current standards including installation of Ground Fault Circuit Interrupter protection as required. This project will address life, health, safety deficiency by correcting fire suppression capabilities.								
Japan	Kadena	172	1964	22	113	17,644	3,784	0
Repair exterior on 172 Seville Manor MFH units on Kadena AB (128 3 BR Townhomes and 44 4BR Duplexes). Work to include repainting exterior of the homes and extending the life of the roof by applying elasomeric waterproof coating. Roof and exterior paint has exceeded its scheduled lifecycle replacement for these units.								
Ohio	Wright-Patterson	60	1935	300	160	11,040	12,902	0
Repair 60 non-key essential units in the brick quarters housing area. Work repairs the exterior lintels over the windows and door, including spot repair of masonry around the lintels to prevent failing lintels from damaging the structural integrity of the exterior brick walls. In addition, work repair to the slate/tile roofs, including underlayment, asbestos roofing material abatement, flashings, and replaces the gutters and downspourts. Work is required to preserve the roof structure to prevent water damage to interior finishes, utilities, and contents of the units.								

Department of the Air Force
General and Flag Officers' Homes
Anticipated Operations and Maintenance Expenditures Exceeding \$35K per Unit for Fiscal Year 2019
(Dollars in Thousands)

State/Country	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										
Japan	Kadena AB	164 Arnold Terrace	1953	3,528	\$0.5	\$9.9	\$987.9	\$3.9	\$0.0	\$0.0	\$977.5	\$29.4
		Repair Qtrs 164, GOQ 4BR, Single Family home at Arnold Terrace, Kadena Air Base from inadequate status to adequate. Work to include but is not limited to restoration and repair of: Building System (Electrical Systems, Environmental, Exterior Structure, Fire and Life Safety, Interior Structure, Mechanical Systems, Plumbing Systems and Roof Structure); Lot (Utilities); Space (Bathrooms, Bedrooms, Dining Room, Exterior Storage, Family Room, Foyer, Garage (detached), Hallways, Storage, Kitchen, Laundry Room, Closets, Living Room and Patio).										
Japan	Yokota AB	693 Kenney Court	1975	2,869	\$0.4	\$1.7	\$614.1	\$3.1	\$0.0	\$0.0	\$612.0	\$16.8
		Repair Qtrs 693, GOQ 4BR, Single Family home on Kenney Court, Yokota Air Base from inadequate status to adequate. Work to include but is not limited to restoration and repair of: Building System (Electrical Systems, Environmental, Exterior Structure, Fire and Life Safety, Interior Structure, Mechanical Systems, Fire and Life Safety, Plumbing Systems and Roof Structure); Lot (Trash Enclosure); Space (Bathrooms, Bedrooms, Dining Rooms, Exterior Storage, Family Room, Foyer, Hallways, Storage, Kitchen, Laundry Room, Closets, Living Room, Garage and Porch).										
TOTAL:	2 GOQ Units				\$0.9	\$11.6	\$1,602.0	\$7.0	\$0.0	\$0.0	\$1,589.5	\$46.2

**DEPARTMENT OF THE AIR FORCE
MILITARY FAMILY HOUSING
FISCAL YEAR 2019 BUDGET REQUEST**

United States Air Force Privatized General and Flag Officers' Quarters Operation, Maintenance and Repair Costs Incurred by Private Sector Developer/Partner/Owner Exceeding \$50K per Housing Unit for Fiscal Year 2017 (Dollars in Thousands)							
State/Country	Installation	Quarters ID	Year Built	Size NSF	Operations Cost (Note 1)	Maintenance & Repair Cost (Note 4)	Total FH O&M Cost
Florida	Macdill AFB	8203 Atlas Avenue * +	2009	2,815	60.2	7.7	67.9
Texas	JBSA-Randolph	12 East Park *	1931	2,664	3.4	58.0	61.4
Oklahoma	Tinker	3001 Spaatz Court *	2012	4,061	3.1	53.3	56.4
Alaska	JBER	63 Birch Hill *	2007	3,853	25.5	29.2	54.7
Colorado	Air Force Academy	6776 Carlton Drive *	1930	10,846	18.8	42.2	61.0
Louisiana	Barksdale	201 Hap Arnold *	1933	3,132	7.7	57.5	65.2
Total					118.7	247.9	366.6
Exhibit FH-12 Privatized GFOQ Private Sector Costs Exceeding \$50K Notes: (1) The Asterisk (*) next to the Quarters ID indicates some Utility Costs are included as part of Operation Costs. (2) The Plus (+) next to the Quarters ID indicates temporary GO furnished unit (3) Maintenance & Repair includes Capital Repair & Replacement and Reinvestment Costs (4) This annual report complies with the FY2009 National Defense Authorization Act (NDAA), amended Section 2805 requirement.							

**DEPARTMENT OF THE AIR FORCE
MILITARY FAMILY HOUSING
FISCAL YEAR 2019 BUDGET REQUEST**

Reimbursement. 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 2018 President's Budget Request:	\$5,715
2.	Congressional Adjustments:	None
3.	FY 2018 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 2018 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 2019 Budget Request:	\$5,715

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**DEPARTMENT OF THE AIR FORCE
MILITARY FAMILY HOUSING
FISCAL YEAR 2019 BUDGET REQUEST**

LEASING

Budget Request (\$ in Thousands)

FY 2019 Budget Request \$15,832

FY 2018 Budget Request \$16,818

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 2019. The FY 2019 request for family housing leasing points is summarized as follows:

		<u>FY 17</u>		<u>FY 18</u>		<u>FY 19</u>	
	<u>Lease Pts</u>	<u>Used</u>	<u>Cost</u> <u>(\$000)</u>	<u>Used</u>	<u>Cost</u> <u>(\$000)</u>	<u>Used</u>	<u>Cost</u> <u>(\$000)</u>
Foreign	8,988	342	\$11,806	296	\$16,371	149	\$15,376
Domestic	3,333	2	\$50	15	\$447	15	\$456
Total	12,321	344	\$11,856	311	\$16,818	164	\$15,832

**DEPARTMENT OF THE AIR FORCE
MILITARY FAMILY HOUSING
FISCAL YEAR 2019 BUDGET REQUEST**

Foreign Leasing

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

**DEPARTMENT OF THE AIR FORCE
MILITARY FAMILY HOUSING
FISCAL YEAR 2019 BUDGET REQUEST**

RECONCILIATION OF INCREASES AND DECREASES

EXHIBIT OP-5

Leasing

(\$ in Thousands)

1.	FY 2018 President's Budget Request:		\$16,818
2.	FY 2018 Appropriated Amount:		\$16,818
3.	FY 2018 Current Estimate:		\$16,818
4.	Price Growth:		\$2,104
	a. General Inflation (1.7%)	\$193	
	b. Foreign Currency Adjustments	\$1,911	
5.	Program Decreases:		-\$3,090
	a. Divestiture of foreign leases at RAF Lakenheath	-\$3,090	
6.	FY 2019 Budget Request:		\$15,832

Analysis of Changes in Leasing:

The program decrease in FY 2019 is due to the final divestiture of the Lord's Walk Build-to-Lease units at RAF Lakenheath.

**DEPARTMENT OF THE AIR FORCE
MILITARY FAMILY HOUSING
FISCAL YEAR 2019 BUDGET REQUEST
FH-4 ANALYSIS OF LEASED UNITS
(Other than Section 801)**

LOCATION	FY 17			FY 18			FY 19		
	# 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	24	\$50	15	180	\$447	15	180	\$456
Unassigned	3,331	0	\$0	3,318	0	\$0	3,318	0	\$0
TOTAL DOMESTIC LEASES	3,333	24	\$ 50	3,333	180	\$447	3,333	180	\$ 456
FOREIGN LEASES									
Department of State (\$2834):									
Abu Dhabi, UAE	8	96	\$448	22	264	\$2,420	22	264	\$2,430
Amman, Jordan	4	48	\$280	7	84	\$560	7	84	\$571
Bangkok, Thailand	1	12	\$60	1	12	\$60	1	12	\$61
Bogotá, Colombia	1	12	\$50	1	12	\$50	1	12	\$51
Brasilia, Brazil	2	24	\$181	2	24	\$185	2	24	\$189
Bucharest, Romania	1	12	\$58	1	12	\$60	1	12	\$61
Cairo, Egypt	2	24	\$173	3	36	\$270	3	36	\$275
Chiang Mai, Thailand	4	48	\$157	4	48	\$160	4	48	\$163
Classified Location	2	24	\$160	3	36	\$245	3	36	\$250
Copenhagen, Denmark	2	24	\$180	2	24	\$180	2	24	\$183
Doha, Qatar	2	24	\$167	2	24	\$170	2	24	\$173
Manama, Bahrain	0	0	\$0	1	12	\$65	1	12	\$66
Mexico City, Mexico	9	108	\$720	18	216	\$1,528	18	216	\$1,559
Muscat, Oman	1	12	\$84	1	12	\$84	1	12	\$86
Nassau, Bahamas	2	24	\$137	2	24	\$140	2	24	\$143
Oslo, Norway	0	0	\$0	1	12	\$80	1	12	\$82
Paris, France	6	72	\$620	6	72	\$630	6	72	\$642
Rabat, Morocco	1	12	\$85	0	0	\$0	0	0	\$0
Sofia, Bulgaria	0	0	\$0	3	36	\$240	3	36	\$244
Tel Aviv, Israel	0	0	\$0	2	24	\$160	2	24	\$163
Vienna, Austria	0	0	\$0	0	0	\$0	0	0	\$0
Vilnius, Lithuania	0	0	\$0	3	36	\$240	3	36	\$244
DoS Subtotal	48	576	\$ 3,560	85	1,020	\$ 7,527	85	1,020	\$ 7,636
AF Foreign Leases (\$2828):									
Doha, Qatar	34	420	\$2,436	36	432	\$3,060	36	432	\$3,119
Aviano, Italy	10	120	\$416	25	300	\$1,040	25	300	\$1,060
Geilenkirchen, Germany	0	0	\$0	2	24	\$165	2	24	\$168
Istanbul, Turkey	0	0	\$0	0	0	\$0	0	0	\$0
Izmir, Turkey	1	12	\$45	0	0	\$0	0	0	\$0
RAF Lakenheath UK	248	2,436	\$5,239	147	1,776	\$4,479	0	0	\$0
Stavanger, Norway	1	12	\$110	1	12	\$100	1	12	\$102
AF Foreign Leases Subtotal	294	3,000	\$ 8,246	211	2,544	\$ 8,844	64	768	\$ 4,449
Unassigned	8,646	0	\$0	8,692	0	\$0	8,691	0	\$3,291
TOTAL FOREIGN LEASES	8,988	3,576	\$11,806	8,988	3,564	\$16,371	8,840	1,788	\$15,376
GRAND TOTAL FH-4	12,321	3,600	\$11,856	12,321	3,744	\$16,818	12,173	1,968	\$15,832

**DEPARTMENT OF THE AIR FORCE
MILITARY FAMILY HOUSING
FISCAL YEAR 2019 BUDGET REQUEST**

**FH-4A ANALYSIS OF HIGH COST LEASED UNITS
(Other than Section 801)**

LOCATION	FY19 TOTAL LEASES PER LOCATION	FY17			FY18			FY19		
		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	\$29,646	\$0	0	\$30,414	\$0	0	\$	\$0
Sub-Total Domestic High-cost	0	0		\$0	0		\$0	0		\$0
FOREIGN LEASES										
Doha, Qatar	36	34	\$51,161	\$2,436	36	\$51,161	\$3,060	36	\$51,161	\$3,119
Aviano, Italy	1	10	\$51,161	\$416	25	\$51,161	\$1,040	25	\$51,161	\$1,060
Geilenkirchen, Germany	2	0	\$51,161	\$0	2	\$51,161	\$165	2	\$51,161	\$168
Istanbul, Turkey	0	0	\$51,161	\$0	0	\$0	\$0	0	\$0	\$0
Izmir, Turkey	0	1	\$51,161	\$45	0	\$0	\$0	0	\$0	\$0
Stavanger, Norway	1	1	\$51,161	\$110	1	\$51,161	\$100	1	\$51,161	\$102
Sub-Total Foreign High-cost	40	46		\$3,007	64		\$4,365	64		\$4,449
GRAND TOTAL FH-4A	40	46		\$3,007	64		\$4,365	64		\$4,449

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**DEPARTMENT OF THE AIR FORCE
MILITARY FAMILY HOUSING
FISCAL YEAR 2019 BUDGET REQUEST**

FAMILY HOUSING PRIVATIZATION

Budget Request (\$ in Thousands)
FY 2019 Budget Request \$22,205
FY 2018 Budget Request \$21,569

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 53,239 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 approximately 21,500 new homes and 12,300 renovated homes, in addition to the 16,500 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 FY2019 funding request provides \$22,205 for portfolio oversight and asset management. This program funds all costs related to family housing privatization, to include civilian pay for portfolio management personnel, travel, contracts for environmental assessments, financial consultant services, project construction oversight, and training. This funding ensures the Air Force maintains oversight and accountability and fulfills reporting requirements mandated in Title 10, United States Code, Section 2885. In addition, long-term project oversight is essential to ensuring the Air Force continues to receive quality housing from the privatized housing project owners.

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**DEPARTMENT OF THE AIR FORCE
MILITARY FAMILY HOUSING
FISCAL YEAR 2019 BUDGET REQUEST**

RECONCILIATION OF INCREASES AND DECREASES

EXHIBIT OP-5

Housing Privatization

(\$ in Thousands)

1.	FY 2018 President's Budget Request:		\$21,569
2.	FY 2018 Appropriated Amount:		\$21,569
3.	FY 2018 Current Estimate:		\$21,569
4.	Price Growth:		\$636
	a. General Inflation (1.7%)	\$268	
	b. Civilian Pay Adjustment	-\$27	
5.	FY 2019 Budget Request:		\$22,205

Analysis of Changes in Privatization:

The price increase is attributed to inflation.

DEPARTMENT OF THE AIR FORCE
Exhibit FH-6 Family Housing Privatization Comparison
FISCAL YEAR 2019

Privatization Date ¹	MHPI Project Name ²	Installation/State ³	Approved by OSD & OMB ⁴						Actual/Current ⁴							MHPI Author-ities ¹³
			No. Units Conveyed ⁵	No. End State Units ⁵	Funding Source ⁶				No. Units Conveyed ⁹	End State Units ¹⁰	Total No. Units in Current Inventory ¹¹	Funding Source ⁶				
					Amount (\$M) ^{7a}	Budget Year(s) ^{7b}	Type of Funds ^{7c}	Source Project Name ^{7d}				Amount (\$M) ¹²	Budget Year(s) ¹²	Type of Funds ¹²	Source Project Name ¹²	
Aug-98	Lackland I	Lackland AFB, TX (Ph I)	272	420	6.200	96 97	Construction Construction	Lackland Lackland SIOH	272	420	420	6.161	96 97	Construction Construction	Lackland Lackland SIOH	1, 4
Sep-00	Robins I	Robins AFB, GA (Ph I)	670	670	12.800	98 97	Construction Construction	Robins Replace MFH Ph 4 (60) Dyess Construct MFH Ph 1 (70)	670	670	670	12.624	98 97	Construction Construction	Robins Replace MFH Ph 4 (60) Dyess Construct MFH Ph 1 (70)	1, 4
Sep-00	Dyess	Dyess AFB, TX	0	402	16.300	99 98	Construction Construction	Dyess-Construct MFH Ph 2 (64) Dyess-Construct MFH Ph 1 (70)	0	402	402	16.269	99 98	Construction Construction	Dyess-Construct MFH Ph 2 (64) Dyess-Construct MFH Ph 1 (70)	1
Mar-01	Elmendorf I	Elmendorf AFB, AK (Ph I)	584	828	23.304	98	Improvement	Elmendorf-Improve MFH Ph 9 (82 units) HRSO to FHIF	584	828	828	23.304	98	Improvement	Elmendorf-Improve MFH Ph 9 (82 units) HRSO to FIFH	1, 4
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	02 99	Improvement Construction	Hickam-Privatize MFH Wright Patterson-Replace 40 Units	1, 4
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 02 99	Construction Construction Construction	Travis - Replace MFH Ph 1 Mountain Home-Replace MFH 56 Units Kirtland-Replace MFH Ph 5 (37)	1, 4
Aug-04	Buckley	Buckley AFB, CO	0	351	15.619	04 02	Improvement Construction	Hickam - Improve 190 MFH Buckley-Privatize MFH	0	351	351	17.893	04 02	Improvement Construction	Hickam - Improve 190 MFH Buckley-Privatize MFH	1, 4
Sep-04	Elmendorf II	Elmendorf AFB, AK (Ph II)	986	1,194	41.496	03 02	Improvement Improvement	Elmendorf-192 Ph 11 Improve Elmendorf-Privatize MFH	986	1,194	1,194	41.496	03 02	Improvement Improvement	Elmendorf-192 Ph 11 Improve Elmendorf-Privatize MFH	1, 3, 4
Feb-05	Hickam I	Hickam AFB, HI (Ph I)	1,356	1,356	4.194	02	Improvement	Hickam Privatize MFH	1,356	1,356	1,356	4.185	02	Improvement	Hickam Privatize MFH	1, 4
Sep-05	Offutt	Offutt AFB, NE	2,600	1,640	12.568	01	Improvement	Offutt Privatize MFH	2,600	1,640	1,954	12.568	01	Improvement	Offutt Privatize MFH	1, 4
Sep-05	Hill	Hill AFB, UT	1,138	1,018	11.280	05 01	Improvement Improvement	Davis-Monthan, Repair MFH Ph 6 Hill, Privatize MFH	1,138	1,018	1,082	11.656	05 01	Improvement Improvement	Davis-Monthan, Repair MFH Ph 6 Hill, Privatize MFH	1, 4
Sep-05	Dover	Dover AFB, DE	1,488	980	12.425	05 04	Improvement Construction	Fairchild AFB - Privatize MFH Dover, Repl 112 MFH Ph 3	1,488	980	980	12.278	05 04	Improvement Construction	Fairchild AFB - Privatize MFH Dover, Repl 112 MFH Ph 3	1, 4
Jan-06	Scott	Scott AFB, IL	1,430	1,593	0.000	N/A	N/A	N/A	1,430	1,593	1,593	0.000	N/A	N/A	N/A	1, 4
May-06	Nellis	Nellis AFB, NV	1,278	1,178	1.827	05 02	Improvement Improvement	Holloman - Privatize MFH Nellis - Privatize MFH	1,278	1,178	1,178	1.827	05 02	Improvement Improvement	Holloman - Privatize MFH Nellis - Privatize MFH	1, 4
Sep-06	McGuire	McGuire AFB/Ft. Dix, NJ	2,364	2,083	7.569	02	Improvement	McGuire Privatize MFH	2,364	2,084	2,212	5.270	02	Improvement	McGuire Privatize MFH	1, 4
Feb-07	AETC Group I	Altus AFB, OK	883	530	6.244	04	Improvement	Sheppard Privatize 1,288 MFH	883	530	530	6.244	04	Improvement	Sheppard Privatize 1,288 MFH	1, 4
		Luke AFB, AZ	690	550					690	550						
		Sheppard AFB, TX	1,167	714					1,167	714						
		Tyndall AFB, FL	848	813					848	813						
		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	Improvement	AF Academy Privatize 445 Units	1, 4
Jul-07	ACC Group II	Davis-Monthan AFB, AZ	1,256	929	27.922	05	Construction	Davis-Monthan AFB - Replace FH Ph 6	1,256	961	1,174	27.922	05	Construction	Davis-Monthan AFB - Replace FH Ph 6	1, 4
		Holloman AFB, NM	1,009	909		05	Construction	MacDill Replace FH Ph 6	929	923	1,075		05	Construction	MacDill Replace FH Ph 6	
		ACC Group II Total:	2,265	1,838		05	Improvement	Holloman, Privatize Family Housing	2,185	1,884	2,249		05	Improvement	Holloman, Privatize Family Housing	
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	4
Sep-07	Tri-Group	Los Angeles AFB, CA	617	572	19.950	06	Improvement	Fort MacArthur - Improve 188 Units	617	613	613	19.945	06	Improvement	Fort MacArthur - Improve 188 Units	2, 4
		Peterson AFB, CO	493	723		06	Improvement	Peterson, Privatize 1,132 Units	493	669	669		06	Improvement	Peterson, Privatize 1,132 Units	
		Schriever AFB, CO	0	269					0	242	242					
				Tri-Group Total:		1,110	1,564						1,110	1,524	1,524	
Sep-07	BLB	Barksdale AFB, LA	729	1,090	15.300	06 05	Improvement Improvement	Bolling, Improve 24 Units Barksdale, Imp MFH Ph 1	723	1,090	1,090	15.231	06 05	Improvement Improvement	Bolling, Improve 24 Units Barksdale, Imp MFH PH 1	1, 4
		Joint Base Anacostia-Bolling (Bolling), MD	1,343	669		05	Improvement	Langley, Improve Electrical System	1,343	672	850		05	Improvement	Langley, Improve Electrical System	
		Joint Base Langley-Eustis (Langley), VA	1,496	1,430		03	Construction	Eglin, 234 MFH Ph 2A	1,496	1,430	1,430		03	Construction	Eglin, 234 MFH Ph 2A	
		BLB Total:	3,568	3,189		03	Improvement	Eglin - Hurlburt 213 MFH Improvement	3,562	3,192	3,370		03	Improvement	Eglin - Hurlburt 213 MFH Improvement	
Oct-07	Robins II	Robins AFB, GA (Ph II)	563	207	10.600	05	Improvement	FY 05 Robins, Improve Family Housing	558	207	254	10.600	05	Improvement	FY 05 Robins, Improve Family Housing	2, 4
Oct-07	AETC Group II	Columbus AFB, MS	518	453	59.000	06	Improvement	Andrews-Improve 178 Units	517	453	453	59.000	06	Improvement	Andrews-Improve 178 Units	2, 4
		Goodfellow AFB, TX	98	241		05	Improvement	Randolph, Construct MFH Ph 1	98	241	241		05	Improvement	Randolph, Construct MFH Ph 1	
		Laughlin AFB, TX	534	516		05	Construction	Davis-Monthan, Repair MFH Ph 6	534	451	451		05	Construction	Davis-Monthan, Repair MFH Ph 6	
		Maxwell AFB, AL	729	501		03	Construction	Hurlburt, 134 MFH Ph 2A	723	501	513		03	Construction	Hurlburt, 134 MFH Ph 2A	
		JBSA-Randolph, TX	397	317		03	Improvement	Eglin - Hurlburt 213 MFH Improvement	397	317	317		03	Improvement	Eglin - Hurlburt 213 MFH Improvement	
		Vance AFB, OK	230	229					230	242	242					
		AETC Group II Total:	2,506	2,257					2,499	2,205	2,217					

DEPARTMENT OF THE AIR FORCE
Exhibit FH-6 Family Housing Privatization Comparison
FISCAL YEAR 2019

Privatization Date ¹	MHPI Project Name ²	Installation/State ³	Approved by OSD & OMB ⁴						Actual/Current ⁴							MHPI Author-ities ¹³
			No. Units Conveyed ⁵	No. End State Units ⁵	Funding Source ⁶				No. Units Conveyed ⁹	End State Units ¹⁰	Total No. Units in Current Inventory ¹¹	Funding Source ⁶				
					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	
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	1, 4
Nov-07	AMC East	Andrews AFB, MD	1,480	887	0.000	N/A	N/A	N/A	1,466	933	1,143	0.000	N/A	N/A	N/A	2, 4
		MacDill AFB, FL	752	571					752	572	572					
		AMC East Total:	2,232	1,458					2,218	1,505	1,715					
Jul-08	AMC West	Fairchild AFB, WA	1,055	641	28.190	04	Construction Improvement	Tinker, Privatize 730 MFH Sheppard, Privatize 1,288 Units FHIF Funds	1,055	641	641	28.190	04	Construction Improvement	Tinker, Privatize 730 MFH Sheppard, Privatize 1,288 Units FHIF Funds	1, 4
		Tinker AFB, OK	694	660					694	660	660					
		Travis AFB, CA	2,187	1,134					1,094	1,134	1,273					
		AMC West Total:	3,936	2,435					2,843	2,435	2,574					
Nov-08	Falcon Group	Hanscom AFB, MA	726	746	15.723	02	Improvement	Hickam - Privatize MFH Moody MFH Privatization Travis - Replace 64 Units Little Rock - Privatize MFH	726	731	731	15.723	02	Improvement	Hickam - Privatize MFH Moody MFH Privatization Travis - Replace 64 Units Little Rock - Privatize MFH	1, 4
		Little Rock AFB, AR	1,295	999					1,295	991	991					
		Moody AFB, GA	303	256					303	287	287					
		Patrick AFB, FL	991	616					991	616	616					
		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, 4
Jun-11	JBER	JB Elmendorf-Richardson	1242	1240	36.800	11	Improvement	Army Funds Transferred	1,242	1,240	1,240	36.798	11	Improvement	Army Funds Transferred	1, 4
Sep-11	Southern Group	Arnold AFB, TN	40	22	23.354	07	Construction	Mountain Home - Replace 457 MFH	40	22	22	23.354	07	Construction	Mountain Home - Replace 457 MFH	1, 4
		Charleston AFB, SC	478	345					478	345	599					
		Keesler AFB, MS	1,188	1,188					1,188	1,188	1,188					
		Shaw AFB, SC	681	630					679	630	633					
		Southern Group Total:	2,387	2,185					2,385	2,185	2,442					
Mar-12	Western Group	Beale AFB, CA	884	509	20.053	07 05 04 03	Construction FHIF FHIF FHIF	Mountain Home - Replace 457 MFH Beale Beale Beale	683	509	509	20.053	07 05 04 03	Construction FHIF FHIF FHIF	Mountain Home - Replace 457 MFH Beale Beale Beale	1, 4
		F.E. Warren AFB, WY	831	749					831	749	749					
		Malmstrom AFB, MT	1,412	1,116					1,168	1,116	1,116					
		Whiteman AFB, MO	920	890					920	890	890					
		Western Group Total:	4,047	3,264					3,602	3,264	3,264					
Aug-13	Northern Group	Cannon AFB, NM	763	1,038	37.813	09	Improvement	Kadena - Improve 614 MFH (Ph 9) Misawa - Improve 370 MFH (Ph 4)	763	1,038	993	37.576	09	Improvement	Kadena - Improve 614 MFH (Ph 9) Misawa - Improve 370 MFH (Ph 4)	1, 4
		Cavalier AFB, ND	14	14					14	14	14					
		Ellsworth AFB, SD	283	497					283	497	497					
		Grand Forks AFB, ND	833	547					833	547	547					
		Minot AFB, ND	1,746	1,606					1,746	1,606	1,606					
		Mountain Home AFB, ID	956	844					956	844	844					
		Northern Group Total:	4,595	4,546					4,595	4,546	4,501					
Sep-13	Continental Group	Edwards AFB, CA	741	741	82.610	09	Improvement	Mountain Home - Replace 457 MFH Kadena - Improve 614 MFH (Ph 9) Yokota - Improve 350 MFH (Ph 7) Misawa - Improve 370 MFH (Ph 4)	741	741	741	80.181	09	Improvement	Mountain Home - Replace 457 MFH Kadena - Improve 614 MFH (Ph 9) Yokota - Improve 350 MFH (Ph 7) Misawa - Improve 370 MFH (Ph 4)	1, 4
		Eglin AFB, FL	898	747					894	747	881					
		Eielson AFB, AK	934	898					934	898	898					
		Hurlburt AFB, FL	380	404					380	404	421					
		McConnell AFB, KS	401	364					401	364	349					
		Seymour Johnson, NC	708	708					686	686	686					
		Continental Group Total:	4,062	3,862					4,036	3,840	3,976					
Sep-13	ACC Group III	Dyess AFB, TX (PH II)	674	674	9.617	09	Improvement	Yokota - Improve 350 MFH (Ph 7) Misawa - Improve 370 MFH (Ph 4)	674	674	674	6.315	09	Improvement	Yokota - Improve 350 MFH (Ph 7) Misawa - Improve370 MFH (Ph 4)	1,4
		Moody AFB, GA (PH II)	0	184					0	101	101					
		ACC Group III Total:	674	858					674	775	775					
2019 (E)	Wright-Patterson II	Wright-Patterson AFB, OH (PH II)	100	30	TBD	03 18	FHIF Improvement	Wright-Patterson Kadena AB - Improve Family Housing (Sebille Manor)	100	30	0	20.800	03 18	FHIF Improvement	Wright-Patterson Kadena AB - Improve Family Housing (Sebille Manor)	3,4
Grand Totals ¹⁴			61,983	53,361	617.796				60,304	53,267	55,858	632.133				

- NOTES:**
- 1 - The date real property is transferred (land and housing units) to private ownership/developer, and when service members become entitled to receive a Basic Allowance for Housing (BAH).
 - 2 - Provide the name of the MHPI Project given to the privatization project, including the name given to integrated/grouped projects. The MHPI project name should be consistent with the MHPI project name used in the previously approved OSD/OMB Scoring report and/or subsequent notification to Congress.
 - 3 - List the MHPI project location by installation and state, including each installation/state incorporated into the integrated/grouped MHPI project.
 - 4 - This section relates the previously-approved OSD/OMB project scope and funding amounts contained in the scoring package and/or subsequent Notification of Funds Transfer letters to Congress.
 - 5 - Provide the number of family housing units to be conveyed by installation and state to the Developer, including each installation and state incorporated into the integrated/grouped MHPI project, as previously-approved in the OSD/OMB Scoring report.
 - 6 - Provide the end state number of family housing units by installation and state to the Developer, including each installation/state incorporated into the integrated/grouped MHPI project, as previously-approved in the OSD/OMB Scoring report.
 - 7 - Provide all of the funding source information for the MHPI project as reflected in the previously-approved OSD/OMB report and consistent with the project summary details accompanying the Notification of Transfer letter to Congress, such as:
 - a. The amount of funds to be used for the Government's cost of the project (i.e., equity contribution, credit subsidy costs, differential lease payments, etc.).
 - b. The fiscal year(s) of the funding sources to be used to cover the Government's cost of the MHPI project.

DEPARTMENT OF THE AIR FORCE
Exhibit FH-6 Family Housing Privatization Comparison
FISCAL YEAR 2019

Privatization Date ¹	MHPI Project Name ²	Installation/State ³	Approved by OSD & OMB ⁴						Actual/Current ⁴						MHPI Author- ities ¹³	
			No. Units Conveyed ⁵	No. End State Units ⁵	Funding Source ⁶				No. Units Conveyed ⁹	End State Units ¹⁰	Total No. Units in Current Inventory ¹¹	Funding Source ⁶				
					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

c. The type of funds (e.g., FH New Construction, FH Construction Improvements, FH Improvement Funds) to be used to cover the Government's cost of the MHPI project.

d. The project(s) that are used to source the Government's cost of the privatization project.

8 - This section relates to the Military Departments' actual and/or current plan, which might or might not be consistent with the details contained in the previously-approved OSD/OMB Scoring report and project summary to Congress for the MHPI project due to extenuating circumstances.

9 - Provide the actual and/or revised planned number of family housing units conveyed to the Developer by installation and state, including each installation/state incorporated into the integrated/grouped MHPI project.

10 - Provide the actual and/or revised, planned number of family housing end state units by installation and state, including each installation/state incorporated into the integrated/grouped MHPI project.

11 - Provide the total number of privatized family housing units in the inventory for each MHPI project by installation/state, including each installation/state incorporated into the integrated/grouped MHPI project, regardless if they are currently occupied or not.

12 - Provide all the "actual and/or current" funding sources used to fund the MHPI project, which might or might not be consistent with the details contained in the previous-approved OSD/OMB Scoring report and project summary (i.e., project amount, budget year of funds, source project, appropriation) to Congress for the MHPI project due to extenuating circumstances. If possible and/or available, please provide the requested funding information by installation/state.

13 - Provide the applicable MHPI authorities in subchapter IV of Chapter 169 in title 10 U.S.C. was used and/or proposed to be used for the privatization project. Designators are as follows:

1 = 10 USC 2873 - Government Direct Loans

2 = 10 USC 2873 - Loan Guarantees

3 = 10 USC 2875 - Investments, such as DoD Equity Contributions in non-governmental entities

4 = 10 USC 2877 - Differential Lease Payments

5 = 10 USC 2878 - Conveyance or Lease of Existing Property and Facilities

14 - Totals of number of units conveyed, number of end state units, and funding amounts.

FOREIGN CURRENCY EXCHANGE DATA
FY 2019 Budget Request
(\$ in Thousands)

MFH O&M		FY 2017		FY 2018		FY 2019	
Country	Local Currency	Budget Exchange Rates	\$ U.S. Requiring Conversion	Budget Exchange Rates	\$ U.S. Requiring Conversion	Budget Exchange Rates	\$ U.S. Requiring Conversion
Denmark	Krone	6.7076		6.9385		6.3847	
European Comm	Euro	0.8990	\$ 38,007	0.9329	\$ 42,602	0.8582	\$ 45,476
Japan	Yen	122.4519	\$ 90,113	111.3365	\$ 118,249	111.5938	\$ 115,893
Norway	Krone	8.1758	\$ -	8.4115	\$ -	8.0858	\$ -
Singapore	Dollar	1.3858	\$ -	1.4132	\$ -	1.3640	\$ -
South Korea	Won	1151.5242	\$ 4,255	1156.12	\$ 7,201	1128.1127	\$ 7,263
Turkey	Lira	2.8346	\$ 3,853	3.4789	\$ 2,755	3.6022	\$ 2,598
United Kingdom	Pound	0.6473	\$ 25,312	0.8072	\$ 24,720	0.7651	\$ 25,568
Total			\$ 161,540		\$ 195,527		\$ 196,798

MFH Construction		FY 2017		FY 2018		FY 2019	
Country	Local Currency	Budget Exchange Rates	\$ U.S. Requiring Conversion	Budget Exchange Rates	\$ U.S. Requiring Conversion	Budget Exchange Rates	\$ U.S. Requiring Conversion
Denmark	Krone	6.7076	\$ -	6.9385	\$ -	6.3847	\$ -
European Comm	Euro	0.8990	\$ 498	0.9329	\$ -	0.8582	\$ -
Japan	Yen	122.4519	\$ 56,486	111.3365	\$ 80,617	111.5938	\$ 72,766
Norway	Krone	8.1758	\$ -	8.4115	\$ -	8.0858	\$ -
Singapore	Dollar	1.3858	\$ -	1.4132	\$ -	1.3640	\$ -
South Korea	Won	1151.5242	\$ -	1156.12	\$ -	1128.1127	\$ -
Turkey	Lira	2.8346	\$ -	3.4789	\$ -	3.6022	\$ -
United Kingdom	Pound	0.6473	\$ -	0.8072	\$ -	0.7651	\$ 3,146
Total			\$ 56,984		\$ 80,617		\$ 75,912

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