Missile Defense Agency

Fiscal Year 2017

President's Budget Submittal

Military Construction Exhibit



February 2016

MISSILE DEFENSE AGENCY FY 2017 MILITARY CONSTRUCTION PRESIDENTS BUDGET SUBMITTAL DESCRIPTIVE SUMMARIES

(\$ in Thousands)

<u>Program</u>	Authorization	Appropriation
Major Construction	176,230	176,230
Unspecified Minor Construction	2,414	2,414
MILCON Planning & Design	0	0
TOTAL MILITARY CONSTRUCTION	178,644	178,644

MISSILE DEFENSE AGENCY FY 2017 MILITARY CONSTRUCTION, DEFENSE-WIDE PROJECT SUMMARY BY LOCATION

(\$ in Thousands)

State/Country/Installation/Project	Authorization <u>Request</u>	Approp. <u>Request</u>	New/Current <u>Mission</u>	Page <u>No.</u>
Major Construction				
Alaska Clear Air Force Station (AFS) Long Range Discrimination Radar System Complex, Phase 1	155,000	155,000	N	4
Fort Greely Missile Defense Complex Switchgear Facility	9,560	9,560	С	9
Wake Island Wake Island Air Base Test Support Facility	11,670	11,670	С	13
Unspecified Minor Construction	2,414	2,414		17
MILCON Planning and Design	0	0		
TOTAL MILITARY CONSTRUCTION	178,644	178,644		

1. COMPONENT MDA FY 2017 MILITARY CONSTRUCTION PROJECT DATA							A	2. DATE Feb 2016		
3. INSTALLATION A	ND LOCATION				4. COMMAN	D				CONSTR
Clear AFS, A	Alaska				Missile	Defens	se Ager	псу		7 INDEX . 44
6. PERSONNEL	F	PERMANENT	Γ		STUDENTS			SUPPORTE	D	
STRENGTH:	OFFICER	ENLISTED	CIVILIAN	OFFICER	ENLISTED	CIVILIAN	OFFICER	ENLISTED	CIVILIAN	TOTAL
N/A: Tenant of U.S Air Force										
			7. IN\	VENTORY	DATA (\$000)					
					,		/	_		
A. TOTAL ACERAG						••••••	N/.			
B. INVENTORY TO							N/			
C. AUTHORIZATION	I NOT YET IN INVEN	NTORY					0			
D. AUTHORIZATION	I REQUESTED IN T	HE FY2017					1	55,000		
E. AUTHORIZATION	I REQUESTED IN TH	HE FY2018					0			
F. PLANNED IN NEX	T THREE PROGRA	M YEARS					1	50,000		
G. REMAINING DEF	ICIENCY						0			
H. GRAND TOTAL.							3	05,000		
8. PROJECTS REQ CATEGORY CODE 1413	JESTED IN THE FY: PROJECT TITLE Long Range System Comp	Discrim	ination	Radar	SCOPE 1 EA	(\$0	OST OO) 5,000	DESIGN START Jan 15	COMPLETE	
9. FUTURE PROJEC	CTS:									
CATEGORY CODE 8111	PROJECT TIT	ge Discr		on Rada	ar Syster	n	SCOPI 1 EA		COST (\$000) 150,000	<u>)</u>
	Complex,	Phase 2	2					Total.	150.00	0

Total: 150,000

10. MISSION OR MAJOR FUNCTIONS: The mission of the Missile Defense Agency (MDA) is to develop and field an integrated, layered Ballistic Missile Defense System (BMDS) to defend the United States, our deployed forces, allies, and friends against all ranges of enemy ballistic missiles in all phases of flight. The Long Range Discrimination Radar project is required for deployment of a new midcourse tracking radar that will provide persistent coverage and improve lethal object discrimination capabilities against threats to the homeland from the Pacific theater.

11. OUTSTANDING POLLUTION AND SAFETY DEFICIENCIES:

A. Air Pollution: N/A
B. Water pollution: N/A
C. Occupational safety and health (OSH): N/A

1. COMPONENT MDA FY 2017 MILITARY CONSTRUCTION PROJECT DATA 2. DATE Feb 2016

3. INSTALLATION AND LOCATION 4. PROJECT TITLE

Clear AFS, Alaska Long Range Discrimination Radar System Complex, Phase 1

8. PROGRAM ELEMENT	6. CATEGORY CODE	7. PROJECT NUMBER	8. PROJECT COST (\$000)
0604873C	1413	MDA 657	155,000

9. COST ESTIMATES									
ITEM	U/M	QUA	ANTITY	UNIT C	OST	COST \$(000)			
PRIMARY FACILITIES						75 , 751			
Mission Control Facility (141391)	m2 (SF)	5 , 574	(60,000)	10,646	(989)	(59 , 340)			
Radar Foundation	LS					(2,607)			
Special Construction	LS					(9,150)			
Nearfield Antenna (132134)	EA		2	350,0	000	(700)			
Entry Control Facility (730837)	m2 (SF)	102	(1,100)	7,280	(676)	(744)			
Antiterrorism/Force Protection	LS					(2,180)			
Security Infrastructure/ESS	LS					(1,030)			
SUPPORTING FACILITIES						62 , 857			
Electric Service	LS					(24,491)			
Water, Sewer	LS					(11,179)			
Paving, Walks	LS					(1,137)			
Site Imp (11.5M) / Demo (1.4M)	LS					(12,900)			
Information/Communication Systems	LS					(4,060)			
Temporary Infrastructure Mob/Demob	LS					(9,090)			
SUBTOTAL						138,608			
CONTINGENCY (5.00%)						6 , 931			
TOTAL CONTRACT COST						145 , 539			
SIOH (6.50%)						9,461			
TOTAL REQUEST						155,000			
TOTAL ROUNDED REQUEST						155 , 000			
INSTALLED EQUIPMENT-OTHER APPROP						(893 , 728)			

10. DESCRIPTION OF PROPOSED CONSTRUCTION: This project constructs a Long Range Discrimination Radar (LRDR) System Complex at Clear AFS, Alaska, supporting missile defense command and control components. The complex will consist of high-altitude electromagnetic pulse (HEMP) constructed LRDR infrastructure to include a mission control facility and foundation for the radar equipment. The complex will be within a System Security Level A (SSL-A) secure boundary with an entry control facility. Additional construction includes lightning protection, equipment grounding systems, nearfield antennas, electronic security system infrastructure, site boundary and restricted area security fencing, barriers, and gates.

Special Construction includes HEMP/Electro-Magnetic Interference (EMI) shielding and testing in mission support areas. Mission facilities will include features to meet site specific ground motion and seismic requirements. The constructed Mission Control Facility will be designed to obtain LEED Silver Certification.

Supporting facilities include overall site development, electrical services, utility building and commercial power electric substation, water, sewer, cooling water wells, paving, walks, storm drainage, fire protection and alarm systems, site improvements and demolition, telecommunication distribution and information management systems. The project also includes wastewater, sewage collection and disposal designed as a septic tank / leach field system.

Temporary infrastructure will support site improvements and preparation for construction. Improvements include temporary roads, construction site fence, temporary power, mobilization and demobilization.

Installed building equipment includes special flooring, redundant mechanical and electrical systems, uninterruptable power system and electronic controls to monitor building systems and the base infrastructure. A/C is estimated at 140 tons.

1. COMPONENT

MDA

FY 2017 MILITARY CONSTRUCTION PROJECT DATA

2. DATE

Feb 2016

3. INSTALLATION AND LOCATION

Clear AFS, Alaska

4. PROJECT TITLE

5. PROJECT NUMBER

Long Range Discrimination Radar System Complex, Phase 1

MDA 657

11. REQUIRED: 1 EA Complex

ADEQUATE: NONE

SUBSTANDARD: 1

PROJECT: Construct a new Long Range Discrimination Radar System Complex at Clear AFS, Alaska. (New Mission)

REQUIREMENT: This project is required for deployment of a new midcourse sensor that will provide midcourse Ballistic Missile Defense System (BMDS) discrimination capability to defend the United States from ballistic missile attacks and meet the 2020 MDA Enhanced Homeland Defense Capability. When complete, this radar will function as part of the BMDS and be functionally capable through the MDA Command, Control, Battle Management and Communications (C2BMC) system. Construction is planned to allow radar prime contractor integration in 2019. In addition, Air Force Space Command envisions using LRDR's inherent space situational awareness capabilities to augment the Space Surveillance Network.

CURRENT SITUATION: There are no existing facilities that can be modified to house a new midcourse sensor. The new LRDR complex will expand radar coverage and increase the level of sophistication in radar discrimination beyond what is currently available to support the BMDS.

IMPACT IF NOT PROVIDED: If this project is not provided, enhanced midcourse sensor discrimination capability will not be deployed and the BMDS will be less capable against expected threats in 2020 and beyond.

ADDITIONAL INFORMATION: As applicable, this project shall comply with UFC 1-200-01, "General Building Requirements", providing model building codes and government-unique criteria for typical design disciplines and building systems, as well as for accessibility, antiterrorism, security, sustainability, and safety. All required NEPA and/or EO 12114 analyses will be completed prior to the start of construction. The project is being coordinated with the Installation Master Plan.

Research, Development, Test & Evaluation (RDT&E) funds are programmed to provide security control and a temporary man camp to support lodging and dining in support of site activation. In addition, an RDT&E effort will demilitarize and remove the remaining BMEWS AN/FPS-50 detection radar fixed antenna, transmitter equipment, and two tracking radars.

The Radar structure, enclosure, and associated equipment will be provided with other appropriations by the radar prime contractor.

A follow-on Phase 2 project is planned to construct a mission power plant, diesel fuel storage and load/unload point, an on-site maintenance facility, and associated site support. Portions of the Mission Facilities must be HEMP protected in accordance with MIL-STD-188-125 "High Altitude Electromagnetic Pulse (HEMP) Protection".

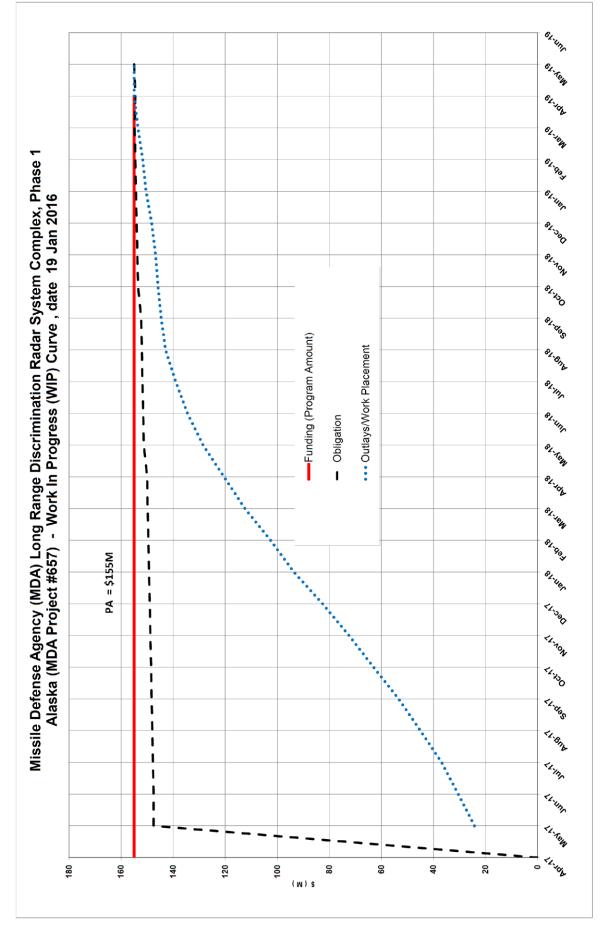
This project has been evaluated for compliance with Executive Orders 11988 Flood Plain Management and 11990 Protection of Wetlands and the Flood Plain Management Guidelines of U.S. Water Resources Council. The project is not sited in the 100-year flood plain and will be sited to preserve and enhance the natural and beneficial values of wetlands; and minimize the destruction, loss or degradation of wetlands.

Cost estimates were derived from the LRDR System Complex 35% design.

1. COMPONENT 2. DATE **FY 2017 MILITARY CONSTRUCTION PROJECT DATA** MDA Feb 2016 3. INSTALLATION AND LOCATION Clear AFS, Alaska 4. PROJECT TITLE **5. PROJECT NUMBER** Long Range Discrimination Radar System Complex, Phase 1 MDA 657 12. SUPPLEMENTAL DATA: A. Estimated Design Data (1) Status: Jan 2015 (a) Date Design Started (b) Percent Complete As Of January 2016 50% Oct 2015 (c) Date 35% Design Complete (d) Date Design Complete Sep 2016 (e) Parametric Cost Estimating Used To Develop Cost No (f) Type of Design Contract Design-Bid-Build (2) Basis: (a) Standard or Repetitive Design No (b) Where Design Was Most Recently Used N/A (3) Total Design Cost (c) = (a)+(b) or (d)+(e)(\$000)(a) Production of Plans and Specifications 9,300 (b) All Other Design Costs 6,200 (c) Total Design Costs 15,500 (d) Contract 10,850 (e) In-House 4,650 (4) Contract Award Mar 2017 (5) Construction Start Jun 2017 Aug 2020 (6) Construction Completion B. Equipment associated with this project which will be provided from other appropriations:

Equipment Nomenclature	Appropriation	FY Appropriated or Requested	Cost \$(000)
Radar System Equipment & Encl.	RDT&E	FY16-FY21	868,758
Mission Comms Equipment			
Security Equipment (IESS)			
Installed Building Equipment			
Commercial Power Extension			
Demil/Remove BMEWS Antenna/Equip/Radars	RDT&E	FY16-FY17	100
Site Activation	RDT&E	FY16-FY18	24,870
		TOTAL:	893 , 728





1. COMPONENT									2. DATE	
MDA	F	Y 2017 M	IILITARY	CONST	RUCTIO	N PROJE	CT DAT	Ά	Feb 2016	
3. INSTALLATION AND LOC	ATION									
3. INSTALLATION AND LOCATION				'	4. COMMAN	D			-	CONSTR.
Fort Greely, Ala	ska			1	Missile	Defens	se Agen	су	2.45	
6. PERSONNEL	F	PERMANEN	Т		STUDENTS		;	SUPPORTE	D	
STRENGTH:	OFFICER	ENLISTED	CIVILIAN	OFFICER	ENLISTED	CIVILIAN	OFFICER	ENLISTED	CIVILIAN	TOTAL
N/A: Tenant of U.S. Army										
			7. IN	VENTORY I	DATA (\$000)					
A. TOTAL ACERAGE							N/Z	Δ		
B. INVENTORY TOTAL AS ()F						N/2			
C. AUTHORIZATION NOT Y		NTORY					0	. 1		
D. AUTHORIZATION REQUI								, 560		
E. AUTHORIZATION REQUI							0	,		
F. PLANNED IN NEXT THRE							0			
G. REMAINING DEFICIENC	· · · · · · · · · · · · · · · · · · ·						0			
H. GRAND TOTAL.							9,	560		
8. PROJECTS REQUESTED	IN THE EV	2017 PPOGI	DAM-							
CATEGORY CODE PRO 89113 Mis	JECT TITLE sile Def tchgear	fense Co	omplex		SCOPE 1,400 SI	(\$0	9ST 00) 560	DESIGN START Jul 15	STATUS COMPLETE Sep 16	
9. FUTURE PROJECTS:										
CATEGORY	ROJECT TIT	LE		sco	PE	CO (\$0				
10. MISSION OR MAJOR FOR field an integrate States, our deploy missiles in all plants of the Ground-Based North This project constant site electrical reliability, available.	ed, laye yed force lases of Midcours cructs a al infra	ered Bal es, all flight e Defen shield structu	listic I ies, and . The S se Syste ed Swite re upgra	Missile d friend Switchge em with chgear l ades to	Defenseds againg ar faci increase facility support	e System st all lity pr sed capa provid curren	(BMDS) ranges oject i bilitie ing red t survi	to def of enem s requis for hundant	end the y ballis red to p omeland switchge	United tic rovide defense.
11. OUTSTANDING POLLU	TION AND S	AFETY DEF	ICIENCIES:							
A. Air Pollu	tion:					/A				
B. Water pol						/A				
C. Occupatio	nal safe	ety and	health	(OSH):	N,	/A				

1. COMPONENT FY 2017 MILITARY CONSTRUCTION PROJECT DATA 2. DATE

MDA TI 2017 WILLTAKT CONSTRUCTION PROJECT DATA Feb 2016

3. INSTALLATION AND LOCATION 4. PROJECT TITLE

 8. PROGRAM ELEMENT
 6. CATEGORY CODE
 7. PROJECT NUMBER
 8. PROJECT COST (\$000)

 0603882C
 89113
 MDA 653
 9,560

Missile Defense Complex Switchgear Facility

9. COST ESTIMATES										
ITEM	U/M	QUANTITY	UNIT COST	COST \$(000)						
PRIMARY FACILITIES				7,590						
Switchgear Facility (89113)	m2 (SF)	130 (1,400)	31,831 (2,956)	(4,138)						
Electrical Switching Station (81350)	KV	12.47	151,083	(1,884)						
Special Construction	LS			(914)						
Switchgear Pad (85225)	m3 (CY)	77 (100)	263 (480)	(48)						
Transformer (81360)	KV	12.47	244	(366)						
Security Fence/Force Protection/ESS	LS			(240)						
SUPPORTING FACILITIES				959						
Electrical	LS			(675)						
Water, Sewer, Gas	LS			(5)						
Paving, Walks	LS			(50)						
Mob / Demob	LS			(200)						
Site Improvements / Demo	LS			(20)						
Information/Communication Systems	LS			(9)						
SUBTOTAL				8,549						
CONTINGENCY (5.00%)				427						
TOTAL CONTRACT COST				8 , 976						
SIOH (6.50%)				583						
TOTAL REQUEST				9,560						
TOTAL REQUEST ROUNDED				9,560						
INSTALLED EQUIPMENT-OTHER APPROP				(100)						

10. DESCRIPTION OF PROPOSED CONSTRUCTION: Construct a shielded Switchgear Facility to include a switching station with switchgear and all necessary safety and security equipment, two shielded enclosures, concrete pad, and associated electrical infrastructure upgrades at Fort Greely, Alaska. The Switchgear Facility will provide redundant automatic switchgear units and other electrical equipment supporting the two existing In-Flight Interceptor Communications System (IFICS) Data Terminals (IDTs).

The shielded Switchgear Facility construction will contain the primary power equipment to support the IDT units: redundant switchgear units, electrical breakers, and two - 750 KVA transformers. The Switchgear Facilities' protection includes 1/4-inch thick steel plates and IDT test connection points. The shielding requires testing and certification.

The switchgear concrete pad construction will include features to meet site specific ground motion and seismic requirements. Security infrastructure will include fencing, bollards, and an electronic security system.

Supporting facilities include: site electrical power system and grounding system upgrades; coordination improvements, electrical conduits and manhole upgrades, paving, fire protection and alarm systems, and information management systems. Site preparation includes clearing, grubbing, site grading, and demolition of a fence and existing transformers.

Fort Greely, Alaska

1. COMPONENT

MDA

FY 2017 MILITARY CONSTRUCTION PROJECT DATA

2. DATE

Feb 2016

3. INSTALLATION AND LOCATION

Fort Greely, Alaska

4. PROJECT TITLE 5. PROJECT NUMBER

Missile Defense Complex Switchgear Facility

MDA 653

11. REQUIRED: 1,400 SF

ADEQUATE: NONE

SUBSTANDARD:

NONE

<u>PROJECT:</u> Construct a shielded Switchgear Facility, associated electrical infrastructure upgrades, and supporting facilities. (Current Mission)

REQUIREMENT: This project is required to provide the Ground-Based Midcourse Defense System with increased capabilities for homeland defense. This project constructs a shielded Switchgear Facility providing redundant switchgear units and site electrical infrastructure upgrades to support current survivability and reliability, availability, and maintainability (RAM) requirements. The redundant switchgear units will support the two existing IDT units on the Missile Defense Complex (MDC) at Fort Greely, Alaska. The shielded Switchgear Facility and site electrical infrastructure upgrades will contribute to the end-to-end protection of the mission assets on the MDC.

<u>CURRENT SITUATION:</u> The lack of this new shielded switchgear for the IDT units limits improvements to the mission readiness and capability of the Ground-Based Midcourse System to perform missile defense operations.

<u>IMPACT IF NOT PROVIDED:</u> Planned enhancements for the shielded protection of the Ballistic Missile Defense System will not be available for our Nation's homeland defense.

ADDITIONAL INFORMATION: This project is being coordinated with the appropriate physical security plans and includes required physical security and/or combating terrorism measures. All required NEPA and/or EO 12114 analyses will be completed prior to the start of construction. The project has been coordinated with the Installation Master Plan, and will be located on the Missile Defense Complex.

This project has 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. The project has been sited to manage 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.

The Switchgear Facility is an uninhabited space; and therefore exempt from Americans with Disabilities Act and Leadership in Energy and Environmental Design requirements.

1. COMPONENT 2. DATE **FY 2017 MILITARY CONSTRUCTION PROJECT DATA** MDA Feb 2016 3. INSTALLATION AND LOCATION Fort Greely, Alaska 4. PROJECT TITLE **5. PROJECT NUMBER** Missile Defense Complex Switchgear Facility MDA 653 12. SUPPLEMENTAL DATA: A. Estimated Design Data (1) Status: (a) Date Design Started Jul 2015 (b) Percent Complete As Of January 2016 35% (c) Date 35% Design Complete Jan 2016 (d) Date Design Complete Sep 2016 (e) Analogous Cost Estimating Used To Develop Cost Yes (f) Type of Design Contract Design-Bid-Build (2) Basis: (a) Standard or Repetitive Design No (b) Where Design Was Most Recently Used N/A (3) Total Design Cost (c) = (a) + (b) or (d) + (e)(\$000)(a) Production of Plans and Specifications 519 (b) All Other Design Costs 346 (c) Total Design Costs 865 (d) Contract 606 259 (e) In-House (4) Contract Award Mar 2017 (5) Construction Start May 2017 (6) Construction Completion Aug 2019 B. Equipment associated with this project which will be provided from other appropriations: FΥ Equipment Procuring Appropriated Cost Nomenclature Appropriation or Requested \$(000) Security Equipment RDT&E FY17 100 Total: 100

1. COMPONENT									2. DATE			
MDA	F`	FY 2017 MILITARY CONSTRUCTION PROJECT DATA								2016		
3. INSTALLATION AND LOCATION					4. COMMAND				5. AREA CONSTR. COST INDEX			
Wake Island					Missile	Defens	se Agen	су		.61		
6. PERSONNEL	F	PERMANEN	Γ	•	STUDENTS	}	5	SUPPORTE	D			
STRENGTH:	OFFICER	ENLISTED	CIVILIAN	OFFICER	ENLISTED	CIVILIAN	OFFICER	ENLISTED	CIVILIAN	TOTAL		
N/A: Tenant of U.S. Air Force												
			7. IN\	VENTORY	DATA (\$000)							
							,					
A. TOTAL ACERAGE							N/A	A				
B. INVENTORY TOTAL AS	OF						N/A	A				
C. AUTHORIZATION NOT	YET IN INVEN	NTORY					0					
D. AUTHORIZATION REQI	JESTED IN TI	HE FY2017					11	L , 670				
E. AUTHORIZATION REQU	JESTED IN TI	HE FY2018					0					
F. PLANNED IN NEXT THE	EE PROGRA	M YEARS					0					
G. REMAINING DEFICIEN	CY						0					
H. GRAND TOTAL.							11	,670				
	D IN THE FY DJECT TITLE st Suppor				SCOPE 8,200 SI	CO (\$0 11,	00)	DESIGN START Oct 15	COMPLETE	:		
9. FUTURE PROJECTS: CATEGORY CODE	PROJECT TII	'LE		sco	DPE	CO (\$0						
10. MISSION OR MAJOR FUNCTIONS: The mission of the Missile Defense Agency (MDA) is to develop and field an integrated, layered Ballistic Missile Defense System (BMDS) to defend the United States, our deployed forces, allies, and friends against all ranges of enemy ballistic missiles in all phases of flight. The Test Support Facility project is required to support at least 12 flight tests planned at Wake Island through 2024 per the MDA Integrated Master Test Plan including FTO-03 E2 which is currently scheduled for 4th QTR FY18.												
11. OUTSTANDING POLLUA. Air Poll		AFETY DEF	ICIENCIES:		T/I	/A						
B. Water po						/ A / A						
C. Occupati		ety and	health	(OSH):		/ A / A						
<u>.</u> .		-		•	·							

1. COMPONENT MDA FY 2017 MILITARY CONSTRUCTION PROJECT DATA 2. DATE Feb. 2016

3. INSTALLATION AND LOCATION 4. PROJECT TITLE

Wake Island Test Support Facility

 5. PROGRAM ELEMENT
 6. CATEGORY CODE
 7. PROJECT NUMBER
 8. PROJECT COST (\$000)

 0603914C
 37110
 MDA 662
 11,670

9. COST ESTIMATES ITEM U/M QUANTITY UNIT COST COST \$(000)												
ITEM	l	U/M		JANTITY	UNIT	UNIT COST						
PRIMARY FACILITIES							8,536					
Test Support Facility (37110)	m2	(SF)	762	(8,200)	11,205	(1,041)	(8,536)					
SUPPORTING FACILITIES							1,929					
Site Electrical		LS					(863)					
Water, Sewer		LS					(388)					
Paving, Walks		LS					(233)					
Site Improvement/Demo		LS					(213)					
Information/Communications Systems		LS					(174)					
Antiterrorism/Force Protection		LS					(58)					
SUBTOTAL							10,465					
CONTINGENCY (5.00%)							523					
TOTAL CONTRACT COST							10,988					
SIOH (6.20%)							682					
TOTAL REQUEST							11,670					
TOTAL REQUEST ROUNDED							11,670					
INSTALLED EQUIPMENT-OTHER APPROP							(500)					

10. DESCRIPTION OF PROPOSED CONSTRUCTION: Construct supporting foundation and procure and install an insulated, pre-engineered, single-story, metal building. The facility includes mission execution workspace, office space, conference room, elevated storage, restrooms, and mechanical-electrical room. The project includes air conditioning (A/C), plumbing, power, lighting, lightning protection, fire alarm, and fire suppression.

Supporting facilities include site work to extend utilities to the facility; an aggregate access road; paving and walkways; information/communication infrastructure; connections to support backup power; and antiterrorism/force protection. The constructed facility will be designed to obtain LEED Silver Certification. A/C is estimated at 25 tons. The facility will provide work space for approximately 60 deployed personnel during test events.

11. REQUIRED: 8,200 SF ADEQUATE: NONE SUBSTANDARD: 7,100 SF

PROJECT: Construct a new test support facility on Wake Island for Ballistic Missile Defense
System test missions. (Current Mission)

REQUIREMENT: MDA has an established test capability on and around Wake Island with an operational area covering almost a million square kilometers. The highly complex integrated test deployments executed by the Agency require extensive support. The Test Support Facility (TSF) is required to provide mission-critical support that would otherwise be unavailable on-island. The facility supports multiple Ballistic Missile Defense Test Stakeholders, including flight test communications and infrastructure personnel responsible for time critical infrastructure build-up activities; the Mission Execution Team responsible for managing and executing inherent on-island activities to support flight test execution; Operational Test Authority and other Warfighter representatives; and special dedicated contract Subject Matter Experts supporting birth to death test execution activities. The facility is a central hub from which test build-up, test support, and test execution personnel can support and manage all on-island mission activities. The facility also provides critical functionality necessary for forward deployed asset managers and test support personnel to coordinate with CONUS-based leadership prior to and during test execution, including voice communications, MDA network connectivity, and conference room

1. COMPONENT

MDA

FY 2017 MILITARY CONSTRUCTION PROJECT DATA

2. DATE

Feb 2016

3. INSTALLATION AND LOCATION

Wake Island

4. PROJECT TITLE 5. PROJECT NUMBER

Test Support Facility MDA 662

11. REQUIRED (CONTINUED): capacity to support MDA leadership. This facility enables deployed personnel to safely and securely meet all test support and test safety requirements on Wake Island. The new facility is required to replace the current functionality of Building 1601. Due to the facility's poor condition and lack of other similar and available space on Wake, future mission personnel will have to be re-located into a new facility.

CURRENT SITUATION: The current support facility, Building 1601, has been heavily damaged by the corrosive environment on Wake Island and is now in a state of disrepair. The 611th Civil Engineering Squadron inspects Building 1601 annually and estimates it must be vacated within five years or less due to its poor condition. There are no other on-island facilities available to provide sufficient operations and support space.

IMPACT IF NOT PROVIDED: If not funded, MDA will have insufficient test support space required during test deployments to ensure successful completion of 12 future flight tests presently planned at Wake Island through 2024 (per MDA Integrated Master Test Plan). Building 1601 stands to be condemned within five years. Without a new facility to replace its capabilities, MDA will incur interoperability and test support space deficiencies. The new facility need date is based on the FTO-03 E2 test event scheduled for 4th QTR FY18.

ADDITIONAL INFORMATION: This project shall comply with UFC 1-200-01, "General Building Requirements", providing model building codes and government-unique criteria for typical design disciplines and building systems, as well as for accessibility, antiterrorism, security, sustainability, and safety. All required NEPA and/or EO 12114 analyses will be completed prior to the start of construction. The siting master plan has been coordinated with the host installation and MDA will receive site approval prior to construction.

This project has been evaluated for compliance with Executive Order 11988 Flood Plain Management. Wake Island is subject to tsunamis and rogue waves which occasionally affect the island. The project has been sited to manage the risk of flood loss and minimize the impact of floods on human safety, health and welfare. Design will incorporate mitigation measures where feasible, and in accordance with current Air Force policy on island.

12. SUPPLEMENTAL DATA:

- A. Estimated Design Date
 - (1) Status:

(a)	Date Design Started	Oct 2015
(b)	Percent Complete As Of Jan 2016	5%
(C)	Date 35% Design Complete	May 2016
(d)	Date Design Complete	Oct 2016
(e)	Parametric Cost Estimating Used To Develop Cost	No
(f)	Type of Design Contract	Design-Bid-Build

(2) Basis:

(a)	Standard or Repetitive Design	No
(b)	Where Design Was Most Recently Used	N/A

- (3) Total Cost (c) = (a) + (b) or (d) + (e) (\$000)
- (a) Production of Plans and Specifications

 (b) All Other Design Costs

 (c) (a) (b) All Other Design Costs
 - (b) All Other Design Costs 392
 (c) Total Design Costs 980
 (d) Contract 800
 (e) In-House 180

DD FORM 1391

1. COMPONENT 2. DATE **FY 2017 MILITARY CONSTRUCTION PROJECT DATA** Feb 2016 MDA

3. INSTALLATION AND LOCATION

Wake Island

4. PROJECT TITLE **5. PROJECT NUMBER** MDA 662 Test Support Facility

12. SUPPLEMENTAL DATA (CONTINUED):

(4) Contract Award

Apr 2017 (5) Construction Start Jul 2017

(6) Construction Completion Mar 2018

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

	FY				
Equipment Nomenclature	Procuring Appropriation	Appropriated or Requested	Cost \$(000)		
Furniture, Fixtures & Equipment	pment RDT&E		500		
		Total:	500		

1. COMPONENT MDA	FY 2017 MILITARY CON	ISTRUCTION	I PROJECT D	АТА	2. DATE Feb 2016	
3. INSTALLATION AND LOCATION Various Worldwide Locations		4. PROJECT TITLE Unspecified Minor Construction				
5. PROGRAM ELEMENT 6. CATEGORY CODE 7. PROJEC		7. PROJECT	NUMBER	8. PROJECT (PROJECT COST (\$000)	
N/A	N/A	N/A		2,414		
	9. CC	ST ESTIMATES		· · · · · · · · · · · · · · · · · · ·	-	
	ITEM	U/M	QUANTITY	UNIT COST	COST (\$000)	
Unspecified Mino	r Construction	LS			2,414	
SUBTOTAL CONTINGENCY PERCY TOTAL CONTRACT CO SUPERVISION, INST					2,414 2,414 0 2,414	

10. DESCRIPTION OF PROPOSED CONSTRUCTION: Provide a lump sum amount for unspecified construction projects, not otherwise authorized by law, having a funded cost of \$3 million or less, including normal construction, alteration or conversion of permanent or temporary facilities and projects having a funded cost of \$4 million or less that are intended solely to correct a deficiency that is life-threatening, health-threatening, or safety-threatening, in accordance with 10 USC Section 2805.

11. REQUIREMENT: As required

TOTAL REQUEST (ROUNDED)

INSTALLED EQPT-OTHER APPROPRIATIONS

<u>REQUIREMENT</u>: These funds provide MDA the capability to react in FY 2017 to requirements for construction, alteration, or modification of facilities resulting from unforeseen situations affecting mission performance or safety of life or property. Included would be projects to support mission critical research and development requirements of the Ballistic Missile Defense System.

All required NEPA and/or EO 12114 analyses will be completed prior to the start of construction for each unspecified construction project.

DD FORM 1391

2,414

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