



THAAD and Product Support Overview

For the MDA Small Business Conference



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Agenda

- **MDA Overview**
- **THAAD Overview**
- **Product Support Requirements for set-aside**



Missile Defense Agency

Missile Defense Agency Mission

To develop and deploy a layered Ballistic Missile Defense System to defend the United States, its deployed forces, allies, and friends from ballistic missile attacks of all ranges and in all phases of flight



**Missile Defense Capability
Globally Deployed**



Missile Defense Agency Priorities

- In Support Of The National Defense Strategy -

- Continue focus on increasing system reliability to build warfighter confidence
- Increase engagement capability and capacity
- Rapidly address the Advanced Threat



BMDS Meets Today's Threat but Requires Additional Capacity and Advanced Capability to Stay Ahead of the Evolving Threat



Today's Ballistic Missile Defense System

C2BMC Command Control, Battle Management and Communications

NMCC

USSTRATCOM

USNORTHCOM

USINDOPACOM

USEUCOM

USCENTCOM

BOOST / ASCENT Defense Segment

MIDCOURSE Defense Segment

TERMINAL Defense Segment



Aegis
Ballistic Missile Defense

SM-3
Standard Missile-3



GBI
Ground-Based
Interceptor



Aegis
Sea-Based Terminal



THAAD
Terminal High
Altitude Area Defense



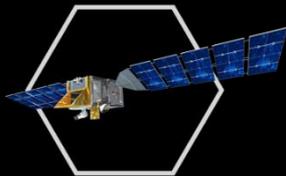
PAC-3
Patriot Advanced
Capability-3

The System Of Elements

Aegis Ashore



Sensors



Satellite Surveillance



Forward-Based Radar



Upgraded Early
Warning Radar



AEGIS BMD
SPY-I Radar



Sea-Based
X-Band Radar



THAAD Capabilities Overview

- **Defends against short-, medium- and limited intermediate-range ballistic missiles**
- **High firepower and sustainability for resistance to mass attack**
- **Both endo and exoatmospheric intercept capability**
- **High lethality with proven hit-to-kill**
- **Interoperable with other Ballistic Missile Defense (BMD) Systems**
- **Dedicated to BMD missions – positioned to counter prevailing threat**
- **High single-shot kill probability provides cost effectiveness**

***THAAD Provides Unique and Cost-Effective Capabilities
for Critical Ballistic Missile Defense Missions***



THAAD Configuration

Launcher Component



- HEMTT-based launcher
- 8 Interceptors per Launcher
- 6 Launchers per Battery
- 30-min reload
- Highly-mobile

Key System Attributes

- Endo- and exo- atmospheric engagements
- Shoot-Look-Shoot capability
- Hit-to-Kill
- Wide area coverage
- Operationally flexible TFCC
- Long range, high accuracy Radar
- Worldwide deployable by C17

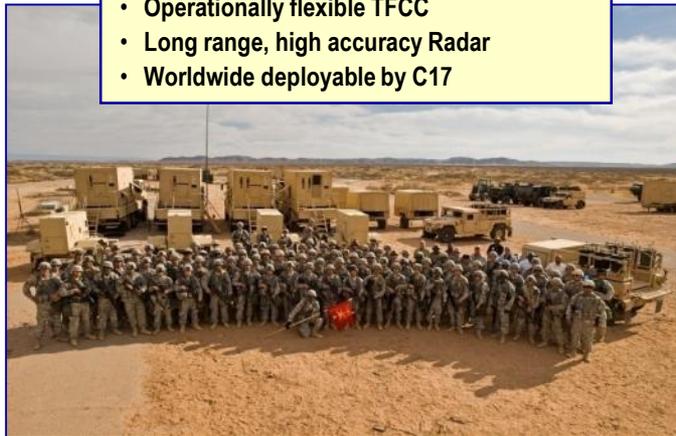
Interceptor Component

- Hit-to-Kill lethality
- Uncooled sapphire window
- Infrared gimbaled seeker
- Single-stage solid-propellant booster with thrust vector control
- Liquid bi-propellant Divert and Attitude Control System (DACS)



AN/TPY-2 (TM) Radar Component (Field Support not being set-aside)

- Target discrimination
- Hit assessment
- Communication link with in-flight missile
- Surveillance and target tracking
- Common with AN/TPY-2 (FBM)
- Radar components:
Antenna Equipment Unit (AEU), Electronic Equipment Unit, (EEU) Cooling Equipment Unit (CEU), Prime Power Unit (PPU)



THAAD Fire Control and Communications (TFCC) Component



TOS with 30kW generator LCS with 30Kw generator



ASV and CSV

Peculiar Support Equipment (PSE)

Battery Support Center (BSC)



Missile PSE



Single Missile Round Transport Container (SMRTC)



THAAD Active Leak Sensor System (TALSS)



Interim Contractor Support System (ICSS)



Missile Round Pallet – Transportable (MRP-T) Trailer



- **One Tactical Station Group (TSG) contains:**
 - Tactical Operations Station (TOS)
 - Force / engagement operations managed from dual tactical operation stations
 - Launch Control Station (LCS)
 - Robust communication capabilities
 - Station Support Group (SSG)
 - Antenna Support Vehicle (ASV)
 - Cable Support Vehicle (CSV)



THAAD Battery Status

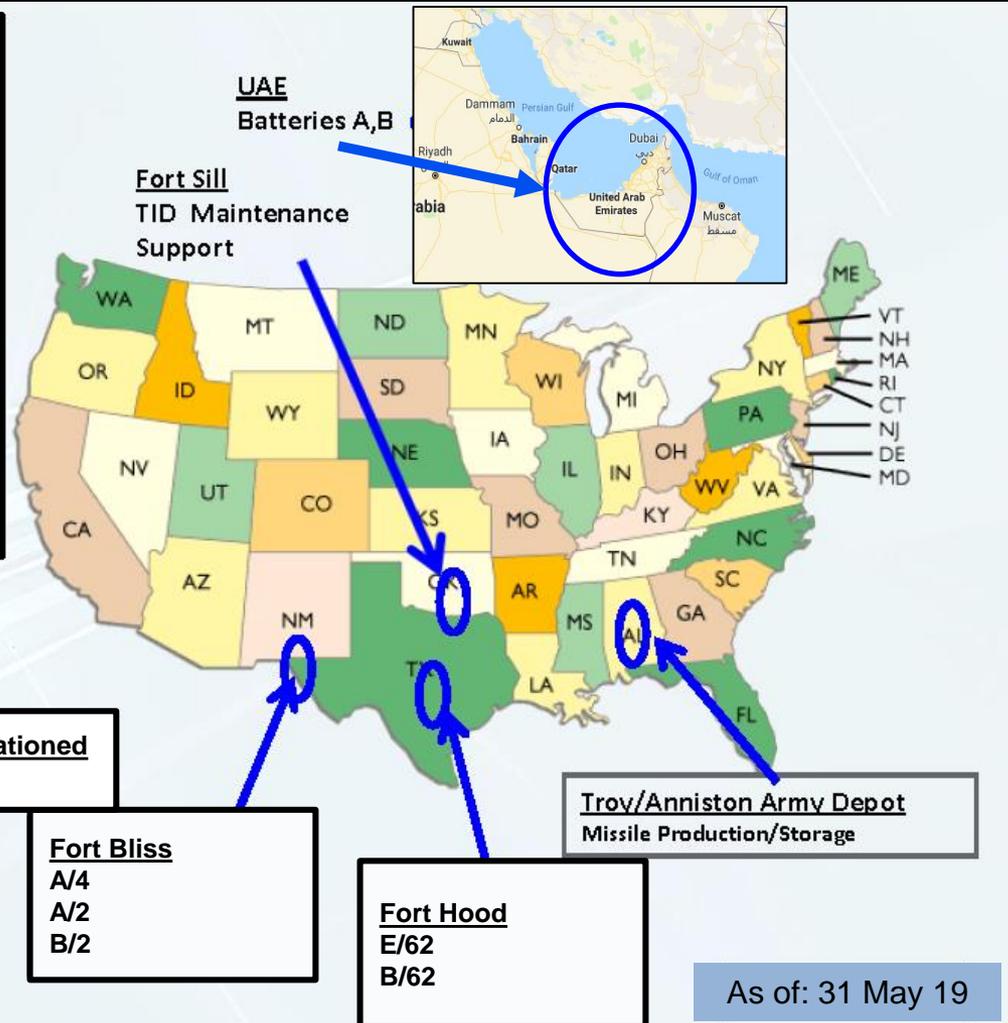
Battery Updates

US Batteries

- E/3 Forward Stationed; Operational Mission Support
- D/2 Forward Stationed; Operational Mission Support
- A/4 Ready Battery
- A/2 Normal Operations
- B/2
- E/62
- B/62

UAE Batteries

- UAE Battery A: Operational Mission Support
- UAE Battery B: Operational Mission Support



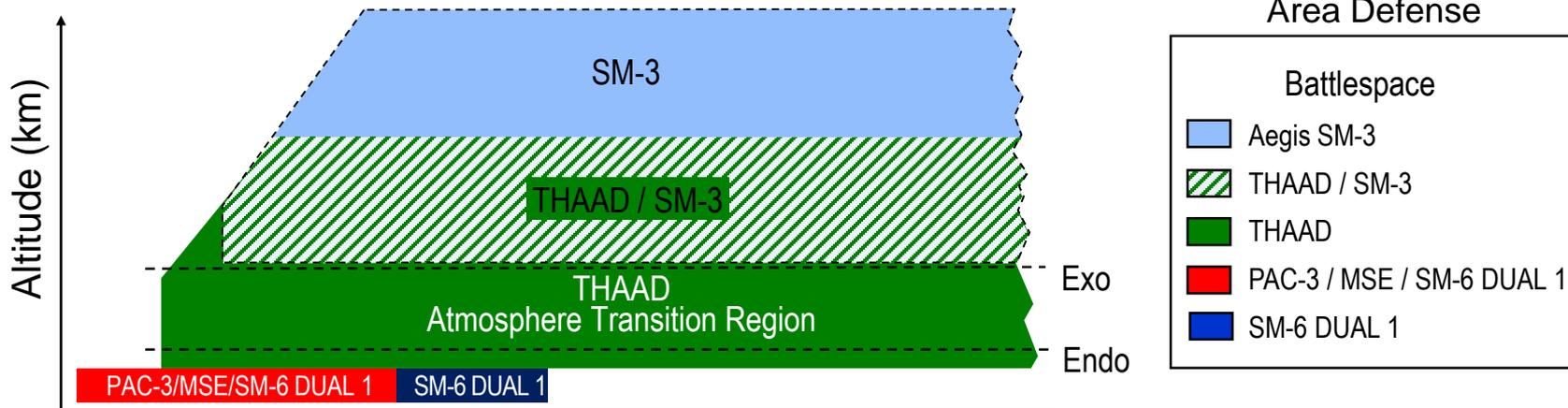
As of: 31 May 19



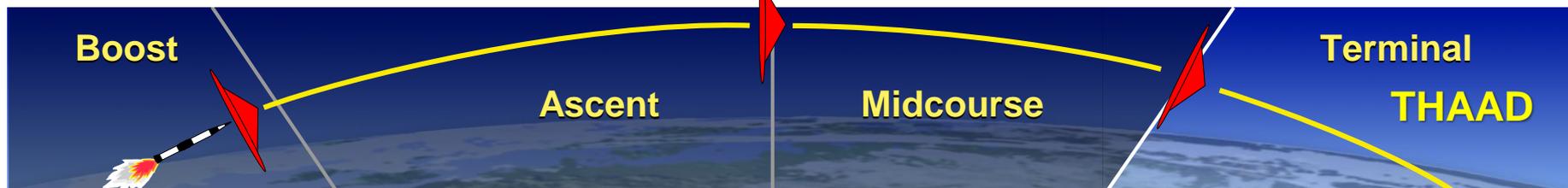
THAAD Contribution to the BMDS

Provide Combatant Commanders a globally-transportable, rapidly-deployable capability to intercept and destroy short-range, medium-range, and limited intermediate-range ballistic missile threats inside or outside the atmosphere during terminal phase of flight.

THAAD Unique Battlespace



Threat Range SRBM MRBM IRBM



THAAD Fills the Gap Between Low-Exo and High-Endo with High Pk

THAAD Program Locations and Key Suppliers



LOCKHEED MARTIN
Sunnyvale, CA
 Program Mgt, WSEIT
 Interceptor, Integration
 Labs

AEROJET ROCKETDYNE
Sacramento, CA
 Boost Motor

PACIFIC SCIENTIFIC
Hollister, CA
 LIOS

AEROJET ROCKETDYNE
Canoga Park, CA
 DACS

ATK
San Diego, CA
 Mid-body Shells

NORTHROP GRUMMAN
Salt Lake City, UT
 TARS

LOCKHEED MARTIN
Lufkin, TX
 CEM

LOCKHEED MARTIN
Santa Cruz, CA
 Ordnance

LOCKHEED MARTIN
Denver, CO
 Conventional
 Cables

OSHKOSH
Oshkosh, WI
 Transporter Vehicle

LOCKHEED MARTIN
Owego, NY
 Cables

BAE SYSTEMS
Nashua, NH
 Seeker, PDU

LOCKHEED MARTIN
Chelmsford, MA
 Communication
 Transponder

Raytheon
Andover, MA
 AN/TPY-2 Radar

Honeywell
Clearwater, FL
 MC, IMU

PMRF
 Kekaha, HI

WSMR
 Las Cruces, NM

Fort Bliss
 El Paso, TX

LM THAAD PM
 Grand Prairie, TX

MDA
 Fort Belvoir, VA

THAAD Project Office
 Huntsville, AL

EAGLE EPICHER
Joplin, MO
 Battery

LOCKHEED MARTIN
Camden, AR
 Launcher, MRP, TSG,
 Interceptor Canister

HAMILTON SUNDRAND
Rockford, IL
 TVA

LOCKHEED MARTIN
Huntsville, AL
 Program Mgt, WSEIT,
 TFCC, Launcher, PSE, ILS,
 Integration Labs

LOCKHEED MARTIN
Troy, AL
 Interceptor, Shroud
 Final Assembly

LOCKHEED MARTIN
Ocala, FL
 Interceptor CCA, TSG
 Power Modules

- CCA Circuit Card Assemblies
- CEM Carrier Electronics Module
- DACS Divert & Attitude Control System
- IMU Inertial Measurement Unit
- LIOS Laser Initiated Ordinance System
- MC Mission Computer
- MDA Missile Defense Agency
- MRP Missile Round Pallet
- PDU Power Distribution Unit

- PMRF Pacific Missile Range Facility
- TARS Two Axis Rate Sensor
- TFCC THAAD Fire Control and Communications
- TPO THAAD Project Office
- TSG Tactical Station Group
- TVA Thrust Vector Assembly
- WSEIT Weapon System Engineering, Integration & Test
- WSMR White Sands Missile Range



Draft Set-Aside Work Scope Overview

- **CLS Manager-** Manage support of fielded THAAD-peculiar equipment in areas such as:
 - Maintenance
 - Sustainment
 - Supply
- **Contractor Maintenance Support-** Embedded Contractor Logistics Support (CLS) Teams responsible for Maintenance of THAAD Peculiar Equipment
- **Augmentation Team-** Additional support to the CLS Teams, as needed
- **Supply Chain Management-** Conduct supply support activities in areas such as:
 - Maintain warehouse equipment
 - Material handlers
 - Quality Assurance/Safety
 - Inventory control
- **Maintenance Support to the THAAD Instructional Division-** In support of the Institutional Training Base (ITB) at Ft. Sill, OK.



Draft Schedule

- **Draft Request for Proposal release-August 2019**
- **Industry Day #1- August 2019**
- **Final Request for Proposal release-October 2019**
- **Industry Day #2-October 2019**
- **Proposals Due-December 2019**
- **Award date: March 2020**

Draft Information-Subject to Change



Summary



- **First time competitive set-aside for Product Support functions**
- **Award targeted for March 2020**
- **Industry Days planned for both draft and final Request for Proposal releases**
- **Break out session (Room #1) June 26th 1500-1700 for more specific information**
 - **Provide more information on requirements and acquisition**
 - **Seeking feedback to incorporate into draft Request for Proposal that is under development**



Questions?





Contact Information



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