

Theater High Altitude Area Defense (THAAD) Media Update



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THAAD SYSTEM ELEMENTS

Missile

- ATBM Hit-To-Kill Interceptor With Endo / Exoatmospheric Capability
- Kill Vehicle On A Single-stage Solid Propellant Booster
- Autonomous Onboard Navigation
- Refines Navigation Using In-flight Updates
- Kill Vehicle Acquires, Tracks, And Intercepts Target During Last Seconds Of Flight



Launcher

- Design Based On Palletized Load System (PLS) Truck
- Elevates Missile, Checks Health / Status And Launches Missile
- Interfaces With BM/C⁴I For Receipt And Execution Of Launch Message
- Accommodates 10 Missiles; Rapid Reload Capability



BM/C⁴I

- Generates Launch Command Based On Calculated Target Trajectory
- Schedules And Commands In-flight Target Updates To Missile
- Performs Threat Assessment And Prioritization, Engagement Optimization And Mission Control
- Interoperable With PATRIOT And Other Air Defense Systems

Radar

- Phased Array X-band Antenna
- Acquires And Tracks Missile And Target
- Uplinks Target Updates To Missile During Flight
- Provides Early Warning Of TBM Attack
- Provides TBM Attack Data To Permit Accurate And Timely
 - Attack Assessment And Target Discrimination
 - Counterstrike Operations Against Enemy TBM Launch Sites
 - Interception Of Enemy Missiles (Fire Control And Kill Assessment)





THE TMD FAMILY OF SYSTEMS

THAAD



Navy Area



PATRIOT



ABL (Funded By USAF)



Space Sensors



BM/C³



MEADS



Medium Extended Air Defense System

Battle Management / Command, Control And Communications

Navy Theater Wide





THEATER MISSILE DEFENSE

Lower Tier

- PAC-3
- Navy Area
- MEADS

Upper Tier

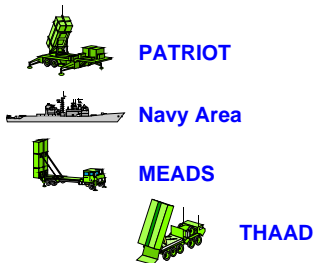
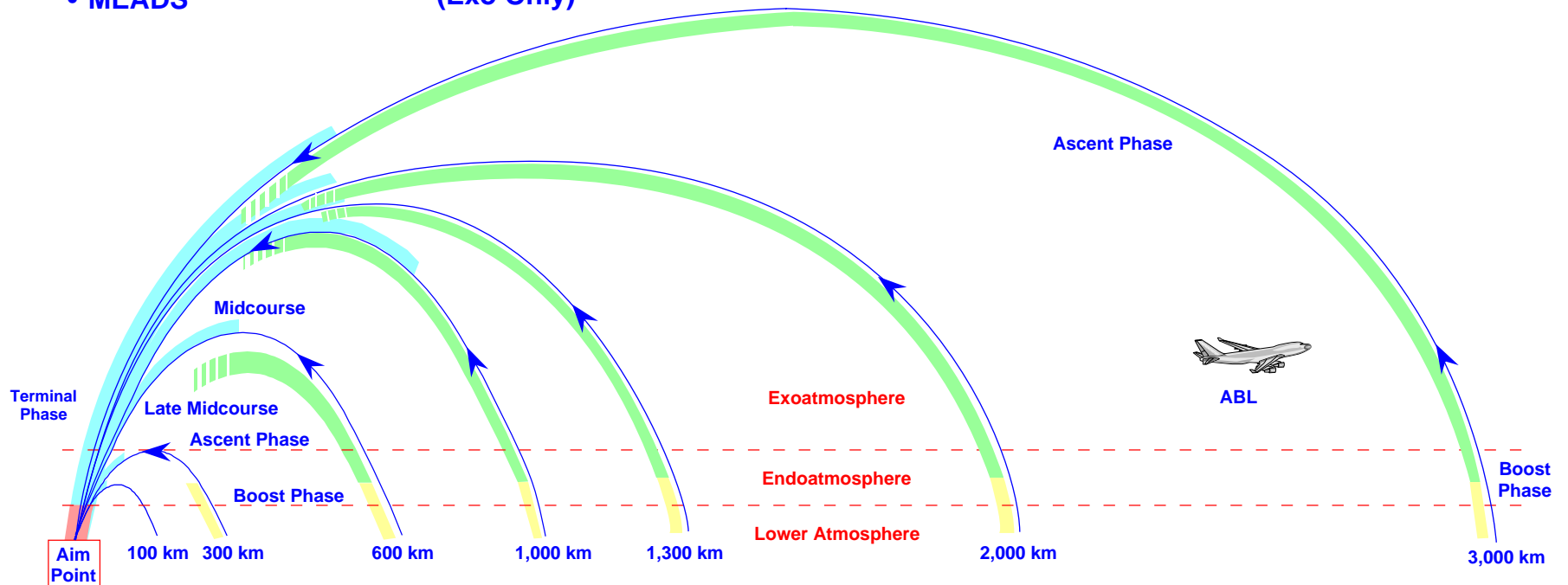
- THAAD (Endo / Exo)
- Navy Theater Wide (Exo Only)

Ascent Phase

- Navy Theater Wide (Exo Only)

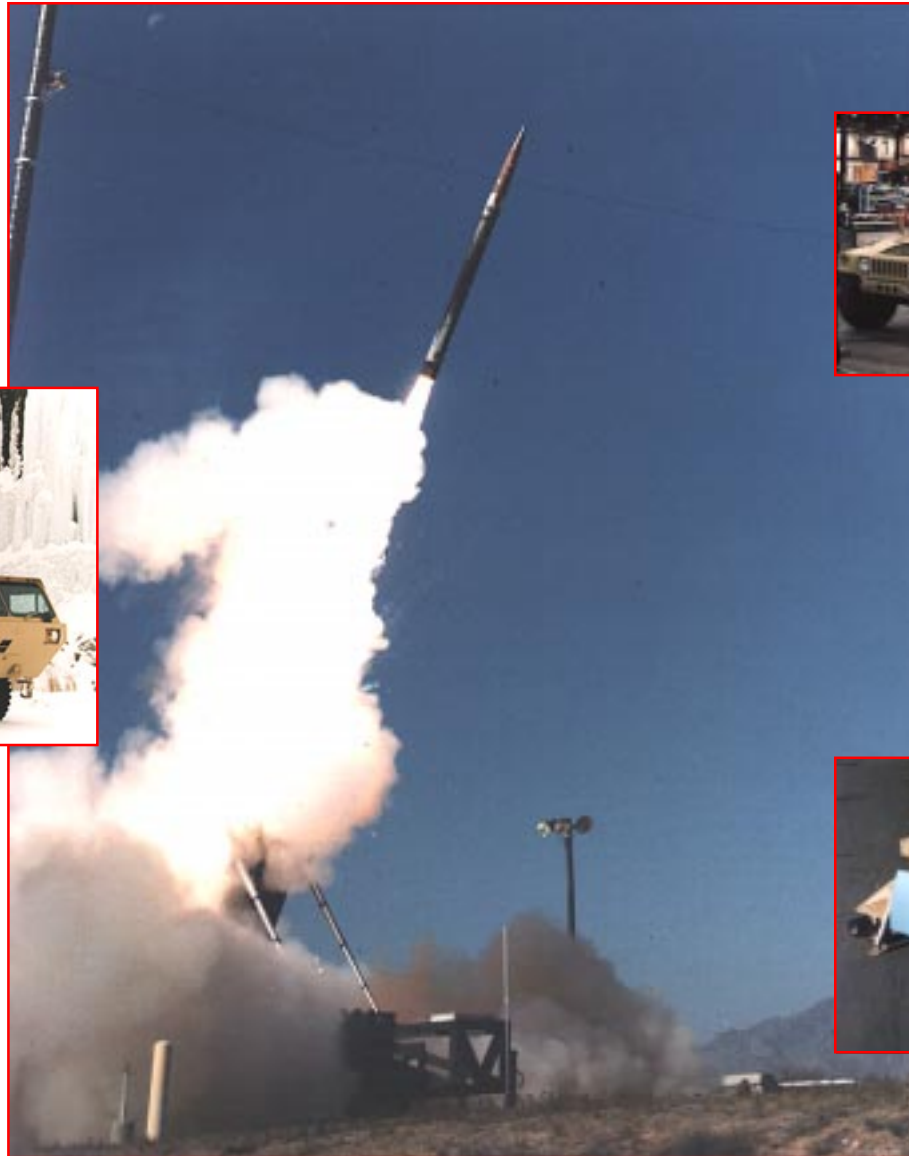
Boost Phase

- Airborne Laser





THAAD SYSTEM





THAAD FLIGHT TEST SUMMARY

| | FT-01 | FT-02 | FT-03 | FT-04 | FT-05 | FT-06 | FT-07 | FT-08 |
|---------------------|------------------------|--|---|---|--|------------------------------------|---|----------------------------|
| Mission | Propulsion (No Target) | Controllability (No Target) | Flyby (Acquire Seeker Data) | Exo Intercept | High Endo Intercept | High Endo Intercept (Repeat FT-05) | High Endo Intercept | High Endo Intercept |
| Radar | Surrogate ✓ | ✓ | ← | THAAD Radar (Shadow Mode) → | | | Final Segment ✓ | ✓ |
| Launcher | Interim ✓ | ✓ | ✓ | ✓ | THAAD Launcher ✓ | ✓ | ✓ | ✓ |
| BM/C ³ I | NA | NA | ✓ | ✓ | ✓ | ✓ | ✓ | ✓ |
| Missile | ✓ | Range Safety Termination – Short In Flare Ordnance | Target Not Designated – FPA Edge Saturation | DACS Fuel Depleted – Software Error In IFTU Logic | Separation Anomaly – Connector Failure | Seeker Anomaly – Contamination | DACS Anomaly – Cable Electrical Problem | Boost Controllability Loss |

Demonstrated Significant Steps In System Integration – Anomalies Not Caused By Design Limitations



FAILURE ANALYSIS CLOSURE PLAN

- Program Reviews / Milestones
- Flight Test-08
 - Hardware Recovery
 - Team Formation
- Failure Analysis
 - Fault Tree
 - Missile Telemetry
- Testing (Sim Lab)
- Hardware Inspection And Dissection
- Cause(s) Isolated And Identified
- Root Cause Identified



LOCKHEED MARTIN CURE PLAN

Major Features

- **LMMS Presented New Organization Structure For The Flight Test Program**
- **Five Review Teams Have Been Established**
- **LMMS And Government Still Negotiating Terms Of Cost-sharing Agreement**



THE ROAD AHEAD

- **Completing FT-08**
- **Preparing For FT-09, FT-10, FT-11**
- **Entry Into EMD**
- **Field THAAD For The Warfighter**