State of IAMD Symposium

SMDC/ARSTRAT Role In Support Of Army Integrated Air and Missile Defense

SMDC/ARSTRAT
25 June 2015

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2015 Army AMD Vision Statement

Provide the Army and Combatant Commanders with Integrated Air and Missile Defense that leverages joint capabilities to defend critical assets and protect the force against the full range of air and missile threats in support of Joint force operations.
NEW SMDC/ARSTRAT RESPONSIBILITY

• 08 SEP 2014, CSA designated the CG, USASMDC/ARSTRAT as the Army AMD Enterprise Integrator
• No Additional Authorities Assigned
• As Army AMD Enterprise Integrator
  - Coordinating Revisions to the 2012 Air and Missile Defense Strategy
  - Charged with Developing Options for the Army to Consider in Response to AMD Issues
USASMDA Organization

Operations
- Provides trained and ready Space and Missile Defense forces & capabilities to the Warfighter
- 1st Space Bde, 100th Missile Defense Bde (GMD)
- Executes GMD at Fort Greely

Capability Development
- Builds future Space and Missile Defense Forces
- Leads Combat Development and Integration
- Conducts Experimentation and Analysis of Space & Missile Defense
- Develops and Executes Institutional Training for Space and Missile Defense

Materiel Development
- Manages Science & Technology Initiatives for Space and Missile Defense
- Develops future Space and Missile Defense Technologies
- Develops Directed Energy Concepts
- US Army Kwajalein Atoll / Reagan Test Site

Integrator and Synchronizer of Army Air and Missile Defense Enterprise
SMDC Video
Threat Trends

• Proliferation of TBMs
• Growing use of UAVs / CMs
• Successful Hypersonic Weapons
• Cyber Attack of Networks and Systems
• Advancement in ASAT
Enable the Defeat of the Full Range of Air & Missile Threats
Build Partner Capacity and Maintain Forward Presence
Transform the AMD Force

Attain Networked Mission Command

Air and Missile Defense Strategy Lines of Effort

SMDC / ARSTRAT
ASA (ALT)
TRADOC
FCOE
PEO MS

SMDC / ARSTRAT
ASA (ALT)
HQDA G-3
ASA (ALT)
TRADOC
FCOE
PEO MS

SMDC / ARSTRAT
ASA (ALT)
TRADOC
FCOE
PEO MS

ARMY AMD Primary Stakeholders

Multiple Roles Position SMDC as Enterprise Integrator
SMDC ROLE in the ARMY AMD Enterprise

Army AMD Enterprise

Council of Colonels/General Officer Steering Committee

HQDA G-3
HQDA G-8
SMDC / ARSTRAT
ASA (ALT)
TRADOC
FORSCOM
ARNG
AAMDCs

HQDA G-1
HQDA G-2
HQDA G-4
AMC
AMCOM
ATEC
MDA
JIAMDO
J7

SMDC Hosts Bi-Weekly AMD/BMD Telecon
The Army AMD Modernization Strategy

• Integrate the Force
• Protect the Force
• Build Partner Capacity
• Transform the AMD Force
AMD Modernization: Defeating the Full Range of Air Threats

**Current**
- **Shooters**
  - PAC-3 Missile
  - Terminal High Altitude Area Defense
  - CRAM
  - Stinger
- **Sensors**
  - PAC-3
  - THAAD AEU
  - Improved Sentinel
  - Patriot Config-3
- **Mission Command**
  - AMDPCS / FAAD C2

**POM Years (AMD Componentization)**
- **Shooters**
  - MSE Missile
  - Avenger
  - Joint Land Attack CMD Elevated Netted Sensor System (JLENS)
- **Sensors**
  - Joint Land Attack CMD Elevated Netted Sensor System (JLENS)
- **Mission Command**
  - Integrated AMD Battle Command System (IBCS)

**Extended Planning Period (Modernize AMD Components)**
- **Shooters**
  - Low Cost Interceptor
- **Sensors**
  - Indirect Fire Protection Capability (IFPC) Increment 2
- **Mission Command**
  - GAP NOT ADDRESSED: Personnel / Equipment Sufficiency

**GAP ADDRESSED:**
- Sustain fielded systems
- Upgrade Patriot (P3I)
- Extend Service Life (Stinger)
- Field enhanced SRBM intercept capability
- Sustain current systems
- Field MRBM intercept capability (exo-atmospheric)

**GAP NOT ADDRESSED:**
- Personnel / Equipment Sufficiency

**Integrated AMD Battle Command System (IBCS)**
- Common AMD Mission Command Node
- IBCS gradually replaces AMDPCS / FAAD C2 enabling joint advanced engagements

**AC/ARNG/Total**
- **ADAS**
  - COCOM: 6/0/6
  - AAMDC: 3/1/4
  - ADA: 5/3/8
  - ADA: 17/7/24
- **Equipment for 7, personnel for 8 programmed**

**Indirect Fire Protection Capability (IFPC) Increment 2**
- GAP ADDRESSED:
  - CMD / C-UAS / C-RAM

**Future Radars**
- GAP ADDRESSED:
  - Enhanced Detection

**Joint IFC Network**
- Field 360-degree sensor coverage and interceptor

**Joint Land Attack CMD Elevated Netted Sensor System (JLENS)**
- GAP ADDRESSED:
  - Cruise Missile / UAS Detection

**Mission Command Nodes must be Integrated and Networked**
Emerging IAMD Technology Initiatives

- High Energy Lasers
- Railgun
- Left of Launch
  - Non-kinetic
  - Cyber Operations
  - Joint
- Counter Hypersonic Weapons
- ARCYBER Command formed to address Cyber attack. Collaboration with MDA to examine MD Cyber defense approaches.
AIAMD First Flight Test - 28 May 2015

- Successful intercept test against a Tactical Ballistic Missile (TBM) surrogate target using a Patriot Guidance Enhanced Missile-Tactical (GEM-T) missile. A Patriot-As-A-Target TBM surrogate flew a TBM trajectory against an asset defended by an AIAMD task force.

- Task Force comprised of a Battalion Engagement Operations Center (EOC), a non-collocated Battery EOC with a Patriot radar, and a remote Integrated Fire Control Network (IFCN) Relay connected to two adapted Patriot Launchers operating on an IFCN.

- The IBCS coordinated all aspects of the engagement sequence.

- This test demonstrated the ability to conduct an engagement over an IFCN utilizing the IAMD Battle Command System (IBCS).
The Critical Factor – Trained and Ready Soldiers

- Conducting 24/7 GMD Homeland Defense
- Playing Integral Role in NTC’s
- Continuous Updated Training on Current and Newly Fielded Systems
- Leveraging the Unique Strengths of ARNG, Reserve & Active Components

- High Demand – 58% ADA Forward Deployed
Way Ahead

• Build On Success
• Ensure Synchronization & Integration Enterprise is Enduring
• Conduct Experiments that Address Simultaneous Air and Missile Attacks
• Closer Collaboration and Coordination Between Services and Coalition Partners
• Conduct Early Vulnerability Assessments of Systems and Architectures
• Develop Better Automated Linkages Between Sensors, Communications and C2 of Air & Missile Defense Systems

An IAMD Enterprise That Defends Critical Assets and Protects the Force
Questions?