



*U.S. Army Space and Missile Defense Command/  
Army Forces Strategic Command*



# USASMDC/ARSTRAT

## JFCC IMD

### Command Update

# Fires Seminar 17 May 2012

# Report Documentation Page

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# Our Reporting Chain

## Our Mission



**USASMDC / ARSTRAT**

**JFCC IMD**

**“Three Hats”**

USASMDC/ARSTRAT conducts space and missile defense operations and provides planning, integration, control and coordination of Army forces and capabilities in support of U.S. Strategic Command missions; serves as the Army force modernization proponent for space, high altitude and global missile defense; serves as the Army operational integrator for global missile defense; and conducts mission-related research and development in support of Army Title 10 responsibilities.

Assigned as Commanding General Joint Functional Component Command for Integrated Missile Defense.



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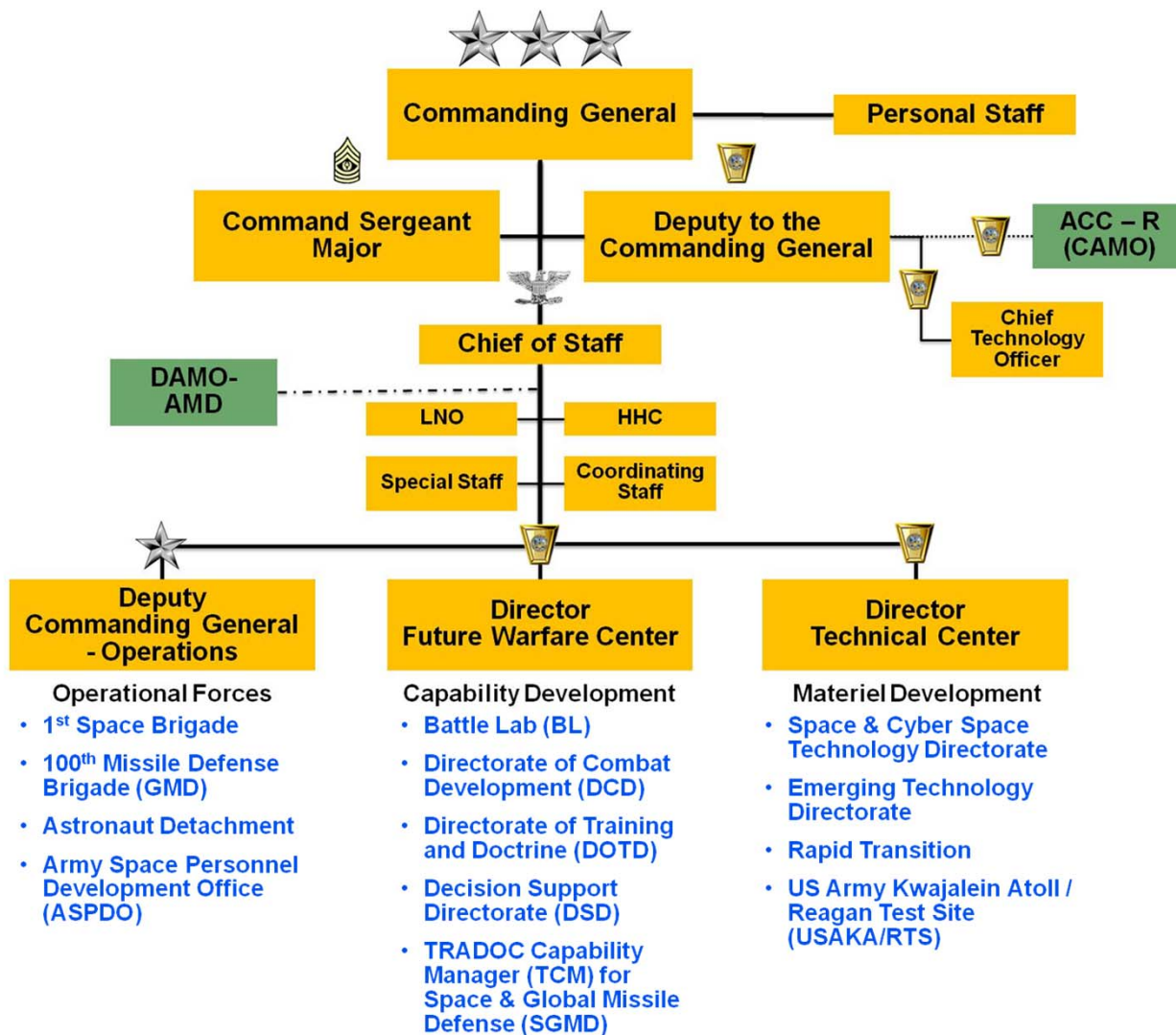


# Organizational Vision Statement

- A diverse, complex, and global command that provides critical capabilities to our Army, USSTRATCOM, COCOMs/ASCCs; in synch with JFCC-IMD
- One command...split based...multi-component...diverse constituencies...dispersed locations...talented work force of Soldiers, Civilians, contractors; public servants
- The Army's force modernization proponent for Space, High Altitude, and Global Missile Defense; the Army's operational integrator for Global Missile Defense:
  - Providing trained and ready Space and Missile Defense forces and capabilities in service to the Warfighter and the Nation (today)
  - Building future Space and Missile Defense forces (tomorrow)
  - Researching, testing, and integrating Space, Missile Defense, cyber, directed energy, & related technologies (day-after-tomorrow)
- Close, collaborative relationships with MDA and a multitude of stakeholders
- Nested within the Army's enterprise; engaged with and embedded in the HQDA DAMO-AMD
- Provide staff support to ARCYBER; retain close organizational linkages
- Disciplined stewards of our nation's resources – accountable cost culture
- Precise, confident, fit, disciplined, courageous Soldiers and Civilians; tough, caring, courageous leaders; committed to safety in all that we do
- A responsible and cooperative tenant on the installations on which we live and serve
- A values based command – caring for and serving Soldiers, Civilians, Families



# Organization



## Three Core Tasks:

- Provide trained and ready Space and Missile Defense forces and capabilities to the Warfighter and the Nation (today)
- Build future Space and Missile Defense forces (tomorrow)
- Research, test, and integrate Space, Missile Defense, cyber, directed energy, & related technologies (day-after-tomorrow)



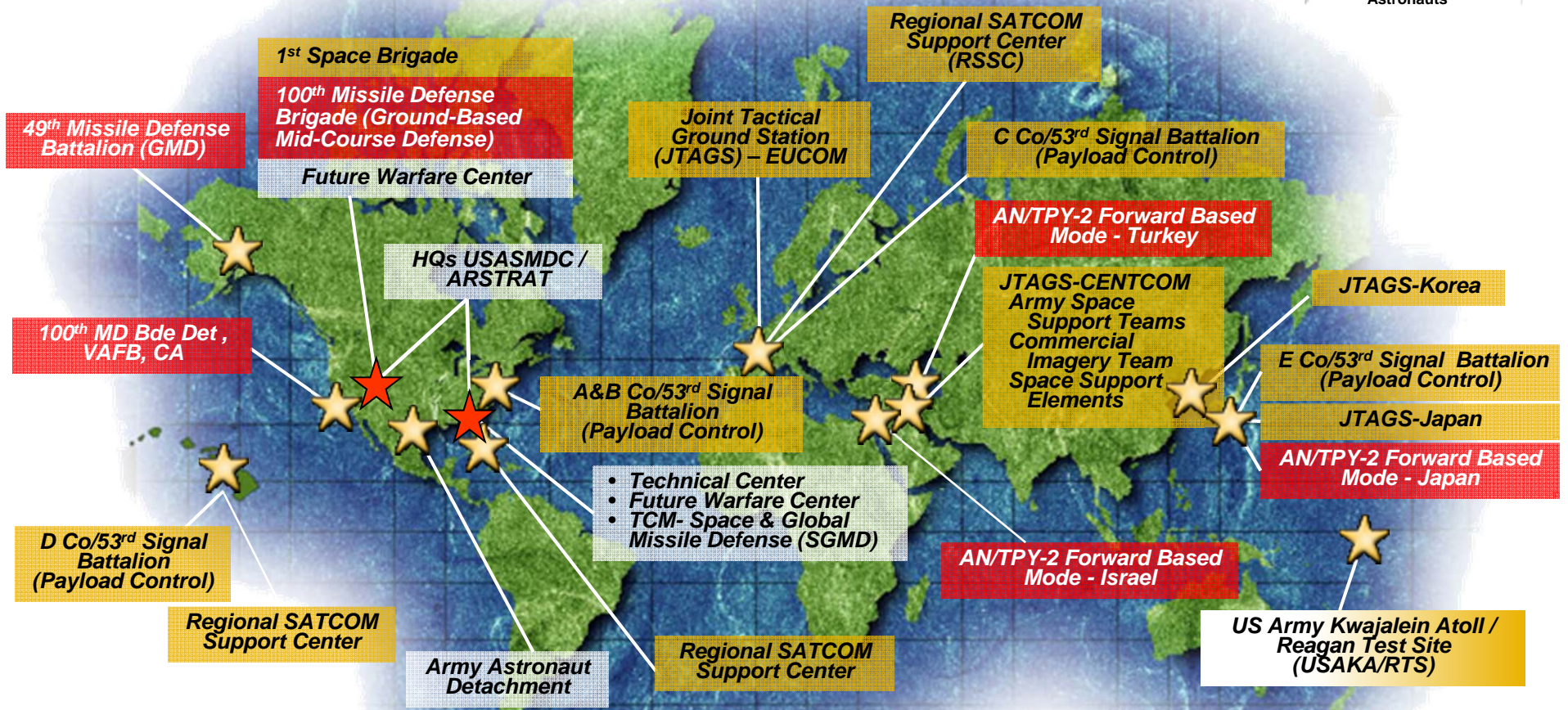


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# A Global Command

Gold: Space Ops  
Red: Missile Defense Ops  
White: HQs, FWC, Technical Center and Army Astronauts



**Uniquely Organized – Geographically Well-Positioned**

“Secure the High Ground”

The sun never sets on USASMDC/ARSTRAT





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## Operations (today)

### Deliverables:

- On any given day – provides more than 840 Operational Forces; US-based, forward-stationed or deployed supporting missile defense and space operations
- Provides missile defense crews 24/7/365, protecting 300 million Americans
- Delivers theater missile warning to deployed forces
- Manages wide-band satellite communications services and support
- Provides Joint Friendly Force Tracking capability
- Provides space based imagery to ground forces
- Provides space tracking and space situational awareness capabilities to USSTRATCOM
- Oversees professional development and career management of Army Space Officers (FA40s)
- Provides operational support for human space flight programs

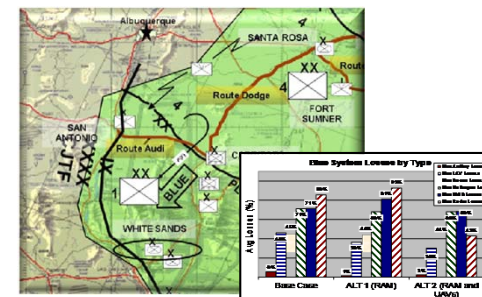
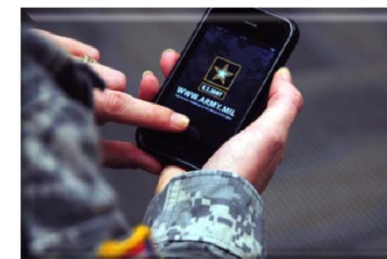




# Capability Development (tomorrow)

## Deliverables:

- Proponent for Space, High Altitude and Global Missile Defense forces and capabilities
- Develops Army Doctrine, Organizations, Training, Materiel, Leader Development, Personnel and Facilities for future space and missile defense forces
- Conducts Army concept development & experimentation for space, missile defense and high altitude capabilities
- Trains and educates the Army's space and missile defense professionals; recognized as U.S Army Training and Doctrine Command Institute of Excellence
- Performs modeling and simulation-based analysis to assess contributions of space, high altitude and missile defense capabilities and inform Army and DoD investments
- Integrates space concepts into Army leader and Soldier institutional training and education



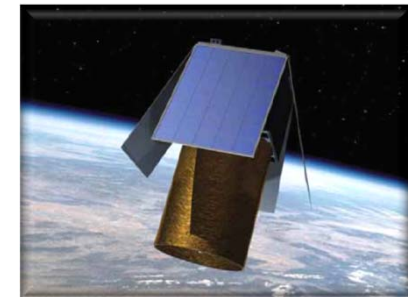




# Materiel Development (day-after-tomorrow)

## Deliverables:

- Operates Kwajalein Atoll / Reagan Test Site as a Major Range and Test Facility Base
- Space, High Altitude and Missile Defense Research and Development Initiatives
  - Nano-satellite technology demonstrations (phased approach, 2012-2014)
  - Long Endurance Multi Intelligence Vehicle (LEMV) operational deployment in 2012
  - High Energy Laser Technology Demonstrator; Counter Rocket, Mortars and Artillery
  - High Power Microwave Weapons and other technologies for Counter-IED (LightGuard Minotaur Early User Test, 2012-2013)
  - Advanced Hypersonic Weapon development
- Research and development supporting Army Cyber Command





## So – What Have We Been Up To?

### Operations

- Deployed 8 Army Space Support Teams (ARSSTs), 2 Commercial Imagery Teams (CITs) and 2 Army Space Control Element (ASCE) teams
- Supported 15 exercises
- Deployed AN/TPY-2 Forward Based Mode Radars
  - EUCOM - Turkey achieved Technical Capability in Dec 11
  - CENTCOM - Interim Site projected for July 12
  - 2<sup>nd</sup> PACOM Site under evaluation
- Modernized FT Detrick Wideband SATCOM Operations Center
- Supported early orbit testing of fourth Wideband Global SATCOM (WGS – 4)
- Supported early orbit testing of first Mobile User Objective System (MUOS)

### Capability Development

- Revising Space and Missile Defense doctrine IAW Doctrine 2015 Strategy
- Supported Army 2020 Task Force and Unified Quest 12
- Developed Army Space White Paper
- Drafted *Proactive Missile Defense* white paper
- Training over 4000 Space and Missile Defense Students
- Supported Network Integration Evaluation (NIE) with an aerostat to host communications payloads



## So – What Have We Been Up To?

### **Matériel Development**

- Launched first successful Advanced Hypersonic Weapon
- Initiated Joint Capabilities Technology Demonstration (JCTD) efforts
  - Two nanosatellite systems (SNaP for BLOS communications and Kestrel Eye for ISR support)
  - One low-cost space launch system (Soldier Warfighter Operationally Responsive Deployer System - SWORDS)
- Selected by NRO to provide two SMDC-One nanosatellites as secondary payloads – will demonstrate BLOS communications for the Warfighter
- Launched Economical Target (ET-1) using SMDC's 25K Transportable Target Launcher
- Completed High Energy Laser Technology Demonstrator (HEL TD)
  - Successful Low Power Operational Design Reference Mission (DRM) Test – Dec 11
- Initiated High Energy Laser Mobile Demonstrator (HEL MD)
  - 10 kW Demonstration projected for Jan 13
- Led an Army-wide effort to evaluate Electric Fires potential and threat



# And So What's Ahead in 2013

## Operations

- Continue to provide trained and ready Space and Missile Defense Forces: 8 deployments & 11 exercises
- Modernize Landstuhl WSOC
- Operational acceptance of WGS-4 and MUOS-1
- Provide SHF Consolidated SATCOM System Expert (C-SSE) capability
- Provide UHF Consolidated SATCOM System Expert (C-SSE) capability

## Capability Development

- Inform and influence future force structure through Total Army Analysis (TAA) and the Army 2020 study
- Standardize AN/TPY-2 FBM support to the GCCs (DOTmLPF Catch-up)
- Complete transition of the GMD Operator's Course from MDA to the Army, and train over 2,800 Space and Missile Defense Soldiers, Civilians, and Joint service members
- Support PEO Missiles and Space with a study on Integrated Air and Missile Defense that identifies appropriate architecture, firing doctrine and inventory balance

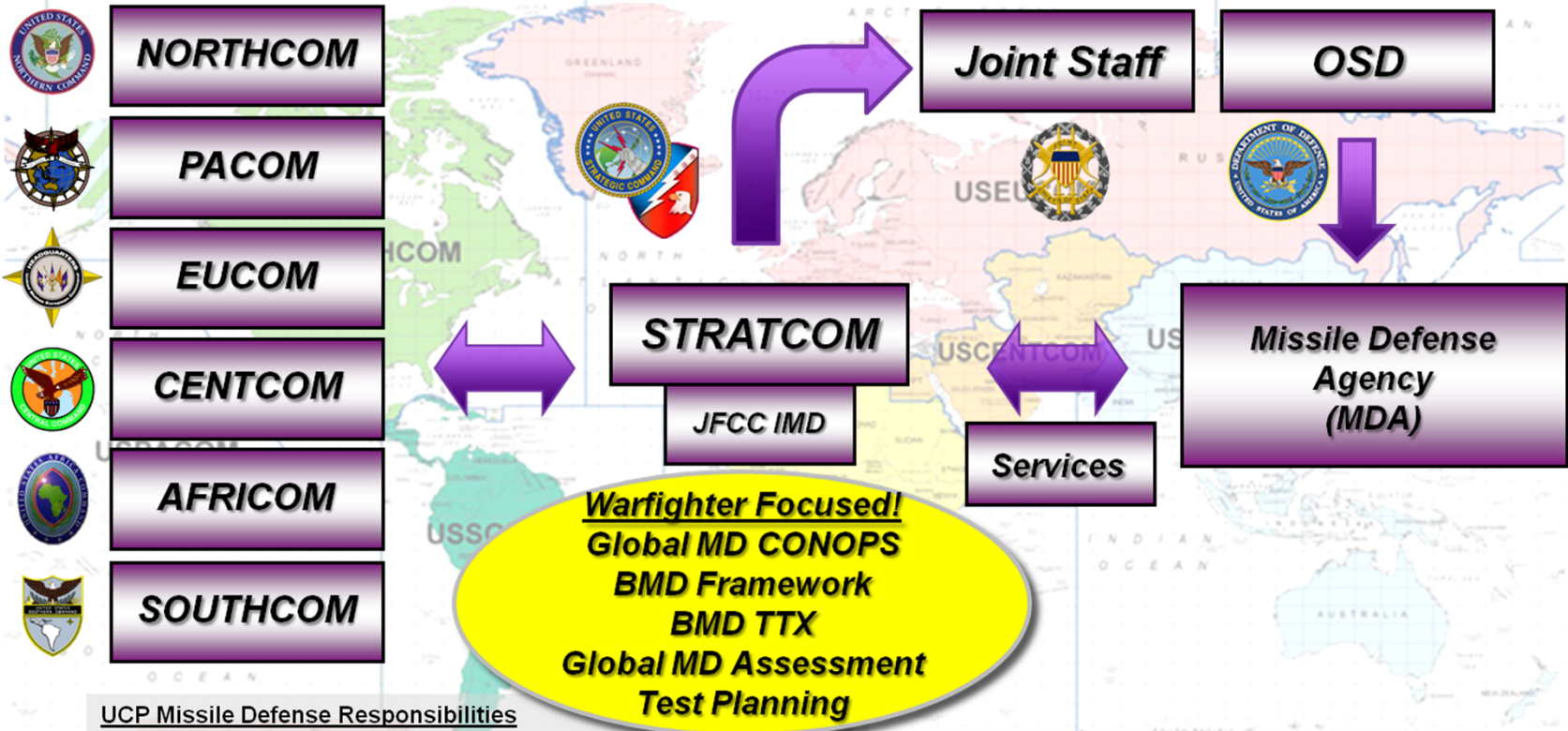
## Materiel Development

- Deploy Long Endurance Multi-Intelligence Vehicle (LEMV)
- Work with OSD to plan for next AHW flight test
- Perform UAS defeat mission demonstrations using mobile demonstrator with onboard 10 kW power laser (High Energy Laser Mobile Demonstrator field testing)
- Conduct extensive lethality testing against rockets, artillery, mortars and unmanned aerial systems (Solid State Laser test bed)





# USSTRATCOM/JFCC IMD Responsibilities and Tasks



UCP Missile Defense Responsibilities

- Synchronize planning for global BMD
- Coordinate global BMD operations support
- Develop/Maintain Global BMD CONOPS
- Provide military representation to US national agencies, commercial entities, and international agencies
- Advocate & coordinate global missile defense and warning capabilities and support
- Integrate TSC activities, deployments and capabilities ICW GCCs
- Provide alternate missile defense execution support

IMD Key Mission Tasks

- Synchronize operational missile defense planning
- Joint Functional Manager for missile defense
- Coordinate asset management for missile defense
- Provide alternate missile defense execution support
- **Joint Missile Defense Training**

*Pro Mundi Vigilans !!*

*Vigilant for the World !!*



# So what have we been up to?

- North Korea Space Launch Tracking
  - Clear dependence on missile defense assets, tactics, techniques & procedures
- Phobos Grunt (Russian satellite) Reentry Tracking
  - Heavy participation from MD community; lots of lessons learned
- Global BMD Framework
  - JS PLANORD briefed to VCJCS...driving major shifts in BMD allocation
- AN/TPY-2 Capability Acceptance
  - Worked capability acceptance of new EUCOM radar
- Presented GCCs options for alternate control of AN/TPY-2 / C2BMC
  - Used experience with control of Shariki to inform/guide EUCOM/CENTCOM decisions
- Combat Support Agency Transfer
  - Identified MDA roles/missions appropriate for realignment



# So what have we been up to?

- Nimble Titan Regional Wargames in USPACOM / USEUCOM / CAPSTONE
  - Tackled key political/military issues that affect multinational BMD
- Ballistic Missile Defense 3-Star TTX
  - HUGE success; informed the GFM process – improving global MD allocation and employment decisions
- Integrated Master Test Plan
  - Participated in 8 major test events over the last year...many more to follow
- Operational Assessment of APOM
  - Numerous iterations...synchronized assessment with the PCL
- Global Force Management Board
  - Built FY13 GFMAP and a concept for creating a BMD Surge Force
- Missile Defense Executive Board / Ops Forces Stand Committee
  - Continued presence in decision making bodies governing missile defense



# So what's ahead in 2013

- Phased Adaptive Approach
  - Continued to work placement of future BMD capabilities
  - Working AN TPY-2 radar Warfighter Acceptance in EUCOM...major step
- Exercises – Tier 1
  - Exercises demanding more MD involvement...important Senior Leader sessions
- BMDCON CJCSI
  - Follow up to BMD Framework effort with the Joint Staff and GCCs
- Following up on Joint BMD Training Study (BITENA)
  - Begin implementing future of BMDS Training & Education -- belongs with us
- Establish GCC LNOs
  - Further operationalize by providing steady state presence within GCCs
- Inclusion/utilization of Foreign Liaison Officers
  - Integrate Dutch & German LNOs into the staff
- Road Mobile ICBM
  - Preparing for emerging threats





## Closing Thoughts

**USASMDC/ARSTRAT is the Army Service Component to USSTRATCOM**

**JFCC-IMD is the functional component to USSTRATCOM for Missile Defense**

**CG USASMDC/ARSTRAT commands JFCC IMD because of the capabilities**

**USASMDC/ARSTRAT contributes as the ASCC**

### **Uniquely Organized**

- Operations: 1<sup>st</sup> Space Brigade, 100<sup>th</sup> Missile Defense Brigade
- Capability Development: Future Warfare Center
- Materiel Development: Technical Center

### **Geographically Well-positioned**

- Huntsville: co-located with MDA, AMC/AMCOM/ACC, PEO Missiles and Space, PEO Aviation, MSIC, NASA, and the technical base there
- Colorado Springs: co-located with MDA, NORTHCOM, US Air Force Space Command, JFCC IMD, and the technical base there

**Providing critical capabilities to Combatant Commanders and Warfighters**



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# Questions?