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LTG Formica's Remarks – as Delivered**

Title

America's Next First Battle – Manning, Training, Equipping – An
SMDC/ARSTRAT Perspective

Opening

Is this a Hooah Day in Fort Lauderdale or what?

Recognitions - Omitted

Stage Setter

I want to thank AUSA for inviting me to speak to you about our perspective on America's First Next Battle - Manning, Training and Equipping. My purpose today is to inform you about what we're already doing at SMDC / ARSTRAT to prepare for America's First Next Battle in the areas of manning, training and equipping our Army's space and missile defense forces. It's a task that SMDC is uniquely organized to accomplish.

My perspective comes from the three hats I currently wear.

1. U.S. Army Space and Missile Defense Command trains, maintains, and equips the Army's Space and Global Ballistic Missile Defense forces
 - o Within the Army, we also serve as the specified proponent for space, high altitude, and ground-based missile defense



2. SMDC/ARSTRAT also serves as the Army Service Component Commander to USSTRATCOM
 - We are the Army force provider to USSTRATCOM
3. My third hat is Commander of USSTRATCOM's Joint Functional Component Command for Integrated Missile Defense
 - JFCC IMD is responsible for integration and global synchronization of missile defense systems and operations to provide optimized, layered missile defense against missiles of all ranges and in all phases of flight

Army's Strategic Guidance

My perspective is informed by two very important strategic documents that were released last year.

First

- The Defense Strategy: "Priorities for 21st Century Defense"
 - Let me highlight two of the many key points provided by the Defense Priorities:
 - Regarding the space and cyberspace capabilities we depend on: "Modern armed forces cannot conduct high-tempo, effective operations without reliable information and communication networks and assured access to cyberspace and space,"...
 - Regarding our homeland defense needs: "Homeland defense and support to civil authorities require strong, steady –state force readiness, to include a robust missile defense capability."



Second

- The Army's Capstone Concept recognizes the importance of both Space and Missile Defense to unified land operations
 - The Army “requires access to space capabilities to exercise effective mission command and support combatant commanders”
 - “The Army requires leaders and Soldiers trained to initiate and maintain access to space capabilities and who can mitigate attempts to deny, degrade, and disrupt that access”
 - To “address the unique threats of the emerging operational environment, the Army provides strategic and theater missile defense capabilities”
- As many in this audience know, the Capstone Concept is an important document because it's the basis for future Army doctrine.
 - It describes the Army's vision for the future environment
 - More importantly, it helps determine the Army's investment strategy for force structure, readiness and modernization
 - Today, I want to provide you my perspective of the space and missile defense aspect of that future environment – what our vision is...
 - And how we are informing the Army's investment strategy for force structure, readiness and modernization – in an era of fiscal uncertainty and reduced budgets

The Army Space and Missile Defense forces contribute to the Army's ability to shoot, move, communicate; they defend the nation, our forces overseas,



and our allies from limited ballistic missile attack, and they provide early warning to our forces in theater.

Uniquely Organized

At SMDC/ARSTRAT, we are a uniquely organized, multi-component (Active, Guard and Reserve), regionally aligned and geographically well-positioned command:

- And we are preparing to meet the challenges of America's First Next Battle and to carry out the Army's strategic guidance.
- To do that, we are organized around three lines of effort to perform three core tasks:
 - Operations – To provide trained and ready Space and Missile Defense forces for our Nation, our Army and for the Warfighter – capabilities we provide today
 - Capability Development – To build future Space and Missile Defense Forces and a Space Cadre – tomorrow
 - Materiel Development – To conduct space mission-related research and development activities – the day after tomorrow

Army's Role in Space

Many of you have heard me say this before – the Army is the largest user of space-based capabilities in the Department of Defense

- What you may not know is that your Army provides significant operational space capabilities to the Joint Warfighter



- With many of those capabilities provided by SMDC/ARSTRAT Soldiers, Civilians, Contractors and Industry partners
- Today there are about 2.1 satellite antennas per Soldier in current operations – these antenna provide:
 - Satellite Communications
 - Positioning, Navigation and Timing
 - Intelligence Surveillance and Reconnaissance
 - Missile Warning
 - Weather/Environmental Monitoring
 - Space Control/Space Situational Awareness

The Army's dependence on space as a force multiplier will continue to grow for Army of 2020 and beyond

- We, as an Army, depend on space capabilities in everything we do – pre-deployment, deployment and redeployment
- Retaining our space superiority is a military imperative and there's no going back
- Space assets support most all that we do in the Army and is a critical enabler of all 6 Warfighter functions
 - Mission Command
 - Intelligence
 - Movement and Maneuver
 - Fires
 - Protection



- Sustainment
- From an SMDC/ARSTRAT Perspective this means:
 - Army Space Support Teams that will be regionally aligned to support the ASCCs and JTF HQs – to plug into the Space Support Elements assigned to these commands – attuned to the unique challenges and requirements of the supported COCOM
 - Commercial Imagery Teams – supporting the Geographic Combatant Command while contributing to security assistance of our Allies
 - Continued integration with and contribution as part of DoD's Geospatial Federation
 - JTAGS ground stations with SIBRS Stare capability to provide direct theater Missile Warning to GCCs
 - Wideband Satellite Operations Centers
 - Coordination with TRADOC and FORSCOM to insure that space is fully integrated into planning and training for the Army of 2020 and beyond

Army's Role in Missile Defense

The Army has been engaged in ballistic missile R&D and operations for decades.

- The Army developed, tested and integrated key hit-to-kill interceptor and radar technologies that made PAC-3, GBI, THAAD and the AN/TPY-2 radar possible

When the SECDEF established the Missile Defense Agency in 2002, Army materiel development of most of these programs was transferred to MDA



- But the Army retains responsibility for DOTmLPF (Doctrine, Organization, Materiel Development, Leadership, Personnel, Funding) for the missile defense systems

Today SMDC/ARSTRAT is responsible for organizing, manning, equipping and training assigned BMDS elements, and providing the national range assets at Kwajalein Atoll that support MDA testing and USAF ICBM tests

Two significant tasks we are currently focused on:

- Standardize AN/TPY-2 FBM support to the GCCs (DOTmLPF Catch-up) as the force provider of these MDA fielded systems
- Force provider for BMD forces at FT Greely and Vandenberg AFB
 - Soldiers from the Army's 100th Missile Defense Brigade operate the Nation's Ground-Based Midcourse Defense system 24/7/365 under the OPCON of USNORTHCOM
 - These are 300 Soldiers defending 300 million Americans

The threat of missile attack to the Homeland and to our Allies will continue to grow into the foreseeable future. To counter these threats, the Army of 2020 must continue to grow and evolve its Missile Defense capabilities.

- Our focus will be first on Homeland Defense and then on Regional Defense
- We must continue to test and exercise the Ballistic Missile Defense system
 - As Warfighters, our priorities are to
 - Maintain confidence in our current global interceptors
 - Gain confidence in the next generation interceptors
 - Test Regional capabilities – SM3 sensors, THAAD, PATRIOT



- Exercise C2BMCS across the COCOMs
- Explore policies and review capabilities for Regional Missile Defense with our Allies
- Pacific shift and continued threat in the Middle East require a greater commitment of missile defense resources. We need to consider how to meet the increasing demand for
 - More THAAD Batteries and PATRIOT Battalions
 - Potential for additional AN/TPY 2 (FBM) Radars
 - Expanded command and control infrastructure

Manning, Training and Equipping Space and Missile Defense Forces

Operationally, SMDC/ARSTRAT supports numerous efforts to organize, man, equip, and train the space and missile defense forces necessary to meet the needs of the Army, the Warfighter, and the Nation

- Army Space and Global Missile Defense Capabilities are Regionally Aligned and Globally Engaged – critical enablers to the Army’s ability to Prevent, Shape and Win
- On any day the SMDC/ARSTRAT has about 950 operational forces; US-based, forward-stationed or deployed supporting Space and Missile Defense operations
 - Last year the SMDC/ARSTRAT deployed eight Army Space Support Teams and Commercial Imagery Teams to the CENTCOM Area of Responsibility (AOR)
 - 78 teams have deployed since the start of combat operations



SMDC / ARSTRAT



- Our Space Professionals supported 16 major exercises, 3 mission rehearsal exercises for deploying units in support of Operation Enduring Freedom, and 17 named operations
- SMDC/ARSTRAT Joint Tactical Ground Station Soldiers provide early theater missile warning to the Combatant Commanders
- We provide the Satellite Systems Expert for operational planning and employment of two of our country's newest Satellite Communications (SATCOM) systems - Wideband Global SATCOM (WGS) and Mobile User Objective System (MUOS) to bring added bandwidth to the Warfighters
 - There are 4 WGS satellites in operation today with two more launches this year
 - The plan is to deploy 10 WGS satellites; fielding is planned through FY19
 - Today we have Partner agreements with 6 countries (Australia, New Zealand, Canada, Netherlands, Denmark, Luxembourg)
 - We currently have Australian military personnel working in our Wideband Operations Center in Wahiawa, Hawaii
 - MUOS is the next-generation narrowband tactical satellite communications system designed to significantly improve beyond-line-of-site (BLOS) communications for U.S. forces on the move
 - The first of five MUOS satellites is in operation today with the second MUOS launch scheduled for later this year



- Joint Friendly Force Tracking and commercial space based imagery supports Combatant Commands across the globe as well as operations at home
 - Provided Friendly Force Tracking data services in support of both military, government agency, and crisis/contingency requirements
 - Routinely support COCOMs and Named Operations
 - Most recently, support NORTHCOM with natural disasters such as the Colorado Wildfires and Hurricane Sandy to USNORTHCOM (Common Operational Picture)
 - SMDC also provides commercial space based imagery to ground forces
 - ~72,000 CIT products per year, most recently providing capacity in Iraq and Afghanistan
 - ~12,000 Geospatial Intelligence reports per year

Building Future Space and Missile Defense Forces

As the Army's proponent for Space, High Altitude and Global Missile Defense forces and capabilities, we develop Army Space and Missile Defense Concepts and Doctrine such as the Army Space Operations Manual (FM 3-14) and Ground-Based Missile Defense Operations Manual (FM 3-27). Both to be updated in FM 13 & 14 respectively.

- Last year, we completed the Army Space Operations White Paper – lays the foundation for determining space capabilities for the Army of 2020



- Continues to serve as a TRADOC Institute of Excellence – just completed its fourth TRADOC quality assurance accreditation inspection in the last eight years – we scored 100% against the 28 inspection standards
 - Trains and educates the Army’s space and missile defense professionals and follows this training up by assisting in the development of tactics, techniques and procedures (TTP) to be employed by space and missile defense professionals globally
 - ~200 formal courses and more than 6,000 students per year
 - This year we are further integrating Space training into the Army's Institutional Training Schools
 - Have integrated Space Knowledge training in 20 Schools and Centers of Excellence
 - Army Space Training Strategy
 1. Increase space knowledge across the force by incorporating in institutional training at Centers of Excellence
 2. Train our units at home station and CTCs on how to exploit space capabilities allowable to it and to respond in a degraded environment
 3. Continue to train our space professionals
 - We’re also working hard to expand our efforts along similar lines for Ballistic Missile Defense training by continuing training AN/TPY-2 FBM sensor management operations; GMD and command launch equipment operations



- And in 2013 we'll take a growing role in Joint BMDS education and training by FWC under JFCC IMD oversight and USSTRATCOM authority
- Our Future Warfare Center conducted the HQDA G-3/5/7's Tactical Space Protection Study
 - Looked at space-based dependencies at the Brigade Combat Team level to identify the impacts of lost or degraded space-based capabilities on tactical operations
 - Used to inform the ongoing Space Capabilities Based Assessment (CBA) and the Mission Command CBA to help identify specific space related gaps associated with the Warfighting Functions
 - We believe these documents will also help identify current linkages and gaps across the Joint community efforts

The Army's Space Mission-related Research & Development Activities

Our Technical Center conducts space mission-related research and development activities.

- Last year, the Technical Center had three programs approved for Joint Capabilities Technology Demonstration (JCTD)
 - These JCTDs will develop capabilities to enhance communications, ISR, and low cost launch with the objective of enhancing responsive space support to the Warfighter
 - SMDC Nanosatellite Program (SNaP) – beyond line of sight communications
 - SMDC/ARSTRAT currently has two nanosatellites on orbit



- Conducting on-orbit experiments of beyond line of sight communications and unattended ground sensor exfiltration
- o Kestrel Eye - ISR
- o Soldier-Warfighter Operationally Responsive Deployer for Space (SWORDS) – low cost launcher
- o These JCTDs will help us identify how do we take these nanosatellite concepts and turn them into operational capabilities
 - How do we develop the technology
 - How would we integrate it into the Army's Doctrine, Organization, Materiel, Training, Leader Development, etc...DOTMLPF...
 - How would we employ them in operations to provide responsive space capabilities to the tactical and operational commander

You'll hear more about these from LTC Pat Marshall during his talk with industry later this morning.

An excellent example of technology with a promising future is our work with the Advanced Hypersonic Weapon system. With AMRDEC and SANDIA we had a highly successful test in 2011.

- Flew thousands of miles in tens of minutes
- Remarkably accurate – especially for a first-of-its-kind prototype system
- We have been approved to develop plans for a second test – probably in 2014 – tremendous potential as part of OSD's Prompt Global Strike

SMDC has been working with industry partners to develop a solid state high energy – 100 Kilowatt – laser system



- The High Energy Laser program achieved "First Light" at the Solid State Laser Testbed
- Lays the groundwork for future development of a mobile high energy laser system
- Intent is to engage rockets, artillery, and mortars as well as in a counter Unmanned Aerial System (UAS) role

In addition to developing technology for our future forces, our Technical center is also responsible for operations at the U.S. Army Kwajalein Atoll/Reagan Test Site (USAKA/RTS). USAKS/RTS is a National Test Range operated by the U.S. Army. Kwajalein is a one-of-a-kind asset which supports research, development, and testing. It also provides operational support to JFCC Space in the form of space tracking and space object identification.

- USAKA/RTS, along with other elements of the command, recently enabled the Missile Defense Agency and other operational elements to conduct the FTI-01 global missile defense test
 - FTI-01 accomplished several "firsts"
 - THAAD successfully intercepted its first Medium Range Ballistic target in history
 - PATRIOT PAC-3 near simultaneously destroyed a Short Range Ballistic Missile and a low flying cruise missile target over water

It was the kind of test that could only be done by an organization like MDA and the kind of test that could only be done at a world class test range like the RTS at Kwajalein.



Funding Challenges

No discussion today can be complete without addressing the impact of budget reductions on the force. You know these reductions stem from three challenges: Sequestration, expiration of Continuing Resolution funding, and reduction of Overseas Contingency Operations funding. The first two have the most direct impact on SMDC/ARSTRAT.

- We are a microcosm of the Army's challenges as attested by the CSA and others with our most significant operational impacts on space and missile defense operations, institutional training, and operations at USAKA
 - This has the potential to degrade strategic and theater missile defense operations defending the homeland and our allies; reduces space capabilities such as satellite communications, theater missile warning, space surveillance and space object identification; and impacts our ability to conduct missile tests at USAKA
- As Senior Commander at two remote locations – Kwajalein and Fort Greely, I am concerned about potential reductions in medical TDY, emergency services and airfield operations
- I'm also concerned about angst in our civilian workforce – the talk of furloughs and loss of jobs generated by the contract work force that is so important to our mission

We are taking actions to implement the Army's guidance. This includes instituting a civilian hiring freeze (with exceptions for mission critical



positions). We are also evaluating all of our contracts for potential cost savings.

As we continue to provide our assessment to the Army about budget impacts, we remain focused on our mission.

Our priority is on Soldiers and Civilians who are deployed or preparing to deploy as we provide space and missile defense capabilities to the COCOMS and the Warfighter.

Conclusion

SMDC/ARSTRAT is actively engaged – across the Army in working to organize, man, equip, and train our Army’s space and missile defense forces Today, Tomorrow, and The Day After Tomorrow.

Fielding the most advanced, well led, best equipped and best trained Army in the world comes with a large digital footprint and an ever growing need for space-based capabilities. Warning and defending our Soldiers, Sailors, Airmen and Marines against missile attack is a vital responsibility.

We will have challenges ahead as we determine the best courses of action to implement DOD and DA budget guidance. I believe that within all the budget turmoil that Space and Missile Defense capabilities will become even more critical to enabling adaptive Army missions and a reduced force presence. Our focus will continue to be on providing Space and Missile Defense forces and capabilities to the Warfighter, the Army and to the Nation.



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Thank you.