Delivering Space Capabilities to Enable the Tactical Warfighter

LTG Richard P. Formica

AUSA National Meeting

11 October 2011
Our Reporting Chain

Our Mission

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

“Three Hats”
The Army as a User of Space Capabilities

• Reliant on space-based systems for:
  – Persistent ISR
  – Global Communications
  – Reliable PNT (Positioning, Navigation, and Timing)
  – Assured Missile Warning
  – Weather

• Supports Combined Arms Maneuver/Wide Area Security – critical to Army’s ability to Shoot, Move, and Communicate; enables Mission Command

• Coordination with Joint community is critical – seamless coordination across services, DOD, Joint agencies

• New Army Space Strategic Plan (CSA signed, May 2011)
  – Focus: to assure access to resilient and relevant space-enabled capabilities

"Army Space Vision: Assured access to resilient and relevant space-enabled capabilities to ensure Army operational and generating forces can conduct a variety of full spectrum operations around the world."

-- Army Space Strategic Plan, May 2011
The Army as a Provider of Space Capabilities

• Intel Community – delivers space-based intel to the Soldier, via Tactical Exploitation of National Capabilities
• Signal Community – oversees Army’s space-based communications; acquires equipment, provides trained SATCOM operators and controllers
• USASMDC/ARSTRAT provides space-based capabilities through operational forces, capability development and materiel development
  – Operations - trained and ready space forces and capabilities (Today):
    o Army Space Support Teams (ARSST) & Commercial Imagery Teams (CIT)
    o DOD’s Wideband SATCOM Operations Centers, SATCOM Support Centers, SATCOM System Experts
    o Theater missile warning (JTAGS)
    o Joint Friendly Force Tracking
    o Geospatial Intelligence products
    o Space tracking and situational awareness (Kwajalein)
    o Life Cycle Management for 300 FA40 Space Operations Officers
The Army as a Provider of Space Capabilities (continued)

- Capability Development - builds future Space forces (Tomorrow)
  - DOTMLPF integration & user representation for Army space-based capabilities
  - Army Space Doctrine (FM 3-14)
  - Space concept integration with Army Operating/Functional Concepts
  - Army Space Cadre & Army Space Knowledge/Leader Development Training
  - Army space requirements in coordination with Intel/Signal
  - Wargames, experimentation, & analysis for Army future force development

- Materiel Development - Conducts versatile and affordable space R&D activities that enable full spectrum operations (Day after Tomorrow)
  - Small satellite Technology Demonstrations for niche communications & ISR needs
  - Low-cost, responsive small satellite launch system
  - Space Control Technology Development
  - Space Data Exploitation initiative
  - Other technologies in support of counter-IED & force protection capability gaps
## Space Applications in Support of Army Operating Concept

**AOC Supporting Ideas:**
- Operate decentralized
- Conduct continuous reconnaissance
- Conduct air-ground operations
- Expand capabilities at tactical levels

**Space Capabilities:**
- SATCOM
- Sensors
- SATCOM, PNT
- Space Knowledge

**Implications:**
- SATCOM enables mission command across extended distances
- Space sensors provide environmental monitoring, threat situational awareness, and threat indications/warnings
- SATCOM and PNT enable precision fires, Friendly Force Tracking, and both manned and unmanned aerial systems
- Leaders must understand how space capabilities enable their ability to conduct mission command, integrate strategic Intel, and employ precision fires

*Space-based capabilities enable all elements of CAM/WAS*