Science and Technology Vision

An innovative team of experts pursuing technological solutions that sustain and further develop the forces that underpin enduring stability and peace in Europe and Eurasia

“Leveraging technology to make us stronger together”

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Sourced by RDECOM and NAVSEA
Funded by RDECOM, NAVSEA, and OSD

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USEUCOM Challenges

Eastern Flank
• Revanchist Russia
• Russian invasion of Ukraine
• Operation ATLANTIC RESOLVE

Southern Flank
• ISIL, Foreign Fighter Flow
• Illicit trafficking/migration

Northern Flank
• Arctic expansion/militarization
USEUCOM Challenges

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USEUCOM Commander’s Priorities

• Enable the NATO Alliance to assure, deter, and defend itself against emergent threats.

• Deter aggression and malign influence towards Allies and partners across USEUCOM AOR.

• Ensure postured and ready forces and strategic access to execute USEUCOM’s high priority contingency plans and to support other combatant commands.

• Preserve our strategic partnerships by:
  • Sustaining relationships with highly capable Allies
  • Strengthening recently developed partner capacity, capability, and interoperability.
  • Maintaining regional stability and security.

• Counter Transnational threats by working with and through allies, partners, the interagency, other combatant command and public-private partnerships.

• Focus on key relationships by:
  • Enhancing security on Europe’s Eastern Flank.
  • Preparing forward, in, and for the Levant and Mediterranean.
  • Strengthening ties with emerging Alliance leaders.
  • Seeking greater cooperation for military support to civil authorities that enable the peaceful opening of the Arctic.
USEUCOM S&T Challenges (1/7)

**Integrated Air and Missile Defense:** Improve the ability to defend against Large Scale Attacks, Dense Raid Sizes, and Structured Attacks

- **Sensors:** Improve sensing capability of indications and warning of BMD attack, left of launch detection.
- **Trackers:** The ability to track exponentially greater number of targets with increased precision.
- **Defeat:** The ability to engage a greater number of targets with at lower cost.
USEUCOM S&T Challenges (2/7)

Anti-Access / Area-Denial (A2/AD): Anti-access (A2) strategies aim to prevent US forces entry into a theater of operations. Area-denial (AD) operations aim to prevent their freedom of action in the more narrow confines of the area under an enemy’s direct control.

- Enhance capability to conduct “standard” operations in an A2/AD environment
- Position, Navigation & Timing
- Command and Control
- A2/AD Defeat
USEUCOM S&T Challenges (3/7)

**Intelligence, Surveillance, & Reconnaissance:** Improve the ability to detect, locate and monitor transnational threats and increase the availability of persistent ISR assets

- Improve tagging, tracking, locating sensors to allow them to be maintained and deployed at a COCOM level
- Improve availability of persistent ISR assets

**Cyber:** Provide a Cyberspace Common Operational Picture to ensure freedom of action to support power projection, protect C2, execute networking and engagement activities, defend transactional information
USEUCOM S&T Challenges (4/7)

Electromagnetic Spectrum Management: Provide capability to continue normal military operations in a electromagnetically contested environment

Command and Control Interoperability: Improve capability to leverage partner and allied capabilities to support common goals
USEUCOM S&T Challenges (5/7)

**Space Resiliency:** Improve the ability for COCOMs to use space in a contested environment against transnational threats.

- Develop low cost, rapid response space launch capability
- Develop modular bus with size, carrying capacity, power, and maneuverability to enable mission oriented “capability sets” - (communications, data relay, optical or electronic ISR sensor) to be plugged in as operational requirements are generated.
USEUCOM S&T Challenges (6/7)

Counter-Unmanned Aerial Systems

• Improve capability to detect and track all classes of UAVs.
• Improve capability to engage, kinetically and non-kinetically, UAVs which are deemed a threat to US or allied interests.
• Improve capability to prevent adversary capability to, kinetically and non-kinetically, counter US or allied UAVs.
USEUCOM S&T Challenges (7/7)

Maritime Surface and Subsurface Operations: Increased capabilities to perform surface and subsurface operations within contested maritime environments.

- Unmanned Undersea Vehicle technologies
- Communication technologies
- Intelligence, surveillance, target acquisition, and reconnaissance
- Improved detection and tracking of submarines and undersea vehicles
Questions?