

Briefer: Dr. Robert M. Toguchi Type of Brief: Information

Date: 23 May 2019

<u>Purpose</u>: To provide REV2 Conference participants with a conceptual approach to foster a culture of change.

Desired Outcome:

• Common framework and understanding on a viable approach to conceptual change within large-scale organizations.

Agenda:

- Questions to Initiate Change.
- Elements to Foster Change.
- Emerging Concept Framework.
- Components of the Solution.







Five Key Elements to Foster Change:

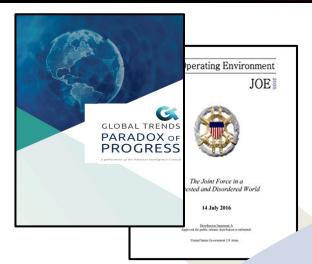
- Portray the Changing Environment
- Identify and Articulate a Clear and Credible Threat
- Convey a Compelling Need for Change
- Create and Communicate the Vision
- Unveil and Follow-Through on the Plan

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What is the Environment Telling Us?

U.S. ARMY SPECIAL OPERATIONS COMMANI



Key Drivers of Change

Networked Targeting Shifting Global Order

AI & Autonomy of Systems

Global Socialization Paradox

Key Global Trends:

- How People Live
 - How People Create and Innovate
 - How People Prosper
 - How People Think

Additive

Manufacturing

- How People Govern
 - How People Fight
 - Terrorism





Operational Concealment - military forces' ability to **conceal their capabilities** and intentions given the proliferation of commercially **distributed digitized information** that also adds a new dimension to how adversaries employ tactics that harness the Internet of Things (IoT).



Competency Edge - comparative advantage in the mix of knowledge, skills, and abilities to employ emerging capabilities such as AI, automation, 3D printing, bio-genetic modification, and human-machine interfacing.



Capability Advantage - numbers of empowered states, groups, and individuals vie for comparative advantages from systems that are growing increasingly **distributed**, **rather than concentrated**, and are both widely available and relatively inexpensive (e.g. UAV swarms).

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Battle Networks - connected systems in a future environment saturated with digitized information, which gives **adversaries access to openly available streams of data** to guide tactical, operational and strategic purposes.



Antagonists and the Antagonized - empowered people with a capacity, capital, and motive who can take advantage of future technologies and shifts in global order to apply force and will against selected people and populations.



Conflict Spaces and Places - the **cognitive**, **virtual**, and physical **spaces** where global actors – states as well as empowered individuals and groups – pursue their interests.



Emerging Concept Framework

We anticipate a future operating context of...

Enduring Challenges

- Time
- Distance
- Populations
- Uncertainty

Evolving Trends

- · Tech-enabled state and nonstate groups
- Hybrid forms of conflict
- Hyper-connectivity increasing rate of emerging threats
- · Decreasing cost of WMD
- · Gray Zone conflicts

That comprise

Operational Environment

- Actors able to mitigate our capabilities
- Blended conventional and irregular conflicts
- Cyber-based influences on populations and governments
- · Diverse growth of threats
- Greater access to WMD

Bending the FOE arc...

- **Global Socialization Paradox**
- Artificial Intelligence and **Automation**
- Additive Manufacturing
- Networked Targeting
- Shifting Global Order

Compounded by ...

Units will have to confront...

Competency Edge - comparative advantage in the mix of knowledge, skills, and abilities to employ emerging capabilities such as AI, automation, 3D printing, bio-genetic modification, and human-machine interfacing. Capability Advantage - comparative advantages from systems that are growing increasingly distributed, are widely available and relatively inexpensive (e.g. UAV swarms).

Operational Concealment - military forces' ability to conceal their capabilities and intentions given the proliferation of commercially distributed digitized information; tactics that harness the Internet of Things (IoT).

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pace Accelerating the

Military Challenge

...how does the organization gain and enduring maintain competitive advantage over our Nation's adversaries?

Central Idea

Unit employs empowered Soldiers and integrated units capable of delivering Joint Combined Arms across the range of modern warfare challenges, leverages adaptive and innovative institutional capabilities to provide the Joint Force an enduring competitive edge over our Nation's adversaries.

Our response should be...

Indigenous Approach – Develop Understanding & Wield Influence – Precision Targeting Operations – Crisis Response through...

Empowered Soldier

- Competency is Capability
- Cognitive Overmatch
- Total Health

Integrated Unit

- Adapt to the OE
- Purpose-built
- Seamless Networking

Joint Combined Arms

- effects Converge-Pulse-Diverge
 - Physical-Virtual-Cognitive Mass
 - Persistent Partner

Institutional Agility

- Operational Prototyping
- Research and Applied Teaming
- Driven Predictive Maintenance
 - Institution as a Unit.

by.

Operational Synergy

- Operational Design
- · COP / SA
- Training

Synchronized Engagement **UNCLASSIFIED**

Empowered Soldier

- Competencies as Capabilities
- Soldier Cognition and Performance Overmatch
- Total Health

Integrated Unit

- Adapt to OE
- Purpose-built
- Seamless Networking

Joint Combined Arms

- Converge-Pulse-Diverge
- Physical-Virtual-Cognitive Mass
- Persistent Partner Engagement

Institutional Agility

- Operational Prototyping
- Research & Applied Teaming
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Operational Synergy

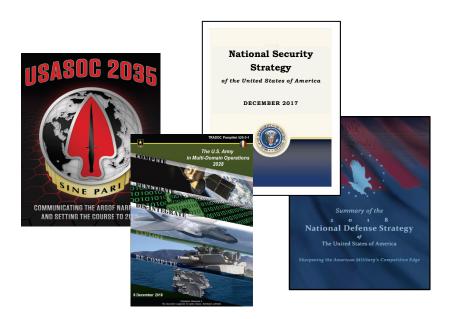
- Operational Design
- Common Operating Picture (COP)
- Training

"The Department of Defense must develop new operational concepts and capabilities to win without assured dominance in air, maritime, land, space, and cyberspace domains, including against those operating below the level of conventional military conflict." (National Security Strategy, 2017, p. 29)

"To succeed in the emerging security environment, our Department and Joint Force will have to out-think, out-maneuver, out-partner, and out-innovate revisionist powers, rogue regimes, terrorists, and other threat actors." (National Defense Strategy Summary, 2018, p. 5)

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