



Winning in Close Combat

Ground Forces in Multi-Domain Battle

Institute of Land Warfare
Contemporary Military Forum



Dr. Nina Kollars (Moderator)
Assistant Professor of Government
Franklin & Marshall College

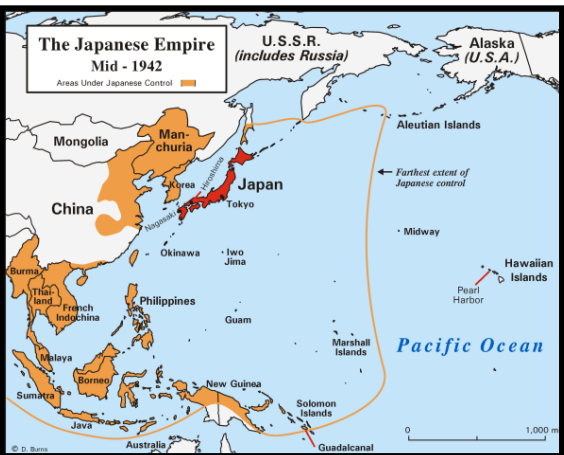
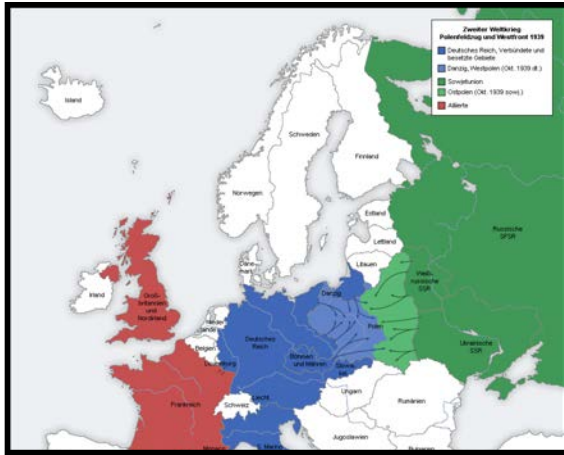


Dr. David Johnson

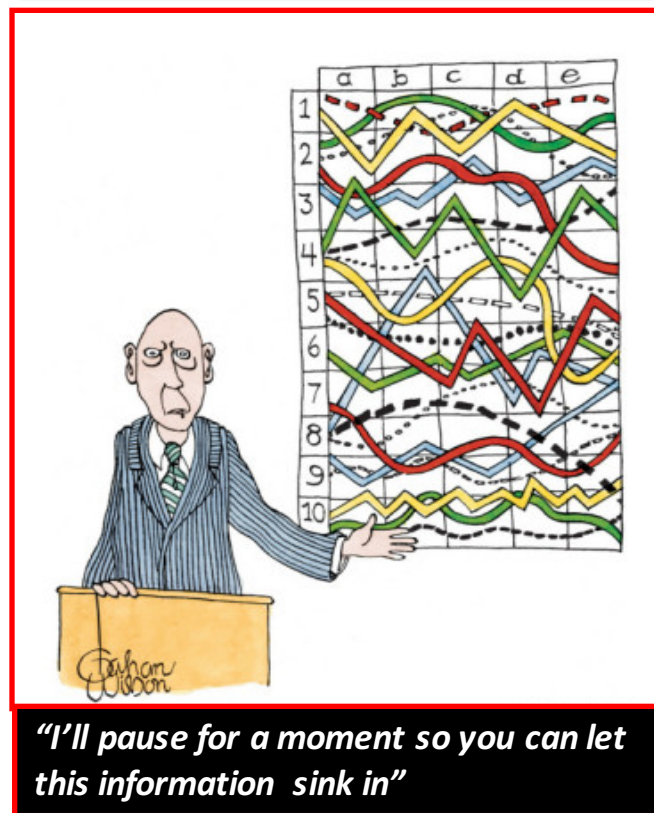
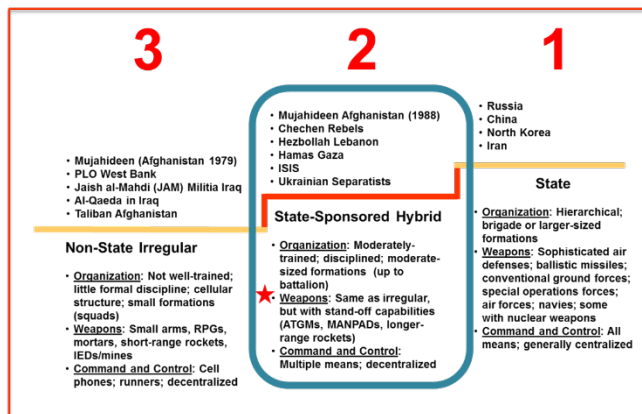
Senior Fellow

Center for Strategic and Budgetary Assessments

- Future land force concepts and capabilities must address competitors that are essentially peers in their regions
- Army can make major contributions to enhancing the collective competitive posture to deter . . .
- . . . and to winning the multi-domain fight if deterrence fails



- **Problem 1:** U.S. land and joint forces need credible capabilities to deter and, if necessary, defeat Russian, China, Korea, and Iran; fundamental to assuring our friends and allies; our coalition partners face similar challenges
- **Problem 2:** Must also be prepared to fight and defeat state-sponsored hybrid adversaries with Russian/Chinese weapons
- Vulnerabilities in **problems 1 and 2** exist today, are urgent, and need to be addressed to avoid tactical, operational, and political surprise
- **Problem 3:** Must also retain counterinsurgency, irregular warfare, and train, advise, and assist skills gained over past decade + of war—because we will likely have to do them in the future



For the Army, the "pacing threat" is Russia—our defeat is possible, and we must imagine defeat to succeed

- Russian capabilities in particular are problems now and will persist into the future: they are also the basis for most of our other adversaries' capabilities
- They challenge the ability of the Joint Force to fight its way into theater (A2) and operate once there (AD)
 - Nuclear weapons—tactical to strategic
 - Anti-access and area denial (A2/AD), e.g., layered, integrated air defenses with IFF
 - Precision artillery and rocket threat (beyond 100KM) with precision and multiple warhead options (anti-personnel, top attack, mines, thermobaric, etc.)
 - Advanced ground systems (5km+ ATGMs; active protection)
 - Cyber and EW
 - Special operations
 - And . . .



Spetsnaz



S-400 SAM



SS-26 SRBM



"Little Green Men"



SA-15 SAM



BM-30 MLRS



T-14 Armata Tank



Pantsir-S1 ADA



TOS-1 MRL



Air-Droppable BMD-4



9K333 MANPADS



2S35 152mm Howitzer

World War II is the last time we fought a state adversary this capable

1. Air and Missile Defense (SHORAD)
2. Long-Range Fires
3. Munition Shortfall
4. Mobility, Lethality and Protection of BCTs
5. Active Protection Systems – Air and Ground
6. Assured PNT
7. Electronic Warfare
8. Cyber (Offensive and Defensive)
9. Assured Communications
10. Vertical Lift



- *Army understands the problem and assessing how to close gaps*
- *But resources are insufficient given the urgency of the problem*

CSBA *We Also Need Threat-Based Joint Operational Concepts— What are the New “31 Initiatives” Across the Domains?*

- Few of the conditions that enabled AirLand Battle are the same today as they were in the 1980s
 - We are a CONUS-based force
 - We will have to deploy under contested conditions—we do not own the air or the seas
 - Space and cyber now critical domains
 - Tempo of conflict is accelerating, Russia can achieve rapid victories before Allied forces can respond
 - Russians will initially have significant numerical superiority and currently have materiel overmatch
 - Army has no tactical nuclear weapons; getting rid of cluster munitions
- In light of these new conditions we need new concepts, capabilities, and positioning options to deter this capable adversary by convincing him we can defeat him





Patton

Weyland

Bradley

Vandenberg

Hodges

Quesada

The air-armor team is a most powerful combination in the breakthrough and exploitation . . . The use of this coordinated force, in combat, should be habitual.

**12th Army Group
Report of
Operations 1945**

- In mid-1944 the United States dominated the air and sea domains and they enabled land*
- In the future, we cannot initially assume dominance in any domain; the Army key to operations in the other domains and winning in close combat*



Major General Bo Dyess

Acting Director

Army Capabilities Integration Center (ARCIC)



Brigadier General J.D. Alford
Commanding General
United States Marine Corps Warfighting Lab



Strategic Transition Point

We are turning the corner from over a decade of wars in Iraq and Afghanistan to resetting readiness and modernization balance and focusing on the threats and opportunities that will define the future....



....while our adversaries have been adapting and modernizing for the future operating environment



Future Operating Environment "Five Drivers of Change"



The future will not be like today. We see a world of increasing instability and conflict, characterized by poverty, competition for resources, urbanization, overpopulation and extremism. How do we organize, train and equip to fight peer, near-peer, terrorist, insurgents and criminal groups that threaten the U.S. and our allies?



MCWL Must Drive the Transition



Our Problem...

The Marine Corps is not organized, trained and equipped to meet the demands of a future operating environment characterized by complex terrain, technology proliferation, information warfare, the need to shield and exploit signatures, and a non-permissive maritime domain.





Our Marine Operating Concept (MOC)



- ***Describes in broad terms how the Marine Corps will operate, fight, and win in 2025 and beyond***
- ***Shapes our actions as we design and develop the capabilities and capacity of the future force.***



Maneuver Warfare in Every Dimension; Combined Arms in All Domains



MOC: Five Critical Tasks

1

**Integrate Naval Force
to Fight At and From
the Sea**

2

**Evolve the
MAGTF**

3

**Operate With
Resilience in a
Network-Contested
Environment**

4

**Enhance
Maneuver**

5

**Exploit the
Competence of
Individual Marines**





Five Critical Tasks Drive Capabilities of the Future Force



- **Develop highly capable tactical units with leaders who are empowered and enabled to fight in complex terrain**
- **Protect our network/C2 and prep for technology denied environments**
- **Use IW in combined arms to ensure an offensive advantage**
- **Regain a fires advantage**
- **Enhance maneuver to outpace adversaries**
- **Leverage Manned / Unmanned Teaming**
- **Develop expeditionary air & missile defense**
- **Enhance logistics systems at a tempo that outpaces adversaries**
- **Enhance our littoral warfare capabilities**

**Marine Corps
Force 2025**

Year-long, collaborative, multi-phased effort to build a balanced MAGTF optimized for the future through extensive wargaming, experimentation and rigorous analysis



Marine Corps Force 2025



- **Reconfigures Infantry to leverage Cross Domain Combined Arms**
- **Develops an initial Information Warfare (IW) capability**
- **Develops aviation intelligence capability and capacity to exploit F-35**
- **Increases capacity and modernization in indirect fires and anti-armor**
- **Increases long range precision fires capacity**
- **Increases Air Defense capacity with critical modernization efforts**
- **Exploits technology to enhance MAGTF Combat Service Support**
- **Enhances C4ISR organizations and systems to enhance the MAGTF**
- **Develops the ability to better integrate with the Army, Navy and SOF**

With a small end-strength increase and a focus on modernization, we can persist and win in the future operating environment, providing access for the joint force while complicating the situation for our adversaries.



MCF 2025 Drives MCWL Efforts



- **Experimentation Focus**

- Evaluating experimental infantry battalion against near-peer adversaries/future experimentation with a Logistics Combat Element
- Limiting Operational Assessments on 21st Century Fires, MC/SOF Integration, Manned-Unmanned Teaming and Future Command Element Experimentation

- **Science and Technology/Rapid Capabilities Office**

- Ship to Shore Maneuver Experimentation and Exploitation Task Force (S2ME2)
- Synchronized efforts with Defense Advanced Research Projects Agency (DARPA)
- Unmanned Logistics Systems, Virtual Training Rooms utilizing emerging technology

- **Wargaming**

- Stress-Testing emerging operating concepts through various scenarios
- Synchronizing efforts with SecDef Planning Scenarios
- Wargaming planned experiments to maximize effectiveness

- **Concept Development: Subordinate Operating Concepts**

- Littoral Operations in a Contested Environment, Expeditionary Advanced Based Operations, Multi-Domain Battle, SOF Integration-Interdependence-Interoperability



Dr. Paul Rogers

Director

**United States Army Tank Automotive Research,
Development and Engineering Center (TARDEC)**

Winning in Close Combat: Ground Forces in Multi-Domain Battle



What we've observed

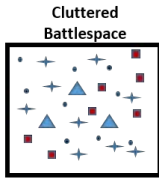
Changes in the Character of War

Lethal, Contested, Complex Operations

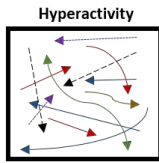
- Hybrid adversaries ... regular, irregular, criminal, terror ... contesting all domains (Land, Maritime, Air, Cyber, Space)
- Potential for overmatch ... proliferation of capabilities and technology... increased lethality and range; long range precision fires and massed fires (Stand-off)
- Operations among populations in complex terrain ... including dense urban
- Proliferations of WMD, cyber, and space capabilities
- Information influences actions and decision making...increased speed of human interaction
- Adversaries seek to avoid U.S. strengths, remain illusive, and exploit U.S perceived weaknesses
- Increased efforts to develop artificial intelligence (AI) and autonomous systems; off-the-shelf technologies in use

Out-gunned, Out-ranged, Out-protected, Outdated, Out of Position

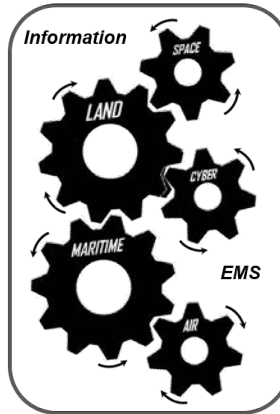
Creates a Battlefield that is...



Mix of military and civilian personnel, facilities, and equipment makes effective targeting challenging. Urban environments may often be cluttered.



Sensors and precision weaponry enable dramatically faster, more intense, and lethal operations.

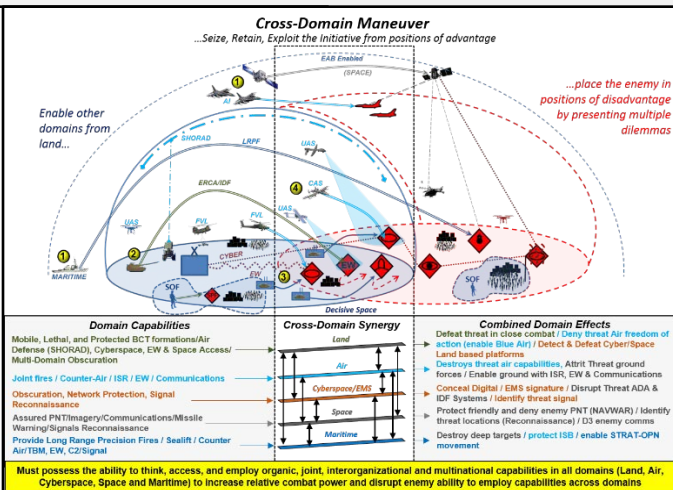
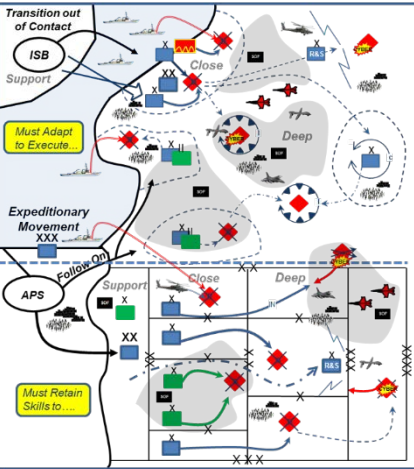


What will happen

- Transregional "hybrid" threats operate in varying OEs, leaving no safe havens, and increased complexity in dense urban areas
- The range of actors and availability of mass communications on the battlefield increase complexity and velocity of human interaction
- Increased speed of actions occurring in all domains; often times simultaneously
- Hyperactivity challenges ability of EAB commanders to manage pace and tempo of actions in the OE
- Decisive space shifts between domains throughout conflict
- Communications becomes degraded for periods of time
- Battlefield becomes more lethal, fluid, and dispersed challenging sustainment, mission command, situational understanding as well as human endurance and unit resiliency
- Battlefield frameworks and operations assume more nonlinear constructs
- Decision making is either decentralized to allow for rapid adaptation to changes in the OE or opportunities are lost
- AI and autonomous systems will fundamentally change the character of war

What we must prepare to do...

BLUF: As part of the Joint Force, Army forces deploy and transition rapidly from expeditionary movement to cross-domain maneuver with combined arms formations that operate semi-independently, enabled by mission command, to conduct joint combined arms operations and seize, retain, and exploit the initiative; defeat enemy forces; and achieve operational objectives consistent with national objectives.

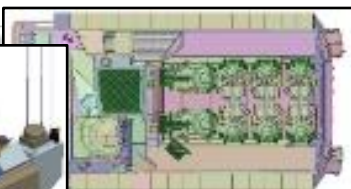
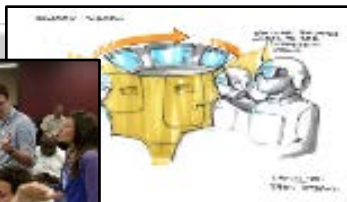


- 4 Components of the Solution:
- Conduct Cross-Domain Maneuver
 - Operate Semi-independently
 - Conduct continuous Integrated Reconnaissance and Security Operations across domains and echelons
 - Execute Mission Command



*Illustration

Soldier Involved Experimentation & Modeling



**Balancing Physical and Virtual Soldier Assessments
to Develop Next Generation Capabilities**



Questions