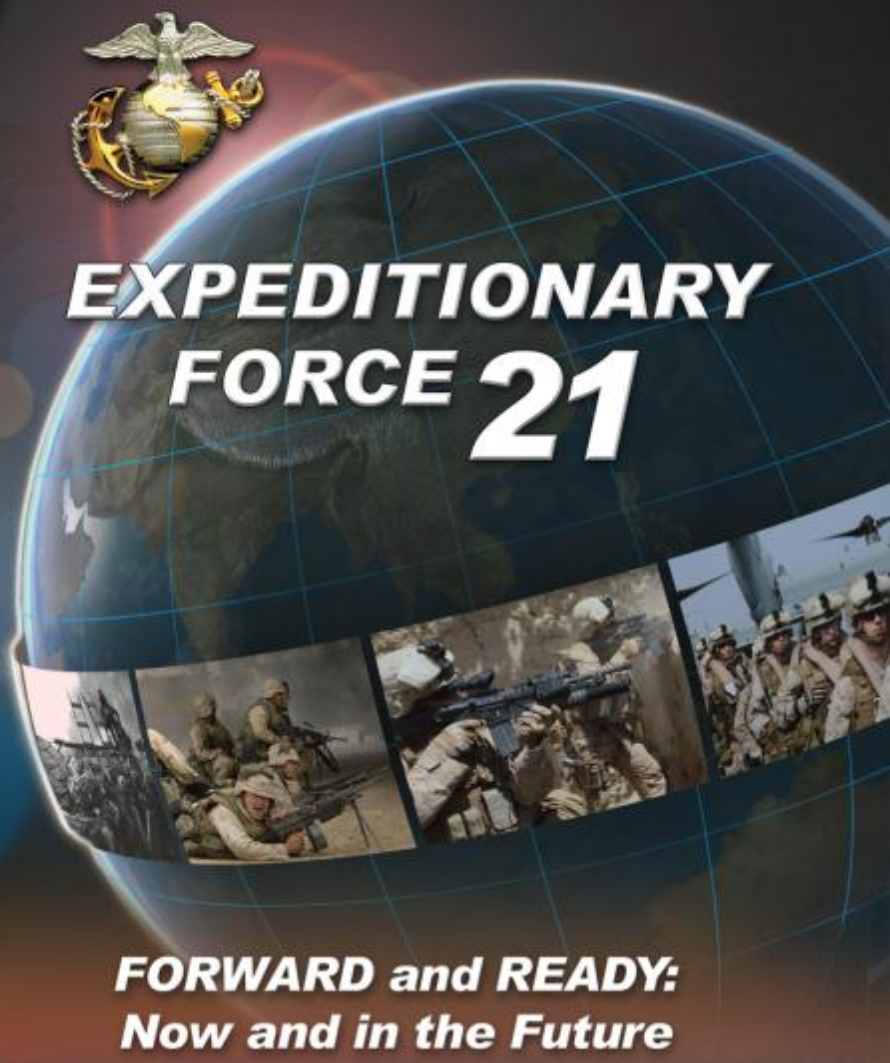
Expeditionary Warfare Conference

November 17, 2014

USMC Capabilities Development Directorate Panel

- Future Operating Environment
- Expeditionary Force 21 ISR Attributes
- ISR Capabilities & Gaps



Colonel Beau McClane
Director, Intelligence Integration Division

Technological Rise of the Rest…

Expeditionary Force 21

Enemy weapons from the past… range in the thousands of yards…

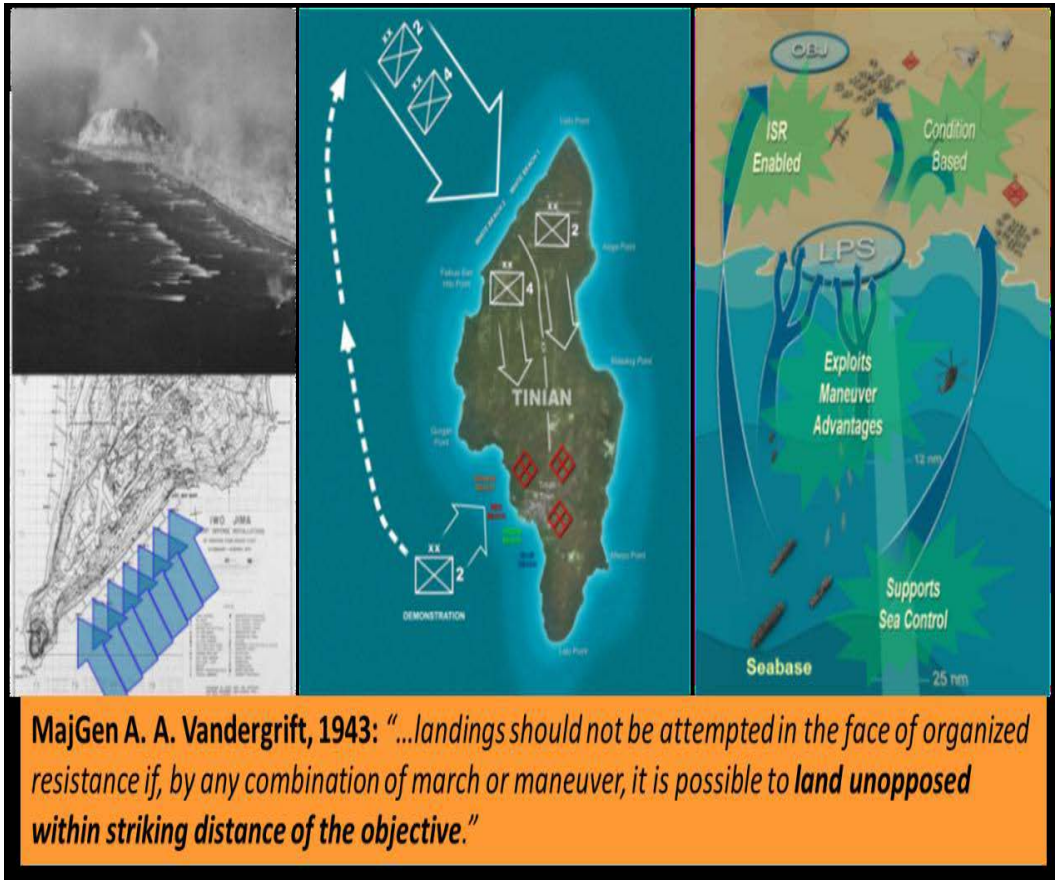


Figure 13: The Invasion of Tinian Exemplified Operational Maneuver in the Littorals **(p. 21)**

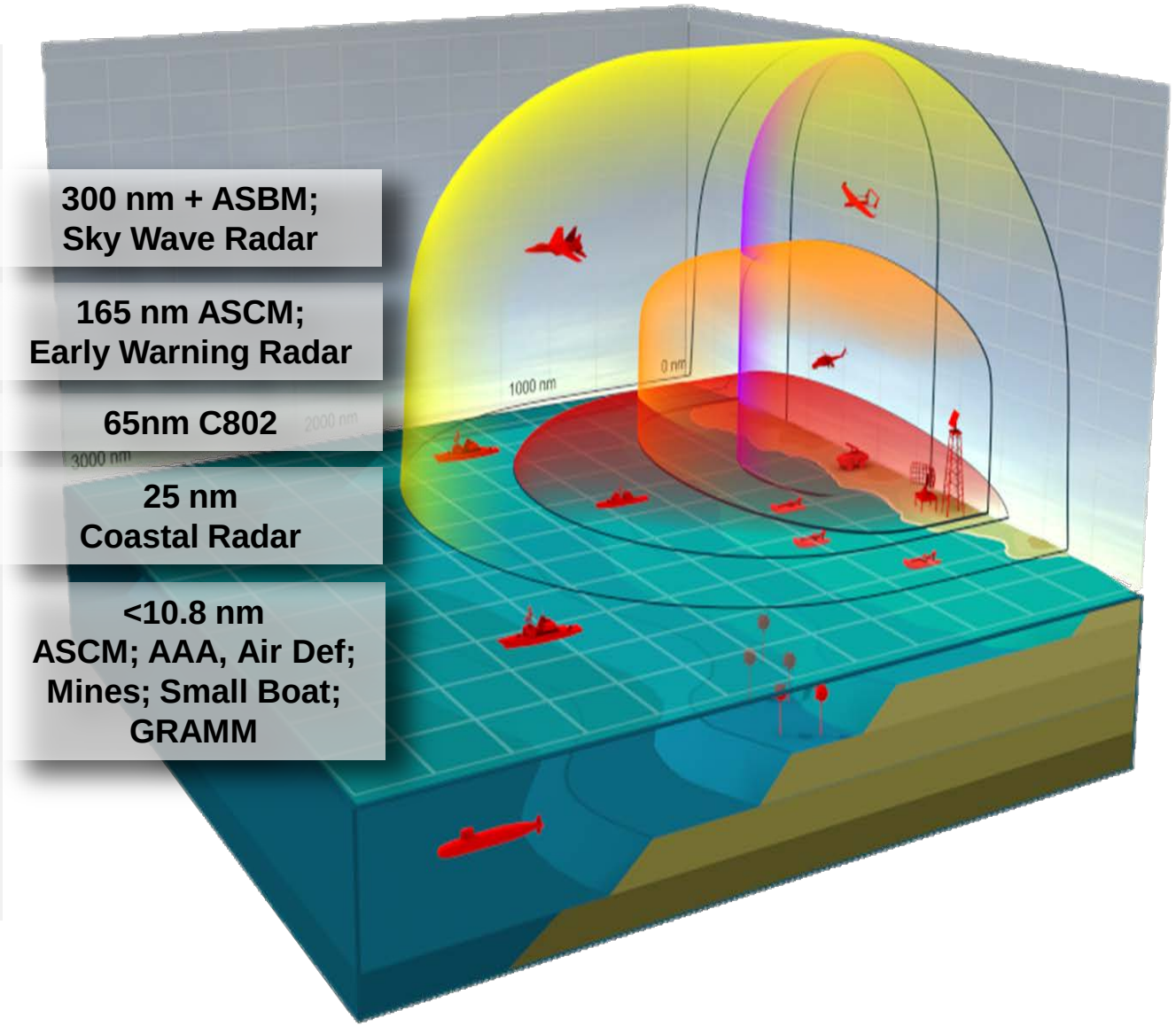
Potential enemy weapons now and in the future…range in the hundreds of miles and further…

Title 10, United States Code, Armed Forces, Chapter 507, Section 5063

The Marine Corps shall be organized, trained, and equipped… for service with the fleet in the seizure and defense of advanced naval bases and for the conduct of such land operations as may be essential to the prosecution of a naval campaign.

The Military Problem
Anti-Access and Area Denial

- Threat ISR and proliferation have changed standoff requirements.
- Crisis response is 'come as you are' w/ limited ability to conduct shaping.
- Complications of ASBM and CDCM defense place demands on DDG / CG capacity to protect the amphibious force.
- The ability to close amphibious ships to 1-2 nm or even 12 nm in an area denial environment requires defeat of CDCM and escort to defeat leakers.



Nature of the Environment

Global Challenges

- **Persistent instability and conflict will undermine global security**
- **Peer competition and regional threats will challenge U.S. dominance**
- **Disparate growth and economic challenges will undermine global security**
- **The geo-political challenges of the Middle East and South Asia will be key focal points**
- **Technology proliferation will challenge U.S. operational advantages**

Uncertainty and Discontinuity

- **Proliferation of CBRN Technology**
- **Proliferation of Precision Weaponry**
- **Proxy Warfare**
- **Rapid Escalation of Crisis**
- **Empowered Non-State Actors**
- **Counters to U.S. Collection Capabilities**

BLUF: The current global situation can and will be quickly and dramatically disrupted by new capabilities, operational concepts, and sources of competition by both state and non-state actors.

Emerging and Disruptive Technology Trends

- **IEDs continue to evolve**
- **Increased proliferation and advancements in fusing/lethality mines/anti-armor technologies and small arms/ammunition**
- **Increasingly sophisticated anti-access/area-denial capabilities**
- **Increased interest in WMD**
- **Increased interest in COTS technologies**
- **Increased optic/surveillance capabilities**

BLUF: Adversaries focused on eroding US advantage in terms of C4ISR, precision targeting, mobility, and firepower.

Strategic Shift to Complex Terrain

Monrovia, Liberia

Mekong Delta

Coast of South Borneo (Indonesia)

Strait of Malacca

HYBRID THREATS IN COMPLEX ENVIRONMENTS

North Coast of Iran

Expeditionary Force 21: Intelligence Attributes

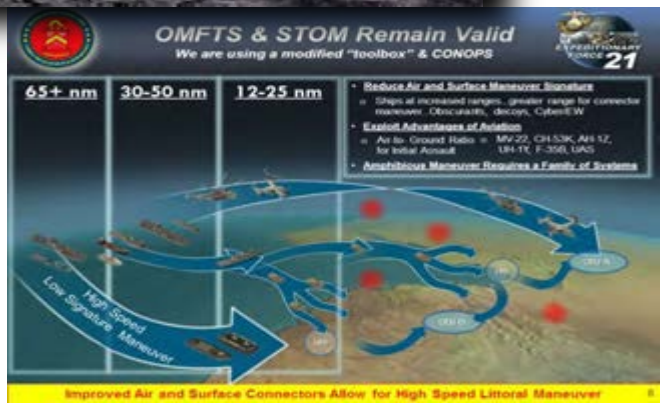
Operations and Intelligence Integration
•*A fully integrated and symbiotic relationship*

Projecting ISR into Forward Operating Environments
•*A scalable and planned progression of intelligence capabilities*
into the operational environment

Persistent ISR, Sensors, and Battlespace Awareness
•*Integrated employment of tactical and non-organic ISR capabilities*

Intelligence Dissemination and Utilization
•*Conveyance of relevant combat information & intelligence to support*
decision making at the point of execution

Advanced Intelligence Analysis
•*Outmaneuvering adversaries through enhanced decision support*



Intelligence, Surveillance, Reconnaissance Capability Investments

Distributed Common Ground/Surface System - Marine Corps (DCGS-MC)

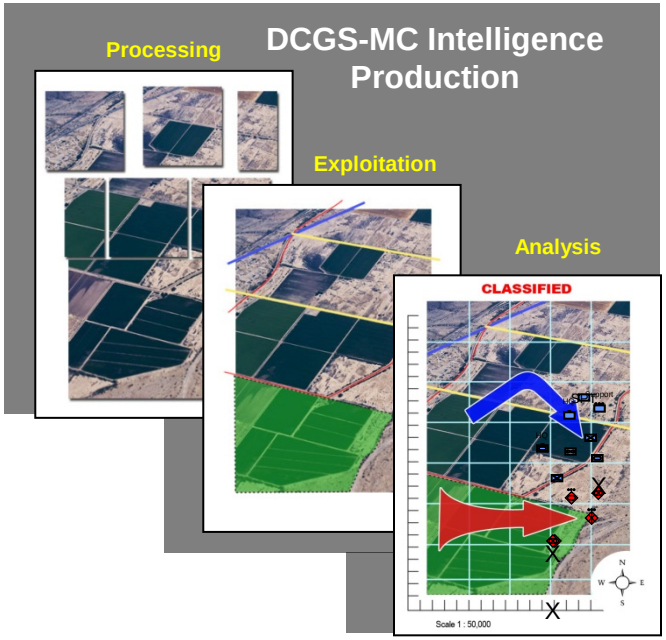
- Access to the DoD Intelligence Community (IC) DCGS Enterprise
- Visualization and collaboration of Service, Joint, IC
  Intelligence products
- Target Material Production / Precision Point Mensuration in support of deliberate targeting

Unmanned Aircraft System Sensor Payloads

- Radar, GMTI, SIGINT/EW
- Integrated sensing and targeting capabilities
- Office of Naval Research S&T partnering

MAGTF Intelligence Centers (MIC)

- Intelligence reachback capability in garrsion
- Connected to regional MAGTFs (MEU and SPMAGTF)
- IC databases, exploitation tools, and production capability to support decisions at the point of execution



Intelligence, Surveillance, Reconnaissance Capability Gaps

MAGTF Sensing Capability

- **Networked sensors programmed across platforms and domains to provide target geo-location data across the ROMO**

Seabased ISR

- **Adapting ISR from COIN to the littorals… ISR architectures, UAS payload development, unattended sensors, ground reconnaissance**

Company Level Intelligence Cell '2.0'

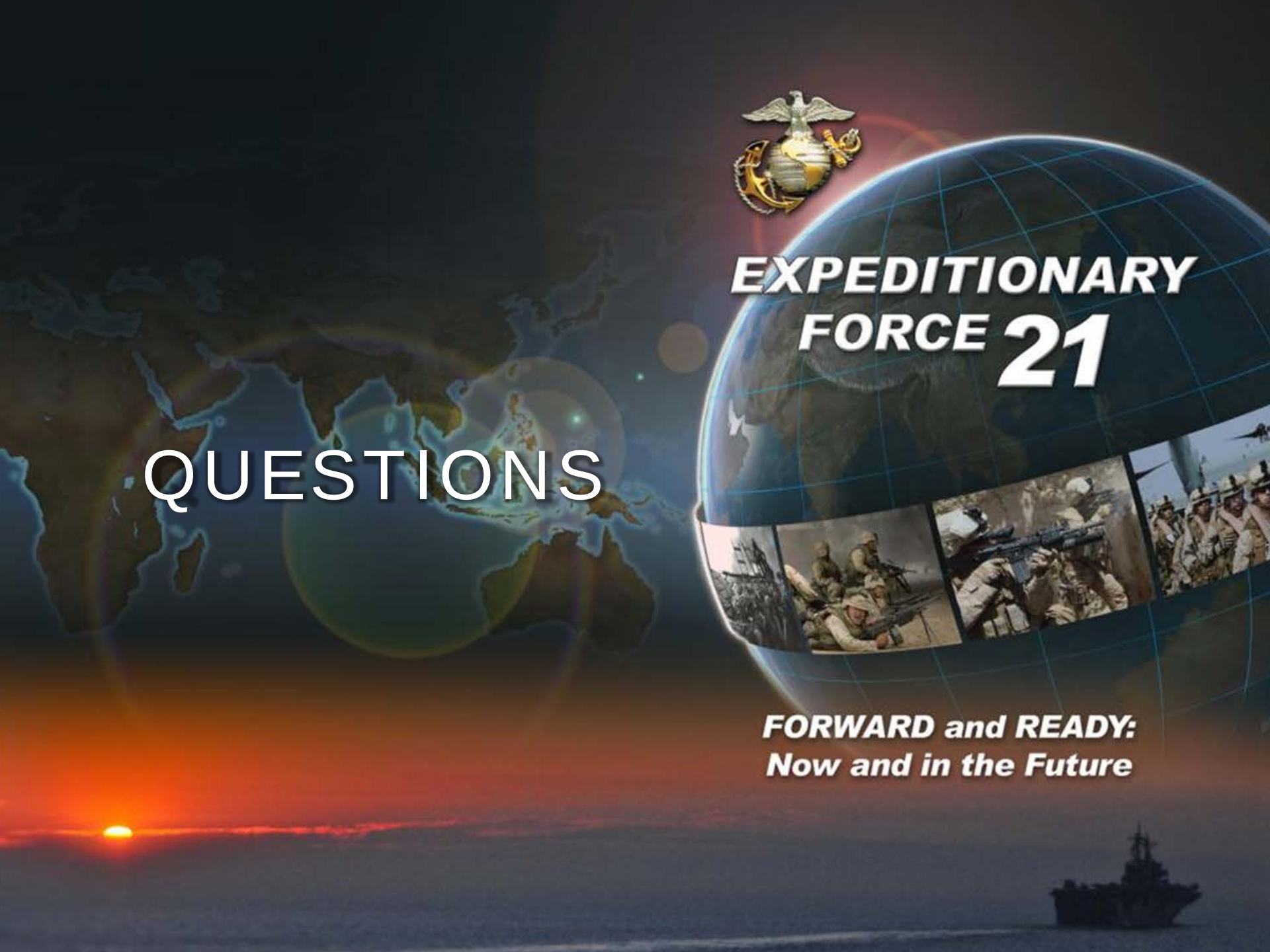
- **Next generation CLIC…company landing team concept…multi-intelligence capable…disconnected environments**

Integrated 'Information Warfare'

- **Cross domain capabilities of IO, EW, Cyber Ops, Intel Ops…fully integrated for effects**

Advanced Analytics

- **Activity based intelligence, social network analysis, anticipatory and predictive (vice reactive)**


EXPEDITIONARY
FORCE 21
FORWARD and READY:
Now and in the Future

QUESTIONS