

# The Rebuild of Conventional Forces: Implications for Force Training

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# Background

- Tri-Continental Engagement
- Visits to multiple bases, areas of operations and wide range of interviews with U.S. and allied military personnel and defense officials worldwide
- Regular visitor to the key warfighting centers at Fallon, MAWTS-1 and Nellis
- Been engaged from the outset in the standup of various USMC key airpower modernization efforts, starting with the Osprey
- For the past five years, have written regular reports on the Australian reworking of the ADF; And am just arriving from the latest seminar one which dealt with “the requirements for fifth generation manoeuvre”

# Phases of Conventional Modernization for the United States and Core Allies

- Air-Land Battle
- The Strategic Shift to COIN
- The Conventional Rebuild in what the Pentagon Refers to as the Return of Great Power Competition but I refer to as competition between the liberal democracies and 21<sup>st</sup> century authoritarian powers
- Crafting and Shaping of an Integrated Distributed Force or what might be called a kill web operational force or shaping deterrence in depth
- Fortunately, the technology is already here to build effectively down this path, a path which allows engagement at the low end and provides building blocks to higher end capabilities

# Crafting an Integrated Distributed force for Full Spectrum Crisis Management

- To deal with the challenge of the rise of the 21<sup>st</sup> century authoritarian powers, the focus is upon an effort to shape a full spectrum crisis management capability whose con-ops is shaped to deal with adversary operations within what some call the “gray zone” or within the “hybrid warfare” area.
- The nature of the threat facing the liberal democracies was well put by a senior Finnish official: “The timeline for early warning is shorter; the threshold for the use of force is lower.”
- What is unfolding is that capabilities traditionally associated with high end warfare are being drawn upon for lower threshold conflicts, designed to achieve political effect
- Higher end capabilities being developed by China and Russia are becoming tools to achieve political-military objectives throughout the diplomatic engagement spectrum.

# Building an Integrated Distributed Force

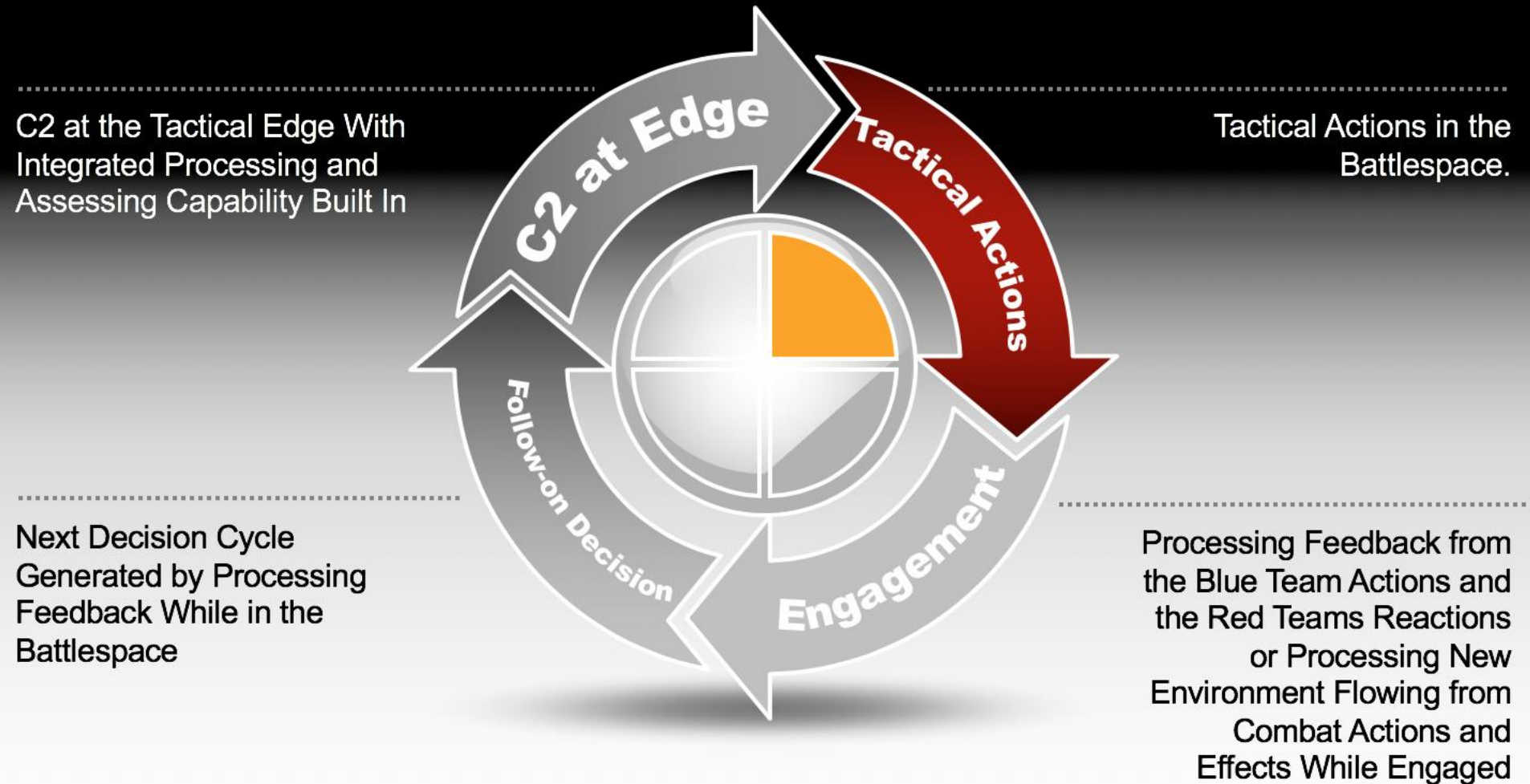
- The force we are building will have five key interactive capabilities:
- Enough platforms with allied and US forces in mind to provide significant presence;
- A capability to maximize economy of force with that presence;
- Scalability whereby the presence force can reach back if necessary at the speed of light and receive combat reinforcements;
- Be able to tap into variable lethality capabilities appropriate to the mission or the threat in order to exercise dominance.
- And to have the situational awareness relevant to proactive crisis management at the point of interest and an ability to link the fluidity of local knowledge to appropriate tactical and strategic decisions.

# The Impact of an Integrated Distributed Force

- What is changing is that the force we are shaping to operate in the littorals has expansive reach beyond the presence force in the littorals themselves. If you are not present; you are not present.
- We have to start by having enough platforms to be able to operate in areas of interest.
- But what changes with the integrated distribute ops approach is what a presence force can now mean.
- Historically, what a presence force is about what organically included within that presence force; now we are looking at reach or scalability of force.
- We are looking at economy of force whereby what is operating directly in the area of interest is part of distributed force.

# Chaos Theory Enabled C<sup>2</sup>

## Enabling Integrated Distributed Combat Capabilities



# Examples

- Australian Maritime Border Command
- HIMARS High Mobility Artillery Rocket System
- Next Phase of Osprey Development and Launch of CH-53K Into the World of the Evolving Amphibious Task Force
- Report Highlighting Relevant Recent Articles
  - <https://defense.info/highlight-of-the-week/the-rebuild-of-conventional-capabilities-for-full-spectrum-crisis-management/>

# VADM Miller and The Shift in Training

- **We discussed the evolution of the Naval Air Wings in the context of the Navy working what we have called in the past “the kill web,” or what I am now referring to as building an integrated distributed force.**
- VADM Miller started by underscoring that significant change is underway for the carrier air wing or CAG.
- Several new capabilities are being introduced into the operational force, such as the F-35, Triton, P-8s, modernized Super Hornets, the new Hawkeye, the MQ-25 unmanned tanker.
- These new capabilities are being worked into an evolving Naval strike force to shape new capabilities for the carrier and for the distributed force.
- The new Commandant of the USMC has highlighted how he sees the evolution of the USN-USMC team to shape a distributed offensive defensive capability and the changes described by the Commandant along with changes to the carrier force are adding up to a significant trajectory of change for the sea-based force.
- **VADM Miller highlighted the key challenge of shaping a new approach to training and testing in which the force evolves more rapidly in its combat learning skills from the standpoint of force interoperability.**

# Implications for Training

- **Air Warriors (and integrated with Surface Warfare Officers) are learning how to operate as distributed force packages.**
- This is leading to radical disjunctures from traditional training approaches and thinking.
  - How do you best train your aviators to tap into networks and provide for distributed strike?
  - In shifting from a training focus on traditional TTPs, how do Naval aviator's problem solve differently?
  - How to reshape effectively the infrastructure to support new training approaches?
  - How do Naval aviators integrate with and maximize their impact for and on the combat force?
- Live Virtual Constructive Training provides a technological path, but is a necessary but not sufficient tool set for the Navy to get where they need to go.
- Training is now about shaping domain knowledge for the operational force to ensure that "we can be as good as we can be all of the time."

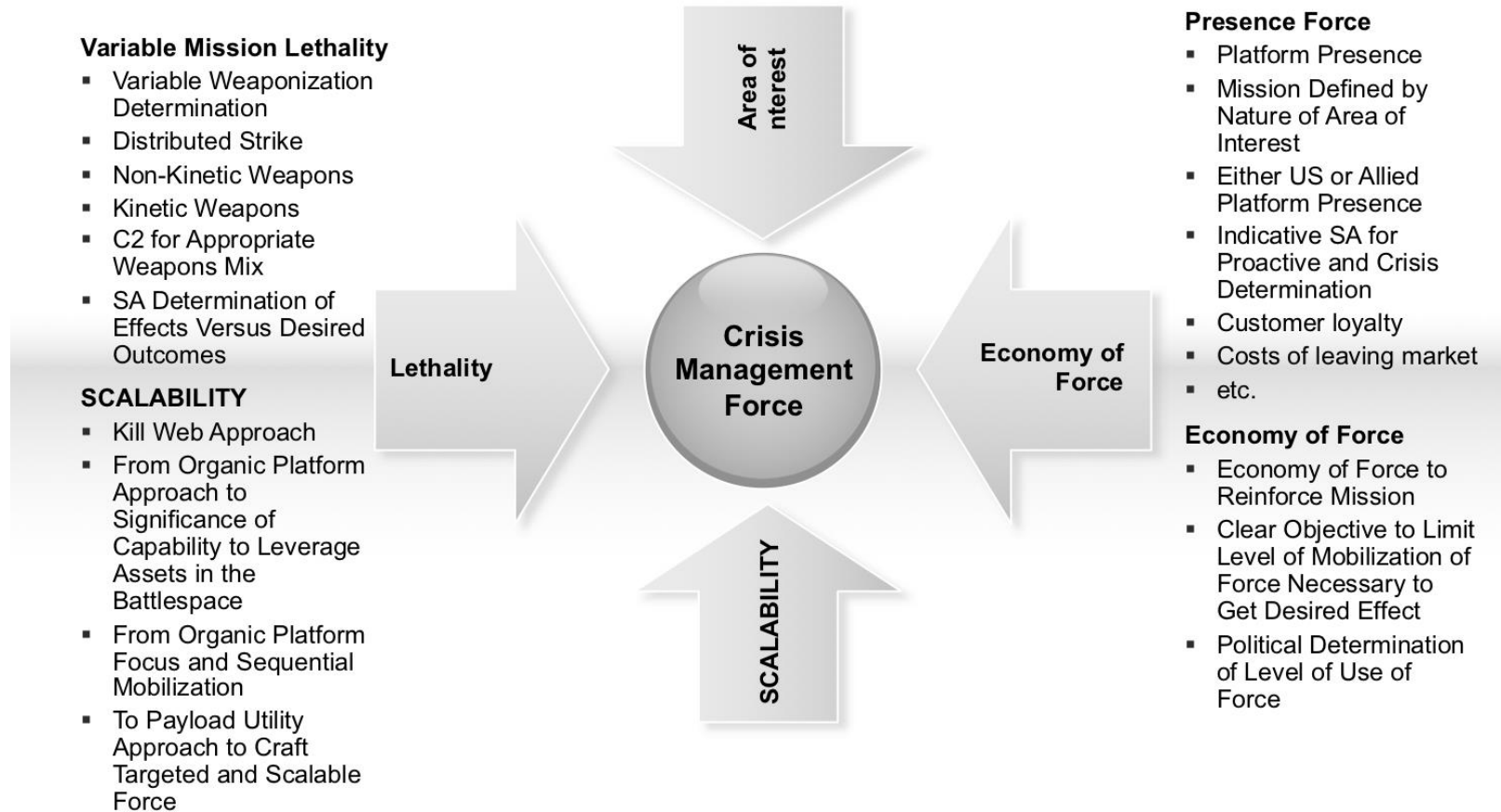
# Summary

- Recent Interview at Chief of Australian Navy's Seapower Conference
- <https://defense.info/video-of-the-week/an-update-from-the-chief-of-navys-seapower-conference-october-2019/>
- <https://www.slideshare.net/robbinlaird/rebuild-of-conventional-forces>
- <https://defense.info/highlight-of-the-week/the-rebuild-of-conventional-capabilities-for-full-spectrum-crisis-management/>

# Background

# Crisis Management Force Structure

From Presence to Conflict Dominance Force



# Air Marshal (Retired) Geoff Brown on Kill Web Training

- <https://sldinfo.com/2019/04/from-legacy-training-to-training-a-crisis-management-force-5th-gen-and-the-kill-web/>
- The three key questions for Brown are as follows:
  - How to train in Battlespace saturated by adversary cyber and Information attacks?
  - How to exploit the advantages of cyber in multi-domain operations
  - Do we have the tools and key infrastructure to train in an appropriate manner?
- “I believe it’s safe to say it is impossible to deny an adversary entirely of the ability to shape aspects of the information environment, whether it’s through spoofing or sabotaging ICT-based warfighting systems. As a result, our goal should be to sustain military operations in spite of a denied, disrupted, or subverted information environment.”

## Brown (2)

- “The requirement is that warfighters need to be able to fight as an integrated whole in and through an increasingly contested and complex battlespace saturated by adversary cyber and information operations. But how to do this so that we are shaping our con-ops but not sharing them with adversary in advance of operations?”
- “The battle for information control needs to drive our training needs much more than it does at the moment. We need to provide warfighters with the right kind of combat learning.”

# Brown (3)

- “During large-scale exercises like Red Flag, cyber training is often employed in parallel with traditional kinetic training programs and is not fully integrated. Non-cyber war fighters do not necessarily experience the effects of “cyber play” while it is ongoing.
- “When cyber effects are integrated into live training events, my experience is that they are often “white carded,” Although this does provide war fighters some insight into how their systems or platforms may be affected in the event of a cyberattack, the lack of realism precludes them from experiencing and subsequently troubleshooting that attack.”
- He cautioned that there are good reasons why this is not done.
  - “The integration of these effects into a live training environment could sabotage the other goals of the exercise, present safety risks to war fighters, and reveal platform vulnerabilities to inquisitive adversaries.”
  - In spite of the limitation, “these live training challenges can’t preclude us from training for a future contested and complex battlespace.”

# Brown (4)

- Brown argued that live training remains very significant for organizing a strike and defense force and working the physical pieces of the task force or air group.
- But that the virtual world is now a key area in which you will shape, work on and exercise your information force concepts of operations.
  - “One of the foundational assumptions I’ve always had is that high quality live training is an essential to producing high quality war fighters but I believe that’s changed
  - “Even if you don’t take cyber into account, and look at an aircraft like an F-35 with an the AESA radar and fusion capabilities, the reality of how we will fight has changed dramatically.
  - “In the world of mechanically scanned array radars. a 2v 4 was a challenging exercise — now as we have moved more towards AESA’s where it is not Track while you Scan but its search while track , it’s very hard to challenge these aircraft in the live environment.
  - “And to be blunt about it, the F-35 and, certainly the F-35 as an integrated force, will only be fully unleashed within classified simulations.
  - “This means that we will achieve the best training outcomes for aircraft like the F-35 only if we have a more comprehensive virtual environment.”

# Operating and Prevailing in the Extended Battlespace

The Offensive-Defensive Enterprise Operating As a Kill Web

## Strategic Direction

Senior Commanders Adjust Force Packages in a Dynamic Reset as Operations Evolve and Outcomes and Effects are Identified

## Distributed C2

Empowering the force operating at the key choke points or the critical nodes of attack or defense



## Secure Information Parsimony

"The right information delivered to the right person, at the right time and at the right place."

## ISR Reach and Assessment

A Continuous Process Delivered by Connected Platforms Operating in the Battlespace.

## Distributed Strike

Multi-Domain Strike Capabilities Deployed by Ground, Air, Space and Maritime Forces



Robbin F. Laird, Edward Timperlake,  
and Richard Weitz

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