



DEPARTMENT OF THE NAVY

Task Force Innovation Working Groups



**EMERGING
OPERATIONAL
CAPABILITIES**

ADAPTIVE WORKFORCE

INFORMATION

EMERGING OPERATIONAL CAPABILITIES (EOC) WORKING GROUP

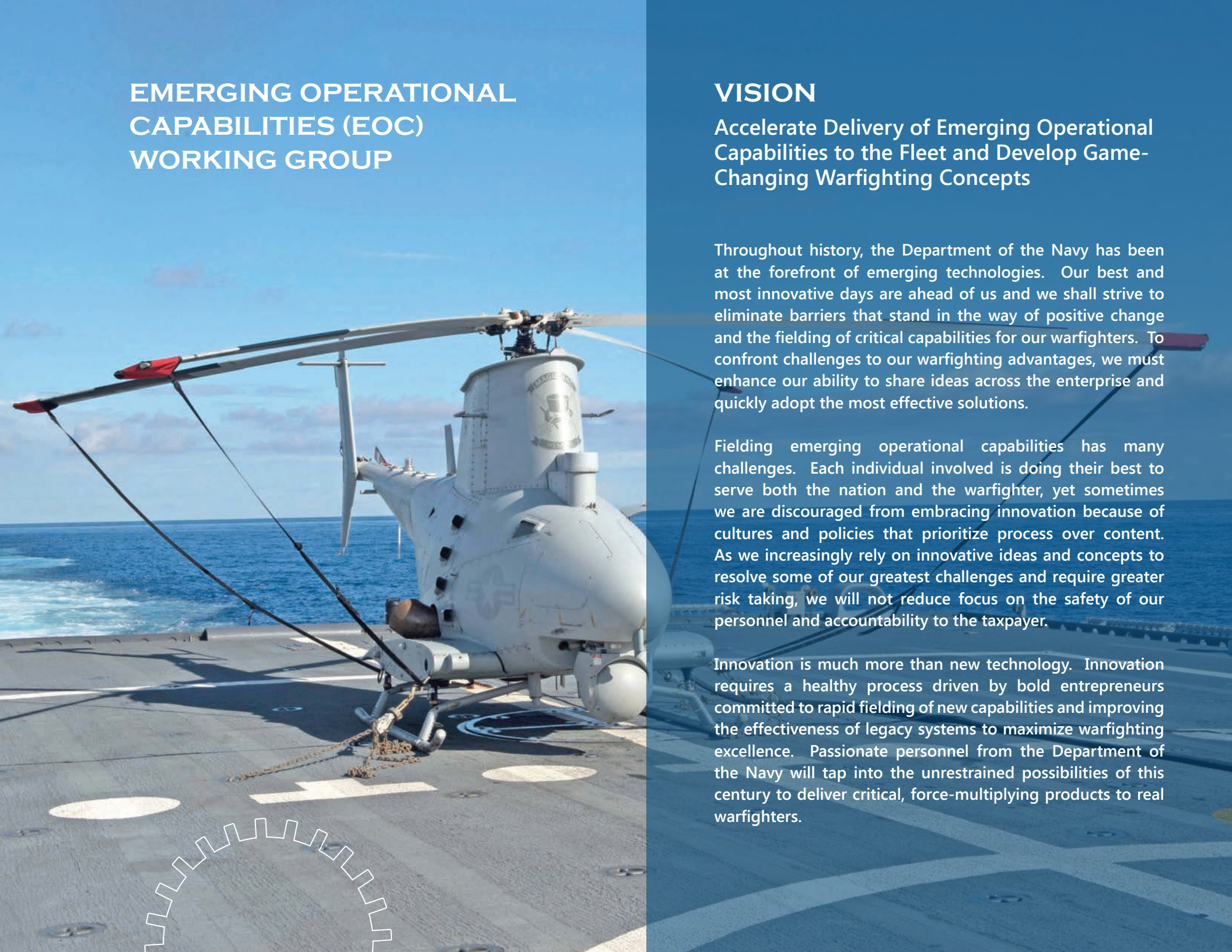
VISION

Accelerate Delivery of Emerging Operational Capabilities to the Fleet and Develop Game-Changing Warfighting Concepts

Throughout history, the Department of the Navy has been at the forefront of emerging technologies. Our best and most innovative days are ahead of us and we shall strive to eliminate barriers that stand in the way of positive change and the fielding of critical capabilities for our warfighters. To confront challenges to our warfighting advantages, we must enhance our ability to share ideas across the enterprise and quickly adopt the most effective solutions.

Fielding emerging operational capabilities has many challenges. Each individual involved is doing their best to serve both the nation and the warfighter, yet sometimes we are discouraged from embracing innovation because of cultures and policies that prioritize process over content. As we increasingly rely on innovative ideas and concepts to resolve some of our greatest challenges and require greater risk taking, we will not reduce focus on the safety of our personnel and accountability to the taxpayer.

Innovation is much more than new technology. Innovation requires a healthy process driven by bold entrepreneurs committed to rapid fielding of new capabilities and improving the effectiveness of legacy systems to maximize warfighting excellence. Passionate personnel from the Department of the Navy will tap into the unrestrained possibilities of this century to deliver critical, force-multiplying products to real warfighters.



ONGOING EFFORTS

The working group identified initiatives that support the accelerated fielding of emerging operational capabilities to the Fleet as well as initiatives that more specifically support identified SECNAV Goals (Unmanned Systems, Agile Manufacturing, Experimentation/ Concepts, and Adaptive Force Packages).

Promoting a culture which tolerates and recognizes the value of risk must include a more robust experimentation process, where risk can be better understood and mitigated. To fully exploit our naval ingenuity, we must dedicate time and resources to develop, test, and implement new warfighting concepts in our operating forces.



KEY OBJECTIVES:

- **Create an Effective Organizational Model for Fielding Unmanned Systems:** Establish two new positions in the Navy staff and Secretariat to provide DON leadership and speed development and fielding of these systems.
- **Test, Evaluate, and Utilize Advanced Manufacturing:** Promote efforts to assist, accelerate, and enable implementation across the enterprise.
- **Identify Changes in Legacy Practices Across the DOTMLPF Spectrum:** Evaluate current processes and identify measures to solve/mitigate requirements hindering innovation initiatives.
- **Increase Experimentation and Test & Fail Rapidly as Part of the Learning Cycle:** Cultivate a culture of risk tolerance and inclusion of low barrier to entry and ad hoc initiatives in the process.
- **Accelerate Speed to Fleet by Scaling Best Practices and Identifying Barriers to Rapid Execution:** Develop bold recommendations to expedite moving emerging capabilities to a program of record.

- **Increase the Frequency and Breadth of DON Wargaming and Connect its Outcomes to the Planning, Programming, Budgeting, and Execution System:** Expand current efforts to modernize wargaming and better inform naval strategy development, campaign analysis, and fleet experimentation.
- **Develop Effective Forecasting, Red Teaming, and Scenario Planning Competencies:** Improve processes which inform senior leaders of global trends and uncertainties.
- **Create Challenges to Identify Diverse Solutions to Operational Problems:** Establish opportunities for the workforce, at all levels and functional areas, to participate in wargaming.
- **Develop Integrated Naval Capabilities:** Use wargaming to enhance Service integration.





LONG TERM EFFORTS

UNMANNED SYSTEMS - DRIVING CHANGE BY FIELDING UNMANNED SYSTEMS

- Accelerate integration of, and increase experimentation with, unmanned and autonomous systems to explore their capabilities and warfighting advantages.
- Develop a comprehensive plan to organize experimentation venues for the rapid demonstration of unmanned systems in all operating domains (air, sea surface, underwater, cyber and on land).
- Examine existing policy and technology barriers and identify prudent changes for faster integration of unmanned systems.

ADDITIVE MANUFACTURING - DRIVING CHANGE BY MAKING PARTS USING ADDITIVE MANUFACTURING

- Develop an integrated plan to leverage additive manufacturing throughout the Fleet and determine how such methods could improve readiness and reduce costs.
- Create a 21st century agile manufacturing network to include a digitally integrated manufacturing grid.

ADAPTIVE FORCE PACKAGING - NEW MISSION CAPABILITIES FOR NAVAL PLATFORMS

- Develop an Adaptive Force Packaging strategy to identify new and alternative means of using auxiliary platforms.
- Champion the demonstration of Adaptive Force Packaging by focusing on re-purposing or re-assigning existing system capabilities to create flexible, adaptive, "shovel ready" ways of meeting warfighter demands.
- Evaluate Adaptive Force Packaging concepts including using naval platforms in non-traditional ways, integrating unmanned systems, and setting alternate roles and missions for auxiliary platforms.

DRIVING CHANGE BY RE-EMPHASIZING EXPERIMENTATION

- Improve effective implementation of emerging operational concepts by increased and dedicated experimentation time aboard Fleet assets, to allow new system concepts to evolve along with the doctrine.
- Increase collaborative experimentation opportunities between laboratories across the DON, letting complex multidisciplinary capabilities inspire new warfighting concepts.
- Exploit lessons learned from each experiment through improved knowledge management.
- Promote a culture which tolerates and recognizes prudent risk including a more robust experimentation process where risk can be better understood and mitigated.



EXPANDING AND REFOCUSING WARGAMING

- Evolve approaches to wargaming which assess the future challenges our sailors and Marines will confront, and the types of decisions they must make.
- Incorporate emerging technology, probabilistic models, and data analytics into gaming techniques.
- Build diversity of thought into game design and execution.
- Establish methods to share actionable insights from wargames across the department, with a particular focus on cross-event analysis.

EXPANDING FORECASTING COMPETENCY

- Leverage private and public efforts to forecast likely strategic environments, which will have utility in helping to build the DON of the future.
- Assess best of breed methods to provide early warning of global technology trends while using commercial applications to improve R&D and acquisition decisions.

IMPROVING CONNECTIVITY THROUGH KNOWLEDGE MANAGEMENT

- Establish an effective framework to capture, organize, apply and grow knowledge gained from previous live and virtual events.
- Create a repository to serve as a data-rich environment for cross-disciplinary knowledge generation.

