

From Top Left (Clockwise)

Narrative

To immerse players into a future environment, narratives are added to provide participants context to a situation they must react to.

Vector Charts

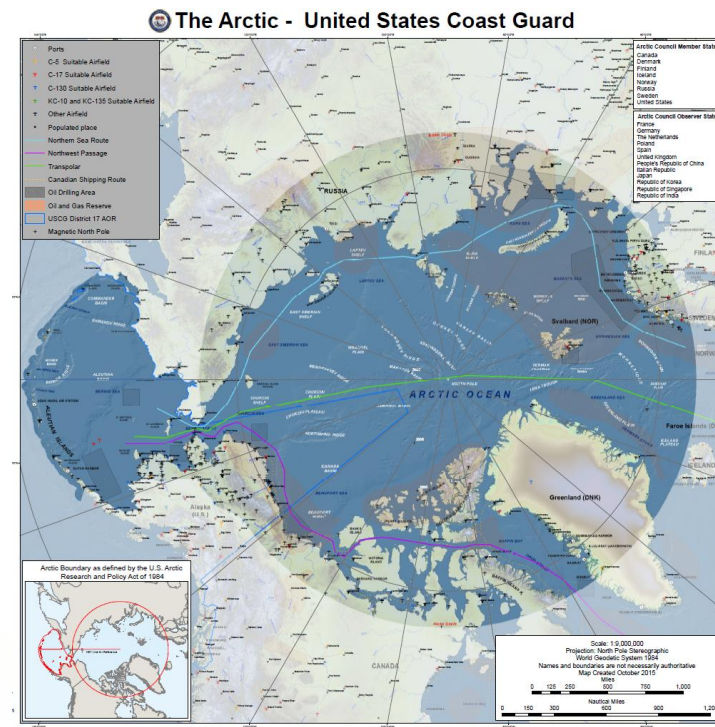
Participants respond to an incident with resources (air and surface) using vector chart overlays. Conversations occur afterwards on the efficacy of pre-planned responses and whether gaps exist in organizational procedures.

Intel Coordination Center

The ICC is creating a baseline PDF map for DCO-X to display information and overlays. Game players will have the ability to turn on and off layers to consider different priorities in where to position assets and resources. This 'board game' approach is also another way to demonstrate how wargames operate.

U.S. Coast Guard Academy

The Office of Emerging Policy is also exploring with the U.S. Coast Guard Academy ways to educate cadets on strategic forecasting. A wargaming interface is a unique and effective approach to encourage others to think and plan for the future.



USCG Office of Emerging Policy

Strategic Benefits to Wargaming:

1. Wargaming is a low cost tool, which can be applied to specific problems (e.g counter narcotics tactics, Arctic Strategy, PATFORSWA, etc.)
2. Wargaming is an interactive tool which has the potential to keep participants engaged and active
3. Wargames can be applied to validate hypotheses and acquire new information about the implication to a particular decision
4. Wargaming is a technique recognized by DOD, allowing the U.S. Coast Guard greater access and participation within their functions
6. Wargames are not just applicable to battle or war, but can be applied any time numerous actors interact or compete.



Exploring Wargaming Applications for the U.S. Coast Guard

Wargaming is an analytic tool which can be used to study complex situations involving human decision-making. It is not limited to battles or war, but can be applied to any situation where individuals, agencies, or countries interact or are in a competing environment. When done correctly, decision makers can prepare for demands of an uncertain environment by exercising thought in how to respond to future challenges and threats.

In an effort to build organizational forecasting to mitigate risks associated with unknown capability gaps, the U.S. Coast Guard's Office of Emerging Policy is exploring ways to create a turn-based strategy Arctic wargame to give decision makers a tool to prepare for the future.

Currently there is a computer game on the commercial market from a Norwegian company which utilizes vector charts in the Arctic Region. By leveraging this type of platform, scenarios can be created to test established processes, identify capability gaps, and exercise response procedures with other participants. Game delivery is provided in three formats: strategic development (aka MOD zero setup), incident response, and role-player vs. role-player (aka wargaming).

MOD Zero Setup: Role Players are immersed in a future environment where the Arctic Region is more navigable. A list of capabilities and their associated costs are provided for players to choose from. Based on finite resources, players identify and position the location of their bases, communication stations, and operational assets (air & surface) to best achieve organizational and national strategic objectives.

Incident Response: Based on where resources were allocated, a scenario is introduced to test response capabilities. Incidences could include a surge in illegal smuggling, a major oil spill, or a response to a significant search & rescue incident. Assessments afterward provide insight on whether chosen resources were adequate.

Role-Player vs. Role Player: Using a computer-style format, two groups interact with one another in a cooperative fashion to respond to specific incidences. Scenarios are also created to analyze how players interact in an adversarial manner.

LCDR David A. Smith
David.A.Smith@uscg.mil
 (w) 202-372-4575
 (C) 530-559-7070

*All video game screen shots were acquired from [Naval War: Arctic Circle](#)

The origins of using Wargaming in the Office of Emerging Policy

The mission of the Office of Emerging Policy is to position the U.S. Coast Guard to effectively navigate emerging strategic challenges

BACKGROUND

Representatives from the U.S. Coast Guard's Office of Emerging Policy (DCO-X) conducted research on commercial games centered in the Arctic and discovered Naval War: Arctic Circle. The CEO was contacted to determine whether the software had been used as a strategic planning tool. Since then, DCO-X has partnered with the Norwegian Naval Academy to explore ways to use computer games for strategic analysis.

Discussions are currently underway to determine whether an exercise can be coordinated within the Coast Guard Arctic Forum.

Potential scenarios may include missions on how agencies or countries would coordinate response efforts to a pollution response, a Search & Rescue or a Freedom of Navigation scenario. Additional discussions have explored higher-level geopolitical situations in the Arctic domain and Western Hemisphere Strategy.



Wargaming can be used to identify gaps in strategies, policies, and capabilities related to the Western Hemisphere Strategy. By red teaming and assuming the role of Transnational Organized Crime Networks, the Coast Guard can begin thinking outside the box on future tactics and procedures.

FUTURE INTENTIONS

The Office of Emerging Policy intends to do the following:

- (1) Continue keeping the Office of General Law, the Office of International Affairs & Foreign Policy, and CG-5PW apprised on all progress with research efforts
- (2) Keep ongoing dialogue with Norway on ways to use different wargaming platforms as strategic forecasting tools
- (3) Meet with members from Norway and Iceland to learn about their governmental research and development grants under which the Naval Operations project is partially funded
- (4) Follow up directly with the Royal Norwegian Naval Academy, to learn how they evaluate the benefits and uses of the Naval Operations game
- (5) Meet with offices which are interested in wargaming to determine gaps in strategies, policies, and capabilities.

Origins of using Wargaming in the Office of Emerging Policy

Executive Summary

The Military Operations Research Society organized a conference on October 17, 2016 to discuss wargaming within the National Security Community. The conference was highlighted by remarks from the Deputy Defense Secretary, Robert Work, and his thoughts on aligning wargaming into the larger analytic process to support national security objectives. Wargaming is a tool which fits naturally into the Evergreen process and is another method the Office of Emerging Policy (DCO-X) utilizes to develop strategic intent within the U.S. Coast Guard.

Background

On December 8th, 2015 Deputy Defense Secretary Robert Work and Air Force General Paul J. Selva, vice chairman of the Joint Chiefs of Staff, co-wrote a memorandum to military department leaders and the chairman of the Joint Chiefs of Staff to align department decision-making and the wargaming enterprise. A review of DOD and joint wargaming revealed a lack of coordination within the wargaming community and the absence of a direct link between insights gained and programmatic action.



In the memo, three steps were ordered to increase wargaming across the services: (1) establish a wargaming repository, (2) form a Defense Wargaming Alignment Group, and (3) examine how to include allies and partners in wargaming efforts. The impetus of the MORS Wargaming Conference was orchestrated to achieve this last effort. The conference consisted of two days of lecture, educating participants on the theory, history and application of wargaming. Three additional days were allocated to create and execute a wargame to determine where it fits into the larger analytic process.

Wargaming is not commonly used by the Coast Guard nor is it a term the service is comfortable with. Part of the reason is education. Coast Guard officers are not required to complete JPME, the course of instruction where wargaming can be learned. Wargaming does not only apply to battles and war scenarios. Instead, wargaming has been identified as an analytic capability and a unique approach to deal with complex situations involving human decision-making. While wargames can never predict the future, when done correctly, participants can prepare organizations for the demands of an uncertain environment.

In Evergreen's infancy, program managers made the decision to use scenario-based planning instead of wargaming. As the program continues to mature, DCO-X has adopted wargaming to help identify challenges associated with future operating environments. DCO-X personnel attended and received certification from the Military Operations Research Society on Wargaming and continues to explore ways to incorporate its use within DHS.

“The purpose of wargaming is to immerse participants into an environment to better understand problems and improve decision making”

Wargames are not an end product. Rather, they must be incorporated into budget analysis when conducting analysis. This requires moderators and participants to have a strong foundation in wargaming, the applications, and the expected results.