



**UNITED STATES MARINE CORPS**  
WARGAMING APPLICATIONS, SPRING SEMINAR  
NAVAL POSTGRADUATE SCHOOL  
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1. **EXECUTIVE ISSUES:**

a. The Wargaming Seminar, Spring Quarter, assessed how players employed different modular designs and expeditionary capabilities during a Baltic Sea wargame. Players effectively planned and executed distributed maritime operations to gain and maintain sea control in a cluttered, constrained, and contested battlespace. The Fleet Design, Concepts, and Experimentation division at U.S. Fleet Forces tasked the wargame team to explore the following areas:

(1) Assess specified command-and-control (C2) structures and the ability to support distributed maneuver in a contested environment.

(2) Assess each specified modular designs' support to mission execution. Evaluation areas include integration, distribution, and maneuver in accordance with the current Fleet Design Campaign Plan.

(3) Identify which current and/or near-future technologies best support mission execution in a contested maritime environment (technologies must meet a time horizon of 2023).

2. **SCENARIO BACKGROUND:**

a. In 2024, Russia pursues regional expansion, believing that the U.S. is over-committed to a geo-political struggle in the South China Sea. Seeking to capitalize on a reduced NATO presence, Russia begins fomenting unrest in Sweden with the intent of isolating Gotland Island from the Mainland. Using information operations and cyber technologies, the Russians begin to organize far right groups disenfranchised by current immigration policies. Additionally, the Russians are using naval forces (both military and commercial vessels) to probe the sea and littoral areas around Gotland Island.

b. Russia seeks to seize Gotland Island to achieve greater situational awareness of the maritime approaches to key Russian ports and further project control over shipping and natural resources within the Baltic Sea.

3. **DISCUSSION:**

a. In the Baltic region, distributed maritime operations provide U.S. forces a more agile and robust deterrent than the traditional power projection approach.

b. Incorporating expeditionary forces into a modular design results in a more complete Fleet Tactical Grid.

c. Deploying ground forces, sensors, and strike capabilities to the tactical edge protects high value surface combatants and places greater pressure on enemy resources in zone.

4. **RECOMMENDATIONS REINFORCED BY OBSERVED GAME PLAY:**

a. When fighting in a cluttered and contested environment, expeditionary capabilities must be integrated into modular design. An integrated Fleet Tactical Grid, reinforced by the physical presence of naval forces ashore, restricts enemy options and forces the enemy to invest more time and resources to overt military activities. Ultimately, this reaction helps drive the U.S. diplomatic narrative and places pressure on enemy decision makers.

b. Commanding and controlling a distributed force is a challenge. The disaggregation of friendly forces makes "mission type" orders essential to operating in degraded situations. Additionally, distributing forces places greater demands on individual battle staffs. It is likely that battle staffs will have to increase in size and undergo advanced training such as R2P2 to accommodate an increase in mission tempo and become more comfortable incorporating supplementary capabilities (e.g., fighting autonomous vehicles).

c. Distributed, land-based detachments and capabilities reduce the exposure of high value surface combatants, simplify logistic requirements, and allow U.S. forces to better establish a well-integrated Fleet Tactical Grid. Diplomatic efforts will be critical to emplacing the right capabilities in the right places.

d. Autonomous platforms and expeditionary capabilities increase the agility and robustness of surface modular designs, allowing premier strike platforms greater stand-off from enemy threats. In a cluttered environment like the Baltic Sea, this stand-off provides a surface action group more maneuver space and places pressure on an enemy to locate high value assets.

e. Conceptual insights identified by players:

(1) Regardless of modular design, massing physical combat power is difficult; however, massing precision strike capabilities is not. Most players were willing to trade mass for situational awareness and responsive strike capabilities.

(2) In the Baltic region, advanced basing will be different than what is envisioned in a South China Sea scenario. It is likely that U.S. forces will be capped for diplomatic reasons and integrated with host nation militaries. Thus, U.S. forces should remain light and mobile. Attached equipment must be cheap, expendable, and low-cost in energy consumption.

5. For more detailed information on wargame results, modular designs, and the study findings see the Wargame Final Report. The POC for all game related materials is Dr. Jeff Appleget (COL ret.). Dr. Appleget may be reached at [jaappleg@nps.edu](mailto:jaappleg@nps.edu).

Very Respectfully,

NPS Wargame Team