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#### Naval Mine & Anti-Submarine Warfare Command Game '13

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# NMAWC TABLE TOP WAR GAME REPORT

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The United States Naval War College (NWC) War Gaming Department (WGD) conducted a Table Top War Game for the Naval Mine and Anti-Submarine Warfare Command (NMAWC) in San Diego, California from 27 – 28 February 2013. This event was developed and executed under the sponsorship of NMAWC in an effort to enhance their input to the International Mine-Countermeasure Exercise (IMCMEX) Final Planning Conference (FPC), as well as prepare participants for the actual exercise in the Commander, Fifth Fleet (C5F) Area of Responsibility in May 2013.

This report was prepared by a core team of NWC WGD research faculty and professional analysts. The findings in this report reflect the observations and insights that were garnered from participants during game play and that were briefed out at the conclusion of the event. These results are presented in the following categories: IMCMEX 2013 preparations, IMCMEX 2013 communications, and future IMCMEX planning considerations. While the scope of this Table Top War Game was limited in relation to many games conducted by NWC WGD, these findings offer a pathway for NMAWC to better contribute to IMCMEX milestones, in keeping with the game objectives.

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#### I. INTRODUCTION

#### A. Game Background

In September 2012, the International Mine Counter-Measures Exercise (IMCMEX 2012) was conducted for the first time. This event was a USCENTCOM sponsored, USNAVCENT led multinational exercise that fostered interoperability with coalition partners and enhanced MCM operational and support capabilities. IMCMEX 2013 will take place from 6-30 May, 2013. The following are major planning and preparation milestones for this exercise:

- Concept Development Conference (CDC): 27-29 Nov 2012
- Initial Planning Conference (IPC): 14-17 Jan 2013
- Mid Planning Conference (MPC): 11-14 Feb 2013
- Final Planning Conference (FPC): 11-14 March 2013

This exercise will build upon IMCMEX 2012 by broadening the scope of the exercise to include a number of inport and underway activities taking place in four phases addressing multinational MCM and supporting defensive measures. The exercise phases are:

- Phase 0: Harbor Phase (Reception, Staging, Onward Movement & Integration (RSO&I))
- Phase 1: Maritime Infrastructure Protection Symposium (MIPS)
- Phase 2: Execution (Underway) Phase
- Phase 3: Recovery and Debrief Phase

#### **B.** Game Purpose

The U.S. Naval War College (NWC) War Gaming Department (WGD) was approached by the NMAWC leadership to develop a table top war game that would assist the NMAWC staff in identifying exercise issues and preparing to participate in the exercise.

#### C. Objectives

Based on NMAWC's participation in IMCMEX 2012, a review of the 2012 exercise lessons learned, and frequent conversations with the NMAWC staff, the following objectives were identified for this project:

- Relevant exercise issues have been identified for NMAWC to present at upcoming FPC
- Members of NMAWC who are participating in IMCMEX 2013 are better prepared to fulfill their exercise roles

Based on these objectives, a staff exercise in the form of a table top war game, was determined to be the most suitable approach.

#### II. GAME OVERVIEW

#### A. War Game Description

During the NMAWC Table Top War Game, game players relied on personal fleet operational experience, subject matter expertise, and shared awareness derived from game play to discuss command and control issues, identify challenges and propose inputs for the IMCMEX 2013 FPC, as well as prepare those NMAWC personnel who will be participating in IMCMEX 2013. This game was designed as an unclassified, one-sided, professionally facilitated directed seminar activity. This scenario-driven staff exercise included facilitated injects, intelligence updates, and situation-based questions as they relate to IMCMEX 2013.

#### **B.** War Game Methodology

Through a series of six uniquely designed facilitated sessions, participants assumed the roles and responsibilities of key exercise staff billets. Players actively participated in a moderated discussion in order to identify the potential issues and implications associated with exercise play and develop potential solutions.

#### C. Focus of the War Game

Based on collaboration between NMAWC and WGD, the following topics were identified as focus areas for the event:

- Session 1: Harbor Phase (RSO&I)
- Session 2: Intelligence, Surveillance, Reconnaissance / Maritime Security
- Session 3: Floating Mine Response
- Session 4: MCM Lead Through and Route Clearance
- Session 5: Critical Maritime Infrastructure Protection / Port Harbor Clearance
- Session 6: Recovery and Debrief Phase

Each session was a facilitator led activity that discussed issues from the perspective of Operational Functions. The Operational Functions consisted of the following:

- Maneuver and Movement
- Command and Control
- Fires
- Intelligence
- Sustainment
- Protection

Figure 2.1 illustrates the relationship between the exercise phases and the focus areas/war game sessions.

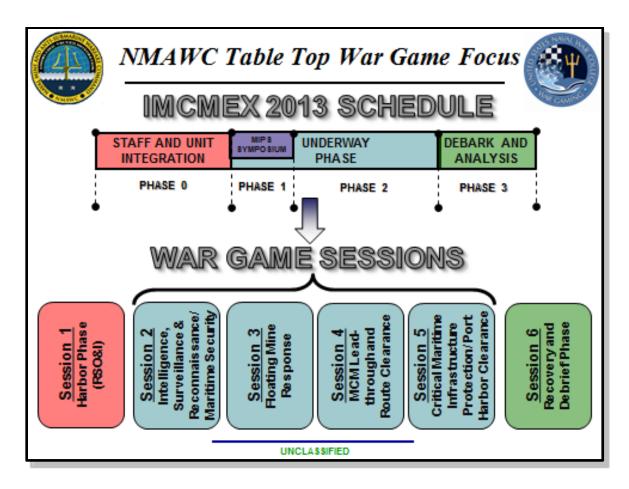


Figure 2.1 – War Game Focus Areas

#### III. GAME STRUCTURE AND PARTICIPANTS

#### A. Game Structure

The NMAWC Table Top War Game consisted of six, unclassified, time-stepped vignettes tailored to the aforementioned focus areas.

#### **B.** Player Cell

There were 21 player cell positions with each player representing a key staff role or function in the exercise. NMAWC staff and a COMTHIRDFLT Naval Cooperation and Guidance for Shipping (NCAGS) representative filled the player roles identified in Figure 3.1:



Figure 3.1 - Player Cell Roles

#### C. White Cell

The White Cell functions were performed by the WGD facilitators who led each session discussion. They engaged with the game participants regarding relevant exercise issues, including coordination and support requirements with the following organizations:

- Coalition partners
- Tactical participants
- MCMC (West)
- IMCM Exercise Cell (EXCON)

#### IV. GAME SESSIONS

#### A. Session 1: Phase 0 - Harbor Phase (RSO&I)

This session was designed to assist the participating forces of IMCMEX 2013 to prepare for the initial stage of the exercise, concentrating on establishing communications networks and developing support and sustainment procedures for all participating nations.

## B. Session 2: Phase 2 - Intelligence, Surveillance, Reconnaissance (ISR)/Maritime Security

The second session was designed to identify and examine issues associated with the coordination, control, prioritization and employment of defensive capabilities during the exercise, as well as discuss the process for requesting/utilizing non-organic ISR support.

#### C. Session 3: Phase 2 – Floating Mine Response

The participants identified response actions to a variety of floating mine-related incidents and discussed the threat of deployed floating mines within their area of responsibility. Building on that discussion, they addressed a floating mine vignette, with their inputs focused on how a response would impact command and control (C2), intelligence, force protection and logistics responsibilities.

#### D. Session 4: Phase 2 – MCM Lead Through and Route Clearance

Participants examined the challenges associated with a commercial vessel striking a mine in the Central Arabian Gulf (CAG) resulting in an oil spill. Subsequent discussions included route clearance, escort operations and MCM lead through actions supported by a NCAGS detachment. Participants were asked to identify reporting responsibilities, along with potential shortfalls and gaps in the anticipated C2 structure.

# E. Session 5: Phase 2 – Critical Maritime Infrastructure Protection (MIP)/Port Harbor Clearance

This session combined two related areas of interest by addressing the challenges associated with both MIP and port harbor clearance operations. The vignettes highlighted the need for interaction with other key organizations that have infrastructure security responsibilities in this region, including local governments and commercial industry. Several threats to maritime infrastructure were presented, with detailed discussions centering on various threats to OPLATs, as well as threats to merchant vessels operating within a harbor.

#### F. Session 6: Phase 3 – Recovery and Debrief Phase

As the final session, participants were asked to examine the requirements for the Recovery and Debrief phase of the exercise. The session focused on potential post-underway logistics issues, along with a discussion of the various planning and execution considerations required to make the Tactical Hot Wash and Operational/VIP Debrief sessions a success.

#### V. TABLE TOP WAR GAME KEY FINDINGS

#### A. Summary of Analysis

Data was captured throughout the facilitated discussions by both the players and the WGD facilitators, who also served as ethnographers. From this data, the players developed a PowerPoint Out-brief which they presented to NMAWC leadership on 28 February 2013. This brief highlighted key results of the Table Top War Game, and grouped findings into three general categories: Exercise Preparations, Communications and Future IMCMEX Planning Considerations, each of which is discussed in further detail below.

#### **B.** Exercise Preparations

The participants indicated that IMCMEX 2013 requires a Letter of Instruction (LOI) and a draft OPORDER. The LOI should be generated by NAVCENT (Exercise Control) by 16 April 2013 and should provide administrative guidance to the exercise participants, to include:

- Scenario and higher headquarters guidance (see RIMPAC as potential template)
- Delineated serial (pre-planned exercise event) requirements
- Detailed C2 construct
- Process for non-exercise issues to be deferred to standing COMFIFTHFLT C2 structure (Utilizing the existing exercise Liaison Officer (LNO) structure would be one approach)
- Exercise communications procedures (message traffic, CENTRIXS cut-over date, etc).

Based on the higher headquarter guidance, the IMEF staff should generate an IMCMEX 2013 Draft OPORDER no later than 6 May 2013 to support review during the staff integration portion of Phase 0 operations. This document should provide participants with the operational exercise guidance required to fulfill their exercise roles.

Based on feedback from participants in IMCMEX 2012, this year's exercise would benefit from an improved schedule of events (SOE) management process. The development of a detailed, comprehensive SOE, along with the promulgation of specific event reporting and schedule change procedures at both the FPC and Pre-sail Conference should address this concern.

The participants highlighted the need for a detailed staff billet structure for each of the various exercise staffs (IMEF, CTF 521, CTF 522 and CTF 523) based on their particular mission responsibilities and staff functions as assigned in the IMCMEX 2013 OPORDER. This information should then be used to create a Joint Manning Document (JMD), which would also identify personnel required arrival and departure dates based on their specific assignment and responsibilities.

During Phase 0, the various staffs should use the exercise scenario and SOE to conduct staff training to provide the planning and execution expertise required to effectively operate as a staff when dealing with both free-play and serialized events.

Players identified the need to have specialized breakout groups at the FPC, as this will enable detailed planning items to be addressed and subsequently incorporated into the IMCMEX LOI and OPORDER, respectively. These breakout groups should include, at a minimum, the following:

- Diving Operations
- Intelligence

- Logistics
- Communications

Regarding Phase 3 Ops: Both the administrative procedures and data collection requirements associated with the hotwash sessions and post-exercise reports/briefs should be identified and promulgated at the FPC, since the associated collection, analysis and briefing requirements will impact the composition of the JMD. These procedures should also account for the inclusion of coalition partner inputs in each of the hot wash sessions, as well as post-exercise products, to ensure that their perspectives are not overlooked.

#### C. Communications

The players identified the need to determine and publish a format for operational orders, as the scope of IMCMEX 2013 has increased with the addition of CTF 521 & 523. While EXTAC 871 was an acceptable format for IMCMEX 2012, the addition of Maritime Security Operations (MSO) and Maritime Infrastructure Protection (MIP) requires an expanded capability, which might be addressed by utilizing the Multinational Training Publications (MTPs).

While IMCMEX is an unclassified exercise, passing situational reports over an unsecure circuit may lead to a compromise of classified capabilities or tactics. Therefore, a need exists to identify classified information requirements associated with the exercise, and the appropriate exchange procedures to be followed, such as the use of promulgated exercise brevity codes. These codes support the exchange of information between units over open circuits and can support higher headquarters tasking, as well as allow units to report the status of their activities.

With coalition forces having a wide range of C4 capabilities, a C2 architecture which identifies the minimum C4 requirements for each C2 node should be developed. This will ensure that units fulfilling key C2 responsibilities have the requisite capabilities.

#### **D. Future IMCMEX Planning Considerations**

In future exercises, participants' roles and responsibilities should be assigned based on their ability to meet minimum operational thresholds associated with, but not limited to, communications and manning. The development of such business rules would identify where units with different capabilities could effectively participate.

Including serials of increased tactical complexity would provide coalition partners with an expanded range of training opportunities that they could take advantage of, commensurate with their level of proficiency.

The exercise should continue to include escort, logistics and defense force operations, as this provides an opportunity for coalition partners to leverage services, capabilities and scenarios that may not be available in their own national exercise programs.

A requirement exists to define the life-cycle for IMCMEX in order to maximize effectiveness and efficiency. This life-cycle should include a lengthened planning and execution timeline in comparison to previous IMCMEXs. This approach would ensure sufficient timing is available for planning and would support de-conflicting the exercise and its major planning events with existing U.S., NATO and coalition exercises. The IMCMEX life-cycle could evolve into a two-year process consisting of the current full-scale exercise involving tactical units and a Command Post Exercise (CPX), with each conducted in alternating years.

#### E. War Game Feedback

At the completion of the out-brief, NMAWC leadership indicated their appreciation for WGD support, as they found the game extremely helpful to identify exercise issues that they can take to the FPC for resolution by the IMCMEX leadership. They also stated a desire to utilize in-house resources to conduct a similar gaming effort for all of the exercises in which they participate.

NMAWC also indicated an interest in NWC's ability to provide Operational Planning expertise to support the staff integration portion of Phase 0 operations.

