



Maritime Staff Operators Course (MSOC)

<https://usnwc.edu/college-of-maritime-operational-warfare/Core-Curriculum/Maritime-Staff-Operators-Course>

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OVERVIEW

Welcome to the Maritime Staff Operators Course (MSOC). This syllabus is provided for reference and guidance throughout the course.

The Maritime Staff Operators Course (MSOC) provides resident education in the application of the Maritime Operations Center (MOC) concept, organization and processes; maritime operational level of warfare concepts, terminology and processes; and the Navy Planning Process (NPP) in order to produce graduates capable of immediately supporting the commander's decision cycle at the operational level of warfare in a dynamic and complex environment.

This course examines both the art and science associated with military activities across the range of military operations. It includes recently developed MOC concepts and substantial application of the Navy Planning Process (NPP). MSOC incorporates seminars, lectures, and practical exercises using a realistic maritime scenario. It culminates with a synthesizing Battle Lab exercise designed to replicate the organization, processes, procedures, and command and control tools of a nominal MOC.

The focus of this course is on maritime operations at the operational level of war. The construct is inherently joint, and uses both Navy and joint doctrine as standard references. Accordingly, it emphasizes the application of maritime capabilities through a combined/joint force maritime component commander (C/JFMCC) and its relevance and value to the joint force commander (JFC). Students apply planning skills and maritime staff processes and procedures across numerous maritime lines of operation (LOOs) which include, but are not limited to maritime interception operations (MIO), noncombatant evacuation operations (NEOs), and multi-Service/interagency/multinational operations, using a dynamic scenario set in 2025.

MSOC uses a practitioner's approach requiring hands-on student participation. Student-produced deliverables include military briefings and mission-type orders (e.g., operation orders (OPORDs), fragmentary orders (FRAGORDs), and daily intentions messages (DIMs).

COURSE OUTCOMES

The course builds on fundamentals and culminates with the students planning a major naval operations during the execution phase of MSOC. This course is designed to produce personnel who are capable of performing in a high-tempo, fluid operational environment. Specifically, course graduates will be able to:

- **APPLY** the MOC concept, processes, procedures, terminology and support commander's decision cycle as part of a functional center or cross functional team;
- **EXECUTE** the Naval Planning Process (NPP) as a member of an operational planning team (OPT) within a MOC across the range of military operations and develop plans and orders at the operational level of warfare;
- **APPLY** the concepts of operational art and operational functions in planning and execution of naval, joint, interagency, and multinational maritime operations;
- **UNDERSTAND** Information Management within a MOC battle rhythm and among subordinate commands or activities, adjacent components, and higher headquarters staffs in a collaborative information environment;
- **DEMONSTRATE** the ability to employ naval capabilities, maritime C2, and operational warfare at sea concepts and terminology in the context of planning and executing naval, joint, interagency and multinational maritime operations.
- **REMEMBER** naval capabilities, maritime C2, and operational warfare at sea concepts and terminology in terms of applicability to defeating near peer competitors.

LINES OF EFFORT (LOEs)

The curriculum is comprised of *four interconnected LOEs*:

1. **Strategy, Operational Art, and Operational Functions**
2. **Maritime Command and Control**
3. **Planning and Preparation**
4. **Execution**

Holistically, the LOEs are designed to meet the following **COURSE OBJECTIVES**:

- Comprehend the strategic context, fundamentals of naval and joint operations, operational art/design and relationship of operational art to strategy and tactics.
- Analyze the organization and functions of a maritime component staff in order to command and control maritime, joint, and multinational forces across the range of military operations.

- Apply and analyze the NPP and how to use that process to create plans and orders at the operational level of war.
- Synthesize course fundamentals as a member of a MOC during execution in a realistic scenario.

Strategy, Operational Art, and Operational Functions

In the first LOE, MSOC introduces the students to the fundamental aspects of joint warfare, to include familiarization with:

- National and maritime strategies
- Operational Concepts
- Operational art and design concepts
- Joint and Service references and doctrinal publications
- Levels of command and levels of war
- Theater geometry
- Operational warfare at sea
- Operational factors of space-time-force
- Principles of joint operations/principles of war
- Center-of-gravity identification and deconstruction
- Joint functions of C2, intelligence, sustainment, movement and maneuver, fires, and protection (with detailed discussions of each function)
- Joint planning guidance and execution systems

The initial LOE culminates in a comprehensive discussion of the Battle of Leyte Gulf which synthesizes the key aspects of operational art. The remainder of the course builds extensively upon these foundational aspects.

Maritime Command and Control

The second LOE focuses on the core aspect of operational-level warfare – C2 of maritime forces, the employment of maritime capabilities, and how the Navy executes operational C2 via the MOC construct, to include:

- The commander's decision cycle
- COCOM, OPCON, and TACON authorities

- Supported and supporting command relationships
- Joint force and JTF organization
- Information operations (IO)
- Cyberspace operations (CO)
- Operational law and rules of engagement (ROE)
- Joint Service capabilities (USN, USA, USMC, USAF, USCG, SOF)
- Maritime security operations, including MIO and operations to support FON
- Maritime Domain Awareness (MDA)/Maritime Operational Threat Response (MOTR)
- HA/DR and NEOs
- Information management and knowledge management (IM/KM)
- Universal Joint Task List and Universal Naval Task List applications
- Operational assessment methodology
- Functional components and JFMCC forming

MSOC faculty will introduce students to the organizational construct of a MOC and the associated processes and concepts. They are also shown the organization and missions of the individual Navy MOCs (USFF, CPF, C2F, C3F, C4F, C5F, C6F, C7F, and C10F). They explore how a staff operates within a disciplined battle rhythm to support the decision cycle.

Planning and Preparation

The students then transition into the Planning and Preparation LOE that uses operational art and MOC processes as its foundation. In this LOE, the students engage in practical exercises using a scenario set in 2025 that reinforces class lectures and uses a “learn then do” methodology. Focus areas include:

- The six-step NPP
- Staff estimates
- Operational planning team (OPT) organization and utilization
- Risk assessment
- Commander’s intent and guidance
- Targeting overview
- Intelligence support, including the joint intelligence preparation of the operational environment (JIPOE)

The students then employ the NPP, with emphasis on key techniques, supporting concepts, and doctrine. Students use the doctrine in NWP-5-01 to perform the six steps of the NPP:

- Mission Analysis
- Course of Action (COA) Development
- COA Analysis (Wargaming)
- COA Comparison and Decision
- Plan or Order Development
- Transition

Execution

The Execution LOE is the synthesizing event of MSOC, where the class functions as a MOC staff and applies joint and Service concepts, fundamentals, doctrine and knowledge of the NPP within the context of a realistic scenario. The class executes the CFMCC operation order that they developed in the Planning and Preparation LOE. A Control Group role-plays the higher headquarters, adjacent components, coalition partners and subordinate task forces in the execution portion of the scenario.

The intent is to demonstrate how internal (e.g., working groups, NPP briefings) and external activities support the commander's decision cycle. During the week-long command post exercise students serve in various cross functional teams using systems and applications that effectively replicate real-world MOC C2 systems and functionality. Students work in the Current Operations (COPS) cell, Future Operations (FOPS) cell, Future Plans Cell (FPC), and the Operational Assessment Cell (OAC), and are supported by the Control Group.

COPS will:

- Analyze, fuse, and disseminate information for shared situational awareness
- Develop and release daily intentions messages (DIMs)
- Coordinate, produce, and deliver Commander's Update Briefs (CUBs)
- Manage the common operational picture (COP)
- Coordinate and monitor execution of current directives
- Publish fragmentary orders (FRAGORDs) as required
- Release immediate messages per reporting requirements
- Develop, manage, and promulgate C/JFMCC battle rhythm
- Maintain the Significant Events Log

- Manage requests for information (RFIs)
- Communicate with higher, adjacent, and maritime subordinate commands
- Track the readiness of forces assigned to the C/JFMCC
- Coordinate operations with other joint force components
- Direct subordinates in achieving C/JFMCC objectives
- Form crisis action teams (CATs) in emergent circumstances
- Monitor, assess, and report commander's critical information requirements (CCIRs)

FOPS will:

- Draft commander's intent to include purpose, method, end state, and risk
- Develop COAs to modify maritime operations to achieve the commander's intent
- Phase and synchronize tactical concepts of operations (CONOPS)
- Conduct branch planning
- Produce CONOPS by phase with COA sketches and statements
- Identify decision points
- Develop synchronization matrices
- Coordinate and draft requests for forces (RFFs)/requests for capabilities (RFCs)
- Present transition briefs to COPS
- Coordinate internal staff actions as they relate to planning
- Propose targeting priorities for consideration in the targeting process

FPC will:

- Conduct analysis and coordination of future operations during execution
- Coordinate internal and external planning
- Conduct sequel planning; present transition briefs to FOPS
- Assist FOPS in crisis action planning as required
- Draft commander's intent to include purpose, method, end state, and risk

OAC will:

- Develop measures of effectiveness (MOEs)
- Develop measures of performance (MOPs)
- Develop MOE indicators (MOE-Is)

- Consolidate and assess task accomplishment
- Conduct analysis and determine trends
- Identify the operational impact of events on the LOOs
- Assess progress of each phase toward (or away from) C/JFMCC's objectives
- Provide assessment inputs to appropriate cross functional team activities
- Recommend whether or not C/JFMCC should execute branch or sequel plans
- Inform plans development (ends and means) and modify plans (ways)

MSOC Grading Policy

MSOC students are graded on a high pass/pass/fail basis based on the faculty's evaluation of the students' preparation, participation, two (2) exams, and contributions during class and practical exercises. Students are expected to complete all assigned readings and come to class fully informed and ready to critically examine and discuss the assigned material. Expectations for class contribution, exams, exercise participation and attendance are as follows:

- **(10%) Class contribution during OLW Fundamentals Sessions (≈Day 1 – Day 7):** Students are expected to listen and contribute to each class session, especially when called upon, and actively participate in any associated small group breakout activities.
- **(20% total) OLW Fundamentals exam (10%)** given normally on the 1st day of Week 3 and **NPP Academics exam (10%)** given on the last class day of Week 4. Minimum exam passing score is **80**. Students who score **70-79** will remediate by reviewing those questions they missed and completing an oral review and exam with faculty. Students who score **69 or below** will retake the entire exam. Maximum recorded score on any retake exam (partial or entire) is **80**. Failure to pass any retake exam will require a faculty-led remediation session to determine if the student can successfully meet the requirements for the AQD (JOM) or NEC (831A).
- **(70% total) NPP Practical (35%)** (≈Day 8 – Day 20) and **Battle Lab Exercise (35%)** contribution (≈Day 21 – Day 25): The planning and “execution” exercise is the focus of this course and students are expected to engage fully in all aspects of the exercise. Expectations include an active approach, constructive curiosity and a willingness to step outside of one's tactical or community experience. Students are also expected to demonstrate critical and creative thought in developing, evaluating and briefing the various required products, during the NPP process steps. Students will be expected to fill various leadership roles, recognizing that student experience and backgrounds will vary, and that many students will participate in areas for which they have no prior

expertise. Consequently, each student will be evaluated on his/her preparation and contribution in each given role, not on prior experience.

A grade of **High-Pass** overall will be assigned to students who demonstrate superior preparation for all seminar sessions, consistently contribute original and highly insightful thoughts and insights to the discussion, pass both exams the first time, demonstrate exceptional teamwork and leadership during planning practical and Battle Lab execution exercise.

A grade of **Pass** overall will be assigned to students who demonstrate thorough, preparation for all class sessions, regularly contribute original and well-developed insights to the discussion, pass both exams—the first time or retake, fully participate in the planning practical and Battle Lab execution exercise as a team player, and are ready and willing to take the lead for team tasks and projects.

A grade of **Fail** will be assigned to students who are obviously unprepared for class sessions, repeatedly are absent or tardy coming to class, contribute rarely or only when called upon, fail both exams (to include retakes), or consistently require encouragement or prodding to take on fair share of team project workload.

A grade of **Incomplete** will be assigned to students who are not able to complete the course due to unforeseen circumstances.

Students who choose to apply satisfactory completion of this course toward Block 5 in USNWC Naval Command and Staff Online Program will have their pass or high pass grade translated into an equivalent letter/numerical grade as follows: **Pass = B+/88, High-Pass= A/95.**

COURSE MATERIALS

The students will also be receive an iPad containing all MSOC course materials on the first day of the course. Classroom computers will be available to each student which also hosts the same course materials as the iPad. Prior to graduation, students will return the iPad, and may opt to receive a DVD containing all of the course materials.

On both the iPad and the classroom computers, open the MSOC Homepage via a web browser by clicking on the [MSOC.htm](#) icon in the top level directory.

- Access the syllabus overview by clicking on the [Course Introduction](#) link. Click on the [Session Guides](#) to access the list of individual sessions. From there, click on the session topic link to access the session guide, including Focus, Background, Required & Supplementary Readings, Key Slides, Takeaways, Questions to Consider, and Handouts. [Scenario Files](#) (available on the IPAD only) contains copies of all pertinent scenario documents. The [Points of Contact](#) link provides CMOW MSOC faculty phone numbers and email addresses. [Quick References](#) and [Acronyms](#) are self-explanatory. The [Staff Operator Toolkit](#) link accesses a variety of information of use to the Staff Operator.

- The DVD works best with the Google CHROME browser, although other browsers MAY work as well.
- Links within the supporting files are of two types: those that are available on the DVD, and those that require access through an internet provider. Any link beginning with “http://” REQUIRES access to the internet to work.

While the iPad contains all reference material required for MSOC, paper copies of references which are heavily used or referenced in the course (NWP 5-01, *Navy Planning*, NWP 3-32, *Maritime Operations at the Operational Level of War*, and NTTP 3-32.1, *Maritime Operations Center (MOC)*) will be available to students in the classroom. Therefore, students should not have to print out session study materials.

Students may retain their personal copy of the *CMOW Maritime Staff Reference Guide* on course completion.

READINGS

The MSOC Session Schedule noted below contains all applicable Required Reading for the course. **Students will need to READ the assigned sections noted in the Required Readings in preparation for the daily sessions.** Additional Supplemental Readings and other reference documents are contained on the Student iPad. Students can use those references for additional familiarization, to acquire a more in-depth understanding of selected topics, and for future reference. The student DVD contains doctrinal web links and bibliographies which will be very useful during your upcoming staff assignment.

“Read ahead” assignments for the first day of class are available via the MSOC web page: <https://usnwc.edu/college-of-maritime-operational-warfare/Professional-Military-Education/Maritime-Staff-Operators-Course>, under the in the “Read Ahead Documents” section.

The Joint Doctrine, Education and Training Electronic Information System (JDEIS) Web Portal contains the entire Joint Electronic Library: <https://jdeis.js.mil/jdeis/generic.jsp> (or .smil for classified portions of the JEL). For Navy references, the Navy Warfare Development Command’s (NWDC) Navy Warfare Library (NWL) can be found at: <https://doctrine.navy.mil> (NIPR) or <http://ndls.nwdc.navy.smil.mil> (SIPR).

MSOC SESSION SCHEDULE

Link to the Session Schedule [here](#).

MSOC SURVEYS

MSOC is YOUR course. The faculty strive to keep the material current and continuously improve the course. To assist us in this endeavor, we require students to complete a course questionnaire available on a password-enabled portal. The questionnaire is designed to allow students to comment on and critique session topics, readings, moderator guidance and support, and lectures, with the objective of improving successive course offerings.