THIS PAGE INTENTIONALLY BLANK
Foreword

This syllabus and study guide provides a comprehensive overview of the Naval War College (NWC), College of Distance Education (CDE) course on Joint Maritime Operations (JMO). Prepared for the Fleet Seminar Program (FSP) and Naval War College-at-Naval Postgraduate School (NWC-at-NPS) Program to assist the student in weekly seminar preparation and development of a personal plan of study. Administrative information is also included. Course curricula are derived from the resident College of Naval Command and Staff (CNC&S) core curriculum.

SUBMITTED:  
MICHAEL J. BARKER  
Head,  
Joint Military Operations Department

APPROVED:  
L. W. WILDEMANN  
Dean,  
College of Distance Education
# SECTION ONE: COURSE OVERVIEW & ADMINISTRATION

<table>
<thead>
<tr>
<th>Section</th>
<th>Page</th>
</tr>
</thead>
<tbody>
<tr>
<td>FOREWORD</td>
<td>i</td>
</tr>
<tr>
<td>TABLE OF CONTENTS</td>
<td>iii</td>
</tr>
<tr>
<td>COURSE DESCRIPTION</td>
<td>1</td>
</tr>
</tbody>
</table>
1. MISSION                                                               | 1    |
2. COURSE OVERVIEW                                                      | 1    |
3. CDE JMO LEARNING AND ASSESSMENT METHODOLOGY                           | 1    |
4. CJCS OFFICER PROFESSIONAL MILITARY EDUCATION POLICY                   | 2    |
5. COURSE ORGANIZATION                                                  | 2    |
6. SYLLABUS ORGANIZATION                                                | 4    |
7. METHODS OF INSTRUCTION                                               | 4    |
8. MEDIA AND READINGS                                                   | 5    |
9. REQUIREMENTS                                                          | 6    |
  9.1. STUDENT RESPONSIBILITIES                                          | 6    |
  9.2. WORKLOAD                                                          | 6    |
  9.3. ASSESSMENTS                                                       | 7    |
  9.4. EVALUATION OF ASSESSMENTS                                         | 7    |
  9.5. FLEET SEMINAR ASSIGNMENTS                                         | 9    |
  9.6. FLEET SEMINAR/NWC-AT-NPS SCHEDULES                                | 9    |
10. GRADING CRITERIA                                                    | 10   |
  10.1. SUMMATIVE ASSESSMENTS                                            | 10   |
  10.2. STUDENT CONTRIBUTION                                             | 11   |
  10.3. DIPLOMA REQUIREMENTS AND TRANSCRIPTS                             | 13   |
  10.4. ACADEMIC HONOR CODE                                              | 13   |
11. GUIDANCE FOR WRITTEN SOLUTIONS                                       | 14   |
  11.1. WRITING STANDARDS                                                | 15   |
  11.2. FORMAT                                                            | 15   |
    a. SUMMATIVE ASSESSMENTS                                             | 15   |
    b. POINT PAPERS                                                      | 15   |
  11.3. SUMMATIVE ASSESSMENT DUE DATES AND UNSATISFACTORY WORK           | 16   |
  11.4. GRADE APPEALS                                                    | 16   |
12. END OF COURSE QUESTIONNAIRE                                         | 17   |
13. ATTENDANCE                                                          | 17   |
  13.1. FLEET SEMINAR PROGRAM (FSP)                                      | 17   |
SECTION TWO: JOINT MARITIME OPERATIONS STUDY GUIDES

1. BLOCK 1: COURSE FOUNDATIONS, OPERATIONAL ART THEORY & PRACTICE. 1-1
   1.1 Course Overview ........................................................................................................ 1-3
   1.2 Critical and Creative Thinking .................................................................................. 1-5
   1.3 Introduction to Operational Art .................................................................................. 1-9
   1.4 Military Objectives and Levels of War ...................................................................... 1-13
   1.5 Operational Factors .................................................................................................. 1-17
   1.6 Theater Structure and Geometry .............................................................................. 1-21
   1.7 Principles of Joint Operations .................................................................................. 1-25
   1.8 Operational Functions .............................................................................................. 1-27
   1.9 Major Operations / Campaigns & Their Elements .................................................. 1-31
   1.10 Operational Design: An Analysis of the Battle of Leyte Gulf ................................ 1-37
   1.11 Operational Leadership .......................................................................................... 1-41
   1.12 Operational Design: Analysis of the Falklands/Malvinas Conflict ....................... 1-45
   1.13 Summative Assessment 1: Operational Art & Retrospective ................................ 1-49

2. BLOCK 2: NAVAL, JOINT AND MULTINATIONAL WARFARE ................................ 2-1
   2.1 Naval Warfare Theory .............................................................................................. 2-3
   2.2 Objectives of Naval Warfare ................................................................................... 2-7
   2.3 Naval Tactics ............................................................................................................ 2-11
   2.4 Organizing Naval Forces in the Open Ocean ......................................................... 2-15
   2.5 Naval Combined Arms & Joint Warfare – Part I ................................................... 2-17
   2.6 Naval Combined Arms & Joint Warfare – Part II .................................................. 2-21
   2.7 Operational Design: Analysis of the Naval Battles of Guadalcanal ....................... 2-25
   2.8 Joint and Multinational Warfare – Command & Control ...................................... 2-29
   2.9 U.S. Navy Command & Control ............................................................................. 2-33
   2.10 Joint Warfare – U.S. Coast Guard Capabilities & Doctrine ............................... 2-37
   2.11 Joint Warfare – U.S. Marine Corps Capabilities & Doctrine .............................. 2-39
   2.12 Joint Warfare – U.S. Army Capabilities & Doctrine ........................................... 2-43
JOINT MARITIME OPERATIONS COURSE DESCRIPTION

1. Mission.

In keeping with the Naval War College (NWC) Mission, the Joint Maritime Operations (JMO) Course is designed to educate mid-career leaders for service at the operational and theater-strategic levels of war. These leaders will be capable of meaningfully contributing to staff actions necessary for the linkage of ends, ways, and means in the attainment of strategic and operational objectives in both peace and war.

2. Course Overview.

The Joint Maritime Operations course is an in-depth study of the high-tactical and operational levels of war throughout the full spectrum of military operations, with an emphasis on mid-to-high intensity combat at sea. A focus will be put on refining students’ analytical skills as well as both critical and creative thinking abilities. The emphasis in this course is on operational art and naval/joint warfare to develop creative solutions to ill-structured problems. Although maritime operations and sea service contributions are emphasized, the capabilities of all services are studied with ultimate focus on planning and execution of joint/combined operations at the joint/combined task force and maritime/naval component commander levels in the maritime domain. The academic year will flow from the simple to the more complex and will culminate in a final planning exercise intended to allow students to display their comprehension of the syllabus material and to demonstrate critical and creative thinking skills.

Via extensive study of numerous case studies, the JMO student is challenged with four enduring questions from the perspective of maritime and joint force commanders and their staff planners:

- What are the objectives and desired end state? (Ends)
- What sequence of actions is most likely to achieve those objectives and end state? (Ways)
- What resources are required to accomplish that sequence of actions? (Means)
- What is the likely chance of failure or unacceptable results in performing that sequence of actions? (Risk)

The ability to answer these questions is the essence of the Joint Maritime Operations course.

3. Chairman, Joint Chiefs of Staff (CJCS) Officer Professional Military Education Policy.

The Chairman of the Joint Chiefs of Staff (CJCS) Instruction CJCSI 1800.01E sets the policies, procedures, objectives, and responsibilities for both officer Professional Military Education (PME) and Joint Professional Military Education (JPME). It directs the services and service colleges to comply with the Officer Professional Military Education Policy (OPMEP) by

---

1 The 2007 National Defense Authorization Act revised the definition of joint matters to include the integrated use of military forces that may be conducted under unified action on land, sea, or in air or space, or in the information environment with participants from multiple armed forces, U.S. Armed Forces and other U.S. departments and agencies, U.S. Armed Forces and the military forces or agencies of other countries, U.S. Armed Forces and non-governmental persons or entities, or any combination thereof. Accordingly, for purposes of clarity, the term “joint” includes multinational and interagency partners.
meeting the objectives it defines. The Officer Joint Professional Military Education objectives are designed to produce officers fully capable of serving as leaders or staff officers at the operational level of war.

The OPMEP Service Intermediate-Level College (ILC) Joint Learning Area objectives are presented in Appendix A to highlight the linkage between the CDE JMO competencies and the joint learning areas prescribed by the CJCS. This syllabus also lists the Naval War College (NWC) learning objectives to be addressed in each session.

4. CDE JMO Learning and Assessment Methodology.

The CDE JMO learning and assessment methodology is based on competencies aligned with officer Joint Professional Military Education (JPME) objectives and Naval War College desired student educational outcomes. The six CDE JMO competencies are:

- Competency 1: The ability to analyze operational situations in the contemporary security environment using operational art and joint doctrine.
- Competency 2: The ability to apply naval, joint, interagency and multinational capabilities in a maritime/joint theater across the range of military operations.
- Competency 3: The ability to apply the Navy/Joint Planning Processes (NPP/JPP) to synthesize solutions to operational problems in a joint/maritime theater.
- Competency 4: The ability to apply critical and creative thinking to operational problems.
- Competency 5: The ability to apply clear and precise communication, both orally and in writing.
- Competency 6: The ability to comprehend leadership concepts and challenges at the operational level of war.

Competencies are further subdivided into associated elements to provide greater resolution of student proficiency and to allow for flexibility in assessment methods. See Appendix B.

5. Course Organization.

The Joint Maritime Operations (JMO) course introduces the student to subject matter organized into five blocks. Each block is further subdivided into sessions. The course is sequenced to build upon previous sessions, culminating in the application of the Navy/Joint Planning Process (NPP/JPP) in a realistic scenario. An overview of the five blocks follows:

Block 1—“Course Foundations and Operational Art Theory & Practice.” The Course Foundations portion of this block lays the foundation of the Joint Maritime Operations (JMO) course, to include an emphasis on critical and creative thinking. The Operational Art (OPART) portion encompasses the theory and practical application of OPART. In these seminar sessions and video lectures students are introduced to the fundamental themes of OPART, which are subsequently woven throughout the ensuing blocks. These sessions will also explore OPART relative to the unique nature of the maritime environment and maritime warfare. The enduring concepts of OPART are thoroughly illustrated using the Battle of Leyte Gulf and the Falklands/Malvinas Conflict historical case studies as well as current operations. A case study—
based written assignment usually constitutes the first summative assessment (defined below) at the end of Block 1.

**Block 2**—“Naval, Joint and Multinational Warfare.” In the first part students will be exposed to the theory and objectives of naval warfare, to include an in-depth look at naval tactics, combined arms warfare, and naval command & control. Next, we explore the doctrinal, operational and planning considerations in employing, as part of a joint team, the capabilities of the individual Services (U.S. Navy, U.S. Coast Guard, U.S. Marine Corps, U.S. Army, and U.S. Air Force) and Special Operations Forces (SOF). Follow-on sessions cover joint/multinational command and control, intelligence support to operational decision making and planning, information operations and cyber warfare, naval, joint and multinational logistics, and strategic deployment. A case-study vignette typically serves as the backdrop for the second summative assessment at the end of Block 2. Students will have the opportunity to apply knowledge gained in this block again during Blocks 4 and 5.

**Block 3**—“Contemporary Operations” examines a variety of activities and mission sets which may be executed or supported by the military throughout the range of military operations (ROMO). The block begins with a review of those aspects of operational law most relevant to contemporary naval and joint operations. Other topics include ROMO and the phenomenon of fragile states; naval support of foreign policy; military-civilian interaction; insurgencies and counterinsurgency operations; and irregular warfare/unconventional statecraft. Students will also discuss ethical situations confronting operational leaders. The block finishes with a review of peace operations, a perpetual challenge for the international community since the end of the Cold War. Throughout the block, case studies will be used to enable students to fully comprehend military and interagency operations in support of strategies designed to address these very complex types of operations. For NWC-at-NPS students, a third assessment concludes the block. Students in both programs will be expected to apply knowledge gained in this block while analyzing and planning for a variety of challenges in Blocks 4 and 5.

**Block 4**—“Joint / Navy Planning Exercise” uses the knowledge gained in previous blocks and provides students with the tools, concepts, principles, doctrine and practical planning skills required to accomplish modern military tasks. The block begins with a session on the Adaptive Planning and Execution System (APEX). Students will then have the opportunity to apply the Navy/Joint Planning Process (NPP/JPP) using the fictional Borneo Case Study, a multi-session collaborative planning exercise (Commander’s Estimate of the Situation). The sessions are intended as both an introduction to joint/navy planning as well as an opportunity for students to appreciate the integral role of Operational Art, naval/joint/combined operations, Service capabilities, joint/service doctrine, and contemporary operational issues in a realistic, complex practical planning exercise. The last summative assessment concludes this planning block.

**Block 5**—“JTF / JFMCC OPORD Development.” The final block is a continuation of the collaborative planning exercise from Block 4 in which students role-play as members of a Joint Planning Group / Operations Planning Group (JPG/OPG) tasked with writing an Operation Order (OPORD) based on the planning results of the previous block. The exercise is designed to introduce the dynamics of superior-subordinate operational staffs in a hypothetical, complex scenario that requires integrated operational level planning decisions on the use of military force in a maritime/joint/coalition/multinational environment. For this block, students are assessed solely on their exercise participation and contribution.
In summary, the Joint Maritime Operations course design allows each student to understand and then employ the Navy/Joint Planning Process as a means to reinforce knowledge of the planning process but also to reinforce complex decision making and leadership skills at the operational level of war. The course flow is designed to provide a sound foundation of theory, an understanding of current joint/service doctrine and capabilities, the planning processes, and the challenges of the current operating environment. The Planning Exercise and OPORD Development sessions are integrating events designed to provide students the supervised opportunity to apply their knowledge of OPART, doctrine and collaborative planning processes in a realistic, complex scenario. Students will benefit from faculty guidance coupled with the shared professional expertise of the seminar.


The syllabus establishes the basis for required course work and serves as an intellectual roadmap for the academic year. In each session, the Focus specifies the general context of the topic. Next, the Objectives section cites the specific session goals and provides an intellectual line of departure for the readings. The Background section provides assistance in framing the individual session and how it fits into the course flow. The Questions section is designed to generate critical thinking and is the foundation for seminar discussion. The questions also serve to focus the student as he or she reads through the assigned readings. Lastly, they provide a review at the completion of the readings to insure the student comprehends the essence of the lesson. Prior understanding of the questions is key to effective reading. The Required Media and Required Readings sections provide a foundation for student preparation and enhance understanding of the topic while the Supplementary Readings section is provided for those who want to enhance their preparation or go into more depth about a session topic.

The Joint Maritime Operations course fulfills many of the officer Joint Professional Military Education (JPME) Phase I requirements established by the Chairman, Joint Chiefs of Staff in the OPMEP guidance. The objectives identified in Appendix A, and in each class session, reflect these requirements. The remaining JPME Phase I requirements are fulfilled in the Theater Security Decision Making and Strategy & War courses.

7. “Active Learning” Methods of Instruction.

The Socratic Method. The seminar is the fundamental learning forum for this course, with student expertise being a significant part of the learning process. For a seminar to succeed, there must be open and candid sharing of ideas and experiences, engaged through civil discourse. Students will find that even the most unconventional idea may have some merit. Successful seminars—that is, seminars whose members leave with the greatest knowledge and personal satisfaction—are those made up of students who come to each session equipped with questions, observations, and insights based on thorough preparation. These insights build upon the assigned questions and are generated through a combination of reading, experience and thinking through the material. Most students leave the seminar with new insights or even more thought-provoking questions. Student preparation, free and open discussion, and the open-minded consideration of other students’ ideas, all contribute to a valuable seminar experience. The “one-third” rule is the keystone of the seminar approach. The first third is a well-constructed, relevant curriculum. The second third is a high quality CDE JMO faculty to present the material and guide the discussion, and the most important third is the participation
and contribution of the individual students. Only by thoroughly preparing for seminar sessions can students become active catalysts who generate positive and proactive seminar interaction and refine critical and creative thinking skills.

The Case Study Method. This method of instruction is used to provide intellectual stimulation for students and is designed to develop student abilities to analyze and solve problems using the knowledge, concepts, and skills honed during the academic year. A concomitant benefit of the case study is to deepen the experiential pool in students through analysis of past great captains of war or to expand the knowledge of a specific geographic area. Some of the cases and problems stress individual effort and planning, while others require a team or staff approach. Cases may consist of historical events, analyzed for tactical, operational and theater strategic lessons, or postulated crisis situations that demonstrate the application of concepts such as presence, deterrence, international law, rules of engagement, and self-defense. Case studies sometimes will be narrowly focused to illustrate a specific force and its capabilities and limitations or to highlight explicit concepts involving an aspect of tactical, operational, or theater-strategic warfare. Seminars are often split into smaller groups or teams to prepare solutions and responses. The case study method of instruction allows students to achieve a higher level of learning while providing students with many more data points relevant to problem solving in the volatile, uncertain, complex, and ambiguous environment in which we operate. Students will be tasked with analyzing the case study material, synthesizing information, and evaluating recommended courses of action that they create.

The Lecture-Seminar Method. To share equally the vast experience of some of our faculty members and guest speakers, lectures are often provided. These lectures are provided in person or are available on Blackboard/Sakai as indicated in the Required Media section of a particular seminar session. Students are encouraged to analyze critically the information presented by speakers. JMO lectures are intended to generate questions that the students may discuss in seminar and are not intended as merely the transmission of knowledge.

The Practical Exercise Method. The opportunity for students to apply information presented in the curriculum is critical to achieving course outcomes. Practical exercises allow students time to analyze information critically in order to develop viable solutions to ill-structured problems. Students may be assigned to practical exercises as individuals, small groups, or as a seminar.

8. Media and Readings.

JMO sessions are supported by various media and readings. The purpose of the media and readings is to assist in understanding the many aspects of the topics being presented, and often, to provide divergent points of view on the same topic. For the most part, the readings and media are intended to convey to the student basic information, the mastery of which will facilitate in-class discussions. Many of the readings provide point-counterpoint and are intended to foster discussion. Students are reminded, however, that as critical thinkers, all readings should be questioned concerning their relationship to the topic, to other readings, and to the personal experience of the student. While the vast majority of assigned readings and media have been loaded onto Blackboard (FSP) or Sakai (NWC-at-NPS), we may issue some books and readings, due to their value as reference material (students must return books to Newport or Monterey/NPS, as appropriate, at the end of the course).
Each session lists categories of media and readings. The categories are as follows:

- **Required Media** include videotaped lectures, service briefs, interactive exercises and exercise background and should be treated the same as any **Required Reading**. They must be viewed prior to the session. All serve to enhance the learning experience by providing critical background for certain blocks or for specific sessions. They are provided on Blackboard and on Sakai.

- **Required Readings** are those that must be read prior to the session. Often professors will offer additional guidance on the priority of the readings based on the special needs of the individual seminar or recommend students scan a particular reading for broad content or as a refresher. These readings are provided on Blackboard and on Sakai. **Supplementary Readings** are those relevant to a session topic which may be useful to a student seeking more information in order to gain insight beyond that provided by the **Required Readings**; this includes additional background material on case studies and exercises. The **Supplementary Readings** listed in the syllabus are not issued but may be found in most libraries or on-line.

Included in these readings’ categories are case studies, problem sets, books, manuals, and excerpts from manuals. There will be no classified material issued to students. The college provides materials to meet the course objectives. Students may refer to other materials available from local commands, libraries, or websites during the course. Extra materials can supplement, but will not substitute for, the provided materials. Policies and procedures for issue and return of course materials will be discussed at the first session.

The vast majority of required readings and various other media will be provided on Blackboard (FSP) or Sakai (NPS). Blackboard and Sakai are set up with the syllabus loaded and all of the readings and media presented as hyperlinks. Simply locate the session in the syllabus, go to the **Required Media** or **Required Readings**, and select the hyperlink for the reading you want to review.

The amount of preparatory reading required for each session depends on a variety of factors, including topic complexity, session objectives, and course schedule. This syllabus is a powerful tool in that it allows students to develop a personal plan of study that leads to better time management and a deeper understanding of the syllabus material. **It is recommended that you review the session requirements at least a week ahead of time in order to regressively and accurately plan preparation time.**

9. **Requirements.**

9.1. **Student Responsibilities.** FSP and NWC-at-NPS students are expected to prepare for each seminar and to participate in classroom discussions and exercises. A questioning attitude and a willingness to enter a rigorous but disciplined discussion are central to the success of the course. An officer’s ability to engage positively and productively in deliberations and formulate advice is integral to sound operational decision making. Professors evaluate student contributions with regard to one’s skill in persuading peers and seniors, because that persuasive leadership is critical to an officer’s continued success. Professors evaluate written products because they represent one’s ability to synthesize and organize information in a coherent manner, applying analytical frameworks and critical and creative thinking. Seminar work and written products also
demonstrate the level of mastery achieved by individual students. Students are expected to improve both their written and verbal skills throughout their NWC experience.

9.2. Workload. The structure of the study requirements generally provides for an even workload throughout the academic year/quarter. Some peaks will naturally occur. Students should discuss any perceived overloads with the faculty. Advanced planning and careful allocation of time will help mitigate these peak workloads. Student surveys show that the course requirements involve an average workload of eight to ten hours per week. Assessments (explained below) may require additional time.

9.3. Assessments. Faculty will assess student progress using three means: formative assessments, summative assessments, and student contribution.

- Each block of the course will include **formative assessments** designed to evaluate mastery of competencies addressed by individual sessions in the block. Various methodologies may be used in conducting these formative assessments (e.g., fill-in-the-blank, point paper, short answer). While formative assessments are not assigned a numeric grade, a student must meet a standard (corresponding to 80% or better performance) that demonstrates acceptable mastery of the competency (or competencies) being tested. Students that fail to demonstrate the required level of proficiency must retake the formative assessment. Those not passing it on the second attempt will be considered for removal from the course. Successful completion of all formative assessments in a block is a prerequisite for completing the overall block requirements and for taking the next summative assessment.

- Three **summative assessments** will be administered to FSP students, and four to NWC-at-NPS students, during the course. *Summative assessments may evaluate student proficiency in any and all competencies addressed to that point in the course.* Students will receive detailed feedback addressing both the strengths and shortcomings of their written work along with a numeric and corresponding letter grade. Receiving a grade of less than 80% means a student has not demonstrated the required level of mastery on one or more of the competencies being evaluated. These students will receive remedial instruction and be reassessed once the remedial work is completed. The time between the receipt of the initial grade and the resubmission will not exceed one week. The student’s second attempt will be evaluated to the same standard, using the designated rubric, as the initial submission. If it has been determined the student has demonstrated the required level of mastery of the competencies being evaluated, he/she will be assigned a grade of 80% for the event and permitted to continue the course of study. Students who fail to demonstrate the required level of mastery of the competencies being evaluated on their second submission will be considered for removal from the course.

- The last graded component, **student contribution**, will be evaluated (with a numeric and corresponding letter grade) at the end of each of the first three blocks (FSP) or quarter (NPS). FSP contribution grades for Blocks 4 & 5 will be combined. Students will be evaluated on how well they apply applicable JMO course concepts, demonstrate critical & creative thinking, and communicate their results in seminar discussions, in-class exercises, and other course activities. Assessments therefore provide the opportunity for the student to demonstrate progress toward desired educational outcomes. Assessments also serve as a means for feedback and interaction between faculty and members of the seminar, providing the student some measure of how he or
she is doing at that point in the course.

### 9.4. Evaluation of Assessments

The following is a composite listing of Fleet Seminar Program (FSP) JMO course requirements, type of effort, basis of evaluation, time due and their relative weight:

#### Fleet Seminar Program JMO Course Requirements

<table>
<thead>
<tr>
<th>REQUIREMENT</th>
<th>TYPE EFFORT</th>
<th>BASIS OF EVALUATION</th>
<th>DUE</th>
<th>WEIGHT</th>
</tr>
</thead>
<tbody>
<tr>
<td>Formative Assessments</td>
<td>Individual</td>
<td>Various formats may be used. Students will receive specific instructions from their professor.</td>
<td>Per Appendix C (Posted on Blackboard)</td>
<td>Evaluated for competency but not factored into course grade.</td>
</tr>
<tr>
<td>Summative Assessment 1</td>
<td>Individual</td>
<td>Written response demonstrating mastery of applicable competencies.</td>
<td>Late October</td>
<td>25%</td>
</tr>
<tr>
<td>Summative Assessment 2</td>
<td>Individual</td>
<td>Written response demonstrating mastery of applicable competencies.</td>
<td>Mid-February</td>
<td>20%</td>
</tr>
<tr>
<td>Summative Assessment 3</td>
<td>Individual</td>
<td>Written response demonstrating mastery of applicable competencies.</td>
<td>Late April</td>
<td>25%</td>
</tr>
<tr>
<td>Student Contribution ²</td>
<td>Individual, but may be in a group setting</td>
<td>Quality of individual contribution to seminar discussion and course active learning events.</td>
<td>Weekly</td>
<td>30%</td>
</tr>
</tbody>
</table>

The requirements for the NWC-at-NPS JMO course are slightly different due to the limited time available and because it is taught in two separate quarters, JMO-1 (NW-3275) and JMO-2 (NW-3276). NWC-at-NPS course requirements are reflected below:

#### NWC-at-NPS JMO Course Requirements

<table>
<thead>
<tr>
<th>REQUIREMENT</th>
<th>TYPE EFFORT</th>
<th>BASIS OF EVALUATION</th>
<th>DUE</th>
<th>WEIGHT</th>
</tr>
</thead>
<tbody>
<tr>
<td>Formative Assessments</td>
<td>Individual</td>
<td>Various formats may be used. Students will receive specific instructions from their professor.</td>
<td>Per schedule supplement (section 16)</td>
<td>Evaluated for competency but not factored into course grade.</td>
</tr>
</tbody>
</table>

² FSP Student contribution grade assigned by Block (5% each of Blocks 1-3; 15% for Blocks 4 & 5 combined).
### JMO-1 (NW-3275)

<table>
<thead>
<tr>
<th>Component</th>
<th>Type</th>
<th>Description</th>
<th>Timeline</th>
<th>Weight</th>
</tr>
</thead>
<tbody>
<tr>
<td>Student Contribution²</td>
<td>Individual</td>
<td>Quality of individual contribution to seminar discussion and course active learning events.</td>
<td>Weekly</td>
<td>15%</td>
</tr>
<tr>
<td>Summative Assessment 1</td>
<td>Individual, either take-home or completed in class.</td>
<td>Written response demonstrating mastery of applicable competencies.</td>
<td>Mid-quarter</td>
<td>20%</td>
</tr>
<tr>
<td>Summative Assessment 2</td>
<td>Individual, either take-home or completed in class.</td>
<td>Written response demonstrating mastery of applicable competencies.</td>
<td>At or near end of quarter</td>
<td>15%</td>
</tr>
</tbody>
</table>

### JMO-2 (NW-3276)

<table>
<thead>
<tr>
<th>Component</th>
<th>Type</th>
<th>Description</th>
<th>Timeline</th>
<th>Weight</th>
</tr>
</thead>
<tbody>
<tr>
<td>Student Contribution²</td>
<td>Individual, but may be in a group setting.</td>
<td>Quality of individual contribution to seminar discussion and course active learning events.</td>
<td>Weekly</td>
<td>15%</td>
</tr>
<tr>
<td>Summative Assessment 3</td>
<td>Individual, either take-home or completed in class.</td>
<td>Written response demonstrating mastery of applicable competencies.</td>
<td>Late January</td>
<td>15%</td>
</tr>
<tr>
<td>Summative Assessment 4</td>
<td>Individual, either take-home or completed in class.</td>
<td>Written response demonstrating mastery of applicable competencies.</td>
<td>At or near end of quarter</td>
<td>20%</td>
</tr>
</tbody>
</table>

#### 9.5. Fleet Seminar Assignments.**

Ideally, seminar groups provide a balanced distribution between Services, agencies and functional expertise. Student seminar, classroom, and faculty assignments are provided via separate correspondence before the start of the academic year.


Fleet Seminar Program seminars generally meet for three hours each week either on Monday, Tuesday, Wednesday or Thursday evenings depending on location. A course planning weekly schedule containing the Monday date of the FSP JMO seminar is in Section 15. Meeting places and times may change occasionally to adapt to visiting Naval War College faculty from Newport, visiting professors from colleges, universities or government organizations around the country, or local events or weather conditions. NWC-at-NPS seminars meet for two hours twice a week during the regular academic quarter. The weekly schedule for NWC-at-NPS seminars is in Section 16. Students in both programs are expected to attend all seminars.

---

² Student contribution grade assigned by quarter (15% each quarter).
The college understands that duty/work requirements occasionally may necessitate the late submission of work and missed classes. Because of common schedules in the Fleet Seminars, students may be able to attend a JMO evening seminar at a temporary duty location hosting a Fleet Seminar. Students are expected to coordinate delays or make arrangements to attend another seminar in advance. *Students who miss a class are required to write a point paper relating to at least one of the sessions missed during that seminar. The topic will come from that session’s questions in the syllabus.* Students who receive permanent change of duty station orders during the academic year should contact their professor and notify the Fleet Seminar Program Manager to transfer between seminars or to arrange for completing the course by another means.


A course grade will be assigned based on grades for the **summative assessments** and for **student contribution**. Fleet Seminar Program students must complete, with a B- or better grade, each of the three NWC core courses for the Master’s Degree program. A minimum grade of B- is required for successful completion of the JMO course and receipt of JPME Phase I certification. All work in the prescribed curricula for the intermediate program will be graded using the standards below.

Final course grades will be expressed as the unrounded numerical average of the weighted course segments in paragraph 9.4 above, to two decimal places, along with the corresponding letter grades with pluses or minuses.

Grading rubrics help in the determination of grades assigned during the Joint Maritime Operations course academic year. General rubrics are provided, in this syllabus, so that the student will know the general performance criteria for summative assessments and student contribution. Student final course grades will be posted after students complete the end-of-course questionnaire.

10.1. Summative Assessments. In addition to the substantive criteria specified below, the written response must be editorially correct (spelling, punctuation, grammar, syntax, format, etc.). See course competency #5. Written work should conform to the *Guidance for Written Solutions for College of Distance Education (CDE) Students.*

<table>
<thead>
<tr>
<th>Grade</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>A+</td>
<td>(97-100)</td>
</tr>
<tr>
<td>A</td>
<td>(94&lt;97)</td>
</tr>
<tr>
<td>A-</td>
<td>(90&lt;94)</td>
</tr>
</tbody>
</table>

---

4 NWC-at-NPS students are not eligible for the Master’s Degree program.
B+  (87<-90)  Well-crafted answer that discusses all relevant important concepts with supporting rationale for analysis. Demonstrates mastery of all competencies evaluated.

B  (84<-87)  **Average graduate performance.** A successful consideration of the topic overall, but either lacking depth or containing statements for which the supporting rationale is not sufficiently argued. However, demonstrates acceptable mastery of all competencies evaluated.

B-  (80<-84)  Addresses the question and demonstrates a fair understanding of the topic, but does not address all key concepts and is weak in rationale and clarity. However, demonstrates acceptable mastery of all competencies evaluated.

C+  (77<-80)  Demonstrates some grasp of the topic, but provides insufficient rationale for response and misses major elements or concepts. Does not merit graduate credit. Fails to demonstrate the required mastery of one or more of the competencies evaluated.

C  (74<-77)  Demonstrates poor understanding of the topic. Provides marginal support for response. Missing major elements or concepts. Fails to demonstrate the required mastery of one or more of the competencies evaluated.

C-  (70<-74)  Addresses the question, but does not provide sufficient discussion to demonstrate adequate understanding of the topic. Fails to demonstrate the required mastery of one or more of the competencies evaluated.

D+  (67<-70)  Considerably below graduate-level performance and lacking any evidence of effort or understanding of the subject matter. In some measure, fails to address the entire question.

D  (64<-67)  Unsatisfactory work. Fails to address the question(s), or displays evidence of plagiarism, cheating or misrepresentation.

D-  (60<-64)

F  (0<-60)

10.2. Student Contribution. The student contribution grades are determined by professor evaluation of the quality of a student's contributions to seminar discussions, projects, exercises and other course activities. The evaluation will consider a student’s critical & creative thinking as demonstrated in oral or written communication when contributing to seminar activities. All students are expected to contribute to each seminar session, and to listen and respond respectfully when seminar-mates or professors offer their ideas. This overall expectation underlies all criteria described below. Interruptive, discourteous, disrespectful, or unprofessional conduct or attitude detracts from the overall learning experience for the seminar and will negatively affect the contribution grade.

When a student’s contribution grade falls below a B- (or is in danger of it) the Professor will intervene and ensure that the student understands that a contribution grade of B- or better is required for successful completion of each block. The student will be provided the opportunity to increase his contribution grade through remediation provided by the Professor. Remediation must be determined by the Professor to be of high quality to warrant an increase in the student’s contribution grade. A final contribution grade below a B- in any block will result in
a recommendation for disenrollment from the course.

The contribution grade for Block 4 (Joint / Navy Planning Exercise) & Block 5 (JTF / JFMCC OPORD Development) is determined by the professor’s evaluation of the student’s contributions to exercise preparation, planning, and execution play. It is recognized that many students will participate in areas for which they have no prior expertise. Additionally, some positions have greater visibility. Consequently, each student will be evaluated on his/her preparation and contribution in each given role, taking into consideration the above factors.

A+  (97-100)  Peerless demonstration of wholly thorough preparation for individual seminar sessions. Consistently contributes original and highly insightful thought. Exceptional team player and leader.

A   (94-<97)  Superior demonstration of complete preparation for individual sessions. Frequently offers original and well-thought-out insights. Routinely takes the lead to accomplish team projects.

A-  (90-<94)  Excellent demonstration of preparation for individual sessions. Contributes original, well-developed insights in the majority of seminar sessions. Often takes the lead to accomplish team projects.

B+  (87-<90)  Above-average graduate level preparation for seminar sessions. Occasionally contributes original and well-developed insights. Obvious team player who sometimes takes the lead for team projects.

B   (84-<87)  Average graduate level preparation for individual sessions. Occasionally contributes original and insightful thought. Acceptable team player; takes effective lead on team projects when assigned.

B-  (80-<84)  Minimally acceptable graduate level preparation for individual sessions. Infrequently contributes well-developed insights; may sometimes speak out without having thought through an issue. Requires prodding to take the lead in team projects.

C+  (77-<80)  Generally prepared, but not to minimum acceptable graduate level. Requires encouragement to contribute to discussions; contributions do not include original thinking or insights. Routinely allows others to lead the team projects.

C   (74-<77)  Preparation for individual sessions is only displayed when student is called upon to contribute. Elicited contributions reflect at best a basic understanding of session material. Consistently requires encouragement or prodding to take on a fair share of team project workload. Only occasionally engages in seminar dialogue with peers or professors.

C-  (70-<74)  Barely acceptable preparation. Contributions are extremely limited, rarely voluntary, and reflect minimal grasp of session material. Displays little interest in contributing to team projects.

D+  (67-<70)  Rarely prepared or engaged. Contributions are uncommon and reflect below-minimum acceptable understanding of lesson material. Engages in frequent fact-free conversation.
13

Unacceptable preparation. Displays no interest in contributing to team projects; cannot be relied on to accomplish assigned project work. At times may be seen by peers as disruptive.

10.3. Diploma Requirements and Transcripts. Each student is responsible for ensuring all eligibility and academic requirements of the Fleet Seminar/NWC-at-NPS Programs are met and policies adhered to. The Naval War College website http://www.usnwc.edu/ contains policies and procedures for satisfying diploma and graduation requirements and providing official transcripts.

10.4. Academic Honor Code. The Naval War College diligently enforces a strict academic code requiring authors to credit properly the source of materials directly cited in any written work submitted in fulfillment of diploma or degree requirements. Simply put: plagiarism is prohibited. Likewise, this academic code prohibits cheating and the misrepresentation of a paper as an author’s original thought. Plagiarism, cheating, and misrepresentation are inconsistent with the professional standards required of all military personnel and government employees. Furthermore, in the case of U.S. military officers, such conduct clearly violates the “Exemplary Conduct Standards” delineated in Title 10, U.S. Code, Sections 3583 (U.S. Army), 5947 (U.S. Naval Service), and 8583 (U.S. Air Force).

Plagiarism is the use of someone else’s work without giving proper credit to the author or creator of the work. It is passing off as one’s own another’s words, ideas, analysis, or other products. Whether intentional or unintentional, plagiarism is a serious violation of academic integrity and will be treated as such by the command. Plagiarism includes but is not limited to the following actions:

- The verbatim use of others’ words without citation;
- The paraphrasing of others’ words or ideas without citation;
- Any use of others’ work (other than facts that are widely accepted as common knowledge) found in books, journals, newspapers, websites, interviews, government documents, course materials, lecture notes, films, etc., without giving credit.

Authors are expected to give full credit in written submissions when utilizing another’s words or ideas. Such utilization, with proper attribution, is not prohibited by this code. However, a substantially borrowed but attributed written submission may lack the originality, creativity or critical thought expected of graduate-level work and may merit a low or failing grade, but is not plagiarism.

Cheating is defined as the giving, receiving, or using of unauthorized aid in support of one’s own efforts, or the efforts of another student. Cheating includes the following:

- Gaining unauthorized access to formative or summative assessments.
- Assisting or receiving assistance from other students or other individuals in the preparation of formative or summative assessments, unless specifically permitted.
- Utilizing unauthorized materials (notes, texts, crib sheets, and the like, in paper or electronic form) during formative or summative assessments.

Misrepresentation is defined as reusing a single paper (written response for a formative or
summative assessment) for more than one purpose without permission or acknowledgement. Misrepresentation includes the following:

- Submitting a single paper or substantially the same paper for more than one course at the Naval War College without advance permission of the professor.
- Submitting a paper or substantially the same paper previously prepared for some other purpose outside the Naval War College without acknowledging that it is an earlier work.

**Action in case of suspected violation:**

If a student’s submitted written work appears to violate this code of conduct, the following procedures shall be followed:

- The Deputy Dean, CDE will be notified by the CDE JMO DH and will initiate an investigation. The student will be informed of the investigation and be allowed to submit information on his/her behalf. Results of the investigation will be given to the Dean, CDE.
- The Dean, CDE will forward the results of the investigation and a disposition recommendation to the Provost. The Provost will review the case and determine whether it should be referred to the Academic Integrity Review Committee (AIRC).
- The Provost may elect to have the case settled by the Dean, CDE; or refer it to the AIRC, in which case the President, NWC will be notified of the pending action.
- If the case is forwarded to the AIRC, the AIRC will review the case, inviting the student to participate by remote means such as phone-conference or tele-conference if feasible and desired; and/or accept any further written student information. The AIRC will make findings of fact and recommend appropriate action to the President, NWC. This action may include any or all of the following:
  - Lowering of the grades on the affected work (this will be a letter grade of “F” and a numerical grade of between 0 and 59) or on the entire course of instruction.
  - Inclusion of remarks in Fitness Reports.
  - Letter to appropriate branches of Service, agencies, offices, or governments.
  - Dismissal from NWC.
  - Referral for disciplinary action under the Uniform Code of Military Justice or for appropriate action under rules governing civilian personnel.

Violations discovered after graduation will be processed similarly and may result in referral of the matter to the current command or office of the individual concerned and, if appropriate, revocation of the NWC diploma, master’s degree, and JPME credit.

11. **Guidance for Assessment.**

All Naval War College courses encourage a free and open exchange of ideas. Students are exposed to a broad spectrum of opinions to encourage individual analysis rather than learning preconceived doctrine. Two things about this methodology are worth noting: First, the views expressed by the faculty are their own and not necessarily related to an official Navy position. Second, the course provides few clear-cut answers to the issues addressed. This
approach may be frustrating to some, but it more accurately represents the complex and uncertain nature of issues students will grapple with in their profession, and is considered a more effective method to develop the ability to analyze, draw conclusions, and make sound decisions. While there may be no single right answer to a question, there are still good and bad solutions.

11.1. Writing Standards.

Written work submitted for grade should be formal, comprehensive, and in an academically acceptable style. The quality of work required is graduate school level. See competency number 5. The Joint Military Operations Department’s Guidance for Written Solutions for the College of Distance Education (CDE) Students is provided on Blackboard/Sakai to assist you in regard to the format and content of written work. When applicable, written work should begin with a clear statement that identifies the student's position on the issue or question and the methodology that will be used to argue the position. Arguments should be coherent and persuasive and should lead to conclusions consistent with the line of reasoning developed. When directed to do so by your professor, derivative information will have sources identified, using an accepted format, for footnotes or endnotes and a bibliography citing all sources used. Students should refer to some recognized style manual or writing guide for guidance on correct usage and acceptable convention. Once again, manuals for this purpose include, but are not limited to, the Guidance for Written Solutions for College of Distance Education (CDE) Students.

11.2. Format.

Written work will be submitted electronically in MS Word, per the professor’s instructions.

a. **Formative and Summative Assessments.** Regardless of submission method, written assessments will conform to the following requirements at a minimum:

- Type all text in standard “TrueType” Times New Roman, size 12 font, double-spaced. Margins should be set at one inch on the left side and one inch at the top, bottom, and right side. Justification should also be to the left.
- Number all pages consecutively. The maximum number of pages indicated in the assessment instructions is a strict limit. Page limits encourage disciplined thinking and require the student to reduce their arguments to the essential points. Do not include graphics, notes, bibliography, or title pages in counting to remain within the page requirements.
- As previously mentioned, document reference material when told to do so using some recognized format for footnotes, endnotes, or parenthetical citations. A bibliography is also required.
- Reproduce the written topic exactly as it appears in the assessment question at the beginning of the written solution.

b. **Point Papers.** Point papers are short one- or two-page responses to a session question. Point papers have a multipurpose nature on staffs. They are written to knowledgeable readers and often provide talking points for meetings, recommendations
for discussion, or alternatives for decision-makers. *(Guidance for Written Solutions for College of Distance Education (CDE) Students* provides a point paper format that will help students capture on one or two pages the relevant issues, facts, analysis and recommendations.) Initially, students may find it difficult to write succinct but comprehensive point papers. Fight the tendency to tell everything you know or read about an issue.

### 11.3. Assessment Due Dates and Unsatisfactory Work.

Each formative and summative assessment will have a specific due date for submission. Unexcused tardy student work—that is, work turned in past the deadline without previous notification of the professor—will receive a grade of not greater than a B- (80). On a case-by-case basis, work submitted more than 14 days late without the prior knowledge of the professor may result in the student’s removal from the course. In any case, when written work is submitted more than 30 days overdue, a numeric grade of zero will be assigned and the Department Head and Program Manager in Newport shall be notified with dis-enrollment the likely outcome. Faculty members are available to assist students with course material, to review a student’s progress, and to provide counseling as required. Students with individual concerns are encouraged to discuss them as early as possible so that professors can render assistance in a timely manner.

### 11.4. Grade Appeals.

a. **Formative Assessments.** Formative Assessments are tools of various types used by the student and the professor to measure a student’s progress toward mastery of course competencies. They are not graded events per se and, as such, are not subject to appeal.

b. **Summative Assessments.** Following remediation, students receiving a grade of less than 80 (B-) on their second attempt to complete a Summative Assessment may appeal within 72 hours after receipt of the grade in order to continue in the course of study. Contested grades shall be appealed first to the faculty member who assigned the grade, and then, if unresolved, to the Deputy Dean, College of Distance Education (CDE), via the Joint Military Operations Department Head. An additional grader will be assigned who will grade the submission in the blind (i.e., without specific knowledge of the initially assigned grade). This review may sustain, lower, or raise the assigned grade. If this review results in a grade of 80 (B-) or above, the student will receive a grade of 80 (B-) for the assignment and proceed with the course of study. If the initially assigned grade is sustained or lowered, the student may further contest the newly assigned grade by submitting, in writing and within 48 hours of receipt of the grade, a request that his/her appeal be taken to the Dean, CDE. The determination of the Dean, CDE is final. During the appellate process for a Summative Assessment grade, the student must satisfactorily complete follow-on coursework and graded assignments, if any, in order to remain in the course pending resolution of their appeal.

c. **Any Assigned Grade (except for a final grade).** Students must meet submission deadlines for appeals of unsatisfactory Summative Assessments discussed above, but may appeal a graded event for which they receive a grade of 80 (B-) or above within fifteen (15) days
after receipt of the grade. Contested grades shall be appealed first to the faculty member who assigned the grade, and then, if unresolved, to the Deputy Dean, College of Distance Education (CDE) via the Joint Military Operations Department Head. An additional grader will be assigned who will grade the submission in the blind (i.e., without specific knowledge of the initially assigned grade). This review may sustain, lower, or raise the assigned grade. In the event that this grade is subsequently contested, the student must submit, in writing and within 48 hours of receipt of the grade, a request that his/her appeal be taken to the Dean, CDE. The determination of the Dean, CDE is final.

d. **Contributions Grades.** Students may only appeal contributions grades to the faculty member who assigned the grade. That faculty member will consider the student’s feedback, make a final determination, and present the situation and the final determination to the Department Head.

e. **Final Course Grades.** A final course grade is not subject to review except for computational accuracy.

12. **End of Course Questionnaire.**

Students’ constructive comments ensure the course improves in subsequent years. The principle objective of this course is to provide a useful professional educational experience. Please report achievement or non-achievement of this objective via the survey. Mutual respect and a common goal — student educational advancement — are the basis for the student and faculty relationship. *Release of a student’s final course grade and course completion letter is contingent upon completion of the course critique.*

13. **Attendance.**

13.1. **Fleet Seminar Program (FSP).**

Attendance is defined as a student's physical presence in any Fleet Seminar Program event (meeting, lecture or discussion, whether it is the home seminar or at another FSP location) for the course. Any student who does not attend a class in any location for a given week or session shall be considered as absent. There is no distinction between "excused" and "unexcused" absences. A student who is absent from four or more seminar meetings (whether lecture or discussion class) in any single course may not be eligible, by accreditation standards, for the M.A. degree. Upon the fourth absence, or when a fourth absence is anticipated, the specifics of the situation shall be reported by the seminar Professor to the Department Head and Program Manager in Newport, and a case-specific determination regarding eligibility for the NWC M.A. degree will be made by the Dean, College of Distance Education (CDE). Students who are subsequently absent from five or more events in any single course shall be reported to the course Department Head and Program Manager upon the fifth absence, and a case-specific determination regarding continuation in the course and eligibility for a Naval War College Diploma and JPME-I certification will be made by the Dean, CDE.

a. **Visiting Other Fleet Seminar Sites.** The Fleet Seminar Program (FSP) is structured such that any student who cannot be physically present in the normally-assigned seminar on any given week or weeks, but who is able to attend a seminar at another location for that week
or those weeks, is given full credit for attendance. Students are responsible for advising
their professor in advance of an anticipated absence, as well as for coordinating
participation with another seminar professor if possible. Such coordination will include
email advisories to both professors documenting their attendance. If a student is unable to
attend any seminar at any location for a given week or weeks, he or she must submit a Point
Paper responding to one of the questions within a session covered. This submission will
not erase the recorded absence for the seminar(s) or lecture(s) missed. This written work
shall be submitted at the beginning of the next seminar attended in the student’s normally-
assigned seminar. The quality of this written submission will be considered in the overall
student contribution grade.

b. Transfer to Other Fleet Seminar Site. Students who are required to move to another class
due to a permanent change of station, or TAD orders longer than three weeks, must contact
the Fleet Seminar Program (FSP) Manager for placement in a new class. In some
circumstances professors with students visiting for three weeks or less may ask the Program
Manager to enroll the student in an auditing status to provide access to Blackboard.

13.2. NWC-at-NPS Program.

Students are required to fulfill all academic requirements and attend all scheduled class
sessions. Attendance is defined as a student’s physical presence in seminar sessions or lectures
for the course in which the student is enrolled in any given quarter. An absence shall be
assessed to any student who does not attend a seminar session or lecture for any scheduled
class period. There is no distinction made between “excused” and “unexcused” absences in
this policy.

Routine appointments (e.g., medical/dental) should be scheduled so as to avoid missing classes
as stipulated in the published NPS attendance policy. For longer absences involving the
granting of leave by NPS, notification is also required in advance, or when feasible in the case
of emergency leave. For extended absences greater than three class sessions, including
approved thesis research away from the NPS campus, students will be required to withdraw
from the course, and reschedule it for another quarter. If a student is unable to attend a seminar
session or lecture for any reason, the student **must advise the Professor in advance** via email
that he or she will miss class for that period.

When a student in the NWC-at-NPS program is absent from two sessions in any one quarter,
the seminar Professor shall immediately report it to the Associate Dean, NWC-at-NPS. Upon
the third absence, or if possible, when a third absence is anticipated, the situation shall be
reported to the CDE JMO Department Head in Newport. A case-specific determination
regarding continuation in the course and eligibility for a Naval War College Diploma and
JPME-I credit will then be made by the Dean, CDE in Newport.

The NWC-at-NPS program is structured such that any student who cannot be physically
present in the normally-assigned seminar on any given day or days, but who is able to attend
another NWC-at-NPS seminar for that day or those days, is given full credit for attendance.
Students are responsible for advising their professor in advance of an anticipated absence, as
well as for coordinating participation with another NWC-at-NPS seminar professor if possible.
Such coordination will include email advisories to both professors documenting their
attendance. If a student is unable to attend any NWC-at-NPS seminar for a given day or days,
the student must submit a point paper responding to one of the discussion questions within the syllabus for the session(s) missed. This submission will not erase the recorded absence for the session(s) missed. This written work shall be submitted at the beginning of the next seminar session. The quality of this written submission will be considered in the overall student contribution grade.


If you require additional course information, or if interpersonal problems develop that you cannot resolve locally, contact one of the following individuals:

JMO Professors

NEWPORT
Prof. Michael Barker, LtCol, USMC (Ret)
Head, Joint Military Operations Department
841-6598 [barkerm@usnwc.edu]
Prof. Roger Fountain, Lt Col, USAF (Ret)
841-3980 [roger.fountain@usnwc.edu]
Prof. Derrill Goldizen, Ph.D., Lt Col, USAF (Ret)
841-6521 [derrill.goldizen@usnwc.edu]
Prof. Edmund Hernandez, CAPT, USN (Ret)
[edmund.hernandez@usnwc.edu]
Prof. Angus K. Ross, CDR, RN (Ret)
841-6528 [angus.ross@usnwc.edu]
Prof. Georgette Wilson, Ed.D., COL, USA (Ret)
841-6525 [georgette.wilson@usnwc.edu]

MONTEREY
Prof. James Adams, COL, USA (Ret)
656-1924 [james.adams@nps.edu]
Prof. Jonathan Czarnecki, Ph.D., COL, ARNG (Ret)
656-2653 [jczarne@nps.edu]
Prof. Richard Grahlman, CDR, USN (Ret)
656-3540 [rgrahlman@nps.edu]
Prof. Scott McPherson, Ph.D., CAPT, USN (Ret)
656-3719 [jmcphe@nps.edu]
Prof. Thomas Moore, Ph.D., COL, USAR (Ret)
656-2642 [tmoore@nps.edu]
Prof. Dayne Nix, Ph.D., CDR, CHC, USN (Ret)
656-3141 [denix@nps.edu]
Prof. David Overton, LtCol, USMC (Ret)
NWC-at-NPS JMO Course Director
656-3020 [dfoverto@nps.edu]
Prof. Greg Reilly, COL, USA (Ret)
Fleet Seminar Program Manager: Prof. Ron Oard, CDR, USN (Ret)
841-3664 [oardr@usnwc.edu]

Graduate Degree Program Manager: Prof. David Kelly
841-6416 [david.kelly@usnwc.edu]

Commercial Telephone Area Code
Newport (401)/Monterey (831)

Defense Switched Network (DSN) Prefix
Newport 841-XXXX/Monterey 756-XXXX

Facsimile
Newport 841-2457/Monterey 656-7637

Address official correspondence to:
President
Code 1G
Naval War College
686 Cushing Road
Newport, RI 02841-1207
15. Academic Year (AY) 20-21 Schedule Supplement for JMO Fleet Seminars. (Week beginning date included)

<table>
<thead>
<tr>
<th>Block</th>
<th>Topic</th>
<th>Date</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>COURSE FOUNDATIONS AND OPERATIONAL ART THEORY &amp; PRACTICE</td>
<td></td>
</tr>
<tr>
<td>1.1</td>
<td>Course Overview</td>
<td>Sep 7, 2020</td>
</tr>
<tr>
<td>1.2</td>
<td>Critical and Creative Thinking</td>
<td></td>
</tr>
<tr>
<td>1.3</td>
<td>Introduction to Operational Art (OPART)</td>
<td>Sep 14</td>
</tr>
<tr>
<td>1.4</td>
<td>Military Objectives and Levels of War</td>
<td></td>
</tr>
<tr>
<td>1.5</td>
<td>Operational Factors</td>
<td>Sep 21</td>
</tr>
<tr>
<td>1.6</td>
<td>Theater Structure and Geometry</td>
<td></td>
</tr>
<tr>
<td>1.7</td>
<td>Principles of Joint Operations</td>
<td>Sep 28</td>
</tr>
<tr>
<td>1.8</td>
<td>Operational Functions</td>
<td></td>
</tr>
<tr>
<td>1.9</td>
<td>Major Operations / Campaigns &amp; their Elements</td>
<td>Oct 5</td>
</tr>
<tr>
<td>1.10</td>
<td>Operational Design: Analysis of the Battle of Leyte Gulf</td>
<td>Oct 12</td>
</tr>
<tr>
<td>1.11</td>
<td>Operational Leadership</td>
<td></td>
</tr>
<tr>
<td>1.12</td>
<td>Operational Design: Analysis of the Falklands/Malvinas Conflict</td>
<td>Oct 19</td>
</tr>
<tr>
<td>1.13</td>
<td>Summative Assessment 1: Operational Art (Issued 19 Oct)</td>
<td>Due 26 Oct</td>
</tr>
<tr>
<td></td>
<td>Operational Art Retrospective</td>
<td>Oct 26</td>
</tr>
<tr>
<td>2</td>
<td>NAVAL, JOINT &amp; MULTINATIONAL WARFARE</td>
<td></td>
</tr>
<tr>
<td>2.1</td>
<td>Naval Warfare Theory</td>
<td>Nov 2</td>
</tr>
<tr>
<td>2.2</td>
<td>Objectives of Naval Warfare</td>
<td></td>
</tr>
<tr>
<td>2.3</td>
<td>Naval Tactics</td>
<td>Nov 9</td>
</tr>
<tr>
<td>2.4</td>
<td>Organizing Naval Forces in the Open Ocean</td>
<td></td>
</tr>
<tr>
<td>2.5</td>
<td>Naval Combined Arms &amp; Joint Warfare – Part I</td>
<td>Nov 16</td>
</tr>
</tbody>
</table>

Thanksgiving Break (23-27 November 2020)

| 2.6   | Naval Combined Arms & Joint Warfare – Part II | Nov 30 |
| 2.7   | Operational Design: Analysis of the Naval Battles of Guadalcanal | Dec 7 |
| 2.8   | Joint and Multinational Command & Control |     |
| 2.9   | U.S. Navy Command & Control | Dec 14 |
| 2.10  | Joint Warfare – U.S. Coast Guard Capabilities & Doctrine |     |

Christmas/New Year Holiday Break
(21 December 2020—3 January 2021)
2.11 Joint Warfare – U.S. Marine Corps Capabilities & Doctrine  Jan 4, 2021
2.12 Joint Warfare – U.S. Army Capabilities & Doctrine
2.13 Joint Warfare – U.S. Air Force Capabilities & Doctrine  Jan 11
2.14 Joint Warfare – U.S. Special Operations Forces Capabilities & Doctrine
2.15 Operational Intelligence for the Maritime Commander  Jan 18
2.16 Information Operations & Cyber Warfare
2.17 Naval, Joint & Multinational Logistics  Jan 25
2.18 The Struggle for Sea Control: PRC-Taiwan Case Study  Feb 1
2.19 Summative Assessment 2: Naval, Joint & Multinational Warfare (Issued 1 Feb)  Due 15 Feb

3 CONTEMPORARY OPERATIONS

3.1 Operational Law  Feb 8
3.2 Range of Military Operations (ROMO) Across the Conflict Continuum  Feb 15
3.3 Naval Support of Foreign Policy
3.4 Civil-Military Interaction  Feb 22
3.5 Insurgency and Counterinsurgency with Naval Forces  Mar 1
3.6 Unconventional Statecraft  Mar 8
3.7 Military Ethics and Operational Leadership
3.8 Peace Operations  Mar 15

4 JOINT / NAVY PLANNING EXERCISE

4.1 Adaptive Planning and Execution System (APEX)  Mar 22
4.2 Navy/Joint Planning Processes (NPP/JPP) (Introduction)
4.2 Navy/Joint Planning Processes (NPP/JPP) (4 sessions)  Mar 29 – Apr 19
4.3 Summative Assessment 3: Joint/Navy Planning (Issued 19 Apr)  Due 26 Apr

5 JOINT TASK FORCE (JTF) / JOINT FORCE MARITIME COMPONENT COMMAND (JFMCC) OPERATION ORDER (OPORD) DEVELOPMENT

5.1 Orders and Orders Development  Apr 26
5.2 JTF / JFMCC OPORD Development (start)
5.2 JTF / JFMCC OPORD Development (2 full evenings)  May 3 -May 10
5.2 JTF / JFMCC OPORD Development (finish)
5.3 JMO Course Hot Wash  May 17

McGinnis Award Grades Due  May 24, 2021
Overall Grad Grades Due  May 25, 2021
Graduation  June 11, 2021
### NW3275—JMO Part 1

**BLOCK 1—COURSE FOUNDATIONS AND OPERATIONAL ART THEORY & PRACTICE**

<table>
<thead>
<tr>
<th>Week/Session</th>
<th>Session#</th>
<th>Session</th>
</tr>
</thead>
<tbody>
<tr>
<td>1/1</td>
<td>1.1</td>
<td>Intro Seminar/Course Overview (S)</td>
</tr>
<tr>
<td>1/2</td>
<td>1.2</td>
<td>Critical and Creative Thinking (S)</td>
</tr>
<tr>
<td></td>
<td>1.3</td>
<td>Introduction to Operational Art (S)</td>
</tr>
<tr>
<td>1/4</td>
<td>1.4</td>
<td>Military Objectives and Levels of War (S)</td>
</tr>
<tr>
<td></td>
<td></td>
<td><strong>Formative Assessment 1</strong></td>
</tr>
<tr>
<td>2/3</td>
<td></td>
<td>Formative Assessment 1</td>
</tr>
<tr>
<td>2/4</td>
<td>1.5</td>
<td>Operational Factors (S)</td>
</tr>
<tr>
<td>2/5</td>
<td>1.6</td>
<td>Theater Structure and Geometry (S)</td>
</tr>
<tr>
<td></td>
<td>1.7</td>
<td>Principles of Joint Operations (S)</td>
</tr>
<tr>
<td>2/6</td>
<td>1.8</td>
<td>Operational Functions (S)</td>
</tr>
<tr>
<td>4/7</td>
<td>1.9</td>
<td>Major Operations/Campaigns &amp; their Elements (S)</td>
</tr>
<tr>
<td></td>
<td></td>
<td><strong>Formative Assessment 2</strong></td>
</tr>
<tr>
<td>4/8</td>
<td>1.10</td>
<td>Op Design: Analysis of the Battle of Leyte Gulf (S)</td>
</tr>
<tr>
<td></td>
<td>1.11</td>
<td>Operational Leadership (S)</td>
</tr>
<tr>
<td>5/9</td>
<td>1.12</td>
<td>Operational Design: Falklands / Malvinas Conflict (S)</td>
</tr>
<tr>
<td></td>
<td>1.13</td>
<td><strong>Summative Assessment 1</strong></td>
</tr>
</tbody>
</table>

**BLOCK 2—NAVAL, JOINT & MULTINATIONAL WARFARE**

<table>
<thead>
<tr>
<th>Week/Session</th>
<th>Session#</th>
<th>Session</th>
</tr>
</thead>
<tbody>
<tr>
<td>5/10</td>
<td>2.1</td>
<td>Naval Warfare Theory (S)</td>
</tr>
<tr>
<td></td>
<td>2.2</td>
<td>Objectives of Naval Warfare (S)</td>
</tr>
<tr>
<td>6/11</td>
<td>2.3</td>
<td>Naval Tactics (S)</td>
</tr>
<tr>
<td></td>
<td>2.4</td>
<td>Organizing Naval Forces in the Open Ocean (S)</td>
</tr>
<tr>
<td></td>
<td></td>
<td><strong>Formative Assessment 3</strong></td>
</tr>
<tr>
<td>6/12</td>
<td>2.5</td>
<td>Naval Combined Arms &amp; Joint Warfare – Part I (S)</td>
</tr>
<tr>
<td>7/13</td>
<td>2.6</td>
<td>Naval Combined Arms &amp; Joint Warfare – Part II (S)</td>
</tr>
<tr>
<td>7/14</td>
<td>2.7</td>
<td>Op Design: Naval Battles of Guadalcanal (S)</td>
</tr>
<tr>
<td></td>
<td>2.8</td>
<td>Joint/Multinational Warfare – Command &amp; Control (S)</td>
</tr>
<tr>
<td>8/15</td>
<td>2.9</td>
<td>U.S. Navy Command &amp; Control (S)</td>
</tr>
<tr>
<td></td>
<td>2.10</td>
<td>Joint Warfare – U.S. Coast Guard Capabilities (S)</td>
</tr>
<tr>
<td>8/16</td>
<td>2.11</td>
<td>Joint Warfare – U.S. Marine Corps Capabilities (S)</td>
</tr>
<tr>
<td></td>
<td>2.12</td>
<td>Joint Warfare – U.S. Army Capabilities (S)</td>
</tr>
<tr>
<td></td>
<td></td>
<td><strong>Formative Assessment 4</strong></td>
</tr>
<tr>
<td>9/17</td>
<td>2.13</td>
<td>Joint Warfare – U.S. Air Force Capabilities (S)</td>
</tr>
<tr>
<td></td>
<td>2.14</td>
<td>Joint Warfare – U.S. SOF Capabilities (S)</td>
</tr>
<tr>
<td>9/18</td>
<td>2.15</td>
<td>Op Intelligence for the Maritime Commander (S)</td>
</tr>
<tr>
<td></td>
<td>2.16</td>
<td>Information Operations &amp; Cyber Warfare (S)</td>
</tr>
<tr>
<td>10/19</td>
<td>2.17</td>
<td>Naval, Joint and Multinational Logistics (S)</td>
</tr>
</tbody>
</table>
**Formative Assessment 5**

<table>
<thead>
<tr>
<th>Date</th>
<th>Content</th>
</tr>
</thead>
</table>
| 10/20 | { 2.18 Struggle for Sea Control: PRC-Taiwan Case Study (S)  
2.19 **Summative Assessment 2** } |

**NW3276—JMO Part 2**

**BLOCK 3—CONTEMPORARY OPERATIONS**

<table>
<thead>
<tr>
<th>Date</th>
<th>Content</th>
</tr>
</thead>
<tbody>
<tr>
<td>11/1</td>
<td>3.1 Operational Law (S)</td>
</tr>
</tbody>
</table>
| 11/2 | { 3.2 Range of Military Operations (S)  
3.3 Naval Support of Foreign Policy (S)  
3.4 Civil-Military Interaction (S)  
3.5 Insurgency and COIN with Naval Forces (S)  
3.6 Unconventional Statecraft (S)  
3.7 Military Ethics and Operational Leadership (S)  
3.8 Peace Operations (S)  
3.9 **Summative Assessment 3** } |

**BLOCK 4—JOINT / NAVY PLANNING EXERCISE**

<table>
<thead>
<tr>
<th>Date</th>
<th>Content</th>
</tr>
</thead>
<tbody>
<tr>
<td>14/7</td>
<td>4.1 Adaptive Planning and Execution System (APEX) (S)</td>
</tr>
<tr>
<td>14/8</td>
<td>4.2 Navy/Joint Planning Processes (NPP/JPP) (S)</td>
</tr>
<tr>
<td>15/9</td>
<td>4.2 Navy/Joint Planning Processes (NPP/JPP) (S)</td>
</tr>
<tr>
<td>15/10</td>
<td>4.2 Navy/Joint Planning Processes (NPP/JPP) (S)</td>
</tr>
<tr>
<td>16/11</td>
<td>4.2 Navy/Joint Planning Processes (NPP/JPP) (S)</td>
</tr>
<tr>
<td>16/12</td>
<td>4.2 Navy/Joint Planning Processes (NPP/JPP) (S)</td>
</tr>
</tbody>
</table>
| 17/13 | { 4.2 Navy/Joint Planning Processes (NPP/JPP) (S)  
4.3 **Summative Assessment 4** } |

**BLOCK 5—JOINT TASK FORCE (JTF) / JOINT FORCE MARITIME COMPONENT COMMAND (JFMCC) OPERATION ORDER (OPORD) DEVELOPMENT**

<table>
<thead>
<tr>
<th>Date</th>
<th>Content</th>
</tr>
</thead>
</table>
| 17/14 | { 5.1 Orders and Orders Development (S)  
5.2 JTF / JFMCC OPORD Development (S) } |
| 18/15 | 5.2 JTF / JFMCC OPORD Development (S) |
| 18/16 | 5.2 JTF / JFMCC OPORD Development (S) |
| 19/17 | 5.2 JTF / JFMCC OPORD Development (S) |
| 19/18 | 5.2 JTF / JFMCC OPORD Development (S) |
| 20/19 | 5.2 JTF / JFMCC OPORD Development (S) |
| 20/20 | 5.3 Exercise Debrief/Course Closure |
A. **Focus:**

This block will establish the conditions for the Joint Maritime Operations Course. It highlights the opportunities and challenges ahead and introduces the students to the themes, outcomes, and general requirements of the course. The block emphasizes the study of operational art. Operational art prepares students for examining the entire spectrum of conflict by introducing a theoretical framework and then applying it at the operational level of war.

(The theory and practice of operational warfare at sea will be introduced in Block 2. Those sessions will provide students with a better comprehension of the importance of the maritime environment and the essential role of operational art in accomplishing maritime objectives.)

B. **Description:**

The CDE JMO student body is diverse; each student comes to the JMO course following a unique path. The introductory sessions in this block help students by providing a common intellectual framework upon which the course will build.

To begin the block, your professor will provide an overview of the Joint Maritime Operations Course. At the introductory seminar students will meet their professors and fellow students and discuss the requirements of the JMO course in more detail. A foundational session, “Critical and Creative Thinking,” will establish a cognitive baseline for assessment of your written and oral work.

The remaining Block 1 sessions are foundational for comprehending operational concepts introduced throughout the remainder of the course and for practical use in the field. The study of operational art, to include the elements of operational warfare and basic operations and campaign planning, is essential to comprehending the nuances of the operational level of war. Students will discover that they are, in fact, learning a different “language.” The lexicon of the operational commander and staff is rooted in the language of operational art. A critical point for students to keep in mind is that, while they will first investigate operational art from the theoretical perspective, the value of operational art lies in its practical use in resolving ill-structured problems. Operational art may be completely new to some and more familiar to others. No matter what a student’s background, there is a wealth of invaluable knowledge to be gained from each assigned reading. Preparation and participation are essential; students are expected to be prepared to participate in classroom discussions with colleagues from a variety of backgrounds and expertise.

The block will include the following:

- **Introduction of the theoretical components of operational art;**
- **Application** of operational art concepts using the Leyte Gulf and Falklands/Malvinas case studies;
- **Formative assessments** and an end-of-block **summative assessment** that will gauge your understanding of the concepts of operational art.
A. **Focus:**

This session provides an overview of the objectives and requirements of the Joint Maritime Operations Course.

B. **Objectives:**

- Comprehend the requirements and objectives of the course.
- Know the background and expertise of the faculty and student members of the seminar.
- Comprehend seminar guidelines for conduct and assessments.
- Discuss social and administrative matters.

C. **Background:**

For the foreseeable future, the use of military power, together with the diplomatic, economic, and informational instruments of national power, will be essential to achieving national strategic objectives. During this course you will study how to effectively wield the military instrument of power in concert with the other instruments to achieve operational and theater-strategic objectives.

While many students arrive in seminar flush with tactical knowledge and expertise, we will now open the intellectual aperture and examine higher levels of war, in this case the operational and theater-strategic levels. The focus therefore will be upon operations at the Joint Force Commander (Joint Force Maritime Component Commander, Joint Task Force commander, and Combatant Commander) levels.

D. **Questions:**

None.

E. **Required Media:**

None.

F. **Required Readings:**

College of Distance Education. *Guidance for Written Solutions for College of Distance Education (CDE) Students.* Newport, RI: Naval War College, 2017. Scan. *(CDE 2062C)* (Government)

G. **Supplementary Readings:**


STUDY GUIDE

1.2
CRITICAL AND CREATIVE THINKING

“[Naval War College]... the finest heuristic teaching institution in the world.”

—comment attributed to former Commandant of the Army War College, General Robert Scales (ret. USA)

A. Focus:
This session introduces the concepts and lexicon of critical and creative thinking. The lesson intends to enhance one’s ability to analyze critically the arguments of others and to construct logically persuasive arguments of one’s own. The ultimate goal is to improve the student’s ability to solve problems creatively and make sound decisions and help others do the same.

B. Objectives:
- Comprehend the relationship between planning and problem solving.
- Analyze the differences in problem structure and the various methodologies available to problem solvers to address them.
- Comprehend the language of problem solving and complexity.
- Comprehend critical thinking and understand it both as an artifact and as a process.
- Comprehend the value of questioning in critical thinking.
- Comprehend the differences between critical and creative thought.
- Analyze an argument by identifying its thesis and supporting rationale.
- Evaluate an argument for accuracy or truthfulness.
- Analyze an argument for fallacious reasoning.
- Comprehend how to refute fallacious arguments.
- Apply critical thinking skills when analyzing and creating scholarly work.

C. Background:
Circumstances often require mid-level and senior military officers or their civilian counterparts to derive solutions to complex, ill structured problems in a time- and resource-constrained, volatile, uncertain, ambiguous, and sometimes-violent operational environment. The conundrum is that most formal military decision-making processes are best suited to the usually well-structured case of major combat operations between conventional military forces of nation-states governed by rational elites mindful of international norms. As history shows, however, most of what our military confronts falls outside the ambit of well-structured competition and into a realm of “wicked” problems defying solution via linear, rational thought...
processes – if a solution exists at all. In such situations, the skill, expertise, experience, creativity, and intuition of the commander and staff are often critical in deriving “satisficing” courses-of-action with an acceptable probability of success.

The material for this session spans four general topic areas: 1) solving problems 2) thinking critically and creatively 3) analyzing arguments and 4) avoiding logical fallacies. The required readings for this session offer minimal preparation for seminar participation, whereas the supplementary readings afford you the opportunity to expand upon your understanding of these complicated and often complex topics.

In this course, you will do a lot of reading, for which you will need (or learn) to be critical consumers of ideas. You will also find yourself putting your own ideas in writing, in formative and summative assessments. Therefore, over the academic year you should periodically revisit the readings and exercises found here to reinforce your critical and creative capacities. Expect your professors to criticize (professionally) your work when your ideas or arguments do not “hold water” or come across as pedestrian rather than creative – be bold!

Lastly, depending on one’s training and education in formal logic, complexity theory or other related disciplines, the session may seem somewhat pedantic or mundane – please take it in the spirit in which it is intended. For others, the material here may break new ground intellectually – great! That said, the preparation- and class-time allotted to this one session will not make you an expert – mastery of critical and creative cognitive talents is a life-long pursuit.

D. Questions:

1. What is a problem and why is it important to understand problem structures?
2. How does a problem’s structure relate to the methodology to resolve it?
3. Why do (or should) we first assess the structure and typology of a problem, before we begin trying to resolve it?
4. If many of the problems we confront in the modern operating environment manifest themselves as Complex Adaptive Systems, how can they be adequately described?
5. What are the fundamental differences between an argument and a disagreement in formal logic?
6. What value lies in the deconstruction of an argument?
7. How and why does a critical thinker deconstruct an argument?
8. Describe the indicators of fallacious reasoning.
9. Identify techniques to spur creative thought, both individually and in groups.

E. Required Media:

“Introduction to Problem Solving” Lecture. View first 5 minutes only. (CDE 8064M)

F. Required Readings:


__________. “Thinking About Complexity.” Newport, RI: Naval War College, Joint Military Operations Department, 2012. (NWC 1141) (Government)


G. Supplementary Readings:


STUDY GUIDE

1.3
INTRODUCTION TO OPERATIONAL ART

Successful strategy achieves national and alliance political aims at the lowest possible cost in lives and treasure. Operational Art translates those aims into effective military operations and campaigns.

—Colonel Harry G. Summers, U.S. Army (Ret.),
On Strategy II: A Critical Analysis of the Gulf War, 1992

A. Focus:

This session focuses on the concept of operational art and its historical roots; the linkage between operational art, strategy, and tactics; and the relationship between operational art and the operational level of warfare. Additionally, this session provides important background for developing the skills required for effective operational planning which are exercised in subsequent JMO sessions. Operational Art provides the foundation for all analysis and synthesis in the remainder of the JMO course.

The “War in the Pacific” lecture is inserted into this session to introduce the historical case study for this and the upcoming Operational Art sessions. It provides students with the general origins of the War in the Pacific, the principal actors on each side, and some of the major operations and campaigns that led to the series of battles known as the Battle of Leyte Gulf. This is intended to provide historical context for the Philippines Campaign in general and not be a rehash of Strategy and War sessions on World War II. It provides the strategic and operational background for the October 1944 Allied invasion of the Republic of the Philippines and the subsequent Campaign to wrest control of the Philippines from the Imperial Japanese empire.

B. Objectives:

- Comprehend the meaning of the term Operational Art.
- Comprehend the historical emergence of Operational Art.
- Comprehend how Operational Art links strategy to tactics.
- Comprehend the importance of applying Operational Art during conceptual planning.
- Comprehend the historical setting for the United States entry into WWII.
- Comprehend the major operations and campaigns in the Pacific in WWII.
- Comprehend the operational concept and sequence of events associated with the combat actions in the invasion of the Philippines from both the Allied and Japanese perspectives.

C. Background:

Classic military thinkers such as Clausewitz, Mahan, and Douhet looked to the past to better predict how wars could be fought in the future. These theorists lived in turbulent times,
highlighted by technological advancement. As both the size, speed, and diversity of military forces grew—as well as the space they occupied and fought in—these men understood that a good strategy alone could not guarantee victory; conversely, one could win every tactical engagement and still lose the war. To achieve victory, they understood that one must effectively link strategy and tactics to ensure that tactical actions support strategic objectives. In modern warfare, the strategic perspective is often too broad to ensure the decisive employment of one’s sources of power; likewise, the tactical framework is too narrow.

Another field of study and practice exists to synchronize multiple sources of power properly in order to accomplish the ultimate strategic or operational objective. This third component of military art, Operational Art, occupies an intermediate position between the realm of policy and strategy and that of tactics—and is inextricably linked with both. Without operational art, war would be a set of disconnected engagements, with relative attrition the only measure of success or failure.

Operational Art as defined by Dr. Milan Vego in Joint Operational Warfare: Theory and Practice is the component of military art concerned with the theory and practice of planning, preparing, conducting, and sustaining campaigns and major operations aimed at accomplishing strategic or operational objectives in a given theater. Operational Art emerged in the nexus of societal change and advancements in industrialization and technology. As the size of military forces and the resultant complexity of their movement and sustainment multiplied, military leaders and theoreticians, both on land and at sea, sought effective methods for conducting war on a greater scale. The interaction among study, theory, and practice continues today.

The application of Operational Art is a cognitive process; the conduct of warfare at the operational level preceded the emergence of formal operational art. Operational Art is also not strategy; strategy is developed and implemented at the national and theater level. Operational art helps commanders use resources efficiently and effectively to achieve strategic objectives. Operational art requires broad vision—the ability to anticipate—and effective joint and multinational cooperation. Operational art is practiced not only by Joint Force Commanders, but also by their senior staff officers and subordinate commanders.

Students often ask, why study a war that happened so long ago? Or, why study a pre-precision-guided-munitions-era war? What utility is there in it for a modern maritime war fighter? The answer to this lies in the timelessness of the theory of war. While we know that the character of war changes with technological evolution and so forth, it is the nature of war that is immutable; thus the lessons we glean from a comprehension of the battles for Leyte Gulf vis-à-vis operational art remain valid today.

The 1944 Philippines Campaign does in fact have all the aspects of a modern, 21st century campaign: a maritime component that fought to establish local sea control to facilitate Sixth Army’s decisive effort ashore; three numbered Air Forces isolating the archipelago and providing operational fires to support the campaign objectives; a special operations component coordinating an effective insurgency against the Japanese occupiers; and finally, decisive combat operations ashore. General Douglas MacArthur skillfully orchestrated these components—in time, space, and purpose—to achieve a theater-strategic objective.

As students in a Naval War College program, you should consider the maritime aspects of this campaign, specifically Operation KING II—the largest and most complex sea-air conflict (four separate battles over two days) in history. As the final showdown between the U.S. and
Japanese fleets, this one major joint/combined operation involved enormous naval and air forces in huge areas and over vast distances (the operation spanned over a hundred thousand square miles). As such, the operation provides superior illustrations of virtually all aspects of operational art and remains directly relevant to joint operations in the littorals today.

D. Questions:
1. How does theory contribute to our comprehension of Operational Art?
2. How does operational art link the strategic and tactical levels of war?
3. How has technology influenced both Operational Art and how practitioners and theoreticians view the conduct of war?
4. How does Operational Art assist commanders in making sound military decisions?
5. Discuss how comprehension of Operational Art assists commanders in non-traditional warfare.
6. Articulate why Operational Art begins with the objective.

E. Required Media:
   “Introduction to OPART” Lecture. (CDE 8121M)
   “War in the Pacific” Lecture. (CDE 8122M)
   “The Battle for Leyte Gulf” Interactive. (CDE 8091M)

F. Required Readings:

G. Supplementary Readings:
STUDY GUIDE

1.4
MILITARY OBJECTIVES AND THE LEVELS OF WAR

Pursue one great decisive aim with force and determination—a maxim which should take first place among all causes of victory.

— Carl von Clausewitz, _Principles of War_, 1812

A. **Focus:**

This session focuses on the importance of the objective in operational warfare; the process of determining and articulating objectives; the scale of military objectives; the linkage between the objective and its constituent tasks; and the relationships between the military objectives and corresponding levels of war.

B. **Objectives:**

- Comprehend the relationship between the strategic, operational, and tactical levels of war and their objectives.
- Comprehend the interrelationships among/between the four elements of national power (diplomatic, informational, military, and economic) and how the strategic objective relates to the desired end state.
- Comprehend the concepts of regressive planning and operational-level planning.
- Comprehend how the “Four Questions” of warfare can help operational–level commanders employ assets in the pursuit of strategic objectives.

C. **Background:**

A clearly stated and attainable objective is essential to the theory and practice of war; without one, any military effort expended is literally aimless and tactical actions, however successful, remain random. This is particularly true at the operational and strategic levels of war because the stakes are higher than at the tactical level. Almost all aspects of operational warfare are related, either directly or indirectly, to the objective to be accomplished.

Tactical, operational, and strategic objectives are differentiated according to their scale. Among other things, the objective determines the method of one’s combat force employment, the size of the physical space for accomplishing it, the level of war, and also the level of command, type of planning, and major phases and elements of one’s combat force employment. The scale of the objective determines the method of one’s combat force employment and the size of the physical space in which one’s forces are to be employed – not vice versa.

The selection of an objective is the first and most critical step in undertaking any military enterprise. As Liddell-Hart describes, this establishes the _purpose_ for the operation. Once the objective is determined, the entire problem becomes greatly simplified (but not necessarily easy to resolve). Determining a military objective, however, is often the most difficult aspect
of operational planning, requiring a careful analysis of the enemy’s factors of space, time, and force. In general, the larger the scale of the objective, the larger the factors of space, time, and force to be considered become.

It is not sufficient to specify the objective alone; one must also clearly articulate what type of action must be carried out to accomplish the specific objective or the staff will be unable to plan the pending operation effectively. The operational commander and planners must also try to anticipate the possible effects (consequences or results) of the accomplishment of the military objective. This is more an art than a science and requires working regressively: working backwards from the desired end state to ensure that the required conditions are created at each step prior to executing the operation. Much depends on the commander’s knowledge and understanding of the enemy and all aspects of the military and nonmilitary situation. There are however many pitfalls in the process, which, in turn, can make predictions tenuous at best.

The scale and complexity of the military objective to be accomplished determine the level of war to be conducted. It is generally recognized that the larger the military objective, the higher the level of war. Thus, as discussed in 1.3 (Introduction to Operational Art), three basic levels of war exist: strategic, operational, and tactical. The strategic level of war can be divided into two sublevels: national-strategic and theater-strategic. We will focus primarily on the operational level of war.

Through operational art, commanders integrate ends, ways, and means across the levels of war to achieve the desired end state. This requires commanders to answer the following questions:

1. What are the objectives and desired end state? *(Ends)*
2. What sequence of actions is most likely to achieve those objectives and end state? *(Ways)*
3. What resources are required to accomplish that sequence of actions? *(Means)*
4. What is the chance of failure or unacceptable consequences in performing that sequence of actions? *(Risk)*

These four questions form the nexus for the use of regressive planning in determining the objectives at all levels.

Regressive planning allows a commander to develop a concrete plan of action that employs the armed forces and other instruments of power in a synchronized fashion to achieve the *(ends)* being sought. If commanders concentrate on first identifying what it is they want to accomplish *(ends)*, they will be subjecting their potential options to the right test. Without knowing where they are headed, commanders could waste their resources without achieving anything important. Clear “ends” allow the operational commander to assess the viability of potential military options for achieving them. They also allow theater-strategic and operational level commanders and others to assess what non-military actions are needed before, during (or instead of), and after military actions. The bottom line is that there is no point in doing anything unless it assists in achieving the desired “ends.” All your “means” can easily be wasted when they are not focused on what needs to be accomplished.

**D. Questions:**

1. What is the desired end state and what are its main elements?
2. What is the relationship between the desired end state and the strategic objective?

3. How do U.S. military commanders derive military objectives from higher strategic direction?

4. What are the distinctions among tactical, operational, and strategic physical objectives? Why it is important to properly comprehend these distinctions?

5. What is the relationship between the military objective and the constituent tasks?

6. Some theorists claim that technology has compressed the levels of war to the point that the differences are no longer significant. Do you agree?

**Leyte Case Study**

7. What were the Allied strategic, theater-strategic, and operational objectives in the Leyte operation?

8. What were the Japanese strategic, theater-strategic, and operational objectives in the Leyte operation?

9. Was General MacArthur a strategic or operational-level commander during Operation King II (Leyte)? What were Admirals Nimitz and Halsey?

10. What were the key features of the Japanese command organization? Was Admiral Soemu Toyoda an operational or theater-strategic commander? Why?

11. What were the theater-strategic, operational, and tactical levels of war in the Leyte Operation?

E. **Required Media:** (Review as necessary)

   “War in the Pacific” Lecture. (CDE 8122M)

   “The Battle for Leyte Gulf” Interactive. (CDE 8091M)

F. **Required Readings:**


G. **Supplementary Readings:**


STUDY GUIDE

1.5
OPERATIONAL FACTORS

The combinations of space, time, and strength, which require to be looked into as elements of this theory of defense, make the subject somewhat complicated, so that it is not easy to gain a sure point from which to commence. The following is the result at which everyone will arrive on full consideration.

—Carl von Clausewitz, On War 1832

For the infantry to seize and hold the island, ships had to control the sea. For a fleet to control the sea, the pilots had to fly from the island’s airfield. For the pilots to fly from the airfield, the infantry had to hold the island. That tripod stood only by the strength of all three legs.

—James D. Hornfischer, Neptune’s Inferno: The U.S. Navy at Guadalcanal

A. Focus:

This session addresses the most basic foundational aspect of operational art—the operational factors of space, time, and force and the interrelationship of these factors in achieving operational objectives. As we have already discovered, all aspects of operational art and planning are linked to objectives. The concept of using information obtained from the analysis of operational factors in order to better understand the operating environment and to make sound operational decisions is examined in this session. Addressing the factors from a theoretical perspective and then using them to frame the Battle of Leyte Gulf and the U.S. and Japanese objectives will enhance understanding of the factors and their interrelationships.

You will also take a closer look at the physical maritime environment in a manner that will permit the operational planner to understand the time, space, and force challenges in that domain which impact on maritime operations.

B. Objectives:

- Comprehend the individual operational factors of space, time and force.
- Comprehend the interrelationship between the operational factors.
- Analyze the process by which an operational commander balances operational factors against each other in order to expose opportunities and risks towards achievement of the objective.
- Comprehend the impact of the physical environment on planning and conducting maritime operations.

C. Background:

The theoretical aspects of operational factors presented in this session enhance a commander’s ability to make sound decisions; thus, military problem solving begins with a consideration of the factors Space, Time, and Force. Knowledge gained in analyzing the operational factors
allows commanders greater mental freedom of action. In analyzing operational factors, the size, shape, and nature of a space will affect the quantity and type of force employed, as well as the time required to conduct a successful military operation. The necessity of commanders having a full comprehension of the factors of space, time, and force and the ability to balance them toward achieving the objective is a critical aspect of warfare.

Analysis of operational factors must begin with the objective. Without consideration of the objective, the analysis has no focus. Critical aspects of information from both the enemy and friendly sides are included in this analysis. Although operational commanders may not be able to choose their space, they do have the ability to manage the characteristics of time and force. Managing aspects of all three of these factors allows the commander to shape the operational environment to his or her advantage and mitigate operational and tactical risks.

Operational factors must be considered early in the operational planning process. For an experienced practitioner of operational art, they become intuitive considerations. During the JMO course, operational factors will be considered explicitly to help you to identify enemy strengths to avoid and weaknesses to attack while at the same time protecting friendly weaknesses and exploiting our strengths.

D. Questions:

1. What are the key features of factor space? How do factor space and factor force relate?
2. What are the main aspects of factor time? What is the relationship between factor time and the factors of space and force?
3. Why is a precise assessment of factor of force so difficult? Describe the theoretical difference between combat potential and combat power.
4. What are the theoretical relationships between the operational factors space/time, space/force, and time/force? How might an operational commander balance these relationships to achieve objectives?
5. What major considerations must be made to balance the physical environment with respect to factors time, space and force, and how does the maritime commander use these to his operational advantage?

Leyte Case Study

6. What were the Allied objectives for Operation KING II?
7. What were the key elements of factor space from the Japanese and Allied perspectives?
8. How did the factor force affect Japanese plans for the Philippines?
9. How did the Allies balance the operational factors of space, time and force at Leyte Gulf? How did the Japanese?

E. Required Media: (Review as necessary)

“War in the Pacific” Lecture. (CDE 8122M)
“The Battle for Leyte Gulf” Interactive. (CDE 8091M)
F. **Required Readings:**


G. **Supplementary Readings:**


Nimitz, Chester. *CINCPACFLT letter to Pacific Fleet and Naval Shore Activities*, Pacific Ocean Areas, 13 February 1945. (NWC 4025)

A. **Focus:**

This session explores the meaning of the term “theater,” its structure, and its elements or geometry. The inextricable linkages among and between objective(s), the theater, and levels of war and command will be discussed, and the Leyte case study used to illustrate and enable a critical analysis of the theater structure and selected parts of the theater geometry.

B. **Objectives:**

- Comprehend the relationship between military objective(s) and the physical structure of a theater.
- Comprehend the considerations that may inform and influence theater structure.
- Comprehend the meaning and importance of the key terms pertaining to theater geometry (positions, bases of operation, lines of operation, decisive points, lines of communication, and objectives).

C. **Background:**

Modern theory holds that a theater should be militarily organized to ensure the most favorable conditions for the employment of one’s forces across the entire spectrum of conflict, from peacetime competition to high-intensity conventional war. The larger the assigned military objective(s), the greater the force required and, therefore, the larger the physical environment required to deploy, concentrate, and maneuver the force, and the larger the infrastructure needed to support the employment of one’s forces. Hence, the theater has to be divided into a number of geographically-based areas to ensure the most effective employment of one’s military and nonmilitary sources of power. The structure of a three-dimensional theater, overlaid with the information and cyber environments, can include one or more theaters of operations, areas of operations, and combat zones (or sectors). The size of each subdivision should be based primarily on the scale of the military objective to be accomplished and the selected method of combat force employment. The latter, in turn, dictates the size and mix of one’s forces required to accomplish a given objective. The theater and its subdivisions are the very basis for establishing and maintaining tactical, operational, and strategic levels of command or command echelons.

Any theater contains natural and artificial features called “theater elements” or “theater geometry” that significantly affect the planning and execution of military action at any level of war. These theater elements include: positions, distances, bases of operations, physical objectives, decisive points, lines of operation (LOO), and lines of communications (LOC)—any of which may have tactical, operational, or even strategic significance. The key to evaluating the military importance of these features involves not only their number and...
characteristics, but also their relative position and distance from each other—the geometry of the situation. Operational commanders and their staffs therefore, must know and comprehend the advantages and disadvantages of these elements to ensure the most effective employment of their forces against the enemy, but also to protect friendly forces from reciprocal actions by the enemy.

D. Questions:
1. In building an appreciation of the operational environment, what physical and abstract/intangible factors bear on theater structure and how are they balanced?
2. What are the advantages and disadvantages of the central and exterior positions?
3. What is the original meaning and importance of the Jominian concept of “decisive point?” Has the information age changed the concept? If so, how?
4. To what extent are there differences in “lines of operations” on land, in air, and at sea? Explain.

Leyte Case Study:
5. Within the context of the Pacific Theater, what was the declared (or undeclared) theater structure for the Japanese and Allies in the Leyte operation?
6. What were advantages and disadvantages of the positions and the respective lines of operations in the employment of the Japanese and Allied naval forces? Did the Japanese and Allied commanders maximize the advantages and minimize disadvantages of position and corresponding lines of operation?
7. What were the advantages and disadvantages of the positions and lines of operations in the employment of the Japanese and Allied ground forces and land-based aircraft?
8. What were the principal decisive points from the Japanese and Allied perspectives? Did the Allied and the Japanese naval commanders recognize the importance of decisive points? What mistakes in selecting or omitting decisive points were made, if any?

E. Required Media: (Review as necessary)
“War in the Pacific” Lecture. (CDE 8122M)
“The Battle for Leyte Gulf” Interactive. (CDE 8091M)

F. Required Readings:


G. **Supplementary Readings:**

STUDY GUIDE

1.7
PRINCIPLES OF JOINT OPERATIONS

Under the glass top of Nimitz’s desk were several cards bearing military slogans, and in a central position one small card with a list: “Objective, Offensive, Surprise, Superiority of Force at Point of Contact, Simplicity, Security, Movement, Economy of Force, Cooperation.” Some people call such lists “principles of war,” but Nimitz thought of his merely as reminders, a check-off list of things to be considered before launching an operation….

– E. B. Potter, Nimitz

A. Focus:
This session examines the principles of joint operations as listed in current joint doctrine.

B. Objectives:
• Comprehend current joint doctrine regarding the principles of joint operations and how they evolve over time.
• Apply the principles of joint operations in planning.

C. Background:
Historians and military leaders have always studied past wars in hope of uncovering underlying principles that might explain the foundation of victory or the root cause of defeat. Once discovered, those underlying principles would then serve as the framework for conducting future operations. However, blind adherence to such principles when developing doctrine can be problematic. The principles of joint operations should be reexamined after the introduction of new technology or new cultural influences; in other words, they should evolve. Therefore, the principles of joint operations are not intended to be recipes, but rather guides, that when appropriately applied in time and space, can enhance the probability of success.

D. Questions:
1. Admiral Mahan wrote that principles are, “fundamental truths correctly formulated. They are nothing more than the proper conclusions from the observation of a large number of naval campaigns in the past.” He also said, “Historical examples are more valuable than principles, because by being narrative of the past events they are a story of practical experience.” What do you think he meant? Are his suggestions still valid?

2. Although the principles vary in name, number, and definition from nation to nation, each country finds that it is important for military officers to know that certain principles exist. Why do the armed forces of most nations accept the general validity of certain fundamental principles (of war) and teach them to each new generation of officers?

3. What can you learn about a nation’s culture from its principles?

4. What risks are introduced by strict adherence to principles of joint operations?
5. What are the risks of not comprehending the principles of joint operations?

**Leyte Case Study**

6. Some historians have criticized Admiral Halsey’s actions as the Third Fleet Commander during the Battle of Leyte Gulf. Yet, Halsey, until his death, believed that his actions were correct in view of the information he had and his interpretation of his mission. Do you think Admiral Halsey acted properly in carrying out the tasks of operational protection and support of the Leyte operation (*King II*)? Defend your position in terms of the principles of joint operations.

7. What insights does the Leyte Gulf case study provide into the principles of joint operations?

E. **Required Media:** (Review as necessary)

   “War in the Pacific” Lecture. *(CDE 8122M)*

   “The Battle for Leyte Gulf” Interactive. *(CDE 8091M)*

F. **Required Readings:**


G. **Supplementary Readings:**

1.8
OPERATIONAL FUNCTIONS

I don’t know what the hell this “logistics” is that Marshall is always talking about, but I want some of it.

—Admiral Ernest J. King,
Commander-in-Chief of the Fleet and
Chief of Naval Operations (CNO), 1942-1945

A. Focus:

This session continues defining key aspects of operational art. To employ one’s combat forces with maximum effectiveness, a number of supporting structures and activities, called “functions” should be fully organized and developed. Although functions can be discussed at all three levels of war (tactical, operational, and strategic), this session will focus on functions at the operational level of war, arbitrarily called “operational functions.” Operational functions broadly define a group of related resources, structures, activities, and systems that enable a commander to synchronize his forces. The functions reinforce and complement one another: their integration is essential to mission accomplishment. This session details the operational functions used to support the planning, conduct, and sustainment of major operations and campaigns and in doing so presents these functions from both a theoretical and a joint perspective. The synchronization of these operational and joint functions ensures and enhances the ability of operational commanders and their subordinate elements to carry out their missions in both peace and war.

B. Objectives:

• Comprehend the role and importance of operational functions in operational planning and execution.

• Comprehend how operational functions support major operations and campaigns.

C. Background:

In Joint Operational Warfare: Theory and Practice, Milan Vego identifies six operational functions, which he argues are supporting structures and activities that should be fully organized and developed by the operational commander for maximum effectiveness in employing one’s combat forces. These operational functions include: command organization (or command structure), intelligence, command and control warfare (C2W), fires, logistics, and protection, and their integration ensures efficiency and effectiveness. The sequencing and synchronization of operational functions ensures and enhances the ability of operational commanders and their subordinate elements to carry out their assigned responsibilities throughout a campaign or major operation. Similarly, joint doctrine identifies seven functions and states that “joint functions” are related capabilities and activities grouped together to help the Joint Force Commander (JFC) integrate, synchronize, and direct joint operations. In accordance with Joint Publication 3-0 Joint Operations, joint functions are common to joint
operations at all levels of war, and fall into seven basic groups—command and control, intelligence, fires, movement and maneuver, protection, information, and sustainment. Some operational functions, such as command and control and intelligence, apply to all operations. Others, such as fires, apply as required by the JFC’s mission.

In a mature theater, operational functions will normally be established nearly in their entirety. However, in an immature theater, they may exist in a rudimentary form, or not at all. Comprehending the impact and interaction of these functions at the operational level of war is critically important for proper planning, preparation, employment, and sustainment of one’s own forces in the achievement of assigned objectives.

Operational functions shape actions prior to and throughout a major operation. Operational level practitioners will come to appreciate that at the operational level of war it is the enemy functions which are most vigorously attacked/degraded in order to set the conditions for component success at the tactical level. A superior force can be degraded by an indirect attack upon its functions. As war is a reciprocal act, joint force commanders will expend great effort and resources protecting friendly functions from enemy actions.

D. Questions:

1. What is the relationship between operational factors and operational functions?

2. Combatant Commanders establish, maintain, and protect operational functions for routine peacetime activities as well as for war. What risks does the commander assume in an immature theater in which the functions have not yet been (fully) established?

3. What is role and importance of command and control warfare in providing support to a campaign or major operation?

Leyte Case Study

4. What impact did the following operational functions have on the Leyte Gulf operation from the perspective of both belligerents?

   - Operational Command Organization—how did command structures affect operations at Leyte?

   - Command and Control Warfare—how did either side use operational security, military deception, or psychological operations during the Leyte Gulf operation?

   - Operational Movement and Maneuver—what is the difference between movement and maneuver? How did the opposing forces plan and employ movement and maneuver at Leyte?

   - Operational Intelligence—what advantages did operational intelligence provide to the Allied commanders at Leyte? How were the Japanese commanders disadvantaged by operational intelligence at Leyte?

   - Operational Fires—how were Allied operational fires used to support the Leyte Gulf operation? To what extent were they effective and why?

   - Operational Protection—to what extent did either of the opposing forces at Leyte consider and plan for the use of operational protection?
Operational Logistics—how did the Allied commanders address operational logistics in the Leyte operation? What impact did operational logistics have on the Japanese?

Sustainment—how did the Japanese commanders sustain forces on the island of Leyte? How did the Allied forces sustain forces as part of the major operation (KING II) at Leyte?

E. Required Media: (Review as necessary)

“War in the Pacific” Lecture. (CDE 8122M)

“The Battle for Leyte Gulf” Interactive. (CDE 8091M)

F. Required Readings:


G. Supplementary Readings:


STUDY GUIDE

1.9
MAJOR OPERATIONS/CAMPAIGNS AND THEIR ELEMENTS

What the theorist has to say here is this: one must keep the dominant characteristics of both belligerents in mind. Out of these characteristics a certain center of gravity develops, the hub of all power and movement, on which everything depends. That is the point at which all our energies should be directed.

—Carl von Clausewitz, *On War*, 1832

A. Focus:
The session first explains the principal methods of combat force employment – broadly defined as tactical actions, major operations, and campaigns – to accomplish operational or strategic objectives in a theater. The second part of this session analyzes the main elements of major operations and campaigns with a focus on the concepts of the center of gravity and the point of culmination.

B. Objectives:
- Comprehend the principal methods of combat force employment: tactical actions, major operations and campaigns.
- Comprehend the meaning of the terms “critical factors,” “culminating point” and “center of gravity.”
- Apply a process for deducing centers of gravity and the subsequent deconstruction of the center of gravity.
- Comprehend the utility of the concept of center of gravity in analyzing military problems.
- Comprehend the concept of culmination and identify potential indications of friendly and enemy culmination.

C. Background:
Methods of combat force employment are an important component of operational art. Modern methods of combat force employment are the result of a long evolution of warfare. In the nineteenth century, “decisive” battles were the area of study and practice of tactics, while strategy was concerned with the conduct of campaigns. In that era, primarily armies conducted ground campaigns, although there are examples where navies took part as well (the American War of Independence, the Peninsular War, the Crimean War, the American Civil War, etc.).

The principal methods of combat force employment today are tactical actions, major operations, and campaigns. The terms are differentiated by the military objectives they are intended to accomplish and the corresponding command echelon responsible for their planning, preparation, and execution. Tactical actions are normally conducted to accomplish tactical objectives; the principal methods for accomplishing operational or strategic objectives are major operations and campaigns, respectively.
Tactical actions (battles, engagements, strikes, attacks, etc.) are aimed at accomplishing major or minor tactical objectives in a given combat zone or sectors and, in some cases, can encompass an area of operations. They are usually an integral part of major operations. When conducted over time and in a certain sea or ocean area or airspace, tactical actions can cumulatively accomplish operational objective(s). Tactical actions can be either defensive or offensive in nature and are differentiated by the physical environment (land, sea, or airspace) in which they occur.

In generic terms, a major operation consists of series of related battles, engagements, and strikes and other tactical actions sequenced and synchronized in terms of time and space to accomplish an operational objective. Major operations are normally an integral part of a campaign. Sometimes, a major operation could be planned to accomplish a strategic objective in a situation short of war, and usually in an undeveloped theater. The examples of such major operations are the U.S. invasion of Grenada in October 1983 (Operation URGENT FURY), the U.S. invasion of Panama in December 1989 (Operation JUST CAUSE), and NATO’s actions in the Kosovo Conflict of 1999 (Operation ALLIED FORCE).

Again, in generic terms, a campaign consists of a series of related major operations (land, air/space, naval, special forces) sequenced and synchronized in terms of time and space and aimed to accomplish a military-strategic or theater-strategic objective in a given (declared or undeclared) theater of operations. These operations are executed simultaneously or sequentially and are conducted according to a common plan controlled by a theater commander. The main purpose of a campaign may be either offensive or defensive. Land campaigns and maritime campaigns are differentiated according to the physical environment in which major operations predominantly take place. Because airspace is an inseparable part of a maritime or land theater, air forces are always employed jointly with other Services.

There is possibly no theoretical concept of operational art that generates as much debate as that of center of gravity (COG). Originally coined by Carl von Clausewitz in his magnum opus, *On War*, it has become an integral part of how U.S. planners and commanders analyze an adversary’s threat systems. There exist in service and joint doctrine many ‘definitions’ of the concept, but what is important to modern students of war is that they develop in their mind’s eye their own comprehension of the concept and not simply a pedantic rendition of doctrine.

The COG often serves as the focal point for operations that naturally employ all levers of national power and likewise, permits for a rational, analytical approach to operations planning. As we will come to discover, however, the concept of the center of gravity, while generally appropriate in the analysis of a rational force-on-force conflict, becomes much more arcane as we encounter irregular and hybrid war, especially at the operational level we will study this year.

Operational and Theater-Strategic Commanders and their staffs are required to deduce appropriate centers of gravity for a given operation/campaign. Accordingly, there must be a method for accomplishing this task. Dr. Milan Vego presents to both the practitioner and student of war the concept of critical factors. This includes a listing of enemy (and friendly) strengths and weaknesses from which a potential COG is selected. COG selection is therefore accomplished through the analysis of friendly and adversary critical factors. Selection of a potential COG in the absence of a solid comprehension of likely enemy objectives, however, is effort wasted. It is therefore incumbent upon planners that COG analysis follows the
deduction of enemy objectives, both operational and (theater) strategic. Likewise, a sound comprehension of the environment in which we will operate is essential. This initial comprehension of the environment begins with a detailed analysis of the operational factors and operational functions, which are viewed through the lens of these deduced (enemy) and assigned (friendly) objectives. These are, along with an analysis of the theater and its structure, essential prerequisites to COG selection.

Complicating the concept of the COG is its interrelationship with the levels of war. As students will come to appreciate, the enemy operational COG that Lt Gen Walter Krueger, the Commanding General of Sixth Army, needed to destroy or degrade in order to secure Leyte, had a direct relationship to the enemy-theater strategic COG, General Yamashita’s 250,000 strong 14th Area Army defending Luzon. How did the Allied theater-strategic Commander, General Douglas MacArthur assess the impact of operations in and around Leyte on the campaign’s next major operational objective, Luzon? This is the challenge operational and campaign planners must face: not only the nesting of objectives, but of assessing the impact of actions against an operational COG in light of the next planned operation.

Closely linked to the concept of the COG is that of culmination. Another Clausewitzian concept, the adversary’s culmination is the ultimate goal for the military practitioner, for it is at this point that we may, in theory, impose our will upon the enemy and theoretically achieve our designated objective. Once we destroy or significantly degrade an enemy COG, hypothetically, the enemy’s ability to defeat us is taken away and we may impose our will on the enemy. In the harsh light of practice, however, the degradation of an enemy’s COG is not always the coup de grace that theory purports. Referring back to our foundational theorist Clausewitz, we discover that “in war the result is never final.” It is therefore a mandate that planners and commanders alike continuously assess the environment to ensure that actions taken against a COG, either directly or indirectly, are having the expected outcomes.

Selection of the COG is a complex process requiring a deep comprehension of the adversary and the operating environment. The subsequent deconstruction of the center of gravity leads to a general idea or scheme for defeating the adversary. It leverages many of the facets of operational art, principles of war (joint operations), doctrine, factors, functions, and theater structure. Planners and commanders are required to balance the operational factors and determine relative advantages to exploit and weaknesses to protect. The same critical analysis is required of both friendly and adversary operational functions, since operational level planners and commanders generally degrade/attack functions in order to set the conditions for tactical success of their components. Consider the operational fires employed by Admiral Nimitz against Japanese-occupied Formosa, the guerre de course by U.S. submarines against Japanese merchant shipping, and the degradation of Japanese maneuver means prior to Krueger’s troops arriving in the Leyte amphibious objective area. Each operational or theater-strategic action was intended to set the stage for Sixth Army’s success, which led to securing Leyte.

During this session, students will develop a working definition of the COG, identify Japanese and Allied theater-strategic and operational objectives, and deduce enemy and friendly COGs. Once the COGs have been deduced, one should be able to deconstruct an enemy COG. This deconstruction, along with an understanding of friendly and likely enemy objectives, and an analysis of the theater geometry, friendly and enemy operational factors, and operational functions, all set the stage for a subsequent session, 1.10, Operational Design.
D. **Questions:**

1. What are the principle methods for accomplishing tactical objectives? What are the differences between a battle and an engagement and between a strike and an attack? What is the true meaning of the term “major operation”?

2. How does a planner or commander deduce an enemy center of gravity? Explain the linkage between the objective and center of gravity.

3. Is the center of gravity concept valid across the spectrum of conflict?

4. What is the relationship between Vego’s discussion of the COG and joint doctrine’s discussion of the COG?

5. What is the concept of culmination? What key factors cause culmination? How do you avoid culmination?

6. How are the concepts of Center of Gravity and culmination related?

**Leyte Case Study**

7. Was the Allied amphibious landing at Leyte aimed to accomplish an operational or a strategic objective?

8. What naval battles and engagements constitute what is popularly known as the “Battle of Leyte Gulf”? Were all battles or engagements planned, or are they seen in retrospect as being planned?

9. What were the critical strengths and weaknesses on the Japanese side in the operation? On the Allied side?

10. What were the operational centers of gravity for both the Japanese and Allied sides? Justify.

11. What were the indications of culmination on the Japanese side during the Battle for Leyte Gulf?

12. Of the major naval commanders in the Leyte Gulf battle, who demonstrated a deeper comprehension of the concept of center of gravity? Of culmination?

E. **Required Media:** (Review as necessary)

   “War in the Pacific” Lecture. *(CDE 8122M)*

   “The Battle for Leyte Gulf” Interactive. *(CDE 8091M)*

F. **Required Readings:**


G. Supplementary Readings:


THIS PAGE INTENTIONALLY BLANK
STUDY GUIDE

1.10
OPERATIONAL DESIGN: AN ANALYSIS OF THE BATTLE OF LEYTE GULF

No plan of operations extends with certainty beyond the first encounter with the enemy’s main strength. Only the layman sees in the course of a campaign a consistent execution of a preconceived and highly detailed original concept pursued consistently to the end.

—Field Marshal Helmuth von Moltke 1871

A. Focus:

This session serves as a synthesis of the previously discussed operational art concepts. Following identification of friendly and enemy objectives, analysis of operational factors and functions, review of the theater and its geometry, analysis and deconstruction of the operational center(s) of gravity, and coupled with an understanding of our own and the enemy’s operating environment, students (and planners) are ready to begin operational design. This session presents students with the general concept of an operational design for a major operation as part of a campaign, with the Battle of Leyte Gulf providing the context for analysis.

B. Objectives:

- Comprehend the various elements that can comprise an operational idea/scheme.
- Comprehend how to develop an operational design from an operational idea.
- Comprehend the relationship between operational and theater-strategic objectives and operational and theater-strategic centers of gravity.
- Comprehend the relationship between objectives, factors, functions, and COGs in an operational design.
- Using the Leyte Gulf case study, evaluate the performance of opposing commanders with respect to the operational designs developed by the opposing sides.

C. Background:

The basis of any operational plan is the operational design (the concept of operations) developed by the commander. The operational design is in turn based on the operational idea that is formed from the commander’s initial estimate of the situation—shaped by a rational analysis of the factors, functions, and theater geometry respective of a military objective. The main elements of a sound operational design include the desired end state; ultimate and intermediate objectives; forces required to achieve objectives; identification of critical factors and centers of gravity; initial positions and lines of operation and/or effort; directions/axes; and operational sustainment.

Warfare, by its nature, is a series of trade-offs. Commanders and staffs must continuously balance competing demands for scarce resources while still accomplishing assigned objectives and while avoiding culmination. Taking a commander’s idea and turning it into a sound operational design is not a simple job amenable to a few hours of discussion. It requires time, creativity, detailed
calculations, and above all, rational thinking on the part of the commander and the staff. Operational design synthesizes all the conclusions generated by an operational art approach and turns an exhaustive effort into a coherent one.

An operational design provides a sound framework for subsequent detailed planning that results in executable orders. It does not, however, remain immutable. As Clausewitz has written, “Friction is the only concept that more or less corresponds to the factors that distinguish real war from war on paper.” (Clausewitz, *On War*, Book I, Chapter 7) This means that the operational design should remain flexible to accommodate changes brought about by combat. Consider the Battle of Leyte Gulf—specifically, the Japanese SHO-1 Plan, which on paper, should never have had a chance; the Americans were simply too strong and too many things had to break the right way. The Allied Operation KING II, on paper, should have gone like clockwork. Yet, as you will discover in your analysis, real war consists of often hard-to-explain events and decisions. Up to now, you have used operational art concepts to analyze the rationale behind the opposing plans. Now you will walk-through the Operation itself and determine why it unfolded the way it did. The Japanese almost won, but ultimately were defeated; why? Was it because of questionable leader decisions, unaccounted for changes in the factors, or a poor operational design to begin with? Or perhaps the Americans were simply too strong, too talented, and had a better plan? This session will use the elements of operational design to assist your analysis as you mentally “replay” the Battle of Leyte Gulf.

D. **Questions:**

1. What are the general components of an operational design? How do commanders and staffs generate an understanding of a given situation well enough to conceive an operational design?

2. What are the purpose and elements of the operational idea (scheme)? How are the concepts of operational idea and operational design related?

3. How does the process of identifying “critical factors and center of gravity” aid in designing a major operation?

4. Explain the concepts of operational sequencing and synchronization. How are operational objectives, tasks, and the factor of time related?

5. How are intermediate objectives selected?

6. Explain the concept of branches and sequels.

**Leyte Case Study**

7. Identify and describe the major elements of the American operational design for the landing on and seizure of Leyte Island. Given the outcome, critique the operational design developed by the Americans. Based on what they knew at the time, what could they have done differently?

8. Identify and describe the major elements of the Japanese operational design for the defense of Leyte Island and the defeat of the U.S. invasion fleet. Given the outcome, critique the operational design developed by the Japanese. Based on what they knew at the time, what could they have done differently?
E. **Required Media:** (Review as necessary)
   “War in the Pacific” Lecture. **(CDE 8122M)**
   “The Battle for Leyte Gulf” Interactive. **(CDE 8091M)**

F. **Required Readings:**


G. **Supplementary Readings:**
STUDY GUIDE

1.11
OPERATIONAL LEADERSHIP

I am not afraid of an army of lions led by a sheep; I am afraid of an army of sheep led by a lion.

—Alexander the Great

A. Focus:
This session explores both the characteristics and the elements of military thinking and leadership at the operational level of command and assesses the impact of command decisions on the outcome of military operations. It also introduces students to the concepts of mission command and of the Chairman of the Joint Chiefs of Staff ‘Desired Leader Attributes (DLAs) for Joint Force 2020’.

B. Objectives:
• Comprehend the concepts of operational thinking and operational vision.
• Comprehend why operational commanders need an operational perspective and how this perspective is achieved.
• Comprehend the tenets of mission command and the Desired Leader Attributes for Joint Force 2020.
• Comprehend common military leadership characteristics and attributes of successful commanders at the operational level of command.
• Comprehend the impact of leadership style and command decisions at the operational level of war.
• Comprehend the importance of the human and non-quantifiable elements in the relationship between the commander and staff.

C. Background:
Leadership is one of the most critical aspects of warfare and has had an immeasurable effect on military operations throughout history. Commanders throughout history have shaped the course of operations, campaigns, and conflicts, leaving behind legacies for others to emulate or reject. At the operational level of war, effective commanders require a broad perspective of all the elements in their area of operations in order to understand how their actions may impact the achievement of strategic objectives. This broader operational-level perspective, which requires an understanding of operational art and the challenges of joint operations, renders decision-making processes more complex and challenging than at the tactical level.

In contrast to their subordinate counterparts, operational commanders must focus on military objectives beyond immediate tactical actions. Instead of concentrating on fighting battles and engagements, the operational commander plans and conducts major operations and campaigns.
In doing so, the operational commander must place trust in subordinate commanders and resist the temptation to become pre-occupied with the tactical level of war.

Successful operational commanders possess certain character traits and professional knowledge and experience that set them apart from their peers. Integrity, intellectual capacity, creativity, and boldness are just a few of the many traits that have allowed commanders to make critical decisions that have shaped the course of an operation, campaign, or even conflict. Operational thinking, or the ability to have a broad vision beyond the tactical perspective, can be developed through a synthesis of practical experience in war, exercises and maneuvers in peacetime, operational and strategic war gaming, professional education, and the systematic self-study of history, geography, international relations, economics, nationalism, society, and culture. The study of past wars, major operations, and campaigns in particular, can help a commander acquire an operational perspective. It is the practical application of operational thinking in planning, preparing, and executing a major operation or campaign that allows the commander to anticipate and foresee the effects of his actions on the enemy and then take timely and proper counteractions.

Operational vision is the commander’s ability to envision the military conditions that will exist after the mission is accomplished. In essence, operational vision is the combination of a commander’s personality traits, professional education, and experience that is applied to ambiguous and uncertain situations. Imagination, anticipation, intuition, coup d’œil (the innate ability to evaluate a situation quickly), and inner and historical perspective are critical leadership elements necessary to envision all phases of an operation or campaign in support of the political leadership’s decision to terminate hostilities, or to be able to operate effectively in the absence of perfect information. Without proper operational vision, the commander cannot translate the strategic objective assigned by the top political and military leadership into a military-strategic or theater-strategic objective.

On 3 April 2012, Chairman of the Joint Chiefs of Staff General Martin Dempsey released a White Paper entitled Mission Command, in which he outlined the requirement to “pursue, instill, and foster mission command” throughout the U.S. military. This concept, a notion based on decentralization of effort and speed of execution based on the commander’s intent, will also be discussed in seminar. The commander’s intent (one of the principal elements of the Commanders Estimate) is a key link between operational vision and the successful employment of mission command.

The Chairman issued a second memorandum on 28 June 2013 entitled Desired Leader Attributes for Joint Force 2020, in which he approved a set of Desired Leader Attributes (DLAs) “as guideposts for joint officer leader development” to aid in efforts to “institutionalize the essential knowledge, skills, attributes, and behaviors that define our profession.” How they relate to mission command and to the characteristics of operational commanders will be discussed in seminar.

D. Questions:

1. What are some of the differences between operational thinking and operational vision?
2. How does the study and application of operational art aid in developing a leader’s ability to “think operationally”?
3. Is mission command new? Explain the role and reciprocal nature of “trust” in the concept of mission command.

4. Has technology influenced the role of an operational commander?

5. What common characteristics and attributes do successful and unsuccessful operational commanders exhibit? Which, in your assessment, are the most important? How are they different than those of successful tactical level commanders?

6. The Buell reading highlights the friction that often develops between the operational staff and tactical commanders. What can be done to minimize this friction and thereby promote unity of effort?

Leyte Case Study

7. What were the most important operational and theater-strategic decisions made by Allied and Japanese commanders during planning, preparation, and execution of the Leyte operation?

8. Analyze the elements of the decision made by Admiral William F. Halsey to turn north on the evening of 24 October 1944. Did Halsey display proper perspective on the situation?

9. Did Admiral Toyoda perform well as the operational commander after the Allies landed on Leyte?

10. What set of leader attributes did operational leaders demonstrate during the War in the Pacific? How are they different from the DLAs for Joint Force 2020? How are they similar?

E. Required Media:

None.

F. Required Readings:

Buell, Thomas B. *The Quiet Warrior: A Biography of Admiral Raymond A. Spruance*. Annapolis, MD: Naval Institute Press, 1987. Read: Chapters 10 and 11. (Buell’s account of Spruance’s relationship with the staff he inherited from Halsey just prior to the Battle of Midway, in particular with the Chief of Staff, CAPT Miles Browning.) (CDE 8015)

Potter, E. B. *Nimitz*. Annapolis, MD: Naval Institute Press, 1976. Read: Chapters 6 and 7. (An account of the work done by the staff of CINCPACFLT during the weeks preceding the Battle of Midway as well as its role during the battle.) (NWC 1038)


G. Supplementary Readings:


Vermillion, John M. “The Pillars of Generalship.” Parameters 17, no. 2 (Summer 1987). (NWC 4192)
A senior officer said after the war that it had proved that 'the things we did on the basis of well-tried and proven formation worked, and the ad hoc arrangements turned out much less happily'. Joint-service liaison and staff work left much to be desired.

—Hastings and Jenkins, *The Battle for the Falklands*

### A. Focus:

This session serves as the final synthesis event for the components of operational art and operational design explained and discussed in preceding sessions and serves as a collective preparation for the upcoming **Summative Assessment** at the end of Block 1. The emphasis is placed on the decisions and actions of operational-level commanders on both sides of the conflict and how they could have been different with a better understanding and application of operational art and operational design.

### B. Objectives:

- Synthesize and apply the components of operational art learned to date.
- Analyze how commanders and staffs applied operational art in a historical case study.
- Comprehend the operational issues valid for employment of modern, multinational and joint forces.

### C. Background:

This case study starts with a video lecture (**CDE 8160M**) of the historical/strategic background to the conflict. There is also an interactive walk-through of the various components of the case drawing out elements from both sides involved. These two components will be conducted as homework. The third component involves student-led discussions of the assigned questions in seminar.

This session is designed to reinforce the aspects of operational art and design studied and discussed in preceding sessions. Historical examples provide an excellent opportunity for illustrating the complexities of planning, preparing, conducting, and sustaining major operations and campaigns, and the reasons why certain military actions either succeeded or failed. This particular case is used because it is rich with examples of the application, lack of application, misapplication, or inability to apply the concepts associated with operational art.

The goal of this session is to provide in-depth discussion and analysis of major aspects of the Falklands/Malvinas conflict of 1982 from an operational and theater-strategic perspective. As the major synthesis event for the operational art portion of the syllabus, the motivations, planning and actions of both sides in the conflict will be examined in some detail. Seminar professors will assign specific responsibilities for student discussion of the case.
D. Questions:

Using the below analytical framework and your understanding of operational art for both the United Kingdom and Argentina, be prepared to discuss the following:

Objectives
- Was there a theater strategic objective? If so, what was it/should it have been?
- What was/were each side’s operational objective(s)? What should it (they) have been?

Operational Factors - Space, Time, Force (based on the Operational Objective)
- How did each side balance the factors of space-time-force in trying to accomplish their operational objective(s)?
- How were deficiencies in a factor(s) offset by advantages in a function or vice-versa?

Operational Functions
- How effective was each side's C2 organization? How would you have organized the C2?
- How did each side’s plan for operational sustainment affect operational success? What could have been done to ameliorate any sustainment deficiencies?
- How did each side employ operational fires? How would you have employed operational fires?
- How effectively was operational intelligence employed by both sides?
- How did they employ operational protection? What could they have done better?
- How effectively did each side employ operational movement and maneuver (M2)? How would you have employed M2?
- How were the functions addressed above properly synchronized to accomplish the objective?

Levels of War and the Theater
- How did each side classify the theater of operations and did it support accomplishment of their operational objective? What constraints and restraints were placed on each side by strategic leadership?
- What was the impact of the MEZ/TEZ on operations?

Methods of Combat Force Employment
- Was this a campaign or major operation? Why does it matter? Justify your response.
- What would you have done differently from how each side used theater geometry (LOO, LOCs, bases, decisive points, etc.) to employ forces effectively for this operation?
- If you were a planner, how would you have organized the battle space?

Elements of Operational Warfare
- What were the critical factors?
- What were each side’s operational and strategic COGs and how did they affect each other?
- How did each side protect its operational COG?
- What did each side perceive as the enemy’s operational COG?
- Did each side employ a direct or indirect approach?
- What were the potential culminating points and were they reached?
• How well did each side phase and synchronize their operation/campaign? How would you have done it?

Operational Planning
• How well did each side use the concepts of operational design (operational scheme) in developing their plan?
• How would you have designed the plan now, understanding the strategic/operational objectives?

Operational Leadership
• How did the operational leaders exhibit the important tenets of operational leadership and application of "operational thinking/vision"? How did this affect mission accomplishment for each side?

Operational Art & Design Synthesis Question
• Based on your analysis above, to what extent did each side demonstrate an understanding of operational art and operational design?

E. Required Media:
“Falklands/Malvinas Conflict of 1982” Lecture (2019). (CDE 8160M)
“The Falklands/Malvinas War” Interactive.
“Introduction and the Strategic Setting.” (CDE 8110Ma)
“The Road to War.” (CDE 8110Mb)
“The War at Sea.” (CDE 8110Mc)
“The War Ashore.” (CDE 8110Md)
“Conclusion.” (CDE 8110Me)

F. Required Readings:

G. Supplementary Readings:


A. **Focus:**
This writing requirement is intended to measure a student’s mastery of operational art.

B. **Objectives:**
- Demonstrate the ability to analyze operational situations in the contemporary security environment using operational art and joint doctrine.
- Demonstrate the ability to apply critical and creative thinking to operational problems.
- Demonstrate the ability to apply clear and precise written communication.
- Demonstrate comprehension of operational leadership concepts & challenges.

C. **Background:**
As operational art permeates virtually all other sessions that follow, it is reasonable to expect that students will carry forward a basic level of proficiency in analyzing and applying OPART principles and concepts. This summative assessment is designed to determine the level of mastery among the members of the seminar and to reveal to the students those concepts that may need reinforcing at the next class meeting (the “retrospective”).

Students will be expected to prepare complete responses to questions and problems presented by the faculty. The assignment will not require students to recall mundane, specific facts, but rather to integrate and apply major principles, ideas, and concepts covered in the block.

The basis for evaluation will be:
- Complete, logical, and well-supported solutions to each question or problem presented.
- Application of appropriate course concepts to the specific question chosen.
- Clear and concise articulation of ideas.

D. **Questions:**
Assignment questions and instructions will be provided by the FSP/NPS professors.

E. **Required Media:**
Review as necessary.

F. **Required Readings:**
Review as necessary. This assignment is an individual effort; collaboration is NOT permitted.

G. **Supplementary Readings:**
None.
A. **Focus:**

The focus of Block 2 is upon the proper employment of naval capabilities at the “high-tactical” level of war and joint capabilities at the operational level of war.

B. **Description:**

The first part of Block 2 explores the theory, doctrine and practical application of naval warfare at the high-tactical and operational levels of employment. The block then investigates the warfighting organizational options, capabilities, doctrine, and planning considerations when employing all the services and SOF in a joint/multinational effort at the operational level of war. The remaining sessions cover areas affiliated with some of the operational functions mentioned in Block 1—intelligence support, information operations (IO) and cyber warfare, and joint operational logistics—culminating in an end-of-block exercise that ties together these concepts.

It is expected that students will come away with a comprehension of the capabilities each service possesses as well as the proper organization and employment (selection, assignment, and tasking) of forces in joint and multinational environments to accomplish assigned tasks. The emphasis throughout this block is on the theoretical foundations of naval/joint operational art and their employment in naval/joint/multinational warfare, which will assist the student in considering how best to deploy and employ forces and functional support systems to accomplish assigned objectives. Students will have the opportunity to apply knowledge gained in this block in detail during Blocks 4 and 5.
STUDY GUIDE

2.1
NAVAL WARFARE THEORY

Knowledge of naval matters is an art as well as any other and not to be attended to at idle times and on the by . . .

—Pericles, 460 BC

A. Focus:

The foci of this session are on explaining the nature and character of naval warfare, the differences between wars at sea and those on land, and warfare conducted on the open ocean and war in the littorals. It will also present in broad terms the principal objectives of naval warfare, which we will discuss in greater detail in subsequent sessions.

B. Objectives:

- Comprehend the nature and character of naval warfare, including technological impacts.
- Comprehend in broad terms why nations build and maintain navies.
- Comprehend the mutual relationship between war on land and at sea.
- Comprehend the main components of the maritime domain and where operationally significant.

C. Background:

While the ultimate purpose of warfare is determined on land where people live and politics prevail, the immediate object of any navy is to disable an opposing navy in order to create the necessary conditions to achieve the national objectives on land. This part of the session will explore the multiple aspects and elements of the maritime domain to provide the planner with a theoretical, historical and statistical framework for understanding sea power and maritime influence. While World War II vaulted the U.S. Navy to global pre-eminence, the Navy has not engaged in fleet-on-fleet action since 1945, and the last enemy ship-on-ship tactical action occurred in 1988. When “practice” is limited, the Navy must lean on theory in order to rationalize how it employs forces today and in the future. This is a challenge. This session provides the theoretical rationale behind the essential functions navies provide, the missions that navies accomplish, and the national interests that those missions protect and support. Theoretical rationale includes understanding the objectives of naval warfare, the nature and characteristics of naval warfare, its unique relationship to technology, and its relationship to warfare on land and in the air.

The character of naval warfare in general is primarily determined by the prevailing international relations, domestic politics, economic, social, demographic, religious, legal, and other conditions in a certain era. War at sea is also influenced to a much greater extent than war on land by technological advances. Finally, and unique among the services, the law of the sea (covered in Block 3) also greatly affects the character of naval warfare.
Beginning by gaining a sound understanding of naval warfare principles from Vego (classic) and Till (post-modern), students will then use these in the analysis of the U.S. Navy’s capstone operating document: Cooperative Strategy 21R (CS-21R). The Navy did not develop and produce this document in a vacuum; rather, students should see the theoretical principles that underpin the maritime services’ cooperative strategy. In the end, students should draw conclusions on what navies do (in theory) and why they do it (in theory).

D. Questions:
1. Why, in general terms, do nations build, employ, and maintain navies?
2. What are the critical elements and key components of the maritime domain (interface between land and sea, ocean transit routes, political/legal, military, social, economic and environmental) and how do they differ from those in the land and air domains?
3. Till posits that there are the four historic attributes of the sea (as a resource, a medium for transportation and exchange, a medium for information and the spread of ideas, and a medium for dominion). How must these attributes be considered in planning and executing maritime operations?
4. What are the principal objectives in naval warfare?
5. Considering the objectives of naval warfare, why is it important to consider the elements of nature and character of warfare at sea? Describe the role of the human factor in naval warfare.
6. How do new technologies affect the theory and practice of war at sea?
7. Describe the mutual relationship between war on land and at sea.
8. What are the main differences in conducting a war on the open ocean and in the littorals?

E. Required Media:
“The Maritime Domain” Lecture. (CDE 8123M)

F. Required Readings:
G. **Supplementary Readings:**


STUDY GUIDE

2.2
OBJECTIVES OF NAVAL WARFARE

[My operations] must depend absolutely upon the naval force which is employed in these sea . . .
No land force can act decisively unless accompanied by a maritime superiority.

—General George Washington to the Marquis de Lafayette, 15 November 1781

A. Focus:
This session considers the objectives of naval warfare—both on the open ocean and in the littorals—at the operational level of war. Sea control is the necessary condition that allows naval forces freedom of action to achieve military objectives in the face of an opposing force. This session will examine sea control and sea denial as theoretical constructs, as well as the methods used by the stronger and weaker sides to obtain or deny sea control in a maritime theater.

B. Objectives:
- Comprehend the theories of sea control and sea denial, and differentiate between the various degrees of sea control.
- Analyze the theoretical and practical implications of sea control and sea denial with respect to operational factors and functions.
- Comprehend the main methods of obtaining, maintaining, and exploiting sea control and the conditions for denying and disputing sea control.
- Comprehend the role and importance of other services in sea control and sea denial.
- Comprehend distinctions between denying control on the open ocean and in the littorals.

C. Background:
The political-strategic objectives determine the part to be played by each service in war; however, the achievement of strategic objectives normally requires employment of all the components of a country’s armed forces and often civilian levers of power too. Therefore, war at sea should be considered not in isolation from, but as intrinsically related to, war on land and in the air. Wars are rarely won by the efforts of a single service and normally require close inter-service cooperation. In particular, the highest degree of cooperation among the services is necessary in conducting war at sea.

Historically, the principal objective of a fleet was to obtain and maintain what was called command of the sea (or maritime supremacy in modern joint terms). The meaning of this term has undergone significant changes owing to the advent of submarines, aircraft and guided missiles. The term used today, sea control (or sea superiority in modern joint terms), more accurately conveys the true state of affairs in a war at sea. It requires some level of control in all three domains (air, surface, and sub-surface) to assure one’s own unfettered use of power, or to deny such use to a strong and resourceful opponent. Sea control is the ability of one’s
fleet to operate with a high degree of freedom in a sea or ocean area for a limited period of time. The objective for a weaker opponent at sea would normally be that of sea denial; that is, to challenge the unfettered access of a more powerful opponent, increasing their risk in operating in one or all of the domains.

Sea control, and the original concept of command of the sea, has been a fundamental maritime objective for hundreds of years. By maintaining control of strategically important areas of a maritime theater, the stronger fleet could secure the uninterrupted flow of friendly shipping, cut off enemy maritime trade, and project power onto the enemy shore. The real value of controlling the sea has not been the actual possession of a particular body of water but its subsequent exploitation toward the achievement of other objectives. The stronger maritime force leverages operational factors at sea to achieve its objectives while preventing the weaker maritime force from doing the same. Sea control can be expressed in various degrees—such as general, local, and temporary—that are relative to the operational factors of time, space, and force. As such, it is often incomplete and imperfect.

Sea control, considered the essence of sea power, is often a prerequisite for joint operations. Historically, sea control has been gained through various methods: destroying the enemy fleet at sea, destroying the enemy fleet in ports or bases, attrition, blockades, offensive mining, seizing choke points, blockading choke points, and seizing enemy bases. In the past, the most common method used to destroy the enemy fleet was by seeking a decisive battle at sea. After obtaining sea control, maritime forces consolidate operational or strategic success by maintaining and then exploiting sea control by projecting power ashore, destroying enemy coastal defenses and facilities, and degrading the enemy’s military, political, and economic sources of power.

Sea control can only be understood in the context of an armed struggle at sea. A blue-water navy does not obtain sea control through forward presence because in peacetime, any navy, regardless of its size or combat power, has almost unlimited access to any sea or ocean area. Forward naval presence is generally conducted with full respect of the territorial waters of other countries and in accordance with international treaties and conventions. In any conflict, however, the need to obtain at least local sea control is paramount to successful joint operations.

In general, a strategic objective in a particular maritime theater of operations could be offensive, defensive, or a combination of these two and will usually enable or affect operations ashore. Whether a war at sea would be conducted primarily offensively or defensively would depend, among other things, on a country’s geostrategic position, the initial balance of strength between contending forces, and the overall war objectives. In many cases, whether a fleet is considered “the stronger side” or “the weaker side” is dependent on operational factors extant in a given region or area of operations. In other words, a nation with a large and otherwise very capable navy might be considered the weaker side in a particular ocean area owing to the allocation of forces, the proximity to enemy held territory that enables the application of enemy land-based forces, or aspects of factor space that restrict the employment of the very capable navy’s forces.

A weaker fleet is usually not able to go on the offensive but is forced to stay on a strategic defensive until the balance of forces shifts in its favor. Consequently, sea denial is normally the operational objective, in the maritime domain, for the weaker side during a war at sea. A
weaker side may also try to dispute control in certain sea or ocean areas. Because no navy has unlimited resources, and because a belligerent’s near-term objectives may not require significant use of the sea in a particular area, even a strong navy might opt for or be forced to conduct sea denial. In the former case, once conflict in the primary theater has abated, sufficient forces may be brought into the secondary theater to enable a more offensive posture. If, at this point, the stronger navy has been sufficiently weakened or the weaker side has been sufficiently fortified, the objective for what had been the relatively weaker fleet might shift to obtaining and maintaining sea control in this localized part of the theater.

D. Questions:

1. What is sea control and why does one obtain it? Can sea control exist in peacetime?

2. How are the terms “sea control” and “sea denial” related? How do these two, modern terms relate to the historical “Command of the Seas”?

3. What is meant by the term “Choke Point Control”? How does this relate to Sea Control?

4. How can other services (air and ground forces) be employed in support of naval air to obtain, maintain and exercise control of the air/surface or deny that control?

5. How do the objectives of naval warfare relate to the overall objectives of the conflict itself?

E. Required Media:

None.

F. Required Readings:


________. *Objectives of Naval Warfare*. Newport, RI: Naval War College, Joint Military Operations Department, June 2015. *(NWC 1102) (Government)*

________. *Obtaining and Maintaining Sea Control*. Newport, RI: Naval War College, Joint Military Operations Department, June 2015. Read: 1-5; scan the rest. *(NWC 1108) (Government)*

________. *Exercising Sea Control*. Newport, RI: Naval War College, Joint Military Operations Department, June 2015. Read: 1-2; scan the rest. *(NWC 1131) (Government)*
Disputing Sea Control. Newport, RI: Naval War College, Joint Military Operations Department, June 2015. Read: 1-2; scan the rest. (NWC 1139) (Government)

G. Supplementary Readings:

None.
A. Focus:

The principal purpose of this session is to build student understanding of the key points about naval tactics: How they differ from land tactics and their relationship with maritime strategy. This session is NOT designed to make the students tactical experts, nor should it amount to an opportunity for the naval seminar members to dominate the class. What it should do however is to set the stage for all the subsequent sessions on the naval combat arms.

B. Objectives:

- Comprehend the general capabilities of naval forces and the fundamental principles for tactical employment of naval forces.
- Comprehend the relationship between naval tactics and maritime strategy.
- Comprehend the mutual relationship between the development of naval technology and the evolution of naval tactics.

C. Background:

“The young officer deals in tactics.” So begins the forward to Captain Hughes’ book on Fleet Tactics and Coastal Combat, 2nd edition. While senior officers conceive and draw large arrows on white boards and charts, tactical officers must bring combat power to bear on the enemy at great risk to the crew, ship, and mission. As the October 2000 terrorist attack on USS Cole, the 1987 missile attack on USS Stark, and the 1982 sinking of Argentina’s ARA Belgrano demonstrated, tactical failure at sea has a profound impact on operations, strategy, and even the national mood. While naval tactics are fundamentally different from the tactics on land or in the air, they remain grounded in principles that affect the development and evolution of tactics in general as well as in more specific ways. Understanding these “cornerstones” (as Hughes describes them) allows naval officers to think about how best to employ naval tactical actions in order to accomplish tactical objectives—and the risk to ship and mission that such employment entails. As an operational commander/planner, understanding the fundamentals of employing naval tactical actions is critical to developing rational estimates of the situation, developing effective courses of action, and making sound operational and tactical decisions during the execution phase. As Hughes writes, “Our ablest naval officers were tacticians who knew their weapon systems.”
So what are naval tactics? In generic terms, naval tactics can be defined as the *theory and practice of planning and employing naval tactical actions aimed to accomplish a tactical objective*. The theory of naval tactics can further be arbitrarily grouped into two categories: tactics of naval forces and general naval tactics. *Tactics of naval forces* deal with the tactical employment of naval weapons/sensors/equipment, individual naval platforms and their groups, naval combat arms, and combined naval combat arms. In contrast, *general naval tactics* explain and analyze mutual relationships and patterns of both tangible and intangible elements of tactics common to tactics of platforms and forces as a whole. This session and the following sessions on the naval warfare disciplines will deal primarily with *tactics of naval forces*. Later in the course, you will explore *general naval tactics* as a part of planning for a joint maritime operation.

Naval tactical actions are conducted with and without the use of weapons. They can be planned or unplanned. They can be conducted at any time and regardless of the ratio of forces in a given theater. They are conducted in a sea/ocean area varying in size from a combat zone/sector to a maritime area of operations. In generic terms, the main methods of tactical actions with the use of weapons are attacks, strikes, raids, engagements, and battles. These terms are not necessarily identical to those used in the employment of ground forces. As Hughes describes, firepower (fires), scouting (ISR), and Command & Control (C2) are functioning tactical elements of naval forces which are opposed by the processes and elements of counterforce, anti-scouts (counter-ISR), and C2 countermeasure systems. The naval tactician employs sensors to locate the enemy (while interfering with the enemy’s scouting) and makes command decisions that transform scouting and firepower into a delivered force (while interfering with the enemy’s C2). The successful delivery of firepower is at the center of naval tactical action.

D. **Questions:**

1. Why is understanding naval tactics important to the naval operational commander?
2. Describe Hughes’ six cornerstones of naval tactics. Which seems most relevant to modern navies today? Which seems least relevant?
3. Describe the relationship between naval tactics and maritime strategy.
4. Why is there a mutual relationship between emerging technologies and naval tactics?
5. What is a "naval attack?" How are naval tactical actions different from tactical actions on land or in the air?

E. **Required Media:**

“Naval Way of War” Lecture. *(CDE 8037M)*

F. **Required Readings:**


G. Supplementary Readings:


A senior officer said after the war that it had proved that “the things we did on the basis of well-tried and proven formations worked, and the ad-hoc arrangements turned out much less happily.”

— Hastings and Jenkins, The Battle for the Falklands

A. Focus:

Students will be presented a tactical problem in the form of a brief scenario and using the information learned in the previous sessions and homework on surface, submarine, and naval air power, will aggregate (task organize) and deploy their forces based on the objective, the friendly and threat capabilities, and the environment. Professors will serve as the opposing force. The purpose of this simple exercise is to allow students to demonstrate an understanding of the capabilities of various naval platforms, weapons, and sensors.

B. Objectives:

- Apply critical and creative thinking skills and knowledge of naval power in task organizing a naval force based on objective, threat, environment, and capabilities.
- Apply the broad capabilities of the United States Navy’s principal weapons, platforms, and sensors.
- Comprehend the contrasting influence of the physical environment on the combat employment of surface forces 1) on the open ocean and 2) in the littorals.
- Comprehend the main methods in the employment of naval forces of obtaining / maintaining control of the surface/subsurface and air environments.

C. Background:

Tabletop exercises, sand table exercises, and all manner of educational tools have been in use since the ancient Indians (6th century AD) devised the game of chaturanga—modern day chess—to teach military strategy and maneuver to their officers. From a cursory scan of the readings, we discover that map exercises, staff exercises or Command Post Exercises (CPX), training trips, tactical talks, and sand-table exercises are the more common form of these ‘war games’. The purpose of this session is to allow students to tackle a real-world problem using a fictional scenario.

You are expected to concisely present your decision(s) and to argue (support) them based on what we know of capabilities of the various platforms. Leveraging the very basic information discovered thus far, students will apply critical thought and rudimentary problem solving skills to first disaggregate the assigned forces and then, based on objectives, threat, capabilities, and the environment, aggregate their forces to maximize likelihood of tactical success.
This is not a war fighting exercise, but merely one in a series of exercises that will expand in scope, complexity, and ambiguity—all intended to sharpen your critical thinking and decision making skills. It is, in the language of critical thinking, a logic exercise in which students are presented an opportunity to demonstrate understanding of materials encountered thus far. Your professor will provide input and feedback on the various decisions considered. Students are forewarned, however, that future exercises are designed to increase in complexity, depth, and ambiguity.

D. Questions:
1. Describe the utility of war gaming as a training and educational tool.
2. Develop, propose, and support your potential solution(s) to the given problem regarding the aggregation of naval power.

E. Required Media:
In preparation for this session, students are to work through the six videos below, covering the domains of naval warfare, during the week prior. Armed with this knowledge and the information contained within the three required readings, students should familiarize themselves with how naval forces might respond and position themselves in the given scenario. Come to class ready to justify your thinking. The specific references for each warfare area are as follows:

- Joint and Maritime Command and Control (CDE 8038Me)
- Surface Warfare (CDE 8038Mc)
- Strike Warfare (CDE 8038Mf)
- Amphibious Warfare (CDE 8038Md)
- Submarine and Anti-Submarine Warfare (CDE 8038Ma)
- Mine Warfare (CDE 8038Mb)

F. Required Readings:


G. Supplementary Readings:

STUDY GUIDE

2.5
NAVAL COMBINED ARMS & JOINT WARFARE – Part I
AIR, AIR & MISSILE DEFENSE AND AMPHIBIOUS WARFARE

If you want to go anywhere in modern war, in the air, on the sea, on the land, you must have command of the air.

— Fleet Admiral William F. “Bull” Halsey, USN
Testimony to Congress following WW II

A. Focus:

The focus of this first of two sessions is delve a little deeper into the first three of the six main naval warfare disciplines: Air Warfare (AW); Air and Missile Defense (AMD), which some may know as Anti-Air Warfare (AAW); and Amphibious Warfare (AMW). The session will be equally divided amongst the three. In each case, the aim is to describe and to analyze the tactical fundamentals of employing naval forces in each of the named disciplines. In Air Warfare, it is important to understand the differences in employing naval air assets as opposed to land-based air assets. In AMD, it is important to appreciate that the Carrier Air Wing (CVW) is just one of several tools available, the others being the other AMD-capable surface ships and sister service AMD capabilities. In Amphibious Warfare, the whole thing is an excellent example of naval combined arms, as well as being inherently a joint effort.

B. Objectives:

• Comprehend the tactical capabilities and limitations of employing naval aviation.
• Comprehend the main methods of tactically employing naval aviation.
• Comprehend the dominant principles, primary objectives and tactical methods of employing naval assets in AMD.
• Comprehend how AMD contributes to Sea Control.
• Comprehend the fundamental concepts and the unique requirements for employing amphibious forces in support of operational objectives.
• Comprehend the potential effects that amphibious forces can generate on an enemy as well as their vulnerabilities during landing operations.
• Comprehend the influence of the physical environment on each of these three disciplines.

C. Background:

Naval Air Warfare (AW)

Naval air greatly extends the range and increases the speed at which a commander may either attack enemy forces in the air, land, sea or undersea domains or defend his own forces in a maritime environment. Naval air also has the capacity to significantly enhance situational
awareness in the maritime environment by enabling the commander to dispatch sensors well beyond surface sensor ranges.

Naval air, while a significant aid to warfare in the maritime environment, due to its speed, range and lethality, has certain challenges associated with its efficacy. Projecting naval air-power generally requires air superiority in the operational environment in which the Fleet is operating such that an opposing air force can be detected and neutralized before it becomes a threat to the Fleet. Sustainment and persistence can become challenging if circumstances require continuous coverage for extended tactical actions if only one aircraft carrier is assigned to a task force. Meteorological conditions can also threaten effective naval air operations (for example, heavy sea states that do not permit launch and recovery of aircraft). Aircrew and flight deck personnel fatigue as well as aircraft reliability can also reduce sustainment and persistence with only one aircraft carrier assigned to a specific area of operation.

Naval air assets are relatively cheap, fast and effective with respect to achieving positive identification of threats with multiple sensors for weapons employment, but if a commander desires to maintain a continuous air presence in the maritime environment, the costs associated with putting naval air strike assets on station for continuous coverage could be prodigious and could require multiple carriers and the associated additional logistical support in the form of fuel, parts, etc. For these reasons, it is important for naval air to be viewed as an integral part of the overall naval force and not in isolation.

**Air and Missile Defense (AMD)**

Modern navies must be prepared to defend themselves from a mix of sea- and shore-based anti-ship cruise missiles, anti-ship ballistic missiles, fighter/attack aircraft, electronic/cyber-attack, and armed unmanned aerial vehicles. The proliferation and lethality of modern naval weapons pose a growing threat to maritime operations. Navy AMD is the concept that is designed to protect naval forces from air attack, in order to allow them the freedom of action to conduct other naval warfighting operations. Navy AMD seeks to gain and maintain air superiority within the maritime environment, both to defend friendly forces and to retain the capability to conduct offensive strikes, or *power projection*. High value platforms that project power, such as the aircraft carrier, are likely to be the main targets of enemy air and missile attacks.

The naval commander must balance the inherent tension between allocating assets to protect these platforms while retaining enough forces to conduct strikes against enemy surface or shore targets. Furthermore, the strike group commander may have additional requirements to protect other forces, as in detached surface forces or maritime shipping, further complicating the balance between offense and defense. Given these challenges, the Navy’s AMD concept applies a combined arms warfare approach that integrates embarked naval aviation and surface platforms to provide both defense-in-depth (layered defense) and mutual support, increasing survivability in a complex, dynamic and contested maritime environment.

**Amphibious Warfare (AMW)**

The theoretical underpinnings of amphibious warfare have been established through trial and error over thousands of years. The concept is simple, but like many simple military concepts, it has frequently proven difficult to realize in practice. At its foundation, command of the sea (sea control) is the critical enabler; it allows the use of the sea as a means of transportation, in this case for military purposes. In a little more depth, a very high level of at least localized sea
control and air superiority is a prerequisite for even attempting an amphibious operation. Napoleon’s and Hitler’s intended invasions of England were called off because of the inability to obtain localized sea control for amphibious operations. Even with control of the sea, however, the difficulties in executing a successful amphibious operation are considerable, and must be weighed against potential results.

Amphibious operations include the assault, withdrawal, raid, demonstration, and other types of operations (humanitarian assistance and noncombatant evacuation operations, for example). Regardless of the type of operations, one theory always holds true; establish local sea control and air superiority, designate a landing beach or beaches, develop a ship-to-shore movement plan, develop an amphibious fires plan, develop an afloat sustainment plan, and execute. Once the landing force is on shore, and command and control has been phased ashore to the Landing Force Commander, the amphibious operation is terminated and a land operation or campaign begins.

D. Questions:

**Air Warfare (AW)**

1. What are the tactical advantages and disadvantages in the combat employment of one’s naval air forces?
2. Discuss how the effects of the physical environment affect the employment of one’s naval aircraft on the open ocean and the littorals, such as enclosed / semi-enclosed seas.
3. How can other services (air forces and ground forces) support naval air in naval tactical actions?
4. Manazir argues that carriers should remain the dominant naval arm for naval strike operations and naval tactical actions. Do you agree with his conclusions? Why or why not?
5. Discuss how the increasing prevalence of UAVs may affect naval air operations.

**Air & Missile Defense (AMD)**

6. What is AMD and how does it contribute to the struggle for sea control?
7. Describe the difference between Offensive Counter-Air (OCA) and Defensive Counter-Air (DCA).

**Amphibious Warfare (AMW)**

8. What are the principle requirements to successfully conduct amphibious warfare?
9. Describe the types of operational effects that can be generated by amphibious forces.
10. What are the differences between conducting amphibious landings on the beaches fronting the open ocean or a peripheral sea and an enclosed or semi-enclosed sea?
11. What are the implications of the contemporary environment for amphibious warfare and, on a grander scale, expeditionary warfare?
E. **Required Media:**
   None.

F. **Required Readings:**
   Manazir, Michael C. RADM. “Responsive and Relevant.” *U.S. Naval Institute Proceedings* 140, no. 2 (February 2014). *(NWC 4155) [Air Warfare] (E-Reserve)*

G. **Supplementary Readings:**
STUDY GUIDE

2.6
NAVAL COMBINED ARMS & JOINT WARFARE – Part II
SUBMARINE, ANTI-SUBMARINE AND ANTI-SURFACE WARFARE

Sea Fighting is pure common sense. The first of all its necessities is SPEED, so as to be able to fight WHEN you like, WHERE you like and HOW you like!

—Admiral Sir John “Jackie” Fisher, 1904

Tenacity, Dick. Stay with the bastard till he’s on the bottom.

—CDR Mush Morton, USN
Commanding Officer, USS Wahoo (SS-238)

A. Focus:

The focus of this second of two sessions is to discuss and analyze the three remaining main naval warfare disciplines, namely Submarine, Anti-Submarine (ASW) and Anti-Surface Warfare (ASUW). The session will be divided equally amongst the three. In each case the aim is to describe and analyze the tactical fundamentals of employing naval forces in each of the named disciplines. Traditionally, submarines have operated alone, relying on individual stealth for both their protection and operational effectiveness as offensive weapons. Integrating them with the fleet has proved problematic, with the need to communicate having a very detrimental effect on their freedom of action. As a result, this has traditionally been resisted by the submarine force, something that has become imbued in their “sub-culture” as a result. In the ASW portion of the session the focus will be on the objectives and methods of employing naval/joint ASW forces in the struggle for sea control or in sea denial operations. Finally, in the ASUW portion of the session we will explore the predominant principles of surface warfare, and how various air, surface, and subsurface platforms network in real-time and space to find, track, and attack enemy surface targets.

B. Objectives:

- Comprehend the tactical capabilities, limitations and main methods of employing submarines.
- Comprehend the influence of the physical environment on the employment of submarines.
- Comprehend the dominant principles of anti-submarine warfare and the primary objectives and methods of employing ASW forces.
- Comprehend how ASW forces contribute to sea control/sea denial operations.
- Comprehend the dominant principles of naval warfare particular to surface warfare/anti-surface warfare.
- Comprehend the primary objectives and tactical methods of employment of multiple combat arms in finding, tracking, and attacking enemy surface forces.
C. **Background:**

**Submarine Warfare**

Technological innovations have continued to expand submarine roles and missions. At the start of the First World War, the senior officers of all the Great Powers were unsure as to the role of the submarine. Submarines were originally employed for coastal defense as a form of mobile mine and later as an arm of the battle fleet, operating in support of the main line of battle. This proved disastrous, with the low-lying submarines being difficult to see in the heat of battle, resulting in a number of accidents in which they were literally run over by the speeding battleships. Later still in 1917, German U-boats adopted unrestricted warfare, sinking thousands of tons of merchant shipping. The British effectively countered this tactic with convoys. During World War II, German U-boats employed Wolfpack tactics that concentrated their limited firepower, permitting simultaneous attacks that often overwhelmed convoy escorts. Even after one hundred years of submarine operations, there remains some ambiguity as to the best employment for submarines.

Today submarines provide commanders a wide and diverse set of capabilities that go far beyond the use of stealth to sink surface ships with torpedoes. Submarines provide unique (and often unmatched) capabilities in intelligence, surveillance, and reconnaissance (ISR); naval special warfare; strike operations; employment of mines; and other tactical actions such as maritime interdiction and counter narcotics. At the national level, submarines provide a critical strategic deterrence capability. Taken together, the inherent stealth and independence associated with the employment of submarines continues to challenge an enemy and provide a unique ability to contest the subsurface and surface domains.

**Anti-Submarine Warfare (ASW)**

Large areas, complex and variable environments, a very perishable skill set amongst sonar operators, an immense demand on time and resources, and an increased emphasis on operations in the littorals, all combine to make ASW one of the most difficult problems in naval warfare. At the operational level of war, maritime commanders need to consider various courses of action to degrade the enemy submarine threat. To defeat the submarine alongside or in training areas, on the transit routes to their patrol areas, or while on station, all will require different methods and decisions for the joint force commander. Those who focus on only one of these methods, or solely on the use of maritime forces to degrade enemy capabilities, limit the effectiveness of their joint effort. Land based air, ground, and cyber forces all play an important role in defeating enemy submarines.

Exercising control over the subsurface allows the exploitation of the maritime operating area by other forces to accomplish objectives on land. Vital maritime trade is able to operate freely, amphibious or other military traffic can travel to their operating areas or landing sites, and nuclear deterrent patrols can be protected in bastions. Denying that same capability to the enemy allows one force to prosecute the conflict more effectively, maintaining the initiative in the maritime, and subsequently the terrestrial, realm. There are no panaceas in ASW, but focusing on the required operational objectives and using all elements of the joint force to address the ASW problem provide a greater opportunity to achieve success.
**Anti-Surface Warfare (ASUW)**

Surface warfare (traditionally anti-surface warfare (ASUW)) is conducted on the surface of the oceans. It is the oldest form of naval warfare and is primarily conducted against surface targets. From ancient times until the advent of flight, this meant that surface forces sought each other out and fought for command of the sea. Over the last 100 years the scope of this has changed. Aircraft and submarine forces have provided additional means with which to attack and destroy surface targets. Today, there are a wide variety of weapon and platform types: traditional guns and torpedoes, ship- and air-launched cruise missiles, guided and unguided aircraft-deployed ordinance, and even directed energy weapons. The missile in particular has had the most effect on the evolution of surface force tactical employment – both in terms of ship survivability as well as in extending the ranges of tactical engagement. Just as airpower signaled the end of the battleship’s dominance, the anti-ship cruise missile (ASCM) has posed a similar paradigm shift for surface forces. Surface warfare is no longer the sole province of surface warships.

Yet, surface warfare continues to play a pivotal role in the on-going struggle for sea control. As maritime access potentially becomes more threatened with increased anti-access/area-denial capabilities, navies can no longer count on the luxury of launching power projection strikes from maritime areas of safety. Moving closer places strike forces within range of shore-based air and missile forces, as well as littoral ships equipped with anti-ship missiles. Surface warfare is required to obtain control of seas by destroying or mitigating surface targets in order to create areas from which to project power. This is not done with surface forces only, and relies on the integrated efforts of undersea, air, and cyber forces to attack effectively first, and avoid the enemy’s counterforce. In this session, we will explore the predominant principles of surface warfare, and how various air, surface, and subsurface platforms network in real-time and space to find, track, and attack enemy surface targets.

**D. Questions:**

**Submarine Warfare**

1. What are the traditional capabilities of the various classes of submarines and the sensors and weapons that they employ?

2. How has the employment of the submarine changed over the last 100 years?

3. Describe the tactical challenges of conducting submarine operations in various operating environments.

**Anti-Submarine Warfare (ASW)**

4. Why is ASW so challenging at the operational level of war?

5. What are the dominant principles of ASW? Explain the advantages and limitations of Passive and Active measures.

6. Explain why successful ASW requires a naval combined arms approach, as well as the cooperation of joint forces.

7. Historically, ASW has been labor and time intensive. Can the improvements in information technology transform “Awfully Slow Warfare” into a faster method to defeat enemy undersea threats?
Anti-Surface Warfare (ASUW)

8. What are the dominant principles of surface warfare/anti-surface warfare?

9. How does surface warfare/anti-surface warfare contribute to sea control?

10. Explain why surface warfare/anti-surface warfare has evolved over time to require a combined arms approach.

11. Explain the unique challenges of conducting surface warfare/anti-surface warfare in littoral areas.

E. Required Media:

None.

F. Required Readings:


Toti, William J. “The Hunt for Full-Spectrum ASW.” *U.S. Naval Institute Proceedings* 140, no. 6 (June 2014): 38-43. *(NWC 3219) (E-Reserve) [ASW]*


G. Supplementary Readings:


Vego, Milan. *Fundamentals of Surface Warfare (ASW)*. Newport, RI: Naval War College, Joint Military Operations Department, June 2016. *(NWC 1164A) [ASUW]*
STUDY GUIDE

2.7
OPERATIONAL DESIGN: ANALYSIS OF THE NAVAL BATTLES OF GUADALCANAL

My God, what are we going to do about this?

—Vice Admiral Robert L Ghormley
Nouméa, September 1942

A. **Focus:**

This session is a natural continuation of our earlier study of operational design, but this time with the benefit of a deeper understanding of naval combined arms warfare. It is designed to assist students in comprehending how both the U.S. and Japanese commanders attempted to leverage combined arms in their struggle for sea control during the historical naval battles for Guadalcanal. The exercise uses selected combat actions from the five nighttime, surface naval battles around Guadalcanal (the Battle of Savo Island, The Battle of Cape Esperance, the First Naval Battle of Guadalcanal, the Second Naval Battle of Guadalcanal, and the Battle of Tassafaronga Point). The battles’ operating conditions, which are perfectly exportable to the modern operating environment, should serve as an intellectual line of departure in developing future operational ideas for naval combat.

B. **Objectives:**

- Comprehend how the key elements of operational design apply to the design of major naval operations.
- Using the Guadalcanal case study, analyze and critique the Japanese and U.S. commanders’ operational designs and their respective use of combined arms.
- Comprehend the organization of naval forces based on threat, objective, and environment.
- Comprehend naval capabilities in a combined arms arena.

C. **Background:**

At the outset of the Second World War in the Pacific, most battles were fought according to the plans of the Japanese. They held the initiative and had the advantage of having better trained, better organized and more focused forces. The Allies had to react to these Japanese attacks and were typically outfought and defeated as the Japanese seized outposts across Southeast Asia and the Central Pacific. The Japanese defeats at the Battles of Coral Sea and in particular Midway, affected their ability to maintain this initiative in the war. With the loss of five Imperial Japanese Navy aircraft carriers in these battles, they no longer held the force advantage to assure victory in any operation. The latter stage of the Pacific War, from the Battle of Tarawa in November 1943 to the end of the war saw both the strength and quality of U.S. naval forces expand to such a level that the Japanese Navy was unable to compete. While Japanese ground forces could inflict significant casualties on American ground forces attacking their defenses on a coral atoll, at sea and in the air, it was the U.S. forces that dominated the
conflict. The U.S. war economy outproduced Japan to the extent that the Japanese could not keep up regardless of their fearless devotion to the Emperor’s cause. During this segment of the war the U.S. Navy could fight the type of war it desired, using the superior industrial output of the American factories to destroy Japanese forces on, over, and below the sea.

It was only in the ‘middle’ portion of the war, from after Midway (in June of 1942) to roughly the beginning of 1944, where neither side enjoyed any particular advantage over the other. This required both sides to make do as best they could. When the U.S. Navy engaged at Guadalcanal, the first U.S. offensive operation of the war, it was past the nadir of its wartime performance, but not by much. The Japanese meanwhile, still shrugging off the shock of the Midway defeat, were not far from their zenith. The Imperial Japanese Navy was a combat force with experienced tactical commanders, well-trained crews and, in several areas, better armed ships than their allied opponents in 1942. Over the course of the six-month battle, both sides’ fortunes ebbed and flowed and the side that made the best use of the resources at hand took the lead.

The naval battles off Guadalcanal resulted in alarming losses to the U.S. Navy surface force. During the six-month struggle for the island, many were fought not at the optimum weapons ranges envisioned by either side, but at close quarters and in highly restricted seas. The casualties suffered by the U.S. Navy included over 4,900 killed and nearly 3,000 wounded. In fact, the number of U.S. sailors killed in the battles off Guadalcanal exceeded the number of Marines and soldiers killed in ground fighting (1,769 killed). Losses to the Japanese at sea were also significant. In many ways this is the story of the prewar navies fighting it out for sea control in the Solomon Islands. This might also suggest that a peacetime navy requires a long time to develop the tactics, techniques and mindset to excel in wartime, something that future navies and their sailors may not have.

The purpose of this exercise is to analyze the naval battles and their decisions critically through the lenses of operational art and naval warfare theory. To prevent this from being an exercise in hindsight, students should avoid focusing on what happened and instead analyze the leadership decisions from within an operational art framework so as to get at the reasons why those decisions were made. This exercise will include professor-led discussion and student group work. Seminar teams will analyze the assigned naval battle(s) providing commentary on American and Japanese leadership decisions. We will then look forward and discuss how the lessons learned in blood at Guadalcanal might help us in a modern naval battle.

D. Questions:

1. Describe the general components of an operational design for a major naval operation.

2. Does the operational design for major naval operations differ from design of major operations on land? If so, how?

3. Analyze and critique the Japanese and U.S. balance of operational factors and functions. From the Japanese Commanders’ viewpoint, what were their challenges with respect to Time, Space, and Force? From the U.S. Commanders’ viewpoint?

4. Were there any opportunities for either side to better utilize combined arms during the struggle for Guadalcanal?
5. It has been said that the U.S. Navy was a learning organization during the early years of World War II. What adjustments did the U.S. Navy make after each battle? Were they successful in their implementation?

6. What did the Imperial Japanese Navy learn from their experiences in fighting the U.S. fleet in the waters off Guadalcanal? How did this influence their decision to evacuate Guadalcanal?

E. **Products:**

Students will prepare and brief a given battle, answering pre-assigned questions.

F. **Required Media:**

None.

G. **Required Readings:**


Pye, W.S. President, United States Naval War College to Commander in Chief, U.S. Fleet. “Comments on the Battle of Guadalcanal, Nov. 11-15, 1942.” Newport, RI: Naval War College, 5 June 1943. *(NWC 1167) (Government)*


H. **Supplementary Readings:**

None.
STUDY GUIDE

2.8  
JOINT AND MULTINATIONAL COMMAND & CONTROL

The teams and staffs through which the modern commander absorbs information and exercises his authority must be a beautifully interlocked, smooth-working mechanism. Ideally, the whole should be practically a single mind.

—General Dwight D. Eisenhower

The only thing in war worse than having to fight with allies is having to fight without allies.

— Sir Winston Churchill

A. Focus:

This session examines what many consider the most important of the Joint Functions, Command and Control. It addresses the Joint Force Commander’s (JFC’s) authorities, the command relationships and organizational options when establishing a joint force as well as the internal functions of the JFC’s staff. Additionally, it introduces the functions and responsibilities of the subordinate service and functional component commanders. Since the United States will rarely undertake unilateral military operations, this session will also introduce the critical aspects of multinational operations to include: command and control, intelligence sharing, rules of engagement, capabilities gaps, and logistics.

B. Objectives:

- Comprehend the range of considerations that influence command structures for Joint and/or Multinational operations and campaigns.
- Comprehend the joint force command relationships (COCOM, OPCON, TACON, support, ADCON, DIRLAUTH) and the authorities that each includes.
- Comprehend the functions and responsibilities of service and functional component commands.
- Comprehend possible “seams” that complicate command and control.
- Comprehend key HQ functions and the staff organization and processes that support these functions.
- Comprehend how the establishment of boards, bureaus, centers, cells, and working groups (B2C2WG) enhances cross-functional collaboration on the joint force staff.
- Comprehend how coalitions of like-minded nations are formed for military operations from the strategic level and how this might affect forces at the operational level.
• Comprehend the joint doctrine on Multinational Operations, with special emphasis on planning with multinational partners.
• Comprehend the value, as well as challenges and inherent risks of multinational operations, and the methods for mitigating those challenges/risks.

C. Background:

In the conduct of joint military operations, the JFC must organize forces to achieve clarity of objective, unity of effort, centralized direction and decentralized execution.

Joint Publication 1, Doctrine for the Armed Forces of the United States, provides doctrine, principles and policy for the exercise of authority over joint forces and discusses key considerations for their organization. Command relationships determine the level of authority exercised by the commander over subordinate forces. The selection of command relationships depends on many factors, and it is often contentious because these relationships determine how much authority the JFC will exercise over assigned forces.

The roles of the subordinate service and functional components are important to the achievement of the JFC’s objectives. In order to achieve unify of effort, JFCs and planners must clearly comprehend their span of responsibility and level of authority over each component. Longstanding command and control “seams” such as control of aircraft over water, control of cyberspace assets and force sustainment responsibilities complicate operations.

To command and control forces, the JFC relies on a HQ staff to provide timely and accurate information and recommendations. An efficient and effective joint task force (JTF) HQ organization assists the commander in setting conditions that lead to subordinate success. Several factors influence the organization, processes and systems of the staff such as the joint force’s mission, commander’s preference, available personnel, assigned forces and interagency requirements. Ideally, the HQ staff will be well-balanced and representative of the whole joint force.

The complexity of modern military operations has demonstrated the advantages of a cross-functional approach to staff organization. The establishment of centers, groups, bureaus, cells, offices, elements, boards, working groups, planning teams and other enduring or temporary organizations help manage specific processes and accomplish tasks in support of mission accomplishment. HQ staffs rarely deploy initially with all the expertise needed to enable the commander to effectively command and control forces. The commander’s core staff may receive augmentation from individuals, joint organizations or a standing joint force HQ.

The United States has rarely conducted military operations unilaterally and operations in the future will likely be no different. Accordingly, we can expect that the U.S. military will work with other militaries from around the world when conducting major military operations. While alliances have a lasting C2 structure and a shared doctrine (e.g. NATO) which can ease this integration, since the end of the Cold War, the United States has needed to establish numerous coalitions and has worked with coalition partners in some 10 operations from Operation DESERT STORM (Persian Gulf War 1990-1991) right through to the current Operations INHERENT RESOLVE (against ISIS in Syria and Iraq) and RESOLUTE SUPPORT (Afghanistan). The conduct of multinational operations challenges the operational commanders in many ways, to include: command and control, intelligence sharing, logistics.
and rules of engagement. Additionally, capability gaps in equipment make multinational operations a challenge to plan and execute.

In addition to introducing the command and control challenges in multinational operations, students will also be introduced to the roles of staff functions to include liaison officers. Students should also comprehend the functions of intelligence and logistics, which will need careful consideration for coalition operations to be effective. Another critical aspect of multinational operations is the legal architecture associated with sharing information and providing equipment and logistics. Mutual support arrangements are often required and often these coordinating documents are elevated to national level decisions for multiple coalition or partner members.

D. Questions:

1. It has been said that command and control is one of the most unforgiving of the joint functions if you do not get it right at the beginning. Why?
2. Under what circumstances would a JFC choose to conduct operations through either service or functional component commands?
3. What seams exist between the various service and functional components, and what measures could the JFC use to minimize confusion?
4. How do boards, bureaus, centers, cells, and working groups (B2C2WG) facilitate vertical and horizontal communication in the joint force headquarters?
5. What resources are available to a JFC to ensure a well-balanced staff that is representative of the whole force?
6. Is there a difference between an alliance formed for wartime efforts and a coalition of the willing? What are the advantages and disadvantages of alliances?
7. How are coalitions formed?
8. Under what conditions does the United States place forces under command of another nation’s commander?
9. What are the challenges to logistics when working with military forces from other nations?
10. How can the United States share intelligence with other nations? What must we protect, and what concerns are there?
11. How does the commander work out rules of engagement among coalitions?
12. What is the impact of the science and technology gap between United States forces and other nations’ forces?

E. Required Media:

None.

F. Required Readings:

(CDE 8185) Internet accessed on 22 April 2020. Available at: https://www.rand.org/content/dam/rand/pubs/occasional_papers/2011/RAND_OP340.pdf


Sweeney, Patrick C. “A Primer for the Joint Enabling Capabilities Command (JECC).” Newport, RI: Naval War College, Joint Military Operations Department, 9 February 2015. (NWC 2003D) (Government)


G. Supplementary Readings:

Berry, Charles T. “Understanding OPCON.” Joint Force Quarterly 57 (2nd Quarter 2010): 63-65. (NWC 2106)


Field, Christopher A. “Liaison Officer’s Observations and Insights.” Marine Corps Gazette 88, no.2 (February 2004).


A. **Focus:**

This session addresses the Navy’s management of the Joint Force Maritime Component Commander (JFMCC) organization, its responsibilities, and command relationships. It will provide an overview of the Maritime Operations Center (MOC) construct and how this operates in practice to support the JFMCC. Finally, it examines the Composite Warfare Commander (CWC) concept and how this model is organized to coordinate multiple warfare functions at sea at the tactical, Task Force (TF) and Task Group (TG) levels.

B. **Objectives:**

- Comprehend the factors of centralized and decentralized command and control (C2) to include intent through trust, empowerment, and understanding to support the selection of a specific C2 option.
- Comprehend the Joint Force Maritime Component Commander (JFMCC) and Composite Warfare Commander (CWC) concepts as they apply to command and control of maritime forces in joint and multinational environments.
- Comprehend the organizational options, structures, and requirements available to the Joint Force Maritime Component Commander (JFMCC).
- Comprehend the basic Maritime Operations Center (MOC) structure and purpose.
- Comprehend Navy Composite Warfare doctrine, including the role of the Officer in Tactical Command (OTC) and the OTC relationship to the Composite Warfare Commander (CWC).

C. **Background:**

Command and control (C2) of maritime forces is shaped by the characteristics and complexity of the maritime domain as well as the traditions and independent culture of the naval service. In centralized C2, all authority is concentrated in a single commander and a single headquarters. Decentralized C2 relies on subordinate commanders to execute operations independently but in accordance with a thorough understanding of the commander’s intent, and by using command by negation or “mission command.” The selection of either a centralized or decentralized C2 option depends upon the objective to be accomplished.

---

*We can never forget that organization, no less than a bayonet or an aircraft carrier, is a weapon of war.*

—Congressman Bill Nichols, Hearings for the Goldwater-Nichols Defense Reorganization Act, 1986
Naval command relationships are based on a philosophy of mission command involving centralized guidance, collaborative planning, and decentralized control and execution. With a long-standing practice of using mission-type orders, naval C2 practices are intended to achieve a relative advantage by leveraging Boyd’s “OODA Loop” of Observe, Orient, Decide, and Act more rapidly than the opponent. Mission-type orders enable continued operations in environments where communications are restricted, compromised, or denied, allowing subordinates to exercise disciplined initiative, consistent with the higher commander’s intent.

The Joint Force Commander (JFC) will often designate a JFMCC to coordinate the activities of maritime forces. In cases where the JFC does not designate a JFMCC, the JFC may elect to directly task maritime forces. The JFC normally designates the forces made available for tasking by the JFMCC, and delegates the appropriate command authority that the JFMCC will exercise over his assigned and attached forces and maritime assets. Forward deployed maritime force packages are normally comprised of units that train together prior to deploying. These tailored force packages may include Carrier Strike Groups and Amphibious Ready Groups with an embarked Marine Expeditionary Unit. The JFMCC will normally exercise operational control (OPCON) over assigned service component maritime forces and either OPCON or tactical control over attached forces.

The JFMCC’s staff is typically built up from an existing service component, numbered fleet, Marine Air-Ground Task Force, or subordinate service force staff and then augmented as required. If a Naval component or numbered fleet commander is designated as the JFMCC, his or her existing staff or MOC will normally form the nucleus of the JFMCC staff. In a maritime headquarters, two complementary methods of organizing people and processes exist. The first is the doctrinal Napoleonic J-code structure, which organizes people by the function they perform (i.e. intelligence, logistics, etc.). The second is a cross-functional approach that organizes the staff into boards, centers, cell, and working groups. These organizations manage specific processes or tasks that do not fit well under the J-code structure and are best suited to those tasks that require cross-functional participation, such as targeting, assessment, and information operations.

The formalized addition of this cross-functional network to the doctrinal J-code staff organizational structure is what characterizes the MOC. The MOC can be thought of as a loosely-bound network of staff entities overlaying the J-code structure. Each of these entities has a focus on a specific, multi-discipline operational task or activity, for example maritime targeting. Thus the MOC’s focus is rightly on the operational tasks and activities themselves, rather than broader fleet management or support. In this way the MOC provides an organizational framework through which maritime commanders may exercise operational level command and control. A secondary function of the MOC initiative has focused on developing operational level headquarters with some degree of baseline commonality around the globe. The MOC provides the framework from which Navy commanders at the operational level (Naval Component Command, Numbered Fleet, and Joint/Combined Force Maritime Component Command) exercise their C2.

At the tactical level, C2 transitions to the CWC concept where the OTC is responsible for the tactical force deployment and action. The OTC is the senior officer present eligible to assume command, or the officer to whom the senior officer has delegated tactical command. The commander of a task organization is its OTC when the organization is operating independently. The OTC also designates a CWC structure to coordinate overall operations. This CWC divides
the principle naval warfare areas (air, AMD, ASW, ASUW etc.) into their own functional commands for the accomplishment of each mission area – i.e. all forces engaged in ASW will be temporarily TACON to the ASW Commander. Joint community understanding of these command and control constructs is important when coordinating or working with maritime forces. The OTC controls CWC and subordinate warfare commanders’ actions through “command by negation.” Command by negation acknowledges that in many aspects of often distributed and dispersed maritime warfare, it is necessary to pre-plan the actions of a force to an assessed threat and delegate some warfare functions to subordinate commanders. Once such functions are delegated, the subordinate commander is to take the required action without delay, always keeping the OTC informed of the situation. The CWC orchestrates operations to counter threats to the force, while the OTC retains close control of power projection and specific sea control operations.

D. Questions:
1. What is the preferred method of C2 for Joint Maritime Operations and why?
2. How is a JFMCC staff organized? What are its responsibilities?
3. Describe the MOC concept, its organization, and how the MOC construct differs from traditional naval structures.
4. How does the CWC concept seek to minimize seams between various functional areas?

E. Required Media: Naval War College, JMO Department. Service Briefs. U.S. Navy Briefing. (CDE 8039Mc)

F. Required Readings:


G. Supplementary Readings:

STUDY GUIDE

2.10
JOINT WARFARE – U.S. COAST GUARD CAPABILITIES & DOCTRINE

The U.S. Coast Guard is a shining example of how well a Federal agency can perform with its flexibility, speed, and expertise.

—Representative Russ Carnahan (D-Missouri)

A. Focus:

This session emphasizes how the United States Coast Guard – a Department of Homeland Security (DHS) organization – operates in today’s joint environment while preserving the operational agility necessary to respond to uncertain future crises. As such, this seminar will focus on the organization and employment of USCG forces both from within the joint community and when used for domestic security and support. Highlights include roles, missions, core competencies, operational concepts, and considerations for employing the USCG forces in a joint environment. This session, in conjunction with other Service-specific sessions, will broaden comprehension of joint force employment across the range of military operations in pursuit of national interests.

B. Objectives:

• Comprehend the missions, authorities, and capabilities of the U.S. Coast Guard as a potential tool for use by the joint force commander.

• Comprehend the nature and extent of U.S. Coast Guard international engagement, as a potential tool for use by the joint force commander.

• Comprehend the considerations for employing U.S. Coast Guard forces as part of a joint and multinational force at the operational level of war.

• Comprehend the relationship between Service doctrine and joint doctrine.

C. Background:

This session provides a foundational understanding of U.S. Coast Guard capabilities that students will use throughout the remainder of the course. A discussion of mission, capabilities, and doctrine provides baseline knowledge to inform future planners of potential contributions of these services for future operational contingencies. The Coast Guard is an armed service that has participated in every American war since its inception. Although multi-mission in nature and charged with significant responsibilities in such diverse areas as maritime law enforcement, search and rescue, pollution response and maintaining an aids to navigation system, Coast Guard forces provide military capabilities in support of the national military strategy. In recent combat operations, Coast Guard forces have provided to Joint Force Commanders maritime interception operations, port operations and security, coastal sea control and other mission sets where the smallest U.S. service’s expertise can add value. As part of the Department of Homeland Security, the Coast Guard functions as the lead federal
agency for maritime homeland security and plays a supporting role for maritime homeland defense. While this new emphasis on homeland security has placed increasing demands on an already over-extended service, the Coast Guard has garnered increasing political support from involvement in 9/11 and Hurricane Katrina.

D. Questions:

1. Discuss the roles of the USCG in today’s strategic environment. What are the Service’s strengths and weaknesses in the joint environment? How is it organized?

2. How are deployed forces from the USCG used to support geographic combatant commander (GCC) theater objectives?

3. How might the Coast Guard’s unique authorities and capabilities be leveraged in support of joint military or interagency operations? How can they support naval or maritime objectives?

4. What are the options and considerations for joint / multinational participation in Maritime Homeland Security (MHLS) and Maritime Homeland Defense (MHLD) missions?

E. Required Media:

Naval War College, JMO Department. Service Briefs. U.S. Coast Guard Briefing. (CDE 8041Mc)

F. Required Readings:


U.S. Coast Guard. Doctrine for the U.S. Coast Guard. U.S. Coast Guard Publication (USCG Pub) 1, February 2014. Read: Chapters 1 & 3. Scan: Chapter 4. (USCG Pub 1) (Government)


G. Supplementary Readings:


STUDY GUIDE

2.11

JOINT WARFARE – U.S. MARINE CORPS CAPABILITIES & DOCTRINE

Every Marine has an individual responsibility to study the profession of arms. A leader without either interest in or knowledge of the history and theory of warfare—the intellectual content of the military profession—is a leader in appearance only. Self-directed study in the art and science of war is at least equal in importance to maintaining physical condition and should receive at least equal time. This is particularly true among officers; after all, the mind is an officer's principal weapon.

— Warfighting, Marine Corps Doctrinal Publication 1

A. Focus:

This session emphasizes how the Marine Corps fights today’s enemies while preserving the operational agility necessary to respond to uncertain future crises. As such, this seminar will focus on the organization and employment of Marine forces at the high-tactical and operational levels of war. Highlights include roles, missions, core competencies, operational concepts, doctrine, and considerations for employing the Marine Air Ground Task Force (MAGTF) in a joint environment. This session, in conjunction with other Service-specific sessions, will broaden comprehension of joint force employment across the range of military operations in pursuit of national interests.

B. Objectives:

• Comprehend the roles and missions of the U.S. Marine Corps and its contribution to the Joint Force.
• Comprehend how the U.S. Marine Corps is organized to plan, execute, sustain, and train for maritime and joint expeditionary operations in support of the Joint Force Commander (JFC).
• Comprehend broad doctrinal service concepts guiding the employment of Marine forces at the high-tactical and operational levels of war.
• Comprehend the relationship between Service doctrine and joint doctrine.
• Comprehend the Marine Corps commitment to the Profession of Arms and the principal means by which the Corps achieves decentralized command and control: mission tactics.
• Comprehend emerging concepts within the U.S. Marine Corps.

C. Background:

Since its founding in 1775, the roles and missions of the Marine Corps have evolved to meet the changing needs of the nation. Originally charged with security for naval stations and ships-of-the-line, the Marine Corps grew to contribute major land formations during The Great War (WWI). Throughout World War II, Marine aviators leveraging lessons from the “Banana
Wars” (1898-1934) operated from Navy ships and provided close air support to Marine ground units conducting amphibious operations in the Pacific. Today, the Marine Corps contributes to the nation’s defense by providing an expeditionary force in readiness.

The Marine Corps organizes to provide rapidly deployable forces capable of conducting expeditionary operations in any environment. In addition to maintaining the Marine Corps’ unique amphibious capability, the operating forces maintain the capability to deploy by whatever means is appropriate to the situation. Marine forces are organized around a Marine Air Ground Task Force (MAGTF), a scalable task-organized unit consisting of ground, aviation, combat service support, and command elements. Although MAGTFs are organized around base structures, for example the Marine Expeditionary Brigade (MEB), these organizations provide a combined arms force that a single commander can easily tailor to most emerging situations.

Marine operating forces offer the JFC various options for employment, from forward deployed ship-borne MAGTFs to self-sustaining units capable of operating hundreds of miles inland. The Marine Corps provides unique capabilities for a variety of missions. The Marine Corps ethos, heritage, and warfighting philosophy influence how the Marine Corps organizes, trains, equips, and employs its operating forces. Concepts such as maneuver warfare, decentralized command and control, and a bias for decision making at the lowest level permeate the Marine mindset. Even well-known watchwords such as “innovate, adapt, and win” are more than simple slogans, and they underpin the Marine Corps approach to crisis, conflict, and war.

D. Questions:

1. Describe the roles, organization, and missions of the United States Marine Corps.
2. What unique capabilities do Marine forces provide to the JFC? How can those capabilities support naval or maritime objectives?
3. Discuss the versatility, flexibility, scalability, combined arms capability, types, deployment/employment considerations, and limitations of MAGTFs.
5. Describe how Mission Command, commonly referred to by Marines as mission tactics or mission orders, works within the Marine Corps.

E. Required Media:

Naval War College, JMO Department. Service Briefs. U.S. Marine Corps Briefing. (CDE 8042Md)

F. Required Readings:


G. **Supplementary Readings:**

STUDY GUIDE

2.12

JOINT WARFARE – U.S. ARMY CAPABILITIES & DOCTRINE

[Y]ou may fly over a land forever; you may bomb it, atomize it, pulverize it and wipe it clean of life—but if you desire to defend it, protect it, and keep it for civilization, you must do this on the ground, the way the Roman legions did, by putting your young men into the mud.

—T. R. Fehrenbach, This Kind of War

A. Focus:

This session emphasizes how the Army is organized to contribute to the Joint Force while preserving the operational agility necessary to respond to future crises. This session focuses on the organization and employment of Army forces at the high-tactical and operational levels of war. Highlights include roles, missions, core competencies, operational concepts, doctrine, and considerations for employing Army forces in a joint environment. This session, in conjunction with other Service-specific sessions, will broaden comprehension of joint force employment across the range of military operations in support of national interests.

B. Objectives:

- Comprehend the roles and missions of the U.S. Army and its contribution to the Joint Force.
- Comprehend how the U.S. Army is organized to plan, execute, sustain, and train for maritime and joint expeditionary operations in support of the Joint Force Commander (JFC).
- Comprehend broad doctrinal service concepts guiding the employment of Army forces at the high-tactical and operational levels of war.
- Comprehend the relationship between Service doctrine and joint doctrine.
- Comprehend emerging concepts within the U.S. Army.

C. Background:

This seminar is the first formal opportunity for the students to examine critical capabilities of and employment considerations for the U.S. Army. The session will serve as a foundation for understanding how the Army “thinks and operates,” as well as how it arranges and provides forces and capabilities to a joint force commander.

The Army's three capstone doctrinal publications are Army Doctrine Publication (ADP) 1, The Army; Army Doctrine Publication (ADP), 3-0 Operations; and TRADOC PAM 525-3-1, The U.S. Army Operating Concept (AOC). These relatively-new documents are just a subset of the Army's complete revision of Army doctrine, which was completed in 2015. ADP 1 states that "as part of the joint force, the United States Army ensures mission accomplishment, guarantees national security interests, compels adversaries, prosecutes military campaigns, and delivers lasting strategic results." The Army's culture was formed by its rich history and timeless
traditions. These elements are carried forward today and together, with each soldier's internalization of "Army Values," the "Soldier's Creed," and the "Warrior Ethos," form a team that focuses on its mission and recognizes people as its most important asset.

The Army employs ground forces to accomplish sustaining, shaping and decisive operations, while combining the effects of war-fighting functions to generate combat power. ADP 3-0, *Unified Land Operations*, updates the operating concepts from earlier doctrine to reflect the conditions of the operational environment. "Unified land operations" is not a new operating concept. It represents the current expression of the proven formula for success: seize, retain, and exploit the initiative to gain and maintain a position of relative advantage in sustained land operations through simultaneous offensive, defensive, and stability or defense support of civil authorities operations in order to prevent or deter conflict, prevail in war, and create the conditions for favorable conflict resolution. Army forces are employed within a strategic context defined by the specific operational environment, the character of the friendly force, and the character of the threat. The U.S. Army Operating Concept (AOC) guides future force development through the identification of first order capabilities that the Army must possess to accomplish missions in support of policy goals and objectives. Underpinning the strategic context, Army forces preserve vital national interests; foremost among these are sovereignty in the homeland and the United States constitutional form of government.

D. Questions:
1. What is the role of the Army in today’s Joint Force? What does Army doctrine say it is?
2. Explain the operational advantages (and challenges) of employing the Army in a Joint Maritime Operation. How can Army capabilities support naval or maritime objectives?
3. What are the Army’s primary formations at the operational and tactical levels of war? Are these formations still relevant to today's operational environment? Why or why not?
4. What are the differences between an Army “Modular” Brigade Combat Team (BCT) and a USMC scalable MAGTF?
5. Why does the Army believe that the effect of technologies on land are often not as great as in other domains? Do you agree or disagree?
6. How does Mission Command work within the Army?

E. Required Media:
   Naval War College, JMO Department. *Service Briefs*. United States Army Briefing. (CDE 8044Mc)

F. Required Readings:

G. **Supplementary Readings:**


STUDY GUIDE

2.13
JOINT WARFARE – U.S. AIR FORCE CAPABILITIES & DOCTRINE

If we are not able to gain and maintain air superiority – which is not a given and it’s not easy – if we were unable to do that in a future conflict . . . then everything about the way the United States Army and the United States Marine Corps fight on the ground would have to change. What they buy, how they train, maybe even who they recruit. This is a foundational element of the use of airpower and of joint warfighting.

—General Mark A. Welsh III
Former Air Force Chief of Staff

A. Focus:

This session emphasizes how the United States Air Force (USAF) is organized to fight today’s enemies while preserving the operational agility necessary to respond to uncertain future crises. As such, this seminar will focus on the organization and employment of United States Air Force forces at the high-tactical and operational levels of war. Highlights include roles, missions, core competencies, operational concepts, doctrine, and considerations for employing U.S. Air Force forces in a joint environment. This session, in conjunction with other Service specific sessions, is intended to broaden comprehension of joint force employment across the range of military operations in pursuit of national interests.

B. Objectives:

• Comprehend the roles and missions of the U.S. Air Force and its contribution to the Joint Force.
• Comprehend how the U.S. Air Force is organized to plan, execute, sustain, and train for maritime and joint expeditionary operations in support of the Joint Force Commander (JFC).
• Comprehend broad doctrinal service concepts guiding the employment of Air Force forces at the high-tactical and operational levels of war.
• Comprehend the interrelationship between Service doctrine and joint doctrine.
• Comprehend emerging concepts within the U.S. Air Force.

C. Background:

The USAF is an integrated air and space force commanding a domain that stretches from the earth's surface to the outer reaches of space in a seamless operational continuum. Department of Defense Directive 5100.1 states that the USAF is the only U.S. Service specifically directed to "organize, train, equip, and provide forces for the conduct of prompt and sustained offensive and defensive combat operations in the air and space," as well as for "strategic air and missile warfare." The USAF employs its air and space assets globally and jointly to achieve strategic, operational and tactical objectives. Most air and space assets can perform multiple functions to achieve the desired objectives. The inherent versatility of flexible assets is just one of the
strengths the USAF brings to the operational planning table to ensure the joint force
commander dominates adversaries.

This seminar is an opportunity for the students to examine the specific capabilities and
organization of the U.S. Air Force. This session provides baseline knowledge of Air Force
capabilities and doctrine, informing students about what the USAF contributes to operations
throughout the spectrum of conflict.

D. Questions:
1. What are some of the core capabilities (or functions) of the USAF?
2. What are the roles and responsibilities of a Joint Force Air Component Commander
   (JFACC) and the Joint Air Component Coordination Element (JACCE)?
3. What is the role of the Air Operations Center (AOC)?
4. How can deployed USAF forces support geographic combatant commander (GCC) theater
   objectives? How can they support naval or maritime objectives?
5. Discuss how Mission Command is applied within the USAF.

E. Required Media:
   Naval War College, JMO Department. Service Briefs. U.S. Air Force Briefing. (CDE 8045Mc)

F. Required Readings:
   2012. (NWC 1193) (Government)
   &db=mth&AN=113171219&site=ehost-live
   Document (AFDD) 1. Maxwell AFB, AL: Air Force Doctrine Center, 14 Oct 2011. Read: 11-
   20, 59-61 (AETF), 69-72 (C2), 88-92 (JFACC) and 99 (JACCE). (AFDD 1) (Government)
   Welsh III, Mark A. General. “Global Vigilance, Global Reach, Global Power for America.”
   Air & Space Power Journal 31, no. 2 (April 2014): 4-10. (NWC 4102) (Government)

G. Supplementary Readings:
   Barrett, Mark and Mace Carpenter. Survivability in the Digital Age: The Imperative for Stealth.
   Bender, William J. The Cyber Edge: Posturing the US Air Force for the Information Age.
   Newport, RI: Naval War College, January 2018. Scan: Air Force section. (NWC 3153R)
The environment in which we find ourselves has changed. Instead of traditional nation-state conflict, both USSOCOM’s and USSOF’s assigned missions are predominantly focused on addressing the non-state or transnational violent extremist threat.

—Admiral Eric Olson, USN
Former Commander, USSOCOM

A. Focus:
This session emphasizes how the Special Operations Forces (SOF) contribute to the Joint Force while preserving the operational agility necessary to respond to uncertain future crises. As such, this seminar will focus on the organization and employment of SOF forces at the high-tactical and operational levels of war. Highlights include roles, missions, core competencies, operational concepts, and considerations for employing SOF in a joint environment. This session, in conjunction with the other Service-specific sessions, will broaden comprehension of joint force employment across the range of military operations in pursuit of national interests.

B. Objectives:
- Comprehend the roles and missions of SOF and its contribution to the Joint Force.
- Comprehend how SOF/U.S. Special Operations Command is organized to plan, execute, and sustain operations in support of the Joint Force Commander (JFC).
- Comprehend broad doctrinal service concepts guiding the employment of SOF at the high-operational and operational levels of war.
- Comprehend emerging concepts within the Special Forces Community.

C. Background:
The session provides a foundational understanding of U.S. Special Operations Forces capabilities that students will use throughout the remainder of the JMO course. This baseline knowledge of SOF capabilities and doctrine will inform future planners of the potential contributions of SOF in future operational contingencies. Special Operations Forces (SOF) are small, specially organized units manned by people carefully selected and trained to operate under physically demanding and psychologically stressful conditions. They accomplish missions using modified equipment and the unconventional applications of tactics against strategic and operational objectives in hostile, denied, or politically sensitive environments. Their aim is to achieve military, diplomatic, informational and or economic objectives that otherwise would be out of reach, by employing military capabilities for which there is no broad conventional force requirement.
Since the establishment of the U.S. Special Operations Command (USSOCOM) in 1987, all services’ SOF have been under the combatant command (COCOM) of one unified commander and have been trained and equipped to conduct unilateral, joint and combined special operations across the Range of Military Operations (ROMO). SOF can support the geographic combatant commanders, U.S. ambassadors and their country teams, and other government agencies. Additionally, USSOCOM is designated the global synchronizer for Counter-Terrorism (CT) planning to include operations against terrorist use of Weapons of Mass Destruction (WMD) and supports Commander, USSTRATCOM as the global synchronizer for DoD Countering WMD (CWMD) planning. Each military service has established a major command to serve as the service component of USSOCOM.

D. Questions:
1. Describe the role of SOF. How are SOF organized? What are some of the future challenges that SOF faces?
2. What capabilities do SOF provide national decision makers? What are some limitations of SOF? In what ways can operational planners employ SOF to achieve GCC objectives? How can SOF support naval or maritime objectives?
3. U.S. Special Operations Command propounds five ‘SOF Truths’:
   - Humans are more important than hardware.
   - Quality is better than quantity.
   - Special Operations Forces cannot be mass produced.
   - Competent Special Operations Forces cannot be created after emergencies occur.
   - Most Special Operations require non-SOF assistance.
   Discuss the relevance and applicability of these ‘truths,’ particularly the fifth one.
4. What are the advantages and disadvantages to employing SOF as compared to conventional forces?
5. How does Mission Command work within SOF?

E. Required Media:
Naval War College, JMO Department. Service Briefs. Special Operations Forces (SOF) Briefing. (CDE 8046Mc)

F. Required Readings:


G. **Supplementary Readings:**

STUDY GUIDE

2.15
OPERATIONAL INTELLIGENCE FOR THE MARITIME COMMANDER

By ‘intelligence’ we mean every sort of information about the enemy and his country – the basis, in short, of our own plans and operations.

—Carl von Clausewitz, On War, 1832

A. Focus:

Intelligence, as a discipline and an operational function, is essential to the successful conduct of military operations in both peacetime and war. Intelligence operations are often described as a high-demand/low-density enterprise, meaning requirements routinely outstrip available resources. It is therefore imperative intelligence resources be utilized as efficiently as possible and be driven by a clear set of priorities informed by commander’s intent and guidance. This will ensure limited resources are applied against the commander’s most pressing concerns.

This seminar focuses on the nature and principles of intelligence, the responsibilities of both the joint force and maritime commander and the duties of the staff intelligence officer/J2/N2, primarily at the operational level. In particular, this seminar will explore the critical nature of the commander’s relationship with the intelligence officer, and how commander’s priorities and Priority Intelligence Requirements (PIRs) drive the intelligence process to support operational decision-making. Additionally, the class will examine the importance of the Intelligence Estimate and Intelligence Preparation of the Operational Environment (IPOE), and how they support the Navy Planning Process (NPP).

B. Objectives:

• Comprehend Joint and Navy doctrinal terminology relating to intelligence, including the intelligence process and associated intelligence functions.
• Comprehend how the intelligence process is synchronized to support decision-making and operational planning, specifically towards a more comprehensive understanding of the adversary and the operational environment.
• Comprehend intelligence organizations and operational-level integration.
• Comprehend the roles and responsibilities of the commander and the intelligence officer in the intelligence process at the operational level.

C. Background:

History provides numerous examples of military and political leaders’ quests for detailed information regarding their enemies. From Sun Tzu and Alexander the Great to the present day, leaders’ thirst for information to help make informed decisions has only increased with the progress of information technology. To this end, the United States has developed, over time, an intelligence community of considerable scale and budget. Beginning with personnel dedicated to intelligence duties in the Continental Army, to the establishment of the Office of Naval Intelligence in 1882, military intelligence led the way to more expansive national
intelligence operations, namely the Office of Strategic Services (OSS) during World War II. The OSS evolved into the first permanent peacetime—and largely civilian—intelligence agency, the Central Intelligence Agency (CIA), following the war. Since that time, dedicated intelligence departments and operations have proliferated throughout the U.S. government. Currently there are 17 federal agencies with significant intelligence sections that comprise the overall U.S. Intelligence Community (IC). As one of the recommendations from the 9/11 Commission, and in an attempt to manage and coordinate these intelligence operations optimally, Congress and President George W. Bush established a Director of National Intelligence (DNI) in 2004.

The IC covers a broad waterfront, from providing intelligence on a daily basis to the President and key personnel in the National Security Council and the Cabinet, to informing the theater-wide plans and operations of geographic combatant commanders, all the way down to providing actionable intelligence at the tactical level. While agencies of the IC, guided by the DNI, principally provide intelligence to national-level decision-makers, it is the Joint Intelligence Officer (J2) who is responsible for providing intelligence to the Joint Force and the N2 who is responsible for providing intelligence to naval forces. From the Joint Staff J2 at the national level, through Combatant Command J2s and Joint Task Force J2s at the theater-strategic and operational levels, to N2s at the operational and tactical levels, operational intelligence plays a key role within the U.S. military. Operational intelligence supports military strategy, theater-wide campaign plans, joint operations, maritime operations and tactical actions in all domains.

To this end, operational intelligence has the key role of providing the commander and staff a deep understanding of the operational environment and enemy (or potential enemy) threat. This includes detailed predictive assessments of the enemy military forces, including capabilities and intent, but extends further to include a wide range of environmental, cultural and political factors that affect maritime, joint and multi-national operations. This process is termed the Intelligence Preparation of the Operational Environment (IPOE). The requirement for this wide-ranging assessment of the enemy and the operational environment has existed since the earliest days of intelligence.

Despite the considerable capabilities the U.S. Intelligence Community brings to the joint force and maritime operations, they remain imperfect, and the conduct of intelligence remains as much an art as a science. Intelligence has had its share of failures, both through inaccuracy or even absence, which has had detrimental effects on some national policy decisions and military operations. Even when intelligence is accurate, timely and predictive, it has sometimes been poorly appreciated, or even disregarded, by both military and civilian leaders, with corresponding ill effects on operations. It is therefore critical senior decision-makers and staff planners alike be critical consumers of intelligence, partnering closely with intelligence professionals and organizations to ensure the adversary and the operational environment are as well analyzed and comprehended as possible before committing forces and people to combat.

D. Questions:

1. What is operational intelligence? How does it differ from strategic and tactical intelligence?
2. How is the intelligence process synchronized to support operational decision-making, as well as joint and navy planning? What specific intelligence products does the J2/N2 bring to bear?

3. How does the intelligence officer at the operational level leverage the capabilities of the wider intelligence community for military operations and tactical actions?

4. Intelligence must be driven by a clearly defined set of priorities to ensure limited resources are applied against the most critical intelligence needs. What is the military decision-maker’s role in defining these priorities? What are the characteristics of a critical consumer of intelligence?

5. What are some of the intelligence challenges associated with multinational operations?

E. Required Media:

“Intelligence Support to Operational Planning” Lecture. (CDE 8060M)

F. Required Readings:

Jacoby, L. E. “Operational Intelligence: Lessons from the Cold War.” United States Naval Institute Proceedings 125, no. 9 (Sep 1999): 102-104. (NWC 4139) (E-Reserve)


G. Supplementary Readings:


THIS PAGE INTENTIONALLY BLANK
STUDY GUIDE

2.16
INFORMATION OPERATIONS & CYBER WARFARE

The profoundest truth of war is that the issue of battle is usually decided in the minds of the opposing commanders, not the bodies of their men.

—Captain Sir Basil Liddell Hart, British Army

A. Focus:

The focus of this session is to develop an understanding of how Information and Cyberspace may be used in the pursuit of military objectives and political ends in contemporary conflict. Broadly speaking, all operations are, in the end, ‘influence’ operations. In other words, short of unconditional surrender, military operations are undertaken to influence an adversary to make a decision favorable to larger U.S. objectives. As such, the integrated employment of information–related capabilities (IRCs) and cyberspace operations is central to achieving the commander’s objectives at every level of warfare.

With the emergence of information as key terrain in modern warfare, how we use the Information Environment (IE) and its contemporary subset Cyberspace to inform, persuade, and influence decision makers can be a key element of modern warfare. What moves through cyberspace is information in the form of code (software) that is displayed as content on graphic user interfaces of the electronics we use daily. Effectively using information operations (IO) and cyberspace operations (CO) in support of objectives and ends will be crucial enablers in future conflict. Many of our current and potential adversaries clearly understand this maxim, some better than us. It is one asymmetry that they can use to level the playing field against the United States.

B. Objectives:

• Comprehend the principles, strengths, and limitations of integrating information operations and cyberspace operations into service and joint planning.
• Comprehend how IO and CO are used to inform, persuade, and influence decision makers across the spectrum of conflict.
• Comprehend the relationships between lethal and non-lethal fires in developing IO and CO objectives and tasks that support the Joint Force Commander’s mission and objectives.
• Comprehend the use of cyber warfare in the pursuit of military objectives and political ends.
• Comprehend the ability of cyberspace operations to achieve mass destruction and effects.

C. Background:

Understanding Information as an element of national and military power – how it is moved, prioritized, analyzed and synthesized to support decision makers – has been vital to warfare throughout history. The confluence of information connectivity, content and cognition
combine to form the Information Environment (IE), a term of art in U.S. joint doctrine. The IE is not new and is used by decision makers as data is collected and prioritized to create information. That information is synthesized into knowledge that decision makers leverage to make decisions. Information is also manipulated to influence friend and foe to act in specific ways. Cyberspace (much like the sea) is a domain in which humans maneuver to achieve objectives in the physical spaces where they live. What has changed in the information age are the speed at which information moves around the world, its range and depth of penetration into society, and the continuous invention and adaptation of electronics, software, and content for human and automated use. The speed, range, and depth of the movement of information are made possible by the largely man–made domain of cyberspace.

In what can be seen as the intertwining of cyberspace and human activity, the number of humans utilizing cyberspace for commonplace activities (communication, navigation, news, shopping, banking, entertainment, etc.) is rapidly accelerating. Examples of the scope of global activity in cyberspace in the early 21st century include approximately 2.5 billion internet users (or 33 percent of people on Earth); six billion mobile cellular subscriptions; and more than 1 billion Facebook™ users. In fact the U.S. Department of Defense (DoD) operates over 15,000 networks and more than seven millions edge devices (electronic computing devices that provide entry points to move code and content around the internet).

Cyberspace is defined in U.S. joint doctrine as a global domain within the information environment consisting of the interdependent network of information technology infrastructures and resident data, including the Internet, telecommunications networks, computer systems, and embedded processors and controllers. Joint Publication 3-13 Information Operations characterizes IO as “The integrated employment, during military operations, of information–related capabilities (IRCs) in concert with other lines of operations to influence, disrupt, corrupt, or usurp the decision making of adversaries and potential adversaries while protecting our own.”

In an effort to bring together the concepts of cyberspace operations, information operations, and warfare in the physical domains, the DoD has moved the lexicon of cyberspace operations towards terminology that is recognizable to war fighters in all domains. The constructs of Offensive Cyberspace Operations (OCO) and Defensive Cyberspace Operations (DCO) were developed to standardize the terminology and allow war fighters to better communicate across domains.

Code and content are clearly reshaping the operating environment as we continue to intertwine cyberspace with nearly all aspects of life. Understanding how they move through cyberspace and are used as a force to inform, persuade, and influence decision–makers and to make electronics act independently of the owner’s intent will be fundamental to success in 21st century conflict. This session is intended as a foundation for understanding how IO and CO can be leveraged to achieve success across the spectrum of operations.

D. Questions:
1. Can modern conflicts be won by the use of lethal operations alone? Explain your answer.
2. Why is information considered an element of national power?
3. Identify how joint force commanders can use information-related capabilities to inform, persuade, and influence decision makers across the spectrum of conflict.
4. Can cyberspace be controlled? If so, what impact does that control have on operations in the traditional domains of war? Can cyber control be disputed or denied? If so, provide some examples.

5. Explain how potential adversaries might use cyber warfare against the United States or our allies.

E. **Required Media:** “Cyberspace and International Law” Lecture. (CDE 8125M)

F. **Required Readings:**


G. **Supplementary Readings:**


A sound logistics plan is the foundation upon which a war operation should be based. If the necessary minimum of logistics support cannot be given to the combatant forces involved, the operation may fail, or at best be only partially successful.

—Admiral Raymond A. Spruance, USN, Commander Fifth Fleet, 1946

A. Focus:

This session provides an overview of logistics at the operational level of war – the logistics portion of the operational function sustainment. It addresses the principles of logistics and the geographic combatant commander’s logistics responsibilities. It also examines operational logistics planning considerations for the JTF and JFMCC commanders. Additionally, this session introduces the national deployment system (strategic triad) through an examination of the mission of U.S. Transportation Command (USTRANSCOM), its subordinate component commands, and their role deploying joint forces in support of global contingencies.

B. Objectives:

- Comprehend the relationship among the elements of strategic, operational, and tactical logistics and understand the implications of operational factors on naval, joint, and multinational logistics.
- Comprehend the importance of the Logistics Estimate, to include specific logistics issues that must be addressed when developing a logistics staff estimate for a joint operation and how to apply them in the planning process.
- Evaluate the operational concept of logistics support to achieve operational objectives.
- Comprehend the OCS capabilities, options, and considerations of the joint force.
- Comprehend the elements of the strategic deployment triad, including benefits and challenges of each.
- Comprehend the steps of the deployment process.
- Comprehend the interrelationship between Service doctrine and joint doctrine.
- Comprehend current joint doctrine.

C. Background:

According to JP 4-0, logistics is planning and executing the movement and support of forces. Additionally, NTTP 5-01.4 defines sustainment as the provision of personnel, logistics, and other support required to maintain operations until successful accomplishment of the mission. Naval logistics consists of seven core capabilities: supply, maintenance operations, transportation, health service support, operational engineering, other logistics services, and operational contract support. These seven core naval logistics capabilities should be thought
of as critical requirements for readiness, operational reach, endurance, and sustainment of naval forces.

Naval logistics is interconnected and overlapping across all three levels of war. Each service department is responsible for their logistics; however, logistics support is commonly accomplished through a combination of service departments, various DoD organizations, agencies, and contracted support at the strategic, operational, and tactical levels. Although logistics is a service responsibility, geographic combatant commanders retain Directive Authority for Logistics (DAFL) for situations where operational imperatives drive the need to direct service components to support other services by cross-leveling resources, lift assets or other critical capabilities in support of operational requirements.

Naval logistics at the operational level is primarily concerned with deployment, basing, readiness, and sustainment support to operating forces - namely numbered fleets and Marine Air Ground Task Forces. Naval logistics has unique considerations distinguishing its execution from that of support to ground maneuver forces or air forces operating from expeditionary bases. The Navy’s logistics architecture is designed to support forces maneuvering at sea, over the shore, and ashore.

From the strategic level, the Navy leverages DOD, the services, other government agencies and the private sector as sources of logistics, provided through a Fleet Global Logistics Network. The Fleet Global Logistics Network consists of Naval Advanced Logistics Support Sites (NALSS), Naval Forward Logistics Sites (NFLS) and a Combat Logistics Force to provide shore based and underway replenishment down to the “last nautical mile” to fleets and Marine Corps forces. Effective naval logistics requires access to partner nation bases, ports, and facilities, assured communications, mobile capabilities, and an appreciation for factors time, space, and force among other considerations when developing a fleet concept of logistics support.

At the operational level, naval logistics may also involve coordination with coalition naval commands supporting multinational operations. Although coalition logistics and sustainment are each individual nation’s responsibility, naval component command planners will often develop and utilize acquisition and cross-service agreements through diplomatic channels as a source of multinational logistics support.

The ability of Navy and Marine Corps forces to successfully carry out their assigned tasks in support of national security objectives depends greatly on their logistics capabilities to deploy forces, equip, and sustain them in a theater of operations and in a timely manner. Commanders must have a clear understanding of their logistics capabilities and limitations to execute a major operation or campaign successfully. At the initiation of planning, the Navy N4 (or G4 in a MAGTF) develops a logistics staff estimate: a product describing operational requirements, available resources, existing shortfalls and risk that enables commanders’ situational understanding and decision making. When completed, the logistics staff estimate informs the development of the concept of logistics support - Paragraph 4 and Annex D within plans and operation orders. An effective concept of logistics support should enable freedom of movement, operational flexibility, mitigate risks of culmination, and anticipate operational requirements for follow-on phases in operational plans and campaigns.

Within the context of the commander’s intent and planning guidance, several senior commanders have stressed command & control, basing, and logistics as critical to setting
conditions for operational success. These considerations must be integrated and synchronized with the other operational functions and with respect to factors time, space and force. Finally, they must consider deployment, distribution, and sustainment early and throughout the navy planning process, particularly due to lead times required to source, prepare and deploy forces globally.

Naval forces deploy or move by multiple means. NTTP 5-01.4 *Navy Planning, Logistics*, defines deployment as all activities from origin or home station through destination, specifically including intracontinental United States, inter-theater, and intra-theater movement legs, staging, and holding areas. Deployment encompasses the transportation of people, equipment, supplies, and other commodities by land, sea, and air, to enable military force projection and includes efforts for scheduling the mobilization and movement of forces and materiel to support the higher joint task force commander’s operational concept. Navy ships with embarked forces, naval air squadrons, detachments, and MEUs are self-deploying. Marine Corps forces and naval expeditionary component command forces - such as Seabees, security units, small boat units, and special operating forces, are transported to and from theater via strategic common-user land, sea, and air transportation provided by USTRANSCOM.

The deployment portion of this session focuses on the “move the force” functional capability of which the Navy plays a major role. Over 90% of U.S. warfighter equipment and supplies travels by sea. While the Joint Staff J3 serves as the DOD Joint Deployment Process Owner, USTRANSCOM serves as DOD’s Mobility Joint Force Provider, Single Manager for Defense Transportation and Single Manager for Patient Movement. Their charter is to maintain and operate a deployment system for orchestrating the transportation aspects of worldwide mobility planning, integrating deployment-related information management systems, and providing centralized wartime traffic management. Actual movement is executed by USTRANSCOM’s component commands: Military Surface Deployment & Distribution Command (SDDC—Army), Military Sealift Command (MSC—Navy), and Air Mobility Command (AMC—Air Force). The Department of Transportation’s Maritime Administration (MARAD) bridges MSC with U.S. flag commercial carriers for sealift procurement and operations.

In the initial steps of the joint planning process, the NCC or JFMCC and JTF staffs simultaneously develop a Concept of Operations (CONOPS) along with task organization (Annex A) and a prioritized movement plan, communicated in Annex A, Appendix 1, Time-Phased Force Deployment List (TPFDL). As the planning process continues, the TPFDL is substantiated and codified as the TPFDD or Time Phased Force Deployment Data. The TPFDD serves as the NCC, JFMCC, and JTF commanders’ primary tool for managing the flow of forces/capability into the area of operations. The supported CCDR reviews and validates the lift requirements within the specific TPFDD window and notifies USTRANSCOM that the movement requirements are ready for lift scheduling. USTRANSCOM uses the TPFDD to employ each leg of the Strategic Mobility Triad to project power. The Strategic Mobility Triad consists of pre-positioned material, sealift and airlift.

Sustainment is one of the six joint functions and is the provision of logistics and personnel services necessary to maintain and prolong operations until mission accomplishment and redeployment of the force. This lesson focuses on the logistics portion of the sustainment joint function. Logistics concerns the integration of strategic, operational and tactical support efforts within the theater, while scheduling the mobilization and movement of forces and materiel to support the joint force commander’s operational concept.
The joint operational commander, as well as members of the commander’s staff, must have a clear comprehension of the capabilities and limitations of operational logistics to execute daily peacetime operations successfully and, certainly, missions across the spectrum of conflict. Providing logistics to our forces throughout the world is a complex process and requires a great deal of coordination and synchronization by both supported and supporting commands and organizations. Even though logistics is normally a service responsibility, the combatant commander retains Directive Authority for logistics and must decide if and when it is appropriate to exercise that authority.

This session provides an overview of the fundamentals of operational logistics to include the core logistics functions and the classes of supply. It identifies logistics tools that enable the geographic combatant commander to execute logistics responsibilities in the operational area. These tools include Directive Authority for Logistics (DAFL), Executive Agency (EA), lead service, Common User Logistics (CUL), joint logistics boards, Acquisition Cross Service Agreements (ACSA), and coalition/contract logistics. This session also emphasizes the importance of the Logistics Estimate and how it should be used as a tool to ensure that critical logistics issues are properly considered throughout the joint staff planning process.

D. Questions:

1. Are logistics/sustainment the same/different? When should logistics be considered during the planning process and why?
2. What tools are available to the combatant commander to balance joint logistics efficiently and effectively? What are the advantages and disadvantages associated with those options?
3. How do commanders plan and manage contracted support to meet operational missions? What risks does the operational force assume by relying on contracted capabilities and how can these risks be mitigated?
4. How does the “logistics estimate” serve as a tool to facilitate critical logistics planning during the joint planning process? What are some of the logistics issues that must be properly addressed?
5. What were some of the naval logistics challenges at Leyte? Do some of those same challenges exist today, and if so, which ones and how do we overcome them?
6. What are the major advantages and disadvantages of each leg of the strategic deployment triad?
7. What are the major planning considerations facing operational planners in deploying a force to the theater of operations and conducting intra-theater distribution management?
8. How does the CJTF use the Time Phase Force Deployment Data (TPFDD) to manage the movement of forces into the area of operations?

E. Required Media:

Strategic Deployment Video. (CDE 8065M)
F. **Required Readings:**


___________. *Joint Logistics.* Joint Publication (JP) 4-0. Washington, DC: CJCS, 4 February 2019 (Incorporating Change 1, 18 May 2019). Read: Executive Summary (ix–xviii); Chapter I (all); Chapter II (II-1 to II-3); Chapter III (III-1 to III-3; scan remainder of chapter); Scan: Appendix B, Appendix E, and Appendix P. *(JP 4-0) (Government)*

G. **Supplementary Readings:**


Lopez, Michael C., Major, USA. *Operational Logistics.* Monograph submitted to the School of Advanced Military Studies (SAMS), U.S. Army Command and General Staff College, Fort Leavenworth, Kansas (Second Term, AY 00-01).


O’Hanlon, Michael E. *The Science of War, Defense Budgeting, Military Technology,*


I would say that he (Chinese CNO, Wu) doesn’t want to build a navy that’s equivalent to the U.S. He wants to build a navy that surpasses the U.S.

—Admiral Gary Roughead (USN, Ret.)
Former U.S. Chief of Naval Operations

A. **Focus:**

This session is designed to synthesize the material covered in the course thus far. The session will require students to revisit the unique considerations of naval and joint capabilities/limitations and employment considerations relevant to a variety of warfare areas. A review of operational art and maritime warfare theory will also be required to successfully complete this session. The PRC-Taiwan Vignette provides a fictional future scenario for students to apply their knowledge and understanding of naval and joint force employment considerations and maritime and joint command and control in a discussion of the operational design of a major, joint maritime operation. This is not a planning exercise but rather a realistic backdrop to facilitate a professional discussion on naval and joint warfare in a maritime context.

B. **Objectives:**

- Comprehend maritime and joint force capabilities, roles, functions, employment considerations, and limitations.
- Apply naval and joint capabilities to operations in a high-intensity combat environment against a near-peer competitor.
- Design a major naval/joint operation.

C. **Background:**

Designing a major naval operation in many ways parallels the activities involved in designing a major land operation. However, considerable differences can exist because of the characteristics of the physical environment in which maritime forces operate, as well as other aspects of factor space. Clearly, maritime forces are employed very differently than their terrestrial brethren. In generic terms an operational design for a major naval operation includes the following elements: ultimate operational (and sometimes limited strategic) objective, as well as intermediate objectives; force requirements; balancing of operational factors against the ultimate objective; the identification of critical factors and centers of gravity; the initial positions and lines of operations, directions/axes; the operational idea; and operational sustainment. Students should review Operational Design from Block 1 during their preparation for this session.

The operational idea (or scheme) is the very essence of the design for a major naval operation. The operational idea for a campaign should be developed first, because the overall strategic
objective always delineates the operational objectives. It provides a framework for the operational idea of each subordinate major operation. The operational commander should make sure the subordinate operational ideas in each phase of a maritime campaign are consistent with his own operational idea. The operational idea for a major naval operation is developed during the operational commander’s estimate of the situation, and the idea should be further elaborated upon and refined during the planning process. A soundly conceived operational idea should include selected principles of war; a method for defeating the enemy; the application of sources of power; the sectors of effort; the main and supporting forces, the point of main attack (or defense); the concentration in the sector of main effort; the scheme of operational maneuver and fires; the protection of the friendly center of gravity; an anticipation of the point of culmination as well as considerations of deception; sequencing; synchronization; branches and sequels; phasing; tempo; momentum; and reserve.

It is critical to understand how maritime forces can be used to support and enable the success of the other component commanders’ (land, air, SOF, and so forth) objectives, and ultimately a JTF mission. This fictional vignette is intended to generate a discussion of naval and joint capabilities, limitations, and operational design in the context of a major naval operation. It is not expected that students evaluate the viability of the scenario presented, or the probability of any American intervention in the portrayed crisis. Students need simply to accept the task of discussing potential operational designs or schemes and how maritime/joint forces could be employed effectively in this situation.

The principal purpose of this session, exclusive of a professional discourse, is a review of naval and joint capabilities, limitations, and employment considerations relevant to an operational design (including the operational idea) for denying control of the surface / subsurface / air in the Taiwan Strait and its approaches, and obtaining control of the surface / subsurface / air in the South China Sea and the Yellow Sea. The integration of offensive / defensive cyber war capabilities in the struggle for sea control and sea denial; an operational idea for the protection of blue shipping in the South China Sea; and/or an operational idea for attack of Red maritime trade in the sea areas adjacent to Mainland China may also be included. Professors will issue specific tasking in seminar.

D. Questions:

1. Describe the employment considerations, given the threat, capabilities, environment, and mission.
2. What are some Command and Control options for naval and joint operations?
3. What broad capabilities and options do U.S. Naval forces bring to a Joint Force Commander and how could these be integrated into joint operations?
4. What vulnerabilities exist in U.S. forces that could be exploited by the adversary in exercising sea denial operations? How could the JFMCC compensate for those vulnerabilities?
5. How might the U.S. commander limit the threats to his/her forces from the PRC surface, subsurface, and air threats?
6. How might the JFMCC protect the vital lines of communication (LOCs)?
E. **Required Media:**

None.

F. **Required Readings:**

Joint Military Operations Department. *PRC-Taiwan Vignette.* Newport, RI: Naval War College, 26 April 2018. (NWC 4027F) *(Government)*


G. **Supplementary Readings:**


STUDY GUIDE

2.19
SUMMATIVE ASSESSMENT 2: NAVAL, JOINT AND MULTINATIONAL WARFARE

A. Focus:

This summative assessment is primarily intended to measure a student’s mastery of Block 2 content given a contemporary (real or hypothetical) situation requiring a military response.

B. Objectives:

- Demonstrate the ability to analyze operational situations in the contemporary security environment using operational art and doctrine.
- Demonstrate the ability to apply naval, joint and multinational capabilities in a maritime/joint theater across the range of military operations.
- Demonstrate the ability to apply critical and creative thinking to operational problems.
- Demonstrate the ability to apply clear and precise written communication.

C. Background:

In order to succeed in the remaining blocks of instruction, students must have a basic level of proficiency in applying naval, joint and multinational military capabilities to operational problems. This assignment is meant to ascertain the level of mastery within the seminar and to revisit as necessary those naval, joint or multinational aspects that may need reinforcing.

Students will be expected to prepare a complete response to the question(s) assigned. The assignment may also implicitly require students to apply major principles, ideas, and concepts covered in the previous Block 1.

The basis for evaluation of the written response will be:

- Complete, logical, and well-supported answer(s) to the question(s) or problem(s) presented.
- Application of appropriate course concepts to the specific question(s) assigned.
- Clear and concise articulation of ideas.

D. Questions:

The assigned question(s) and instructions will be provided by the FSP/NPS professors.

E. Required Media:

Review as necessary.

F. Required Readings:

Review as necessary. This assignment is an individual effort; collaboration is NOT permitted.

G. Supplementary Readings:

None.
BLOCK 3:
CONTEMPORARY OPERATIONS

A. Focus:

The focus of this block is on the unique challenges that contemporary operations present to commanders and their staffs, given the nature of the current security environment.

B. Description:

The preceding blocks have discussed the use of the military component of national power to accomplish assigned tasks to achieve national objectives. This block attempts to give greater clarity to the current operational environment by sampling the types of military activity that typically follow, or may be undertaken completely independent of, “decisive operations”. In particular, lower level conflict, often arising from the debris of conventional combat, will often take significantly longer to resolve and may require a greater allocation of resources than major combat operations themselves. Commanders will need to excel in an ambiguous operating environment containing not only the adversary but coalition partners, nongovernmental and international organizations, contractors, the media and a plethora of other groups in order to achieve assigned objectives.

We begin by reviewing those aspects of Operational Law most relevant to the Joint Force Commander, so as to understand the current legal framework that bounds all military action. This is followed by a short exploration of the Range of Military Operations (ROMO), much of it undertaken in an environment defined by the “fragile states” phenomenon. Fragile states have been and will likely continue to be a primary source of regional and potentially international problems—wicked problems that military planners may have to manage as best they can.

Consequently, the block features variations on the theme of countering the negative consequences of failed states or the methods of unconventional statecraft used by others to exploit state fragility for nefarious purposes. This area includes insurgency and counterinsurgency operations, where military forces are just one of several tools of U.S. foreign policy. Another consequence is the increasing post-Cold-War relevance of peace operations in stabilizing and potentially reversing the slide of fragile states into the “failed” category. A significant aspect in all such situations is the degree of interagency and other civil-military coordination required by the joint force commander.

The utility of maritime forces in this complex environment is a common thread running through the block. While many problems can be best addressed by ground forces, maritime forces may permit other courses of action that would not otherwise be feasible. A measured consideration of the strengths and weaknesses of maritime forces may indicate other ways for the Joint Force Commander to manage the complex challenges in his area of responsibility.

The overarching purpose of the Contemporary Operations block is to help set the stage for the Joint/Navy Planning Exercise and the JTF/JFMCC Operation Order Development blocks that follow.
STUDY GUIDE

3.1
OPERATIONAL LAW

Nothing in the present Chapter shall impair the inherent right of individual or collective self-defense if an armed attack occurs against a member of the UN until the Security Council has taken measures necessary to maintain international peace and security.

— UN Charter, Article 51

Don't fire 'til you see the whites of their eyes.

—General Israel Putnam or Colonel William Prescott, Bunker Hill, 1775

A. Focus:
The focus of this session is operational law in a maritime context: specifically, the domestic and international legal frameworks governing U.S. military operations at and from the sea, and rules of engagement/rules for the use of force.

B. Objectives:

• Comprehend the effect of international law on the planning and execution of military operations.
• Comprehend the basic principles of the law of armed conflict for land, air, and naval warfare.
• Value the maritime operational considerations resulting from the sovereign right of nations to limit the entry and movement of foreign forces within their territorial seas.
• Analyze the operational challenges in asserting freedom of navigation and protection of commerce on the maritime commons.
• Analyze emerging legal issues surrounding freedom of navigation in disputed maritime areas such as the Arctic, the Arabian Gulf, and the South China Sea.
• Comprehend the basic principles underlying the use of force in self-defense.
• Comprehend the principles behind the Standing Rules of Engagement (SROE) and the distinction between conduct-based ROE and status-based ROE.
• Comprehend the distinction between SROE and the Standing Rules for the Use of Force (SRUF).
• Comprehend ROE development in the planning process and how modifications to ROE are obtained from higher authority.
• Comprehend the role of political, legal, and military personnel in the formulation of ROE.
• Comprehend the role of the commander upon learning of an apparent ROE violation.
• Comprehend the implications of working with coalition forces and their likely different ROE.
• Apply the CJCS SROE and The Commander’s Handbook on the Law of Naval Operations in a factual context involving employment of military forces.
• Evaluate the evolution of the operational authorities for employment of force during the Iran-Iraq Tanker Wars (1980-1988).

C. **Background:**
Operational law is a broad term encompassing those facets of international law, U.S. domestic law, U.S. military regulations and the domestic law of other nations impacting military planning and operations. When planning and conducting military operations, commanders and their subordinates must comply with the international law that governs (1) the location of hostilities/extrad territoriality, (2) the legal basis for nations to use force and (3) levels of lethality. The Use of Force video lecture introduces both the *jus ad bellum* (a nation’s right to use force—or go to war) and the *jus in bello* (the law of armed conflict during land, air, and naval warfare); however, the video focuses on the former. Additionally, the video touches on legal issues arising from modern use of force against non-state actors, in drone/UAV/RPV strikes, and in cyber operations among others. When planning and conducting military operations, commanders and their subordinates must comply with the international law that governs the legal basis for nations to use force and lethality as well as the law that governs the conduct of hostilities extraterritorially.

The Maritime Operational Law video lecture focuses on the law of the sea and the law affecting military operations in the maritime environment. The general features of the maritime environment, what is called the Maritime Domain will be discussed from a legal perspective. Legal classifications or regimes of the ocean and airspace directly affect maritime operations by determining the degree of control a coastal nation may exercise over the conduct and activities of foreign merchant ships, warships, and aircraft operating in those areas. This video discusses not only constraints maritime operational law might impose on military operations but also, how the operational commander can use the law, what some now call “lawfare”, to achieve success in both conflict and non-conflict missions.

The seminar will review and then apply the fundamental concepts introduced in the video lectures and required readings to a hypothetical Rules of Engagement (ROE) case study. The ROE case study is designed to enhance understanding of the legal, political, and military considerations that factor into ROE development; ROE-related issues that might arise during coalition operations; and the commander’s role in promulgating and reviewing ROE and responding to apparent ROE/LOAC violations. The focus then shifts to the historical application of operational law to a real-world maritime conflict, the 1980-1988 Iran-Iraq Tankers Wars, allowing discussion of how operational commanders derive authorities for action and force employment within the context of specific military operations.

D. **Questions:**
1. Why do nations care about international law when deciding whether or not to use force? What motivates them to comply with its provisions?
2. Describe the role of the UN Security Council (UNSC) regarding the use of force against a nation or non-state actors.

3. What are the requirements to be a lawful combatant; to be a non-combatant/civilian? What is an unlawful (or unprivileged) combatant?

4. To what extent does the law of armed conflict apply across the spectrum of conflict? Across this spectrum of conflict, are criminals, unlawful combatants, or violent extremist organizations (VEOs) subject to the same or different treatment?

5. How has the law of armed conflict changed, if at all, during the conflicts in Iraq and Afghanistan? Is it different for combating ISIL?

6. What sovereign rights does a nation have regarding its land territory, territorial sea and national airspace, and how does this affect the movement or operation of foreign military forces in these zones?

7. What are the distinctions between innocent passage, transit passage, archipelagic sea-lane passage, and high seas freedom of navigation? How, if at all, are military planning and operations affected by the various legal regimes of oceans and airspace?

8. How can operational planners use the concepts of belligerent control of the immediate area of operations, maritime/air warning zones, and blockade to assist mission accomplishment?

9. To what extent may the military operations of a belligerent nation be conducted within the land territory, national airspace or national waters of neutral or non-belligerent nations?

10. Who has a role in crafting ROE for a particular mission and why?

11. How does a joint force and/or a coalition force draft and apply ROE for given operations? What unique ROE issues arise in coalition operations? What methods are used to resolve them?

12. What is Positive Identification (PID) and what ramification does the requirement for PID have on U.S. forces/coalition forces?

13. Describe methods a planning staff can employ to obtain mission-specific ROE. How do you draft and seek supplemental ROE?

14. Who in the chain of command should have/does have the authority to determine hostile intent? Who has the authority to take lethal measures when faced with hostile intent?

15. In asymmetric warfare what, if any, proactive measures can forces take to assist in determining hostile intent at sea and on the ground?

16. What considerations impact a commander’s actions when he/she becomes aware of potential violations of the ROE and/or the Law of Armed Conflict?

17. What role do tactical Directives play vis-à-vis ROE? Operation IRAQI FREEDOM (OIF)/Operation ENDURING FREEDOM (OEF) examples?
E. **Required Media:**

“International Law and the Use of Force” Lecture. (CDE 8189M)

“Maritime Operational Law” Lecture. (CDE 8161M)

F. **Required Readings:**


G. **Supplementary Readings:**

BBC video, “Shooting down of Iran Air 655.” Accessed on 31 May 2019. Available at: [https://www.youtube.com/watch?v=lRJnumxuHwY](https://www.youtube.com/watch?v=lRJnumxuHwY)

CFLCC Operation Iraqi Freedom ROE Card, 31 Jan 03. (NWC 5011)

Grunawalt, Richard J. “USS Vincennes (CG 49) and the shoot-down of Iranian Airbus Flt 655.” NWC Internal Memorandum (1992). (NWC 1156)


McNeal, Gregory S. "The bin Laden Aftermath: Why Obama Chose SEALs, not Drones." *Foreign Policy* (May 5, 2011). (NWC 3160)

Pedrozo, Raul “Pete.” “The Bull in the China Shop and Rising Tensions in the Asia Pacific


White House Fact Sheet: U.S. Policy Standards and Procedures for the Use of Force in Counterterrorism Operations outside the United States and Areas of Active Hostilities, May 23, 2013. (NWC 1085)
3.2
THE RANGE OF MILITARY OPERATIONS (ROMO)
ACROSS THE CONFLICT CONTINUUM

We’re going to find more and more throughout a section of the world that runs from North Africa to the Philippines, from Central Asia to Central Africa; that we have got an entire region of the world that is chaotic and in turmoil, and we have just seen the beginnings of it. For decades more, we’re going to be dealing with this problem. You’re going to be fighting terrorists; you’re going to be fighting against failed or incapable states that are sanctuaries for problems. You’re going to try to rebuild nations. You’re going to deal with crises and threats that threaten our people and our property. And it’s all going to be mixed into one big bag.


Like it or not, most of you will find yourselves in a place you never heard of, doing things you never wanted to do.


A. Focus:

This session focuses on the myriad activities an operational commander may be tasked to perform – the “range of military operations” – anywhere on the conflict continuum from peace to war. The military is often called upon to undertake these activities simultaneously within the same operation. This is particularly true for situations that involve failing or failed states – the “fragile states” phenomenon – where military intervention can present a host of challenges beyond those typically encountered in major combat operations.

B. Objectives:

- Comprehend the full range of military operations across the conflict continuum.
- Comprehend the implications of the ROMO for military operations and military planning.
- Comprehend the concept of fragile states and its operational implications.
- Comprehend the military and non-military consequences of state failure and what those consequences imply for operational planners.
- Comprehend the challenges of restoring stability and peace in failed and failing states by U.S. and coalition forces working in coordination with other organizations (such as the UN).

C. Background:

The Range of Military Operations

Historically, the U.S. military has preferred to focus on large-scale conventional warfare against similar opponents where the objectives were relatively clear and where the war itself was relatively short. Despite this preference, U.S. military forces throughout their history have
found themselves conducting operations falling short of conventional war, and U.S. forces will continue to do so for the foreseeable future. Operation IRAQI FREEDOM, for example, comprised several weeks of conventional combat operations followed by more than eight years of belligerent occupation, stability, and counterinsurgency operations. More than a decade after quickly routing the Taliban in Afghanistan, the United States and its allies refocused their efforts but are still conducting significant operations (of several kinds) there. Operation INHERENT RESOLVE is yet another ROMO exemplar where a mix of coalition SOF and conventional forces confront a violent extremist insurgent group that has managed to carve out a de facto “caliphate” effectively occupying portions of Syria and Iraq, years after we had thought the war there “won”.

Current joint doctrine examines the character of violent conflict and the military’s role in attaining national security goals. The current concept of ROMO found in Joint Publication 3-0 Joint Operations states that ROMO “helps relate military activities and operations in scope and purpose. The potential range of military activities and operations extends from military engagement, security cooperation, and deterrence in times of relative peace up through large-scale combat operations.” This doctrinal concept of ROMO eliminates the traditional boundary between conventional and other military operations, such as stability and reconstruction. ROMO represents the manner in which the military presently thinks about the likely problems it might be expected to encounter. Within this strategic environment, the United States must be able to effectively employ its military forces to accomplish assigned objectives. The ROMO concept assumes that conventional military forces can at any time successfully conduct operations across a spectrum of operations so wide that there may be little in common between operations at one end of the spectrum and those at the other. Planning military operations across this wide spectrum is not necessarily as straightforward as planning for just one method of combat.

As for the role of maritime forces across the Range of Military Operations, opinions differ. Some suggest that naval forces are of marginal utility in many of the scenarios short of large scale conventional warfare, while others note the inherent flexibility of military forces operating at sea. In general, the range of military operations requires the operational level commander to carefully analyze the situation and determine how best to use his joint forces in order to accomplish national objectives in what may be very complex and ambiguous conditions. The issues confronting the U.S. military today are as dramatic as any challenges the military services have confronted during the last century. This is especially true in the current strategic environment, where the fragile-states phenomenon coupled with an epidemic of formidable violent extremist organizations would suggest the nation-state concept itself may be in serious trouble.

The Fragile-States Phenomenon

The modern nation state arose in central Europe in the aftermath of both the Thirty Years War and the Eighty Years War (the Dutch War of Independence). The Peace of Westphalia (1648), which concluded these conflicts, accorded primacy to the nation state as the principal actor in international relations. Over the next several centuries, the European state developed into a powerful political entity that could wage war against its neighbors, enforce security within its borders, and provide positive political goods to its citizens. As European states expanded and established colonial empires throughout the world, they employed their methods of organizing population and space. With the principal objective of extracting wealth from their colonial
possessions while keeping local populations under control, they oftentimes destroyed or degraded indigenous institutions without offering much in their place. Moreover, they regularly devised colonial boundaries that addressed conflicts among the competing colonial powers but that ran roughshod over ethnic groups and peoples in Africa, the Middle East and Asia.

The European colonial powers began shedding their colonies after World War II. Many of the newly independent states experienced significant political, economic and military upheavals as they tried to merge their native customs and culture with the Western model of the state system. Some managed better than others; some descended into long periods of internal disorder. In some, insurgencies or civil wars left both physical and political wreckage.

The Cold War created additional problems for these emerging states, the United States and the Union of Soviet Socialist Republics (U.S.S.R.) caring primarily that their client states embraced their respective causes and were willing to offer basing and other support. Simultaneously, Western aid, based on a faulty understanding of the processes of political and economic development, further dislocated indigenous institutions without producing genuine improvements.

The Soviet Union’s collapse generated new candidates for state failure. It eliminated the decades-old subsidies to client states that had been crucial for maintaining their stability. As well, new states created from the debris of the Soviet empire continue to experience problems analogous to those of the states created during post-WW II decolonization.

Regardless of whether such states are considered “fragile,” “failed,” “recovering,” or “vulnerable”, they all have issues that demand the attention of the international community. Beyond the human suffering that results from ineffective states, the decay of governance in one state creates problems that tend to spill across the borders and threaten the stability of other nations in the region. Sometimes, dueling states attempt to destabilize one another by sponsoring or harboring insurgent forces. Weak states sometimes result in ungoverned internal areas, allowing other entities (e.g., insurgents, organized crime or terrorist groups) to take root. Ungoverned areas may also provide havens for maritime criminals, leading to piracy in adjacent oceanic areas. From a pragmatic standpoint, these fragile states often have natural resources that are of great interest to the world. High-demand natural resources (such as oil and minerals) are often located in areas of ongoing violent internal conflict. The energy resources of the new states in Central Asia are of particular note. Other states have crucial importance to international trade because they are adjacent to or astride vital shipping routes.

Fragile states thus occupy the attention of the international community, and powers with global interests and expeditionary forces often find themselves involved in these conflicted communities. Such interventions may be relatively benign, or at least may begin that way, but can rapidly become exceptionally complex. “Simple” operations such as noncombatant evacuation or humanitarian assistance and disaster relief can easily expand to include foreign internal defense and assorted flavors of peace or counterinsurgency operations. These operations will probably be conducted in large geographic areas with immature infrastructure where cultural norms are in wide variance with Western values.

In these environments, the U.S. military may find itself working alongside a cast of many other organizations (United Nations, other international and nongovernmental organizations, U.S. government agencies, agencies from other governments, and private contractors), all vying for the attention of the host nation government and population. At times, this courtship may be a
forced one, as all of these groups have different objectives and incentives. Attempting to
discern the key elements of this often volatile, uncertain, complex and ambiguous operating
environment will be an important, yet daunting, task for any commander.

D. Questions:
1. How should you think about operational functions once you get away from conventional
   war and consider operations such as peacekeeping and post-conflict reconstruction?
2. What parts of the ROMO present tame problems? What parts present “wicked” problems?
3. How do political objectives vary across the ROMO? What effect do different political
   objectives have on the selection of military objectives?
4. What are the characteristics of a “fragile” or “failed” state?
5. How do states reach a condition of “fragility?” Are there common threads to state failure
   or is each unique? What are useful indications of impending state failure?
6. Why should the Geographic Combatant Commanders be concerned if state failure occurs
   in their area of responsibility?
7. How can we apply military resources most effectively in such scenarios? What other
   resources are typically required?
8. What other non-military organizations are likely to be involved? What are the implications
   for their participation for the military?
9. What role do maritime forces play in addressing the challenges of fragile states?

E. Required Media:
   “Fragile States” Lecture. (CDE 8007M)
   “Naval Operations Other Than Combat” Lecture. (CDE 8163M)

F. Required Readings:
   Brock, Lothar, Hans-Henrik Holm, Georg Sorensen and Michael Stohl. “Failed States and
   Violence: the Limits of External Assistance.” Global Dialogue 13, no. 1 (Winter/Spring
   (PURL)
   Fishel, John T. “Little Wars, Small Wars, LIC, OOTW, the GAP, and Things That Go Bump
   3077) (E-Reserve)
   Menkhaus, Kenneth J. “State Fragility as a Wicked Problem.” PRISM 1, no. 2. (March 2010):
   85-100. (NWC 3085) (Government)
   U.S. Office of the Chairman of the Joint Chiefs of Staff. Joint Operations. Joint Publication
   Read: V-1 to V-5, “Joint Operations Across the Conflict Continuum.” (JP 3-0) (Government)
G. **Supplementary Readings:**


3.3
NAVAL SUPPORT OF FOREIGN POLICY

A man-of-war is the best ambassador.

— Oliver Cromwell, September 1643

A. **Focus:**

This session will analyze the use of naval forces in support of national foreign policy. The focus of the session is on the methods of naval diplomacy, the use of naval forces in conflict prevention and management, and advantages/disadvantages in the employment of naval forces as a tool of foreign policy.

B. **Objectives:**

- Comprehend the diplomatic value of naval power.
- Comprehend the similarities and differences between coercive forms of naval diplomacy and collaborative forms of naval diplomacy.
- Know the main methods in applying coercive and/or collaborative forms of naval diplomacy.
- Know the advantages and disadvantages of using naval forces in support of foreign policy.

C. **Background:**

Navies have been used in support of foreign policy by major powers throughout history. Naval forces can be employed in support of a country’s diplomatic initiatives in peacetime and time of crisis. Naval diplomacy is defined as the employment of naval forces to further foreign policy objectives by influencing foreign decision-makers’ thoughts and actions. Naval diplomacy functions on a cooperative to coercive spectrum: supporting allies and deterring adversaries or compelling them to change policies. A single maritime force may simultaneously engage in more than one type of military/diplomatic activity.

D. **Questions:**

1. Naval ships are specifically designed for naval warfare. Why is there value in employing naval power in a diplomatic role? Why are there disadvantages?
2. Compare coercive forms of naval diplomacy with collaborative forms of naval diplomacy.
3. What are the fundamental principles that underpin the employment of naval forces for diplomatic tasks?

E. **Required Media:**

F. **Required Readings:**


G. **Supplementary Readings:**


You must understand that few of the problems of our time have been solved by military power alone.

— John F. Kennedy

A. Focus:
Myriad civilian “actors” influence military operations across the levels of war, presenting both challenges and opportunities to the joint force commander. Many of the challenges when accommodating civilian efforts result from a fundamental characteristic of civilian organizations: civilian participants are not necessarily required (or inclined) to subordinate their efforts under a military-style chain of command. Consequently, cooperation rather than unity of command is the guiding principle when striving for unity of effort with civilian counterparts. To ensure unified action, operational commanders must understand and account for this and other aspects of civil-military interaction when planning and executing operations across the ROMO.

B. Objectives:

• Comprehend interagency coordination processes at the national and theater levels.
• Comprehend the capabilities and limitations of interagency partners.
• Comprehend how a Combatant Commander can best integrate joint, interagency, and multinational capabilities to achieve theater objectives across the range of military operations.
• Comprehend the role of a U.S. Ambassador and the organization and functions of an embassy country team.
• Comprehend how international organizations conduct operations and their role in conflict management or mitigation.
• Comprehend the United Nations system for planning and managing complex operations.
• Comprehend the cultural differences between military and non-governmental organizations (NGOs) operating in the same space, and how military forces can work with NGOs.
• Comprehend the numbers and types of contractors employed in the operational environment.
• Comprehend the planning and execution considerations for contracting out key operational functions.
• Comprehend the risk associated with the loss or reduction of contractor capabilities.
• Comprehend the Joint Force Commander’s responsibility for Civil-Military Operations (CMO).
Comprehend the role of Civil Affairs specialists in CMO as well as the various alternatives available for coordinating with a wide array of civilian counterparts.

Comprehend the role of USAID/OFDA as the lead federal agency for foreign humanitarian assistance and the military-USAID/OFDA relationship during FHA/DR operations.

C. Background:
At the highest levels of national-strategic decision-making, the National Security Council deliberates the use of military force in concert with other national elements of power in response to a crisis. In turn, NSC-formulated policy directs the activities of other (non-DoD) members of the interagency community – in particular, the Department of State – in a “whole-of-government” response. The role of international organizations such as the United Nations or the European Union are also often a major factor in overseas operations – and not just at the national level, but also at the combatant command, joint task force, functional component, and even lower (tactical) levels of command.

At the theater-strategic level, geographic combatant commanders must work hand-in-hand with the Department of State’s ambassadors and their country teams in the AOR to ensure unity of effort across mutually-supportive lines of operation. The U.S. Agency for International Development (USAID) – a State Department-funded, independent agency focused upon long-term foreign development and short-term humanitarian assistance and disaster relief – also has a noticeable international presence. Cooperative partnerships extend to other members of the interagency community with an overseas presence, such as the Departments of Justice (FBI), Transportation (FAA), and Homeland Security (U.S. Coast Guard, Immigrations & Customs Enforcement, Customs & Border Patrol and others). The national intelligence community, with operations spanning the globe, is clearly a significant player in any AOR. A Joint Interagency Coordination Group (JIACG) or similar organization in the CCDR’s headquarters often structurally formalizes these partnerships.

Operationally, Joint Force Commanders (JFCs) often deal with not only interagency representatives but also those of the United Nations or other international organizations found in the joint operations area. In addition, civilian non-governmental organizations (NGOs) are a nearly ubiquitous presence in the operational environment; frequently sharing similar “ends”, their “ways” and “means” can be at odds with those of the JFC. And though the JFC may establish Civil-Military Operations Centers (CMOCs) at the scene to coordinate with and render support to civilian efforts, civilian actors are not necessarily obliged to participate. Finally, our expanding reliance upon civilian contractors to carry out critical military functions such as command & control and logistics in theater creates its own set of unique challenges for the joint force commander.

Tactically, the civilian “face” often encountered is that of the victim of war or natural disaster – the refugee fleeing the scene of carnage, the local leader possessing little save an earnest desire to rebuild her community, the government official at a loss to see a way forward amidst the devastation. Into this chaotic environment are deployed Civil Affairs (CA) personnel, drawn principally from the Army and Marine Corps, to make sense of the situation and organize the military response.

Civil-Military Operations (CMO) is the doctrinal term of art for the ways in which a commander deals with the aforementioned civilian aspects of military operations at the
operational level of war. While CMO is ultimately the Joint Force Commander’s responsibility, it is the role of Civil Affairs personnel to help orchestrate CMO. With little in the way of organic capability, CA relies upon the other components of the joint force to provide the necessary resources to carry out CMO. Consequently, civil-military interaction is a significant consideration for the JFC, potentially affecting the selection of military objectives, forces, and resources, as well as the execution of operational functions; early planning for CMO across all phases of a major operation or campaign is paramount.

The Operation UNIFIED ASSISTANCE (OUA) case study offers the student an opportunity to explore a situation where the U.S. military overcame the challenges and exploited the opportunities civilian actors brought to a crisis response – a complex, multinational humanitarian intervention in the wake of a major natural disaster overseas.

D. Questions:
1. How does the interagency community coordinate efforts at the national and theater levels?
2. How can a Joint Force Commander (JFC) and his staff organize and plan for successful interagency operations?
3. What are the responsibilities of a U.S. Ambassador and a country team? How do they coordinate with a Joint Force Commander and staff?
4. How can the JFC effectively coordinate, cooperate, and communicate with International Organizations to accommodate their requirements and capabilities early in an operation?
5. How can the joint force commander reconcile his/her mission and objectives with those of an NGO operating in the same area?
6. What are the key planning considerations for the employment of contractors? How do these considerations change by phase of operation? How do they change for different operations across the range of military operations?
7. What are the command and control (C2) issues contractors (DoD, DoS, coalition partners, host nation, International Organization, NGO, other government agencies, etc.), raise for the joint force commander, especially in a non-linear operating environment?
8. When does planning for civil-military operations begin and who does this planning?
9. How do effective civil-military operations contribute to unity of effort in execution of assigned missions?
10. What civilians might be present in the battle space and how might the joint task force effectively work with these organizations?
11. What is the difference between the responsibilities of and operations of a CMOC, a Humanitarian Assistance Coordination Center (HACC), and a Humanitarian Operations Center (HOC)?
12. What military tasks might be useful in FHA/DR? What military components could provide those tasks?
13. What characteristics of expeditionary maritime forces from the OUA case study make them particularly useful for FHA/DR response? What limitations constrain their use in this role?
14. What are the key considerations for developing and executing an exit strategy for FHA/DR operations?

E. Required Media:
“Interagency Collaboration-A Work in Progress: Pain and Pathos” Lecture. (CDE 8051M)
NWC “IGOs, NGOs, and Contractors” Panel. (CDE 8139M)

F. Required Readings:
“Civil Military Interaction: A Primer.” Newport, RI: Joint Military Operations Department, College of Distance Education, Naval War College, April 2017. (CDE 8184) (Government)
______. Interorganizational Cooperation. Joint Publication (JP) 3-08. Washington, DC: CJCS, 12 October 2016. Read: Executive Summary. Scan: II-1 to II-12, IV-1 to IV-16 (HAST, HACC, HOC) and Appendices A-M-1 to A-M-4 (DoS), A-Q-1 to A-Q-5 (USAID), B-B-1 to B-B-6 (UN), and C-1 to C-7 (NGOs). (JP 3-08) (Government)

G. Supplementary Readings:

Lawry, Lynn, ed. *A Guide to Nongovernmental Organizations for the Military*. The Center for Disaster and Humanitarian Assistance Medicine, Office of the Assistant Secretary of Defense (Health Affairs), Summer 2009, extract, pages 25-39 and 195-211. (NWC 4124)


Pope, Robert S. “Interagency Task Forces, the Right Tools for the Job.” *Strategic Studies Quarterly*, (Summer 2011): 113-152. (NWC 3183)


STUDY GUIDE

3.5
INSURGENCY AND COUNTERINSURGENCY WITH NAVAL FORCES

By definition, guerillas and terrorists are weak. By definition, their opponents are much stronger. Contrary to the accepted wisdom...most guerillas and terrorists won their struggles precisely because they were weak.


On the other side—the side of the counterrevolutionaries—the crucial question concerns the relative importance of violence and persuasion, in effect the choice between war and politics. How far is a revolutionary movement dependent upon popular political support, and thus how vulnerable is it to political action designed to undermine popular support? This is the recurring question for the opponents of revolution.

— John Shy and Thomas W. Collier, “Revolutionary War,”
*Makers of Modern Strategy*, 1986

A. Focus:

This session focuses on the fundamental characteristics and types of insurgencies. By framing the operational environment to distill the root causes of insurgency, students will better understand the challenge of designing counterinsurgency operations. Using design methodology, elements of operational art, and specific analytical tools, students will first gain the capability to analyze the environment and structure of an insurgency. This, in turn, will enable them to devise effective operational plans for countering that insurgency. Finally, students will review operational considerations for planning the employment of Naval Forces in the insurgency/counterinsurgency environment.

B. Objectives:

- Comprehend the role of violence in revolutionary warfare.
- Comprehend the joint doctrine perspective on insurgency.
- Comprehend the common causes of insurgency, the fundamental structure of insurgencies, and the persistence and sustainment of insurgencies, using theory, doctrine, and analysis of historical case studies.
- Comprehend the fundamental elements of planning for and conducting COIN operations with naval forces.
- Comprehend the relevance of various elements of operational art in planning COIN operations.
- Apply analytical frameworks for analyzing counterinsurgency operational approaches.
• Analyze the relative effectiveness of military power against the other instruments of national power in COIN, using theory, doctrine, and analysis of historical case studies.

C. **Background:**

Although historically the U.S. military has participated in numerous conflicts against insurgent opponents, it has been far more enthusiastic about fighting at the upper end of the conflict spectrum. Conflicts involving one (or more) insurgencies drag on for years, are rife with political/strategic/operational challenges, and are the least likely to respond to the conventional application of purely military force. We may safely assume that insurgencies will continue, although their environment, specific forms, and tactics may change. Military officers and members of relevant civilian agencies must understand how to operate in politically uncertain and ambiguous environments against “weak” foes that play by very different rules.

To fight an insurgency successfully, one needs to understand the causes, levels of support, grievances, and other factors that sustain the insurgency. This is difficult because although insurgencies share certain fundamental characteristics, they remain unique. Historical, cultural, political, and economic factors must be recognized as integral to any meaningful analysis. A design methodology may be of particular use in identifying the complex, adaptive nature of the environment, the root causes of the conflict, possible objectives, and possible operational approaches.

The employment of naval forces in the insurgency/counterinsurgency environment requires a theoretical understanding of insurgency, operational art, sea control/sea denial principles and planning. Historical analysis demonstrates naval forces have been used effectively (and ineffectively) by both insurgents and those attempting to fight them. As in the land domain, an understanding of the environment is critical to success.

Insurgency and Counterinsurgency are covered together in order to make connections and draw conclusions on the application of operational art theory to the contemporary environment. The first part is devoted to the theory and analysis of insurgency. The second part focuses on both understanding and fighting insurgencies through the continued examination of historical case studies, with an emphasis on the employment of Naval Forces in one case study.

D. **Questions:**

1. Historically, insurgency has been the resort of the “weak.” What does this mean?
2. Explain how environmental factors determine the nature of the insurgency.
3. Describe the factors that must be present for an insurgency to develop and possibly succeed. Which are the most important? Why?
4. Explain how the political/social/cyber environment can be used by an insurgent to accomplish their objectives.
5. Some argue that in the future, insurgencies will increase in frequency while incidents of conventional warfare will recede. Do you agree with this outlook? Why or why not?
6. How has the rise of insurgent movements with global reach differed from earlier insurgencies (or do they differ)?
7. Explain the relationship between the existence of an insurgency and the perceived legitimacy of a host nation or occupying government. How can a government establish legitimacy?

8. Explain the relationship of the operational factors of time, space, and force with an objective involving COIN operations.

9. Analyze the factors that are commonly found in historical and contemporary insurgencies. Which are the most important? Why?

10. Explain how environmental factors determine counterinsurgent objectives, approaches, and access to resources.

11. Explain the unique considerations for employment of Naval Forces in an insurgency environment. How might Sea Control/Sea Denial theory assist Joint Planners?

E. Required Media:
   “Insurgency” Lecture. (CDE 8053M)

F. Required Readings:


Case Study:

G. Supplementary Readings:


3-25


3.6
UNCONVENTIONAL STATECRAFT

If the war [between Israel and Hezbollah] showed anything, it was how insidious the effect of “professional” lingo can be. How does one distinguish “strategic intelligence superiority” from “operational-tactical intelligence dominance”... so thick was the nonsense, and such the resulting verbal confusion, that the need to reform officer training and education ... became one of the cardinal lessons to emerge from the conflict.


A. Focus:

This session complements the preceding seminar on Insurgency and Counterinsurgency With Naval Forces by examining the concepts of hybrid, asymmetric, and irregular warfare in order to address the challenges of determining the patterns of conflict in the contemporary environment as well as the challenges of shaping an effective operational approach for seemingly incomprehensible (and therefore insoluble) conflicts. While the nature of warfare arguably remains unchanged, its character, or how warfare is waged, changes on an evolutionary (and sometimes revolutionary) scale. This session will examine this changing character of warfare where diplomatic, informational and economic applications of power appear to take priority over the employment of military power in attaining operational objectives.

B. Objectives:

- Comprehend evolving trends in warfare and the implications of these for operational planning and execution.
- Comprehend contemporary notions of hybrid warfare, asymmetric warfare, unrestricted warfare and irregular warfare, and their effect on joint doctrine.
- Evaluate the effectiveness of contemporary state and non-state actors in achieving their objectives through use of hybrid, asymmetric, unrestricted and irregular warfare operational approaches.

C. Background:

Hybrid, asymmetric, unrestricted and irregular warfare are terms that are used to capture multiple and evolving patterns of modern conflict. For example, strategists and military experts struggle to categorize the current conflict in eastern Ukraine or the multiple conflicts sweeping Syria /Northwestern Iraq. While the former example could be a state (Russia) fomenting instability in another state (Ukraine) through irregular means, the latter includes a chaotic mix of insurgent groups vying for political control of Syria; internationally recognized terrorist groups with opaque agendas; and non-state actors that are seeking to establish regional political control irrespective of the international borders of several states. In the past, conflicts such as these may not have figured largely in U.S. strategic calculations. In today’s global security
environment, where second and third order effects are not limited by geography, this is no longer true. Non-state actors and terrorist organizations actively recruit and procure resources using information networks that span the globe and easily cross language, culture, ethnic, and religious boundaries. Insurgent groups have a far greater access to successfully co-opt external military and diplomatic support in order to negate the traditional advantages possessed by adversarial government regular forces. Weaker states increasingly are turning to the cyber domain in order to find asymmetric ways to compete with stronger military and economic powers. Strong regional powers are using unconventional warfare and proxy forces to pursue strategic objectives while avoiding diplomatic and economic condemnation by the international community. While history may provide comparable examples, most would agree that the exponential growth of computer networking over the last 20 years has afforded new and innovative opportunities for armed groups and organizations to pursue successfully their objectives while avoiding the debilitating blows by strong, professional military forces such as the U.S. military.

Naval Forces are not exempt from this seemingly evolving and increasingly prevalent character of warfare. In fact, Naval Forces—military, para-military and non-state—are becoming central in such environments. Conflict and competition ongoing in the South China Sea and East China Sea already exhibit asymmetric, hybrid and irregular warfare characteristics. Operational Law and the perception of legitimacy are components of this environment, and opponents appear to target the vulnerabilities of an American Way of War to achieve national or organizational objectives.

The term, “American Way of War” has historically suggested an ‘on/off’ switch indicating whether the nation is at war or at peace. Other cultures embrace a tradition where the nation (or an organization) is always at war, and the application of power is determined by conditions, opportunities and the adversary’s strategic vulnerabilities. Unconventional Statecraft—the application of the nation’s power towards objectives in an environment not dominated by military forces—seeks to address this dichotomy. The term may be useful in determining how best to plan operations in an environment where combatants and competitors seek to gain objectives through hybrid, asymmetric or irregular means; in other words, achieving objectives without flipping the American war-switch to ‘on’.

D. Questions:

1. Are emerging trends in warfare new, or do they represent a return to historical ways of prosecuting war?

2. Discuss the common threads in the concepts of conventional, irregular, hybrid, asymmetric, political, and unrestricted warfare. How do these concepts differ?

3. How do irregular forces use Land, Sea, Air, and Cyber domains asymmetrically against a state that employs traditional regular military forces?

4. How can the United States counter states engaging in these types of warfare? How does the concept of Unconventional Statecraft fit?

5. What complexities do hybrid warfare and irregular warfare present to the joint force commander and staff when conceptualizing military operations? Are existing planning processes adequate for addressing these challenges?
E. Required Media:

None.

F. Required Readings:


French, Howard W. “The South China Sea Could Become a Dangerous Contest of Military Might.” Foreign Policy, 5 June 2015. (NWC 3120) (E-Reserve)


G. Supplementary Readings:


Maxwell, David S. “Do We Really Understand Unconventional Warfare?” Small Wars Journal, 23 October 2014. (NWC 3204)


3.7
MILITARY ETHICS AND OPERATIONAL LEADERSHIP

To educate a person in mind and not in morals is to educate a menace to society.

—Theodore Roosevelt

A. Focus:

Military officers are part of a profession and every profession has a set of professional ethics. It is incumbent on the members of the military profession to take ownership of its ethics. This must be a continuous activity. It is the focus of this session to give you the basis to conduct a continuing conversation on the ethics of the military profession.

B. Objectives:

- Comprehend the ethical dimension of leadership at the operational level of war.
- Comprehend the substantial issues which profoundly affect the Profession of Arms.

C. Background:

Ethics has always been a core element of the profession of arms; periodically it becomes a headline matter as well. Senior officers are required to be models of professional rectitude. They must make command decisions about organizational policies and practices which influence, for better or worse, the attitudes and behaviors of other service members. They also are expected to be familiar with the terminology, concepts and issues regularly debated in the public forum about the military profession. This session is intended to help officers address these responsibilities. It is conducted as a seminar to examine fundamental issues in military service from the perspective of ethics. Consideration is given to such topics as the commander’s responsibilities toward civilians; the laws of war; codes of honor; compartmentalizing; terrorism (and its differences from the legal use of force); operational leadership; and the nature and practices of the military profession. The goal is always to explore the problematic aspects, never to present established answers. The purpose of the session is to deepen your understanding of an important component of decision-making in the military profession.

D. Questions:

1. What are military ethics?

2. Should those who serve in the military be held to a higher moral standard than their civilian counterparts – and if so, why?

3. At what point can a lawful order from a superior command be questioned on ethical grounds?

4. Are terrorists criminals or enemy combatants? Explain your position carefully.
5. How should the military deal with “whistle-blowers” who may in fact be following their own beliefs and principles?

E. Required Media:
   “Srebrenica” video. (CDE 8116M)

F. Required Readings:

G. Supplementary Readings:
STUDY GUIDE

3.8 PEACE OPERATIONS

“That since wars begin in the minds of men, it is in the minds of men that the defenses of peace must be constructed . . .”

—Constitution of the United Nations Educational, Scientific and Cultural Organization (UNESCO)

Peacekeeping is not a job for soldiers, but only soldiers can do it.

—Dag Hammarskjöld, former UN Secretary General 1953-1961

A. Focus:

This session focuses on peace operations from an operational level perspective. It considers the central issues of the evolution of peace operations, the role of peacekeepers in conflict settings, UN peacekeeping missions globally and the basic principles of peacekeeping. The seminar covers key planning and training considerations for these operations.

B. Objectives:

• Comprehend the evolution of peace operations since their inception in the late 1940s, and how the United States military might perform such an operation.
• Comprehend the differences between peacekeeping, peace enforcement and peacebuilding.
• Comprehend the role of international organizations, especially the United Nations, in exercising its responsibility to maintain international peace and security by conducting peace operations.
• Comprehend planning considerations for peace operations in either a post hostilities setting (peacekeeping) or operations to end hostilities (peace enforcement).
• Comprehend how other nations view peacekeeping and the value to their military.

C. Background:

The commitment of U.S. forces to peace operations has proven controversial during the last two decades. There are two basic camps in this policy debate: one favors a broader use of U.S. forces in many roles while the other wishes to reserve use of the U.S. military for war fighting. The issues of combat readiness, retaining flexibility in the use of force, command and control arrangements, and the role of the U.S. military in the post–Cold War era have been and remain an integral part of this debate. Nevertheless, as our wars in the Middle East and Central Asia wind down, the Department of Defense may once again be called upon to participate in peacekeeping missions. Consider: how might a regional combatant command use peacekeeping to help end conflict or stabilize a country emerging from war?
During the Cold War, both the United States and the Soviet Union rarely participated in peace operations because both considered it best to keep the two superpowers apart. Right after the Cold War ended, U.S. involvement in peace operations increased dramatically. American forces found themselves deployed to Somalia, Haiti, Bosnia and Kosovo in a peacekeeping role. Some forces even found their way to less familiar areas like Liberia, East Timor and the Western Sahara. At the turn of the 21st Century, when the United States became embroiled in counter-terrorism and counterinsurgency operations, U.S. participation in peace operations all but came to an end. Today, more nations than ever are involved in peacekeeping duties. Over the last decade China’s role in peacekeeping has expanded dramatically. Also over the last decade peacekeeping missions have changed from neutral involvement (keeping the opposing sides apart) to impartial actions promoting peaceful outcomes or more specifically peacebuilding.

UN peacekeeping has evolved considerably since the first UN peacekeeping mission in 1948. A relatively new UN peacekeeping doctrine is guiding peacekeepers across the globe, and refined mechanisms to manage peacekeepers have matured within the UN system. As of 30 April 2018 there were a little over 104,000 personnel from 124 nations participating in 14 UN peacekeeping missions. To many, the UN is now performing the mission given to it by the drafters of the UN Charter – “save succeeding generations from the scourge of war.”

Given the large number of long-simmering intra-state and inter-state conflicts in the world today and the increasing interconnectedness of economic and security issues across states and regions, it is highly probable that the U.S. military will find itself planning and executing peacekeeping and peace enforcement operations in the near future.

This session exposes the students to the challenges of modern day peace operations, familiarizes them with existing doctrine, and increases their comprehension of the issues involved in planning and preparing for peace operations.

D. Questions:

1. What is the difference between peacekeeping and peace enforcement? What operational factors should be considered when planning for these missions?
2. How and why are the various fundamentals of peace operations different than the principles of joint operations?
3. What role does the United Nations play in international peacekeeping, and how does the UN go about establishing a peacekeeping mission?
4. How do other nations view UN peacekeeping?
5. Who is in charge of a peace operation and for whom do the military commanders work? How does the United States view command relationships in this context and how and why does the U.S. perspective differ from those of other nations?
6. What role can maritime forces play in peacekeeping and peace enforcement?

E. Required Media:

None.
F. Required Readings:


G. Supplementary Readings:


A. **Focus:**
This writing requirement is primarily intended to measure an NPS student’s mastery of Block 3 content as applied to a contemporary (real or hypothetical) situation with significant military participation in an interagency and multinational response.

B. **Objectives:**
- Demonstrate the ability to analyze operational situations in the contemporary security environment using operational art and doctrine.
- Demonstrate the ability to apply naval, joint, interagency and multinational capabilities in a maritime/joint theater across the range of military operations.
- Demonstrate a comprehension of leadership concepts and challenges at the operational level of war.
- Demonstrate the ability to apply critical and creative thinking to operational problems.
- Demonstrate the ability to apply clear and precise written communication.

C. **Background:**
In order to succeed in the rest of the course, students must have a basic level of competency in applying naval, joint, interagency and multinational capabilities across the full range of military operations, anywhere on the conflict continuum, and in an environment that is volatile, uncertain, complex, ambiguous, and fraught with operational-leadership quandaries. This assignment is meant to ascertain the level of proficiency within the seminar and to revisit as necessary those aspects that may need reinforcing.

Students will be expected to prepare a complete written response to the question(s) assigned by the faculty. The assignment may also implicitly require students to apply major principles, ideas, and concepts covered in previous blocks.

The basis for evaluation of the written response will be:
- Complete, logical, and well-supported response to the question(s) or problem(s) presented.
- Application of appropriate course concepts to the specific question(s) assigned.
- Clear and concise articulation of ideas.

D. **Questions:**
The assignment question(s) and instructions will be provided by the FSP/NPS professors.

E. **Required Media/Readings:** Review as necessary. The assignment is an individual effort; collaboration is NOT permitted.

F. **Supplementary Readings:** None.
A. Focus:

Successfully prosecuting a modern war requires more than technical competence in the military domain and effective operational concepts. Block 4 addresses the topics and processes necessary for understanding and meeting today’s national security challenges. The intent of the sessions in this block is to synthesize all previous instruction into practical application. Students will work through the Joint Planning Process (JPP) as members of a Joint Planning Group (JPG) to develop a Commander’s Estimate of the Situation (CES). The Course of Action (COA) that results from their efforts in this block will be carried forward into the Block 5 Joint Task Force (JTF)/Joint Force Maritime Component Command (JFMCC) Operation Order (OPORD) Development exercise.

B. Description:

The sessions are intended to introduce students to joint and navy planning by providing them with the tools, concepts, principles, doctrine and practical planning skills required to accomplish modern military tasks. They also create an opportunity for students to appreciate the integral role of operational art in the planning process, and the similarities between the joint and navy planning processes.

Session 4.1 develops knowledge and skills for planning and directing force employment by introducing the processes of the Adaptive Planning and Execution System (APEX). This session introduces the Joint Strategic Planning System (JSPS) and its role in providing strategic guidance and direction for military planning and allows for a deeper appreciation of the principal guidance documents as well as the military contingency and crisis action processes.

Session 4.2 is a multi-day, Crisis Planning exercise that will allow students the opportunity to apply the Joint Planning Process (JPP) to a fictional military scenario in Borneo. The scope and complexity of the Borneo exercise will broaden understanding of the intricacies of joint planning and the importance of operational design, especially mindful of the need first to establish and then to maintain sea control in a maritime joint operations area.

The detailed, interactive planning exercise will use the Joint Planning Process (JPP) as outlined in Joint Publication 5-0, Joint Planning. The JPP Workbook (latest NWC 4111) provides students an outline of the joint planning process and formats to analyze the situation, conduct mission analysis, develop courses of action (COAs), analyze and compare developed COAs, and ultimately recommend one COA for further development into a Concept of Operations (CONOPS) as part of the JTF Operation Order in Block 5.

Session 4.3 is Summative Assessment 3 (FSP)/4 (NPS), a written assignment evaluating the ability to utilize the planning process to integrate and apply concepts students have been exposed to via the course readings, videos, seminar discussions, case studies, exercises and synthesis events to date. Following the written assignment, students will carry forward their selected Block 4 COA into the development of the JTF Operation Order in Block 5.
STUDY GUIDE

4.1
ADAPTIVE PLANNING AND EXECUTION SYSTEM (APEX)

In preparing for battle I have always found that plans are useless, but planning is indispensable.
—General Dwight D. Eisenhower, USA

A. Focus:

This session introduces the Adaptive Planning and Execution System (APEX), which is designed to ‘bridge the gap’ between contingency planning and crisis planning. APEX is designed to provide the nation’s strategic leadership with a more responsive planning process, both in preparation time and option flexibility. The session begins with an overview of the Joint Strategic Planning System (JSPS) and the roles of the Secretary of Defense, the Chairman of the Joint Chiefs of Staff (CJCS) and the service chiefs in translating national policy objectives into definitive planning guidance. Currently, planning guidance for combatant commanders and their staffs can be found in the Guidance for the Employment of the Force (GEF), the Joint Strategic Capabilities Plan (JSCP), and the Global Force Management and Implementation Guidance (GFMIG).

B. Objectives:

• Comprehend the purpose of the JSPS.
• Comprehend how the GEF, JSCP, and GFMIG drive the planning cycle and frame planning requirements for the combatant commander.
• Comprehend how APEX bridges the gap between contingency planning and crisis planning.

C. Background:

Mandated by Title 10 USC, the Secretary of Defense and the Chairman of the Joint Chiefs of Staff are pivotal in translating national security objectives into definitive planning guidance for the combatant commanders. The combatant commanders are responsible for the actual development and production of the GEF and JSCP-directed campaign plans but are dependent on support from the services, other combatant commanders, and the combat support agencies during the planning and execution process.

In past years, myriad documents provided partial elements of strategic guidance to combatant commanders. These individual documents, often created without close coordination with other strategic policy documents, sometimes provided conflicting guidance and confused an already complicated planning process. The GEF, informed by both the National Security Strategy and the National Defense Strategy, integrates five former guidance documents into one strategic guidance document. Moreover, it directs combatant commanders to develop a campaign plan to support theater and functional command end-states.

The GEF is developed concurrently with the JSCP to ensure a close linkage between the two documents. The JSCP is a companion document to the GEF and provides guidance to the Combatant Commanders and Joint Chiefs of Staff to accomplish GEF tasks. The JSCP includes...
regional objectives and planning assumptions; specifies the type of plan for each task; and apportions major combat and strategic lift forces to the combatant commanders for their planning. The JSCP also provides the combatant commanders with a framework for the scope of their plans, plan formats, and the amount of detailed planning that is required.

The GFMIG is a critical source document for force planning and execution. The Secretary of Defense is required to balance global demand for steady-state and current operations against the needs of the services (e.g., training and testing), while also maintaining a surge capability against contingencies. This SecDef-approved document establishes guidance for assignment, apportionment, and allocation of forces in support of the Global Force Management framework.

Contingency (or deliberate) planning is a complex and lengthy process, particularly when the combatant commanders are required to develop Time-Phased Force and Deployment Data (TPFDD) and a derived Time-Phased Force and Deployment List (TPFDL). The plans developed in support of the JSCP are integral to the combatant commander’s campaign plan.

APEX is the system used by the combatant commanders to produce these directed contingency/deliberate plans. It is a set of ideas unifying efforts across people, processes, products, and technology. It is designed to speed up the contingency planning process—to make contingency plans more relevant, more usable. APEX provides for increased flexibility at the Theater Strategic and Operational levels or war, enabling a shared understanding of problems, threats, and options.

D. Questions:

1. What is the value of this enormous effort we expend on contingency planning?
2. What do the GEF, JSCP, and GFMIG provide planners?
3. Adaptive Planning (AP) is designed to “preserve the best characteristics of present day contingency planning and crisis planning with a common process.” How does APEX meet this challenge?
4. What is a Theater Campaign Plan (TCP) and why was it added to the combatant commanders’ planning requirements?

E. Required Media:

“JOPES & APEX” Lecture. (CDE 8117M)
“Introduction to Problem Solving” Lecture. (CDE 8064M)

F. Required Reading:


G. **Supplementary Readings:**


Plans must be simple and flexible. Actually, they only form a datum plane from which you build as necessity directs or opportunity offers. They should be made by the people who are going to execute them . . . .

—General George S. Patton, USA

He who commands the sea is at great liberty and may take as much or as little of the war as he will.

—Francis Bacon, 1561-1626

A. Focus:

This multi-day exercise introduces the planning processes utilized by warfighting Naval and Joint Force Commanders. We will use one of them, the Joint Planning Process (JPP), as the model for military decision making to conduct a Commander's Estimate of the Situation (CES). The Joint Planning Process Workbook (latest NWC 4111) will be used as an instructional tool and a guide as these concepts are applied to a scenario set in Borneo. Each seminar, using the Borneo case study and acting as the Joint Planning Group (JPG) on a Joint Task Force staff, will conduct each of the key steps of the process to arrive at a Course of Action (COA) decision. Following this, in Block 5, students will then use the selected COA to develop and write a Concept of Operations (CONOPS) within an Operation Order (OPORD) for the Joint Task Force.

B. Objectives:

• Comprehend the similarities and differences between the Navy Planning Process (NPP) and the Joint Planning Process (JPP).

• Apply the JPP in resolving an ill-structured problem.

• Apply the concepts of joint and naval command and control.

• Comprehend planning considerations associated with the employment of navy/joint forces in a contested environment.

C. Background:

Preceding sessions have provided you with the theoretical concepts of Operational Art and Naval Warfare Theory, and have addressed practical planning considerations for the joint employment of each Service and the application of joint functions. Additionally, you have considered the range of military operations available to confront our adversaries across the conflict continuum. This planning exercise builds on this instruction and offers planners a method to facilitate the application and synthesis of these various considerations to support a sound military decision. A new and important aspect of this planning exercise is careful consideration of how decisions made at the Joint Task Force level influence subsequent planning by subordinate echelons – especially
the JFMCC/Naval Component Command (NCC) in its efforts to establish, maintain and exploit sea control in a maritime Joint Operations Area. The selected COA carried forward into Block 5 and the resulting OPORD will reflect those decisions, for good or for ill as far as the JFMCC/NCC is concerned, and can either facilitate or hamper the struggle for and subsequent exploitation of sea control by the joint force.

You will have a wide range of planning experience in your seminar. Differing service perspectives coupled with interagency views about planning will add depth and distinctiveness to each seminar’s proposed courses of action. The main purpose of the JPP, the NPP, or any other planning framework for that matter, is to provide a logical sequence of actions that support analysis of a military problem and achieve an acceptable course of action.

Military commanders must continually make decisions, often under unfavorable conditions. Thoughtful adversaries who are dedicated to the defeat of U.S. and allied forces will compound these unfavorable conditions by executing well designed plans of their own. As well, the physical environment, climate, and weather can significantly interfere with the joint force mission accomplishment. The JPP is designed to guide staff officers and commanders to ensure that no matter of importance is omitted while they are contemplating the best course of action to achieve mission success.

D. Questions:
1. How does operational art theory get translated into real-world practical application?
2. How does the JPP help us plan? What are its advantages and disadvantages?
3. What are the similarities and differences between the Navy Planning Process (NPP) and Joint Planning Process (JPP)?
4. What is the importance of Commander’s Intent and Commander’s Planning Guidance and how are they formulated?
5. What are the components of a well-developed Course of Action (COA)?

E. Required Media:
“Operation Pacific Teak” Interactive (3 videos). (CDE 8068)
“Introduction”
“Background Data”
“Situation Assessment”

F. Required Readings:

Joint Operation Planning Process (JOPP) Workbook. Newport, RI: Naval War College, 1 July 2013. (NWC 4111J w/chg. 1) (Government)

G. Supplementary Readings:

THIS PAGE INTENTIONALLY BLANK
A. Focus:
This writing assignment is intended to measure a student’s knowledge, comprehension, and application of operational art theory and doctrine; naval, joint and multinational capabilities; and navy/joint planning processes in an interagency and multinational cooperative effort, across the range of military operations, and anywhere on the conflict spectrum – in essence, a synthesis of all course concepts – through the proper application of planning processes.

B. Objectives:
• Demonstrate the ability to analyze operational situations in the contemporary security environment using operational art and joint doctrine.
• Demonstrate the ability to apply naval, joint, interagency and multinational capabilities in a maritime/joint theater across the range of military operations.
• Demonstrate the ability to synthesize solutions to operational problems in a joint/maritime theater using the Navy/Joint Planning Processes (NPP/JPP).
• Demonstrate the ability to apply critical and creative thinking to operational problems.
• Demonstrate the ability to apply clear and precise written communication.
• Demonstrate an understanding of operational leadership concepts & challenges.

C. Background:
At this point, the student must be prepared to demonstrate written competency in comprehending and applying all course concepts. The assignment will not require students to recall mundane, specific facts, but rather to integrate and apply major principles, ideas, and concepts of the course. The basis for evaluation of the written assignment will be:
• Complete, logical, and well-supported solutions to each question or problem presented.
• Application of appropriate course concepts to the specific question(s) chosen.
• Clear and concise articulation of ideas.

D. Questions:
Assignment question(s) and instructions will be provided by the FSP/NPS professors.

E. Required Media: Review course videos as necessary.

F. Required Readings: Review readings as necessary. This assignment is an individual effort; collaboration is NOT permitted.

G. Supplementary Readings: None.
A. **Focus:**

Block 5 builds upon the framework and components of Block 4 by continuing the planning process toward execution. Students will continue to work through the planning process as members of a JTF staff, its components, and its interagency and multinational partners to develop an operation order for the employment of naval, joint and multinational forces in a complex crisis. This further refines the students’ experiential tool kit and assists in refining their problem-solving skills. After completing the Operation Order Development exercise, students will be better prepared to serve as an integral member on a maritime or joint planning staff.

B. **Description:**

Having used the JPP to complete a Commander’s Estimate for a crisis in Borneo, students will continue to work as members of a JTF Joint Planning Group (JPG) tasked with drafting the resulting Operation Order for employment of the joint task force, in a four-evening practical exercise. The block begins with a professor-led session on how to write an order – format, content, and so forth. Students will then finish the Joint Synchronization Matrix and Concept of Operations (CONOPs) begun in the previous block, incorporating them into an Operation Order (OPORD) submitted to their professors for adjudication at the end of class the third week. Following an exercise move at the start of the fourth week (the last night of class), students, now acting as the JFMCC Operations Planning Group (OPG), will assess how the changed situation impacts their command’s ability to exercise sea control and accomplish other assigned tasks, and will adjust the supporting tactical concept accordingly via a Fragmentary Order.

On the last evening, following the completion of the exercise, students will have an opportunity to discuss with the professor(s) their thoughts on course content, structure, graded events, and so forth with the goal of providing constructive criticism to help improve the course next time.
STUDY GUIDE

5.1
ORDERS AND ORDERS DEVELOPMENT

My mental faculties remained in suspended animation while I obeyed the orders of higher ups. This is typical with everyone in the military.

— MajGen Smedley Butler USMC, 1933

A. Focus:
Planning is problem solving, and orders development is the mechanism used to convey the planning group’s intellectual labor to subordinate commands for execution. Orders development and orders writing is a common task that all commanders and staff officers should understand.

B. Objectives:
- Comprehend the Orders Development Process, the contents of an Operation Plan / Order, and the standard format used for Operation Plans / Orders.
- Comprehend the importance of orders reconciliation / crosswalk prior to issuing the order.
- Comprehend the issues for consideration, inputs, and outputs of the Orders Development Process sufficient to produce a basic Operation Order.

C. Background:
As CDE graduates, you may one day participate in the orders development process, perhaps tasked with writing a staff estimate, base plan, or a specified annex to an operation plan or order. To meet this task, you must be able to read a higher headquarters order, develop a supporting order, and communicate that order clearly to subordinate units in a timely manner.

You will use the information presented in this session and associated reference readings to develop portions of the operation order to communicate the commander’s intent, guidance, and decisions that are products from the planning process. Orders development communicates the commander’s intent, guidance, and decisions in a clear, useful form understandable by those executing the order. The operation order is the means of transmitting this key and pertinent information concerning execution to all units assigned or attached to the issuing headquarters. The order should only contain critical or new information—not routine matters normally found in Standard Operating Procedures (SOPs). The Chief of Staff (CoS), the J-5 (Plans) or the J-3 (Operations) Officer, as appropriate, is normally responsible for orders development. Orders development also includes an essential two-step quality control approach during the writing phase of the order or plan. Reconciliation is an internal review that the staff conducts of the entire order. It identifies gaps and discrepancies in the order. Specifically, the staff compares the Commander’s Intent, the mission, and Commander’s Critical Information Requirements (CCIR(s)) against the Concept of Operations (CONOPS) and supporting concepts. The Crosswalk is an external review of higher and adjacent orders to ensure unity of effort and to ensure the Higher Headquarters (HHQ) Commander’s Intent is met.
D. Questions:

1. How does the operational design generated as a result of the planning process become codified for action?

2. Describe the difference between an Operation Order (OPORD) and a Commander’s Estimate.

3. How does a commander provide updates to an OPORD once issued?

E. Required Media:

None.

F. Required Readings:


G. Supplemental Readings:


College of Distance Education. Guidance for Written Solutions for College of Distance Education (CDE) Students. Newport, RI: Naval War College, August 2017. (CDE 2062C)

STUDY GUIDE

5.2
JOINT TASK FORCE (JTF) / JOINT FORCE MARITIME COMPONENT COMMAND (JFMCC) OPERATION ORDER DEVELOPMENT

In the absence of orders, go find something and kill it.

—General Erwin Rommel

A. Focus:

The final event in the JMO curriculum is an order-writing exercise to synthesize and reinforce course material through practical application as a member of the Joint Planning Group (JPG) with an assigned role. Continuing with the Borneo scenario, the JPG will portray a joint staff environment with multinational, interagency and functional/service component elements while solving a military problem. This is an educational exercise that requires students to apply the principles and concepts studied throughout the course in order to accomplish the assigned mission. While the challenges confronting the students in this exercise are realistic, the situations used to highlight these issues and the solutions the students select are strictly hypothetical.

B. Objectives:

- Synthesize the concepts of operational art necessary to lead a multidisciplinary and multinational planning team addressing a complex, irregular conflict in a contemporary environment that is both volatile and unpredictable.

- Comprehend the organizational dynamics and challenges that a member of a joint, multinational, interagency planning effort must overcome.

- Synthesize an operational approach that supports theater campaigns and national military strategy and synchronizes efforts at the operational level to facilitate component tactical success.

- Create a conceptual plan through military briefs and written products associated with the Joint Planning Process (JPP)/Navy Planning Process (NPP).

C. Background:

Over the several weeks of this session you will review the planning process, an area crucial to good operational execution. In this review we will not only recap what we’ve done in Block 4, we will also focus on the “natural” follow-on step of that CES process—plans/orders development. The Borneo scenario serves as a synthesis event, requiring the student to consider issues and principles covered in the preceding blocks. The emphasis is not message drafting and formatting. It is demonstrating an understanding of how the decision making process works and applying the various issues and concepts covered in this course.

Student seminars will be assigned roles as key members of a JTF JPG at the operational level of war. Seminar professors will make assignments to specific billets in the weeks prior to the
exercise. While professors will assign billets, students will be left to organize the flow of information and tasks within and among staffs themselves. Seminar professors will act as higher authority.

Using the Commander’s Estimate completed in Block 4, the JPG will review what they accomplished while conducting the estimate process, and over the next several weeks develop a JTF Operation Order (OPORD) without annexes (base OPORD). This OPORD will include, as its centerpiece, a clear, concise, detailed, sequenced, and synchronized Concept of Operations (CONOPS) backed up by a Joint Synchronization Matrix (JSM). The CONOPS will be cognizant of friendly and enemy capabilities and weaknesses, operational factors and functions, and will take into consideration termination goals and the desired military end state. By the end of the third week of the Block, the JPG will deliver a hard-copy OPORD and will brief the included CONOPS to their professors. Professors in turn will adjudicate the OPORD and generate an exercise “move” – a designated period of exercise time after which the operational situation on Borneo has changed. At the start of the fourth week (the last night of class), students, now acting as the JFMCC Operations Planning Group (OPG), will assess how the changed situation impacts their command’s ability to exercise sea control and accomplish other assigned tasks, and will adjust the supporting tactical concept accordingly via a Fragmentary Order (oral or written as time allows). In this way, students are forced to confront planning decisions made by the JTF JPG (reflected in the OPORD) as they now impact the subordinate JFMCC’s situation some time later.

The exercise is designed to highlight, as nearly as possible, the realities of concurrent and parallel planning. In other words, the staffs will be making recommendations up the chain-of-command, and responding to taskers simultaneously. Similarly the flow of information and events will cause staffs to deal with immediate events while planning for future operations.

D. Questions:

1. How does a Joint Planning Group (JPG) adapt the JPP to solve an ill-structured problem?

2. How does the JPG plan for post-hostility operations using a design approach, during or immediately after combat operational planning?

3. How does a JPG anticipate future changes in the operating environment caused by military actions?

4. How does a JPG effectively leverage component and multinational capabilities when planning operations?

5. How does a Joint Task Force best integrate elements of national power to accomplish strategic and operational objectives?

E. Required Media:

“Operation Pacific Teak” Interactive (3 videos). Review. (CDE 8068)

F. Required Readings:

G. **Supplementary Readings:**

*Since the exercise involves application of material covered throughout the course, students will have to make individual decisions regarding references needed based on the role assigned and individual knowledge and experience. The documents listed below may be helpful.*


__________. **Joint Planning.** Joint Publication (JP) 5-0. Washington, DC: CJCS, 16 June 2017. (JP 5-0)

STUDY GUIDE

5.3

JOINT MARITIME OPERATIONS COURSE HOT WASH

A. **Focus:** On the last evening, following the completion of the JTF/JFMCC OPORD Development exercise, students will have an opportunity to discuss in open forum their thoughts on course content, structure, graded events, and so forth with the goal of providing constructive criticism to improve the course.

B. **Objectives:**
   - Provide constructive feedback to help improve the course for future Fleet Seminar Program and NWC-at-NPS students.

C. **Questions:**
   None.

D. **Required Media:**
   None.

E. **Required Readings:**
   None.

F. **Supplementary Readings:**
   None.
THIS PAGE INTENTIONALLY BLANK
APPENDIX A

OFFICER PROFESSIONAL MILITARY EDUCATION POLICY
(CJCSI 1800.01E, 29 MAY 2015)
SERVICE INTERMEDIATE-LEVEL COLLEGE (ILC)
JOINT LEARNING AREAS AND OBJECTIVES (JPME-I)

Learning Area 1 – National Military Capabilities Strategy
a. Comprehend the capabilities and limitations of U.S. military forces to conduct the full range of military operations in pursuit of national interests.
b. Comprehend the purpose, roles, authorities, responsibilities, functions, and relationships of the President, the Secretary of Defense, National Security Council, Homeland Security Council, Chairman of the Joint Chiefs of Staff, Joint Chiefs of Staff, Combatant Commanders, Joint Force Commanders (JFCs), Service component commanders, and combat support agencies.
c. Comprehend how the U.S. military is organized to plan, execute, sustain, and train for joint, interagency, intergovernmental, and multinational operations.
d. Comprehend strategic guidance contained in documents such as the National Security Strategy, the Quadrennial Defense Review, National Military Strategy, Global Force Management Implementation Guide (GFMIG), and Guidance for Employment of the Force (GEF).

Learning Area 2—Joint Doctrine and Concepts
a. Comprehend current joint doctrine.
b. Comprehend the interrelationship between Service doctrine and joint doctrine.
c. Apply solutions to operational problems in a volatile, uncertain, complex or ambiguous environment using critical thinking, operational art, and current joint doctrine.

Learning Area 3—Joint and Multinational Forces at the Operational Level of War
a. Comprehend the security environment within which Joint Forces are created, employed and sustained in support of JFCs and component commanders.
b. Comprehend Joint Force command relationships.
c. Comprehend the interrelationships among the strategic, operational, and tactical levels of war.
d. Comprehend how theory and principles of joint operations pertain to the operational level of war across the range of military operations to include traditional and irregular warfare that impact the strategic environment.
e. Comprehend the relationships between all elements of national power and the importance of comprehensive approaches, the whole of government response, multinational cooperation, and building partnership capacity in support of security interests.
f. Analyze a plan critically for employment of joint and multinational forces at the operational level of war.
g. Comprehend the relationships between national security objectives, military objectives, conflict termination, and post conflict transition to enabling civil authorities.

Learning Area 4—Joint Planning and Execution Processes
a. Comprehend the relationship among national objectives and means available through the framework provided by the national level systems.
b. Comprehend the fundamentals of joint operation planning across all phases of a joint operation.

c. Comprehend the integration of joint functions (command and control, intelligence, fires, movement and maneuver, protection and sustainment) to operational planning problems across the range of military operations.

d. Comprehend how planning for OCS across the joint functions supports managing the effects contracting and contracted support have on the operational environment.

e. Comprehend the integration of IO and cyberspace operations with other lines of operations at the operational level of war.

f. Comprehend the roles that factors such as geopolitics, geostrategy, society, region, culture/diversity, and religion play in shaping planning and execution of joint force operations across the range of military operations.

g. Comprehend the role and perspective of the Combatant Commander and staff in developing various theater policies, strategies and plans.

h. Comprehend the requirements across the joint force, Services, interorganizational partners and the host nation in the planning and execution of joint operations across the range of military operations.

Learning Area 5—Joint Command and Control

a. Comprehend the organizational options, structures and requirements available to joint force commanders.

b. Comprehend the factors of intent through trust, empowerment and understanding (Mission Command), mission objectives, forces, and capabilities that support the selection of a specific C2 option.

c. Comprehend the effects of networks and cyberspace on the ability to conduct Joint Operational Command and Control.

Learning Area 6—Joint Operational Leadership and the Profession of Arms

a. Comprehend the role of the Profession of Arms in the contemporary environment.

b. Comprehend critical thinking and decision-making skills needed to anticipate and recognize change, lead transitions, and anticipate/adapt to surprise and uncertainty.

c. Comprehend the ethical dimension of operational leadership and the challenges that it may present when considering the values of the Profession of Arms.

d. Analyze the application of Mission Command (intent through trust, empowerment, and understanding) in a Joint, Interagency, Intergovernmental and Multinational (JIIM) environment.

e. Communicate with clarity and precision.

f. Analyze the importance of adaptation and innovation on military planning and operations.
APPENDIX B

COMPETENCIES AND ASSOCIATED ELEMENTS

1. Analyze high-tactical/operational situations in the contemporary security environment using operational art and joint doctrine.
   a. Evaluate objectives at different levels of war for a major operation or campaign.
   b. Analyze space-time-force relationships for a major operation or campaign.
   c. Analyze the sequencing and synchronization of operational functions for a major operation or campaign in a given theater.
   d. Apply critical factors analysis to identify and analyze centers-of-gravity (COGs).
   e. Analyze and apply operational design methodology for a major operation or campaign in the maritime environment.

2. Apply naval, joint, interagency and multinational capabilities in a maritime/joint theater across the range of military operations.
   a. Comprehend the roles & missions of naval forces in the current security environment.
   b. Comprehend naval/joint capabilities in the current security environment.
   c. Comprehend the range of military operations (ROMO).
   d. Comprehend interagency, international organization, non-governmental organization, and contractor capabilities in the current security environment.
   e. Apply naval, joint and multinational capabilities to accomplish assigned tasks.
   f. Design a command arrangement for an operation involving navy, joint, interagency, and multinational forces and resources.

3. Apply the Navy/Joint Planning Processes (NPP/JPP) to synthesize solutions to operational problems in a maritime/joint theater.
   a. Analyze the Operational Environment using the NPP/JPP.
   b. Analyze a Mission using the NPP/JPP.
   c. Create valid Courses of Action (COAs) to achieve a Mission using the NPP/JPP.
   d. Develop a Concept of Operations (CONOPS) for a selected COA using the NPP/JPP.
   e. Develop an Operation Plan/Order for a CONOPS per the format found in the NPP/JPP.

4. Apply critical and creative thinking to operational problems. (An overarching competency for the entire course and therefore evaluated as part of every formative and summative assessment.)

5. Apply clear and precise communication, both orally and in writing. (An overarching competency for the entire course and therefore evaluated as part of every formative and summative assessment.)

6. Comprehend leadership concepts and challenges at the operational level of war.
   a. Comprehend leadership challenges at the operational level of war.
   b. Comprehend “Mission Command”.
   c. Apply Mission Command in planning/organizing naval/joint forces across the ROMO.
APPENDIX C

FORMATIVE ASSESSMENT SCHEDULE

(To Be Issued SEPCOR)