NAVAL WAR COLLEGE

COLLEGE OF NAVAL WARFARE
AND
NAVAL COMMAND COLLEGE

JOINT MILITARY OPERATIONS DEPARTMENT

SYLLABUS AND STUDY GUIDE

FOR

AUGUST 2016
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FOREWORD

This syllabus provides a comprehensive overview of the Naval War College's Joint Military Operations trimester. Prepared for the College of Naval Warfare and the Naval Command College, this syllabus, along with the JMO Blackboard website, provides session-by-session material to assist students in daily seminar preparation and in developing a personal plan of study. Administrative information is also included.

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Chairman, Joint Military Operations Department

Approved:

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JOINT MILITARY OPERATIONS DEPARTMENT

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JOINT MILITARY OPERATIONS COURSE DESCRIPTION

1. Mission

In keeping with the Naval War College (NWC) mission, the Joint Military Operations Department (JMO) curriculum is designed to educate senior leaders for service at the theater-strategic level of war—capable of recognizing the multi-faceted command and staff actions necessary for the linkage of ends, ways, and means in the attainment of strategic and operational objectives in peace and in war.

2. Course Overview

The Joint Military Operations trimester is intended to refine students' critical and creative thinking skills under the aegis of military problem solving. As such, the course is presented logically in a series of integrated sessions, each intended to draw on those that preceded it and to reinforce those that follow. The faculty at the Naval War College realizes that senior officers arrive with an understanding of many of the fundamentals of Joint Military Operations; however, JMO will focus on refining higher order thinking skills through an academic regimen that incorporates evaluation, analysis, and synthesis. The trimester will flow from the simple to the more complex and will culminate in a synthesis event intended to allow students to display their understanding of the course concepts and to demonstrate critical and creative thinking skills. The JMO trimester comprises four segments: 1) Operational Warfare, 2) Planning, 3) Contemporary Operations and Environments, and 4) the Capstone Synthesis Event.

The Joint Military Operations course is an in-depth study of the theater-strategic and operational levels of war across the range of military operations. This course builds on Joint Professional Military Education (JPME) Phase I as defined in the Officer Professional Military Education Policy (OPMEP), and complements the Naval War College's National Security Affairs (NSA) and Strategy and Policy (S&P) curricula. Where NSA and S&P emphasize our national imperative to select a strategy appropriate to our policy goals, the JMO course prepares students for the operational arena by emphasizing problem solving through operational planning and joint force application to achieve military objectives. It examines joint operations from the standpoint of the combatant commander (CCDR) and Joint Task Force (JTF) commander. It further develops joint attitudes and perspectives, and exposes officers to and increases their understanding of service cultures while concentrating on joint operations. Through extensive use of case studies, the JMO student is challenged with four enduring questions from the perspective of a joint force commander and staff:

- 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 very essence of being able to plan and lead joint operations.

3. Course Objectives

The objectives below are provided to identify for the senior student the specific objectives that the JMO Department intends to achieve during the trimester. They are not to be confused with the Educational Outcomes listed in paragraph four below. The Educational Outcomes are intended to be achieved at the completion of the Academic Year after students have had the opportunity to synthesize the education provided by all three academic departments. The Educational Outcomes may be viewed as the strategic objectives for the College. Below are the operational objectives we seek to achieve in JMO. Each individual session has tailored objectives that support those listed below.

- To enhance students' ability to develop operational concepts, to adeptly apply joint planning processes, and to leverage creatively the instruments of national power across the range of military operations in achieving assigned objectives.
- To strengthen senior leadership skills necessary to excel in major staff responsibilities and in theater-strategic positions of leadership, and to serve as trusted advisors to policy makers.
- To develop skilled senior war fighters, able to synthesize valid courses of action and to function in volatile, uncertain, complex, and ambiguous operating environments.
- To hone critical and creative thinking skills, especially the ability to develop and evaluate a range of potential solutions to ill-structured problems.

4. Student Educational Outcomes

The Professional Military Education (PME) outcomes for the College of Naval Warfare and Naval Command College are designed to produce officers fully capable of serving as leaders or principal staff officers at the theater-strategic and operational levels of war. The purpose of these educational outcomes is to develop students who are:

- Skilled in evaluating U.S. strategy and policy through the integrated employment of military and non-military instruments of national power.
- Skilled in joint war fighting, formulation of theater strategy, campaign design, and planning through the creative application of operational art.
- Adept at leading staff elements in both Design and the Joint Operation Planning Process.
- Capable of critical thinking across the range of military operations and national security environments.
- Skilled in aligning and maximizing capabilities across joint force components, services, agencies, and international forces.
- Capable of excelling in positions of theater strategic leadership in peace, in crisis, and in war.

5. CJCS Officer Professional Military Education Policy

The 2007 National Defense Authorization Act, Section 529, revises 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.

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

The Senior Service-Level College (SLC) Joint Learning Area (JLA) objectives from the 29 May 2015 OPMEP are as follows:

Learning Area 1 – National Strategies
a. Apply key strategic concepts, critical thinking and analytical frameworks to formulate and execute strategy.
b. Analyze the integration of all instruments of national power in complex, dynamic, and ambiguous environments to attain objectives at the national and theater-strategic levels.
c. Evaluate historical and/or contemporary security environments and applications of strategies across the range of military operations.
d. Apply strategic security policies, strategies, and guidance used in developing plans across the range of military operations and domains to support national objectives.
e. Evaluate how the capabilities and limitations of the U.S. Force structure affect the development and implementation of security, defense, and military strategies.

Learning Area 2 – Joint Warfare, Theater Strategy and Campaigning for Traditional and Irregular Warfare in a Joint, Interagency, Intergovernmental and Multinational Environment
a. Evaluate the principles of joint operations, joint military doctrine, joint functions (command and control, intelligence, fires, movement and maneuver, protection and sustainment), and emerging concepts across the range of military operations.
b. Evaluate how theater strategies, campaigns, and major operations achieve national strategic goals across the range of military operations.
c. Apply an analytical framework that addresses the factors politics, geography, society, culture, and religion play in shaping the desired outcomes of policies, strategies, and campaigns.
d. Analyze the role of Operational Contract Support in supporting Service capabilities and joint functions to meet strategic objectives considering the effects contracting and contracted support have on the operational environment.
e. Evaluate how strategic level plans anticipate and respond to surprise, uncertainty, and emerging conditions.

f. Evaluate key classical, contemporary and emerging concepts, including IO and cyber space operations, doctrine and traditional/irregular approaches to war.

Learning Area 3 – National and Joint Planning Systems and Processes for the Integration of Joint, Interagency, Intergovernmental, and Multinational Capabilities
a. Analyze how DoD, interagency, and intergovernmental structures, processes, and perspectives reconcile, integrate and apply national ends, ways and means.
b. Analyze the operational planning and resource allocation processes.
c. Evaluate the integration of joint, interagency, intergovernmental, and multinational capabilities, including all Service and Special Operations Forces, in campaigns across the range of military operations in achieving strategic objectives.
d. Value a joint perspective and appreciate the increased power available to commanders through joint, interagency, intergovernmental, and multinational efforts.
e. Analyze the likely attributes of the future joint force and the challenges faced to plan, organize, prepare, conduct, and assess operations.

Learning Area 4 – Command, Control and Coordination
a. Evaluate the strategic-level options available in the joint, interagency, intergovernmental, and multinational environment.
b. Analyze the factors of Mission Command as it relates to mission objectives, forces, and capabilities that support the selection of a command and control option.
c. Analyze the opportunities and challenges affecting command and control created in the joint, interagency, intergovernmental, and multinational environment across the range of military operations, to include leveraging networks and technology.

Learning Area 5 – Strategic Leadership and the Profession of Arms
a. Evaluate the skills, character attributes and behaviors needed to lead in a dynamic joint, interagency, intergovernmental, and multinational strategic environment.
b. Evaluate critical strategic thinking, decision-making, and communication by strategic leaders.
c. Evaluate how strategic leaders develop innovative organizations capable of operating in dynamic, complex, and uncertain environments; anticipate change; and respond to surprise and uncertainty.
d. Evaluate how strategic leaders communicate a vision; challenge assumptions; and anticipate, plan, implement, and lead strategic change in complex joint or combined organizations.
e. Evaluate historic and contemporary applications of the elements of mission command by strategic-level leaders in pursuit of national objectives.
f. Evaluate how strategic leaders foster responsibility, accountability, selflessness, and trust in complex joint or combined organizations.
g. Evaluate how strategic leaders establish and sustain an ethical climate among joint and combined forces, and develop/preserve public trust with their domestic citizenry.

6. Course Organization

The JMO trimester begins with a series of introductory sessions that shape the intellectual environment. The introductory sessions are followed by a series of seminar discussions on the theoretical underpinnings of Joint Military Operations as embodied in operational art and maritime warfare theory. After students gain a deeper understanding of theory, the faculty will present some real-world constraints and restraints in order to investigate the nexus of operational art and operational law. The senior student will then be provided the opportunity to examine the planning processes and considerations used by the United States Department of Defense in framing and solving military problems across the range of military operations.

Once students have grasped the theoretical foundations and the processes necessary for success in the operating environment in which operational and theater-strategic military problems are solved, the course will require students to consider their roles in military operations in complex environments across the range of military operations.

The final event of the JMO trimester is a Capstone synthesis event intended to fuse all aspects of the trimester in a realistic scenario in which students will investigate current issues and recommend solutions. At the conclusion of JMO, senior students should be capable of leading a Joint Planning Group in a problem solving endeavor, fostering critical and creative thinking skills in subordinates, and demonstrating fluency in both operational art and joint terminology.

7. Syllabus Organization

This syllabus establishes the basis for required coursework and serves as an intellectual roadmap for the trimester. In each session, the *Focus* specifies the general context of the topic. The *Objectives* cite the session goals and provide an intellectual line of departure and focus to the readings. The *Background* provides assistance in framing the individual session, that is, how it fits into the course flow and how each session relates to other sessions. The *Questions* are designed to generate critical thinking while the *Products* identify those items that may be produced in fulfillment of the learning objectives. Finally, the *Readings* enhance student understanding of each session's topic and inform seminar discussion.

8. Methods of Instruction

A. *The Socratic Method*. The seminar is the fundamental learning forum for this course with student expertise providing a significant part of the learning process. For a seminar to succeed there must be open and candid sharing of ideas and experiences, tempered with necessary military decorum. 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 based on thorough preparation. 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 quality JMO faculty to present the material and guide the discussion, and the most important third is the participation of the individual students. Only by preparing thoroughly for seminar sessions can students become active catalysts who generate positive seminar interaction and refine critical and creative thinking skills.

B. *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 trimester. 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 operational and theater strategic sessions, or postulated crisis situations that demonstrate the application of concepts such as presence, deterrence, international law, 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 theater strategic warfare. 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. Students will be tasked with analyzing the case study material, synthesizing information, and evaluating recommended courses of action that they create.

C. *The Lecture-Seminar Method*. In order to share equally the vast experience of some of our faculty members and guest speakers, lectures are typically scheduled to be followed immediately by seminar discussion. Students are encouraged to analyze critically the information presented by speakers and engage actively in post-speaker seminar discussions. JMO lectures are intended to generate questions that the students may discuss in seminar and are not focused solely on the transmission of knowledge.

D. *The Practical Exercise Method.* The opportunity for students to apply information presented in the various sessions is important. Practical exercises allow students time to analyze critically information in order to develop viable solutions to ill-structured problems. Students may be assigned to practical exercises as individuals, small groups, seminar, or even multiple seminars.

9. Readings

All JMO seminars are supported by readings. The purpose of these readings is to assist in understanding the topics being presented. For the most part, the readings are intended to convey to the student basic information, the mastery of which will facilitate in-class discussions. Many of the readings also provide divergent points of view and are intended to foster both critical thinking and 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. A thorough

understanding of the following information will assist the student in using the course readings to best advantage:

A. *Categories of Readings*. Each syllabus session lists categories of readings.

(1) Required Readings are those that must be read prior to the session; most are digitally available and downloadable to an iPad or similar digital device. Syllabus readings are arranged alphabetically by author. Moderators may offer additional guidance on the priority of the readings, based on the specific needs of the individual seminar.

(2) Supplementary Readings are those relevant to a session topic that may be useful to a student seeking more information in order to gain insight beyond that provided by the Required Readings. Supplementary readings are likewise arranged alphabetically by author. On occasion, faculty moderators may assign Supplementary Readings to individual students to read and provide oral synopses to the seminar in support of topic discussion. The supplementary reading section also serves to provide students with sources for future research.

B. *Reading Identifiers*. Each reading that is not a complete book or publication has a cover page with a four-digit reading identifier (e.g., **NWC 1002**). Oftentimes this number is used in lieu of the title, but in either event, the readings are almost universally located on the JMO Blackboard Website and issued iPad under the specific session.

C. *Finding Specific Readings*. Readings for any specific session may be located as follows:

(1) Required Readings are annotated as (*Issued*). *Issued* means that the readings are found in the JMO reading material issued to each student at the beginning of the trimester.

(2) Supplementary Readings may be found in the library or through library web access; assistance is available from the reference librarians. The point of contact identified for a given session can assist students experiencing difficulty in locating a reading.

D. *Management of the Reading Load*. The amount of preparatory reading required for each session depends on a variety of factors, to include topic complexity and session objectives. Students are advised to review session reading requirements at least one week in advance of the session presentation date to plan preparation time accurately. Be ready to address queries on the content of the assigned readings and to question the contents vis-à-vis the subject under discussion.

NOTE: Students are cautioned that classified readings and documents must be read on the premises of the Naval War College. These materials must be properly safeguarded at all times. Do not leave the materials unattended. Students are not provided with classified material storage containers (safes); it is therefore necessary to check out and return classified material on a daily basis. JMO faculty will provide additional information as required during the JMO trimester. Electronic devices, such as cell phones and iPads, are not allowed in the classified sessions.

10. Research Paper

The research paper presents an opportunity for students to conduct research and analysis, prepare a paper that advances the literature, and demonstrate critical thinking skills. Students will address a topic that is current and tied to real-world issues that affect U.S. national security. Students will be given broad research questions regarding a selected country that will be the Department's focus of effort for the Capstone synthesis event. This research effort will begin with an individual research question; students will translate this question into an approved thesis statement. Once the thesis is approved by the moderator team, students will then conduct research and analysis, and synthesize their findings in a paper. This paper requires independent thought and graduate-level writing; the final product must be a 14–17 page paper appropriate for publication in a professional journal. Quality papers are retained in the Naval War College's Library, where qualified users can access them for use in a variety of applications.

Students will brief their research to their colleagues, and through this peer review, will be able to refine their papers prior to submission for grading. Moreover, the knowledge gained through the voyage of discovery will support the Capstone synthesis event. Each student, armed with in-depth knowledge of a specific area (education, infrastructure, governance and so forth), will act as a Subject Matter Expert (SME) in his/her assigned Joint Planning Group (JPG).

Students are encouraged to submit their research papers for the Naval War College Prize Competition described in the *Student Handbook*. Amplifying information and guidance on the execution of a successful research paper project is provided on the JMO Blackboard website and in *Capstone Research Paper: Guidance for Students* (NWC 4036E). Moderators will serve as student paper advisors, answer questions, and otherwise assist students in this most important intellectual undertaking.

11. Plagiarism, Cheating, and Misrepresentation

Student attention is directed to the Naval War College 2013 Faculty Handbook which discusses the academic honor code and specifically prohibits plagiarism, cheating, and misrepresentation. The Naval War College diligently enforces a strict academic code requiring authors to credit properly the source of materials directly cited to any written work submitted in fulfillment of diploma/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).

A. *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.

(1) The verbatim use of others' words without quotation marks (or block quotation) and citation.
(2) The paraphrasing of others' words or ideas without citation.
(3) 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, and so forth without giving credit.

Authors are expected to give full credit in their written submissions when using another's words or ideas. Such use, with proper attribution, is not prohibited by this code. However, a substantially borrowed but attributed paper may lack the originality expected of graduate-level work; submission of such a paper may merit a low or failing grade, but is not plagiarism.

B. *Cheating* is defined as the giving, receiving, or use of unauthorized aid in support of one's own efforts, or the efforts of another student. (Note: NWC Reference Librarians are an authorized source of aid in the preparation of class assignments but not on exams). Cheating includes the following:

(1) Gaining unauthorized access to exams.
(2) Assisting or receiving assistance from other students or other individuals in the preparation of written assignments or during tests (unless specifically permitted).
(3) Using unauthorized materials (notes, texts, crib sheets, and the like, in paper or electronic form) during tests.

C. *Misrepresentation* is defined as reusing a single paper for more than one purpose without permission or acknowledgement. Misrepresentation includes the following:

(1) Submitting a single paper or substantially the same paper for more than one course at the NWC without permission of the JMO faculty.
(2) Submitting a paper or substantially the same paper previously prepared for some other purpose outside the NWC without acknowledging that it is an earlier work.

12. Requirements

Students are expected to prepare fully for each seminar and to participate in classroom discussions and exercises. An objective and open attitude, and a willingness to enter into rigorous but disciplined discussion, are central to the success of the course.

A. *Workload.* Some peaks in the workload will occur. Advance planning and careful allocation of time will help mitigate these peaks; this is particularly true of the research paper. This course of study confers a Master's Degree after one year of exceptionally rigorous study. As such, expect to commit significant time to reading and reflection. Student experience indicates that the total course requirements will involve a weekly average

workload of approximately 12–15 hours of in-class and 36–45 hours of out-of-class work. Additionally, students should expect to dedicate 80-100 hours in researching, drafting, and producing an acceptable graduate-level research paper. Time management is a critical aspect of a student's success in mastering the multiple requirements of the Joint Military Operations course. This syllabus is a powerful tool in that it allows students to develop a personal plan of study that leads to efficient time management and a deeper understanding of the syllabus material.

B. *Oral and Written Requirements*. The JMO Department has oral and written requirements that provide the opportunity for the student to demonstrate analysis, synthesis, and progress. In addition, these requirements serve as a means for feedback and interaction between the faculty and members of the seminar. Not all requirements are graded, but each provides the student with some measure of how he or she is doing at that point in the course. The following is a composite listing of these course requirements, type of activity, relative weights, and the key dates of graded events:

Requirement	Type Effort	Weight	Date
Operational Art Exam	Written/Individual	20%	12 September
Seminar/Exercise Contribution	Daily assessment	35%	16 Aug–10 Nov
Comprehensive Exam	Written/Individual	20%	18 October
Research Paper	Written/Individual	25%	28 October

13. JMO Department Grading Criteria

A course average grade of B- or higher is required for successful completion of *Master's degree requirements. A minimum grade of C- is required for successful* completion of the JMO course and to earn JPME Phase II certification. Guidance for grading students is contained in this syllabus and the Naval War College Faculty Handbook. Any grade may be appealed in writing within seven calendar days after receiving the grade. Grades will be appealed first to the student's seminar senior moderator and then to the Department Chairman. If deemed necessary, the Chairman may assign an additional grader who will review the assignment and provide an independent grade. Grade appeals may ultimately be taken to the Dean of Academics, whose decision will be final. Note that the review may sustain, lower, or raise the grade. The Academic Coordinator (Room C-417) can assist in preparing an appeal.

Student work that is not completed will receive a numeric grade of zero (0). Unexcused tardy student work, that is, work turned in past the deadline without previous permission by the moderator, will receive a grade not greater than C+ (78). Student work determined to be in violation of the honor code will receive a grade of F with a corresponding numeric grade between 0 and 59 assigned. The College's Academic Integrity Board will assign this accompanying numeric grade to the F.

Four sets of general grading criteria help in the determination of the letter grades that will be assigned during the JMO trimester. The criteria below offer the student a suggestion of the standards and requirements by which faculty assess performance. Using the Naval War College Faculty Handbook as basic guidance, the procedures below amplify the criteria as established within the Joint Military Operations Department.

A. *Criteria for the Research Paper Proposal*:

While not a graded event, the paper proposal is a formal proposal submitted by the student for moderator approval, and is a key component of a quality research plan. It is developed by the student as a result of critical consideration of the research questions provided in NWC 4036E, initial literature review, development of a sound thesis, and discussions with the paper advisors and subject matter experts in the student's specific field of study. In the proposal students will describe the thesis, provide a research methodology, and conclude with an annotated bibliography for consideration by the moderator team.

B. *Grading criteria for the Research Paper*:

The research paper must have a valid thesis. It must also provide sufficient background research to analyze the thesis, consider arguments and counter-arguments to compare conflicting points of view, present logical conclusions drawn from the material presented, and provide recommendations or lessons learned based on the conclusions. Certain research papers, because of the nature of the assigned research question, may follow a slightly different flow. Students are reminded that their moderators serve as their research paper advisors, and the presentation of papers with different methodologies will be approved by the moderator team. In addition to the examples of substantive criteria specified below, the paper must be mechanically correct (spelling, punctuation, grammar, syntax, format, and so forth) or the grade will be negatively affected.

A+ (97-100): Offers a genuinely new understanding of the subject. Especially deserving of distribution to appropriate authorities and submission for prize competition. Thesis is definitive, research is extensive, subject is treated completely, and the conclusions and recommendations are logical and justified.

A (94-<97): Work of superior quality that demonstrates a high degree of original thought. Suitable for distribution and submission to Defense Technical Institute Center (DTIC) and prize competition. Thesis is clearly articulated and focused, research is significant, arguments are comprehensive, balanced and persuasive. Conclusions and recommendations are supported.

A- (90-<94): Above the average expected of graduate work. Contains original thought. Thesis is clearly defined, research is purposeful, arguments are balanced and persuasive. Conclusions and recommendations are valid.

B+ (87-<90): A solid paper. Above the average of graduate work. Thesis is articulated, research has strong points, subject is well-presented and constructed, and conclusions and recommendations are substantiated by the material.

B (84-<87): Average graduate-level performance. Thesis is presented, research is appropriate for the majority of the subject, analysis of the subject is valid with minor omissions and conclusions and recommendations are presented with few inconsistencies.

B- (80-<84): Below the average graduate-level performance. Thesis is presented, but the research does not fully support it; the analysis, conclusions, and recommendations are not fully developed. The paper may not be balanced and the logic may be flawed.

C+ (77-<80): Below the standards required of graduate work. Portions of the criteria are lacking or missing, the thesis may be unclear, research may be inadequate, analysis may be incomplete, and the conclusions and recommendations may be lacking or not supported by the material.

C (74-<77): Fails to meet the standards of graduate work. Thesis is present, but support, analysis, conclusions, and recommendations are either missing or illogically presented. Paper has significant flaws in construction and development.

C- (70-<74): Well below standards. Thesis poorly stated with minimal evidence of research and/or several missing requirements. Subject is presented in an incoherent manner that does not warrant serious consideration.

D+ (67-<70) Considerably below graduate-level performance and lacking in evidence
D (64-<67) of effort or understanding of the research process or academic rigor. In
D- (60-<64) some measures, fails to adequately address thesis, research question, draw logical conclusions.

F (0-<60): Fails to meet graduate-level standards. Unsatisfactory work. Paper has no thesis. Paper has significant flaws in respect to structure, grammar, and logic. Paper displays an apparent lack of effort to achieve the course requirements. Gross errors in construction and development detract from readability of the paper. Paper displays evidence of plagiarism or misrepresentation.

   C. *Grading criteria for Exams:*

   The Operational Art examination and the Comprehensive examination require students to apply their knowledge of key concepts of the course. Both exams are open-book and require individual work. The exams will focus on aspects presented thus far in the course. Responses to both of these examinations will be in essay format. Grading will be assessed using the following criteria:

A+ (97-100): Organized, coherent and well-written response. Completely addresses the question. Covers all applicable major and key minor points. Demonstrates total grasp and comprehension of the topic.

A (94-<97): Demonstrates an excellent grasp of the topic, addressing all major issues and key minor points. Organized, coherent, and well-written.

A- (90-<94): Above the average expected of graduate work. Demonstrates a very good grasp of the topic. Addresses all major and at least some minor points in a clear, coherent manner.

B+ (87-<90): Well-crafted answer that discusses all relevant important concepts with supporting rationale for analysis.

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.

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.

C+ (77-<80): Demonstrates some grasp of topic, but provides insufficient rationale for response and misses major elements or concepts. Does not merit graduate credit.

C (74-<77): Demonstrates poor understanding of the topic. Provides marginal support for response. Misses major elements or concepts.

C- (70-<74): Addresses the question, but does not provide sufficient discussion to demonstrate adequate understanding of the topic.

D+ (67-<70) Considerably below graduate-level performance and lacking in any
D (64-<67) evidence of effort or understanding of the subject matter. In some
D- (60-<64) measures, fails to address the entire question.

F (0-<60): Unsatisfactory work. Fails to address the questions or paper displays evidence of cheating.

D. *Grading criteria for Seminar and Capstone Synthesis Event contributions*:

The seminar and joint planning exercise contribution grades are determined by moderator evaluation of the quality of a student's contributions to sessions (seminar discussions, projects, and exercises). Because the students are the SMEs for the Capstone, the quality of their paper briefs will be a contributing factor to the contribution grade. All students are expected to contribute to each seminar or exercise session, and to listen and respond respectfully when seminar mates or moderators offer their ideas. This overall expectation underlies all criteria described below:

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

A (94-<97): Superior demonstration of complete preparation for individual sessions. Consistently involved, and 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. Regularly involved, and contributes original, well-developed insights in the majority of sessions. Often takes the lead to accomplish team projects.

B+ (87-<90): Above-average graduate level preparation for individual sessions. Involved and 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. Participates and 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 participates or contributes well-developed insights; may sometimes speak out without having thought through an issue. Requires prodding to take lead on team projects.

C+ (77-<80): Generally prepared, but not to minimum acceptable graduate level. Requires encouragement to participate or contribute; contributions do not include original thinking or insights. Routinely allows others to take the lead in 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 fair share of team project workload. Only occasionally engages in seminar dialogue with peers and moderators.

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
D (64-<67) below-minimum acceptable understanding of lesson material. Engages in
D- (60-<64) frequent fact-free conversation.

F (0-<60): 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.

14. Seminar Assignments

The principal criteria in assigning students to a seminar are a balanced distribution among services and agencies, essentially creating a 'joint force,' as well as student specialties and operational expertise. The Chairman of the JMO Department will assign a minimum of two faculty members to each seminar. The Chairman will also publish separately the student seminar and classroom assignments.

15. Schedule

Seminars may meet in the mornings and in the afternoons. Depending on the work assigned, students may meet for scheduled periods in seminar as a group, in smaller teams depending on tasking, or conduct individual study and research. Students should pay close attention to the start times for each event since they may vary throughout the trimester. Classes normally are scheduled from 0830–1145 and 1330–1630. Moderators may adjust these times to facilitate the learning objectives for each segment of instruction. Changes from this schedule will be captured in the weekly schedules available electronically to students.

16. Key Personnel

For any additional information on the course, or if problems develop that cannot be resolved by your moderators, contact the Chairman or the Executive Assistant. Key departmental personnel are:

Chairman

CAPT Edmund B. Hernandez (USN)
Room C-421, 841-3556

Executive Assistant

PROF F. B. Horne (USN (Ret))
Room C-420, 841-6458

Academic Coordinator

Ms. Susan Soderlund
Room C-417, 841-4120

CNW & NCC Course Coordinator

PROF Richard Shuster
Room C-422, 841-6471

Coordinator, Introductory Sessions and
Operational Warfare Theory Sessions

PROF Stephen Forand (USMC (Ret))
Room C-431, 841-6457

Coordinator, Planning Sessions

PROF Dick Crowell (USN (Ret))
Room C-425, 841-2598

Coordinator, Contemporary Operations &
Environments Sessions

PROF Paul Povlock (USN (Ret))
Room C-410, 841-2598

| Coordinator, Capstone Synthesis Event | PROF Mark Seaman (USN (Ret)) |
| | Room C-428, 841-7297 |

17. Faculty Assistance

Faculty members are available to assist students with course material, to review a student's progress, and to provide counseling as required or requested. Students with individual concerns are encouraged to discuss them as early as possible so that faculty moderators can render assistance in a timely manner. We strongly urge students to make use of this non-classroom time with the faculty. During tutorials, scheduled in conjunction with the research paper, moderators may take the opportunity to discuss student progress as well as to solicit student input on the course to date. The faculty is located on the fourth deck of Connolly Hall.

18. Student Critiques

The Joint Military Operations Department strives continually to improve this course. To assist in this goal, students are required to complete a confidential end-of-course questionnaire that is submitted electronically. Students are encouraged to suggest improvements immediately and not to wait until the end-of-course questionnaire.

The course questionnaire is designed to allow students to comment constructively on the JMO trimester's content, pacing, reading loads, and so forth. It is not intended as a 'gripe sheet' but rather seeks student input to improve the course for the following year's students. As such, students are strongly encouraged to capture their thoughts throughout the course rather than to try to recreate them at the end of the trimester. Your constructive comments will help ensure that the course remains relevant and vital in the years to come. The release of student grades is contingent on completion of the critique.

19. Lectures by Senior Leaders

Enrichment lectures by senior military and interagency leaders occur periodically during the course. Most of these presentations feature the chiefs of service or regional and functional combatant commanders. These speakers are invited to discuss their views and ideas from the perspective as operational and theater-strategic commanders, service chiefs, or agency directors. The weekly academic schedule will specify the final date and time of each enrichment lecture. Last minute changes will be disseminated by the Dean of Students office and/or seminar moderators.

20. Non-attribution Policy

The College's educational mission requires a climate conducive to the free and open exchange of ideas and opinions by students, faculty and guest speakers. To this end and unless otherwise announced by the College or someone with authority to speak for the College, all lectures, seminars and similar academic or policy discussions (to include conferences, workshops, roundtables, etc.) at the College are subject to the Chatham House Rule (CHR). The CHR states: "When a meeting, or part thereof, is held under the Chatham House Rule, participants are free to use the information received, but neither the identity nor the affiliation of the speaker(s), nor that of any other participant, may be revealed."

To support this policy, no student, faculty, staff member, or guest of the College may, without the express permission of the College, use any electronic device or other method to record any lecture, seminar or similar event at the College, whether live, streamed, stored on any NWC network or on any removable storage device, or in any other manner.

The effect of the CHR is to separate statements from their source. For example, a student may not publicly ask a guest lecturer a question prefaced by, "Last week General Clausewitz stated that...." Similarly, statements made by faculty or students in a seminar cannot be reported and attributed outside of the seminar. Thus students, faculty, or guests cannot claim orally, on a blog, or any other way, "CAPT Mahan is being hypocritical in advocating the use of mines, because in seminar he argued that they were inhumane." Specific quotations are also to be avoided if they are likely to be traceable to specific individuals. A professor should not say, for example, "one of my [students from a demographic category in which we have few] students said that while deployed…."

The CHR is relaxed in settings such as classroom discussions that are themselves subject to the Rule. Also, the use of quotations in academic papers, professional articles or other works is allowed when the author has secured the explicit permission of the source individual. These policies apply to all students, faculty, staff and visitors. They apply not only to events on the grounds of the College but also to the College of Distance Education, remote classrooms, seminar off-sites, and other meetings run by the College. These policies are designed to support the free exchange of ideas and opinion without fear of retaliation and to encourage visiting dignitaries to speak freely. They should encourage the discussion in both formal and informal settings of ideas and concepts central to an education in JPME at the Master's Degree level. The policies do not protect any individual against improper speech, discussion, or behavior.

21. Course Calendar

A course calendar is included at the end of this syllabus. Be forewarned, however, that this calendar is subject to change. Changes or updates to this calendar should be expected, and will be captured in the electronic calendar provided for student use by the office of the Dean of Students.

22. Faculty Biographies

COLONEL GREGORY R. BELL, USA, joined the Joint Military Operations Department in March 2014. Prior to joining the War College he commanded 3rd Battalion, 7th Infantry Regiment in support of Operation Enduring Freedom from 2011 –2014. He was commissioned as an Infantry Officer in 1993 from the U. S. Army Officers Candidate School (OCS). He has served in both heavy and light Infantry units in Germany, Macedonia, Bosnia, Kosovo, Iraq and Afghanistan. He also served on the USAFRICOM Staff as the lead Global Force Management Planner, an Advisor to the Saudi Arabian Army (G3), a Battalion level trainer at the Joint Readiness training Center, Fort Polk Louisiana and as a Battalion and Brigade Operation Officer. COL Bell holds a M.A. in National Security and Strategic Studies from the Navy War College, a M.S. in Human Resource Management from the University of Central Michigan and a B.A. in Political Science from the University of Georgia.

PROFESSOR ALBION A. BERGSTROM rejoined the Joint Military Operations faculty in autumn 2003. He retired from the Army with over thirty years active duty in December 1999, having completed his career on the JMO faculty as a Professor of Operations and Chief of Block IV, Regional Contingency Planning and Warfighting. Prior military assignments include duty as an Agency Deputy Commander, Division Chief in the Pentagon, Armor (M1A1) battalion command, and various command and staff jobs. An Armor officer by trade, he had armored cavalry, armor, and infantry experience in Viet Nam, Europe, and CONUS. He holds a B.A. in Political Science/International Relations from Colorado State University, an M.A. in Personnel Management from Central Michigan University, and an M.A. from the Naval War College. He is a graduate of the Army's Command and General Staff College and the Army War College Strategist course. He is also a graduate of the Senior Officials in National Security Course at the John F. Kennedy School of Government at Harvard University and was a National Security Fellow at Harvard.

ASSOCIATE PROFESSOR DOUGLAS A CHAMBERLAIN joined the Joint Military Operations faculty in January 2016, after serving as a career officer in the Directorate of Analysis at the Central Intelligence Agency. As a senior analyst, Dr. Chamberlain followed a variety of Iraq issues for more than seven years. He wrote and contributed to a wide variety of intelligence products, including National Intelligence Assessments and Presidential Daily Briefs. Dr. Chamberlain has briefed the National Security Staff, members of the Cabinet, and members of Congress. He provided close support to the White House for nearly a year in 2008, and did a one-year rotation to the Iraq desk in the Bureau of Near Eastern Affairs at the Department of State in 2009. In the later part of his career, Dr. Chamberlain analyzed issues related U.S. strategic collection, and participated in various Intelligence Community efforts related to future collection technologies, methodologies and strategies. Dr. Chamberlain received his doctorate in history from Oxford University and holds degrees from Cornell and Yale universities. In June 2013 he graduated from the College of Naval Warfare with distinction.

PROFESSOR DONALD CHISHOLM is the Stephen B. Luce Professor of Naval Strategy. He joined the Naval War College faculty in 2000. He earned his A.B., M.A., and Ph.D. in

political science at the University of California. His research has examined the planning and execution of joint military operations; insurgency and irregular warfare; cognitive and organizational limits on rationality; organizational adaptation and innovation; organizational failure and reliability; and privatization of public activities. He is the author of *Coordination Without Hierarchy: Informal Structures in Multi-organizational Systems* (University of California Press, 1989) and *Waiting for Dead Men's Shoes: Origins and Development of the U. S. Navy's Officer Personnel System, 1793–1941* (Stanford University Press, 2001); and has published a number of articles in professional journals. He deployed to Afghanistan in 2011, 2013, and 2014.

ASSOCIATE PROFESSOR RICHARD M. CROWELL joined the Naval War College faculty in January 2008. While on active duty, Professor Crowell was a Joint Specialty Officer (JSO). He served at the Joint Forces Staff College as Military Faculty in the Joint and Combined Warfighting School and the Joint Command, Control & Information Operations School. Additionally, he served as the Chief Operations Branch, NATO Multi-Service EW Support Group, RNAS Yeovilton, UK; Operations Officer, Helicopter Combat Support Squadron SIX; and Assistant Air Officer, USS GUADALCANAL, (LPH-7). His shore tours include the Assistant Air Operations Officer for the Commander Naval Air Force U. S. Atlantic Fleet and the Program Manager for the Aviation Officer Candidate and Aviation Intelligence Officer programs for the Commander Navy Recruiting Command. He has earned a Master of Arts in National Security and Strategic Studies from the Naval War College and a Bachelor of Science from Massachusetts Maritime Academy.

COMMANDER KEITH B. DOWLING, USN, joined the Naval War College faculty in July 2015 after graduating from the College of Naval Warfare. A prior Chief Hospital Corpsman and Diving Medical Technician he was selected for the Navy Commissioning Program and attended the University of North Florida graduating with a Bachelor's Degree in Biology in 1995. He attended Surface Warfare Officer's School and served in USS WARRIOR (MCM 10) home ported in Ingleside TX, and USS DEXTROUS (MCM 13) forward deployed to Navy Central Command, Bahrain. He graduated as an Explosive Ordnance Disposal (EOD) Officer in 2000 and has served in a variety of EOD, diving and salvage billets to include Commanding Officer of Explosive Ordnance Disposal Mobile Unit ELEVEN from April 2012 until July 2014; Branch Chief of Improvised Asymmetric Warfare at U. S. Central Command from February 2009 to February 2012; and Executive Officer of Mobile Diving and Salvage Unit ONE from November 2005 to December 2007. He deployed to Iraq in July 2007 through February 2008 as the Officer in Charge of the Combined Explosives Exploitation Cell conducting forensic exploitation and Weapons Technical Intelligence (WTI) on Improvised Explosive Devices found throughout the Iraq Theater of Operations.

LIEUTENANT COLONEL MATTHEW DREIER joined the Naval War College faculty in May 2016 following a tour at III Marine Expeditionary Force, Okinawa, Japan. Prior tours include U. S. Transportation Command, 2d Marine Logistics Group, University of Rochester Naval Reserve Officer Training Corps, 1st Marine Division and 3d Marine Division. He holds an MS in Information Technology Management from the Naval Postgraduate School, an MBA from the University of Rochester, and a BA in English from the State University of

New York at Albany. A Joint Qualified Officer, he has deployed in support of operations in Iraq and Republic of the Philippines.

COMMANDER ROBERT E. DUCOTE, USN, joined the Naval War College faculty in the Joint Military Operations department in January 2016. Prior to joining the War College, he served with the Central Intelligence Agency. Commander Ducote is a Navy SEAL. In his 28 year career, he has conducted combat operations in Haiti, Bosnia, Kosovo, Afghanistan, Iraq, and various other locations. His other assignments include service as the Executive Officer of the Military Freefall School, Officer-in-Charge of the Naval Special Warfare Group TWO Training Detachment, Operations Officer of SEAL Team TWO, Task Force Operations Officer, and Director of Plans of Combined Joint Special Operations Task Force – Afghanistan. Commander Ducote holds a Bachelor of Science from Excelsior College and a Master of Arts from the Naval War College.

ASSOCIATE PROFESSOR STEPHEN FORAND joined the Naval War College faculty in October 2007 following retirement from the U. S. Marine Corps. He holds a B.S. degree from the University of Massachusetts and an M.A. in National Security Strategic Studies from the Naval War College. A naval aviator with over thirty years of operational experience he served in all active Marine Aircraft Wings. His career encompassed a variety of assignments including USCENTCOM, an exchange pilot with the U. S. Navy at HM-14 an Airborne Mine Countermeasures Squadron, the Naval War College Strategy and Policy Faculty, and Command of Marine Heavy Helicopter Squadron 363 and MCAS New River.

ASSOCIATE PROFESSOR JAMIE GANNON joined the Naval War College Faculty in July 2013. Colonel Gannon has served at numerous command and principal staff positions in the Marine Expeditionary Forces; and as a joint logistics planner and exercise branch chief at USCENTCOM during the early stages of OPERATION ENDURING FREEDOM and OPERATION IRAQI FREEDOM. Colonel Gannon commanded a combat logistics battalion and a Marine Wing Support Group; during which he deployed in command of joint support elements supporting major HADR events in Pakistan, the Philippines and Japan. His combat tours in Iraq and Afghanistan included staff assignments with I MEF and in the USCENTCOM HQ. He has experience in Defense Acquisition of joint programs during tours at HQMC and Marine Corps Systems Command. He holds a Bachelor of Science degree from Miami University (Ohio); a Master of Science in Systems Management from the Naval Postgraduate School; and A Master of Arts in National Security and Strategic Studies from the Naval War College.

ASSOCIATE PROFESSOR WILLIAM HARTIG joined the Naval War College faculty in July 2004, as an active duty Marine infantry officer, following a tour as Assistant Chief of Staff, for the I Marine Expeditionary Force. He served in all three Marine Expeditionary Forces and commanded at each grade. He retired as a Marine Colonel in October 2007 after over 30 years of service and joined the faculty.

CAPTAIN EDMUND B. HERNANDEZ, USN joined the Naval War College faculty in July 2015 after completing his Major Command tour as Commander, Mine Counter-measures Squadron Three. At sea he served in USS LONG BEACH (CGN 9), USS GEORGE PHILIP

(FFG 12), USS PRINCETON (CG 59), COMDESRON THIRTY-ONE, and CTF 70/CSG 5/ GEORGE WASHINGTON Strike Group assigned to the Forward Deployed Naval Forces. He commanded the Mine Sweeper USS PATRIOT (MCM 7) homeported in Sasebo, Japan and the Guided Missile Destroyer USS MILLIUS (DDG 69), homeported in San Diego, California. His shore assignments include serving on the OPNAV staff in the N3/5 Directorate and Combined Joint Task Force - Horn of Africa. CAPTAIN Hernandez holds a Master of Arts Degree in National Security Affairs from the Naval Post Graduate School in Monterey, California and a Bachelor of Arts Degree in Economics from the University of California, Los Angeles.

PROFESSOR DOUGLAS N. HIME joined the Naval War College Joint Military Operations faculty in 1998 following his retirement from the Air Force after 29 years in a variety of command, planning, and staff billets as a former B-52 instructor pilot/flight evaluator. He is a graduate of the Programme for Strategic and International Security Studies at the Graduate Institute of International Studies, Geneva, and holds a B.S. from Emporia State University, an M.S. from the University of Southern California, and a Ph.D. from Salve Regina University. He is a frequent guest lecturer for Joint Special Operations University, and member of the editorial boards for *Joint Force Quarterly* and the *Journal of Defense Management*. himed@usnwc.edu

ASSOCIATE PROFESSOR FRED B. HORNE joined the Joint Military Operations faculty in August 2003 as an active duty Navy Captain, after serving two years as the Director of the Naval Staff College. Professor Horne retired from the Navy in July 2006 and rejoined the faculty as an associate professor. He is currently assigned as the Executive Assistant to the Chairman of the Joint Military Operations Department. He graduated from the U. S. Naval Academy in 1976 with a B.S. degree in Oceanography and designated a Naval Flight Officer in January 1978. He has served in a variety of operational and staff positions in the Maritime Patrol Aviation community including commanding officer Patrol Squadron FIFTY and Chief of Staff, Fleet Air Keflavik in Iceland. He is a 1988 graduate of the College of Naval Command and Staff, a 1999 graduate of the Air War College, and holds a M.A. in National Security and Strategic Studies.

ASSOCIATE PROFESSOR JOHN HOUFEK joined the Naval War College faculty in the Joint Military Operations Department and as a Senior Fellow to the Center on Irregular Warfare and Armed Groups in November 2015. Before joining the faculty, John worked for two years as the Special Operations Forces Program Manager within the National Security Analysis Department at the Johns Hopkins University Applied Physics Laboratory. Previously, John completed a 30-year Navy career retiring in 2013 at the rank of Captain. After graduating from the U.S. Naval Academy, he initially served as a Naval Flight Officer and S-3A Mission Commander making multiple carrier battle group deployments. He was selected for Basic Underwater Demolition/SEAL training and was Class Leader for Class 179. He served as a Platoon Commander, Operations Officer, Executive Officer, ARG/MEU Task Unit Commander, Numbered Fleet NSW Operations Officer, two tours as Commanding Officer and CTF Commander, Deputy Commander for Special Operations Command Central (SOCCENT), Deputy and Chief of Staff (N3/N5) for the Naval Special Warfare Command, and served at the US Special Operations Command as Lead Assessment Director. His final tour before transitioning to the private sector was as a Military Professor and Special

Operations Advisor at the Naval War College. During his military career he made multiple operational deployments to the Pacific, Europe, Africa and Middle East, conducted four overseas tours, and served in multiple fleet and Joint assignments. John holds a Bachelor of Science degree in Economics from the U.S. Naval Academy and is a 2004 Distinguished Graduate of the U.S. Naval War College with a Master's Degree in National Security and Strategic Studies.

CAPTAIN MICHAEL JUNGE, USN, joined the Naval War College faculty in August 2012 following graduation from the College of Naval Warfare. A Surface Warfare Officer, he served afloat in USS MOOSBRUGGER (DD 980), USS UNDERWOOD (FFG 36), USS WASP (LHD 1), USS THE SULLIVANS (DDG 68) and was the 14th commanding officer of USS WHIDBEY ISLAND (LSD 41). Ashore he served with Navy Recruiting as Medical Recruiter and Officer in Charge of Navy Recruiting and Processing Station, San Juan, Puerto Rico; Assault Craft Unit FOUR; Deputy Commandant for Programs and Resources, Headquarters, Marine Corps; Deputy Chief of Naval Operations for Communication Networks (N6); and with the Office of the Secretary of Defense. Captain Junge holds a B.S. from the United States Naval Academy in Political Science with a Minor in German; a MA in Organizational Management from George Washington University; and a MA in National Security and Strategic Studies.

CAPTAIN RICHARD A. LABRANCHE, USN, joined the Naval War College faculty in July 2013 after completing his Major Command tour as Commander, Carrier Air Wing SEVENTEEN (CVW-17), flying the F/A-18 C/E/F/G variants onboard the USS CARL VINSON (CVN-70). Previous operational tours include: Commanding Officer of Fighter Squadron THIRTY-ONE (VF-31), flying F-14Ds onboard USS THEODORE ROOSEVELT (CVN-71) and USS JOHN C. STENNIS (CVN-74), Fighter Squadron ELEVEN (VF-11), Flying F-14Ds onboard CVN-70, and F-14Bs onboard CVN 74, Attack Squadron ONE-NINETY-SIX (VA-196), flying the A-6E onboard CVN-70, and Attack Squadron EIGHTY-FIVE (VA-85), flying the A-6E onboard the USS AMERICA (CV-66). Captain LaBranche has nine operational deployments to the Iraq/Afghanistan AORs and has amassed 5,000 flight hours and over 1,400 arrested landings. His shore assignments include: Liaison Officer (LNO) to Commander JOINT FORCES COMMAND (JFCOM), for Commander US NORTHERN COMMAND (NORTHCOM), Instructor Pilot at Fighter Squadron ONE HUNDRED-ONE (VF-101) and Flag Aide to Commander, Naval Air Force U.S. Atlantic Fleet. He has also previously held positions at the Naval War College as the Deputy Director of the Wargaming Department, and as the Director of the Maritime Advanced Warfighting School (MAWS). Captain LaBranche earned a Master of Arts in National Security and Strategic Studies from the Naval War College, a Master of Science in Business Administration from Boston University, a Bachelor of Science in Aviation Management from Southern Illinois University and is currently working toward a PhD (ABD) in Business Administration (anticipated 2016) from Touro University. Captain LaBranche is also a Joint Qualified Officer (JSO).

LIEUTENANT COLONEL MICHAEL J. LEPAGE, USAF, joined the Naval War College faculty in August 2013 following his tour as Deputy Commander, 694th Intelligence, Surveillance and Reconnaissance Group, Osan Air Base, Republic of Korea. During this tour

he was responsible for over 1,000 U. S. and Republic of Korea personnel conducting combined operations in the Distributed Ground Station-3 weapon system. Previously, Lt Col LePage commanded the 17th Training Support Squadron at Goodfellow Air Force Base, Texas, where his squadron directly supported technical training for intelligence, firefighter, and special instruments personnel. He is a career intelligence officer. Lt Col LePage holds a B.A. degree in Criminal Justice from Norwich University, a Master of Science degree in Business Management from Troy State University, a Master of Science of Strategic Intelligence from the Joint Military Intelligence College and a Master of Military Art and Science degree from the Air Command and Staff College.

ASSOCIATE PROFESSOR IVAN LUKE is a faculty member in the Joint Military Operations Department and teaches in both of the department's resident core courses. Professor Luke also teaches elective courses in Maritime Homeland Security and Defense and Naval Leadership. In addition, he coordinates and teaches in the department's two-week course for reserve officers, offered annually. His research interests include maritime history, maritime security, homeland security, and the military's role in domestic incident response. Professor Luke's interest in maritime topics springs from his time in the U. S. Coast Guard where he served for more than twenty-nine years, retiring as a Captain in 2003. While in the service, he was a seagoing officer, serving at sea for more than fourteen years, including seven years in command. Much of his experience while in uniform was in the law enforcement field, including significant time conducting counter-narcotics and migrant-interdiction operations in the Caribbean. His most memorable assignment, however, was his four years in command of the Coast Guard's sail training ship, USCGC EAGLE. Professor Luke graduated from the United States Coast Guard Academy in 1976 with a Bachelor of Science in Electrical Engineering. He earned Master of Arts in National Security and Strategic Studies from the Naval War College in 1998, and a PhD in Humanities from Salve Regina University in 2012. His interdisciplinary dissertation had a dual focus in maritime history and philosophy. Professor Luke holds a merchant mariner's license in the grade of Unlimited Ocean Master, Steam, Motor or Sail.

ASSOCIATE PROFESSOR MICHAEL MCGAUVRAN joined the Naval War College as an active duty Air Force Colonel in July 2006, following a tour as the Chief of Plans at U. S. Strategic Command. A command pilot with 4,100 hours in B-1, T-38, and B-52 aircraft, he has extensive experience in the T-38 as a flight training instructor and in the B-1 as an instructor, evaluator, Operations Officer, Squadron and Deputy Group Commander. As a staff Officer in Headquarters Air Combat Command, he oversaw the F-22, F-15, B-1, B-2 and B-52 programs, and assisted COMACC in Congressional testimony. Additionally, he was the B-1 Expeditionary Operations Support Squadron Commander for Operation DESERT FOX and flew combat sorties in support of Operation ALLIED FORCE. Col McGauvran retired from the U. S. Air Force after 27 years of service and joined the NWC faculty as an Associate Professor in 2009. His degrees include a B.S. from Stony Brook University, NY, an M.A. in Public Administration from Midwestern State University, TX, an M.A. in National Security and Strategic Studies from Naval Command and Staff College, RI, an M.S. in National Resource Strategy from the National Defense University, Washington D.C., and a Doctorate in Educational Leadership from Johnson & Wales University. His

most recent publication was a co-authored research article on Chinese air refueling capabilities written for the Naval War College's Strategic Studies Group.

COLONEL JOE MCGRAW, U. S. Army joined the Joint Military Operations department in August 2014 following Command of a U.S. Army Special Forces Battalion. Prior tours include Commander, Special Operations Task Force-West—Afghanistan; Executive Officer 1st Special Forces Group (Airborne); Deputy Commander, Joint Special Operations Task Force—Philippines; Director, Advanced Special Operations Techniques Course—United States John F. Kennedy Special Warfare Center and School; Commander, Advanced Operating Base 1220—Diyala, Iraq; and Executive Officer, Department of the Army Secretariat for Centralized Selection Boards. Colonel McGraw is a graduate of the United States Military Academy and the Naval Postgraduate School. He has deployed in support of operations in Afghanistan, Iraq and the Republic of the Philippines.

ASSOCIATE PROFESSOR CHRISTOPHER J. MCMAHON joined the Naval War College faculty in July 2014 as the Emory S. Land Chair for Merchant Marine Affairs – detailed from the U. S. Maritime Administration, U. S. Department of Transportation. He is a member of the Federal Senior Executive Service (SES). Professor McMahon is a 1977 graduate of the United States Merchant Marine Academy at Kings Point, New York, where he graduated with a B.S. in Marine Transportation, a commission as Ensign, U. S. Naval Reserve and a Merchant Marine license. He sailed for more than a decade aboard U. S. flag merchant vessels engaged in worldwide trade. He is a U. S. Coast Guard licensed unlimited Master of Steam and Motor Vessels with a Master of Sail endorsement. Beginning in 1984, in between periods at sea and as a commissioned Maritime Service officer, Professor McMahon served as an associate professor of Marine Transportation and Nautical Science at the U. S. Merchant Marine Academy and later as Director of Waterfront Activities and Sailing Master. He was founding Director of the Global Maritime and Transportation School (GMATS). Following the September 11th attacks on America in 2001, the Secretary of Transportation appointed Professor McMahon as his Special Assistant responsible for coordinating surface transportation security. He was promoted by the Secretary to Rear Admiral (Lower Half), U. S. Maritime Service in 2004 and to Rear Admiral (Upper Half) in 2005. During this period, he was assigned to Iraq as the Transportation Counselor to the Ambassador and Multi-National Forces Iraq and as Director of the Iraqi Reconstruction Management Office of Transportation. In that capacity, he was responsible for rebuilding Iraq's airports, seaports, railroads, and other transportation infrastructure. He later served as Acting Director of the Department of Transportation's Office of Intelligence, Security, and Emergency Response. From 2006 to 2008, he served as Deputy Superintendent of the U. S. Merchant Marine Academy. Professor McMahon has graduate degrees from the American University, Long Island University, and Starr King Seminary at the Graduate Theological Union, Berkeley, California.

LIEUTENANT COLONEL LATASHA L. MOODY-LOVE, U.S. Army, joined the Joint Military Operations Department in June 2016. Prior to joining the War College she served as the Joint Logistics Plans Officer for Defense Logistics Agency Pacific in Daegu, South Korea. She was commissioned as a Logistics Officer in 1999 through the Reserve Officer Training Corps (ROTC). She served the majority of her career in the Pacific Command

(PACOM) region providing logistics support to light Infantry units to include a Stryker Brigade Combat Team (SBCT). She served at the Strategic, Operational and Tactical level throughout her military career. LTC Moody-Love's deployments include Operation Iraqi Freedom as the Stryker Brigade Combat Team S-4/Logistics Officer and the Military Transition Team (MiTT) Lead. She holds a B.A. in Anthropology from Northwestern State University of Louisiana and a Master of Science in International Relations from Troy University.

CAPTAIN F. WILLIAM MOSENFELDER, USN, joined the Naval War College faculty in June 2015 following his assignment to the Joint Staff Intelligence Directorate where he served as a watch team chief and a senior editor of the Chairman's daily intelligence brief. He has deployed as the Deputy J2 for Combined Joint Task Force – Horn of Africa in Djibouti, and completed multiple deployments to Kosovo. Captain Mosenfelder's sea duty assignments include Amphibious Squadron 8 N2 during which he deployed with Amphibious Task Force East at the start of the second Iraq war, and earlier as Strike Fighter Squadron 105 Intelligence Officer. Ashore he served as Naval Attaché to Croatia and with the Joint Analysis Center, Molesworth, UK. Captain Mosenfelder is a Joint Qualified Officer and earned an M.M.S from the USMC Command and Staff College.

LIEUTENANT COLONEL ANTHONY E. NEW, U. S. Army joined the Naval War College faculty in May 2014 following command of 2-34 AR, a Combined Arms Battalion (CAB) located at Fort Riley, KS. LTC New was commissioned in the Infantry from the United States Military Academy in 1996 and has served in numerous troop leading and staff positions while assigned to Light Infantry, Air Assault Infantry, Stryker Infantry, and Armored Battalions/ Brigades during his career. His deployments include Operation IRAQI FREEDOM as an Air Assault Company Commander and Brigade Combat Team planner in 2003-04, and Stryker Battalion Executive officer and Brigade S-3/Operations Officer in 2009-10. He holds a B.S. degree in Civil Engineering from the U. S. Military Academy and a Masters of Military Arts and Science from the Command and General Staff College at Fort Leavenworth, KS.

PROFESSOR GEORGE F. OLIVER III joined the Naval War College in November 2005. Prior to joining the NWC faculty, he served 31 years in the U. S. Army. His last military assignment was with the U. S. Army Center of Military History where he was writing the official history of the U. S. Army in peace operations. Before this position, he spent six months in Iraq as the Deputy Coordinator for Humanitarian Assistance for the Coalition Provisional Authority. From 1999–2003, Colonel Oliver served as the Director of the U. S. Army Peacekeeping Institute in Carlisle, Pennsylvania, and from 1996–1999, the Military Advisor to the U. S. Ambassador to the United Nations. George Oliver earned a B.A. in Engineering from the United States Military Academy, an M.S. in Business Administration from the University of South Carolina, an M.A. in National Security and Strategic Studies from the Naval War College, and a Ph.D. from George Mason University's School of Conflict Analysis and Resolution. While on active duty, Professor Oliver served in a variety of light infantry, ranger, Special Forces, and airborne units across the globe. He served in leadership roles in the infantry, Special Forces and light armored cavalry, culminating at battalion command. His overseas roles include serving within the demilitarized zone in

Korea, the 1990–1991 Gulf War and Operation Iraqi Freedom in 2003. His expertise is as an operations officer having served in that capacity in three different levels of command. Colonel Oliver's interest in peace operations began in 1993, while the Operations Officer for the Joint Readiness Training Center at Fort Polk, Louisiana. Since then he has been involved in several peacekeeping missions, developed U.S. national policy, and has analyzed these roles for U.S. forces. Additionally he has taught, written and lectured around the world on the role of the military in peace operations and in peacebuilding. Professor Oliver is also one of the authors on the United States Army's book on the Gulf War, *Certain Victory*, and has published several articles. His PhD dissertation looked at the role of U.S. military forces in stability operations. Professor Oliver continues to be a sought after lecturer on peace and stability operations.

COMMANDER TAM N. PHAM, USN, reported to the Joint Military Operations Department as a faculty member in March 2016 following his tour as an Information Operations Warfare Commander mentor and assessor at Commander, Carrier Strike Group FOUR (CCSG-4)) at Naval Station Norfolk, VA. While at CCSG-4, he also led Fleet training and assessment of Electromagnetic Maneuver Warfare, Electronic Warfare, Space Operations, and Cyberspace Operations training for Carrier Strike Groups, Amphibious Ready Groups, and Independent Deployers. Prior to CCSG-4, he served as the Deputy Director and Future Readiness Officer at the Fleet Electronic Warfare Center under Navy Cyber Forces (now Navy Information Warfare Forces) located in Suffolk, VA. Commander Pham obtained his commission through the U.S. Naval Academy and graduated with merit with a BS in applied mathematics in 1996. A career Naval Flight Officer, he has served as an EA-6B Electronic Countermeasures Officer. Other tours include Electronic Attack Squadron 132 (VAQ-132) and VAQ-138, Developmental Test & Evaluation Squadron 30 (VX-30), and Carrier Air Wing 14 (CVW-14) Staff. He has an MBA from California Lutheran University, an MA in National Security and Strategic studies from the U. S. Naval War College, and is also a graduate of the Joint Combined Warfare School at the Joint Forces Staff College.

ASSOCIATE PROFESSOR PAUL A. POVLOCK joined the Naval War College faculty in 2004 following command of USS SAN FRANCISCO (SSN-711). He retired from active service in 2009 at which time he joined the faculty as an Associate Professor. His sea tours included duty on USS LAFAYETTE (SSBN-616) (GOLD), USS RICHARD B. RUSSELL (SSN-687), USS ALBUQUERQUE (SSN-706), and USS PHILADELPHIA (SSN-690). Significant shore tours included service on the Joint Staff as the Navy Branch Chief of the Reconnaissance Operations Division (J38), at Central Command Headquarters as the Chief of Effects Synchronization & Plans of the Strategic Effects Division (J5), and as an Instructor at the Naval Academy. A 1984 graduate of the Naval Academy, he also holds Master's degrees in Mechanical Engineering from the University of Maryland and in National Security and Strategic Studies from the Naval War College, and a Ph.D. in Humanities from Salve Regina University.

COMMANDER CAROL A. PRATHER, USN, joined the Naval War College faculty in November of 2011 following graduation with distinction from the College of Naval Warfare. Prior to reporting to Newport, CDR Prather served from 2008 to 2010 as Commander, Task

Force 72 Liaison to Commander, Seventh Fleet embarked in USS BLUE RIDGE, home ported in Yokosuka, Japan. From 2006 to 2008 she served as Current Operations Officer and Exercise Officer for Commander Task Force 57/72 in Misawa, Japan. A P-3 pilot by trade, from 2004 to 2006 CDR Prather served as Operations Officer, Training Officer and Assistant Maintenance Officer for Patrol Squadron FOUR, with operational deployments to Bahrain, Djibouti, Kandahar, Afghanistan, and Misawa, Japan. CDR Prather reported to USS KITTY HAWK on September 11, 2001 as Ops Admin Officer and deployed immediately to the North Arabian Sea for Operation ENDURING FREEDOM. While with KITTY HAWK she also qualified as a Tactical Action Officer, a watch she stood for deployments throughout the Western Pacific as well as to the Arabian Gulf for the lead up to and initial months of Operation IRAQI FREEDOM. From 1999 to 2001 CDR Prather taught the Basic Officer Leadership Course and served as a T-44 flight instructor with Training Squadron THIRTY-ONE in Corpus Christi, Texas. Her first operational tour following designation as a Naval Aviator in 1995 was with Patrol Squadron TWENTY-SIX in Brunswick, Maine, where she served as Aircraft Division Officer, Command Enterprise Officer and Ordnance Branch Officer, with operational deployments to Puerto Rico, Panama, Keflavik, Iceland and Sigonella, Sicily. CDR Prather is a 1992 graduate of the U. S. Naval Academy.

LIEUTENANT COLONEL MICHAEL TROY RITTENHOUSE, USA, joined the Joint Military Operations Department in July of 2015 after completing his Battalion Command assignment of Defense Logistics Agency Distribution Tobyhanna, Pennsylvania. Rittenhouse originally enlisted in the U.S. Army in 1991 out of Harrisburg, Pennsylvania, and later, went on to be commissioned a branch detailed, Infantry officer from Minnesota State University, Mankato in 1995. Upon completion of the branch detail, he transitioned to a Quartermaster/Logistics Officer. Rittenhouse has served in various Infantry, Quartermaster and Logistics assignments in Kuwait, Korea, Qatar, Iraq and United States of America. Rittenhouse served as the first III Corps' Presidential Support Team officer in charge to President George W. Bush. He commanded a petroleum supply company in the 64th Corps Support Group, 13th Corps Support Command, as well as cadet companies in the United States Corps of Cadets, United States Military Academy, and most recently, DLA Distribution Tobyhanna, Pennsylvania. Rittenhouse holds an M.S. in Counseling and Education with an emphasis in Leadership from NY Long Island University, C.W. Post and a B.S. in Business Administration/Marketing from Minnesota State University, Mankato.

CAPTAIN ROB SANDERS, JAGC, USN, joined the Naval War College faculty in 2014. Prior to reporting to NWC he was the 10th Director, Defense Institute of International Legal Studies (DIILS). A DIILS international legal adjunct instructor since 2000, his primary focus was on rule of law in conflict/post-conflict areas of the Middle East, Africa and Asia. Sanders twice commanded Navy Legal Service Office (NLSO) North Central and completed JAG officer tours at USCENTCOM, NLSO Detachment NAS Sigonella; NAS Jacksonville; COMSUBGRU TEN; the Navy and SECDEF Offices of Legislative Affairs; Navy/OJAG General Litigation, Appellate Defense and Military Personnel divisions and. While deployed to the Office of Military Cooperation-Afghanistan (OMC-A) he served as the Afghan National Army TJAG's Mentor and Special Staff Deputy Director. He has completed MIT's Seminar XXI Program for Foreign Politics, International Relations and National Interest fellowship and a Defense Equal Opportunity Management Institute (DEOMI) internship; his

DEOMI was work is published in DEOMI Heritage Series Pamphlet 99-3, "Black Seminoles." The Navy's 2009 NAACP Roy Wilkins Meritorious Service Award recipient, he was elected to the Schenectady New York County School System's Hall of Fame in 2010, has earned a USMC Martial Arts Program Green Belt and was a member of the Department of Defense Task Force on the Care, Management and Transition of Recovering Wounded, Ill and Injured Members of the Armed Forces. Captain Sanders entered the Navy as an enlisted Reserve Intelligence Specialist and as a civilian engineer/contractor worked on Navy weapon systems, nuclear submarine propulsion equipment and aircraft carrier tactical radios. A member of NWC's first distance learning M.A. degree class, Captain Sanders also earned his Doctor of Law and Policy (LP.D) and B.S. Electrical Engineering degrees from Northeastern University; a Juris Doctorate (JD) from Columbus School of Law, Catholic University of America; a Master of Laws (LLM) - Military/Int'l and Operational Law Specialty from the U. S. Army JAG School; an M.S. in Strategic Intelligence (MSSI) from the National Defense Intelligence College; and a M.S. in International Relations (MSIR) from Troy State University.

COLONEL ADRIAN C. SCHUETTKE, USAF, joined the Naval War College faculty in August 2011. His assignment followed his tour as the Commander, 521st Air Expeditionary Advisory Squadron, Kirkuk, Iraq where he directed a diverse team of Combat Air Advisors training and assisting the Iraqi fixed-wing and rotary-wing pilot training programs as well as guiding the operational employment, weapons procedures, and maintenance of the only fixed-wing reconnaissance/strike unit, enabling autonomous Iraqi airpower in support of internal national security. Colonel Schuettke has deployed to the Middle Eastern, European, and Pacific theaters as a highly experienced F-15E fighter pilot, instructor, and mission commander with over 2,500 hours in the F-15E, A/T-38, AC/TC-208, C-172 aircraft. He has previously served as a future requirements development officer in the Pacific Air Forces A-3 staff, and deployed in support of the Central Command J-5 Coalition Coordination Center. Additionally, he has experience as a mishap investigating officer, operational test pilot, requirements development officer, and program element manager. Colonel Schuettke holds a B.S. degree in Mechanical Engineering from the University of Portland and an M.S. degree in Systems Engineering from the Air Force Institute of Technology.

ASSOCIATE PROFESSOR MARK SEAMAN joined the Naval War College faculty in September 2001, as an active duty Navy Captain and served in both the Joint Military Operations and War Gaming departments before retiring from the Navy in June 2008. He then rejoined the faculty as an Associate Professor. He graduated from the U. S. Naval Academy in May 1979 and was designated a naval aviator in August 1981. His sea tours include Fighter Squadron 32 (1984–1987), deploying aboard both the USS INDEPENDENCE (CV-62) and USS JOHN F. KENNEDY (CV-67); and Fighter Squadron 143 (1989–1992) deploying aboard the USS DWIGHT D. EISENHOWER (CVN-69). His major shore tours include Fighter Squadron 101 (1987–1989); a joint tour with Headquarters North, Kolsas, Norway (1992–1995); Navy Recruiting District, Portland, Oregon as Commanding Officer (1996–1998) and then completed a second tour in Norway as the Chief, Naval Plans and Exercises, Joint Headquarters North, Stavanger. He holds a B.S. degree in Naval Science from the U. S. Naval Academy and a M.A. degree in National Security and Strategic Studies from the U. S. Naval War College.

ASSOCIATE PROFESSOR RICHARD J. SHUSTER joined the Naval War College faculty in August 2009. From 2009-2012, he was the Defense Intelligence Agency's Representative to the Naval War College under the Associate Deputy Director's Office. He has over eight years' experience at DIA, where he produced classified studies, reports, and assessments for analysts and policymakers. His two most comprehensive works were *Find, Exploit, Eliminate: The Iraq Survey Group from Weapons of Mass Destruction to Counterinsurgency* (DIA, December 2007) and *Weathering the Storm: The International Security Assistance Force in Afghanistan, 2001-2009* (DIA, June 2009). Professor Shuster earned his Ph.D. in modern European history in 2000 from the George Washington University, where he has also taught courses. He is the author of *German Disarmament After World War I: The Diplomacy of International Arms Inspection, 1920-1931* (Routledge, 2006).

LIEUTENANT COLONEL JENNIFER L. STOKES, USAF, joined the Naval War College faculty in the Joint Military Operations department in August 2015. Prior to joining the War College, she commanded the Air Force Reserve Officer Training Corps Detachment 088, Sacramento, CA. She administered a comprehensive recruiting, training, and commissioning program for over 150 cadets enrolled at 15 colleges and universities across the Sacramento region, and also served as the Chair of the Department of Aerospace Studies at California State University, Sacramento. Lieutenant Colonel Stokes is a command pilot with over 3,500 flying hours in the KC-135, UV-18, T-52, and T-53 aircraft. She has flown combat missions in support of operations in Afghanistan, Iraq, Kosovo, and Bosnia. Her various assignments include service as the Chief of Special Operations Air Refueling for the 22d Air Refueling Wing and as the Director of Safety for the United States Air Force Academy. She also served as the Chief of Safety for the International Security Assistance Force Joint Command and Director of Staff to the Deputy Chief of Staff – Air, Kabul, Afghanistan. Lieutenant Colonel Stokes holds a Bachelor of Science in Engineering Mechanics from the United States Air Force Academy and a Master of Aeronautical Science from Embry Riddle Aeronautical University.

CAPTAIN ALFRED (FRED) TURNER, USN currently serves as a military professor for Joint Military Operations. Following commissioning via AOCS and initial intelligence training in 1988, CAPT Turner assumed duties as Intelligence Officer to Attack Squadron Eight Five. He deployed with VA-85 aboard USS America (CV 66) to the North Atlantic, Mediterranean, and Indian Ocean, as well as to the Red Sea/Persian Gulf for Desert Shield/Storm. CAPT Turner was detailed to Commander, Naval Force Europe N2 in 1991, where he was a Watch Officer and Fleet Support Officer, as well as a Balkans and Maritime Analyst. During this time, CAPT Turner also augmented the Joint Task Force Provide Promise J2. In 1994, CAPT Turner reported to Joint Staff J2 where he was assigned to the Deputy Directorate for Targets with EUCOM and CENTCOM targeting responsibilities. Midway through his tour, CAPT Turner deployed to Sarajevo, Bosnia-Herzegovina as the National Intelligence Support Team Chief. Following Joint Targeting School, CAPT Turner was the Intelligence Officer for Commander, Carrier Air Wing One from 1998 to 2000. He participated in deployments to the Mediterranean and the Persian Gulf aboard USS John F. Kennedy (CV 67) in support of Joint Task Force South West Asia. After completing Naval War College, CAPT Turner was assigned to Commander, Pacific Command J2 in 2001,

where he served as Deputy Executive Assistant and Current Intelligence Officer to the J2. Following Joint Forces Staff College, CAPT Turner reported to the Chief of Naval Operations Staff in May 2004, was assigned for two months with the Office for Administrative Review of Detained Enemy Combatants, and worked the remainder of his tour in analysis, programming and integration, as well as strategy, policy and Intelligence Community affairs. From July 2007 until August 2009, CAPT Turner was the Assistant Chief of Staff for Intelligence for Commander Carrier Strike Group Two, completing a combat deployment aboard USS Theodore Roosevelt in support of Operation Enduring Freedom and COMFIFTHFLT operations. Following his strike group N2 tour, he served as Military Sponsorship Branch Head in the OPNAV N2/N6 (Information Dominance) Total Force Management Division. From March 2011 until August 2012, CAPT Turner served as the N2 for Commander Fleet Cyber Command/Commander Tenth Fleet. CAPT Turner received his B.A. in Foreign Affairs from the University of Virginia and M.A. in National Security Studies from the Naval War College.

PROFESSOR MILAN VEGO joined the Naval War College faculty in August 1991. A Croatian native of Čapljina, Herzegovina, he earned a B.A. in Naval Science from the former Yugoslav Academy in 1961. He also holds a Master Mariner's license since 1973. Professor Vego served for twelve years as an officer in the former Yugoslav Navy and for three years as 2nd Officer (Deck) in the former West German merchant marine before obtaining political asylum in the United States in 1976. He became a naturalized citizen in 1984. Professor Vego was an adjunct professor at George Washington University (1983), the former Defense Intelligence College (1985–1991), and at the War Gaming and Simulations Center, National Defense University, Washington, D.C. (1989–1991) before joining the Naval War College faculty in August 1991. He was a Senior Fellow at the Center for Naval Analyses, Alexandria, Virginia (1985–1987), and the former Soviet Army Studies Office (SASO), U. S. Army Combined Center, Fort Leavenworth, Kansas (1987–1989). Professor Vego holds a B.A. in Modern History (1970) and an M.A. in U. S./Latin American History (1973), Belgrade University, and a Ph.D. in Modern European History from George Washington University (1981). He has published nine books including *Soviet Naval Tactics* (Annapolis, MD: Naval Institute Press, 1992); *Austro-Hungarian Naval Policy 1904–1914* (London: Frank Cass Publishers, 1996); *Naval Strategy and Operations in Narrow Seas* (London: Frank Cass Publishers, 1st ed., 1999; 2nd ed., 2003) *The Battle for Leyte, 1944: Allied and Japanese Plans, Preparations, and Execution* (Annapolis, MD: Naval Institute Press, 2006); *Joint Operational Warfare: Theory and Practice* (Newport, RI: Naval War College, 1st printing, 2007; 2nd printing 2009) and *Operational Warfare at Sea: Theory and Practice* (London/New York: Routledge, Taylor & Francis Group, 2009). His latest book *Major Fleet-Versus-Fleet Operations in the Pacific War, 1941-1945* will be published by the Government Printing Office in February 2015. Professor Vego also published numerous articles/essays in various professional journals/magazines.

ASSOCIATE PROFESSOR BARRETT JAMES WANN is the U. S. Defense Intelligence Agency (DIA) Representative at the Naval War College. He joined the College faculty in January 2013 following an extended overseas tour supporting EUCOM and AFRICOM. He began his career with the Federal Government in 1994 as a staffer in defense policy for Senator Robert Smith (R-NH). In 1996, he began working for the National Security

Agency's Office of Counterintelligence with tours in multiple countries supporting the protection and collection of signals intelligence (SIGINT). In 2003, he transitioned to the Defense Intelligence Agency and had deployed routinely to support HUMINT (human intelligence) and MASINT (technical collection) operations in hostile and friendly regions worldwide. While deployed to EUCOM he was tasked with the training and equipping of several North African allies to combat regional instability and supported the 6th Fleet with its maritime security mission within the Gulf of Guinea. He served on the J2 and J5 AFRICOM Transition Team Staff and was the first DIA Representative assigned to the new command. His last assignment in AFRICOM prior to his arrival in Newport was as the Senior Security Advisor to the Commander.

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COURSE OVERVIEW (Lecture)

Always keep in mind the product which the country desperately needs is military leaders with the capability of solving complex problems and of executing their decisions…You must keep your sights on problem solving as your objective.

—Vice Admiral Stansfield Turner, NWC Convocation Address, 1972

A. Focus:

The Chairman of the Joint Military Operations Department, Captain Edmund B. Hernandez (USN), will provide an overview of the objectives and requirements of the Joint Military Operations course.

B. Objective:

- Understand the objectives of the College of Naval Warfare and Naval Command College Joint Military Operations course.

C. Background:

For the century ahead, the use of military and naval power and their inter-relationships with the political, diplomatic, economic, and informational instruments of national power will remain essential to achieving desired end states. During this trimester, we will study how to wield the military instrument of power, in peace and in war, to achieve national policy goals. We will examine relationships of national power at two levels—operational and theater-strategic. This will include the varying perspectives of the Executive Branch (President, the Secretary of Defense and other cabinet members), Congress, the Joint Chiefs of Staff, combatant commanders, Joint Task Force commanders, and component commanders. Our focus remains on joint operations at the theater and task force level across all domains: land, maritime, air, space, and cyber. This course will enhance students' senior leadership skills and critical thinking abilities to plan theater strategies and translate them into naval, joint, interagency, and multi-national operations in order to accomplish national objectives.

We will review the theory of operational art, compare it to the doctrinal basis for contemporary application of military power, and begin to distill the next generation of doctrine for our armed forces. Today's operational art theory and the doctrinal basis for the U.S. armed forces reflect the knowledge of Industrial Age warfare and nation-state relationships. The advent of the so-called 'Information Age' creates an additional challenge in the creation of the next generation of joint doctrine because some of our theoretical and fundamental beliefs may change. The joint community and each of the military services are

exploring this issue. Through this prism, we will examine the nation's near-term challenges and the tenets of future warfare.

The point of contact for this session is Captain Edmund B. Hernandez, USN, C-421.

D. Questions:
None.

E. Products:
None.

F. Required Reading:

U.S. Naval War College. *College of Naval Warfare and Naval Command College Joint Military Operations Department Syllabus and Study Guide for August 2016*. Read vii – xxiv. **(Issued)**.

G. Supplementary Reading:
None.

INTRODUCTORY SEMINAR

[General] Marshall's advice on dealing with the rival service branch was basic Dale Carnegie: Listen to the other fellow's story. Don't get mad. And let the other fellow tell his story first.

─James D. Hornfischer, *Neptune's Inferno: The U.S. Navy at Guadalcanal*

A. Focus:

This session is devoted to the introduction of faculty and students, a review of the administrative requirements and procedures for the trimester, and an overview of the general ground rules of seminar conduct.

B. Objectives:

- Comprehend seminar guidelines, course expectations, and outcomes.
- Discuss the syllabus, grading policy, reading and writing requirements, the schedule, student critiques, and student and faculty expectations.
- Assign seminar administrative responsibilities.

C. Background:

This session provides you the opportunity to introduce yourself and share relevant professional background and areas of expertise with your seminar peers. Furthermore, this session provides the forum for moderators and students to discuss appropriate social and administrative matters pertaining to the conduct of the seminar. The research paper writing requirement is briefly introduced but will be discussed in more detail in JMO-05. Students are encouraged to review the research topics and questions contained in NWC 4036E as early as possible to contribute to development of their research direction/thesis statement.

The point of contact for this session is Professor Steve Forand, C-407.

D. Questions:

Over 40 years ago, VADM Turner believed that the military establishment was in an intellectual decline and instituted educational reforms because of this belief. Based on your reading of his address, how do you think VADM Turner would view the intellectual state of the current military and interagency establishments?

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E. Products:

Students are required to turn in their biographical data. Forms will be provided prior to the first session.

F. Required Reading:

Turner, VADM Stansfield. Convocation Address (edited), U.S. Naval War College,
    Newport, RI. 24 August 1972. Read. **(NWC 1121).**

JMO Blackboard Website at: https://navalwarcollege.blackboard.com. Scan.

G. Supplementary Reading:
None.

INTRODUCTION TO PROBLEM SOLVING (Seminar)

> *Always keep in mind the product which the country desperately needs is military leaders with the capability of solving complex problems and of executing their decisions. . . . You must keep your sights on problem solving as your objective.*
>
> —VADM Stansfield Turner, USN
> Naval War College Convocation, August 24, 1972

A. Focus:

This session addresses the fundamental challenges of problem solving and decision making—especially with respect to complex adaptive systems—within the broader framework of human problem solving and military decision making. In so doing, it considers the components of problem framing, limits on rationality, and different categories of problems and relates them to appropriate decision making processes and command and staff structures and processes. The intent is to improve student problem solving abilities, especially as applied to organizing, planning, and commanding at the operational and theater strategic levels. This is the first of two closely related seminars. While the Introduction to Problem Solving is just that, an introduction, the subsequent session, *Design: A Problem Solving Methodology* serves as a sequel to this seminar and delves deeper into the problems faced by the modern military professional.

During the remainder of the JMO trimester, students will address many of the questions raised in the seminar regarding the typology of problems, consensus decision making, 'satisficing,' and the role of culture and religion in military planning and on planners. In so doing, moderators and students will discuss problem framing and solving and how they relate to the military planning process and to Information Operations, how planning groups may organize by outcome, and the development of the human intellect vis-à-vis problem solving. The intent of this seminar is to help students improve critical problem solving capabilities while providing an opportunity to discuss the challenges associated with solving ill-structured problems and the requisite intellectual tools needed to aid in that endeavor.

B. Objectives:

- Value the structural differences in problem sets.
- Understand the heuristic character of human decision making, especially as it relates to decision makers operating in a volatile, uncertain, complex, and ambiguous environment.
- Appraise the concept of satisficing and how it relates to joint operations and campaign planning.
- Understand what comprises a Complex Adaptive System and why, as senior officers, we must change the way we view problems that so manifest themselves.

C. Background:

Planning *is* problem solving, but before we can begin to resolve an ill-structured problem, we must first frame it. Framing the problem includes understanding and clarifying an end state and desired conditions in the operating environment. It also includes determining the appropriate operational approach, method, and defeat or stability mechanism. Framing requires understanding and viewing the operational environment from a systemic perspective and recognizing the environment holistically. The purpose of framing the problem is to gain a deep understanding of the operating environment and the nature of the problem we face. This understanding allows a commander and staff (planners) to visualize the operation and to present a broad, general conceptual approach. Framing provides context for the examination of what the command must accomplish, when and where it must be done, and most importantly, why—the purpose of the operation. The risk in poor framing of problems is that the organization's efforts are aimed at solving a symptom instead of the root cause of the problem. Problem framing is absolutely critical and is a principal responsibility of the senior officer. No amount of subsequent planning can solve a problem that we as a group fail to understand correctly.

Operational planning and senior officer decision-making comprise a specific category of the more general processes of human problem solving and decision making. The military commander and his staff almost inevitably address problems of organized complexity in the face of considerable uncertainty; this is especially true today. No longer afforded the luxury of a single, large opponent that operates conventionally and can be relatively well understood, the United States faces a post-Cold War world composed of both state and well-resourced, non-state, trans-national actors. These actors pose diverse threats and are more likely to engage in unconventional, unrestricted, irregular, or hybrid warfare than in conventional military operations. Globalization has ensured that the United States is no longer effectively screened from such threats by its geo-strategic position—new threats can come from anywhere and the U.S. military must in consequence be prepared to operate on any part of the planet.

At the same time, the U.S. military is required to plan and execute an expanding, more varied array of activities across the entire spectrum of conflict. Responses to these diverse threats are increasingly likely to require unorthodox diplomatic, information, military, and economic efforts effectively coordinated over lengthy periods of time. Thus, the U.S. military will be working with more actors in the future than it ever has before, including other U.S. government agencies, state and local governments, other states' militaries and civilian agencies, nongovernmental organizations, intergovernmental organizations, and private contractors. Compounding the challenges are the profound effects that individual tactical events may have at the operational and strategic levels. Moreover, outcomes are more likely ambiguous, solutions never complete, and solutions absent the kind of conclusive character that we achieved against state actors in conventional warfare in the not-so-distant past.

Taken together, the challenges of the contemporary operating environment constitute what have been variously called wicked, ill-defined, or ill-structured problems, as opposed to tame, well-defined, or well-structured problems. It is, therefore, imperative that professional military officers develop a sound understanding of the fundamental characteristics of problem solving and decision making in the face of complexity and consciously apply that

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knowledge in pragmatic ways in order to be more effective operational planners and commanders.

In this session we focus specifically on the contributions of psychology and cognitive science to a descriptive theory of decision making and its implications for sound military planning and command decision making. As Nobel Laureate Herbert A. Simon noted, the descriptive theory of decision making gives great attention to the limits on human rationality that are imposed by "the complexity of the world in which we live, the incompleteness and inadequacy of human knowledge, the inconsistencies of individual preference and belief, the conflicts of value among people and groups of people, and the inadequacy of the computations we can carry out, even with the aid of the most powerful computers." Notwithstanding these substantial limitations, humans often manage to make rational decisions. The descriptive theory of decision making is founded in problem solving, first codified by the philosopher John Dewey, but also exemplified in the Commander's Estimate of the Situation, developed by the students at the Naval War College before World War I, and in more recent efforts such as the Navy Planning Process (NPP) and the Joint Operation Planning Process (JOPP).

The point of contact for this session is Professor Bill Hartig, C-428.

D. Questions:

How does a problem's structure relate to the methodology to resolve it?

Describe what general conditions are appropriate for implementing a rational, analytical approach and which are more suited to a design approach.

How do the differences between decision making and consensus decision making affect a planning group and a commander?

How do you think culture and religion affect planning and problem framing and/or problem solving in general? Is this impact always negative?

If problems in the social domain manifest themselves as Complex Adaptive Systems (CAS), how does a problem solver know when the problem is 'solved'?

E. Products:
None.

F. Required Reading:

Fischer, Andreas, Samuel Greiff, and Joachim Funke. "The Process of Solving Complex Problems." *The Journal of Problem Solving*, Vol 4, no. 1 (Winter 2012). Read. (**NWC 4161**).

Hartig, William J. "Thinking about Complexity." Newport, RI: Naval War College, 2012. Read. (**NWC 1141).**

Simon, Herbert A. *The Science of Design: Creating the Artificial*. Design Issues: Vol. V, Numbers 1&2 Special Issue. 1998. (**NWC 4160**).

G. Supplementary Reading:

Agre, Gene P. "The Concept of Problem." *Educational Studies* 13 (1982): 126–127.

Berger, Warren. *Glimmer: How Design Can Transform Your Life, and Maybe Even the World*. New York: Penguin Press, 2009.

Checkland, Peter and John Poulter. *Learning for Action: A Short Definitive Account of Soft Systems Methodology and Its Use for Practitioner, Teachers, and Students*. Hoboken Wiley, 2006.

Chisholm, Donald. "Ill-Structured Problems, Informal Mechanisms, and the Design of Public Organizations." In Jan-Erik Lane, ed. *Bureaucracy and Public Choice*. London: Sage, 1987.

———. "Problem Solving and Institutional Design." *Journal of Public Administration Research and Theory* 4 (1995): 451-191.

Cyert, Richard M., Herbert A. Simon, and Donald B. Trow. "Observation of a Business Decision." *Journal of Business* 29 (1956): 237-248.

Dillon, J. T. "Problem Finding and Solving." *Journal of Creative Behavior* 16 (1982):7-111.

Duggan, William. *Strategic Intuition: The Creative Spark in Human Achievement*. New York: Columbia University Press, 2007.

_____. *The Art of What Works: How Success Really Happen.* New York: Columbia University Press, 2003.

Gladwell, Malcolm. *Blink: The Power of Thinking Without Thinking.* Boston: Little Brown & Company, 2005.

Hayes-Roth, Barbara, and Frederick Hayes-Roth. "A Cognitive Model of Planning." *Cognitive Science* 3 (1979): 275–310.

Jones, J. Christopher. *Design Methods: Seeds of Human Futures*. New York: Wiley-Interscience, 1970.

Klein, Gary A., and J. Weitzenfeld. "Improvement of Skills for Solving Ill-Defined Problems." *Educational Psychologist* 13 (1978): 31–41.

LaPorte, Todd R. "Organized Social Complexity: Explication of a Concept." In Todd R. LaPorte, ed. *Organized Social Complexity: Challenges to Politics and Policy*. Princeton: Princeton University Press, 1975.

Lawson, Bryan. *How Designers Think: The Design Process Demystified*. Boston: Architectural Press, 1997.

Mintzberg, Henry, Duru Raisinghani, and Andre Theoret. "The Structure of Unstructured Decision Processes." *Administrative Science Quarterly* 21 (1976): 246–275.

_____. *The Rise and Fall of Strategic Planning*: *Reconceiving Roles for Planning, Plans, Planners*. New York: Free Press, 1994.

Newell, Allan, J. C. Shaw, and Herbert A. Simon. "Elements of a Theory of Human Problem Solving." *Psychological Review* 65 (1958): 151–166.

Reitman, Walter. "Heuristic Decision Procedures, Open Constraints, and the Nature of Ill Defined Problems." In M. W. Shelley II and G.L. Bryan, eds. *Human Judgments and Optimality*. New York: Wiley, 1964.

Simon, Herbert A. and Associates. "Decision Making and Problem Solving." In *Research Briefings 1986: Report of the Research Briefing Panel on Decision Making and Problem Solving*. Washington, DC: National Academy Press, 1986.

Simon, Herbert A. "The Executive as Decision Maker" and "Organizational Design: Man-Machine Systems for Decision Making." In Herbert A. Simon, *The New Science of Management Decision*. New York: Harper and Row, 1960.

_____. "The Architecture of Complexity." *Proceedings of the American Philosophical Society* 106 (1962): 467–82.

_____. "On the Concept of Organizational Goal." *Administrative Science Quarterly* 8 (1963): 1–22.

_____. "The Structure of Ill-Structured Problems." *Artificial Intelligence* 4 (1973): 181–201.

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DESIGN: A PROBLEM SOLVING
METHODOLOGY (Seminar)

Design does not replace planning, but planning is incomplete without design. The balance between the two varies from operation to operation as well as within each operation. Operational design must help the commander provide enough structure to an ill-structured problem so that planning can lead to effective action toward strategic objectives. Executed correctly, the two processes always are complementary, overlapping, synergistic, and continuous.

—General James N. Mattis USMC

A. Focus:

This session expands on the previous Problem Solving seminar and focuses on the concept of design as a problem solving methodology as well as the fundamentals of planning major operations and campaigns. A discussion of the applicability of the Joint Operations Planning Process (JOPP) and/or the various military services planning processes vis-à-vis ill-structured problem resolution will be included. Students should come to appreciate the varied approaches to problem solving available to the senior officer.

B. Objectives:

- Comprehend the relationship between design as a problem solving methodology and the process of planning.
- Evaluate the concept of complexity as it relates to planning and design.
- Assess how campaigns and operations support national objectives.
- Compare the complexity of campaign design with that of operations planning.

C. Background:

The doctrinal concept of design (not to be confused with the concept of operational design or idea) as a synthesis and an aid to planners has been matured by doctrine writers and continues to be refined by practitioners. Ill-structured problems and/or complex adaptive systems are clearly dynamic and simply do not allow any human being to clearly envision an 'end state'. Seeing 'the solution' is beyond the cognitive capacity of the human mind in such cases. For such complex adaptive systems and/or ill-structured problems, the design approach is preferred. Design, over time, allows the staff and commander to develop a deeper understanding of the problem and the operating environment, leading to a supposition or general theory about how to move from the existing state to a desired 'different state'. This agreed-upon general theory, supposition, or thesis, is arrived at through a professional discourse by subject matter experts who are familiar with planning in general. This 'different

state', which has 'buy-in' from all participants, becomes a concept of operations, often obviating the need to develop multiple courses of action. Design, therefore, is conceptual planning while the planning most officers are accustomed to is the detailed planning that uses such processes as JOPP, MDMP, and so forth.

Design requires commanders and staffs to use a systems view of the problem(s) they confront. Literature on problem solving argues that humans see problems or issues in three general ways; first, a problem may be viewed as familiar pattern, either physically or cognitively. In this case, potential solutions are intuitive. We see this often in senior officers with a great deal of experience; they are confronted with a problem and in very short order present the staff with a directed course of action. MacArthur at Inchon immediately comes to mind. This is known in the vernacular as intuitive decision making, or as System 1 in the field of decision science. Design, as previously stated, is conceptual planning, something that is far more amorphous than the planning we are accustomed to doing.

The second way a problem may present itself is as new or unusual to the commander and staff, but one in which they know what process to use to solve it. State-on-state conflict, humanitarian assistance, and force deployment are examples of this type problem, and intuitive decision making is not appropriate. Rather, JOPP, the Military Decision Making Process (MDMP), the Navy Planning Process (NPP), and any of the other rational, analytical processes are appropriate models to use for resolution of such problems. Again, this is known in the literature as System 2. Both System 1 and System 2 are ideal for structured problems. Unfortunately, as military professionals, you will rarely be presented with a well-structured problem. For ill-structured problems, which often may be seen as complex, adaptive systems (especially in planning for COIN operations), a method must be employed that allows commanders and staffs to achieve a fundamental agreement and understanding on the problem's boundaries.

The design approach, therefore, does not recognize the need (or desire) for multiple courses of action. Nor does it recognize the formal process of analysis and comparison because those activities are accomplished through the discussion and framing of the problem. Design is an appropriate approach when the problem is so complex that the commander and staff cannot comprehend it. If a commander can envision and articulate a military end state, then the problem confronting him or her is either familiar or sufficiently structured to simply apply the JOPP. When confronted with those complex, adaptive and/or interactive systems, however (including insurgency, revolution, stability operations, for example), human cognition simply cannot envision an end state. It is in these cases where a design approach is appropriate. The rational, analytical planning processes embodied in the JOPP, MDMP, and so forth are ideally suited and appropriate for less complex problems, or problems that are routine in nature.

During the Capstone synthesis event, moderators will lead students using a design approach to problem solving. In order to develop resident subject matter expertise in the various Joint Planning Groups, research paper questions will be assigned to students along various lines of effort. The research paper, therefore, serves multiple objectives: (a) to meet the JMO Department's requirement for the submission of a publication-quality research paper, (b) to expand the body of knowledge in a given topic area, and (c) to prepare students for participation in the Capstone Synthesis event.

The point of contact for this session is Professor Bill Hartig, C-428

D. Questions:

How do campaigns and operations differ vis-à-vis planning? What are the implications of these differences for how planners think about each?

How does the structural complexity of problems relate to the problem solving methodology employed?

How do design and planning in the early twenty-first century differ from earlier efforts?

What are the challenges associated with leading a design effort, generally? How does design differ from planning?

E. Products:
None.

F. Required Reading:

Hartig, William J. "Design: A Problem Solving Methodology." Newport, RI: Naval War College, Joint Military Operations Department, 2014. Read. **(NWC 1056A).**

_____. "Complexity and the Center of Gravity." Newport, RI: Naval War College, Joint Military Operations Department, 2012. Read. **(NWC 1142).**

United States Army, *The Operations Process*, ADP 5-0, Washington DC: Department of the Army, May 2012. Read pp. 7, 8 (paragraphs 29-34).

United States Marine Corps. "The Theory of Planning." Planning, MCDP 5, Washington DC: Department of the Navy, 1997. Read pp. 29-38.

U.S. Office of the Chairman, Joint Chiefs of Staff. *Joint Operation Planning*, Joint Publication (JP) 5-0. Washington, DC: CJCS, August 11, 2011. Read: III-1 to III-18.

G. Supplementary Reading:

Alexander, Christopher. *Notes on the Synthesis of Form.* Cambridge: Harvard University Press, 1964.

Department of the Army. Military Strategy, Planning, and Operations, U.S. Army War College. *Campaign Planning Handbook* AY 08, Final Working Draft. Carlisle: 2008

Dorst, Kees. "Design Problems and Design Paradoxes." *Design Issues* 22 (Summer 2006): 4-17.

Lessard, Pierre. "Campaign Design for Winning the War . . . and the Peace." *Parameters* (Summer 2005): 36-50.

Ross, Karol, G., Gary A. Klein, Peter Thunholm, John F. Schmitt, and Holly M. Baxter. "The Recognition Primed Decision Model." *Military Review* (July–August 2004): 6-10.

Simon, Herbert A.. *Models of Discovery and Other Topics in the Methods of Science*. London: D. Reidel, 1977.

_____. "Style in Design," pp. 287-309 in C.M. Eastman (ed.), *Spatial Synthesis in Computer-Aided Building Design.* London: Applied Science, 1975.

United States Department of Defense. *Irregular Warfare (IW) Joint Operating Concept (JOC)* Version 1.0. September 11, 2007.

_____. *Major Combat Operations: Joint Operating Concept*. Version 2.0. December 2006.

United States Marine Corps. *A Concept for Interagency Campaign Design.* Marine Corps Combat Development Command: Quantico, VA. May 5, 2007.

United States Navy. Office of the Chief of Naval Operations. *Naval Manual of Operational Planning.* Washington, DC: Navy Department, 1948.

Well, Gordon M. "No More Vietnams: CORDS as a Model for Counterinsurgency Campaign Design." Ft. Leavenworth: School of Advanced Military Studies, U.S. Army Command and General Staff School, 1991.

RESEARCH PAPER (Seminar)

Put it before them briefly so they will read it, clearly so they will appreciate it, picturesquely so they will remember it, and above all, accurately so they will be guided by its light.

—Joseph Pulitzer

A. Focus:

The research paper is an objective vehicle for students to demonstrate research skills, critical thinking, writing, and professional competence at the Master's degree level. The research paper also provides an opportunity to study an issue of relevance that will be leveraged during the Capstone synthesis event. This session addresses specific paper requirements, including guidance on research, writing, and due dates. The country of interest is Ukraine.

B. Objectives:

- Understand the research paper requirements.
- Comprehend the research assets available through the NWC Library.
- Understand how the research paper supports the Capstone synthesis event.

C. Background:

The research paper provides an opportunity to study an issue of relevance that will be leveraged during the Capstone synthesis event. The paper requires independent thought, thorough research, and competent writing. Student exploration and research in the assigned topic area will enable students to serve as subject matter experts, albeit with a narrow focus, in the Capstone. The range and depth of research should be adequate to support the student's thesis, and justify conclusions and recommendations.

1. *Paper Proposal.* Using the format contained in enclosure (1) to NWC 4036E, a paper proposal must be provided to the moderators. The proposal will state the student's thesis, approach, relevance, data collection methodology, and an annotated bibliography so that the moderators can determine if the thesis will satisfy JMO course requirements. An accepted proposal means that both the student and the moderators understand the depth of research, extent of analysis, and quality of writing expected of the student, in addition to the requirements discussed in paragraph one of this section. Once the moderator team approves a proposal, this constitutes an understanding between the student and their moderators. Any changes to this research plan should be discussed between the student and moderators.

2. *In-Progress Reviews.* Students will be required to participate in two in-progress reviews with their seminar moderators. During the first review, moderators will discuss the students' initial research ideas, paper requirements, expectations, and research methods. After completion of the first review, students will have time to conduct preliminary research and develop their theses. After submitting his or her proposed thesis, each student will participate in a second in progress review. During this second review, each student will discuss his or her proposed thesis, selected bibliography, and outline.

3. *Format.* A template for the research paper is available on the JMO Blackboard website. Formatting should follow the Chicago Manual of Style (CMS). *A Manual for Writers of Research Papers, Theses, and Dissertations* provides advice and CMS guidance.

4. *Length.* The text of the research paper will be 14 to 17 double-spaced pages in Times New Roman 12 point font to meet standard format for publication and award submissions. Left margins 1.25", all other margins 1".

5. *Faculty Advisor.* Seminar moderators will serve as faculty paper advisors. Paper advisors help students define the scope of the research effort, keep research, analysis, and writing on track, and review outlines and drafts. For additional assistance, faculty paper advisors may also encourage a student to contact a resident subject matter expert. These SMEs are not to be confused with the faculty paper advisor; rather, the SME provides expertise on the *subject* the student is directed to pursue.

6. *Grading.* The research paper represents a substantial portion of the JMO Course grade. Grades will be based on the criteria specified in the Grading Criteria section of this syllabus.

7. *Prizes and Awards.* Student research papers may compete for the prizes and awards bestowed annually during the June graduation ceremony. Students are encouraged to prepare their papers with the additional purpose of competing for these honors, if applicable. Details are included in NWC 4036E. Moderators can assist students in refining papers for award submission.

8. *Suggested Schedule:*

18 August:	Research question issued
29-31August:	In Progress Review #1
9 September:	Paper proposal due
19-22 September:	In Progress Review #2
21-25 October:	Paper presentations in seminar
28 October:	Research paper due

The point of contact for this session is Col Adrian Schuettke, USAF, C-412.

D. Questions:
None.

E. Products:

The required product is a research paper.

F. Required Reading:

Turabian, Kate L. *A Manual for Writers of Research Papers, Theses, and Dissertations*, 8th ed. Chicago: University of Chicago Press, 2013. Scan. **(Issued)**

U.S. Naval War College, Joint Military Operations Department. *Capstone Research Paper: Guidance for Students.* Newport, RI: July 2016. Read. **(NWC 4036E)**.

_____. JMO ONI Ukraine Overview Brief. Read. **(Available on Blackboard).**

_____. JMO Paper Template, 2016. Scan. **(NWC 8001).**

G. Supplementary Reading:

Strunk, William, Jr. *The Elements of Style.* 4th ed. With revisions, an introduction, and a chapter on writing by E. B. White. New York: MacMillan, 1999.

U.S. Naval War College, Writing Center. *Pocket Writing and Style Guide.* Newport, RI: 2012. (Available on Blackboard).

University of Chicago Press. *The Chicago Manual of Style*. 16th ed. Chicago: University of Chicago Press, 2011.

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**OPERATIONAL ART AND
DOCTRINE (Seminar)**

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*Operational art provides a framework to assist commanders in
ordering their thoughts when designing campaigns and major operations.*

—Milan Vego

A. Focus:

This session begins the exploration of Operational Art to include its historical emergence and application in modern warfare. Additionally, this session addresses the relationship between service and joint doctrine, and goes into greater depth on the relationship between operational art and doctrine.

B. Objectives:

- Analyze the importance of Operational Art in modern warfare.
- Evaluate the effect of joint doctrine on the decisions of operational commanders.
- Evaluate the relationship and fundamental differences between Operational Art and doctrine.

C. Background:

Operational Art. In modern war, sound strategy alone is not sufficient to ensure victory. Likewise, combat forces trained in tactics and capable of winning battles against the strongest foes are inadequate, by themselves, to ensure overall victory. An effective combination of strategy and tactics must exist to achieve victory. The need to integrate tactics and strategy led to the emergence of the intermediate area of theory and practice called operational art. Operational art provides the fundamental conceptual structure to link military tactical actions to national security and military strategies. Effectively applied, operational art allows commanders to arrange and synchronize forces in time, space, and purpose.

Operational theory and practice must be consistent with operational realities, otherwise operational concepts are almost certain to fail. History teaches a focus on (for instance) technology at the expense of operational thinking can preclude success against an opponent who, not having the most advanced weapons or equipment, develops superior operational concepts. In a war between two strong opponents, victory will go to the side that thinks more clearly and that acts faster and with greater determination. This does not lessen the need for capable weapons and equipment, but superior concepts, complemented by awareness of history's lessons, are far more critical than technology.

The American study and practice of operational art began after the War of 1812 and recurred intermittently over the next century. During the period between the two world wars, operational art (called "strategy" and influenced by Clausewitzian concepts) permeated

conceptual innovations of the period. The success of joint and combined campaigns in World War II reflected a sophisticated use of operational art in U.S. military campaign planning and execution. The war's immediate aftermath saw a major revision of the military's publications, enriched by superb operational thinking and the practical wisdom of experienced campaigners.

With the rise of nuclear weapons and the belief that the next war would be nuclear and short, such thinking receded for nearly three decades, until the shock of Vietnam compelled reassessment. Under the leadership of William DePuy, Donn Starry and others in the U.S. Army, operational art reemerged and re-entered the American military's consciousness. During subsequent years, operational art advanced conceptually and expanded throughout military training and educational institutions, becoming the foundation on which doctrine is built. Today's service and joint doctrine reflects the influence of operational art.

Doctrine. Every military service operates in a unique environment, employing forces in accordance with warfighting methods developed over long experience and optimized for each service-specific environment. Such tried-and-true employment methods constitute service doctrine. Joint doctrine complements service doctrine and prescribes methods to facilitate integrated, multi-service operations to achieve national and theater-level objectives. An extensive joint publications system, complete with a topical hierarchy and prescribed development process, exists to help ensure authoritative joint doctrine exists to shape how we think about and train for war.

Sound operational art provides the foundation for effective doctrine. Doctrine, by its nature, involves specific application of general insights regarding "how to fight," influenced by relevant environmental factors, such as political and military perspectives, economics, geography, the capabilities and limitations of weapon systems, and so forth. Joint and service doctrine must evolve as the factors that influence it change. History provides many examples of nations defeated in war because they failed to modify their doctrine to reflect changes in the environment, changed their doctrine incorrectly because they misunderstood changes in the environment, or ignored the operational concepts upon which doctrine was founded.

As you begin your analysis of operational art, recall that enduring military "truths," established and validated through history, have evolved from experiences and lessons learned, for the most part, in combat. Many remain valid and will be vital to future joint military planning and operations, even as technology and related concepts such as Network Centric Warfare, Hybrid Warfare, and the "system-of-systems approach" evolve. However, new operational realities can render some doctrine obsolete, and some of our doctrinal thinking may no longer be relevant in emerging contexts. The challenge ahead is discerning what to keep, what to discard, and what to add. Understanding the historical, theoretical, and practical underpinnings of both doctrine and operational art are keys to developing future doctrine.

The point of contact for this session is Lt Col Michael LePage, USAF, C-403.

D. Questions:

What is operational art?

Why might each service have a different view of doctrine?

What role does service doctrine play in joint doctrine?

How does joint doctrine affect the decisions of operational commanders?

What factors influence the development of doctrine (both service and joint)?

Milan Vego claims that the use of terminology in our joint doctrine is frequently incorrect. What problems can the misuse of terminology create? How can we better address this challenge?

What is the relationship between operational art and doctrine?

E. Products:
None.

F. Required Reading:

U.S. Office of the Chairman of the Joint Chiefs of Staff. "Joint Doctrine in Perspective" and "Influence of Joint Doctrine." *Joint Doctrine Development System*. CJCS Instruction (CJCSI) 5120.02D. Washington, DC: CJCS, January 5, 2015. Read Enclosure A.

_____. *Joint Operations,* Joint Publication (JP) 3-0. Washington, DC: CJCS, August 11, 2011. Review: II-3 to II-4.

Vego, Milan. *Joint Operational Warfare, Theory and Practice.* Newport, RI: U.S. Naval War College, 2009. Read "On Operational Art," "On Doctrine," and "Operational Art and Doctrine," pp. I-3 to I-11, XII-3 to XII-22 and XII-27 to XII-36. **(Issued).**

G. Supplementary Reading:

Brodie, Bernard. "The Worth of Principles of War." Lecture delivered on March 7, 1957 to the U.S. Army Command and General Staff College, Fort Leavenworth, KS.

Brown, C. R. "The Principles of War." *Proceedings* 75, no. 6 (June 1949): 621–33.

Builder, Carl H. *The Masks of War: American Military Styles in Strategy and Analysis.* Baltimore: Johns Hopkins University Press, 1989, 1-44.

Department of the Air Force. *Basic Doctrine*, Core Doctrine vol 1. Curtis LeMay Center: Maxwell AFB, AL. October 14, 2011.

Department of the Army. *Unified Land Operations*, ADRP 3-0. Washington, DC. May 16, 2012.

Glenn, Russell W. "No More Principles of War?" *Parameters* 28 (Spring 1998): 48-66.

Hughes, Wayne P., Jr. "The Power in Doctrine." *Naval War College Review* (Summer 1995).

Johnson, Paul. "Doctrine Is Not Enough: The Effect of Doctrine on the Behavior of Armies."
    Parameters 30, no. 3 (Fall 2000): 30-39.

Mattelaer, Alexander. "The Crisis in Operational Art." A paper presented at the European
    Security and Defence Forum, London, UK, November 2009.

Murdock, Paul. "Principles of War on the Network-Centric Battlefield: Mass and Economy
    of Force." *Parameter*s 32 (Spring 2002), 86–95.

Nelson, Bradford K. "Applying the Principles of War in Information Operations." *Military
    Review* 78 (September–October–November 1998), 31-35.

United States Coast Guard. *U.S. Coast Guard: Doctrine for the U.S. Coast Guard.* Coast
    Guard Publication 1, Washington, DC, Headquarters, U.S. Coast Guard, February
    2014.

United States Marine Corps. *Marine Corps Operations*, MCDP 1-0. Headquarters, U.S.
    Marine Corps: Quantico VA. August 9, 2011.

U.S. Naval War College. "Perspectives on Service Culture: Developing an Awareness of the
    Impact of Culture in the Planning Group." Newport, RI: January 2014.

United States Navy. *Naval Warfare,* Naval Doctrinal Publication (NDP) 1. Government
    Printing Office, Washington, DC. March 2010.

U.S. Office of the Chairman of the Joint Chiefs of Staff. *Doctrine for the Armed Forces of
    the United States*, Joint Publication (JP) 1. Washington, DC: CJCS, March 25, 2013.

Vego, Milan. "On Military Theory." *Joint Force Quarterly*, no. 62 (July 2011): 59-67.

Waghelstein, John D. "Preparing the U.S. Army for the Wrong War, Educational and
    Doctrinal Failure, 1865–91." *Small Wars and Insurgencies* 10, no. 1 (Spring 1999): 1-
    33.

STRATEGIC BACKGROUND FOR THE 1944-1945 PHILIPPINES CAMPAIGN (Lecture)

I must say that during phases there, I thought it was not possible in such a broad theater to plan so far in advance, when so much depended on the success of certain of the local operations as to whether they should be continued, whether we should continue along that course.

– General of the Army George C. Marshall, on strategic planning for the Pacific Theater of War ,1956

A. Focus:

This lecture provides an overview of the strategic background for the 1944-1945 Philippines Campaign.

B. Objectives:

- Understand the broad contours of the pre-war and wartime strategic and operational events and decision-making that led to the decision to conduct the 1944-1945 campaign to retake the Philippines from the Japanese.
- Understand the enduring complexities and challenges of theater-level campaign planning.

C. Background:

At the distance now of some seven decades there is a tendency among both the professional military and academics to oversimplify the events of World War II in the Pacific Theaters of War to a straightforward linear narrative, to overplay the influence of inter-war planning and plans on actual operations, and to caricature the service differences and personalities involved. Unfortunately, so doing undercuts our ability to draw relevant practical lessons for contemporary theater-level planning and execution.

In this session we reconstruct the decision-making processes in all their glorious messiness, including the roads considered but not travelled, in order to place the 1944-1945 Philippines campaign in proper context and set the stage for that campaign's use in exploring the concepts and theory of operational art. We address the challenges of coalitions, civil-military dynamics, differences of interest and perspective among and within the several services, the structure and evolution of command and control and planning, the pivotal role of personalities, and the great uncertainties and surprises of the Pacific war, all set against the vast international stage on which World War II played out.

The point of contact for this session is Professor Donald Chisholm, C-422.

D. Questions:
None.

E. Products:
None.

F. Required Reading:

Hime, Douglas N. Joint Military Operations Department. "The Philippines Campaign,
1944-45: A Case Study." Newport, RI: Naval War College, December 2013.
Read pp. 1-8. (**NWC 1093**).

G. Supplementary Reading:

Barbey, Daniel E. *MacArthur's Amphibious Navy: Seventh Amphibious Force Operations,
1943-1954*. Annapolis, MD: Naval Institute Press, 1969.

Buell, Thomas B. *Master of Seapower: A Biography of Fleet Admiral Ernest J. King*. Boston:
Little, Brown, 1980.

_____. *The Quiet Warrior: A Biography of Raymond A. Spruance*. Boston: Little, Brown,
1974.

Cannon, M. Hamlin. *Leyte: The Return to the Philippines. United States Army in World War
II. The War in the Pacific.* Washington, DC: Office of the Chief of Military History,
Department of the Army, 1953.

Dyer, George C. *The Amphibians Came to Conquer: The Story of Admiral Richmond Kelly
Turner, Vols. I and II.* Washington, DC: Government Printing Office, 1972.

King, Ernest J. and Walter Muir Whitehill. *Fleet Admiral King: A Naval Record.* New York:
Norton, 1952.

King, Ernest J. *U.S. Navy at War, 1941-1945: Official Reports to the Secretary of the Navy
by Fleet Admiral Ernest J. King.* Washington, DC: U.S. Navy Department, 1946.

MacArthur, Douglas. *Reminiscences.* New York: McGraw-Hill, 1964.

Matloff, Maurice. *Strategic Planning for Coalition Warfare, 1943-1944. United States Army
in World War II.* Washington, DC: Office of the Chief of Military History,
Department of the Army, 1959.

Matloff, Maurice and Edwin Snell. *Strategic Planning for Coalition Warfare, 1941-1942.
United States Army in World War II.* Washington, DC: Office of the Chief of Military
History, Department of the Army, 1953.

Miller, Edward S. *Bankrupting the Enemy: The U.S. Financial Siege of Japan before Pearl Harbor.* Annapolis, MD: Naval Institute Press, 2007.

_____. *War Plan Orange: The U.S. Strategy to Defeat Japan, 1897-1945*. Annapolis, MD: Naval Institute Press, 1991.

Morison, Samuel Eliot. *The Liberation of the Philippines: Luzon, Mindanao, the Visayas, 1944-1945, History of United States Naval Operations in World War II, Vol. XIII.* Boston: Little, Brown, 1959.

_____. *Leyte: June 1944-January 1945, History of United States Naval Operations in World War II, Vol. XII.* Boston: Little, Brown, 1958.

_____. *Strategy and Compromise*. Boston: Little, Brown, 1958.

Morton, Louis. *The Fall of the Philippines. United States Army in World War II. The War in the Pacific.* Washington, DC: Office of the Chief of Military History, Department of the Army, 1952.

_____. *Strategy and Command: The First Two Years. United States Army in World War II, The War in the Pacific.* Washington, DC: Office of the Chief of Military History, Department of the Army, 1962.

Parshall, Jonathan and Anthony Tully. *Shattered Sword; the Untold Story of the Battle of Midway.* Washington, DC: Potomac Books, 2005.

Potter, E. B. *Nimitz.* Annapolis, MD: Naval Institute Press, 1976.

Smith, Robert Ross. *Triumph in the Philippines. United States Army in World War II. The War in the Pacific.* Washington, DC: Office of the Chief of Military History, Department of the Army, 1963.

_____. *The Approach to the Philippines. United States Army in World War II. The War in the Pacific.* Washington, DC: Office of the Chief of Military History, Department of the Army, 1953.

Pogue, Forrest C. *George C. Marshall: Organizer of Victory, 1943-1945*. New York: Viking, 1973.

_____. *George C. Marshall: Ordeal and Hope, 1939-1942*. New York: Viking, 1966. United States Strategic Bombing Survey (Pacific). Naval Analysis Division. The Campaigns of the Pacific War. Washington, DC: Government Printing Office, 1946.

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THE STRATEGIC OBJECTIVE AND LEVELS OF WAR (Seminar)

> *What do you want to achieve or avoid? The answers to this question are objectives. How will you go about achieving your desired results? The answer to this you can call strategy.*
>
> — William E. Rothschild, *Strategic Alternatives*, 1979

A. Focus:

This session focuses on *strategic objectives* and how they must drive military thinking and actions throughout the entire range of military operations. The direct relationship between national strategic and operational objectives will be discussed, as well as the concept of regressive planning. This session will also consider the interrelationship among the four instruments of national power (diplomatic, information, military, and economic) and how the *strategic objective* relates to the *desired end state*. Discussions will also briefly address the policy documents that provide strategic direction to the military, such as the *National Security Strategy*, the *National Defense Strategy*, and the *National Military Strategy*.

B. Objectives:

- Analyze the interrelationship among the four instruments of national power (diplomatic, information, military, and economic) and how the strategic objective relates to the desired end state.
- Examine the relationship between levels of war and levels of command
- Examine the concept of regressive planning and operational-level planning.
- Dissect the "Four Questions" and analyze how they can help the theater-strategic and operational level commanders apply assets in the pursuit of strategic objectives.
- Analyze how strategic communication is integrated into theater planning to support the national military and national security strategies.

C. Background:

As a starting point, the seminar will briefly discuss the primary policy documents that provide strategic direction to the military, recognizing that entire seminar sessions will be dedicated to each of these guidance documents during the NSA trimester: the *National Security Strategy* (NSS) (2015), the *Quadrennial Defense Review 2014,* and the *National Military Strategy* (NMS) (2015). The *National Military Strategy* and the *Quadrennial Defense Review* (Chapter III, "The Defense Strategy") support the aims of the President's *National Security Strategy*.

The *National Security Strategy* (NSS) provides a broad strategic context for employing military capabilities in concert with other instruments of national power. The

National Military Strategy (NMS), coupled with the 2012 pamphlet, the *Chairman's Strategic Direction to the Joint Force,* derives objectives, missions, and capability requirements from an analysis of the NSS. The seminar will examine the inter-relationship among the four main instruments of national power as they relate to the operational commander.

The *National Military Strategy* (NMS) provides focus for military activities by defining a set of interrelated military objectives and joint operating concepts from which the service chiefs and combatant commanders identify desired capabilities and against which the Chairman of the Joint Chiefs of Staff assesses risks. Operational art promotes unified action by helping joint force commanders and staffs facilitate the integration of other agencies and multinational partners in achieving the national strategic end state. Among the tools that will assist military commanders with that challenge is a set of four operational art questions found in joint doctrine:

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 likely chance of failure or unacceptable results in performing that sequence of actions? (Risk)

Levels of command exist during both peace and wartime and are more clearly delineated than levels of war. As noted in Joint Publication 3-0,

> …three levels of war—strategic, operational, and tactical—model the relationship between national objectives and tactical actions. There are no finite limits or boundaries between these levels, but they help commanders visualize a logical arrangement of operations, allocate resources, and assign tasks to the appropriate level of command. Echelon of command, size of units, types of equipment, and types and location of forces or components may often be associated with a particular level, but the strategic, operational, or tactical purpose of their employment depends on the nature of their task, mission or objective.

In practice, the level of command is determined not only by the objectives to be accomplished, but by the size and shape of the area in which the command operates and the size and composition of forces engaged.

The theater-strategic/operational commander must ensure that the response to the "four questions" (the essence of the plan) remains in line with strategic guidance. While some situations allow for clear military answers to these questions, in other cases there may be no military condition that will contribute to the stated or implied strategic objective(s). Often, the appropriate action may be diplomatic or economic with the military instrument of power in a supporting role. When conflict appears necessary, the joint force commander must also anticipate and plan for conflict termination and post-conflict activities, which may include both military and civilian elements. Without considering these aspects from the outset of planning, there is little chance that even the best planned military operation can achieve the desired end state.

The concept of regressive planning will be discussed using excerpts from Gordon and Trainor's *Cobra II* to focus on pre-conflict, post-hostilities planning for the 2003 invasion of Iraq. Excerpts from this book will be used again later in the trimester as well as during the Strategy and Policy (S&P) trimester later in the academic year.

The point of contact for this session is Professor Doug Hime, C-423.

D. Questions:

Why is it important to differentiate between different levels of war? How do levels of war and levels of command differ?

How can the "four questions" help an operational commander respond to strategic guidance?

Explain the concept of regressive planning.

To what extent were the strategic and operational objectives of each side nested during the 1944-45 Philippines Campaign?

What is the connection between planning for conflict and planning for post-conflict operations?

Why does it matter *when* you do this planning? What other government agencies should be involved in this process?

How and by whom are the terms and conditions for conflict termination determined?

How effective was the pre-conflict and post-hostilities planning for Operation IRAQI FREEDOM? Why?

E. Products:
None.

F. Required Readings:

Gordon, Michael R., and Bernard E. Trainor. *Cobra II: The Inside Story of the Invasion and Occupation of Iraq*. (New York: Pantheon, 2006). **(Issued).** Hardcover books read pp. 70-74; Softcover 80-85.

U. S. Office of the Chairman, Joint Chiefs of Staff. *Joint Operations,* Joint Publication (JP) 3-0. Washington, DC: CJCS, August 11, 2011. Read: I-1 to I-15, II-1 to II-4.

———. *Joint Operation Planning,* Joint Publication (JP) 5-0. Washington, DC: CJCS, August 11, 2011. Read: II-1 to II-5, Appendices B and E.

Yarger, Harry R. Extract from *Strategic Theory for the 21st Century: The Little Book on Big Strategy*. Carlisle Barracks, PA: Strategic Studies Institute (February 2006): 47-55. Read. **(NWC 4012)**.

G. Supplementary Readings:

Iklé, Fred C. *Every War Must End.* New York: Columbia University Press, 1991, 1–16.

Reed, James W. "Should Deterrence Fail: War Termination . . ." *Parameters* 23, no. 2 (Summer 1993): 41-51.

U. S. Department of Defense. *Quadrennial Defense Review 2014.* Washington, DC: DoD, 2014.

U. S. Office of the Chairman of the Joint Chiefs of Staff. *National Military Strategy of the United States of America: Redefining Americas Military Leadership 2011*. Washington, DC: CJCS, February 8, 2011.

_____. *Chairman's Strategic Direction to the Joint Force*. Washington, DC: CJCS, 6 February 2012.

Vego, Milan. *Joint Operational Warfare: Theory and Practice.* Newport, RI: Naval War College, 2009. Read: "Policy-Strategy-Operational Art Nexus," I-35 thru I-50.

_____. "Policy, Strategy, and Operations." In *Strategic Logic and Political Rationality*. Edited by B. A. Lee and K. F. Walling. London: Frank Cass, 2003.

White House. *The National Security Strategy of the United States of America,* Washington, DC: The White House, February 2015.

OPERATIONAL FACTORS (Seminar)

I intend, if possible, to deny the enemy a chance to outrange me in an air duel and also to deny him an opportunity to employ an air shuttle against me. If I am to prevent his gaining that advantage I must have early information and I must move smartly.

—Admiral William F. "Bull" Halsey letter to
Admiral Chester W. Nimitz, October 3, 1944

A. Focus:

This session addresses the foundational aspect of operational art—the operational factors of *time, space, and force* and the interrelationship of these factors in achieving operational and campaign objectives. In this session we will discuss operational factors from a theoretical perspective by studying the relevant aspects of the Philippines Campaign to deepen our understanding of operational art.

B. Objectives:

- Analyze how the operational factors of time, space and force impact planning and execution of major operations and campaigns.
- Apply an analytical framework that addresses operational factors in shaping the desired outcomes of strategies, campaigns, and operations.

C. Background:

The art of warfare is to obtain and maintain freedom of action—the ability to carry out critically important, multiple, and diverse decisions to accomplish military objectives. The higher the level of war, the more critical it is to have the factors of time, space, and force in harmony, because the consequences of failure at the operational and strategic levels are far more serious than at the tactical level. Maintaining freedom of action towards the accomplishment of an objective—and limiting the enemy's freedom of action—requires evaluation of one's own forces as well as the enemy's; the space in which they must operate, and the time available to apply the right force in order to achieve an objective. Assessing these factors in relation to achieving ultimate objectives is the core of operational warfare and the chief prerequisite for success in the planning and execution of any military action.

The Objective first determines the necessary Forces, and Force is difficult to evaluate. Properly evaluating force requires converting combat potential into combat power over the course of accomplishing a mission against an enemy force and in a specific environment. Force is composed of tangible elements that are functional and can be "used," *and* of intangible elements such as leadership, morale, fatigue, and fear. Force can be regenerated, added, or replaced; space can be lost and recovered. Any major mismatch between the space

to be gained and controlled and the force available will require the operational commander to assume greater risks. The requirements of Force employment determines the Space in which it will be employed. Space, comprised of such variables as geography, weather, and even culture, is the simplest factor to quantify with some measure of certainty. The challenge is the depth of analysis of the Space. Perhaps most critical is factor Time, which can never be recovered. If the duration of a major campaign or operation is longer than anticipated, the operational factors will reassert themselves, normally with fatal consequences. In addition, disconnects between the factors and the ultimate objective should result in a changed objective. Therefore, full knowledge and understanding of operational factors are necessary to plan and conduct major operations or campaigns successfully.

The point of contact for this session is Professor Ivan Luke, C-431.

D.   Questions:

At the operational and strategic level, "force" encompasses far more than simply military sources of power. Explain the difficulties in evaluating force capabilities beyond quantifiable military formations.

Explain how time impacts each level of war differently. How can a theater-strategic/operational commander influence the time required for a major operation or campaign?

How do the several domains (air, sea, land, cyber, space) impact operational freedom of action?

What are the theoretical relationships between the operational factors space/time, space/force, and time/force as they relate to a given objective?

How can the ability to achieve objectives be influenced by tradeoffs in the factors?

How do critical factors emerge from an analysis of operational factors in relation to an objective?

Philippines Case Study:

What were the time-space-force challenges identified by Japanese and U.S. planners in regard to the Philippines campaign in 1944? What emerged as <u>critical factors</u> in relation to the respective objectives?

What tradeoffs did the Japanese have to consider in balancing the factors of space, time, and force in developing the SHO One plan (defense of the Philippines)?

How did the Allied assessment of Japanese forces affect plans for the Philippines campaign in regards to factor time?

Why the island of Leyte? Discuss, using the factors, why the island of Leyte was chosen for the start of the U.S. Philippines Campaign and why the Japanese chose to contest the U.S. landing at Leyte Gulf instead of Luzon.

Evaluate how well the United States and Japan each attempted to manipulate the operational factors during the planning phase of the Philippine/SHO One campaign plans. What would you have done differently?

E. Products:
None.

F. Required Reading:

Hime, Douglas N. Joint Military Operations Department. "The Philippines Campaign, 1944-45: A Case Study." Newport, RI: U.S. Naval War College, December 2013. Review pp. 1-8. Read pp. 9-58. **(NWC 1093).**

Vego, Milan. *Joint Operational Warfare: Theory and Practice*. Newport, RI: U.S. Naval War College, reprint, 2009. Read "Operational Factors" pp. III-3 to III-63. **(Issued).**

G. Supplementary Reading:

MacGregor, Douglas A. "Future Battle: The Merging Levels of War." *Parameters* (Winter 1992–93): 33–47.

Morison, Samuel Eliot. *History of United States Naval Operations in World War II: Vol. 12, Leyte, June 1944-January 1945.* Annapolis, MD: Naval Institute Press, 1958, renewed 1986.

Smith, Robert Ross. *Triumph in the Philippines: The War in the Pacific*. Washington, DC: Government Printing Office, 1963.

U.S. Office of the Chairman of the Joint Chiefs of Staff. *Joint Operations*, Joint Publication (JP) 3-0. Washington, DC: CJCS, August 11, 2011.

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OPERATIONAL FUNCTIONS (Seminar)

By the very nature of logistics one or more elements of supply, transportation, or services almost always must be limiting factors in any given situation.

—James A. Huston, *The Sinews of War: Army Logistics 1775-1953*

A. Focus:

Operational functions are another foundational concept of the operational art. Where analysis of operational factors in relation to an objective allows us to derive critical factors that impact our ability to achieve the objective, operational functions provide the commander levers to manipulate in order to effectively integrate, synchronize, and direct joint operations towards the achievement of an objective. This session will focus on the theoretical tenets of operational functions and their relationship to the objective, levels of war, and to operational factors.

B. Objectives:

- Analyze the role of operational functions in major operation and campaign planning.
- Evaluate the process by which the operational commander balances operational factors in order to obtain freedom of action, and then exploits this balance through the resourcing and arrangement of operational functions.

C. Background:

Operational functions exist at all levels of war and are considered even during the selection and articulation of an objective. As an example, in order to effectively analyze Space and the Force available to an adversary, consideration of operational intelligence is immediately necessary. Logistics immediately provides limits to what operations can and cannot do in a specific timeframe in a specific space. Objectives and levels of war determine initial command arrangements from which command and control is derived. These and other operational functions are the activities by which commanders can mitigate unfavorable Space and Time disadvantages and exploit favorable advantages. Since operational functions broadly define this group of related activities and systems that enable a commander to synchronize forces, they are not prescriptive. Proper analysis of operational factors and their relationship to an objective allows operational functions to emerge <u>that are relevant</u> to the major campaign/operation. Theater commanders establish, protect, and use operational functions to sequence and synchronize efforts along cognitive and physical lines of operation in order to defeat (or protect) centers of gravity and establish the conditions for achievement of operational and strategic objectives. Because unity of effort is required at the operational and strategic levels of war to achieve synchronicity, doctrine provides the U.S. military and

interagency a specific set of joint functions that assists unity of effort during operational planning. Operational commanders rarely attack forces; rather they deliberately disrupt enemy functions in order to create exploitable vulnerabilities. Therefore, theater/operational commanders achieve operational success by managing functions in order to facilitate tactical success by component commanders. This subsequently achieves military objectives in support of national objectives.

The point of contact for this session is Professor Ivan Luke, C-431.

D. Questions:

Describe how operational functions impact the objective, levels of war, and operational factors. Which of the functions is most important? Why?

How might operational functions be manipulated by commanders to apply the appropriate force towards the accomplishment of an objective?

As our armed forces become ever more information-based, what is the impact of information on each operational function and the relationship between the functions?

Philippines Case Study:

Explain the challenges in regard to the utilization of operational functional encountered by the Allies and Japanese during planning for their respective campaigns. How well did both sides address these challenges? In what functions did the opposing sides assume risk?

Analyze the Japanese use of their operational functions to defeat the Allied attempt to re-take the Philippines Islands. With the benefit of hindsight, what would you have done differently with their operational functions?

Analyze the Allied use of their operational functions in order to seize the RPI. With the benefit of hindsight, how would you have resourced, synchronized, or sequenced them differently?

E. Products:
None.

F. Required Reading:

Hime, Douglas N. U.S. Naval War College. Joint Military Operations Department. "The Philippines Campaign, 1944-45: A Case Study." Newport, RI: Naval War College, December 2013. Review pp. 1-58. **(NWC 1093).**

U.S. Office of the Chairman, Joint Chiefs of Staff. Joint Operations, Joint Publication (JP) 3-0. Washington, DC: CJCS, August 11, 2011. Read III-1 to III-39.

Vego, Milan. Joint Operational Warfare: Theory and Practice. Newport, RI: Naval War College, reprint, 2009. Read "Operational Functions," VIII–3 to VIII–101. **(Issued).**

G. Supplementary Reading:

Goodrich, David M. "Forgotten Mission: Land Based Air Operational Fires in Support of the Leyte Gulf Invasion." Joint Military Operations Department. Newport, RI: Naval War College, 2000.

Handel, Michael I. "Intelligence and Military Operations." In *Intelligence and Military Operations*. London: Frank Cass, 1990.

Hutcherson, Norman B. *Command and Control Warfare: Putting another Tool in the War-Fighter's Data Base.* Maxwell AFB, AL: Air University Press, 1994.

Morison, Samuel Eliot. History of United States Naval Operations in World War II: Vol. 12, Leyte, June 1944-January 1945. Annapolis, MD: Naval Institute Press, 1958, renewed 1986.

Porter, Laning M. "Preconceptions, Predilections, and Experiences: Problems for Operational Level Intelligence and Decision Making." Fort Leavenworth, KS: School of Advanced Military Studies, U.S. Army Command and General Staff College, May 12, 1986.

Rockwell, Christopher A. "Operational Sustainment: Lines of Communication and the Conduct of Operations." Fort Leavenworth, KS: School of Advanced Military Studies, U.S. Army Command and General Staff College, May 3, 1987.

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THEATER STRUCTURE AND GEOMETRY (Seminar)

General MacArthur will liberate Luzon, starting 20 December, and establish bases there to support later operations. Admiral Nimitz will provide fleet cover and support, occupy one or more positions in the Bonin-Volcano Island group 20 January 1945, and invade the Ryukyus, target date 1 March 1945.

—U.S. Joint Chiefs of Staff Directive, October 3, 1944

A. Focus:

The objective determines force employment which in turn determines the required space. In order to effectively employ force and manipulate operational functions within a space, the commander must first organize a theater. This session explores the principal elements of theater geometry for establishing and maintaining tactical, operational, and strategic levels of command within a theater structure.

B. Objectives:

- Analyze how geometry and theater structure allows operational commanders to plan, organize, prepare, conduct, and assess operations.
- Evaluate the theater-strategic and operational options available in constructing a joint, interagency, and multinational theater of operation or theater of war.

C. Background:

Theater and operational commanders must often determine the size of the physical space required for basing, deployment, combat employment, and logistical support and sustainment of the forces assigned to accomplish respective military objectives; this is among the first and most important organizational decisions to be made by the commander. At the operational and theater-strategic levels of war, the organization of physical space ranges from combat zones/sectors and areas of operation to theaters of operation and theaters of war.

Geographic locations afford significant tactical, operational, and strategic advantages to either side and provide bases from which to operate within the theater. After analyzing combat potential with respect to factor space, lines of communication, operation, and effort begin to emerge across the several domains. These theater elements also include: positions, distances, bases of operation (BOO), physical objectives, decisive points (DP), lines of operation (LOO), and lines of communication (LOC)—any of which may have tactical, operational, or even strategic significance. 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*. Therefore, operational commanders and their staffs must know and understand the advantages and disadvantages of

these elements to ensure the most effective employment of their forces: converting combat potential into combat power. In short, factor analysis articulates what is possible to the operational commander. Therefore, it is not enough to ensure a balance of time, space, and force against an objective; rather, the commander structures the theater and articulates what is possible given the space, combat potential, and anticipated duration of the campaign or major operation.

The point of contact for this session is Professor Doug Hime, C-423.

D. Questions:

Explain how the commander uses operational factors, functions, and objectives to structure a theater.

How do theater elements impact how the operational commander visualizes future operations?

How do time, space, force and operational functions inform the identification and selection of decisive points (DPs)?

How does the concept of physical lines of operation compare with lines of effort? To what extent are LOOs still a valid concept in the information age?

Has technology and information changed individual factors and/or their interrelationships? How?

Is the concept of the theater of operation and elements of theater geometry outdated in the contemporary environment? Defend your position.

Philippines Case Study:

Evaluate the relative advantages and disadvantages of the geostrategic position for the Japanese forces on land, at sea, and in the air in their defense of the Philippines in early September, 1944 using the language of theater geometry.

How did each side classify their respective theaters of operations and did it support accomplishment of their theater and operational objectives? What were the strategic and political constraints on the respective theater structures?

What were the U.S. decisive points (DPs) before and after landing on Leyte?

Describe the impact of theater geometry on operations between October, 1944 and March, 1945. Assess how well the United States and Japan re-balanced time, space, and force against their respective objectives as the geometry of the situation evolved.

F. Products:
None.

F. Required Reading:

Hime, Douglas N. Joint Military Operations Department. "The Philippines Campaign, 1944-45: A Case Study." Newport, RI: Naval War College, December 2013. Review pp. 1-58. **(NWC 1093).**

U.S. Office of the Chairman of the Joint Chiefs of Staff. *Joint Operations*, Joint Publication (JP) 3-0. Washington, DC: CJCS, August 11, 2011. Read pp. IV-1 to IV-14.

Vego, Milan. *Joint Operational Warfare: Theory and Practice*. Newport, RI: U.S. Naval War College, reprint, 2009. Read "The Theater and Its Structure," pp. IV-3 to IV-12, and "Theater Geometry," pp. IV-49 to IV-78. **(Issued).**

G. Supplementary Reading:

Collins, John M. *Military Geography for Professionals and the Public*. Washington, DC: Brassey's, 1988.

MacGregor, Douglas A. "Future Battle: The Merging Levels of War." *Parameters* (Winter 1992–93): 33–47.

Morison, Samuel Eliot. *History of United States Naval Operations in World War II: Vol. 12, Leyte, June 1944-January 1945.* Annapolis, MD: Naval Institute Press, 1958, renewed 1986.

Smith, Robert Ross. Triumph in the Philippines: The War in the Pacific. Washington, DC: Government Printing Office, 1963.

U.S. Office of the Chairman of the Joint Chiefs of Staff. *Joint Operations*, Joint Publication (JP) 3-0. Washington, DC: CJCS, August 11, 2011.

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The Japanese in the Philippines were ill prepared to withstand invasion. Indeed, the Japanese forces as a whole were now suffering the consequences of their own earlier success. Having passed what Clausewitz calls 'the culminating point of the offensive', they found themselves in possession of more territory than they could closely defend and were confronted by an enemy who was on the rampage and whose resources were growing by the month.

—John Keegan, *The Second World War*

A. Focus:

Having previously discussed the fundamentals of operational art, this session examines how a commander analyzes critical factors. It focuses first on identifying the objective to determine the friendly and enemy centers of gravity, and then on developing an operational idea to defeat the enemy's center of gravity and protect one's own. The session also examines the concept of culmination, specifically avoiding one's own and hastening that of the enemy. The practical exercise will focus on deducing and describing the operational ideas developed during planning by the opposing commanders in historical case study.

B. Objectives:

- Analyze enemy and friendly critical factors and centers of gravity through the lens of the objective.
- Examine the concept of culmination as it relates to the center of gravity.
- Deduce the operational ideas developed by opposing commanders during planning for the Philippines/SHO One Campaigns.

C. Background:

Understanding the theory of the concept of center of gravity is crucial if commanders and their staffs intend to employ all sources of power to achieve success in the shortest time and with the least losses for friendly forces. Combat power is normally limited – even during World War II, General MacArthur and Admiral Nimitz rarely had all the forces they thought were required given their theater objectives, available time, and the incredible space in which their operations were conducted. Because of this, these theater commanders knew that they had to focus the major part of their efforts against the strongest source of the enemy's power—the center of gravity (COG). Scarce resources are often wasted when they are applied to sources of power that do not create the conditions for achievement of the objective. MacArthur and Nimitz focused their efforts to maintain freedom of action and avoid operational culmination in time and resource-constrained theaters of war. They observed principles of war such as objective, mass, and economy of effort to guide the

articulation of their operational idea. Therefore, the "idea" for a major campaign or operation includes the identification of the enemy's center of gravity.

Identifying the enemy's center of gravity is only the first part of the commander's analysis. Commanders and their staffs want to degrade, neutralize, or destroy this center of gravity—it stands in the way of accomplishing the objective. How to go about doing this is the essence of the operational idea. The operational idea is normally developed during the operational commander's estimate of the situation, and the decision should be further elaborated and refined during the planning process. The operational idea is the very essence of any operational design. In general, it should describe in broad terms, concisely and clearly, what each functional/service component force will do to accomplish the ultimate objective of a campaign. The operational idea represents the commander's vision of what he intends to do and how he intends to accomplish the assigned strategic objective. It should include the sequence of major events and actions of the principal subordinate forces, and it should be detailed enough to allow subordinate component commanders to draw their operational scheme for their respective forces. The initial operational idea should be reviewed and, if necessary, modified or altered if changes in the strategic situation warrant.

The point of contact for this session is Professor Ivan Luke, C-431.

D. Questions:

Explain the relationship between theater-strategic/operational objectives and centers of gravity (COG). Is there ever more than one center of gravity at any one time? Can the center of gravity ever change? Explain.

Explain the concepts of critical capabilities and critical requirements. How do they contribute to defeating the enemy COG?

Explain what may determine whether an indirect or direct approach to the COG is appropriate.

How can deception potentially weaken a critical strength?

Explain the concept of physical and cognitive culmination. What key factors cause culmination?

Explain the concept of the operational idea. How does the operational idea relate to the operational design?

Philippines Case Study:

What were the Allied and Japanese centers of gravity? Did the respective commanders correctly identify their friendly and enemy centers of gravity? To what degree did each identify and exploit critical factors?

Did either the Japanese or the Allies reach a culmination point in the Philippines campaign? If so, what were the indications?

Articulate the U.S. and Japanese operational ideas for the invasion and defense of the Philippines as developed during planning. To what extent did the operational ideas properly focus on the objective and on defeating the enemy COG?

E. Products:

Articulation of U.S. and Japanese operational ideas as developed during planning for Philippines/SHO One Campaigns.

F. Required Reading:

U.S. Naval War College. *Joint Operation Planning Process (JOPP) Workbook*. Joint Military Operations Department, Newport, RI: Naval War College, 2012. **(NWC 4111J w/Chg1).** Read Appendix C. **(Issued).**

U.S. Office of the Chairman, Joint Chiefs of Staff. *Joint Operation Planning*, Joint Publication (JP) 5-0. Washington, DC: CJCS, August 11, 2011. Read "Center of Gravity" thru "Culmination" III-22 thru III-34.

Vego, Milan. *Joint Operational Warfare: Theory and Practice.* Newport, RI: Naval War College, 2009. Read "Concept of Critical Factors and Center of Gravity" VII-13 to VII-33; "Identification of Critical Factors and Center of Gravity" IX-90 to IX-94; Concept of the Culminating Point VII-73 to VII-91.

_____. *Operational Warfare at Sea.* London: Routledge, 2009. Read Chapter 7, "Operational Idea," pp. 137-144 **(Issued).**

G. Supplementary Reading:

Perez, Celestino, General Editor, by select faculty of U.S. Army Command and General Staff College. *Addressing the Fog of COG: Perspectives on the Center of Gravity in US Military Doctrine,* Fort Leavenworth: Combat Studies Institute Press, 2012.

Strange, Joseph L., and Richard Iron. "Center of Gravity: What Clausewitz Really Meant." *Joint Force Quarterly*, no. 35 (October 2004): 20-27.

Webb, George S. "The Razor's Edge: Identifying the Operational Culminating Point of Victory." U.S. Naval War College, Joint Military Operations, Student Paper, May 16, 1995.

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OPERATIONAL DESIGN (Seminar)

This plan is derived from "MUSKETEER-TWO", Basic Outline Plan for PHILIPPINES Operations, GHQ, SWPA, 29 August 1944, and JCS 713/4. It covers operations of forces of the Southwest Pacific Area to reoccupy LUZON. It includes changes of plan as a consequence of the results of recent carrier strikes in the PHILIPPINE area.

—Directive, MUSKETEER III, Basic Outline Plan, 26 September 1944

A. Focus:

This session serves as a synthesis of the previously discussed operational art concepts. This seminar will focus on the logic behind the development of an operational idea into a full operational design with emphasis on sequencing and synchronization, selection of intermediate objectives, and the use of functions to exploit advantages and mitigate disadvantages in time, space, and force. The practical exercise will again focus on the operational designs of the opposing commanders in historical case study, but this time from the perspective of how the campaign was fought rather than how it was planned, leading to analysis and evaluation of the key decisions the commanders made as conditions on the battlefield changed.

B. Objectives:

- Analyze the logic underpinning the development of an operational idea into an operational design through the application of operational art concepts.
- Compare the conduct of the Philippines/SHO One Campaigns to the respective operational designs developed during planning and evaluate through the lens of operational art the major decisions made by the commanders.

C. Background:

The basis of any campaign plan is the operational design. The operational design is in turn based on the operational idea developed during the commander's estimate of the situation. An operational design includes a number of interrelated elements drawn from the operational idea that collectively ensures firmly focusing on the ultimate objective. The main elements of a sound operational design include the desired strategic end state; ultimate and intermediate objectives; force requirements; balancing of operational factors against the ultimate objective; identification of critical factors and centers of gravity; initial positions and lines of operations; directions/axes; and operational sustainment.

Warfare, by its very nature, is a series of trade-offs. In each instance, the operational commander and staff should properly balance competing demands for scarce resources while still accomplishing assigned operational or strategic objectives. Designing a campaign is not

a simple job amenable to a few hours of discussion. It requires time, imagination, hard work, and, above all, sound military thinking and common sense on the part of both operational commanders and their staffs. The main purpose of operational design is to make this exhaustive effort a coherent one.

The operational idea and operational design developed by the commander and planning team prior to a campaign provide a sound starting point for the accomplishment of the objective but do not remain static, especially once combat is joined. General MacArthur had an idea for a return to the Philippine Islands as early as May, 1942, but continued to refine it through the start of the campaign October, 1944, and then made significant changes afterwards as conditions on the battlefield changed. A good operational design incorporates elements a high degree of flexibility to accommodate such changes.

The point of contact for this session is Professor Ivan Luke, C-431.

D. Questions:

How are the concepts of operational idea and operational design related?

Explain the concepts of operational sequencing and synchronization. What is the relationship among operational objectives, tasks, and the factor of time?

How are intermediate objectives selected?

How may operational functions exploit advantages and mitigate disadvantages in time, space, and force?

Philippines Case Study:

To what degree did MacArthur's planned operational design for the reconquest of the Philippines survive contact with the enemy? Identify and assess the major decision points in the campaign from the U.S. side.

To what degree did the original Japanese operational design for the defense of the Philippines survive contact with the enemy? Identify and assess the major decision points in the campaign from the Japanese side.

Analyze the Japanese plan for operational deception in support of their naval defense of the Philippines. To what extent was the plan successful and why?

E. Products:

Analysis and critique of Japanese and U.S. operational designs as executed during the Philippines/SHO One Campaigns.

F. Required Reading:

Hime, Douglas N. Joint Military Operations Department. "The Philippines Campaign,
1944-45: A Case Study." Newport, RI: Naval War College, December 2013.
Review pp. 1-58. **(NWC 1093).**

U.S. Office of the Chairman, Joint Chiefs of Staff. *Joint Operation Planning*, Joint
Publication (JP) 5-0. Washington, DC: CJCS, August 11, 2011. Read pp. III-35 to III-
44.

Vego, Milan. *Operational Warfare at Sea.* London: Routledge, 2009. Read Chapter 6,
"Operational Design" and Review Chapter 7, "Operational Idea" pp. 145-171
(Issued).

G. Supplementary Reading:

Cannon, M. Hamlin. "Plans Are Made and Forces Are Readied." *United States Army in World
War II – The War in the Pacific: Leyte: The Return to the Philippines.* Washington,
DC: Office of the Chief of Military History, Department of the Army, 1992.

Hime, Douglas N. Joint Military Operations Department. "Disappointing Doctrine." *Journal
of Defense Management* 1, 2011.

Vego, Milan. *Joint Operational Warfare, Theory and Practice.* Newport, RI: U.S. Naval War
College, 2009. Read "Operational Planning" IX-63 – IX-79, "Operational Design:
Major Combat Phase" IX-83 – IX-90, IX-94 – IX-102, "The Operational Idea"
IX-103 – IX-133 and "Deception Planning," IX-163 – IX-172. Review "Operational
Sequencing," IX-135 – IX-142 and "Operational Synchronization," IX-145 – IX-153.
(Issued).

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OPERATIONAL LESSONS LEARNED (Seminar)

> *The student study of his famous predecessors must be active and not passive; he must put himself in their place, not content with merely reading a lively narrative, but working out every step of the operation with map and compass; investigating the reasons of each movement; tracing cause and effect, ascertaining the relative importance of the moral and the physical, and deducing for himself the principles on which the generals acted.*
>
> —Lieutenant Colonel G.F.R. Henderson, C.B.

A. Focus:

This session focuses on the purpose of deriving operational lessons learned from previous operations or campaigns, both successful and unsuccessful. Students will derive operational lessons learned from the Philippines Campaign through the lens of both Allied and Japanese participants.

B. Objectives:

- Apply the process used to derive operational lessons learned from a campaign.
- Evaluate the potential pitfalls in deriving and applying lessons learned.

C. Background:

Milan Vego emphasizes the importance for military organizations to study lessons learned in order to avoid repeating errors and mistakes in future combat. Lessons derived by militaries have a proven value for modifying or improving existing doctrine. They are especially important in creating new tactical and operational concepts, and in turn relevant new doctrine, while at the same time helping to identify for discard that which is ineffective or inadequate. This new doctrine then serves as broad guidance for force employment. Another purpose of deriving lessons is to provide input for designing new weapons/sensors based upon discovery of inadequacies in present technology. The process of learning lessons also has considerable value for enhancing the professional knowledge of the officer corps.

The higher the level of war, the greater the significance of the lessons learned and the longer the durability of that lesson. Strategic lessons learned last longer than operational or tactical lessons. Therefore, today's military professional can still glean insight from wars fought millennia ago. Lessons on intangible aspects are generally more durable than lessons derived from the physical aspects of a given situation. War is a clash of human wills; hence, the human element is a critical part of lessons learned and will remain so in the future. Thus, lessons pertaining to leadership, unit cohesion, morale, discipline, and training are essentially timeless. In contrast, technological lessons are, by their very nature, short-term.

Lessons learned are interrelated and can have a considerable effect on the employment of forces, both in peacetime and in conflict. Optimally, lessons should be derived by evaluating all possible sources of information, ranging from peacetime exercises to full-spectrum conflict to include war gaming results, the study of military history, personal war experiences, and the results of combat. Nothing should be thought unimportant. One must consider not only military information but diplomatic, economic, cultural and other factors that influence the situation in order to reach valid conclusions and lessons learned.

While the Joint Force has a lessons learned repository that can be accessed via the internet (Joint Lessons Learned Information System, https://www.jllis.mil), this is not the sole location of documented lessons learned. Professional reading and more specifically, reading and critically analyzing military history may provide a commander with a rich source of data that may be applicable across today's spectrum of conflict. Beyond the challenge of developing the operational and strategic prowess of the individual commander is the challenge of creating an institutional culture in which lessons are valued, and so the organization devotes sufficient resources to relevant data capture, derivation of valid lessons, and consideration of those lessons into future planning.

Deriving lessons learned is a potentially complex process, fraught with risk of misstep. Faulty analysis of a chain of events could lead to derivation of flawed lessons, which in turn could lead to poor doctrine, and unwise decisions in force structure. Such errors in thinking might not be obvious until some grave event occurs that results in heavy losses or defeat. Nevertheless, despite potential problems, individuals and organizations should make every effort to derive valid lessons from a wide array of sources. Neglecting to attend to the learning points available from experience poses risks to the ability to refine existing doctrine, write new doctrine, develop new operational concepts, modify tactics, transform forces, educate and train officers for positions of great responsibility, and prepare for war in general. The study of military history is perhaps the most beneficial of all methods in deriving operational lessons because it offers the most complete range of human experience from both friends and foes in wartime.

The point of contact for this session is Lt Col Michael J. LePage, USAF, C-403.

D. Questions:

What are operational lessons learned?

How does one go about capturing and/or writing an enduring lesson learned?

What is the importance of studying and sharing operational lessons learned?

Philippines Case Study:

What operational lessons learned, from both the Allied and the Japanese perspective, can be derived from the Philippines Campaign? Consider the following as you craft your lessons learned:

- Selection of the military objectives.

- Balancing of the operational/theater strategic objective and the factors space-time-force.
- Joint functions (command and control, intelligence, fires, sustainment, protection, and movement and maneuver).
- Operational decision-making.
- Operational design.
- Operational leadership.

Explain how lessons derived from the Philippines Campaign are/are not applicable to today's operational commander.

E. Products:

Students will evaluate the Philippines Campaign and derive operational lessons learned from both the Allied and Japanese perspectives.

F. Required Reading:

Hime, Douglas N. Joint Military Operations Department. "The Philippines Campaign, 1944-45: A Case Study." Newport, RI: Naval War College, December 2013. Review pp. 1-58. **(NWC 1093).**

Vego, Milan. "A Guide for Deriving Operational Lessons Learned" Newport, RI: Naval War College, 2006. Read. **(NWC 1159).**

_____. *Joint Operational Warfare: Theory and Practice*. Newport, RI: Naval War College, reprint, 2009. Read "Operational Lessons Learned" pp. XI-43 to XI-72. (**Issued**).

G. Supplementary Reading:

Cordesman, Anthony H. *Preliminary "Lessons" of the Israeli-Hezbollah War* (working draft, 2d ed. Rev, September 11, 2006). Washington, DC: Center for Strategic and International Studies, 2006.

Mansager, Tucker B. "Interagency Lessons Learned in Afghanistan." *Joint Force Quarterly*, no. 40 (January 2006): 80-84.

Ministry of Defense. *Iraq First Reflections Report*. London: Ministry of Defense, July 2003.

Vego, Milan. "What Can We Learn from Enduring Freedom?" *U.S. Naval Institute Proceedings* 128, no. 7 (July 2002): 28-33.

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THEATER-STRATEGIC LEADERSHIP (Seminar)

If the worst should happen there was a chance that we would lose the entire fleet; but I felt that that chance had to be taken…There would be no sense in saving the fleet at the expense of the loss of the Philippines.

—Admiral Soemu Toyoda, CINC, Imperial Japanese Combined Fleet, 1944-45.

It is still somewhat of a mystery how and whence…MacArthur derived his authority to use United States Forces to liberate one Philippine island after another. He had no specific directive for anything subsequent to Luzon…

--Samuel Eliot Morison, *The Liberation of the Philippines*

A. Focus:

This session addresses the fundamental components of theater-strategic leadership. It contrasts the responsibilities of theater-strategic and operational commanders with those of command at the tactical and national-strategic levels, employing a series of case studies to highlight the types of decisions theater-strategic and operational-level commanders face.

B. Objectives:

- Analyze theater-strategic leadership to determine the unique responsibilities and unique challenges of leadership and command at the theater-strategic and operational level of war.
- Analyze how theater-strategic leaders—commanders and their staffs—acquired an operational perspective.
- Assess the U.S. military's effectiveness at developing successful theater-strategic and operational leaders, operational and tactical levels of war can be examined and understood.

C. Background:

Theater-strategic leadership is a collective term for levels of command with the authority and responsibility for accomplishing strategic, theater-strategic, and operational level objectives. As such, it bridges the command levels responsible for accomplishing national strategic objectives down to and including operational objectives. It is exercised by levels of command from the combatant command level to subordinate joint task force commands. It requires a leader with broad vision who can focus on broad military objectives above the tactical level. With a wide array of objectives, theater-strategic commanders must be able to view accurately even the most complex situation. Furthermore, these leaders must understand how actions at each level of war affect other levels. In the United States, plans

for force employment all include cooperation with other agencies and forces from allied or coalition partners. Therefore, it is imperative that theater-strategic and operational commanders understand joint/combined operations, how to coordinate interagency issues, and command and control challenges in planning and preparation of a campaign or major operation.

To move beyond the narrow focus of a tactical commander, theater-strategic and operational commanders must anticipate trends in military, political, economic, and other elements of a situation weeks and months ahead of time. In short, they must think operationally. This also means they must stop thinking tactically, which is unintuitive because, in most cases, tactical expertise is what got these officers promoted to the position of an operational leader.

Operational thinking does not come naturally; it is acquired by conscious effort and hard work. It can be obtained through practical experience in war or large-scale exercises and maneuvers, as well as through operational and strategic war gaming. However, there is little opportunity for most future commanders to obtain the necessary broad vision via experience. Therefore, the officer acquires the needed perspective through both PME and systematic self-study of military history, geography, international relations, economics, ethnicity and nationalism, culture, society, religions, and so forth. Study of past wars, campaigns, and major operations is one the best methods for acquiring an operational perspective, and eventually an *operational vision*. The latter is the application of operational thinking in planning, preparing, or executing a campaign or major operation.

Combat success is enhanced when theater-strategic and operational commanders leverage certain selected aspects of operational art. Like the principles of war, there is no common agreement with regard to what the principles are or even how many there are. They are not universal, but primarily based on one's way of war. Yet despite national differences in the conduct of operational warfare, experience has shown that overlooking or violating the selected principles of operational leadership decreases chances for success and can result in the failure of a major operation or campaign. This session studies the theater-strategic leadership of selected past military leaders, allowing you to distill prevailing operational leadership principles and consider their utility as a framework for further application.

The point of contact for this session is Professor Steve Forand, C-407

D. Questions:

Deduce the fundamental tenets of successful theater-strategic leadership. Which, in your assessment, are the most important?

Explain the relationship between a commander's character traits, personal intellect, and personal intuition. How much does character matter? How do we develop and assess personal intuition?

Compare and contrast tactical, operational, and strategic decisions. What commonalities exist among them? What distinguishes them from one another?

Given Milan Vego's explanation of the concepts of operational thinking and operational vision from the readings, analyze the similarities and differences. What role does the study of operational art play in developing operational leaders who possess such thinking and vision?

Evaluate the prevailing principles of successful operational leadership. Which, in your assessment, are the most important? What is the linkage to 'Mission Command'?

Historical commanders had months or years of warfare in which to grow into outstanding theater-strategic leaders. How can we effectively develop senior leaders for this difficult position today?

E. Products:

Student teams will be assigned by the moderator to analyze the elements of decisions made by past leaders and the consequences of those decisions. Students will lead seminar discussions on theater-strategic leadership based on their findings and analysis.

F. Required Reading:

Hornfischer, James D., *Neptune's Inferno: The U.S. Navy at Guadalcanal.* New York: Bantam Press, 2012. Read pp. 150-156. **(NWC 1131).**

U.S. Office of the Chairman, Joint Chiefs of Staff. *Mission Command White Paper,* Washington, DC: CJCS, April 3, 2012. Read. **(NWC 1193)**.

Vego, Milan. "*Joint Operational Warfare: Theory and Practice.* Newport, RI: U.S. Naval War College, 2009. Read "Operational Leadership," pp. X-5 to X-13; "The Decisions," pp. X-61 to X-71; "What Is Operational Thinking?" pp. XI-4 to XI-5; and "Operational Vision," pp. XI-35 to XI-39. **(Issued).**

In addition, students will be assigned one of the following readings:

Ballard, John. "Learning in Combat: Eisenhower and Operational Art, 1942-1944." Newport, RI: U.S. Naval War College, 2002. **(NWC 1196).**

Builder, Carl H., Steven C. Bankes, and Richard Nordin. "The Visionary: MacArthur at Inchon." *Command Concepts: A Theory Derived from the Practice of Command and Control.* Santa Monica, CA: Rand, 1999, Read pp. 73-88. **(NWC 1054).**

Parshall, Jonathan B., and Anthony P. Tully. "Genesis of a Battle." *Shattered Sword: The Untold Story of the Battle of Midway*. Washington, DC: Potomac Books, 2005, Read pp. 19-38. **(Issued).** (For a brief overview of the Japanese military organization in 1942, see http://www.users.bigpond.com/battleforAustralia/ battaust/AustInvasion/ JapHighCommd.html).

G. Supplementary Reading:

Blumenson, Martin, and James L. Stokesbury. *Masters of the Art of Command* (Boston, MA: Houghton Mifflin Company, 1975).

Creveld, Martin van. *Command in War*. Cambridge, MA: Harvard University Press, 1985, 261-275.

De Czege, Huba Wass. "A Comprehensive View of Leadership." *Military Review* 72, no. 8 (August 1992), 21–29.

Field, James A., Jr. *The Japanese at Leyte Gulf: The SHŌ Operation*. Princeton, NJ: Princeton University Press, 1947. Read "The End of a Navy," pp. 131-150. **(NWC 1050).**

Kolenda, Christopher. *Leadership: The Warrior's Art*. Carlisle Barracks, PA: Army War College Foundation Press, 2001.

Zais, Mitchell M. "Strategic Vision and Strength of Will: Imperatives for Theater Command." *Parameters* (Winter 1985): 59–63.

MARITIME OPERATIONAL LAW (Lecture)

The sea, in contrast to [land] cannot be held or captured. . . No one processes the sea or an ocean permanently.

—*The Nature of Naval Warfare*, Naval War College Staff, 1938

A. Focus:

This lecture focuses on the law of the sea and the law affecting military operations in the maritime environment. When planning and conducting military operations, commanders and their subordinates must comply with the international law that governs (1) the legal basis for nations to use force and lethality and (2) the law that governs the conduct of hostilities extraterritorially; to this on land we now add an aquatic tributary, flowing from these two streams into the maritime environment (conflict and non-conflict). 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 lecture discusses not only constraints maritime operational law might have on military operations but, also how the operational commander can use the law to achieve success in both conflict and non-conflict missions.

B. Objectives:

- 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 Strait of Hormuz, Arctic, and South China Sea.

C. Background:

For the operational planner, "Factor Space" is heavily influenced by international law governing establishment of land, sea and air "boundaries." These boundaries directly impact freedom of movement of military forces. For example, during the deterrent or pre-hostilities phase of an operation, military forces typically respect the sovereign rights of nations regarding their land territory, national waters, and national airspace.

During the hostilities phase of an operation, when the Law of Armed Conflict governs the situation, the movement of military forces may be conducted without regard to the sovereign territorial rights of the enemy belligerent nation. However, the traditional sovereign rights of other states (e.g., neighboring/neutral states) must, as a matter of law,

continue to be respected. Limitations on freedom of movement of forces within land, sea, and air boundaries of such states must be factored into operational planning. For instance, when navigation and over flight rights within another nation's air and sea space prove insufficient, operational planners must consider alternative routes or consider notifying the State Department of the need to obtain access and transit agreements in order to facilitate planned operations.

Freedom of movement in international waters and airspace is fundamental to implementing U.S. national and military strategies. The legal basis for these navigational freedoms is customary international law and the United Nations Convention on the Law of the Sea (UNCLOS). This freedom allows access to strategic areas of the world, facilitates support and reinforcement of forward-deployed forces, enables U.S. and coalition forces to operate worldwide, and ensures uninterrupted global commerce. During this lecture and associated readings the rights of all nations in international waters and international airspace, as well as the limited rights of coastal nations to exercise jurisdiction over some portions of the sea and airspace adjacent to their coastline will be discussed.

Although UNCLOS has not been ratified by the U.S. Senate, all U.S. military operations are, by Executive Order (EO), conducted in accordance with UNCLOS' delineation of rights and responsibilities. The EO, in place since 1983, is recognized as depicting customary international law and reflects UNCLOS' descriptions of various maritime zones and boundaries and associated states' rights and responsibilities. Since the EO's enactment, the United States has actively exercised and asserted U.S. navigation and over flight rights and freedoms on a worldwide basis. The United States does so in a manner consistent with the balance of interests reflected in customary law/UNCLOS through the Freedom of Navigation Program (FONOPS). Pursuant to the EO, the United States asserts it will not "acquiesce in unilateral acts of other states designed to restrict the rights and freedoms of the international community in navigation and over flight and other related high seas uses.[1]

The point of contact for this session is Captain Robert A. Sanders, JAGC, USN, C-424.

D. Questions:

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?

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

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

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[1] J. Ashley Roach, and Robert W. Smith, *eds. Naval War College, International Law Studies,* "Excessive Maritime Claims," 66 INT'L L. STUD 3 (1994) quoting, President Ronald Reagan's, March 10, 1983, Statement on United States Oceans Policy.

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

E. Products:
None.

F. Required Reading:

Guangqian, Major General (ret) Peng, People's Liberation Army, "China's Maritime Rights and Interests," in *Military Activities in the EEZ, A US-China Dialogue on Security and International Law in the Maritime Commons*, Vol. 7 Naval War College, China Maritime Studies Institute (December 2010). Read pp. 15-22. **(NWC 1150).**

Pedrozo, Raul "Pete," "The Bull in the China Shop and Rising Tensions in the Asia Pacific Region. *Naval War College, International Law Studies,* 90 INT'L L, STUD 66 (2014). Available at: https://www.usnwc.edu/getattachment/a79b504a-46bf-45be-a587-9ed51592a289/The-Bull-in-the-China-Shop—Rising-Tensions-in-thaspx. Read. **(NWC 1205).**

U.S. Department of Defense, General Counsel. *DoD Law of Warfare Manual*, 2015. Scan Chapter XIII- Naval Warfare. **(NWC 1208)**

U.S. Department of the Navy. Naval Warfare Publication 1-14M, *The Commander's Handbook on the Law of Naval Operations*. July, 2007. Scan Chapters 1-5. (**Issued**)

G. Supplementary Reading:

Garamone, George, "[CJCS General] Dempsey Urges Ratification of Law of the Sea Convention," Armed Forces Press Service (May 9, 2012).
Available at: http://www.defense.gov/news/newsarticle.aspx?id=116265.

Kraska, James and Brian Wilson, "Combating Pirates of the Gulf of Aden: The Djibouti Code and the Somali Coast Guard," *Ocean & Coastal Management* (2009).

Migdalovitz, Carol, "Israel's Blockade of Gaza, the *Mavi Marmara* Incident, and Its Aftermath," Congressional Research Service, (June 23, 2010).

United Nations. *United Nations Convention on the Law of the Sea*. Third United Nations Conference on the Law of the Sea. 1983. Articles 1-25, 29-54, 86-111 and 121. U. S.

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INTERNATIONAL AND OPERATIONAL LAW (Lecture)

> *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

A. Focus:

This lecture introduces the "operational law" in use of force portion of the JMO Senior Course curriculum. 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/extraterritoriality, (2) the legal basis for nations to use force and (3) levels of lethality. This lecture is devoted to discussing 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). Additionally, this lecture touches on legal issues arising from modern use of force against non-state actors, during detainee operations, in drone/UAV/RPV strikes, and in cyber operations among others.

B. Objectives:

Session objectives are considered in relationship and application to planning and executing U.S. military operations and with a requirement that all "Members of the DoD Components comply with the law of war during all armed conflicts, however such conflicts are characterized, and in all other military operations, especially those holding the potential for use of force."[2]

- Value the effect of international law on the planning and execution of military operations.
- Value the basic principles of the law of armed conflict for land, air, and naval warfare.
- Analyze emerging legal issues surrounding the law of armed conflict at the strategic and operational levels of war.

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[2] DoD Law of War Program, DoDD 2311.01E, May 9, 2006 (Incorporating Change 1, November 15, 2010, Certified Current as of February 22, 2011). See also, *The Department of Defense Law of War Manual* (NWC 1208).

C. Background:

International relations, both military and civilian involve the application of international law; and senior military officers may encounter international law in both contexts. For example, international law regulates such diverse activities as aviation safety, communications, financial transactions, nautical rules of the road, and environmental protection. Paramount in the military context is that along with *domestic law* derived from a nation's constitution, International law is the standard measurement for the legality of a nation's use of force and application of the law of war under the rule of law.

There are two primary sources of international law: state practice and international agreements. When state practice attains a degree of regularity <u>and</u> is accompanied by the general conviction among nations that such behavior in conformity with that practice is obligatory, that practice it is said to have risen to become a rule of *customary law* or *customary international law*. Customary international law is binding upon all nations and exists without a signed agreement *(*e.g., treaties or conventions*)*.

Bilateral or multilateral formal agreements between and among nations are the primary sources of international law, and many often restate customary international law norms while adding additional material and considerations. Signed, formal agreements, *treaties* or *conventions* come in multiple forms — related and unrelated to the conduct of hostilities. Significant conventions and treaties related to the conduct of hostilities include the Hague Conventions of 1907, the UN Charter of 1945, the Geneva Conventions of 1949, the 1975 Declaration protecting persons from Torture and Other Cruel, Inhuman or Degrading Treatment or Punishment, the 1977 Additional Protocols (AP I and AP II) to the 1949 Geneva Conventions (I, II, III and IV), the 1993 Chemical Weapons Convention and the 1997 Convention on the Prohibition of the Use, Stockpiling, Production, and Transfer of Anti-personnel Mines (Ottawa Treaty), among others. Secondary sources of international law include general principles of law, judicial decisions, and writings by legal experts.

The UN Charter is the keystone publication for understanding the post-WWII construct for a nation's resort to use of force whether in accordance with the Charter's Article 51 (self-defense) or as authorized by a formal Resolution of the UN Security Council. Other legal bases for use of force include, but are not limited to, humanitarian intervention to stop a genocide, protection of own nationals abroad through non-combatant evacuation operations (NEOs) or the rescue of hostages taken by terrorists or pirates.

The two legal regimes that may apply to a use of force are *International Human Rights Law (IHRL)* or the *Law of Armed Conflict (LOAC)*. LOAC (the current preferred U.S. terminology) has been historically referred to as the *Law of War*; and today it is often referenced by the international community as *International Humanitarian Law or IHL*. Unlike the general body of IHRL, which the USG generally considers a peacetime regime; IHL/LOAC is the specialized body of law directed at military members involved in international armed conflict (IAC), non-international armed conflict (NIACs), and during all U.S. military-executed counter-terrorism (CT) operations. The U.S. military generally uses the terms IHL and LOAC consistent with guidance under the DoD Law of War (LOW)

Instruction and with the International Committee of the Red Cross and Red Crescent Society (ICRC) definition. The DoD's instruction on LOW definition says,

> Law of War. That part of international law that regulates the conduct of armed hostilities. It is often called the 'law of armed conflict.' The law of war encompasses all international law for the conduct of hostilities binding on the United States or its individual citizens, including treaties and international agreements to which the United States is a party, and applicable customary international law.[3]

The ICRC definition states, "International humanitarian law is a set of rules which seek, for humanitarian reasons, to limit the effects of armed conflict … [it] protects persons who are not or are no longer participating in the hostilities and [it] restricts the means and methods of warfare"[4] unless stated otherwise. This set of laws is represented, among other places, in Common Article 3 of the four 1949 Geneva Conventions.

The U.S. military's Law of War Doctrine does not consider most human rights law extraterritorial, i.e., these laws are within a legal regime that generally does not apply across nation state borders. The U.S. view on the application of human rights in armed conflict is: in international armed conflict, only the customary law of human rights applies; in NIAC, both customary and treaty law (to which the United States is a party) apply, but this application is subject to the doctrine of *lex specialis* ("law governing a specific subject matter"). In armed conflict, under *lex specialis*, when there is a conflict between the two sources of law (IHL and IHRL), the LOAC rule (the specialized law) is followed. Likewise, things in the conflict zone, not germane to the fight (the right to vote) would generally by governed by IHRL.

In contrast, the United States does consider LOAC to have extraterritorial application, i.e., it applies globally at all times to military forces during armed conflict and is the law primarily applicable during international military combat operations. Definitely, it is that part of international and domestic law regulating the conduct of armed hostilities under the *jus in bello* construct. LOACs extraterritorial application is based on domestic policy, international custom and practice, and international agreements or conventions and shows up in execution as the *rules of engagement* followed by forces in the field.

There are three general principles of LOAC: *military necessity*, *proportionality*, and *humanity*. *Military necessity* allows a belligerent to apply force to achieve legitimate military objectives. *Proportionality* means the degree of force used must be no greater than necessary (i.e., minimally necessary) and required (i.e., proportional) to the prompt realization of those legitimate military objectives sought to be obtained. *Humanity* forbids the infliction of suffering, injury, or destruction not actually necessary to accomplish legitimate military purposes ((i.e., not militarily necessary and/or not proportional). LOAC also requires, for example, that belligerents distinguish as much as reasonably possible between combatants and noncombatants when targeting the enemy; and for combatants to do the same and

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[3] *Ibid.*

[4] International Committee of the Red Cross Society, Advisory Service on International Humanitarian Law. "What is International Humanitarian Law?" available at https://www.icrc.org/eng/assets/files/other/what_is_ihl.pdf.

separate from non-combatants when in a position to be engaged by opposing forces – this is known as the *principle of distinction*.[5]

Finally, LOAC is consistent with Principles of War, such as objective, mass, and economy of force. LOAC and the Principles of War stress the importance of directing force against critical military targets, while avoiding the waste of resources against objectives that are militarily unimportant.[6] LOAC also enhances legitimacy and facilitates restraint; both of which are principles of Joint Operations.

The point of contact for this session is Captain Robert A. Sanders, JAGC, USN, C-424.

D. Questions:

Why do nations care about international law when deciding whether or not to use force? What motivates them to comply with its provisions?

Describe the role of the UN Security Council (UNSC) regarding the use of force against a nation or non-state actors.

To what extent does the law of armed conflict apply across the spectrum of conflict?

What are the requirements to be a lawful combatant? To be a non-combatant? What is an unlawful (or unprivileged) combatant?

How has the law of armed conflict changed, if at all, during the conflicts in Iraq and Afghanistan?

E. Products:
None.

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[5] The rules governing targeting operations to ensure that these operations are conducted consistently with key law of armed conflict principles, including:

The *principle of distinction*, which requires that attacks be limited to military objectives and that civilians or civilian objects shall not be the object of the attack; and

The *principle of proportionality*, which prohibits attacks that may be expected to cause incidental loss of civilian life, injury to civilians, damage to civilian objects, or a combination thereof, that would be excessive in relation to the concrete and direct military advantage anticipated.

[6] The principles of war guide warfighting at the strategic, operational, and tactical Levels -- **Mass**: To concentrate the effects of combat power at the place and time to achieve decisive results; **Objective**: To direct every military operation toward a clearly defined, decisive, and attainable objective; **Unity of Command**: To ensure unity of effort under one responsible commander for every objective; **Simplicity**: To prepare clear, uncomplicated plans and concise orders to ensure thorough understanding; **Economy of Force**: To allocate minimum essential combat power to secondary efforts; **Maneuver**: To place the enemy in a position of disadvantage through the flexible application of combat power; **Offensive**: To seize, retain, and exploit the initiative; **Security**: To never permit the enemy to acquire unexpected advantage; and **Surprise**: To strike the enemy at a time or place or Ina manner for which it is unprepared.

F. Required Reading:

Schmitt, Michael N. "Extraterritorial Lethal Targeting: Deconstructing the Logic of International Law," Volume 52, Columbia Journal of Transnational Law. Read pp. 77- 112. **(NWC 1206)**.

United States Congress, Joint Resolution, *Authorization for Use of Military Force* [AUMF] Public Law. 107-40 [S.J. RES. 23], September 18, 2001. Read. **(NWC 1198).**

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. Read. **(NWC 1085).**

U.S. Department of the Navy. Naval Warfare Publication 1-14M, *The Commander's Handbook on the Law of Naval Operations. July 2007.* Scan Chapters 5, 8, and 12. **(Issued)**

United Nations. *The Charter of the United Nations*. June 26,1945. Scan (Relevant articles: pp. 1–2, 23 [1963 text], 24–25, 27 [1963 text], 33–34, 36–43, 45–46, 48–49, 51–53). (Contained within the *Law of War Documentary Supplement*, pp. v-vi; 1-8). **(NWC 1008A)**.

G. Supplementary Reading:

OPLAW Overview

General Counsel, U.S. Department of Defense. *DoD Law of Warfare Manual*. June 12, 2015. Table of Contents.

Protection and Treatment of Combatants/Non-combatants

Diplomatic Conference for the Establishment of International Conventions for the Protection of Victims of War. *Convention Relative to the Protection of Civilian Persons in Time of War,* August 12, 1949, Articles 13-26 and 47-88. (Contained within the *Law of War Documentary Supplement* 238-240 and 244-251).

_____. *Convention Relative to the Treatment of Prisoners of War,* August 12, 1949, Articles 1-42. (Contained within the *Law of War Documentary Supplement* 199-208), 111.

United States Congress, Joint Resolution. *Affirmation of Authority of the Armed Forces of the United States to Detain Covered Persons Pursuant to the* [AUMF]*,* NDAA FY2012, Public Law. 112-81, § 1021, December 31, 2011.

Emerging legal issues

Dunlap, Major General (Ret) Charles J., Jr. "Lawfare Today . . . and Tomorrow," in *International Law and the Changing Character of War* 87, Naval War College (2011).

Koh, Harold Hongju. "International Law in Cyberspace" USCYBERCOM Inter-Agency Legal Conference, Ft. George G. Meade, MD (September 18, 2012). http://www.state.gov/s/l/releases/remarks/197924.htm

Hsu, Kimberly and Craig Murray. The U.S.-China Economic and Security Review Commission, "*China and International Law in Cyberspace*", 6 May 2014. http://www.uscc.gov/Research/china-and-international-law-cyberspace.

Use of Force

Koh, Harold Hongju. State Department Legal Advisor. "The Obama Administration and International Law" Annual Meeting American Society of International Law (ASIL), (March 25, 2010), Read Subsection III. B., "The Law of 9/11" http://www.state.gov/s/l/releases/remarks/139119.htm.

_____. "Statement Regarding Use of Force in Libya" Annual Meeting ASIL, (March 26, 2011), http://www.asil.org/am11/pdfs/haroldkoh/2011_Libya_Harold _Koh_ASIL_Remarks.pdf.

War Powers Resolution of 1973, 50 U.S.C. §§1541-1548.

OPERATIONAL LAW CASE STUDY (Seminar)

> *You will usually find that the enemy has three courses open to him, and of these he will adopt the fourth.*
>
> — Field Marshal Helmuth von Moltke, the Elder

A. Focus:

This seminar provides the opportunity to apply operational law from the courses prior OPLAW lectures and readings to a real-world maritime conflict and to discuss how operational commanders derive authorities for action and force employment within the context of specific military operations.

B. Objectives:

- Analyze the logic underpinning the development of an operational idea into an operational design through the application of legal concepts such as the Law of the Sea and Law of Armed Conflict.
- Apply the CJCS SROE in a factual context involving employment of military forces.
- Evaluate the evolution of the operational authorities for employment of force during the several years of the Tanker Wars (1980-1988).

C. Background:

See JMO Sessions 16 and 17.

The point of contact for this session is Captain Robert A. Sanders, JAGC, USN, C-424.

D. Questions:

Students will work individually to prepare short answers to assigned scenario questions and then lead seminar discussion on their assigned questions.

E. Products:

An in-seminar discussion using a real-world case study and selected questions intended to synthesize the concepts of operational law.

F. Required Reading:

U.S. Department of Defense, General Counsel, DoD Law of Warfare Manual, 2015. Chapter XIII- Naval Warfare. Review. (**NWC 1208**).

U.S. Department of the Navy. Naval Warfare Publication 1-14M, *The Commander's Handbook on the Law of Naval Operations.* July 2007. Review. (**Issued**)

U.S. Naval War College. "CJCS Standing Rules of Engagement and Rules for the Use of Force." Newport, RI: Extracts from CJCS 3121.01B. Review. **(NWC 1062A).**

Walker, George K. Selected Readings from *The Tanker War, 1980–88, Law and Policy.* U.S. Naval War College International Law Studies, Volume 74 (2000), Edited by CDR Dan Crouch. Read. (**NWC 3004B**).

G. Supplementary Reading:

BBC video, "Shooting down of Iran Air 655"
  Part 1 of 3: https://www.youtube.com/watch?v=Onk_Wi3ZVME
  Part 2 of 3: https://www.youtube.com/watch?v=50sYFs6p7lk
  Part 3 of 3: https://www.youtube.com/watch?v=Rgu5FNtpBzM

Cordesman, Anthony H. "Iran, Oil, and the Strait of Hormuz," Center for Strategic and International Studies (CSIS) (March 26, 2007), available at http://csis.org/publication/iran-oil-and-strait-hormuz (accessed June 24, 2015).

Council on Foreign Relations. *Crisis Guide: Iran*, CFR Website, http://www.cfr.org/interactives/CG_Iran/embed.html (accessed June 24, 2015).

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

Islamic Republic of Iran Mission to the UN. "Address by H.E. Dr. Mahmoud Ahmadinejad President of the Islamic Republic of Iran before the United Nations General Assembly. (September 23, 2011), available at http://gadebate.un.org /sites/default/files/gastatements/66/IR_en.pdf . (accessed June 24, 2015)

O'Neil, William and Caitlin Talmadge. "Costs and Difficulties of Blocking the Strait of Hormuz." *International Security* 33, no. 3 (Winter 2008/09): 190–198.

Talmadge, Caitlin. "Closing Time: Assessing the Iranian Threat to the Strait of Hormuz," *International Security* 33, No. 1 (Summer 2008): 82–117.

The President. *Remarks by President Obama in Address to the United Nations General Assembly* (September 21, 2011), http://www.whitehouse.gov/the-press-office/2011/09/21/remarks-president-obama-address-united-nations-general-assembly.

THE OBJECTIVES OF SEAPOWER (Seminar)

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*My operation 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,
November 15, 1781

A. Focus:

This session focuses on the role naval forces play in achieving national objectives
across the spectrum from peacetime to major combat. In this session we examine the range
of tasks naval forces accomplish and the objectives those tasks aim to achieve. We also
examine how the objectives achieved by naval forces contribute to the accomplishment of
higher theater or strategic objectives. Sea control, the necessary condition for naval forces to
achieve military objectives in wartime, will be explored in the following session.

B. Objectives:

- Distinguish between the objectives naval forces achieve and the methods by which
  they achieve those objectives.
- Analyze how the accomplishment of naval objectives contributes to theater and
  strategic objectives across the spectrum from peacetime to major combat.
- Evaluate the *Cooperative Strategy for 21st Century Seapower*.

C. Background:

Naval forces play an important role in achieving objectives across the range of
military operations. Mahan believed the proper objective of a navy was command of the sea
and that command was achieved through destruction of the enemy fleet. Corbett saw
command of the sea as more of a means to an end than an end unto itself, emphasizing the
use of naval power in achieving political objectives and supporting the army ashore. Naval
forces operate full time in the global commons, not just when deployed for combat. This
means that naval forces must be ready to respond to hostile threats at all times. It also means
that naval forces are uniquely postured to contribute to national security and prosperity
interests on a daily basis.

In today's complex and interconnected maritime operating environment, naval forces
support an array of national interests through a diverse range of tasks and activities. As
stated in the 2015 *Cooperative Strategy for 21st Century Seapower* (CS21), "Naval forces use
the global maritime commons as a medium of maneuver, assuring access to overseas regions,
defending key interests in those areas, protecting our citizens abroad, and preventing our
adversaries from leveraging the world's oceans against us." CS21 attempts to capture this

diverse range of naval activities into five essential functions. These are sea control, all domain access, power projection, deterrence, and maritime security. Naval theorists Geoffrey Till and Milan Vego have slightly different ways of conceptualizing the range of naval activities. A full and thorough consideration of what navies contribute to national security and other national interests, and how they do it, is important if commanders and planners are to make the best use of naval assets in theater.

The point of contact for this session is Captain Michael Junge, USN, C-429

D. Questions:

Why do nations build and maintain navies? To what degree does the Mahanian concept of command of the sea apply today?

How do the objectives of naval forces in wartime contribute to the overall war effort?

Compare and contrast sea control to maritime security. Can sea control be exercised in peacetime? Why or why not?

How do the key components of the maritime operating environment (political/legal, military, social, economic, environmental, etc.) enable or constrain the operational planner?

What were the objectives of the U.S. and Japanese naval forces during the Philippines Campaign? How did land and maritime objectives differ? Were they mutually supporting?

E. Products
None.

F. Required Reading:

Luke, Ivan T. "Legitimacy in the Use of Seapower" Newport, RI: U.S. Naval War College, Joint Military Operations Department, July 2015. Read. **(NWC 2133).**

Till, Geoffrey. *Seapower: A Guide for the Twenty-First Century*. 3^d ed. London and New York: Routledge, 2013. Read pp. 27-44. **(Issued).**

U.S. Navy, U.S. Marine Corps, U.S. Coast Guard. *A Cooperative Strategy for 21st Century Seapower*. Washington, DC: Headquarters, U.S. Navy, Marine Corps, and Coast Guard. March 2015. Read. **(NWC 2134).**

Vego, Milan. "On Naval Power." *Joint Force Quarterly*, 3rd Quarter 2008: 8-17. Read. **(NWC 4072)**

G. Supplementary Reading:

Brodie, Bernard. *A Guide to Naval Strategy*. 5th ed. New York: Frederick A. Praeger, 1965.

Cable, James, and James Cable. *Gunboat Diplomacy, 1919-1991: Political Applications of Limited Naval Force*. New York: St. Martin's Press, 1994.

Corbett, Julian S. *Some Principles of Maritime Strategy.* Annapolis, Md: Naval Institute Press, 1992.

Eaglen, Mackenzie M., James Dolbow, Martin E. Andersen, and James J. Carafano. *Securing the High Seas: America's Global Maritime Constabulatory Power*. Heritage Special Report SR-20. Washington, DC: The Heritage Foundation, 2008.

Hill, J.R. *Maritime Strategy for Medium Powers*. Annapolis, MD: Naval Institute Press, 1986.

Hughes, Wayne. *Fleet Tactics and Coastal Combat.* 2^d ed. Annapolis, MD: Naval Institute Press, 2000.

Rosinski, Herbert. *The Development of Naval Thought.* Edited by B. Mitchell Simpson III. Newport, R.I.: Naval War College Press, 1977.

Thomas, Guy. "Maritime Domain Awareness: There Is No Silver Bullet, Not Now, Not in the Foreseeable Future." *Proceedings of the Marine Safety and Security Council* 63, no.3 (Fall 2006): 24-26.

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THE STRUGGLE FOR SEA CONTROL (Seminar)

Control of the seas means security. Control of the seas means peace.
Control of the seas can mean victory. The United States must control the sea if
it is to protect our security.

—President John F. Kennedy

A. Focus:

This session focuses on the struggle for sea control in wartime. Sea control allows naval forces freedom of action in achieving military objectives against an opposing force. This session examines sea control as a theoretical construct as well as methods stronger and weaker sides use to obtain or deny sea control in a maritime theater.

B. Objectives:

- Analyze sea control from a theoretical perspective.
- Examine the methods of obtaining, maintaining, exploiting, and denying sea control.
- Critique the sea control efforts of the opposing sides during the Philippines campaign.

C. Background:

The previous session examined the objectives and methods of naval forces across the spectrum of peace and war. This session focuses on sea control, the wartime condition bounded in time and space where a naval force accomplishes military tasks without serious opposition from the enemy. Sea control is necessary to accomplish other objectives, not simply an end unto itself.

Historically, the objective of a fleet was to obtain and maintain what was called command of the sea (now called "maritime supremacy" in joint terminology). The meaning of this term changed significantly with the advent of submarines, aircraft, and guided missiles. The term we teach, *sea control*, more accurately conveys the true state of affairs in a war at sea. It is extremely difficult to command the seas—to assure one's own unfettered use or to deny completely such use to a strong and resourceful opponent. Sea control essentially means the ability of one's fleet to operate with a high degree of freedom in a sea or ocean area for some period of time. A likely objective for a weaker opponent at sea would be *sea denial* where a naval force precludes or interferes with the other's ability to conduct operations but does not, or is not capable of, conducting their own operations.

Sea control is not analogous to occupying or capturing territory on land. The sea or ocean area is invariably abandoned by the victorious side regardless of whether the opponent was completely defeated or not. Once obtained, effort must always be expended to maintain sea control. As long as an enemy naval force can challenge sea control, control remains a tentative condition.

Most importantly, sea control is only meaningful in relation to military objectives. Sea control is obtained only in the place, time, and to the degree necessary to accomplish specific objectives. Sea control can be categorized in terms of operational art: factors time, space, and force. In terms of factor time, sea control may be seen as permanent or temporary; in terms of factor space, it may be general or local; and in terms of force it may be absolute or contested. In practice, degrees of sea control are difficult to define.

The primary methods of obtaining sea control include destruction of the enemy fleet, either through fleet battle at sea, attrition, or destruction in port, and neutralization of the enemy fleet through blockade, choke point control, or seizure of bases. Sea denial methods include attrition, counter-blockade, choke-point denial, and coastal/littoral defense.

The point of contact for this session is Captain Michael Junge, USN, C-429.

D. Questions:

What is sea control and why does one obtain it?

What are the various degrees of sea control and how do you differentiate between them?

How are the terms "sea control" and "sea denial" related?

Discuss the main methods used by opposing sides to obtain, maintain, exploit, deny and dispute sea control.

How does a commander balance obtaining and maintaining sea control with risk?

How would you evaluate the effectiveness of U.S. and Japanese planning and execution in the struggle for sea control during the Philippines campaign?

E. Products:
None.

F. Required Reading:

Till, Geoffrey. *Seapower: A Guide for the Twenty-First Century*. 3nd ed. New York: Routledge, 2013. Read pp.144-156. **(Issued).**

Vego, Milan. *Operational Warfare at Sea*. London and New York: Routledge, 2009. Read pp. 21-48. **(Issued)**

G. Supplementary Reading:

Barnett, Roger. "Technology and Naval Blockade." *Naval War College Review* 58, no. 3 (Summer 2005): 87-98.

Brodie, Bernard. *A Guide to Naval Strategy*. 5th ed. New York: Frederick A. Praeger, 1965.

Caravaggio, Angelo N, LtCol, Canadian Forces. "The Attack at Taranto." *Naval War College Review* (Summer 2006).

Corbett, Julian S. *Some Principles of Maritime Strategy.* Annapolis, MD: Naval Institute Press, 1992.

Douglas, A. H., CAPT, USN. "Employment of Aviation in Naval Warfare." Newport, RI: U.S. Naval War College, 14 December 1939.

Elleman, Bruce A., and S.C.M Paine, eds. *Naval Blockades and Seapower: Strategies and counter-strategies, 1805-2005*. London and New York: Routledge, 2006.

Lautenschlager, Karl. "The Submarine in Naval Warfare, 1901-2001." *International Security* 11, no. 3 (Winter 1986/1987).).

Mahan, Alfred Thayer. *The Influence of Sea Power Upon History, 1660–1783*. New York: Dover, 1987, reprint of 1890 edition.

Moineville, Hubert. *Naval Warfare Today and Tomorrow*. Oxford, UK: Basil Blackwell, 1983.

Papadopoulus, Randy. "Between Fleet Scouts & Commerce Raiders: Submarine Warfare Theories and Doctrine in the German and U.S. Navies, 1939–1945." *Undersea Warfare* (Summer 2005).

Rosinski, Herbert. *The Development of Naval Thought.* Ed. B. Mitchell Simpson III. Newport, RI: Naval War College Press, 1977.

Scheina, Robert L. *The Malvinas Crisis*, *Latin America: A Naval History 1810–1987*: Annapolis, MD: Naval Institute Press, 2003.

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THE FALKLANDS / MALVINAS CONFLICT (Lecture and Exercise)

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.' Joint-service liaison and staff work left much to be desired.

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

A. Focus:

This lecture and exercise serve as the synthesis event for the components of operational art explained and discussed in preceding sessions. The emphasis is on the decisions and actions of operational-level commanders on both sides of this conflict and how they could have been different had they a deeper understanding of operational art.

B. Objectives:

- Analyze and evaluate how commanders and staffs applied operational art in a historical case study.
- Apply concepts from operational law in order to evaluate the legal issues in a historical case study.
- Analyze the operational lessons valid for the employment of modern, multinational and joint forces.

C. Background:

This case study is presented in two consecutive sessions starting with a faculty presentation of the historical/strategic background to the conflict. There will also be a 60-minute film drawing out elements from both sides involved in the conflict. Students will have seminar time available to study the case materials and develop student-led discussions of the assigned questions. The final session is devoted to student-led discussions of the case study.

The goal of this session is to provide in-depth discussion and analysis of major aspects of the Falklands conflict of 1982 from an operational and theater-strategic perspective. This session will reinforce the aspects of operational art 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.

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 moderators will assign specific responsibilities for student discussion of the case.

The point of contact for this session is Commander Adrian Fryer, Royal Navy, C-407.

D. Questions:

Applying the principal elements of operational design, analyze the Falklands/Malvinas conflict. How did each side use the concepts of operational design in developing their plan?

Were the objectives for each side appropriate? Why?

How well did each side employ forces relative to theater geometry to achieve their objectives?

Critique the British and Argentinian operational theater organization and the relevant command structures. What would you have done differently?

How well did each side apply the aspects of operational and maritime law?

What major operational lessons learned can the United States derive from this conflict?

E. Products:

Synthesis of operational art concepts through the use of an analytical framework in order to discuss and answer moderator assigned questions.

F. Required Reading:

Hime, Douglas N. "The Falklands-Malvinas Case Study. Newport, RI: Naval War College, June 4, 2010. Read. **(NWC 1036).**

G. Supplementary Reading:

Argentino. Ejército. Selected extracts from *Informe official del Ejército Argentino: Conflicto Malvinas, Tomo II*. Buenos Aires: Ejército Argentino, 1983.(The Official Report of the Argentine Army, Vol. II).

Clapp, Michael. *Amphibious Assault Falkland Islands: The Battle of San Carlos Water*. Annapolis: Naval Institute Press, 1996.

Freedman, Lawrence. *The Official History of the Falklands Campaign*—Vol 2. London: Routledge, Taylor & Francis Group, 2005.

Hastings, Max, and Simon Jenkins. *The Battle for the Falklands*. New York: Norton, 1983.

Thompson, Julian. "Amphibious Logistics—Falklands 1982." Extract from Chapter 8 in *The Lifeblood of War: Logistics in Armed Conflicts.*

_____. *No Picnic: 3 Commando Brigade in the South Atlantic: 1982*. New York: Hippocrene, 1985.

U.K., The Defence Council. "The Falklands War 1982 from the Viewpoint of Doctrine."

Van der Bijl, Nick, and David Aldea. *5th Infantry Brigade in the Falklands 1982*. Barnsley, West Yorkshire: Leo Cooper, 2003.

Woodward, Sandy. *One Hundred Days—The Memoirs of the Falklands Battle Group Commander*. Annapolis: Naval Institute Press, 1992.

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OPERATIONAL ART EXAMINATION (Individual Effort)

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*No wonder then, that war, though it may appear to be uncomplicated,
cannot be waged with distinction except by men of outstanding intellect.*

—Clausewitz, *On War*

A. Focus:

This session is intended to permit the student to demonstrate a synthesis of the introductory and theory of operational warfare sessions presented to date and to demonstrate further higher order thinking skills.

B. Objectives:

- Synthesize operational art concepts through the analysis of a historical case study.
- Create a cogent response to the examination questions that demonstrate an internalization of the various concepts of operational art.

C. Background:

Written examinations serve three fundamental purposes: to evaluate student understanding of a given subject, to evaluate the student's ability to think critically and respond to a complex question, and last, to evaluate the faculty's ability to convey information and to create new knowledge. This session presents the student with the opportunity to demonstrate mastery of the first two purposes stated above and further allows the moderators to ensure that no intellectual gaps exist in student learning to this point.

Students will be provided with a case study containing sufficient information to address the questions presented. This case study will be issued by your moderators to permit sufficient time to prepare. Time is scheduled for student preparation, and students are strongly encouraged to prepare as a seminar. The examination is scheduled to be issued on 12 September at 1145. Exams will be returned to the moderators NLT 1200 the following day. Grading criteria for the operational art examination may be found on pages xviii-xix of this syllabus.

The point of contact for this session is Professor Steve Forand, C-407.

D. Questions:

See examination question sheet.

E. Products:

A written examination response that demonstrates student mastery of the course concepts.

F. Required Reading:

A case study will be issued prior to the examination with sufficient time for students to conduct a thorough analysis and prepare for the examination.

G. Supplementary Reading:
None.

ADAPTIVE PLANNING AND EXECUTION (APEX)
Part 1 (UNCLASSIFIED) and Part 2 (SECRET) (Seminar)

In war, nothing is achieved except by calculation. Everything that is not soundly planned in its detail yields no result.

—The Maxims of Napoleon

A. Focus:

In previous sessions you examined operational art and discovered how it is used to develop an operational design to achieve assigned objectives. This session introduces the Adaptive Planning and Execution (APEX) system and explores how this system supports plans development. APEX Part 1 provides an unclassified 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), the Joint Staff, and the service chiefs and their staffs in translating national policy objectives into definitive planning guidance for the combatant commanders and their service component commanders. Particular attention is given to the role of the *Guidance for Employment of the Force* (GEF) and its relationship to the *Joint Strategic Capabilities Plan* (JSCP), as well as the combatant commander's campaign plan. Later, in APEX Part 2, U.S. students will have an opportunity to review the planning guidance documents during a classified session.

B. Objectives:

- Evaluate the application of the strategic military planning process in support of U.S. planning for Operation IRAQI FREEDOM (OIF).
- Analyze the integration of strategic military guidance with other instruments of power in the development of a plan to support of national objectives and the friction experienced in the process.
- Assess how campaigns and operations support the attainment of national objectives.
- Evaluate the capabilities and limitations of interagency processes and of all services (own service, other services—to include Special Operations Forces (SOF)) to meet planning objectives.
- Using OIF planning as an example, evaluate critical thinking and decision making by strategic leaders.

C. Background:

As mandated by Title 10 USC, the Secretary of Defense and the CJCS are responsible for translating national security objectives into definitive planning guidance for the combatant commanders. The service chiefs and their staffs are also involved in the process, both as contributors to the joint planning guidance and in deriving service plans that provide

trained and equipped forces to support that process. Combatant commanders are responsible for developing strategies for their commands and the development and production of a campaign plan with supporting operation plans (OPLANs) and concept plans (CONPLANs).

APEX provides the overall framework for the military planning process. Prior to APEX, the Joint Operation Planning and Execution System (JOPES) served as the strategic planning framework. JOPES was developed during the Cold War to give senior level decision-makers the tools to monitor, analyze, and control events during both planning and execution of joint operations. Shortly after the terrorist attacks on 9-11, it became apparent to the Secretary of Defense that the existing planning system was not nimble enough to react to emerging needs. The Secretary of Defense grew dissatisfied with the static nature of the JOPES process and its inability to adjust quickly to changing circumstances, guidance, and force availability. Secretary of Defense Rumsfeld directed the development of an Adaptive Planning (AP) capability that could incorporate those qualities. This framework became APEX, a concept that is still evolving as new technologies and processes are developed and incorporated.

In recent years there has been a proliferation of documents providing narrow elements of strategic guidance to combatant commanders. These individual documents, often created without close coordination with other strategic policy documents, contributed to an already unwieldy system of planning. The GEF (classified Secret), released for the first time in 2008, provided a single document presenting strategic guidance once found in five separate directives (Contingency Planning Guidance, Security Cooperation Guidance, Global Force Management Guidance, Global Defense Posture and Policy Guidance for the Employment of Nuclear Weapons) and directs combatant commanders to develop a campaign plan to support achievement of theater and functional command end states. Publications evolve, however; the 2015 GEF emphasizes threat-based, integrated planning and the Contingency Planning Guidance is now published separately. More detail will follow in NWC 2061F, a required reading for this session.

Reflecting another innovation, the GEF is developed concurrently with the JSCP, ensuring a close linkage between the two documents. The JSCP is the vehicle by which the CJCS initiates the deliberate planning cycle. It includes regional objectives and planning assumptions; it specifies the type of plan for each task; and it 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. Deliberate planning is a complex and lengthy process, particularly when the combatant commanders are required to develop Time-Phased Force Deployment Data (TPFDD). The plans developed in support of the JSCP are integral to the combatant commander's theater campaign plan.

The point of contact for this session is Professor Mike McGauvran, C-414.

D. Questions:

Why expend a great deal of effort in the planning process, including development of detailed force deployment information, when contingency plans always change prior to execution?

Why has the DoD developed the concept of adaptive planning, and how does a combatant commander incorporate that concept into his region's planning?

How are limited resources and forces matched to planning requirements necessary to support the national security strategy and objectives?

What is the purpose of Global Force Management (GFM) and its implications to the Combatant Commander and his staff?

In support of the OIF readings in *Fiasco* and *Cobra II* and using the "JMO Operational Leadership Prevailing Principles / Competencies" discussed in the Theater Strategic Leadership session:

- Assess General Franks' decisions during his staff's formulation of the plan for OIF and his relationships with:
  - Secretary Rumsfeld
  - USCENTCOM staff
  - JCS
  - Subordinate Commanders

- What was the role of external influences to CENTCOM's planning and how might Adaptive Planning have mitigated some of CENTCOM's challenges?

E. Products:
None**.**

F. Required Reading:

<u>APEX Part 1 (Unclassified)</u>

Office of the Secretary of Defense. *Sustaining U.S. Global Leadership: Priorities for 21st Century Defense*. Washington, DC: January 5, 2012. Scan. (**NWC 2111**). .

Santacroce, Michael. A. *Joint /Interagency SMARTbook 1: Joint strategic and operational Planning*. Lakeland, FL: The Lightning Press, 2014. Read Chapters 2 and 3. **(Issued).**

Sweeney, Patrick C. "A Primer for: *Guidance for Employment of the Force* (GEF), *Joint Strategic Capabilities Plan* (JSCP), Global Force Management (GFM) and the *Adaptive Planning and Execution* (APEX) *System*." Newport, RI: U.S. Naval War College, December 2015. Read. (**NWC 2061F**).

U. S. Office of the Chairman of the Joint Chiefs of Staff. *Joint Operation Planning*, Joint Publication (JP) 5-0, Washington, DC: CJCS, August 11, 2011. Review Chap I-1 thru I-7, Chap II-1 thru II-39 and H-1 thru H-8.

As designated by seminar moderators, half the seminar should read the *Cobra II* reading and the other half *Fiasco*. Consider the OIF questions in paragraph D above as you complete this portion of the reading assignment.

Gordon, Michael R., and General Bernard E. Trainor. *Cobra II: The Inside Story of the Invasion and Occupation of Iraq*. New York: Pantheon Books, 2006. Hard Cover Edition: Read 24-54; 66-74; 86-94. Soft Cover Edition Read pp. 27-42; 76-85; 99-108 **(Issued).**

Ricks, Thomas. *Fiasco: The American Military Adventure in Iraq.* New York: Penguin Books, 2007. Read pp. 32-45; 66-76; 78-80; 104-111. **(Issued).**

APEX Part 2 (SECRET)

U.S. students should not bring laptops, iPads, cell phones, or any other wireless devices into the seminar room during this class. The classified readings reflected below will be distributed for review in the seminar room.

Guidance for Employment of the Force (GEF) (SECRET)

Joint Strategic Capabilities Plan (JSCP) (SECRET)

Global Force Management Implementation Guidance (GFMIG) (SECRET)

USPACOM Theater Campaign Plan (SECRET)

G. Supplementary Reading:

U.S. Office of the Chairman, Joint Chiefs of Staff. *Joint Operation Planning and Execution System* (JOPES), Volume I, Planning Policies and Procedures, CJCSM 3122.01A, Washington, DC: CJCS, September 29, 2006.

_____. *Adaptive Planning and Execution (APEX) Planning Formats and Guidance*, CJCSM 3130.03. Washington, DC: CJCS, October18, 2012.

Wade, Norman M. "Chapter 3, Joint Operation Planning." *The Joint Forces Operations & Doctrine SMARTbook: Guide to Joint, Multinational & Interagency Operations*. 3rd ed. Lakeland, FL: The Lightning Press, 2012. **(Issued).**

THE JOINT OPERATION PLANNING PROCESS (JOPP)
(Seminar)

The one who is to draw up a plan of operations must possess a minute knowledge of the power of his adversary and of the help the latter may expect from his allies. He must compare the forces of the enemy with his own numbers and those of his allies so that he can judge which kind of war he is able to lead or to undertake.

—Fredrick the Great, Letter ,1748

A. Focus:

This session builds on the foundation established in the Operational Art, Problem Solving, APEX, and Design sessions. It provides a review of planning employed in the Joint Operation Planning Process (JOPP), as well as a discussion on how to lead a joint planning effort.

B. Objectives:

- Analyze the Joint Operation Planning Process.
- Understand the responsibilities of the commander and joint planning group (JPG) in leading the JOPP.

C. Background:

During the previous APEX and Design sessions we examined conceptual planning. While design allows the commander and his staff to gain a greater understanding of the environment through informed discourse, ultimately this conceptual design methodology must inform a planning process allowing for the development of viable plans and orders. In both deliberate planning and crisis action planning (CAP), the JOPP is the orderly and analytical method used by DoD to transform strategic guidance into a viable plan or order. It is commander driven, and provides a common vocabulary and organizational framework that enable effective collaboration and integration for solving complex tasks.

As discussed earlier, APEX attempts to link deliberate planning to crisis action planning. The planning techniques employed during both deliberate and CAP, therefore, share many attributes. To effectively supervise or lead a joint planning effort, senior officers must have a holistic appreciation of military planning in general. In addition to having a solid foundation in the JOPP, one must also have an appreciation of the many intangibles often encountered when supervising or leading a joint planning group (JPG).

Joint planning requires bringing focused teams together from within the joint force headquarters, interagency and often coalition and international organization partners, and coordination with higher, adjacent, and subordinate commands to translate strategic guidance

and objectives into developing options for the commander and ultimately publish plans and orders. In crisis-action planning, a joint planning group must be able to work effectively under time-constraints across diverse commands, often with vague initial guidance, and produce timely orders to subordinates to accomplish the joint mission. Those leading JPGs must understand group dynamics, executive communications with senior leadership, and the complexity of planning across multiple event horizons between higher and subordinate levels of command.

During this session, students will review the JOPP. Additionally, you will consider some of the supporting activities / processes / products that inform the JOPP, as well as some of the common pitfalls often encountered leading the JOPP. We will draw from case studies in the previous APEX session's readings, and include another crisis-action case study to discuss, analyze, and evaluate joint operational planning and critical factors that JPG leaders must consider when developing plans. Students who need a refresher on the JOPP are encouraged to view the Gray Guard video, May 2013, a fictional crisis-action planning scenario.

The point of contact for this session is Professor Jamie Gannon, C-424.

D. Questions:

What are the theoretical underpinnings of the JOPP?

How does JOPP link conceptual planning and detailed planning?

What are the unique leadership considerations when leading a joint planning group?

How does JOPP relate to Design as a methodology?

Is there a better method to solve military problems?

E. Products:

Students will be assigned to teams to analyze planning dynamics in the historical case studies. Students will lead seminar discussion based on their findings and analysis. A moderator memo will provide breakout group assignments and additional questions.

F. Required Reading:

Department of Military Strategy, Planning, and Operations. "Campaign Planning Handbook: Academic Year 2014 (Extract)." U.S. Army War College, Carlisle Barracks, PA: 2014. Review Chapter 5, pp. 59-99. **(NWC 2082)**.

Deployable Training Division, Joint Staff J7. "Insights and Best Practices: Joint Operations, 4th Edition." Suffolk, VA: March, 2013. Read pp. 18-71. **(NWC 2098).**

_____. "Insights and Best Practices Focus Paper: Design and Planning, 1st Edition." Suffolk, VA: July 2013. Read pp. 1-25. (**NWC 2157**).

Gordon, Michael R., and General Bernard E. Trainor. *Cobra II: The Inside Story of the Invasion and Occupation of Iraq*. New York: Pantheon Books, 2006. <u>Hard Cover Edition:</u> Review 24-54; 66-74; 86-94; Read pp. 97-108 and 457-469. <u>Soft Cover Edition</u> Review pp. 27-42; 76-85; 99-108; Read pp.111-124, 524-534 **(Issued).**

Ricks, Thomas. *Fiasco: The American Military Adventure in Iraq.* New York: Penguin Books, 2007. Review pp. 32-45; 66-76; 78-80; 104-111; Read pp. 115-135, 154-172. **(Issued).**

Santacroce, Michael. A. *Joint /Interagency SMARTbook 1: Joint Strategic and Operational Planning*. Lakeland, FL: The Lightning Press, 2014. Read Chapter 9. **(Issued).**

U.S. Naval War College. *Joint Operation Planning Process (JOPP) Workbook*. Joint Military Operations Department, Newport, RI: U.S. Naval War College, 2013. Scan. **(NWC 4111J w/ch1)**. **(Issued).**

U.S. Office of the Chairman, Joint Chiefs of Staff. *Joint Operation Planning*, Joint Publication (JP) 5-0, Washington, DC: CJCS, 11 August 2011. Read Chapter IV.

G.   Supplementary Reading:

Hooker, Gregory. *Shaping the Plan for Operation Iraqi Freedom: The Role of Military Intelligence Assessments*. Washington, D.C.: Washington Institute for Near East Policy, 2005.

U.S. Department of the Navy. *Navy Planning,* Naval Warfare Publication (NWP) 5-01, Norfolk, VA: Department of the Navy, December, 2013.

U.S. Naval War College. *Gray Guard* (**Video**), May 2013. View**. Available on BlackBoard.**

U.S. Office of the Chairman, Joint Chiefs of Staff. *Joint Intelligence Preparation of the Operational Environment,* Joint Publication (JP) 2-01.3, Washington, DC: CJCS, June 16, 2009.

Wade, Norman M. *The Joint Forces Operations & Doctrine SMARTbook: Guide to Joint, Multinational & Interagency Operations*. 3rd ed. Lakeland, FL: The Lightning Press, 2012. **(Issued).**

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**INTELLIGENCE FOR OPERATIONAL PLANNING
AND DECISION-MAKING (Seminar)**

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*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*

A. Focus:

This session reinforces the key role intelligence plays as an operational function and examines how intelligence supports planning. It also provides a broader view of the use and value of intelligence to decision-makers across the U.S. government; from supporting national strategy, diplomacy, and military R&D, down to the operational and tactical levels of warfare. Within the overall JMO curriculum, this session supports a more detailed student exploration of the concept of Design during the Capstone exercise.

B. Objectives:

- Evaluate the roles and responsibilities of intelligence and the U.S. Intelligence Community (IC) as they relate to supporting national/strategic, theater/operational and even component/tactical planning and decision-making.
- Understand how the intelligence process is synchronized to support operational decision-making and Joint Planning/Design, specifically towards a more comprehensive understanding of the adversary and the operational environment.
- Comprehend the roles and responsibilities of the commander and the intelligence officer in the intelligence process at the joint operational level.
- Assess how intelligence has been utilized – optimally or less so – in historical context, to determine enduring lessons and consider implications for future joint military planning and operations.

C. Background:

History is replete with evidence of military and political leaders' quests for detailed information regarding their enemies. From Sun Tzu and Alexander the Great to the present day, a leader's thirst for information to 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 to its current status today, consisting of 17 federal agencies with significant intelligence sections that comprise the overall U.S. Intelligence Community. As one of the recommendations from the 9/11 Commission, and in an attempt to optimally manage and coordinate these intelligence operations, Congress and former President George W. Bush established a Director of National Intelligence (DNI) in 2004. The Director also presides over the National Intelligence Council (NIC), which is principally chartered to produce National Intelligence Estimates (NIE).

The U.S. Intelligence Community covers a broad waterfront, from providing intelligence on a daily basis to the President and key personnel in the National Security Council and cabinet, to informing the theater-wide plans and operations of our geographic and functional combatant commanders, all the way down to providing actionable intelligence at the tactical level. While the CIA and the NIC, guided by the DNI, principally provide intelligence to national-level decision-makers, it is the Joint Intelligence Officer, or J2, who is charged to provide intelligence to the Joint Force. This Joint Force can be at the Joint Chiefs, combatant command, Joint Task Force, or Joint Component level. It is at the theater-strategic and operational levels—the geographic combatant commander, JTF, and Joint Component level—that intelligence arguably plays a key role within the U.S. military. Operational intelligence supports military strategy, theater campaign plans, joint operations, and tactical actions in all domains.

To this end, joint 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 joint and multinational operations. This process is termed the Joint Intelligence Preparation of the Operational Environment (JIPOE). 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 (IC) brings to the joint force and military 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. Yet 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 that senior decision-makers and staff planners alike be critical consumers of intelligence, partnering closely with intelligence professionals and organizations to ensure that the adversary and the operational environment are as well analyzed and comprehended as possible before committing forces to battle.

The point of contact for this session is Captain Fred Turner, USN, C-430.

D. Questions:

What is operational intelligence? How does it differ from strategic and tactical intelligence?

How is the intelligence process synchronized to support operational decision-making and Joint Planning/Design?

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

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?

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

Proponents of the concept of design stress the significance of thoroughly understanding the operational environment prior to detailed joint planning, much less operations. Is this the primary responsibility of intelligence? What is the role of intelligence in design? Is it any different from the JIPOE?

E. Products:

Students will be assigned to teams to analyze optimum and sub-optimum incorporation of intelligence into planning and operations in the historical case studies. Students will lead seminar discussion based on their findings and analysis.

F. Required Reading:

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

Turner, Michael. *Why Secret Intelligence Fails*. Washington, DC: Potomac Books Inc., 2006. Read pp. 1-16. (**NWC 3194**).

U.S. Office of the Chairman, Joint Chiefs of Staff. *Joint Intelligence,* Joint Publication (JP) 2-0. Washington, DC: CJCS, October 22, 2013. Read Executive Summary and Chapter III. Scan Chapters I and II.

_____. *Joint Task Force Headquarters,* Joint Publication (JP) 3-33. Washington, DC:CJCS, July 30, 2012. Read Chapter VI.

_____. *Joint and National Intelligence Support to Military Operations,* Joint Publication (JP) 2-01. Washington, DC: CJCS, January 5, 2012. Read Chapter IV.

_____. *Joint Intelligence Preparation of the Operational Environment,* Joint Publication
(JP) 2-01.3. Washington, DC: CJCS, May 21, 2014. Read Executive Summary.

Your moderator will assign the readings below individually.

Flynn, Michael T. "Fixing Intel: A Blueprint for Making Intelligence Relevant in
Afghanistan." Voices from the Field, Center for New American Study. January 2010.
(NWC 2081).

Ford, Christopher A., and David A. Rosenberg. "The Naval Intelligence Underpinnings of
Reagan's Maritime Strategy." *Journal of Strategic Studies* 28, no. 2 (Apr 2005):
379-409. **(NWC 4141)**

Shuster, Richard. " Intelligence, Leadership, and Decisive Victory at Midway." Joint Military
Operations Department, U.S. Naval War College, 2011. **(NWC 2080).**

G. Supplementary Reading:

Hooker, Gregory. *Shaping the Plan for Operation Iraqi Freedom: The Role of Military
Assessments*. Washington, DC: The Washington Institute for Near East Policy, 2005.

Ilardi, Gaetano Joe. "al Qaeda's Operational Intelligence – A Key Prerequisite to Action."
Studies in Conflict and Terrorism, 31 (2008): 1072-1102. **(NWC 2078).**

Metz, Thomas F. "OIF II: Intelligence Leads Successful Counterinsurgency Operations."
Military Intelligence Professional Bulletin: Jul-Sep 2005; 31, 3 Military Module,
pp. 10-15. **(NWC 2084).**

U.S. National Intelligence Council, *Global Trends 2025*, 2008, U.S. Government Printing
Office, Washington, DC. http://www.dni.gov/nic/NIC_2025_project.html.

Vego, Milan. "Operational Intelligence." *Joint Operational Warfare: Theory and Practice.*
Newport, RI: U.S. Naval War College, 2009. Read VIII-25 to VIII-31.

JOINT OPERATIONAL LOGISTICS
(Seminar)

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 focuses on joint logistics at the theater-strategic and operational levels of war. It addresses the principles of logistics, the geographic combatant commander, and the joint force commander's logistics responsibilities. The session also identifies the key organizations that execute the joint force commander's logistics priorities and their relationship to the United States Transportation Command (USTRANSCOM), Military Services, the Defense Logistics Agency, and the component commanders. Finally, it examines logistics planning considerations.

B. Objectives:

- Comprehend the art and science of planning, sustaining, and executing the use of military resources of the Nation, in conjunction with other instruments of national power, to attain national security objectives.
- Analyze the role and perspective of the combatant commander and staff in developing various theater policies, strategies, and plans, to include joint logistics.
- Evaluate DoD logistics systems and processes by which strategic and operational ends, ways, and means are reconciled, integrated, and applied.
- Evaluate the logistics capabilities and limitations of all Services and SOF in achieving strategic objectives in an integrated environment.

C. Background:

The joint force commander, as well as members of the commander's staff, must have a clear understanding of the capabilities and limitations of operational logistics to successfully plan and execute peacetime operations and missions across the range of military operations. Sustaining our forces throughout the world is a complicated process and requires coordination and synchronization by both supported and supporting commands. Even though logistics is normally a service responsibility, the combatant commander retains Directive Authority for Logistics (DAFL) and must decide if and when it is appropriate to exercise that authority.

This session provides an overview of the fundamentals of operational-level logistics to include key organizations in the Joint Logistics Enterprise (JLEnt), principles of joint logistics, and core logistics functions. It identifies logistics control options that enable the geographic combatant commander to properly execute logistics responsibilities in the operational area. These options include DAFL, Lead Service, Base Operating Support – Integrator (BOS-I), joint logistics boards and offices, Acquisition Cross Service Agreements (ACSA), coalition logistics, and operational contract support (OCS). This session also emphasizes the importance of command relationships in how sustainment is planned and executed at the operational level.

The point of contact for this session is LTC Troy Rittenhouse, USA, C-404.

D. Questions:

Using Operational Art concepts, what was Rommel's Operational Logistics dilemma?

How does the immediacy of the objective (Strategic, Operational, or Tactical) influence how we balance logistics effectiveness and efficiency?

What command and control challenges exist between the Joint Force Commander (JFC), the Joint Force J4, Sustainment Commanders, and other JTF commanders?

Why should a combatant commander be concerned about exercising Directive Authority for Logistics (DAFL) if logistics is an individual service responsibility?

What other options are available to the joint force commander to address the services' sustainment capabilities and limitations to achieve effective operational logistics?

Why should the JFC be concerned about operational contract support?

E. Products:
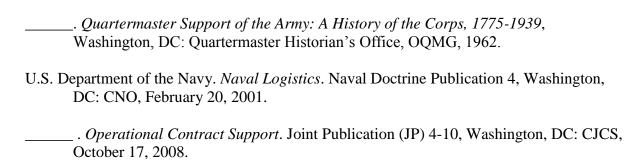None.

F. Required Reading:

Coley, Bradford D. and George Topic. "Operational Contract Support—A Primer." Center for Joint and Strategic Logistics, Sept 10, 2014. Read. **(NWC 2171A)**.

Creveld, Martin van. *Supplying War: Logistics from Wallenstein to Patton*. Cambridge, UK: Cambridge University Press, 1997. Read Chapter 6, pp. 181-192; 199-201. **(Issued).**

U.S. Army Command and General Staff College. "Operational Logistics Planning." Fort Leavenworth, KS. March 2009. Read pp. 4-16 to 4-27. **(NWC 3166)**.

U.S. Office of the Chairman of the Joint Chiefs of Staff. *Doctrine for Logistic Support of Joint Operations*, Joint Publication (JP) 4-0. Washington, DC: CJCS, October 16, 2013. Read Executive Summary (ix–xvi); Chapter I; Chapter II-1 to II-12; Chapter III-1 to III-3 (scan remainder of chapter); and Appendix B. Scan Appendix C, D, and E.

G. Supplementary Reading:

Creveld, Martin van. *Technology and War: From 2000 BC to the Present: A Revised and Expand Edition*, New York: The Free Press, 1989.

Crowell, Benedict and Robert Forest Wilson. *The Armies of Industry, II: Our Nation's Manufacture of Munitions for a World in Arms, 1917-1918*, New Haven: Yale University Press, 1921.

Derrecagaix, *Modern War: Part I, Strategy*, translated by C.W. Foster, Washington, DC: James J. Chapman, 1888.

Eccles, Henry E. *Logistics in the National Defense*. Newport, RI: Naval War College Press, 1997.

Jones, Archer. *The Art of War in the Western World*, Urbana: University of Illinois Press 1987.

Leighton, Richard M. and Robert W. Coakley. *United States Army in World War II: The War Department: Global Logistics and Strategy, 1940-1943*, Office of the Chief of Military History, Department of the Army, Washington, DC: 1955.

Lynn, John A. ed. *Feeding Mars: Logistics in Western Warfare From the Middle Ages to the Present.* Boulder: Westview Press, 1993.

Millett, John D. "Logistics and Modern War," *Military Affairs*, (Fall 1945):193-207.

Morgan, John. "War Feeding War? The Impact of Logistics on the Napoleonic Occupation of Catalonia" *Journal of Military History* 73 (January 2009): 83-116.

Risch, Erna. *United States Army in WWII: The Technical Services: The Quartermaster Corps: Organization, Supply and Services* I, Washington, DC: Department of the Army, 1953.

Romano, Steven T. "Logistics Planning and Collaboration in Complex Relief Operations." *Joint Force Quarterly*, Issue 62 (3rd Quarter 2011).

_____. *Quartermaster Support of the Army: A History of the Corps, 1775-1939*, Washington, DC: Quartermaster Historian's Office, OQMG, 1962.

U.S. Department of the Navy. *Naval Logistics*. Naval Doctrine Publication 4, Washington, DC: CNO, February 20, 2001.

_____ . *Operational Contract Support*. Joint Publication (JP) 4-10, Washington, DC: CJCS, October 17, 2008.

Von der Goltz, Baron Colmar, Philip Ashworth (trans). *The Nation in Arms: A Treatise on Modern Military Systems and the Conduct of War*, London: Hugh Rees Limited, 1913.

STRATEGIC DEPLOYMENT
(Seminar)

Victory is the beautiful, bright-colored flower. Transport is the stem without which it could never have blossomed.

—Winston Churchill, *The River War*, 1899

USTRANSCOM . . . their motto should be "try fighting without us."

—General Henry Shelton

A. Focus:

This session focuses on the U.S. strategic deployment system and how it supports the warfighter. First, the seminar will address the organization and mission of the U. S. Transportation Command (USTRANSCOM) and its component commands. Next, it will examine the United States' ability to deploy in support of global contingencies and identifies the critical relationship between distribution (transportation) and all other sustainment functions at the operational level of war. Finally, the seminar will identify the key organizations which execute the joint force commander's intra-theater and inter-theater lift priorities and their relationship with USTRANSCOM, each Service, the Defense Logistics Agency (DLA), and the component commanders.

B. Objectives:

- Comprehend the art and science of deploying, employing, and sustaining the military resources of the nation, in conjunction with other instruments of national power, to attain national security and mission objectives.
- Understand the unique challenges for each element of the strategic deployment triad.
- Understand the role and perspective of the USTRANSCOM in supporting combatant commanders.
- Comprehend the role and importance of the Time Phased Force Deployment Data/List (TPFDD/L).
- Comprehend the doctrinal responsibilities for intra and inter-theater transportation.

C. Background:

The ability of the U.S. military to successfully carry out its assigned tasks per the National Security Strategy and National Military Strategy depend greatly on its capability to effectively sustain U.S. and multinational forces in a theater of operations (force sustainment includes all supporting activities required to support a deployed force). Strategic mobility encompasses the part of the sustainment process that transports people, equipment, supplies,

and other commodities by land, sea, and air from one theater to another—inter-theater transportation (inside a theater, or intra-theater transport of these materials to the end user is the responsibility of the theater commander). To successfully execute a major operation or campaign, the theater/operational commander must have a clear understanding of the capabilities and limitations of the inter-theater lift systems and capabilities.

USTRANSCOM oversees the strategic deployment process through the Defense Transportation System. The deployment and movement are executed by USTRANSCOM's component commands: Military Surface Deployment & Distribution Command (Army), Military Sealift Command (Navy), and Air Mobility Command (Air Force). The Department of Transportation's Maritime Administration (MARAD) bridges Military Sealift Command, U.S. Flag commercial companies, and domestic unions for sealift procurement and operations. MARAD maintains a fleet of ships to provide surge sealift during war and national emergencies, promotes an adequate U.S. Merchant Marine to meet the Nation's sustainment needs, operates the U.S. Merchant Marine Academy and supports state maritime academies to educate maritime officers, and provides information on training and employment to American merchant mariners.

During planning, the Joint Force Commander's staff must develop a prioritized deployment plan and Joint Reception, Staging, Onward Movement and Integration (JRSOI) plan that supports the commander's operational design . The joint force's detailed movement plan, which includes timing and sequence of deploying and redeploying forces, is communicated to supporting commanders in the Time Phased Force Deployment Data/List (TPFDD/L). The TPFDD/L serves as the commander's primary tool for managing the flow of forces/capability into—and from— the area of operations.

The TPFDD/L uses the Strategic Mobility Triad consisting of pre-positioned material, sealift, and airlift. Each triad component has distinct advantages and disadvantages in terms of response time, expense, availability of assets, and carrying capacity. Sealift and airlift have access to only limited U.S. Government-owned assets, and thus are highly reliant on commercial industry under a variety of programs, including the Civil Reserve Air Fleet (CRAF) and the Voluntary Intermodal Sealift Agreement (VISA).

Finally, resources strategically transported must be distributed within the theater to when and where it is needed. The theater/operational commander is responsible for developing and maintaining an intra-theater distribution network in his operating area that effectively integrates with inter-theater assets.

The point of contact for this session is Lt Col Jennifer Stokes, C-406.

D. Questions:

What are the major planning considerations and challenges facing operational planners in deploying a force to and from a theater of operations? Why?

Explain how the TPFDD/L is used to manage the movement of forces into and out of an area of operations. What are the advantages and/or vulnerabilities of this system?

How does a supported commander interface with USTRANSCOM and other supporting commanders?

What are the relative advantages and disadvantages of each leg of the strategic deployment triad?

How does USTRANSCOM, as the Distribution Process Owner, affect the Joint Force Commander's intra-theater distribution system? Is there a better way?

E. Products:
None.

F. Required Reading:

Dowd, Kenneth S. "Building 'Log Nation' in the U.S. Central Command." Army
     Sustainment (Sep-Oct 10). Read pp. 3-7. **(NWC 2107)**.

Gordon, Michael R., and Bernard E. Trainor. *Cobra II: The Inside Story of the Invasion and*
     Occupation of Iraq. New York: Pantheon, 2006. Hardcover books read pp. 95-101;
     Softcover books read pp. 108-117. **(Issued)**.

U.S. Naval War College, Joint Military Operations Department. *Reference Guide,*
     Forces/Capabilities Handbook. Newport, RI: 2014. Read Strategic Lift Section.
     (NWC 3153P). (Issued).

U.S. Office of the Chairman, Joint Chiefs of Staff. *Deployment and Redeployment*
     Operations, Joint Publication (JP) 3-35. Washington, DC: CJCS, January 31, 2013.
     Read pp. II-1–II-9.

G. Supplementary Reading:

U.S. Office of the Chairman, Joint Chiefs of Staff. *Joint Doctrine for the Defense*
     Transportation System. Joint Publication (JP) 4-01, Washington, DC: CJCS, June 6,
     2013.

_____. *Sealift Support to Joint Operations.* Joint Publication (JP) 4-01.2. Washington, DC:
     CJCS, 29 December 2015.

Wade, Norman M. *The Joint Forces Operations & Doctrine SMARTbook: Guide to Joint,*
     Multinational & Interagency Operations. 4th Revised Edition, Lakeland, FL: The
     Lightning Press, 2015**.**

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COMMAND AND CONTROL (Seminar)

> *Command and control encompasses the exercise of authority,*
> *responsibility, and direction by a commander over assigned and attached forces*
> *to accomplish the mission. Command at all levels is the art of motivating and*
> *directing people and organizations into action to accomplish missions. Control*
> *is inherent in command. To control is to manage and direct forces and functions*
> *consistent with a commander's command authority. Control of forces and*
> *functions helps commanders and staffs compute requirements, allocate means,*
> *and integrate efforts. Mission command is the preferred method of exercising*
> *C2.*

> —Joint Publication (JP) 1, *Doctrine for the Armed Forces of the United States*

A. Focus:

This session examines what many consider the most important of the Joint Functions, Command and Control. Students will analyze a Joint Force Commander's (JFC) organizational options when establishing the command organization for a joint force, as well as the considerations (both tangible and intangible) which the commander should remain mindful of when extending command and control to the multinational arena.

B. Objectives:

- Understand how effective Command and Control aids both joint force integration and mission success across the Range of Military Operations (ROMO).
- Analyze the commander and the staff's roles in developing command and control structures that leverage networks and technology to support achievement of mission objectives.
- Analyze how Mission Command can impact the development and selection of Command and Control option.
- Evaluate the operational and strategic level C2 options available to the joint force commander in the joint, interagency, intergovernmental, and multi-national environment.

C. Background:

In the sessions in Operational Art students discussed why the function of C2 was so important—effective C2 enables the combat power of the joint force. It is the primary means by which the commander, leveraging Mission Command, sequences and synchronizes the joint force to achieve objectives across the ROMO.   In this session, we will delve more deeply into this joint function to gain greater understanding on how best to organize

forces to achieve unity of command, unity of effort, centralized direction, and decentralized execution.

Joint Pub 1, *Doctrine for the Armed Forces of the United States,* provides doctrine, principles, and policy to 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. 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 achieving the JFC's objectives. In order to unify effort, JFCs and planners must have a clear understanding of span of responsibility and level of authority within each component. Longstanding issues such as aircraft control over water, control of cyberspace assets, and force sustainment responsibilities can degrade operational effectiveness.

The JFC must also look beyond the U. S. military; he/she must examine the complex challenges—and opportunities—presented by interagency, intergovernmental, and multinational partners across the ROMO. In fact, key tenets of U.S. military strategy depend heavily upon other nations to realize success, and many key planning documents highlight the U.S. preference for operating with alliance and coalition partners to achieve U.S. national objectives. Alliances, which offer more formal and enduring command relationships, provide a range of capabilities from which the commander may draw. Organizing a multinational force, however, can present significant challenges given potential diplomatic and political sensitivities. Coalitions, which are normally formed in an *ad-hoc* manner, often represent a disparate group of nation-states responding to a common specific threat at a particular time, thus posing even more demanding challenges to the commander than the more stable alliance. Maintaining the integrity of a coalition may become a critical factor/objective to a combined operation's success.

The point of contact for this session is Professor John Houfek, C-409.

D. Questions:

Is command and control one of the most important functions? Why?

Has technology affected C2 across the ROMO? How?

What is the relationship of established joint operational areas depicting sectors/areas of responsibility (graphics) to command and control? How can C2 assist the joint force in achieving military objectives?

How does Mission Command affect C2? Why?

What factors should be considered when determining what level of command authority a JFC should exercise over forces under their command (i.e. OPCON, TACON)?

How could you use the Joint Enabling Capabilities Command to improve future Joint Task Forces?

Today's JFC faces a number of C2 challenges in multinational and/or interagency organizations across the ROMO, some of which are cultural, doctrinal, readiness, intelligence sharing, equipment/communications compatibility, objectives, ROE, and logistics, to name a few. How can these challenges be mitigated by C2?

F. Products:

Using the article "Libya's Operation Odyssey Dawn," students will critique the C2 challenges USAFRICOM faced before and during execution of Operation ODYSSEY DAWN.

F. Required Reading:

Quartataro, Joe, Michael Rovenolt, and Randy White. "Libya's Operation Odyssey Dawn: Command and Control." *PRISM Security Studies Journal* 3, no 2. (March 2012). Read. (**NWC 4159**).

Sweeney, Patrick C. "A Primer for the Joint Enabling Capabilities Command (JECC)." Newport, RI: Joint Military Operations Department, February 9, 2015. Read pp.1 thru 15. (**NWC 2003D**).

U. S. Naval War College. *Forces/Capabilities Handbook.* Newport, RI: Naval War College, 2016. Read the "Operational Command and Control" Section**. (NWC 3153P). (Issued).**

U.S. Office of the Chairman, Joint Chiefs of Staff. *Multinational Operations*. Joint Publication (JP) 3-16, Washington, DC: CJCS, July 16, 2013. Read pp. I-1 thru I-9; pp. II-1 thru II-17 and review pp. III-1 thru III-54.

G. Supplementary Reading:

Builder, Carl H., Steven C. Banks, and Richard Nordin. *Command Concepts: A Theory Derived from the Practice of Command and Control*. Santa Monica: RAND, 1999.

Davis, Mark G. "Operation Anaconda: Command and Confusion in Joint Warfare." Master's Thesis, Maxwell Air Force Base, AL: Air University, School of Advanced Air and Space Studies, 2004.

Rice, Anthony J. "Command and Control: The Essence of Coalition Warfare." *Parameters* (Spring 1997): 152–67.

Wade, Norman M. *The Joint Forces Operations & Doctrine SMARTBOOK: Guide to Joint, Multinational & Interagency Operations*. 3rd ed., Lakeland: The Lightning Press, 2012. **(Issued).**

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THE INFORMATION ENVIRONMENT (Seminar)

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:

With the emergence of information as key terrain in modern warfare, our understanding of the Information Environment – how information is sent and received, how it is perceived, and how it is acted upon – are all are integral to contemporary warfare. This session focuses how Information Operations (IO) and Operations in the Information Environment (OIE) are used to inform, persuade, and influence decision–making. This session will explore the doctrinal basis of IO and discuss how information–related capabilities and OIE are used in conflict, and review IO successes and failures from the last decade plus of war.

B. Objectives:

- Assess the role of Information as an instrument of national power in achieving theater strategic objectives.
- Assess the integration of Information Operations (IO) and Operations in the Information Environment (OIE) in theater campaign development.
- Evaluate the role and perspective of the combatant commander and staff in developing various theater policies, and strategies to include IO and OIE to be used to achieve strategic and operational objectives across the spectrum of conflict.
- Evaluate the principles, capabilities and limitations of IO and OIE in contemporary conflict.

C. Background:

Understanding *Information* as an element of national and military power; how it is moved, prioritized, analyzed and synthesized to support decision makers is key to twenty–first century operations. 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 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.

Joint Publication *Information Operations* (JP 3-13) 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." Broadly speaking, all operations are in the end 'influence' operations. In other words, short of

unconditional surrender all 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) is central to achieving the commander's objectives at every level of warfare.

Operations in the Information Environment (OIE) are yet another attempt by the DoD to get their arms around the power on information in contemporary conflict. OIE are used by belligerents on both sides to affect decision–making across the range of military operations, yet our adversaries consistently control the narrative. The June 2016 strategy closely resembles the 2003 Information Operations Roadmap yet we have had few successes in changing the adversaries' behavior. This is in large part due to the fact that our adversaries, whether they are state or non-state actors, are not constrained by truth and laws, enabling them to out inform us on and off the battlefield.

Today, operations in the IE are being used to inform, persuade, and influence decision–makers in conflict around the globe. The weapons that are being employed use information as force instead of physical means to compel adversaries and decision–makers to act. This session is intended as a foundation for understanding of how IRCs can be leveraged to achieve success across the spectrum of operations.

This session links directly with JMO 31 Cyberspace Operations as information in the form of computer code is what moves through cyberspace. The information content is displayed on the graphic user interfaces of the electronics at hand, and it is that content that is increasingly used to get people to act in contemporary conflicts.

The point of contact for this session is Professor Dick Crowell, C-425.

D. Questions:

Can modern conflicts be won by the use of lethal operations alone? Explain your answer.

Why is information considered an element of national power?

How can joint force commanders use information-related capabilities to inform, persuade, and influence decision makers across the spectrum of conflict?

Why is commander's communication synchronization important in contemporary conflict?

What lessons for future operations can be drawn from both the Russian and Ukrainian forces use information-related capabilities in the 2014 conflict in the Crimea?

E. Products:
None.

F. Required Reading:

Crowell, Richard M. "War in the Information Age: A Primer for Information Operations and Cyberspace Operations in 21st Century Warfare" Newport, RI: U.S. Naval War College, January 2016. Read. (**NWC 2021D**).

Darczewska, Jolanta. "The Anatomy of Russian Information Warfare – The Crimean Operation, A Case Study" Warsaw: Centre for Eastern Studies, May 2014. Read. (**NWC 4100**).

Reilly, Robert R. "Information Operations: Successes and Failures." Westminster Institute, 2013. Read. (**NWC 2163**).

U. S. Office of the Chairman of the Joint Chiefs of Staff. *Information Operations*. Joint Publication (JP) 3-13, Washington, DC: CJCS, November 27, 2012. Scan Executive Summary; Chapters 1, 2, and 4.

U. S. Office of the Secretary of Defense. *Department of Defense Strategy for Operations in the Information Environment*. Washington, DC: June 2016. Read pp. 1-7; Scan remainder of the document. (**NWC 2165**).

G. Supplementary Reading:

Armistead, Leigh, ed. *Information Operations: Warfare and the Hard Reality of Soft Power*. Washington, DC: Brassey's, 2004.

Bar, Shmuel and Richard Crowell. "Hybrid Conflict: A Retrospective Analysis of The Summer 2006 War Between Israel and Hizballah." Newport RI: U.S. Naval War College, 2013.

Caddell, Joseph W. *Deception 101—Primer on Deception*. Carlisle: Strategic Studies Institute, U.S. Army War College, Dec 2004.

Chisholm, Donald. "The Risk of Optimism in the Conduct of War." *Parameters* 33, no. 4 (Winter 2003): 114–131.

Cicalese, Carmine. "Redefining Information Operations." *Joint Force Quarterly*, issue 69: 109–112. Read. (**NWC 4047**)

Crowell, Richard M. "Hung on the Old Bridge like Slaughtered Sheep." Newport, RI: U.S. Naval War College, 2010. (**NWC 2074**).

_____. "The Sputnik Razor: A Retrospective Analysis of the 2008 Russia Georgia War." Newport: U.S. Naval War College, January 2010.

Joint Forces Staff College. *Joint Information Operations Planning Handbook* (Amended-UNCLAS). March 2005 Joint Command Control & Information Operations School at the Joint Forces Staff College.

Lamb, Christopher J. "Information Operations as a Core Competency." *Joint Force Quarterly*, (Washington, DC: National Defense University Press, 36): 88–96.

Payne, Kenneth. "The Media as an Instrument of War." *Parameters* 35 no. 1 (Spring 2005): 81–93.

Peters, Ralph. "In Praise of Attrition." *Parameters* 34, no. 2 (Summer 2004): 24–32.

Post, Jerrold M. "Psychological Operations and Counterterrorism" *Joint Force Quarterly*, (Washington, DC: National Defense University Press, 37, (2nd Quarter 2005): pages.

Steele, Robert D. *Information Operations: Putting the 'I' Back in DIME*. Carlisle: Strategic Studies Institute, U.S. Army War College, Feb 2006.

U.S. Army. *Information Operations Primer,* U.S. Army War College Carlisle: Nov 2011.

Woods, Kevin M. *Iraqi Perspectives Project: A View of Operation Iraqi Freedom from Saddam's Senior Leadership.* Suffolk: Joint Center for Operational Analysis. United States Joint Forces Command, 2006.

MILITARY DECEPTION (Seminar)

I did send for thee, To tutor thee in strategems of war.

—Shakespeare, *Henry VI Part I, Act IV, Scene 5*

A. Focus:

This session introduces the theory and practice of deception in warfare. Emphasis is on the theater-strategic level of war and the issues involving the planning, execution, monitoring, and termination of deception operations.

B. Objectives:

- Know how to apply the functions of military deception at the operational level of war.
- Assess the legal and ethical constraints on deception activities.
- Understand doctrine for deception planning at the combatant command and JTF level.
- Analyze a deception plan for employment of joint forces at the Combatant Commander or Joint Task Force Commander level.

C. Background:

In the 4th century B.C., Sun Tzu stated his oft-quoted aphorism, "All warfare is based on deception." Some now believe that in the age of information, deception efforts are too easy to detect to integrate them into the planning and execution of major operations and campaigns. However, contemporary command and control methods provide greater avenues for deceiving the adversary. Deception remains far more than what T.E. Lawrence (of Arabia) dismissed as "witty hors d'oeuvres before battle." When fully integrated as a critical part of a major operation or campaign, deception can have a decisive impact on success.

This session will introduce deception in theory and in practice at the operational and theater-strategic levels of war and examine how it can be integrated into a Combatant Commander's or a Joint Force Commander's plan.

The point of contact for this session is Captain Bill Mosenfelder, USN, C-412.

D. Questions:

How have the four basic techniques of deception—feints, demonstrations, ruses, and displays—been applied in recent history?

How are ends, means, and risks balanced when considering the ways forces are applied towards a deception effort?

Describe the advantages and challenges associated with deception at the operational and theater-strategic levels of war.

What are the legal and ethical constraints imposed on U.S. practice of deception?

What is the relationship between deception and information operations?

E. Products
None.

F. Required Reading:

Shaw, Eric. J. "An Introduction to Operational Deception." Newport, RI: U.S. Naval War College. January 2014. Read. **(NWC 4115A).**

U.S. Office of the Chairman, Joint Chiefs of Staff. Joint Publication (JP) 3-13.4, *Military Deception*, January 26, 2012. Scan pp. I-1—I-11, IV-1—IV-15.

Nisbett, Thad. "Operational Deception – The Lost Art in Today's Operations." Research Paper. Newport, RI: Joint Military Operations Department, U. S. Naval War College, May 2005. Read. (**NWC 3197).**

G. Supplementary Reading:

Brown, Anthony Cave. *Bodyguard of Lies*. New York: Harper Collins, 1975.

Cruickshank, Charles. *Deception in World War II*. Oxford University Press, 1979.

Daniel, Donald C. and Katherine L. Herbig, eds. *Strategic Military Deception*. New York: Pergamon Press, 1982.

Dassault, Rob. "Denial and Deception in a Nutshell." *Defense Intelligence Journal* 15, no. 2 (2006): 81-94.

Dewer, Colonel Michael. *The Art of Deception in Warfare.* Exeter, U.K.: David and Charles, 1989.

Glantz, David M. *Soviet Military Deception in the Second World War.* London: Frank Cass, 1989.

Godson, Roy and James J. Wirtz, eds. *Strategic Denial and Deception: The Twenty-First Century Challenge*. New Brunswick, NJ: Transaction Publishers, 2008.

Handel, Michael I. *Strategic and Operational Deception in the Second World War* London: Frank Cass, 1989.

_____. "Military Deception in War and Peace" in *Jerusalem Papers on Peace Problems, Number 38.* The Leonard Davis Institute for International Relations, 1985.

Holt, Thaddeus. *The Deceivers: Allied Military Deception in the Second World War*. New York, Scribner, 2004.

Howard, Michael. *Strategic Deception in the Second World War.* New York: W.W. Norton & Company, 1995.

Latimer, Jon. *Deception in War*. New York: The Overlook Press, 2001.

Lloyd, Mark. *The Art of Military Deception*. London: Leo Cooper, 1997.

Mastermann, J.C. *The Double Cross System in the War of 1939 to 1945.* New Haven: Yale University Press, 1972.

Vego, Milan. *Joint Operational Warfare, Theory and Practice*. Newport, RI: U.S. Naval War College, 2009.

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CYBERSPACE OPERATIONS (Seminar)

We can thus only say that the aims a belligerent adopts, and the resources he employs, must be governed by the particular characteristics of his own position; but they will also conform to the spirit of the age and to its general character.

—Carl von Clausewitz, *On War* 1832

A. Focus:

This session builds on the information environment and focuses on developing an understanding of how cyberspace operations may be used in the pursuit of military and political objectives in contemporary conflict. In previous sessions we discussed the theory of cyber warfare with the use of content and code as force in conflict and how the information environment could be used to inform, persuade, and influence actors. This session delves into both theory and practice of cyberspace operations.

B. Objectives:

- Assess the role and perspective of the combatant commander in integrating cyberspace operations into theater policies, strategies, and plans across the spectrum of conflict.
- Examine the use of cyberspace operations in the pursuit of military objectives and political ends.
- Assess the ability of cyberspace operations to achieve mass destruction and effects.

C. Background:

Some of the most significant changes in contemporary conflict are the speed at which information moves around the world, its depth of penetration into society, and the continuous invention and adaptation of electronics and software for human and automated use. The speed and depth of the movement of information are largely the result of the man–made domain of cyberspace. Cyberspace, much like the sea, is a domain in which humans maneuver in and through to achieve objectives in the physical spaces where they live.

What moves through cyberspace is information in the forms of code (software) and content. 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 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 content and code around the internet).

Cyberspace operations are defined in U.S. Joint doctrine as the employment of cyberspace capabilities where the primary purpose is to achieve objectives in or through cyberspace. 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) have been developed to standardize the terminology and allow war fighters to better communicate across domains. This session supports this evolution so that commanders and planners may begin normalizing their understanding of cyberspace operations and their use in pursuit of military objectives and political ends.

The point of contact for this session is Professor Dick Crowell, C-425.

D. Discussion Topics:

Describe how cyberspace operations are used in contemporary conflict to influence decision-makers and automated systems.

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, describe how denial or dispute supports military operations.

Describe the relationships between operational art and contemporary warfare conducted in and through cyberspace.

What lessons for future operations can be drawn from both the Libyan government and opposition forces use of cyber technologies and information-related capabilities in the 2011 Revolution?

Describe how potential adversaries might use cyberspace operations against the United States or our allies.

E. Products.
None.

F. Required Reading:

Crowell, Richard M. "Some Principles of Cyber Warfare." Newport, RI: U.S. Naval War College, Joint Military Operations Department, April 2016. Read. (**NWC 2160A**).

Fahrenkrug, David T. "Countering the Offensive Advantage in Cyberspace: An Integrated Defensive Strategy." NATO Center for Cyber Defense Centre of Excellence, Tallinn, 2012. Read. (**NWC 2161**).

Scott-Railton, John. "Revolutionary Risks: Cyber Technology and Threats in the 2011 Libyan Revolution." CIWAG case study series 2013, ed. Richard Crowell, Marc Genest, and Andrea Dew. Newport, RI: U.S. Naval War College, Center on Irregular Warfare and Armed Groups. Read. (**NWC 3176**).

U.S. Office of the Chairman of the Joint Chiefs of Staff. *Cyberspace Operations*. Joint Publication (JP) 3-12R, Washington, DC: CJCS, November 5, 2013. Scan.

G. Supplementary Reading:

Crowell, Richard M. "Analyzing Hybrid Warfare." Newport, RI: U.S. Naval War College, Revised June 2016.

Darley, William M. "Clausewitz's Theory of War and Information Operations." *Joint Force Quarterly*. No. 40 (1st Quarter 2006): 73–79.

Deibert, Ronald. "Black Code: Inside the Battle for Cyberspace." Toronto: McClelland & Stewart, 2013.

Dombrowski, Peter and Chris C. Demchak. "Cyber War, Cybered Conflict, and the Maritime Domain." *Naval War College Review* (Spring 2014).

Olson, Parmy. "We are Anonymous: Inside the Hacker World of LulzSec, Anonymous, and the Global Cyber Insurgency." New York: Little, Brown and Company, 2012.

Schmitt, Michael N. Ed. *The Tallinn Manual on the International Law Applicable to Cyber Warfare*. Cambridge: Cambridge University Press, 2013.

Warner, Michael. "Cybersecurity: A Pre-history." *Intelligence and National Security*, 27:5, (2012).

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THE THEATER CAMPAIGN PLAN (Seminar)

In times of peace the general staff should plan for all contingencies of war. Its archives should contain the historical details of the past, and all statistical, geographical, topographical, and strategic treatises and papers for the present and future.

—Antoine Henri du Jomini, 1838

A. Focus:

The APEX session introduced the requirement for geographic combatant commanders to develop a Theater Campaign Plan (TCP). This session examines the nature of TCPs and the role they play in "operationalizing" the combatant commander's overarching theater strategy. It also examines the unique challenges associated with integrating security cooperation actions and interagency activities into the Combatant Commander's overall TCP. Finally, we will discuss how the methodology of design (introduced earlier) can be used by a commander and their staff to develop a theater strategy.

B. Objectives:

- Comprehend the organizational considerations when employing a design methodology.
- Comprehend how the Guidance for Employment of the Force (GEF) and the Joint Strategic Capabilities Plan (JSCP) affect combatant commanders' TCP and security cooperation activities and objectives.
- Understand the role and perspective of the combatant commander and staff in developing joint and multinational theater plans in support of national objectives.
- Understand the principal joint strategy development and operational processes involved in the development of a TCP.
- Evaluate the capabilities and limitations of interagency organizations in developing security cooperation activities and comprehend the requirement to synchronize those activities with all instruments of national power.

C. Background:

The Theater Campaign Plan and Security Cooperation

A traditional campaign plan is operationally focused and normally oriented towards accomplishing strategic and/or operational objectives. The TCP differs from a traditional campaign plan in that it seeks to direct a combatant command's steady state efforts throughout the area of responsibility (AOR) to achieve GEF/JSCP-directed objectives.

The combatant commander (CCDR) develops his theater strategy in concert with strategic guidance, in collaboration with stakeholders (both within and outside of DoD), and

through frequent dialog with his planning team. While there is no prescribed format for a TCP, it is expected to contain:

- An assessment of the theater
- Mission statement
- Concept of engagement
- Intermediate military objectives
- Coordinating instructions
- Resource requirements

The TCP must also show a clear linkage to the GEF/JSCP directed contingency plans. These contingency plans are viewed as "branch plans" to the TCP, and as such, the TCP should identify the conditions that could necessitate the activation of the contingency plan(s). TCP's utilize Security Cooperation (SC) activities across the DIME to shape the environment, discouraging undesired outcomes and/or prepare the space if military action is required. Though the TCP operationalizes the CCDR's theater strategy, operations require manpower and equipment. CCDR's, therefore, are required to provide a theater posture plan describing how theater forces required to meet TCP objectives are positioned—as well as identify risks and opportunities.

Theater Campaign Plans are supported by service component plans, and the Navy Component Commanders (NCCs) balance the naval service strategy, *A Cooperative Strategy for 21st Century Seapower*, with the TCPs of geographic combatant commanders and provide guidance to the fleet. NCC staffs fulfill TCP requirements and develop supporting NCC Maritime Security Cooperation Plans (MSCP) and a coordinated maritime Annex to the TCP. During planning, the maritime staffs leverage NWP 5-01, Navy Planning, NTTP 3.07-15, Navy Component Commander Support to Theater Security Cooperation, and country-specific guidance normally resident in the TCP appendices. This support plan provides theater, regional, and country-specific guidance that enables the tactical maritime commander to plan and execute operations, actions and activities that support achievement of strategic objectives.

Integral to the TCP is a meaningful assessment program. While each combatant command executes assessment differently, all seek to determine the effectiveness of the measures taken to achieve the theater strategy (this requirement is levied in the GEF; CCDR's must show how they will achieve (and assess their effectiveness) directed objectives. The theater planning staff should include the staff members responsible for assessment in the early stages of the strategy development to ensure the creation of a viable assessment concept that meets the CCDR's decision cycle.

Design and The Theater Campaign Plan

Earlier in the trimester, you were introduced to the concept of design. Design is a methodology that can be used to assist a CCDR and his staff in developing a conceptual framework to help formulate/articulate a theater strategy. As noted in NWC 2082 "Campaign Planning Handbook," there are five questions that one may ask to ascertain if using design methodology is warranted:

1. Do we know enough about the situation to move forward in a meaningful way? Is a course of action clear and evident? ***If yes, the use of design is likely not necessary.***
2. Are the actions we are taking having unexpected and/or surprising effects? ***If yes, design may prove useful to clarify the interactions.***
3. Is the problem so familiar and solution so obvious that we already know what to do? ***If yes, the use of design is not necessary.***
4. Do we know what end state conditions we are trying to achieve, or are the desired end state conditions unclear? ***If unclear, design may aid in clarification.***
5. Are actions and techniques that were originally effective now falling short of achieving the desired impact*? **If yes, design may offer insights.***

Commander involvement is a cornerstone of design methodology. While it is naïve to expect that a CCDR will have the time to linger in multiple planning sessions with the design planning team, his guidance and periodic presence during "in progress reviews" keeps the commander informed while also ensuring the strategy matches the commander's vision. Design methodology has four major components: understanding the strategic guidance, framing the operational environment, framing the problem, and developing an operational approach to the solution. This is not a linear process; the planning team will find itself moving among all of these components throughout the process as greater understanding develops.

While the design effort should produce sufficient vision and logic for the subsequent development of the campaign plan, it does not stop with the transition to detailed planning. The assessment process (mentioned above) serves as a means to determine if "reframing" of any of the design components is necessary.

The points of contact for this session are Professors Mike McGauvran, C-414, and Mark Seaman, C-428.

D. Questions:

Since a combatant commander is primarily responsible for only the military aspect of the DIME in the theater, how can the CCDR develop a truly comprehensive theater campaign plan?

Why might design be useful in assisting the development of a Theater Campaign Plan?

What is the purpose of intermediate military objectives (IMOs)? What concerns might you have with the use of IMOs?

How does a combatant commander convert policy into a cogent theater strategy that can be executed in the AOR as actions and activities?

How do the individual services integrate their security cooperation activities with the combatant commander's TCP?

How are security cooperation actions and activities linked with shaping operations for contingency plans.

What are the challenges associated with military involvement in Foreign Internal Defense?

Describe mechanisms for addressing the challenges associated with Security Cooperation planning and assessment.

E. Products:
None.

F. Required Reading:

Department of Military Strategy, Planning, and Operations. "Campaign Planning Handbook: Academic Year 2014 (Extract)." U.S. Army War College, Carlisle Barracks, PA: 2014. Read Chapters 3 and 4 (pp. 21-57). **(NWC 2082)**.

Dyekman, Gregory J. *Security Cooperation: A Key to the Challenges of the 21st Century*. Carlisle, PA: Strategic Studies Institute, 2007. Read. **(NWC 2058).**

Office of the Deputy Assistant Secretary of Defense for Plans and Office of the Under Secretary of Defense for Policy. "Theater Campaign Planning: A Planners' Handbook." Version 1.0, Washington, DC: February, 2012. Read pp. 8-39. **(NWC 2121)**.

 U.S. Navy, U.S. Marine Corps, U.S. Coast Guard. *Maritime Security Cooperation Policy: An Integrated Navy-Marine Corps-Coast Guard Approach*. January 2013. Scan 3-11. **(NWC 2116)**.

 U.S. Office of the Chairman, Joint Chiefs of Staff. *Foreign Internal Defense,* Joint Publication (JP) 3-22. Washington, DC: CJCS, July 12, 2010. Read Chapter I; Scan Chapter II.

G. Supplementary Reading:

Carpenter, Wendi B., RADM, USN. "Tactical Commander's Handbook for Theater Security Cooperation." Norfolk, VA: Naval Warfare Development Command, 2009.

Gilewitch, Daniel. "Security Cooperation Strategic and Operational Guidance: Translating Strategy to Engagement."*The DISAM Journal of International Security Cooperation Management*. 2013. **(NWC 2123).**

Huang, Victor. "Building Maritime Security in Southeast Asia." *Naval War College Review* 61, no. 1 (2008): 87-105.

U.S. Department of State, USAID, and DOD. "3D Planning Guide: Diplomacy, Development, Defense" Pre-Decisional Working Draft. July 31, 2012.

Wade, Norman M. *The Joint Forces Operations & Doctrine SMARTbook*: *Guide to Joint, Multinational & Interagency Operations*. 3rd ed., Lakeland, FL: The Lightning Press, 2012. **(Issued).**

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SMALL WARS (Seminar)

Small wars are conceived in uncertainty, are conducted often with precarious responsibility, under indeterminate orders lacking specific instructions.

— U.S. Marine Corps, *Small Wars Manual*, 1940

A. Focus:

This session addresses the evolving character of war to meet the social and political phenomenon of what has been historically described as Small Wars. The concept of Small Wars serves as a primary means to better understand the many and varied conflicts of the late twentieth and early twenty–first centuries.

B. Objectives

- Assess the evolving character of war.
- Evaluate contemporary efforts of both states and non-state actors to achieve their political ends.
- Assess the implications of Small Wars on operational planning and execution.

C. Background:

The concept of Small Wars is not new. Clausewitz discusses the concept of guerrilla warfare, insurgency, and wars of liberation in "The People in Arms" in *On War* and in his numerous correspondence and lectures, particularly "Lectures on Small War," given to the military school in Berlin 1811 – 1812. The U.S. Marine Corps produced an in-depth study of Small Wars between the world wars. Most recently *Small Wars / 21st Century* advises that these types of war differ from large conventional ones in both frequency (significant events separated by long periods of time) and amplitude (the degree of power employed by a system and it is not entirely related to the amount of destruction caused).

Historically great powers have not always had success at fighting Small Wars. Their failures may be attributed to the need to maintain large conventional forces that can successfully win against a large conventional foe, an inability to adapt these large forces to compete with smaller hybrid forces, and the protracted nature of Small Wars that often diminishes the political will to fight and win. These factors make it challenging at best to achieve a clear political end state and supporting national and military objectives. In essence, large nation state armies do not necessarily lose Small Wars; they simply fail to win them.

Many of the topics studied in the latter portion of the JMO trimester represent the ways and means of Small Wars: Insurgency, Counterinsurgency, Irregular, and Hybrid

Warfare. They are often characterized by the use of asymmetric methods that weaker sides choose to fight great powers. From a U.S. perspective, the challenges began in the early twentieth century with military intervention in Latin America; they continued with Vietnam, Afghanistan, and Iraq. Others too have faced their fair share of Small Wars, i.e., Israel–Hezbollah 2006, Russia–Georgia 2008, Israel–Hamas 2008, Russia–Ukraine 2014, and Syria / Iraq vs. ISIS/ISIL, with varying degrees of success and failure.

Small Wars are population–centric and may be characterized by a combination of physical violence and non-lethal forms of influence requiring the tightly integrated application of all levers of national power: diplomatic, informational, military, and economic. While actions may be labeled irregular, hybrid, asymmetric, etc., they are simply terms that are used to capture multiple and evolving patterns of conflict. They are in fact as Clausewitz tells us a broadening and intensification of the fermentation process known as war. It is essential for professional military officers and civilian leaders to comprehend not only these emerging patterns, but also to understand how present and future opponents, state and non-state, conduct Small Wars in pursuit of their objectives and ends.

Point of contact for this session is Professor Dick Crowell, C-425.

D. Questions:

Discuss how Small Wars may be used to achieve military objectives and political ends.

Describe the use of information–related capabilities (IRCs) to aid or hinder belligerents in the population—centric character of Small Wars.

Discuss the common threads in the ways belligerents prosecute Small Wars. How do these concepts differ?

Assess the use of the traditional instruments of national power to prosecute Small Wars.

Describe the challenges theater strategic commanders and staffs face in effectively incorporating ideas on prosecuting Small Wars into campaigns and major operations of future wars.

E. Products.
None.

F. Required Reading:

Barrett, Richard. *The Islamic State*. The Soufan Group, November 2014. Read. (**NWC 3201**).

Cassidy, Robert M. "Why Great Powers Fight Small Wars Badly," *Military Review*, Sept./Oct. 2002. Read pp. 41-53. (**NWC 3198**).

Daase, Christopher. "Clausewitz and Small Wars." *Clausewitz in the Twenty-First Century*, edited by Hew Strachan and Andreas Herberg-Rothe (Oxford University Press, September 2007). Read. **(NWC 3192).**

U.S. Marine Corps. *Small Wars / 21ˢᵗ Century*. Marine Corps Combat Development Command, Quantico, VA, 2005. Read Chapters 1, 2, and 6. (**NWC 3193**).

_____. *Warfighting*. Marine Corps Doctrine Publication 1. Headquarters United States Marine Corps, Washington DC 1997. Read pp. 23-28.

G. Supplementary Reading:

Berzins, Janis. "Russia's New Generation Warfare in Ukraine: Implications for Latvian Defense Policy," National Defence Academy of Latvia, Center for Security and Strategic Research, April 2014.

Bunzel, Cole. "From Paper State to Caliphate: The Ideology of the Islamic State" *The Brooking Project on U.S. Relations with the Islamic World, Analysis Paper No. 19*, March 2015

Cassidy, Robert M. "Counterinsurgency and Military Culture: State Regulars versus Non-State Irregulars." Baltic Security & Defence Review Volume 10, 2008.

Conetta, Carl. "Dislocating Alcyoneus: How to Combat al-Qaeda and the New Terrorism." Project on Defense Alternative Briefing Memo # 23. The Commonwealth Institute, Cambridge MA**.** June 25, 2002.

Hoffman, Frank G. (2010). 'Hybrid Threats': Neither Omnipotent Nor Unbeatable. *Orbis* 54, no. 3 (July 1, 2010): 441.

_____. "Hybrid Warfare and Challenges." *Joint Force Quarterly* 52 (1st Quarter 2009): 34-39.

U.S. Marine Corps. *A Concept for Countering Irregular Threats: A Comprehensive Approach*. Washington, DC: U.S. Marine Corps. June 14, 2006.

_____. *Small Wars Manual 1940 (1990 Re-print)*. Department of the Navy, Washington, DC: HQ USMC, 22 December 1990.

U.S. Office of the Chairman of the Joint Chiefs of Staff. *Counterinsurgency*, Joint Publication (JP) 3-24. Washington, DC: CJCS, 22 November 2013.

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INTERAGENCY COORDINATION (Seminar)

> *... for all the improvements of recent years, the United States interagency tool kit is still a hodgepodge of jury-rigged arrangements constrained by a dated complex patchwork of authorities, persistent shortfalls in resources, and unwieldy processes.*
>
> — Robert Gates

A. Focus:

This session concentrates on the importance of interagency coordination at the national and theater levels to meet strategic and theater-strategic objectives. Operational commanders will likely face significant challenges when cooperating with numerous agencies and departments that comprise the often complex operating environment. Organizational culture and bias often narrow focus and lead to fractures in unity of effort. Being aware of the challenges inherent in interagency coordination is a critical first step to understanding how operational commanders can integrate and coordinate non-military agencies into their planning to achieve strategic objectives.

B. Objectives:

- Explore interagency coordination at the national, theater, and operational levels.
- Appraise the capabilities and limitations of interagency partners in the planning and execution across the range of military operations.
- Evaluate the role of the U.S. Ambassador and the organization and functions of an embassy country team.
- Examine how Joint Force Commanders coordinate interagency and multinational planning and operations.

C. Background:

Interagency coordination is complex and demanding. Military commanders and their staffs must understand how national security policy in a given administration is developed, planned, and executed through interagency processes. They must also understand how non-military, U.S. and international agencies contribute to the successful prosecution of joint and multinational operations. Each government organization has its own distinct mission, perceived equities, authorities, procedures, resources, culture, and policy preferences. Just as they synchronize and sequence military service capabilities in the joint arena, operational commanders and their staffs must be aware of the diverse viewpoints and capabilities of federal agencies in order to plan and execute operations with success.

At the strategic level, the National Security Council is a forum for considering national security and foreign policy issues that coordinates policies across government agencies. The Principals Committee, Deputies Committee, and the Interagency Policy

Committees work to reach consensus. There is no single approved coordination or planning process. Each issue is unique and requires the interagency "team" to develop its own concept of operations. Personalities, resources, and time drive the decision making process.

At the theater and operational levels, developing effective working relationships between Washington based policy elements, U.S. Ambassadors, the Combatant Commander, Joint and Combined Task Force Commanders, and their staffs, contributes to unity of effort and mission success. Executive orders, joint doctrine, and civilian agency procedures only partially determine the ways in which interagency coordination takes place. Success hinges on understanding the capabilities, equities, and cultures of various agencies and the individuals that represent them in any operation or campaign. Comprehending these variables, both in their historical context and evolving relationships, will improve a commander's ability to plan, coordinate, and execute across the range of military operations.

Combatant commanders and Joint Force commanders have a number of resources available to assist with interagency coordination.   Most Combatant commanders have a hand-picked senior political advisor (POLAD). Combatant Command and often Joint Task Force staffs have a Joint Interagency Coordination Group (JIACG), which has emerged as an organizational mechanism for planning coordination. Additionally, Promote Cooperation, an Office of the Secretary of Defense and Joint Staff approved program, is a forum where Combatant commanders coordinate their plans with other agencies.

The point of contact for this session is Professor Douglas Chamberlain, C-423.

D. Questions:

Comprehend interagency coordination at the national and theater level.

Evaluate how a Joint Force commander and staff can organize and plan for successful operations. What are the key challenges?

Explore the responsibilities of a U.S. Ambassador and a country team. How do they coordinate with a Joint Force commander and staff?

E. Products:
None.

F. Required Reading:

Atlantic Council Combatant Command Task Force, *All Elements of National Power: Moving Toward a New Interagency Balance for US Global Engagement*. July 2014. Scan. (**NWC 3202**)

Oakley, Robert D. and Michael Casey, Jr., "The Country Team: Restructuring America's First Line of Engagement", *Joint Force Quarterly,* issue 47, (4th Quarter 2007). Read. (**NWC 3002**).

U.S. Office of the Chairman of the Joint Chiefs of Staff. *Interorganizational Coordination During Joint Operations*. Joint Publication (JP) 3-08. Washington, DC: CJCS, 24 June 2011. Read pp. II-1 to   II-20, D-1 to D-13. Scan Executive Summary pp. ix-xxi, I-1 to I-18, A-K-1 to A-K-5.

_____. *Management and Review of Joint Strategic Capabilities Plan (JSCP)-Tasked Plans,* CJCSI 3141.01E, September 15, 2011. Read Enclosure D.

Whittaker, Alan G., Frederick C. Smith, and Elizabeth McKune. "The National Security Policy Process: The National Security Council and Interagency System," October 8, 2010. Read pp. 5-6, 24-42, and 44-57. **(NWC 3026C)**.

G. Supplementary Reading:

Deutch, John, Arnold Kanter, and Brent Scowcroft. "Strengthening the National Security Interagency Process." Ch. 10 in Ashton B. Carter and John P. White, *Keeping The Edge: Managing Defense for the Future*, Cambridge, MA: Preventive Defense Project, 2000.

Flournoy, Michèle and Shawn Brimely. "In Search of Harmony: Orchestrating the Interagency for the Long War," *Armed Forces Journal,* July 2006.

Hamblet, William P. and Jerry G. Kline. "Interagency Cooperation: PDD 56 and Complex Contingency Operations." *Joint Force Quarterly,* Spring 2000.

Lamb, Christopher J. and Edward Munsing. "Joint Interagency Task Force-South: The Best Known, Least Understood Interagency Success." *Institute for National Strategic Studies Strategic Perspectives 5,* June 2011.

National Security Presidential Directive/NSPD-44, *Management of Interagency Efforts Concerning Reconstruction and Stabilization. National Security Presidential Directive /NSPD 44*, December 7, 2006.

Pope, Robert S. "Interagency Task Forces The Right Tools for the Job." *Strategic Studies Quarterly,* (Summer 2011).

U.S. Joint Forces Command. *Commander's Handbook for the Joint Interagency Coordination Group,* 1 March 2007.

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CIVIL-MILITARY INTEGRATION (Seminar)

Learning how to cross-communicate with NGOs and build a level of coordination and cooperation required a tremendous amount of work. That was the most important function of the CMOC.

— General Anthony Zinni, *The Battle for Peace,* 2006

Challenges [to security, stability, and peace] can be addressed through the integration and comprehensive use of intergovernmental organizations (IGOs), national and local governments, and nongovernmental and private sector organizations, which have proliferated in number, variety, and capability.

—Joint Publication 3-57, *Civil Military Operations,*
11 September 2013

A. Focus:

Although the U.S. military is organized, trained, and equipped for sustained large scale combat anywhere in the world, the reality is that the U.S. military more often conducts operations at the lower end of the range of military operations. These include theater security cooperation programs, humanitarian assistance operations, foreign internal defense, and stability operations. These missions often take place in complex environments and involve a diversity of interested organizations. When the military is involved in crisis response and limited contingency operations, there is often involvement by intergovernmental organizations, like the UN or other regional organizations. This session focuses on the civil-military relationship between the military, international governmental organizations (IGOs), and nongovernmental organizations (NGOs), and the importance of integrating these diverse organizations into the mission.

B. Objectives:

- Comprehend the role of intergovernmental organizations (IGOs), including the United Nations, in resolving conflicts.
- Comprehend the role of non-governmental organizations (NGOs) and how they respond to humanitarian emergencies and other limited contingency operations.
- Analyze how the military can create the conditions for effective civil-military relations with IGOs and NGOs.

C. Background:

Combatant commanders understand that working with IGOs and NGOs can help ensure unity of effort toward achieving objectives. IGOs are making a more concerted effort to mitigate, engage in, and manage conflict around the globe. The European Union, the African Union, the Organization for American States—as well as the more localized organizations such as the Economic Community of West African States—now focus on maintaining peace and security. U.S. Africa Command, for example, works closely with the African Union to find ways for Africans to manage security challenges on the continent. The United Nations, the largest IGO, has undergone a complete transformation since the end of the Cold War.

NGOs, like IGOs, are also changing and can be a help to mission accomplishment. Forty years ago, only a few thousand NGOs were in existence. Today, NGO organizations number well over 40,000. Many of these organizations focus on missions the military was often tasked to undertake. These might include humanitarian assistance, stability (peacebuilding) operations and efforts to resolve conflict. Thus, these organizations can complement the military mission. However, many NGOs avoid working directly with military forces. An understanding of NGO personnel, their mission, and their capabilities and requirements can assist military personnel in establishing a "working" relationship with these organizations and facilitate mission accomplishment. The responsibility to establish a working relationship with NGOs and IGOs normally falls to the J-9 in a U.S. staff. The creation of a Civil-Military Operations Center (CMOC) or even a Joint Civil-Military Operations Task Force (JCMOTF) helps in the coordination with NGOs. Additionally commanders, at times, will meet with senior NGO managers to coordinate and synchronize efforts.

The point of contact for this session is Professor George Oliver, C-426.

D. Questions:

How do the roles and missions of global and regional IGOs impact a combatant command's military operations? What are the strengths and limitations of IGOs?

What is the role of the UN in international or intrastate conflicts and how does the UN organize a mission? How might the role of the UN Special Representative of the Secretary General dovetail with a JTF mission?

What are the advantages to the Joint Force in coordinating with IGOs/NGOs early in an operation? What is the State Department's or United States Agency for International Development's (USAID) role?

How could the Joint Force Commander coordinate with NGOs operating in his joint operations area and what is the best way to synchronize their work with that of the military?

What is the military's role as part of a U.S. response to a disaster in a foreign country? What are the implications for the commander?

E. Products:
None.

F. Required Reading:

Holshek, Christopher and John Church, ed. 2014-2015 Civil Affairs Issue Papers: The Future of Civil Affairs, Carlisle: U.S. Army War College Press, PKSOI Paper, undated. Read "Executive Summary by Chris Holshek, pp vii – xvii and "Panel Discussion III: Shaping the Future of Civil Affairs –the Way Forward," pp. 23-52 by Karen Guttieri. (**NWC 6057**).

Lawry, Lynn. Guide to Nongovernmental Organizations for the Military. Bethesda: The Center for Disaster and Humanitarian Assistance Medicine, Summer 2009. Read. (**NWC 4124**).

Nguyen, Thi Hai Yen. "Beyond Good Offices? The Role of Regional Organizations in Conflict Resolution," *Journal of International Affairs,* Spring 2002, 55, no 2. Read. (**NWC 3181**)

Peck, Connie. "Special Representatives of the Secretary-General" in David Malone, ed., *The UN Security Council: From the Cold War to the 21ˢᵗ Century*. Lynn Rienner Publishers, 2004. Read pp. 325-339. (**NWC 6055).**

United States Institute for Peace, "Guidelines for Relations Between U. S. Armed Forces and Non-Governmental Humanitarian Organizations in Hostile or Potentially Hostile Environments," Washington, DC: U.S. Institute of Peace and Interaction, July 2007. Scan. (**NWC 3075**).

U.S. Office of the Chairman, Joint Chiefs of Staff. *Civil Military Operations*, Joint Publication 3-57. Washington, DC: CJCS, 11 September 2013. Read Executive Summary, pp ix-xiv.

G. Supplementary Reading:

Baumann, Andrea Barbara, "Clash of Organizational Cultures? The Challenge of Integrating Civilian and Military Efforts in Stabilization Operations." *The Royal United Services Institute Journal* 153 (December 2008): 70-73.

Cohen, Michael A. Maria Figueroa Küpçü and Parag Khanna. "The New Colonialists," *Foreign Policy*, October 7, 2009.

De Coning, Cedric. "Civil-Military Coordination and UN Peacebuilding Operations." ACCORD, Tufts University Website: http://sites.tufts.edu/jha/files/2011/04/a183.pdf.

Diehl, Paul F. "New Roles for Regional Organizations." In Chester A. Crocker, Fen Osler Hampson, and Pamela Aall, ed. *Leashing the Dogs of War.* Washington DC: U.S. Institute of Peace Press, 2008.

Franke, Volker. "The Peacebuilding Dilemma: Civil-Military Cooperation in Stability Operations, *International Journal of Peace Studies*, Vol 11, no 2. Autumn/Winter 2006.

Hettne, Björn and Fredrik Söderbaum, "The UN and Regional Organizations in Global Security: Competing or Complementary Logics?" *Global Governance* 12, (July-Sep 2006): 227-332.

Kasselmann, Hans-Jürgen, "Civil-Military Cooperation: A Way to Resolve Complex Crises." *Prism,* Vol 4, no.1, 2012.

Lacquement, Richard. "Integrating Civilian and Military Activities," *Parameters*. Winter 2011-2012.

Mingst, Karen A. and Margaret P. Karns. "The United Nations and Conflict Management: Relevant or Irrelevant?" In Chester A. Crocker, Fen Osler Hampson and Pamela Aall, ed. *Leashing the Dogs of War.* Washington D.C.: U.S. Institute of Peace Press, 2008.

Natsios, Andrew S. "Commander's Guidance: A Challenge of Complex Humanitarian Emergencies." *Parameters* 26 (Summer 1996): 50-66.

Neethling, Theo. "Shaping the African Standby Force: Developments, Challenges, and Prospects," *Military Review* (May-June 2005): 68-71.

O'Connor, Cathal. "Foreign Humanitarian Assistance and Disaster Relief Operations: Lessons Learned and Best Practices," *Naval War College Review*, 65 no. 1 (Winter 2012), 152-160.

Rosen, Frederik. "Third-generation Civil-Military Relations: Moving Beyond the Security-Development Nexus," *Prism.* Vol 2, no 1 (December 2010): 27-42.

United Nations. "Civil-Military Coordination in UN Integrated Peacekeeping Missions," New York: UN Headquarters, Policy Paper, October 2012. Website: https://docs.unocha.org/sites/dms/Documents/DPKO%20UN-CIMIC%20(2010).pdf.

U.S. Agency for International Development. Bureau for Humanitarian Response. Office of Foreign Disaster Assistance. *Field Operations Guide,* Version 4.0, September 2005.

U.S. Office of the Chairman, Joint Chiefs of Staff. Foreign Humanitarian Assistance, Joint Publication (JP) 3-29, January 3, 2014.

CONFLICT TERMINATION (Seminar)

We have known the bitterness of defeat and the exultation of triumph, and from both we have learned there can be no turning back. We must go forward to preserve in peace what we won in war.

—General Douglas MacArthur,
Surrender Ceremony on the *USS Missouri*, 2 September 1945

A. Focus:

This session addresses the challenges of conflict termination and provides the intellectual foundation for the following session on stability operations. It considers the advantage of early planning for conflict termination and how termination criteria can set the conditions for a stable transition to subsequent operations. Conflict termination can have a dramatic impact upon Phase IV (Stability) and Phase V (Enabling Civil Authorities) operations, and history provides cases of varying degrees of success. Students should be aware of the complex array of factors inherent in conflict termination as part of a process that focuses on achieving an effective transition to stability operations and subsequent activities.

B. Objectives:

- Examine the complex process of conflict termination.
- Compare and contrast the roles of military and civilian leaders in conflict termination.
- Explore the commander's role in developing termination criteria.
- Examine how conflict termination fits into the planning process and sets the conditions for subsequent post-conflict operations.

C. Background:

U.S. military operations throughout their history have illustrated the complex nature of conflict termination. Past operations provide many examples of successes and failures in linking the termination of combat operations to desired end states. The characteristics of different types of conflicts—civil war, conventional state-on-state war, and insurgencies—have produced various planning approaches and results. Additionally, the scope of strategic objectives has an impact on the termination process. For the joint force commander, the challenge of conflict termination is not the discontinuation of hostilities at a point in time but rather the effective transition from combat to post-hostilities operations. Although joint doctrine has recently begun to address the transition from dominating (Phase III) to stabilizing the operational environment (Phase IV), the key to success can reside outside an operational commander's control. Ideally, a clear desired end state is the basis for establishing specific termination criteria that set the conditions for successful stability operations.

Setting the stage for a continued military and civilian presence after the termination of major combat operations is critical to any long-term success in a region. Operational planning must consider that actions taken in Phase III affect efforts to achieve termination objectives and impact the ability to conduct successful stability operations. A number of critical factors influence the decision to terminate conflict: (1) timing; (2) physical location; (3) formality of surrender; (4) the enemy's remaining capabilities and control over assigned forces; (5) the limits on the operational commander's authority to make terms with the enemy; (6) and coalition concerns and objectives. Conflict termination is not a unilateral enterprise, as the enemy ultimately decides when and how to end fighting. At times, enemies have refused orders by their own military and civilian leadership to lay down their arms and have fought long after any reasonable expectation of attaining their objectives had vanished. Thus, conflict termination presents the commander with a number of difficult challenges.

This session examines case studies from different historical periods in order to understand the enduring challenges of conflict termination: the U.S. Civil War, World War II Germany, World War II Japan, and Iraq in 1991. Each case allows the student to consider the criteria that led to conflict termination, examine how theater and/or operational commanders applied directions from higher headquarters, and determine how military objectives were linked to desired end states.

The point of contact for this session is Professor Richard Shuster, C-422.

D. Questions:

Discuss the difference between conflict termination and conflict resolution. Are these concepts more difficult to assess in small wars?

How are the conditions and terms for conflict termination determined?

What are the roles of allies or coalition partners in conflict termination?

Discuss how the joint force commander translates the strategic objective of a conflict into military conditions to be achieved as a product of an operation or campaign.

How does conflict termination impact subsequent stability operations?

E. Products:

Students analyze one of four conflict termination case studies and brief their findings to their seminar.

F. Required Reading:

Flavin, William. "Planning for Conflict Termination and Post-Conflict Success." *Parameters* (Autumn 2003). Read pp. 95–111. (**NWC 3140**).

Tuck, Christopher. "Conflict Termination in Iraq." *The RUSI Journal*, 149:5, 2004. Read pp. 17-21. (**NWC 1096**)

U.S. Office of the Chairman, Joint Chiefs of Staff. *Joint Operation Planning and Execution System* (JOPES). Volume I, Planning Policies and Procedures. Washington, DC: CJCS, 29 September 2006. Read pp. B-13—B-15.

_____. *Joint Operation Planning.* Joint Publication (JP) 5-0. Washington, DC: CJCS, 11 August 2011. Read pp. III-18 to III-20.

Case Studies

U.S. Civil War

Waghelstein, John D. and Donald Chisholm. "The Road Not Taken: Conflict Termination and Guerillaism in the American Civil War." *Journal of Strategic Studies*, Vol. 29, Issue 5, October 2006. (**NWC 3139**).

Germany

Pogue, Forrest C. "The German Surrender." Ch. XXV, pp. 474-494 in *The European Theater of Operations: The Supreme Command*. Washington, DC: Department of the Army, Office of the Chief of Military History, 1954. (**NWC 3138**).

Japan

Allied Forces. *Instrument of Surrender*. 2 September 1945. (**NWC 3187**)

The United States Strategic Bombing Survey. *Japan's Struggle to End the War*. Washington, DC: United States Government Printing Office, July 1946. (**NWC 3178**).

Iraq

Cline, Lawrence. "Defending the End: Decision Making in Terminating the Persian Gulf War." *Comparative Strategy*, Volume 17, 1998, pp. 363-380. (**NWC 3151**)

G. Supplementary Reading:

Berdal, Mats R. *Disarmament and Demobilization after Civil Wars: Arms, Soldiers and the Termination of Armed Conflicts.* New York: Oxford University Press, 1996.

Boulé, John R. "Operational Planning and Conflict Termination" *Joint Force Quarterly* Issue 29 (Autumn/Winter 2001–2002): 97–102.

Cimbala, Stephen J., and Sidney R. Waldman, ed. *Controlling and Ending Conflict: Issues Before and After the Cold War*. New York: Greenwood Press, 1992.

Cordesman, Anthony. "Iraq and Conflict Termination: The Road to Guerrilla War?" Washington, D.C.: Center for Strategic and International Studies, 28 July 2003.

Fondaw, Jeffrey E. "Conflict Termination: Considerations for the Operational Commander." Newport, RI: U.S. Naval War College, Joint Military Operations Paper, May 2001.

Guthrie, Colonel John W. (USMC). "The Theater Commander: Planning for Conflict Termination." Carlisle Barracks: U.S. Army War College, 2006.

Holshek, Christopher. "The Operational Art of Civil-Military Operations: Promoting Unity of Effort," pp. 269-309 in Larry Wentz, ed., *Lessons from Kosovo: The KFOR Experience.* Washington, D.C.: DoD Command and Control Research Program, 2002.

Phinney, Catherine. "Enhancing Conflict Termination through Problem Solving." *Peacekeeping & International Relations* 26 (January–February 1997): 15-17.

Rotermund, Manfred K. "The Fog of Peace: Finding the End-State of Hostilities." Carlisle, Barracks: U.S. Army Institute for Strategic Studies, 1999.

Soucy, Robert R., Kevin A. Shwedo, and John S. Haven II. "War Termination and Joint Planning." *Joint Force Quarterly* (Summer 1995): 95–101.

STABILITY OPERATIONS (Seminar)

The sooner I can get rid of these questions that are outside the military in scope, the happier I will be! Sometimes I think I live ten years each week, of which at least nine are absorbed in political and economic matters.

—General Eisenhower to General Marshall,
following Operation Torch, November 1942

A. Focus:

This session examines the challenges of stability operations, building upon the key components of conflict termination to focus on how to plan effectively for Phase IV operations and beyond. It addresses the need for combatant and joint force commanders to consider stability operations early in the planning process and illustrates the challenge in developing lines of effort inherent in Phase IV operations: establishing a secure environment, initiating reconstruction efforts, and/or providing governance, humanitarian relief, and the restoration of essential public services in order to facilitate the transition to civilian control.

B. Objectives:

- Assess the relationship between conflict termination and stability operations.
- Evaluate the key planning challenges for Phase IV operations.
- Identify and discuss the military's role in planning and conducting Phase IV operations in regard to security, governance, reconstruction, and humanitarian relief.
- Examine the role of U.S. government agencies, Intergovernmental Organizations (IGOs), and Non-Governmental Organizations (NGOs) in support of stability operations.

C. Background:

Victory in the dominate phase of an operation will not necessarily achieve a war's political objectives unless that success is consolidated in the post-conflict phase. Historically, U.S. military and civilian leaders and planners have focused on winning wars at the expense of post-conflict operations. For instance, operations in Afghanistan and Iraq have demonstrated the importance of planning for stability operations well before the initiation of Phase IV activities. The desire to withdraw forces soon after the termination of major combat operations, however, must be weighed against whether an extended U.S. military presence could have a positive influence on achieving long-term policy goals. Operational victory can still lead to strategic defeat without adequate planning for stability operations.

The key components of stability operations, which became a core U.S. military mission in November 2005, are the maintenance or re-establishment of a secure environment and the provision of essential governmental services, emergency infrastructure reconstruction, and humanitarian relief. Today, joint forces support stabilization activities led by USG departments

or agencies, foreign governments and security forces, IGOs, and NGOs. More importantly, joint forces lead stability operations when other agencies, governments, forces, and IGOs are unable to provide the necessary capabilities.

Similar to the need to address conflict termination in pre-conflict planning, Phase IV operations must be integrated into the planning process at the outset. In short, the lack of consolidating military success in the post-conflict phase of an operation can place the desired end state at risk. Planning that synchronizes all phases of an operation, including conflict termination and stability operations, can have a positive impact on long-term stability in a region. This seminar examines case studies from the U.S. Civil War, World War II Germany, World War II Japan, and Iraq in 2003 in order to illustrate the link between conflict termination and stability operations, and to emphasize the complex nature of post-conflict issues.

The point of contact for this session is Professor George Oliver, C-426.

D. Questions:

What is the relationship between conflict termination and stability operations?

Explore the impact of U.S. and/or allied strategic objectives on the planning and conduct of stability operations.

What are the critical considerations of the operational or theater-strategic commander in planning for the transition from conflict termination to stability operations?

How should the Combatant Commander and the staff plan to establish security, provide governance, rebuild essential services and foster economic development, and provide humanitarian relief?

What is the role of non-military agencies in stability operations, and how does the commander integrate and synchronize military activities with U.S. Governmental agencies, IGOs, and NGOs?

E. Products:

Students analyze one of four post-conflict case studies and brief their findings to their seminar.

F. Required Reading:

Oliver, George F. "Stability Operations Primer," Newport, RI: U. S. Naval War College 2014. Read. **(NWC 3186A)**

United States Office of the Chairman, Joint Chiefs of Staff. *Stability Operations.* Joint Publication (JP) 3-07. Washington, DC: CJCS, 29 September 2011. Read pp. vii-ix, xv-xxix.

Case Studies

U.S. Civil War

Dawson, Joseph G. III, "The US Army in the South: Reconstruction as Nation Building," in *Armed Diplomacy: Two Centuries of American Campaigning*. Fort Leavenworth, KS: Combat Studies Institute Press, August 2003. Read pp. 39-63. (**NWC 3179**).

Germany

McCreedy, Kenneth, "Planning the Peace: Operation Eclipse and the Occupation of Germany." *Journal of Military History* 65 (July 2001): 713-737. (**NWC 3037**).

Japan

Extracts from *Reports of General MacArthur; MacArthur in Japan: The Occupation Military Phase.* General Headquarters, United States Army Forces, Pacific. Washington, DC: GPO, 1966. Read Chapter VII (194-229), "The Eighth Army Military Government System." (**NWC 3051**).

U.S. Department of State. *Occupation of Japan: Policy and Progress*. August 29, 1945. (**NWC 3049**).

Iraq

Gordon, Michael R. and General Bernard E. Trainor. *Cobra II: The Inside Story of the Invasion and Occupation of Iraq*. New York: Pantheon Books, 2006. Read Chapter 8, pp. 138-163. (**Issued**)

Special Inspector General for Iraq Reconstruction. *Hard Lessons: The Iraq Reconstruction Experience*, Washington, DC: US Government Printing Office, 2009. Read pp. 323-337. (**NWC 6056**).

G. Supplementary Reading:

Cavaleri, David P. *Easier Said Than Done: Making the Transition Between Combat Operations and Stability Operations.* Ft. Leavenworth: Combat Studies Institute, 2005.

Crane, Lieutenant Colonel Conrad C. (USA, Ret) "Phase IV Operations: Where Wars are Really Won." *Military Review* (May/June 2005): 27-36.

Dobbins, James, John G. McGinn, Keith Crane, Seth G. Jones, Rollie Lal, Andrew Rathmell, Rachel Swanger and Agna Timilsina, America's Role in Nation-Building: From Germany to Iraq, Santa Monica: RAND, 2003.

Orr, Robert C., ed. *Winning the Peace: An American Strategy for Post Conflict Reconstruction.* Washington, DC: Center for Strategic and International Studies, 2004.

Sefton, James E. The United States Army and Reconstruction 1865-1877, Baton Rouge: University of Louisiana Press, 1967.

Shin, Colonel David W. (USA). "Narrowing the Gap: DoD and Stability Operations." *Military Review* (March/April 2009): 23-32.

Spector, Ronald H. "After Hiroshima: Allied Occupations and the Fate of Japan's Empire, 1945-1947." *Journal of Military History* 69 (October 2005): 1121-1136.

Tracy, Sergeant Jared (USA). "Ethical Challenges in Stability Operations." *Military Review* (January/February 2009): 86-94.

United States Army. *Field Manual 3-07 Stability Operations* (FM 3-07). Washington, DC: Department of the Army, October 2008.

_____. *The Occupation of Mexico: May 1846-July 1848*. The U.S. Army Campaigns of the Mexican War Series. Washington, DC: United States Army, Center of Military History, 1994.

United States Marine Corps. *Small Wars Manual*. With an Introduction by Ronald Schaffer. Manhattan, KS: Sunflower University Press, 1996.

White House. "Management of Interagency Efforts Concerning Reconstruction and Stabilization," National Security Presidential Directive, NSPD-44. Washington DC: Government Printing Office, 7 December 2006.

Yates, Lawrence. *The U.S. Military's Experience in Stability Operations, 1789-2005*. Fort Leavenworth: Combat Studies Institute Press, 2006.

Ziemke, Earl F. "The Formulation and Initial Implementation of U.S. Occupation Policy in Germany." In *U.S. Occupation in Europe after World War II: Papers and reminiscences from the April 23-24, 1976 Conference* held in the George C. Marshall Research Foundation, Lexington, Virginia. Edited with an Introduction by Hans A. Schmitt. Lawrence, KS: Regents Press of Kansas, 1978.

INSURGENCY and COUNTERINSURGENCY (Seminar)

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.

—Martin van Creveld, *The Changing Face of War,* 2008

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 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.

B. Objectives:

- Analyze revolutionary warfare to determine the role of violence in contesting legitimate governance.
- Apply an analytical framework that addresses the common causes of insurgency, the fundamental structure of insurgencies, and how insurgencies are generally sustained.
- Evaluate the key concepts of irregular approaches to warfare and current joint counterinsurgency doctrine.
- Apply the fundamental elements of operational design and planning to counterinsurgency operations.
- Analyze the use and capabilities of interagency, intergovernmental, and multinational organizations in planning for and conducting counterinsurgency operations.
- Evaluate key classical, contemporary, and emerging principles of joint warfare using historical and contemporary counterinsurgency operations.

C. Background:

Although the U.S. military has historically participated in numerous conflicts against insurgent opponents, it has been far more enthusiastic about conflict at the upper end of the range of military operations. 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. One 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, each remains 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.

Insurgency and Counterinsurgency is discussed over two full sessions in order to make connections and draw conclusions on the application of operational art theory to the contemporary environment. The first session is devoted to the theory and analysis of insurgency. The second session focuses on both understanding and fighting insurgencies through the continued examination of historical case studies.

The point of contact for this session is COL Joe McGraw, USA, C-405.

D. Questions:

Historically, insurgency has been the resort of the "weak." What does this mean?

Explain how environmental factors determine the nature of the insurgency.

Describe the factors that must be present for an insurgency to develop and possibly succeed. Which are the most important? Why?

Explain how the political/social/cyber environment can be used by an insurgent to accomplish their objectives.

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?

How has the rise of insurgent movements with global reach differed from earlier insurgencies (or do they differ)?

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?

Explain the relationship of the operational factors of time, space, and force with an objective involving in conducting counterinsurgency (COIN) operations.

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

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

Analyze how counterinsurgents utilize the political/social/information environments in pursuit of their objectives.

E. Products:

Students are assigned three case studies in seminar and will examine and then brief the seminar on specific and relevant insurgency/COIN practices.

F. Required Reading:

First Session:

Fall, Bernard B. "The Theory and Practice of Insurgency and Counterinsurgency." *Naval War College Review* (Winter 1998): 46-57. [Originally published in the April 1965 *NWCR* from a lecture delivered at the Naval War College on December 10, 1964]. Read. **(NWC 3097).**

U.S. Office of the Chairman of the Joint Chiefs of Staff. *Counterinsurgency,* Joint Publication (JP) 3-24. Washington, DC: CJCS, 22 November 2013. Read Chapters I and II.

Waghelstein, John, and Donald Chisholm. "Analyzing Insurgency." Newport, RI: U.S. Naval War College, 2006. Read. **(NWC 3099).**

Second Session:

Sepp, Kalev I. "Best Practices of Counterinsurgency." *Military Review* (May-June 2005). Read pp. 8-12. **(NWC 3119).**

U.S. Office of the Chairman of the Joint Chiefs of Staff. *Counterinsurgency*, Joint Publication (JP) 3-24. Washington, DC: CJCS, November 22, 2013. Read Chapter III, pp. V-1 thru V-7, and scan Appendix D.

Case Studies: students will read the case studies below as directed by seminar moderators.

Greenberg, Lawrence M. Extract from "The Hukbalahap Insurrection: A Case Study of a Successful Anti-Insurgency Operation in the Philippines, 1946-1955." Washington, DC: U.S. Army Center of Military History, 1987. **(NWC 3102A)**.

Fall, Bernard. Chapter 1, "Indochina 1946-1954." USMA HM 381, Revolutionary Warfare, 1968. Ed. J.W. Woodmansee, Jr. **(NWC 3184)**.

Waghelstein, John D. "Military-to-Military Contacts: Personal Observations—The El Salvador Case." Newport, RI: U.S. Naval War College, 2005. **(NWC 3038)**.

G. Supplementary Reading:

Arreguin-Toft, Ivan. "How the Weak Win Wars." *International Security* 26 (Summer 2001): 93–128.

Asprey, Robert B. *War in the Shadows*. Garden City, NY: Doubleday, 1975.

Birtle, Andre J. *U.S. Army Counterinsurgency and Contingency Operations Doctrine 1942-1976*. Washington, DC: U.S. Army Center of Military History, 2006.

Callwell, C. E. *Small Wars: Their Principles and Practice*. 3d ed. Lincoln, NB: Univ. of Nebraska Press, 1996.

Cassidy, Robert M. "The Long Small War: Indigenous Forces for Counterinsurgency." *Parameters* (Summer 2006): 47-62.

Chaliand, Gerard. *Guerrilla Strategies: A Historical Anthology from the Long March to Afghanistan*. Berkeley, CA: Univ. of California Press, 1982.

Evans, Ernest. "El Salvador Lessons for Future U.S. Interventions." *World Affairs* (Summer 1997): 43–48.

Galula, David. *Counterinsurgency Warfare: Theory and Practice*. With a foreword by Robert R. Bowie. New York: Praeger, 1964

Hoffman, Bruce. *Insurgency and Counterinsurgency in Iraq*. OP-127-IPC/CME. Santa Monica, CA: RAND, June 2004.

Hoffman, Bruce, and Jennifer Taw. *A Strategic Framework for Countering Terrorism and Insurgency*. N-3506-DOS. Santa Monica, CA: RAND, 1992.

Waghelstein, John. "Insurgency." Lecture. Newport, RI: U.S. Naval War College, January 2006.

IRREGULAR WARFARE (Seminar)

The problems associated with countering irregular threats are complex, dynamic, and daunting. Their solutions require a long-term, comprehensive approach in the application of the instruments of national power and influence. While we are naturally predisposed toward quick and decisive conflict resolution, our conventional military preeminence virtually guarantees adversaries will resort to irregular means.

— Lieutenant General James N. Mattis, June 2006

A. Focus:

This session addresses evolving patterns of warfare and recent efforts to comprehend what has been variously characterized as unconventional, unrestricted, hybrid, and irregular warfare (IW), as practiced by both state and non-state actors. This session also provides the conceptual foundation to address the planning for and conduct of specific kinds of operations across the spectrum of conflict.

B. Objectives

- Evaluate evolving trends in warfare.
- Assess contemporary efforts of non-state actors to practice irregular / hybrid warfare and how states then develop theories from practice.
- Evaluate the implications of irregular / hybrid warfare threats on operational planning and execution.

C. Background:

The history of war in the Western world is a multi-volume work covering thousands of years of violent conflict. Since the signing of the Treaty of Westphalia in 1648 to end the Thirty Years War, Western theorists and historians have considered state-on-state conflict to be the accepted method of using force to achieve the political objectives. The expanding technological and organizational prowess of the European states enabled them to conduct increasingly larger and more destructive conflicts across the globe. However the history of warfare in the West is only a portion of the history of warfare, a compendium of violent conflict that has never been the exclusive purview of nation states. Wandering bands, tribes, non-state actors, and criminal enterprises loosely aligned with other polities have all used organized violence to achieve their political ends.

Historically, these ends have been somewhat restricted as the operational reach of the non-state groups, particularly compared to the rising European states, was rather limited. This may no longer be the case, particularly in the post-Cold War-9/11 world. Rapid economic globalization with the accelerated use of information communication technologies (ICT) combined with social media has enabled the rise of so-called "rogue states." Well-resourced,

trans-national, non-state actors and proxies have become relatively more powerful with some even attaining global reach. Concurrently, the declining military influence and political will of the former great powers has created safe spaces for these non-state groups to act. As the military proficiency of non-state actors has increased and expanded into "new" patterns of conflict and warfare, inquiring minds are considering how to incorporate these changes in the conduct of future military operations.

The result of this confluence of conventional military forces operating with non-state actors has earned the label of Irregular Warfare (IW). IW favors indirect and asymmetric approaches, though it may employ the full range of military and other capabilities, in order to erode an adversary's power, influence, and will. IW emphasizes winning the support of the relevant population(s), promoting friendly political authority, and eroding adversary control, influence, and support. The definition of IW is broad and diffuse, and many sources have created terms of reference to describe various patterns of warfare within this rubric. Prior to the collapse of the Soviet Union, several U.S. military officers coined the term fourth-generation warfare (4GW), which they described an 'evolved form of insurgency,' ostensibly growing out of Mao's concept of the People's War. The 2010 Quadrennial Defense Review stated the term 'hybrid' has recently been used to capture the seemingly increased complexity of war, the multiplicity of actors involved, and the blurring between traditional categories of conflict. Others, however, suggest that the "new" patterns of warfare—unconventional, irregular, hybrid, and unrestricted warfare—are not really new. Irrespective of whether these patterns are new or old, many state and non-state entities are struggling to come to terms with how warfare may be effectively conducted in the future.

The population-centric character of contemporary conflict combined with rapid adaptation of civilian information technology often allows opposition forces to create dilemmas for enemy governments and bureaucracies. Agile, adaptive, and ruthless potential state and non-state adversaries seek ways to attack those with whom they violently disagree, in particular U.S. and Western interests overseas and on the home front. Insurgents may be able to acquire both conventional and unconventional capabilities that when combined in innovative ways may exceed the firepower of their governmental foes. History suggests that irregular warfare presents significant challenges both to fragile and developed nation states.

Other nation states are keenly interested in emerging patterns of warfare. For example, two People's Republic of China military officers have expressed their concept of "unrestricted warfare," in which they discuss means for weaker states and non-state actors to fight stronger opponents, such as the United States. These Colonels from the People's Liberation Army view future conflict as warfare beyond limits, across a wide spectrum of actions, to include conventional and unconventional means, along with coordinated employment of all sources of national power.

Among non-state actors, members of Al Qaeda and its supporters have written extensively about new ways to attack and defeat the conventionally superior United States and other Western states. These ideas, along with training and planning techniques, have been spread globally via the Internet. While these opponents are not professional military officers, this does not necessarily render them less effective. It will certainly make them less predictable and harder to identify. Furthermore, they are often not concerned with the constraints of international law and the Geneva Conventions.

The 2014 Russia-Ukraine conflict is representative of some of these indirect and asymmetric approaches to warfare. In this conflict hybrid forces successfully operated across the

domains of warfare to create dilemmas for the Ukrainian government that is were unable to handle. The Russian Federation's fusion of conventional weapons, irregular tactics, propaganda and political warfare successfully undermined the Ukrainian government's will to resist. The subsequent annexation of the Crimea and the capture of the Donetsk region suggest that the Russian military activity was shockingly effective, leading to the lasting limited strategic freedom of the Ukraine.

Regardless of the adjectives one uses to describe the multiple and evolving patterns of modern conflict, it is essential for both military officers and civilian leaders to comprehend not only these emerging patterns, but also to understand how present and future opponents, state and non-state, are planning to take advantage of them.

The point of contact for this session is Professor Paul Povlock, C-410.

D. Questions:

Are presently emerging patterns of warfare new or do they actually represent a return to historically common means for conducting war?

Discuss the common threads in the several concepts of unconventional, irregular, hybrid, and unrestricted warfare. Are these concepts different or merely different adjectives to describe the character of *war*?

Explain the implications of facing opponents who do not field professional military forces. How does the use of cyber warfare by state and non-state actors affect a nation state's responses to asymmetric attacks? Consider the response from the perspective of the Law of Armed Conflict.

Describe how a theater strategic commander and staff can effectively incorporate ideas on countering the threat of irregular / hybrid warfare into campaigns and major operations.

The Russian conflict in Ukraine appears to have gone relatively well from the perspective of the Kremlin. Is this a model for future military operations or were the Russians merely fortunate?

E. Products.
None.

F. Required Reading:

Berzins, Janis. "Russia's New Generation Warfare in Ukraine: Implications for Latvian Defense Policy," National Defence Academy of Latvia, Center for Security and Strategic Research, April 2014. Read. (**NWC 3207**).

Hoffman, Frank G. "Conflict in the 21st Century." Potomac Institute for Policy Studies, Arlington (December 2007). Read pp. 17-33. (**NWC 3150).**

Liang, Qiao, and Wang Xiangsui. "Unrestricted Warfare." Beijing: PLA Literature and Arts Publishing House, February 1999. Read Chapter 7, pp. 179-203. (**NWC 6021**).

Rácz, András. "Russia's Hybrid War in Ukraine, Breaking the Enemy's Ability to Resist." The Finnish Institute of International Affairs. June 16, 2015. Accessed January 15, 2016. http://www.fiia.fi/en/publication/514/russia_s_hybrid_war_in_ukraine/. Read pp. 34-43, 57-93. (**NWC 3195**).

Schmitt, Michael, "International Law in Cyberspace: The Koh Speech and Tallinn Manual Juxtaposed," *Harvard International Law Journal Online* 13 (2012). Read pp. 13-37. (**NWC 3203**).

U.S. Office of the Chairman of the Joint Chiefs of Staff. *Counterinsurgency*, Joint Publication (JP) 3-24. Washington, DC: CJCS, November 22, 2013. Read pp. IV-20 thru IV-28. Scan pp. IV-1 thru IV-19.

G. Supplementary Reading:

Bar, Shmuel and Richard Crowell. "Hybrid Conflict: A Retrospective Analysis of the Summer 2006 War Between Israel and Hizballah." Newport: U.S. Naval War College, 2013. (**NWC 2095A**).

Campbell, Lisa J. "Los Zetas: Operational Assessment." *Small Wars & Insurgencies* 21, no. 1 (March 1, 2010): 55. http://www.proquest.com/ (accessed June 20, 2011).

Cassidy, Robert M. "Counterinsurgency and Military Culture: State Regulars versus Non-State Irregulars." *Baltic Security & Defence Review* Volume 10, 2008.

Conetta, Carl. "Dislocating Alcyoneus: How to Combat al-Qaeda and the New Terrorism." Project on Defense Alternative Briefing Memo # 23. The Commonwealth Institute, Cambridge MA**.** June 25, 2002.

Crowell, Richard M. "Analyzing Hybrid Warfare." Newport, RI: U.S. Naval War College, 2015.

Hoffman, Frank G. (2010). 'Hybrid Threats': Neither Omnipotent Nor Unbeatable. *Orbis* 54, no. 3 (July 1, 2010): 441.

_____. "Hybrid Warfare and Challenges." *Joint Force Quarterly* 52 (1st Quarter 2009): 34-39.

_____. "NEO-Classical Counter-Insurgency?" *Parameters* 37 (Summer 2007): 71-87.

Tallinn Manual on the International Law Applicable to Cyber Warfare. http://issuu.com/nato_ccd_coe/docs/tallinnmanual?mode=embed&layout=http%3A%2F%2Fskin.issuu.com%2Fv%2Flight%2Flayout.xml&showFlipBtn=true.

U.S. Marine Corps. *A Concept for Countering Irregular Threats: A Comprehensive Approach*. Washington, DC: U.S. Marine Corps. June 14, 2006.

U.S. Office of the Chairman of the Joint Chiefs of Staff. *Counterinsurgency Operations*, Joint Publication (JP) 3-24. Washington, DC: CJCS, October 5, 2009.

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DEFENSE OPERATIONS IN THE HOMELAND (Seminar)

One of the biggest mistakes that tactical commanders can make is to assume they need to take charge upon arrival at the scene of an incident. Military forces operating freely within civilian jurisdictions risk upsetting the Constitutional balance between civil authority, the military, and the private sector.

—Army Doctrine Publication 3-28,
Defense Support of Civil Authorities

A. Focus:

This session addresses how DoD military operations within the U.S. homeland differ from similar missions on foreign soil. Operating in the homeland brings different command and control arrangements, legal limitations, and risks. Responding to a significant breakdown in civil order will be particularly challenging. This session examines the considerations commanders and planners must take into account when planning or executing military operations on U.S. soil. It also includes a practical exercise in which students explore the implications of DoD domestic military operations in response to an escalating series of threats.

B. Objectives:

- Analyze how military operations within the U.S. homeland differ from similar tasks on foreign soil.
- Assess the risks and implications for the commander of a federal military response to a breakdown in domestic civil order.
- Evaluate options and risks during a hypothetical domestic disaster scenario.

C. Background:

The U.S. joint force is primarily organized, trained, and equipped for operations overseas. The President may, however, choose to employ federal military forces within the U.S. homeland in a variety of circumstances. Missions may include responding to disasters, supporting federal law enforcement authorities, or defending the United States from external threats and aggression. In any case, military operations in the homeland present the commander with numerous factors not encountered in foreign operations.

Many of the challenges of domestic operations spring from the U.S. federal system and the overlap of jurisdiction and responsibility among the various federal, state and local authorities. Other challenges—and risks—arise because these operations are conducted in and among the American people; demanding the highest sensitivity to the use of force and collateral damage within the homeland.

All DoD missions in the homeland are categorized as either Defense Support of Civil Authorities (DSCA), or Homeland Defense (HD). DSCA missions (such as disaster relief) are

conducted in support of one or another civilian agency and make up the preponderance of military operations in the homeland. HD missions are less frequent, intrinsically military in nature, and conducted under DoD lead. All military operations inside the U.S. homeland involve different challenges from those experienced overseas, but the complexity, ambiguity, and risk increases greatly with an increased threat. Any situation where the possibility of violent civil disorder exists will be extremely challenging for the commander. The paradigm for the employment of military force in a coercive role in the U.S. homeland is particularly ill-defined. Military commanders are well served to fully understand the complexity of the domestic operating environment before that decision is made.

The point of contact for this session is Professor Ivan Luke, C-431.

D. Questions:

All DoD missions in the homeland are categorized as either Defense Support of Civil Authorities (DSCA), or Homeland Defense (HD). Given an understanding of the joint doctrine structure for domestic military operations, what are the key distinctions between the different mission areas (DSCA and /HD) and what are the implications for the commander?

Describe the operational concept for U.S. national incident response and how supporting DoD military forces integrate. What are the potential pitfalls for the military commander and how might they be avoided?

When would a dual-status commander be appropriate? What are the advantages and disadvantages of this construct?

What factors should be of concern to the military commander when tasked with restoring domestic civil order? What might the commander consider to reduce or mitigate risk during domestic civil disturbance operations?

E. Products:
None.

F. Required Reading:

Luke, Ivan T. "DOD Operations in the Homeland: Context and Issues for the Commander." Newport, RI: U.S. Naval War College, Joint Military Operations Department, July 2016. Read. **(NWC 2067D)**.

Tussing, Bert B. "Likelihood versus Consequence: The Application of the Land Component in Homeland Defense." In *Homeland Defense and Defense Support of Civil Authorities (DSCA): The U.S. Military's Role to Support and Defend*, ed. by Bert B. Tussing and Robert McCreight. Boca Raton, FL: Taylor & Francis Group, 2015. Read pp. 99-122 **(NWC 2140).**

U.S. Office of the Chairman, Joint Chiefs of Staff. *Defense Support of Civil Authorities,* Joint Publication (JP) 3-28, Washington, DC: CJCS, 31 July 2013. Read Executive Summary, Chapter I.

G.   Supplementary Reading:

Brown, James, B., Russell E. Cobel, and Emery J. Chase. "Radiological Events in the Homeland." *Joint Force Quarterly* 48 (January 2008): 61-65.

Clayton D. Laurie and Ronald H. Cole, *The Role of Federal Forces in Domestic Disorders 1877-1945.* Washington, DC: U.S. Army Center for Military History, 1997)

Felicetti, Gary and John Luce, "The Posse Comitatus Act: Liberation from the Lawyers." *Parameters 34*, no. 3 (Autumn 2004), Military module, 94-106.

Johnson, Diana. "Capability Does Not Equal Authority: A Primer for Judge Advocates on Defense of Civil Authorities in a National Disaster Scenario." Air Command and Staff College, Air University: Maxwell, AL, April 2008.

McGrane, Sean. "Katrina, Federalism, and Military Law Enforcement: A New Exception to the Posse Comitatus Act." *Michigan Law Review* 108, no. 7 (2010): 1309-1340.

Schnaubelt, Christopher. "Lessons in Command and Control form the Los Angeles Riots." *Parameters 27*, no. 2 (Summer 1997), Military module, 88-109.

Schumacher, Ludwig J. "Dual Status Command for No-Notice Events: Integrating the Military Response to Domestic Disasters." *Homeland Security Affairs* 7, Article 4 (February 2011) http://www.hsaj.org/?article=7.1.4

U.S. Federal Emergency Management Administration. *National Response Framework.* January 2008.

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COMPREHENSIVE EXAMINATION (Individual Effort)

If the mind is to emerge unscathed from this relentless struggle with the unforeseen, two qualities are indispensable: first, an intellect that, even in the darkest hour, retains some glimmerings of the inner light which leads to truth; and second, the courage to follow this faint light wherever it may lead.

—Carl von Clausewitz, *On War*, 1832

A. Focus:

This session is designed to allow students to demonstrate a synthesis of the education presented to date and to demonstrate higher order thinking skills in a complex, uncertain, and ambiguous situation involving the use or contemplated use of military force.

B. Objectives:

- Synthesize course concepts including operational art, operational law, and environmental considerations through the analysis of JMO course material.
- Create a reasoned response to the examination questions demonstrating an internalization of the various concepts of the Joint Military Operations curriculum.
- Provide students the opportunity to demonstrate critical thinking skills.

C. Background:

The examination questions will be issued on 18 October at 0830 and student responses are due to the moderators NLT 1200 the following day. Grading criteria for the comprehensive examination may be found on pages xviii-xix of this syllabus.

The point of contact for this session is Professor Paul Povlock, C-410.

D. Questions:

See examination question sheet.

E. Products:

A written examination that demonstrates student mastery of the subject.

F. Required Reading:

The examination will be based on JMO course material presented to date.

G. Supplementary Reading:
None.

RESEARCH PAPER PRESENTATIONS (Dual Seminar)

Somewhere, something incredible is waiting to be known.

—Dr. Carl Sagan, 1990

A. Focus:

This session is intended to allow students to share their knowledge and understanding of the research paper. Furthermore it sets the conditions for the Capstone synthesis event in which a design methodology will be used to assist students in developing a campaign concept. The knowledge gained by the researchers, and shared in this session, serves as an intellectual baseline for addressing an ill-structured problem associated with Ukraine. Students also have the opportunity to make modifications to their papers based on peer responses.

B. Objectives:

- Demonstrate critical thought and synthesize course concepts in the presentation of a scholarly research paper.
- Share research information regarding an ill-structured problem.
- Gain knowledge in multiple topic areas to more fully address the challenges in the Capstone synthesis event.
- Peer review fellow student papers through frank, informed discussion.

C. Background:

When using a design methodology to address an ill-structured problem, planners and commanders must first understand the environment holistically. One method to develop greater understanding is through informed discussion with subject matter experts, foreign area experts, and so forth; another is to research the subject. After the students have written a paper on an assigned topic area, they become the seminar subject matter experts for the Capstone. Students are expected to present an overview of their own research and critically consume the information presented by classmates since the discussions will form the basis for understanding the final problem presented in the Capstone.

The point of contact for this session is Col Adrian Schuettke, USAF, C-412.

D. Questions:
None.

E. Products:

       Students will prepare and present a formal information brief on the findings of their research. This brief should include an introduction of the speaker and the research topic area, the research question and thesis statement, and finally an outline of the key arguments and areas for further research. The brief should last no more than 10 minutes. Students should be prepared to spend a few minutes responding to questions or discussion comments provided by the moderators and their peers. Slides are not required, but a two slide template is provided for optional student use on Blackboard under "Media."

F. Required Reading:
None.

G. Supplemental Reading:
None.

CAPSTONE SYNTHESIS EVENT (Dual Seminar)

If men make war in slavish obedience to rules, they will fail.

—General Ulysses S. Grant

A. Focus:

The final event in the JMO trimester is a Capstone synthesis event that emphasizes design as a methodology for addressing ill-structured problems. The purpose of this exercise is to synthesize course material through rigorous discourse and practical application. This is done in a realistic staff environment through the development of a broad operational approach intended to address a series of problems based on a fictional tasking, using real-world strategic environment/issues relating to Ukraine. Students are advised that this exercise, while based on a fictional task to the J-5, is in no way predictive nor does it reflect the policy of the U.S. Navy or the U.S. Government. This educational exercise provides students an opportunity to apply the principles and concepts studied throughout the trimester.

B. Objectives:

- Synthesize problem-solving concepts in leading a multidisciplinary and multinational planning team addressing ill-structured problems in a volatile, uncertain, complex, and ambiguous environment.
- Synthesize leadership skills necessary to sustain innovative and agile organizations in a joint environment.
- Formulate theater strategic and operational objectives that support theater campaigns and national military strategies across the spectrum of conflict and synchronize efforts at the operational level with the national strategic, national military strategic, and theater strategic levels of war.
- Revise planning processes to balance the competing objectives of the interagency effort, including Inter-Governmental Organizations and Non-Governmental Organizations, in achieving stated objectives.
- Apply a design methodology for developing potential solutions to ill-structured problems.

C. Background:

The Capstone synthesis event is a joint exercise conducted in McCarty Little Hall. The focus of this exercise is to refine the students' abilities to address ill-structured problems at the operational/theater strategic level of war and to demonstrate this skill set using a design methodology. Students will apply a design approach as well as gain a deeper understanding of conceptual planning by developing a campaign-level concept briefing that could form the basis for future engagement.

Students act in assigned J5 Staff Directorate Joint Planning Group billets or as Operation Planning Team leads, with moderators guiding them. Moderators serve as the Commander, J5 Director, and Officers Conducting the Exercise, and provide all guidance and intent to the students in order to ensure a base line for planning. Individual students will serve as the focal point in the educational process providing common answers to Requests for Information, generating support issues as required to sustain the educational momentum, and providing overarching guidance to all planning groups based on their assigned research paper topics. The exercise culminates with a campaign design brief presented to a senior planner.

The point of contact for this session is Professor Mark Seaman, C-428.

D. Questions:

How does a Combatant Commander's staff organize and address potential solutions to ill-structured problems?

How does a Joint Planning Group effectively leverage component or multi-national perspectives and capabilities when planning operations?

How does the Combatant Commander best integrate or leverage elements of national power to accomplish strategic and operational objectives?

E. Products:

A campaign-level concept brief will be presented to a senior planner/mentor.

F. Required Reading:

Breedlove, Philip M. Statement of General Philip M. Breedlove, Commander U.S. Forces Europe, Before the House Armed Services Committee. 25 February 2016. Read. (**NWC 2126**).

Hartig, William J. "Design: A Problem Solving Methodology." Newport, RI: U.S Naval War College, Joint Military Operations Department, 2014. Review. **(NWC 1056A).**

United States Army War College. *Campaign Planning Handbook*. Department of Military Strategy, Planning and Operations, Carlisle Barracks, Pennsylvania, 2014. Review Chapters 3 and 4. (**NWC 2082**).

U.S. Naval War College, Joint Military Operations. *JMO Capstone Synthesis Event*. Newport, RI: 2016. Read. (**NWC 5000.1K**).

G. Supplementary Reading:

The exercise involves the application of materials covered throughout the trimester.

August 2016

Sunday	Monday	Tuesday	Wednesday	Thursday	Friday	Saturday
14	15 1000 † Convocation 1300-1700 † Ethics Conference	16 0845 – 0945 † JMO-01 Course Overview (Lecture) 1000 – 1145 * JMO-02 Introductory Seminar (Seminar)	17 0830 – 1000 * JMO-03 Introduction to Problem Solving (Seminar) 1015 – 1145 * JMO-04 Design Methodology (Seminar)	18 0830 – 1000 * JMO-05 Research Paper (Seminar) 1015-1145 * JMO-06 Operational Art and Doctrine (Seminar)	19 0830-1000 † JMO-07 Strategic Background for the Philippines Campaign (Lecture) 1015 – 1145 * JMO-08 The Strategic Objective and Levels of War (Seminar)	20
21	22 0830 – 1000 * JMO-09 Operational Factors (Seminar) 1015 – 1145 * JMO-10 Operational Functions (Seminar)	23 0830 – 1000 * JMO-11 Theater Structure and Geometry (Seminar) 1015 – 1145 * JMO-12 Elements of Campaigns and Major Operations (Seminar)	24 0830 – 1145 * JMO-12 Elements of Campaigns and Major Operations (Seminar)	25 0830 – 1145 * JMO-13 Operational Design (Seminar)	26 0830 - 1630 Student Research Day	27
28	29 0830 – 1000 * JMO-13 Operational Design (Seminar) 1015-1145 * JMO-14 Operational Lessons Learned (Seminar) In Progress Review #1	30 0830 - 1145 * JMO-15 Theater-Strategic Leadership (Seminar) In Progress Review #1	31 0830 – 1000 † JMO-16 Maritime Op Law (Lecture) 1015 – 1145 † JMO-17 International and Operational Law (Lecture) In Progress Review #1			* Seminar Room † Spruance Aud # Pringle Aud § MLH

September 2016

Sunday	Monday	Tuesday	Wednesday	Thursday	Friday	Saturday
				1 **0830 – 1145 *** **JMO-18 Op Law Case Study (Seminar)** **1145: Op Art Exam Read-ahead Issued** In Progress Review #1	**2** **0830 - 1200 Student Research Day**	**3**
4	**5** **LABOR DAY**	**6** **0830 – 1000 *** **JMO-19 Objectives of Seapower (Seminar)** **1015 – 1145 *** **JMO-20 Struggle for Sea Control (Seminar)**	**7** **0830 – 1145 †*** **JMO-21 The Falklands/Malvinas Conflict (Lecture and PE)**	**8** **0830 – 1145 *** **JMO-21 The Falklands/Malvinas Conflict (PE)**	**9** **0830 – 1145 *** **JMO-21 The Falklands/Malvinas Conflict (PE)** **1630: Paper Proposals Due**	**10** *** Seminar Room** **† Spruance Aud** **# Pringle Aud** **§ MLH**

September 2016

Sunday	Monday	Tuesday	Wednesday	Thursday	Friday	Saturday
11	12 0830 – 1145 * Student Exam Prep 1145 * JMO-22 Op Art Exam Issued	13 1200 JMO-22 Op Art Exam Due	14 0830 – 1145 * JMO-23 APEX Part I (Seminar)	15 0830-1145 * JMO-23 APEX Part II (CLASSIFIED Seminar)	16 0830 - 1630 Student Research Day	17
18	19 0830-1145 * JMO-24 The Joint Operation Planning Process (Seminar) IPR # 2	20 0830-1145 * JMO-24 The Joint Operation Planning Process (Seminar) IPR # 2	21 0830-1145 * JMO-25 Intelligence for Operational Planning and Decision Making (Seminar) IPR # 2	22 0830 – 1000 * JMO-26 Joint Operational Logistics (Seminar) 1015 – 1145 * JMO-27 Strategic Deployment (Seminar) IPR # 2	23 0830 - 1630 Student Research Day	24
25	26 0830 – 1145 * JMO-28 Command and Control (Seminar)	27 0830 – 1000 * JMO-29 Information Environment (Seminar) 1015 – 1145 * JMO-30 Military Deception (Seminar)	28 0830 – 1145 * JMO-31 Cyberspace Operations (Seminar)	29 0830 – 1145 * JMO-32 The Theater Campaign Plan (Seminar)	30 0830 - 1630 Student Research Day	* Seminar Room † Spruance Aud # Pringle Aud § MLH

October 2016

Sunday	Monday	Tuesday	Wednesday	Thursday	Friday	Saturday
2	3 0830 - 1145 * JMO-33 Small Wars (Seminar)	4 0830 - 1000 * JMO-34 Interagency Coordination (Seminar) 1015-1145 * JMO-35 Civil-Military Integration (Seminar)	5 0830 – 1145 * JMO-36 Conflict Termination (Seminar)	6 0830 – 1145 * JMO-37 Stability Operations (Seminar)	7 0830 - 1630 Student Research Day	8
9	10 COLUMBUS DAY	11 0830 – 1145 * JMO-38 Insurgency and COIN (Seminar)	12 0830 – 1145 * JMO-38 Insurgency and COIN (Seminar)	13 0830 – 1145 * JMO-39 Irregular Warfare (Seminar)	14 0830 - 1630 Student Research Day	15
16	17 0830 – 1145 * JMO-40 Defense Ops in the Homeland (Seminar)	18 0830 * JMO-41 Comprehensive Exam Issued	19 1200 JMO-41 Comprehensive Exam Due	20 0830 - 1630 Student Research Day	21 0830 – 1145 § JMO-42 Research Paper Presentations (Dual Seminar)	22 * Seminar Room † Spruance Aud # Pringle Aud § MLH

October 2016

Sunday	Monday	Tuesday	Wednesday	Thursday	Friday	Saturday
23	24 **0830 – 1145 §** **JMO-42 Research Paper Presentations (Dual Seminar)**	25 **0830 – 1145 §** **JMO-42 Research Paper Presentations (Dual Seminar)**	26 **0830 - 1630 Student Research Day**	27 **0830 - 1630 Student Research Day**	28 **0830 - 1630 Student Research Day** **1200 Research Papers Due**	29
30	31 **0830 – 1630 §** **JMO-43 Capstone Synthesis Event – Introduction**					*** Seminar Room** **† Spruance Aud** **# Pringle Aud** **§ MLH**

November 2016

Sunday	Monday	Tuesday	Wednesday	Thursday	Friday	Saturday
1		**1** **0830 – 1630 §** JMO-43 Capstone Synthesis Event	**2** **0830 – 1000 #** JMO-43 Capstone SME Panel (Lecture) **1015 – 1630 §** JMO-43 Capstone Synthesis Event	**3** **0830 – 1630 §** JMO-43 Capstone Synthesis Event	**4** **0830 – 1630 §** JMO-43 Capstone Synthesis Event	**5**
6	**7** **0830 – 1630 §** JMO-43 Capstone Synthesis Event	**8** **0830 – 1630 §** JMO-43 Capstone Synthesis Event	**9** **0830 – 1630 §** JMO-43 Capstone Synthesis Event	**10** **0830 – 1200 §** JMO-43 Capstone Synthesis Event	**11** **VETERANS DAY**	**12**
13	**14**	**15**	**16**	**17**	**18**	**19**
20	**21**	**22**	**23**	**24** **THANKSGIVING**	**25**	**26**
27	**28**	**29**	**30**			*** Seminar Room** **† Spruance Aud** **# Pringle Aud** **§ MLH**