

NWC 2062Y

THE UNITED STATES NAVAL WAR COLLEGE

JOINT MILITARY OPERATIONS DEPARTMENT

**THE CNCS/NSC JMO RESEARCH PAPER
GUIDANCE FOR STUDENTS**



15 January 2013

11 January 2013

MEMORANDUM FOR STUDENTS, JOINT MARITIME OPERATIONS COURSE 2013

From: Chairman, Joint Military Operations Department

Subj: JMO Research Paper

1. The Naval War College exists so that military officers and their civilian counterparts in U.S. Government service may study their craft, reflect on their professions, conduct independent research for professional purposes, and hone their leadership skills. The JMO research paper provides significant opportunity to enact these principles.
2. In keeping with the College's founding principles, we desire to advance the literature regarding military operations. JMO research papers written by NWC students have directly and positively influenced operational art, the operational level of war, and other areas of critical concern to Navy and joint force commanders. Because outstanding JMO research papers compete for and win prizes at graduation, an attachment to this reading also highlights these awards and emphasizes how to submit a paper for award competition. In addition, this reading suggests multiple avenues to have your research paper published. I strongly encourage you consider publication, sharing your research and writing with others in our profession.
3. Getting started is the first challenge. Because topic selection comes early in the JMO course, NWC 2062Y provides detailed guidance to enable effective use of your time and efforts, including a list of potential paper topics from which you may choose if you desire. Keep in mind that final topic approval rests with your seminar moderators, who will also serve as your paper advisors throughout the process.
4. Your moderators will discuss with you specific paper requirements and provide advisory assistance as you progress. We make it our business to see that you are successful. Please keep us informed of your progress and any difficulties encountered as you research, draft, and finalize your papers. I wish you the best in this endeavor and hope you find it both challenging and rewarding.

Captain Alan J. Abramson, U.S. Navy
Chairman, Joint Military Operations
Department

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ENCLOSURE (1) JMO RESEARCH PAPER BASIC REQUIREMENTS

PAPER PROPOSAL. The proposal helps students select an appropriate topic, craft a thesis statement for the topic, describe the methods of the research, and begin to build a bibliography by providing a preliminary annotated bibliography. The proposal process has two parts: (1) submission of the JMO Research Paper Proposal as outlined here and (2) pre- and post-proposal tutorials with the faculty moderators.

The paper proposal comprises a proposal summary that includes a preliminary annotated bibliography. The proposal shall be submitted on or before the date specified in the syllabus schedule.

Prior to and shortly after paper proposal submission, the student and moderators will meet in tutorials to discuss the proposal. Students should start by generating a research question. A good place to start for inspiration for research questions is enclosure (2) of this document, which contains a list of potential paper topics. Students will then conduct sufficient preliminary research to narrow further their topics in order to craft a thesis statement—an arguable position—which they will discuss with their moderators during the first tutorial.

During the second tutorial, students and moderators agree upon the student's paper development course of action. Moderators will help each student focus on the research and writing effort, guide the student with respect to analytical techniques, suggest additional research sources, refer the student to resident experts if necessary, and (because moderators also serve as paper advisors) establish the advisory rule set and schedule. Finally, students should be prepared to answer the questions on page 5 of this reading.

The proposal process culminates with an accepted proposal. This means that students and moderators have common appreciation for the depth of research, extent of analysis, and quality of writing expected of each student. *If a student desires to change a proposal after it has been approved, the change must be approved by the student's moderators.*

PAPER LENGTH & FORMAT. As specified in the JMO Syllabus, the paper shall be **between 14 and 17 pages of text (3500 to 4250 words)**. This underlined distinction means that the table of contents, abstract, notes, bibliography, charts, maps, tables, figures, and so forth do not count against the amount of space available for text. Examples: a student has four pages of charts, maps, and tables integrated into the body of the paper; therefore, the total page count measured from the first page of the Introduction to the last page of the conclusion (prior to end-notes page) should be between 18 and 21 pages. Conversely, a student whose paper has three pages of charts, maps, and tables in the paper body and a page count of 15 (measured from the first page of the Intro to the last page of the conclusion) has 12 pages of text, which is insufficient.

A Writer's Reference, 7th ed., is the standard for unclassified written *work* and shall be used for the JMO Research Paper. The following format parameters pertain:

1. Margins: one-inch top, bottom, and right; left margin is 1.25 inches.
2. Justification: LEFT except when centering is necessary. Hyphenation between lines on the same page (but not between pages) is acceptable. Use Widow-Orphan protection.
3. Double-space all text including block quotations.
4. Use font size 12.

PAPER COMPONENTS. The paper must have the following components except the Table of Contents (optional but recommended):

Standard Form (SF) 298

Cover Page (please use the format attached to this enclosure)

Table of Contents

Abstract

Introduction

Main Body

Notes (endnotes or footnotes)

Selected Bibliography

Note: A counterargument section is not required, but may be included. It is advisable to consider possible counterarguments to the paper's thesis when developing the argument in the main body of the paper.

ENCLOSURE (1) ATTACHMENTS:

- JMO Research Paper Proposal format
- Representative Tutorial Questions
- Paper Advisors
- How to Develop a Paper Thesis
- Example of a Generic Outline
- Preliminary Annotated Bibliography
- Cover Page Format

VII. Moderator Notes and Comments:

REPRESENTATIVE TUTORIAL QUESTIONS

1. Does the approach satisfy the JMO Research Paper requirements? Has an appropriate research thesis statement been derived from the topic?
2. Will the paper be written at the appropriate level? The topic and research question should address theater-strategic or operational level problems/concerns.
3. Are the approach and methodology acceptable? Are there suggestions for improvement?
4. If properly executed, will the effort be relevant?
5. Does the paper's outline indicate a well-thought-out approach? Does it appear that conclusions will flow logically from the analysis presented?

PAPER ADVISORS

JMO seminar moderators serve as paper advisors for all assigned seminar students. The purpose of this “advisory” function is NOT to write (think) the paper for the student, but to ensure students execute properly the research paper process and its objectives (thesis, argument, conclusion, and recommendations), and present their findings coherently. Moderators meet with students to review topics, research questions, theses, outlines, rough drafts, and final drafts. Moderators will also debrief students after the graded paper has been returned.

HOW TO DEVELOP A JMO RESEARCH PAPER THESIS

1. Students will choose their own topics to be addressed substantially in a 14-17 page research paper. Students should start by generating a research question. A good place to start for inspiration for research questions is enclosure (2) of this document, which contains a list of potential paper topics.
2. The second step is to establish the paper's **THESIS** (def: “A position or proposition that a person advances and offers to maintain by argument”). Simply stated, the thesis is what the student believes is the valid argument to answering the research question (“Refocusing joint PME around the pillars of strategy, operational art and joint staff officer competencies at the intermediate level will better prepare officers for future assignments on joint, service or operational staffs.”). This belief is based on preliminary investigation appropriate to the topic and research question, but before substantive research and analysis are accomplished. One may learn, after substantive research and analysis, that one's original thesis was inaccurate, and if such occurs, the original thesis should be revised accordingly.
3. Final Notes. The JMO Research Paper should have the following main parts: introduction with thesis, optional background (only if necessary to set stage for the next section), main body, conclusions / recommendations. A clear, concise, coherent introduction is the key to a successful paper: it introduces the topic, orients the reader to the “what and why” of the effort, gets the

reader's interest, and foreshadows the paper's conclusions. In this regard, the Introduction should state explicitly the author's thesis and explain how the thesis is supported in the paper's main body.

4. Additional information. See *A Writer's Reference*, 7th ed., and/or the *Pocket Writing and Style Guide*, 2012 for detailed suggestions concerning the paper development process from topic selection to final draft.

PAPER ORGANIZATION

Note: every topic is different; the outline below is intended as the point of departure for adaptation to your specific paper thesis and research. Some papers may require a background section; if so, place it immediately after the introduction, and as short as possible (one page).

I. Introduction (about 10 percent of the paper's length; depending on the topic this part could be also titled "Background," "Strategic Setting," "Theoretical Framework," etc.)

A. Nature of the problem / issue you will address:

-- Focus at the operational level; look at the issue from the combatant commander's perspective and articulate that perspective throughout the paper. Explain precisely why resolution of the issue discussed in this paper is important.

B. Your thesis statement concerning the problem/issue:

-- The thesis statement is a single sentence that asserts something and is normally placed at the end of the second paragraph in the Introduction. It does NOT begin with "This paper will" or "The purpose of this paper is to" The thesis statement should answer your research question (RQ); for example:

RQ: Under what primary circumstance are no-fly zones ineffective?

Thesis: No-fly zones are ineffective when they are not integrated with overall operational design.

RQ: Should Amphibious Operations be listed as a core capability in Navy doctrine?

Thesis: The inclusion of Humanitarian Assistance / Disaster Relief (HA/DR) as a core capability and the exclusion of Amphibious Operations as a specific core capability represents a flaw within Navy doctrine and demonstrates incorrect prioritization of mission for the U.S. naval service.

C. Necessary background and limitations:

-- This is a brief summary of necessary background that helps put your approach into context. It may also include a brief explanation of critical terminology and self-imposed limitations (i.e., what you will and will not be addressing in your paper—as necessary). This portion of the paper helps you set the stage for your investigation so that you can launch into your analysis, counter-arguments (optional), and so forth.

II. Main Body [10-12 pages]. This section should be divided into several sections; each section should start with an introductory paragraph; it should end with a transition paragraph to the next section. In the main body of the paper you should present a narrative on a particular topic by using primary/secondary sources. Your argument should be presented as a set of three or four main points. Each main point is a complete sentence—an assertion that develops and supports the thesis. Your counter-arguments or critical comments should follow presentation of the facts in a particular paragraph. Examples of main points relevant to the amphibious operations as a core capability thesis example presented above might be:

- Doctrine aligns the United States Navy's efforts to man, train, equip, and fight, so what is listed as a core capability in doctrine will have significant impact on the structure and capability of the Navy.
- A naval service's ability to conduct amphibious operations allows for a successful HA/DR mission; however, a navy built on the HA/DR mission does not necessarily allow for the full spectrum of amphibious operations.
- In accordance with the National Military Strategy, given the U.S. Navy's maritime role, joint forcible entry, or an amphibious operation, must be a fundamental role of the Navy in conjunction with the Marine Corps

III. Conclusions (about 5 percent of the paper's length). You need to write concluding thoughts (one or two paragraphs) for each section of the main body. No conclusion should be written for your Introduction. Do not cite other sources in your Conclusion; these are your thoughts on the results of your research.

IV. Recommendations/Operational Lessons Learned

Your "Recommendations" (1/2 to 2/3 page long) should deal with the current or future issues. Your recommendations **must be** based on your Conclusion. They should be complete sentences,. If your paper deals with a historical case study, you should write "Operational Lessons Learned," and they **must be** based on your Conclusion. You may present operational lessons learned after each paragraph in your Conclusion (in that case you will merge both sections to "Conclusion and Operational Lessons Learned") or present them as a separate section, but following your Conclusion. For details on "Operational Lessons Learned" see Milan Vego's *Joint Operational Warfare: Theory and Practice*, Appendix G: Guidance for Deriving Operational Lessons, App-91 thru App-95.

THE PRELIMINARY ANNOTATED BIBLIOGRAPHY

An annotated bibliography is attached to the paper proposal and reflects initial research concerning the topic and thesis. It need not contain more than ~ten sources, but they should be important sources the author intends to employ for research and analysis. An example of such sources for the topic *Counterinsurgency* might be:

Sepp, Kalev I. "Best Practices in Counterinsurgency." *Military Review* (May-June 2005): 8-12.

In this relatively short reading, Dr. Sepp outlines what he sees are successful and unsuccessful counterinsurgency practices relative to such activities as population control, political processes, executive authority, and so forth, arguing that over time the United States military improved its counterinsurgency practices in Vietnam; however, those practices "and other Vietnamese-directed programs came too late to overcome the 'Americanization' of the counterinsurgency. He concludes by cautioning readers that any counterinsurgency plan must be considered in light of "historical feasibility in addition to customary methods of analysis."

Cassidy, Robert. "Russia in Afghanistan and Chechnya: Military Strategic Culture and the Paradoxes of Asymmetric Conflict." Carlisle, PA: U.S. Army Strategic Studies Institute, 2003.

This study is a parable for the United States and counterinsurgency. Several pages at the end are devoted to a direct analysis of the implications of Soviet/Russian failures in campaigns against Afghans and Chechens for the transformation of the American military, especially the Army. It examines and compares the performance of the Soviet military in Afghanistan and the Russian military in Chechnya, and it aims to discern continuity or change in methods and doctrine. Because of Russian military cultural preferences for a big-war paradigm that have been embedded over time, this work posits that continuity rather than change was much more probable, even though Russia's great power position had diminished in an enormous way by 1994.

Komer, Robert W. *The Malayan Emergency in Retrospect: Organization of a Successful Counterinsurgency Effort*. Publication R-957-A. Santa Monica, CA: RAND Corporation, 1972.

After leaving Vietnam, Robert Komer went to the RAND Corporation and contemplated the American failure in Vietnam. As part of his ruminations, he elected to study what the British had done in Malaya, 1948-1960, because they were widely perceived to have done things mostly right in their counterinsurgency efforts. This reading comprises what Komer believed were the lessons of Malaya for counterinsurgency.

Waghelstein, John D. "Military to Military Contacts: Personal Observations, The El Salvador Case." Unpublished draft. Newport: U.S. Naval War College, 2002.

This is Professor Waghelstein's personal reflection, after two decades, on what happened in El Salvador, both from the vantage point of his role as the Military Group commander in the early 1980s, and from historical analysis. In essence, it is his reconstruction of events he personally experienced.

Greenberg, Lawrence M. *The Hukbalahap Insurrection: A Case Study of a Successful Anti-Insurgency Operation in the Philippines, 1946-1955*. Carlisle, PA: U.S. Army Center of Military History, 1987.

The Hukbalahap movement, known simply as the “Huk,” was the culmination of events and internal Philippine conditions that predated World War II by centuries and was rooted in the country’s pre-colonial period. Economic, social, and political inequities existed before the arrival of the Spanish, who further co-opted it into their own variety of mercantilism, and were perpetuated into the twentieth century by American policy. This social and political history divided the Filipinos into classes where the “haves” reaped the nation's profits while the “have-nots” were left with little but their desperate desire for change. This case study covers the nine-year history of this successful anti-insurgency operation.

Tuck, Christopher. “Borneo 1963-66: Counter-Insurgency Operations and War Termination.” *Small Wars and Insurgencies* (Winter 2004): 89-111.

Tuck’s article on the “Confrontation” between Great Britain and Indonesia on the island of Borneo is an interesting read for a number of reasons. While not a classic insurgency, this complex border war included many elements of counterinsurgency that have been addressed in other case studies. Uniquely, this case study addresses the issues of operational level command and control for the British counterinsurgency forces, discusses the role of operational leadership, particularly the ability of the British commanders to learn the appropriate lessons from their earlier conflict in Malaya, and finally, looks at the vexing topic of conflict termination. Translating tactical and operational success into the accomplishment of strategic objectives proved very difficult to accomplish. While ultimately the British did succeed, it was a close run thing where Indonesian culmination occurred prior to the Commonwealth.

(COVER PAGE FORMAT)

**NAVAL WAR COLLEGE
Newport, R.I.**

TITLE OF PAPER

by

Name

Rank and Service

A paper submitted to the Faculty of the Naval War College in partial satisfaction of the requirements of the Department of Joint Military Operations.

The contents of this paper reflect my own personal views and are not necessarily endorsed by the Naval War College or the Department of the Navy.

Signature: _____

[Date] [Month] [Year]
(Date of submission of paper)

If distribution of paper is limited in accordance with the DON ISPR, show Distribution Statement here.

ENCLOSURE (2) JMO RESEARCH PAPER TOPICS

You do not have a great deal of time at the beginning of the JMO Course to decide upon a JMO Research Paper topic. The JMO Course Syllabus, your faculty moderators, and this NWC 2062Y reading are primary sources to launch your search. In particular, you will notice that many topics in this enclosure address challenges that require innovative thinking, analysis, and decision-making. Given the significant time and effort you will invest in your JMO Research Paper, we encourage you to apply your expertise and imagination to a topic you develop independently, or one of these challenging topics.

Various commands, organizations, and agencies provide issues of contemporary concern. In the search for a suitable paper topic, investigate these issues first because of the multiple benefits to be realized from well-written papers that address them. Also, please note that some foundational concepts such as Network Centricity apply across the topical spectrum, and thus are not listed as specific categories. **Finally, many of the following topics are sufficiently broad that one could write an entire book about them. Because you only have 14-17 pages in which to maneuver, you will inevitably have to narrow a topic to a selected aspect that meets JMO Research Paper topic criteria.**

Air Operations

- *Evaluation of Air Power Effectiveness against Combat Units.* What is the effectiveness of air power at the operational level of combat considering actual military conflicts, analytical studies, military experience, and so forth? What are the implications of this evidence for the contemporary joint force commander planning a major operation or campaign?

Implications of Proliferation of Unmanned Aerial Vehicles (UAV). Numerous nations are investing in the development of and employing UAV's. Analyze the operational impact of the proliferation of UAVs. Will the wide spread employment of UAV's constitute a radical shift, or will forces merely be able to do more of what they've always done with somewhat less risk? From the operational standpoint, how does the introduction of UAVs compare with the introduction of carriers and submarines?

Access Issues

- *Access is a continuum that ranges from presence on scene to forces positioned to project power / conduct combat operations.* Under what temporal, spatial, or operational conditions / parameters can we say we have achieved access at various points along the continuum? What measures of performance / effectiveness would we use to evaluate our access assurance; or, perhaps more importantly, how would we use those measures in the operational planning phase?

- Evaluate the *Joint Operational Access Concept* of November 2011. Specifically in terms of its value to modern joint warfighting, what are its critical strengths and critical weaknesses? How would you improve the concept?
- What technological, behavioral, and tactical adaptive schema would be necessary to ensure that U.S. and allied forces prevail at any point along the access continuum? Consider that the assured access concept is predicated on conducting warfare (in multiple warfare areas such as USW, SUW, AW, BMD, etc.) along a wide geographic front with great simultaneity among the warfare areas.
- If Anti-Submarine Warfare (ASW) is required in the NORTHCOM Area of Responsibility (AOR) in the 2015-2030 timeframe, should we be confident that Sea Lines of Communication (SLOCs) can be protected? Why or why not? What capability enhancements are needed? Some considerations: China continues to develop modern submarine capabilities and deployments increasingly far from home waters; Russia restarts SSN production and expands training/presence operations, including off the US east coast; Latin American countries are procuring Air-Independent Propulsion (AIP) submarines in increasing quantities.
- At some point, a certain level of access manages risk for a commander and his subordinates. Access may be built around a combination of circumstances in this not-all-inclusive list: specific time or geography, situation, the importance of a mission or task, safety, political pressure, ROE, counter-fire, covertness, and establishing information and knowledge advantage. Additionally, there may be certain scenarios, conditions, and timelines in which one of the following access methods might take precedence over the other two:
 - Developing and sustaining Blue access
 - Denying Red access
 - Giving up Blue access to conduct power projection

In writing this paper, consider the specific operational concerns a JTF commander would use to determine the appropriate course of action. Political elements influence any scenario, so the paper should identify discrete political assumptions on which the writer bases his/her arguments.

Climate Change and Arctic Environment Issues

Papers addressing these topics will support the DoD Task Force Climate Change effort. POC is CDR Paul Matthews, C-403.

- How will climate change impact regional security and the operational considerations of Geographic Component Commanders?

- Identify and analyze the principal DoD challenges associated with the increasing occurrence of Climate Change-influenced HA/DR missions such as displaced peoples, resource competition, and damage to infrastructure?
- Should NATO or the EU be involved in Arctic security issues? Discuss pros and cons while considering: 1) political environment, 2) what NATO/EU brings to Arctic security, and 3) the most likely scenarios and locations for security issues in the region.
- From a U.S. perspective, who are the most influential actors for Arctic matters? What motivates each actor? What outcome does each actor seek in the Arctic region? How are the motivations and desired outcomes of the various actors interdependent? How do each actor's strategic choices affect the decisions of the other actors? Based on the answers to these questions, how might the United States take advantage of opportunities and reduce threats? What strengths should we emphasize or develop? What weaknesses should we overcome or minimize?
- What are the primary, unique operational challenges that commanders must meet to operate forces effectively in the Arctic during the summer months? Various conditions to consider are: the effects of sea-ice coverage, weather and atmospheric events (storms, fog, constant sunlight), superstructure icing, cold weather effects on crew, navigation (e.g., loss of primary electronic systems), minimal/no support infrastructure, and environmental anomalies.
- What are the U.S. national security implications of the major ice-melt scenarios such as melting in one decade, no melting in five decades, and others.
- Identify and assess three major Arctic Security options, including whether the United States should advocate Russian NATO membership.
- What should be the U.S. response to Arctic operations conducted by non-Arctic nations, including Freedom of Navigation issues, resource exploitation, and military operations?
- Identify and evaluate three options for maintaining a logistically-sustained U.S. security force in the Arctic, including establishment of an Arctic Base of Operations in preparation for a more ice-free and navigable Arctic Ocean.
- Identify and evaluate U.S. national security options to accomplish a Comprehensive Arctic Security Agreement.
- Analyze the value of creating a JIATF-High North to synchronize joint, interagency, and multinational Arctic security, operations, and non-military activities.
- Should the Arctic Council expand its role to include security tasks, and why or why not? If yes, how would the DOD support the Arctic Council? Should there be a Defense Attaché Officer (DAO) assigned, a liaison office established, or some other mechanism?

- There are many Non-Arctic states interested in exploiting the benefits created by temporary ice free conditions in the Arctic. These benefits include access for commercial shipping, tourism, fisheries, and other natural resources. Accordingly, what should be the role of Non-Arctic Rim States in the Arctic Council and other policy/security forums, and what are their legal and security rights and privileges in the region?

Close Air Support (CAS)

- Are current CAS paradigms sufficient for modern warfare, or is there a better framework for providing airpower to support ground forces that close with the enemy? Aspects of this topic include whether transformation of the basic Army maneuver element might force transformation of fire support structures, whether precision engagement enables a more flexible "CAS on demand," or if the Air Tasking Order is an appropriate process for tasking CAS missions.

Command and Control (C2)

- Promising alternative concepts of Command, Command relations, and Command and Control processes may be enabled by Network Centric Warfare (NCW). Given these promising alternatives, what specifically will the commander of the future command: forces, information services, key processes, or some mix of these?
- Analyze the potential for Net-Centric Operations and Warfare to compress or eliminate the operational level of war. What are the C2 policy implications of compression / elimination for the Combatant Commanders and U.S. National Command? In this context, who should manage the grids and output systems?
- Staff Organization for Optimum C2. If Full Spectrum Dominance in a net-centric environment demands an ability to make timely and informed decisions on the allocation of resources and the conduct of operations, will the current J-code staff organization provide the optimum support to the joint force commander? For example, a single precision engagement would be ops-focused (J3), would require planning (J5) for the use of offensive information warfare (J3) and munitions based on availability (J4), against the most important targets (J2), and rely heavily on information systems (J6). Is there a better organizational structure to leverage fully the operational concepts in the *Capstone Concept for Joint Operations* (CCJO)?
- Command and Control in a Virtual Environment. Increased war-space awareness and refined decision-making processes provide commanders at the operational and tactical levels with significant opportunity to operate inside an adversary's decision cycle. Additionally, near real-time connectivity at all levels and increasingly decentralized C2 allow rapid exploitation of short-lived opportunities presented by adversaries. How does this influence "centralized command -- decentralized execution?" Is this paradigm outmoded? Do we want or need command and decision authority pushed down to the tactical unit level? Alternatively, will exceptionally talented and capable systems invite

higher authority micro-management of tactical actions? How might such possible “decision up-creep” be mitigated?

- Identify and analyze the measures of effectiveness that should be employed by a commander conducting information-based warfare.
- Warfighting decisions historically rendered by O-6s and O-7s are now being made by O-3s, O-4s, senior and not-so-senior enlisted leaders. What needs to be done to fill the knowledge and experience gaps for these young decision-makers?
- Is the notion adequate that the ultimate command and control capability is persistent collaboration at the appropriate level? If so, what steps must DoD take to achieve it?

Computer Network Defense (CND)

- How should the United States organize the CND intelligence effort? Specifically, what are the major intelligence requirements? In the Intelligence Community, who should be in charge and why? Who should collect what information and how? What products are required (intelligence estimates, studies, databases, etc.)? Who should produce what product? How and where should the intelligence be stored (GCCS, JWICS, etc.) and disseminated?
- How should the DoD share critical, CND-related intelligence with other government departments, industry, academia, and multinational partners?
- Evaluating the results of cyberspace attacks on various computer systems during the past five years, identify and analyze the most important lessons learned in the context of protecting these systems.

Counter-Insurgency

- Evaluate selected aspects of the U.S. Army’s counter-insurgency manual and assess their relevance for U.S. operational commanders.
- What role does understanding culture (i.e., “cultural awareness”) have in counter-insurgency operations?
- Analyze selected historical counter-insurgencies and identify the lessons learned that are most important for current U.S. CO-IN operations.
- If “the people” are the opposing center of gravity for counter-insurgency, how best does the operational commander neutralize that center of gravity?
- In counter-insurgency, how does an operational commander neutralize sanctuaries, particularly those that are inaccessible (across international borders).

Doctrine

- *Effects-Based Targeting.* Targeting is, “The process to detect, select, and prioritize targets; match the appropriate action; and assess the resulting effects based on the commander’s objective, guidance, and intent.” Investigate historical cases and effects that caused nations and their militaries to capitulate. From these case studies, did the effects of the inputs yield results that effectively contributed toward meeting the objectives? Were the "effects" strategic, operational, or tactical? Successful? Why?
- *The Land Attack Warfare Concept.* Within the Joint Force Maritime Component Commander organization, should there be a warfare commander to control the growing arsenal of long-range surface fires (e.g., land attack standard missile [LASM], tactical Tomahawks [TACTOM]), etc., or is the concept of a single Strike Warfare Commander still valid?
- *The network-centric rule set* – what is it and how does it apply? The “Rule Set” is a critical component for achieving speed of command. Define what is meant by “rule set” and evaluate its influence at the tactical, operational, and strategic levels of war.
- *Targeting.* What should be the relationship between the operational commander and his component commanders, especially the JFACC, to achieve optimum effective targeting? Should joint doctrine be changed? If so, how?
- *Air Power Theory and Joint Visions.* If a revolution in military affairs is occurring as proposed in various strategic documents, is it time to rethink air power theory and doctrine? What compelling capability does air power, as applied in the various operational concepts (precision engagement, full-dimensional protection, focused logistics, and dominant maneuver), offer the Joint Force Commander across the range of military operations?
- *Navy Doctrine.* Evaluate the process by which U.S. Navy doctrine is developed and implemented. Argue that the current process is sufficient or that an alternative methodology is necessary to achieve a process that is faster, more effective, and more efficient to keep pace with accelerating technological and operational innovation?
- *Most Likely versus Most Dangerous.* Doctrine and force structure are two of the most important commodities that define whether a military capability can respond effectively across the range of military operations. Evaluate U.S. Joint doctrine and recommend how it should be written to ensure the Joint force is best prepared for most likely challenges (OEF and OIF are examples) without surrendering doctrinal readiness for most dangerous contingencies such as large-scale conventional and nuclear conflicts. Do not address force structure in this analysis except as absolutely necessary to support doctrinal discussion.

Expeditionary Warfare (U.S. Naval)

- What are the implications of advanced expeditionary warfare operational concepts for the development of Navy amphibious warfare as reflected in the Navy's Amphibious Warfare Master Plan?
- Evaluate the Navy and Marine Corps operational concepts in terms of their implications (missions, scenarios, and target sets) for naval fires.
- Propose the optimal "naval operating force" (Navy + Marine Corps) command & control (C2) concept for the second decade of the 21st century. This concept must (1) resolve currently unmediated issues between the two Services; (2) take full advantage of advancing innovative technology; and (3) meet the basic requirements of a notional joint force commander who plans to use this "naval force" as both single entity and enabling core of a larger joint force.
- *USN - USMC Command relationships during Amphibious Operations.* Research the exercises and operations of the past five years and identify the types of command relationships that were utilized. Specifically, regardless of the formal command relationship, what *de facto* command relationship was used? How were different command relationships phased throughout an operation or exercise? What effect did different command relationships have on the outcome of an operation or exercise? Should current Joint Doctrine be changed? If so, how?

Expeditionary Warfare (Joint)

- Is expeditionary warfare sufficiently unique to require examination, definition, and doctrine? While the term "expeditionary" has garnered universal use, it means different things to different Service cultures. Should joint force commanders apply a common usage to the term and define its chief characteristics? If so, what should these be?
- What are the essential elements of modern, joint expeditionary warfare? Are there distinguishing capabilities that should be built into "joint expeditionary forces?" Are the core competencies that underpin expeditionary capability captured in doctrine?
- Expeditionary operations create unique strains on logistics, command and control, operational protection, integrated fires, and synchronized maneuver. Are the joint force commanders, their staffs, and the supporting doctrine organized and prepared to meet these challenges? Should joint force commanders treat operational functions differently in expeditionary operations and campaigns?

Full Dimension Protection

- *Naval Force Protection.* What are the principal threats facing U.S. Navy surface operating forces in the 21st century? Apply network-centric capabilities to the threat assessment and determine what doctrinal actions are required to achieve full dimension protection.

- Recommend the most effective command and control (C2) concept for U.S. joint theater ballistic missile defense forces?
- *Command of Full-Dimension Protection Forces.* Presently, a Joint Rear Area Commander is in charge of protecting the rear area, an Area Air Defense Commander is responsible for air defense, and a Naval Coastal Warfare Commander is responsible for coastal waters defense. Should a single commander be responsible for Full-Dimension Protection?
- *U.S. Military Participation in the Defense of CONUS.* Does Full-Dimension Protection apply to defending CONUS from enemy actions such as terrorism? If so, how can the U.S. military help Federal authorities defend key potential targets in CONUS?
- *Naval Coastal Warfare in the 21st Century.* Should U.S. doctrine change? How will advancing technologies and Network Centric Warfare influence this critical force protection mission?

Homeland Security / Defense

- Is there a better scheme than that currently used for command and control of forces engaged in maritime homeland security and defense operations? Is the MOTR (Maritime Operational Threat Response) process the most effective way to coordinate operations? Take a position and defend it.
- Is the dividing line between homeland security and homeland defense a seam that our enemies might exploit? If so, how can the responsible authorities mitigate this risk?
- According to the October 2007 *Cooperative Strategy for 21st Century Seapower*, contributing to homeland defense in depth is a strategic imperative, and achieving maritime security is a core capability of U.S. naval forces. What is the best organizational construct to accomplish this?
- The task of securing U.S. maritime borders is different than that of securing the nation's air and land borders. However, are there areas of similarity in these tasks that might lead to more effective operations to secure the U.S. homeland?
- What role should DOD forces play in domestic disaster response? What is the most effective C2 regime? What challenges does the domestic disaster response organizational concept present to DOD planners? What considerations are most important for employing joint forces in the most effective manner?
- Is the *Posse Comitatus Act* (PCA) a help or hindrance in homeland security? Should it be changed or simply interpreted differently?
- Is the "domestic response to an event" paradigm valid in an era where DoD steady-state partnerships and support are as involved as cyber strategies envision: Cyber is a domain

but the effects of a cyber attack transcend domains? DHS has the lead for domestic response to cyber attack and its repercussions, but DoD has the lion's share of capabilities. What is the right approach that balances the role of ASD-HD as the crisis manager, NORTHCOM as the lead for domestic response, and CYBERCOM as the lead in the cyber domain?

- What are the U.S. security implications of the increasing level of violence on the Mexican side of border and the perceived threat of transnational criminal organization spillover violence entering the United States? Background: there is a significant U.S. concern that the violence resulting from Transnational Criminal Organization (TCO) illicit activities on the Mexican side of the US-Mexico border is spilling into U.S. southwestern states, and will spread to adjacent U.S. states. While the level of violence in Mexico is currently assessed as high and the TCOs appear to have certain areas within Mexico in a grip of violence, there is not a clear picture of what such violence means to the United States. What are the historical violence trends, and what have they meant to the United States? What are the impacts of this violence on U.S. ability to secure borders, protect citizens, local / state / national economies, and resourcing to ensure this level of security? What is the DoD role in supporting the law enforcement agencies that combat the TCOs? What is the DoD role in homeland defense – national security missions vs. the TCOs?
- Roles and Responsibilities in response to major cyber attack: cyber is a domain but the effects of a cyber attack transcend domains. DHS has the lead for domestic response to cyber attack and its repercussions, but DoD has the lion's share of capabilities. What is the right approach to balance the role of ASD-HD as the crisis manager, NORTHCOM as the lead for domestic response, and CyberCom as the lead in the cyber domain? Is the "domestic response to an event" paradigm valid in an era where DoD steady-state partnerships and support is as involved as cyber strategies envision?

Human Abilities and Behavior

- *The Mythology of the U.S. Military as an Isolated Warfighter.* The apparent politicization of the military appears to be at odds with the military ethos – “give me the task and I’ll get it done; just stay out of my way.” In fact, some senior officers (active & retired) have blamed politicians and senior military officers for meddling in their mission planning and execution, arguing that military effectiveness is sub-optimized by national leader micro-management. What is the reality of such alleged micro-management? Is it naïve to discount the political factor? What does this bode for future military leaders, as well as training and education?
- *The Stock Market as an Historical Foundation for Network-Centric Warfare.* The increase in communication speed from snail mail to telephone to ticker tape to Internet has profoundly affected trading methods, patterns, strategies, and interactive decision-making. How did the stock market adapt to such critical advances? Given the vast amounts of near-real time information now available, what influence do the effects (volatility, lack of redundancy, information volume) portend for NCW?

- *The Impact of Information Superiority Technologies on the Development of 21st century U.S. military leaders.* If emerging technological advances result in an information superiority capability that will provide future leaders near real-time total dominant war-space knowledge, then leaders at all levels will be able to respond immediately to the Joint Force Commander's operational intent. What changes will be required in how we educate future leaders? What are anticipated changes and processes to develop leaders who can operate and execute the art of command using the advantages of information age technologies? Will the art of command dramatically change? What are the possible impacts upon the existing theories of decision making?
- Examine the major ethical challenges faced by a joint force commander in the 21st century. Are they similar to the past or are there new compromising influences?
- Define conventional deterrence. Is it possible to deter someone conventionally? If so, when and how can it be accomplished? Use historical examples to support your argument.

Innovation Challenges

- Develop an operational warfighting concept for a U.S. National Fleet comprising an integrated Navy and Coast Guard.
- Develop a U.S. Naval Service operational concept (NOC) for the 21st century that maximizes agility, flexibility, and speed; effectively integrates Navy and Marine Corps concerns and considerations; is capable of "plugging in" to the *Capstone Concept for Joint Operations*; and makes full use of advancing technology. Use the current NOC 2010 as baseline.
- A renewed attribute of war fighting is that the value of speed is increasing; those factors, forces, sectors, and so forth that slow the planning and execution process must be "speed injected" or eliminated. Identify and recommend specific application of new measures of effectiveness (MOEs) based on the increasing value of speed in warfare.
- *Information Superiority and Its Effects on the Planning and Execution of Operations.* Unlike the relatively fixed framework of the past, contemporary and future warfighting will "drift" between linear and non-linear, and will provide for greater separation of units and forces in both time and space. To what extent is concentration of effects, vice forces, the aim of mass. How will this change conventional notions about command relationships, location and function of "staffs," planning and executing operations, and the fundamental exercise of command?
- *The progeny of TPFDD.* Units were deployed to OIF without reference to TPFDDs. Review this new 'process' and comment on its pros and cons *versus* the prior system. Which system works better and which should be used for future ops; or should a new system be designed and implemented?

- *Experimentation: how can we accelerate the “art of the possible?”* Analyze the processes by which experimental operating concepts are proposed to / acted upon by combatant commanders and individual Services. Identify the obstacles that hamper the effectiveness of this process. Propose a methodology for eliminating obstacles and achieving an effective, timely experimentation process.
- Net-centric information sharing (NCIS) is greatly different from the original net-centric warfare construct. Do the potential benefits of the concept outweigh the potential reluctance? What are the barriers to NCIS deployment?
- The 911 Commission pointed out that the risks of hoarding information in government were greater than the risks of sharing information, and that zero-risk is not an achievable condition. As information becomes increasingly a source of national power, what means must DOD devise to manage risk in the information environment?
- Analyze U.S. Department of Defense implications of current social networking trends.

Intelligence, Surveillance, and Reconnaissance (ISR)

- In the realm of operational intelligence, define the requirements, criteria, and metrics for your Service’s Intelligence Professionals in the first quarter of the 21st Century; include comparison and contrast with IP requirements for the latter part (post-Cold War) of the 20th century.
- A variety of Unmanned Aerial, Surface, and Sub-Surface Vehicles are changing the way that the U.S. Services conduct ISR. How might the operational-level commander best employ the unique capabilities of these platforms?
- Explore the requirements for a Maritime Intelligence Preparation of the Operational Environment (M-IPOE) concept. How is it different from existing doctrinal IPOE processes?

Irregular Warfare (IW)

The following topical questions have been provided by the Office of the Deputy Secretary of Defense (O-DSD).

- How should the U.S. military posture itself for a protracted war against extremist terrorist networks?
- How should the U.S. military improve its capability and capacity to advise, use, and partner with multinational armed forces, and to what ends?

- How should the U.S. military conduct long-duration, low-visibility operations in irregular warfare?
- How should the list of Special Operations activities (enumerated in U.S. Code Title X, Section 167) be changed?
- What are appropriate metrics for assessing effectiveness in the "cognitive" pieces of Irregular Warfare (e.g., PSYOP, civil-military operations, strategic communication)?
- How do we measure influence over a population? How should we?
- With Reserve Component forces being utilized in new ways, what new policies are necessary to achieve effective and efficient RC management?
- What, if any, are the differences between "asymmetric" operations and "non-traditional" operations?

Joint Challenges

- *Information Operations and Warfare.* Identify the principal attributes of Information Operations and Warfare, and explain how these attributes must be employed flexibly in a coordinated effort to achieve effective results across the evolving range of operations that include military, interagency, and multinational components.
- *Comprehensively investigate "jointness."* This paper should bound the issue and provide a credible foundation for further inquiry and research. The following approach is an example: (1) Is there a comprehensive theory of "jointness?" What is it? What are the essential elements? (2) What are the alternative views? (3) At what levels of effort and/or command does jointness occur? (4) What is the relationship between jointness and componency? (5) Given defensible answers to the foregoing questions, what are the implications for U.S. military operations in the 21st century?
- *Combatant Command Resources.* USAFRICOM and USSOUTHCOM have critical missions in vast and complex areas of operations (AOR), yet their budgets and manpower levels (to include assigned and allocated forces) are far less than most other geographic combatant commands (GCCs). Choose one of these two GCCs and compare its annual budget/other resources and its critical mission requirements vis-à-vis threats to US national security in its AOR, to those of one of the more robustly resourced GCCs (e.g., USEUCOM, USCENTCOM, USPACOM or USNORTHCOM). Would you consider certain GCCs as "under-resourced" given the scope of their mission and responsibilities? Is DoD assuming risk in certain AORs? Seen holistically, are these in fact "economy of force AORs" where DoD must assume risk in order to dedicate more of its decreasing resources to "higher priorities" elsewhere? Briefly describe the national and DoD process of how those global priorities are established and promulgated, and how this impacts combatant commanders' budgets and force allocation.

- The effective management of vast data quantities intuitively appears to be an overwhelming challenge for the net-centric environment. Explore information requirements, sourcing, and flow at the tactical, operational, and strategic levels of war, and propose an effective management scheme (for example, sharing, push-pull, tailored, etc.) for dealing with the challenge.
- Evaluate U.S. joint and Service doctrine in terms of what constitutes “military victory.” Is the notion of military victory purely situational or are there certain “absolute” characteristics that define the condition?
- What is the difference between asymmetric operations and non-traditional operations?

Joint Deployment

- With increasing requirements to get military capability to a regional crisis faster:
 - What are the implications of emerging and conceptual high-speed sealift (HSS) technologies for improving the joint force deployment process?
 - Evaluate competing requirements for limited strategic airlift assets to execute inter-theater airlift missions *versus* intra-theater airlift missions. Recommend feasible, suitable mobility solutions that would meet both “inter” and “intra” theater movement requirements.
- Identify and analyze the most significant chemical and biological warfare threats to air- and seaports of debarkation (APOD / SPOD) in terms of the effects on force deployment throughput. Recommend an operational methodology for countering these threats.
- Non-U.S. companies own some U.S. maritime shipping companies. What are the foreign ownership implications to U.S. potential for moving commodities by sealift to areas of crisis and conflict? Include in your assessment the implications of using foreign-flagged ships when it is necessary to sail along SLOCs that are subject to enemy attack.
- Analyze selected U.S. operations of the past decade from a joint deployment perspective, and develop conclusions and recommendations for improvement.
- Evaluate any TRANSCOM surge strategic lift program (Civil Reserve Air Fleet, Ready Reserve Force, Voluntary Inter-modal Sealift Agreement, Foreign Flag Shipping, Effective U.S. Control Shipping) in terms of the program’s ability to accomplish its joint deployment mission. This evaluation should include strengths, weaknesses, and vulnerabilities, including the Reserve Component relationship, maintenance readiness of equipment, and guaranteed use of U.S. commercial and foreign flagged assets in situations that put commercial carriers at risk. Identify solutions to problems and make

recommendations for innovation in contracting, call-up, and application of advancing technology.

- *Quo Vadis VISA?* The Voluntary Intermodal Sealift Agreement was hammered out with great difficulty by a steering group comprising maritime labor, management, and the DOD. But it was not implemented in OIF. Why? Is this a harbinger of the future? How might VISA be modified to improve its utility? Or is it needed at all?
- *Austere SPODs.* Recent operations in Southwest Asia have benefited from availability of mature SPODs. Are we prepared to deploy for major operations through much more austere ports? What sort of preparations and intelligence are required to be effective? Analyze the challenge and identify the critical vulnerabilities with recommended solutions.
- Could the U.S. Navy charter commercial vessels in an emergency, as the Royal Navy did during the 1982 Falklands war? Analyze the challenge and recommend pragmatic courses of action.

Joint Force Maritime Component

- *The Navy's Maritime Operations Center (MOC):* define the most effective transformation methodology to achieve standardized MOC concept objectives while retaining sufficient flexibility to ensure that organization and functions can be tailored to individual fleet commander requirements.
- *Command and Control in Theater Ballistic Missile Defense:* identify options and recommend the most effective for C2 of Navy Aegis BMD capability within the joint force. Analysis must include whether Homeland Defense BMD should be treated similarly or differently from that of BMD in other areas of responsibility (AORs).
- *Command and Control of the theater undersea warfare environment* (see Assured Access). Evaluate the environment and recommend the methodology for effective operational planning, execution, and assessment across the range of military operations.
- *Propose the optimal "naval operating force"* (Navy + Marine Corps) command and control (C2) concept for the second decade of the 21st century. This concept must (1) fix currently unresolved issues between the two Services; (2) take full advantage of innovative, advancing technology; and (3) meet the basic requirements of a notional joint force commander who expects to be able to use this "naval force" as both single entity and enabling core of a larger joint force.
- *MOC and the Composite Warfare Commander (CWC) concept:* evaluate whether Navy CWC doctrine should change with MOC implementation and efforts to improve all operational-level C2 functions. Analysis should include supported / supporting, OPCON, TACON, and other relationships in the joint and multinational environments.

- *Time for a Joint Force Littoral Component Commander?* Current joint doctrine provides for a JFACC, JFLCC, JFMCC, JFSOCC, and others for functional organization of the force. However, what about that complex environment – the littoral – where we have multiple, overlapping functional component responsibilities and authorities? Is it time for the JFLiCC? Argue for or against the idea with facts/analysis and minimal emotion.

Littoral Warfare

Significant scholarship is required in this warfare area. Students pursuing these topics for their Operations papers should visit Professor Milan Vego (C-427, 841-6483) in order to narrow these considerations to specific research questions.

- Influence of Oceanography on the Employment of Naval Forces in the Littorals
- The Arabian (Persian) Gulf: Operational Features of the Physical Environment
- The Adriatic Sea: Operational Features of the Physical Environment
- The Baltic Sea: Operational Features of the Physical Environment
- The East China Sea: Operational Features of the Physical Environment
- The South China Sea: Operational Features of the Physical Environment
- The Yellow Sea: Operational Features of the Physical Environment
- The Caribbean Sea: Operational Features of the Physical Environment

- Obtaining and Maintaining Sea Control in an Enclosed Sea Theater
- Exercising Sea Control in an Enclosed Sea Theater
- Sea Denial in an Enclosed Sea Theater
- Basing/Deployment Area Control in an Enclosed Sea Theater

- Major Naval Operations vs. Enemy Fleet at Sea
- Major Naval Operations vs. Enemy Fleet at its Bases
- Defense of the Coast in an Enclosed Sea Theater
- Straits Warfare
- Naval Blockade in the Littorals
- Naval Counter-Blockade in the Littorals
- Land-Based Air vs. Enemy Fleet at Its Bases
- Land-Based Air vs. Enemy Maritime Trade
- Land-Based Air and Defense of Maritime Trade
- Attack on Enemy Coastal Installations/Facilities
- Attack on Enemy Maritime Trade in the Littorals
- Support of Army in Major Offensive Operations on the Coast
- Support of Army in Major Defensive Operations on the Coast
- Anti-Amphibious Defense in the Littorals
- Defense of Naval Bases and Ports in an Enclosed Sea Theater
- Major Operations to Seize Enemy Naval Basing Area
- Major Operations to Defend Naval Basing Area

- Strike Warfare (STW) in the Littorals
- Antisubmarine Warfare (ASW) in the Littorals
- Amphibious Warfare in an Enclosed Sea Theater
- Naval Control and Protection of Shipping in the Littorals
- Offensive Mining in the Littorals
- Defensive Mining in the Littorals
- Offensive Mine Counter Measures (MCM) in the Littorals

- Naval Command and Control Warfare (C2W) in the Littorals
- Operational Deception in the Littorals
- Operational Fires in the Littorals
- Operational Logistics and the Littorals
- Operational Protection in the Littorals

Logistics / Sustainment

In addition to the topics listed below, Mr George Topic (National Defense University) maintains a list of current logistics/sustainment issues that various commands have requested be addressed by students at the joint and Service colleges. If interested, please contact Mr. Topic at 202-685-7769, george.topic@ndu.edu.

- What makes operational-level logistics so important in the modern world?

- Should the Seabasing Logistics Concept be developed into the Naval Focused Logistics Operating Concept to complement the Joint Focused Logistics Campaign Plan? Explain your response and identify the developmental steps that would best facilitate the Seabasing Concept. Propose and justify alternative operating concepts that would reduce the logistics footprint ashore, while facilitating maneuver in an area of operations.

- The goal of the Focused Logistics Campaign Plan is to, “Provide the joint warfighter the right personnel, equipment, supplies, and support in the right place, at the right time, in the right quantities across the full range of military operations.” To meet this goal at the Strategic and Operational levels, the Geographic Combatant Commander, the Defense Logistics Agency (owner of most military repair parts and common supplies), TRANSCOM (The Distribution Process Owner), and the Joint Staff (the Deployment Process Owner) must properly integrate and synchronize their responsibilities. Analyze each player’s responsibility at the strategic and operational levels, and recommend effort-integrating solutions to meet the Focused Logistics Campaign Plan goal.

- *Focused Logistics as a Multiplier for Joint Force Operational Reach and Approach:* if the concept of Focused Logistics is the fusion of information with logistics capability to provide rapid response with precisely tailored and tracked logistics packages, will focused logistics thus enable the Joint Force Commander to combine forces and actions to attain operational objectives in 2020 differently than today? How will this affect the Joint Force Commander’s operational reach and approach in responding across the range of military operations? Is focused logistics the critical link in future operational success?

- Explore existing business management and military logistics literatures to identify areas of interface and transfer. Explicitly identify situations and techniques for the implementation of the “new logistics paradigm” in a joint military environment.
- Should the Department of Defense establish “The Joint Medical Command” as a new functional command on a level with Space Command, Special Operations Command, Strategic Command, and Transportation Command? The purpose of this new command would be to provide the Combatant Commanders with Health Services Support (HSS) across the operational spectrum. Argue for or against; include the planning implications.
- “Joint Logistics Over the Shore” (JLOTS) is a capability to deploy forces where there is no SPOD or the port is not adequate. Is JLOTS a realistic capability? What factors must be in place for a modern JLOTS operation to be successful? What planning factors and metrics does a joint force commander need and how can they be developed? What improvements to the current system are required?
- How can the future U.S. joint land warfare commander maintain situational awareness and continuous C2 while forces transit to objective areas via air and/or sealift?
- What unique sustainment capabilities are required to conduct sea-basing operations?
- What force protection capabilities must be employed in joint interdependencies?
- Evaluate U.S. capability to build rapidly a maritime sustainment force from commercial assets in similar manner to the British experience in the 1982 Falklands conflict.
- Identify and explain the main reasons that operational-level logistics and sustainment are especially critical to 21st century U.S. military efforts.
- Discuss the challenges and opportunities associated with conducting Operational Logistics and Sustainment in an Anti Access Area Denial (A2AD) Environment
- Evaluate U.S. naval advanced and forward support sites (outside CONUS). What currently exists, what is required, and why?
- Define and describe “industrial mobilization” in a global, information-driven economy.
- How important are forward bases for the U.S. Navy? Where should they be and what should be their longevity (permanent, semi-permanent, temporary)?

Maritime Operations

- *Surface Ship Operations in the Littoral.* The U.S. Navy has been a blue water force for a long time. With *Forward...From the Sea* (1994), it refocused to a realm -- the littorals -- that has been the primary battlespace of many navies since their inception. From these

navies, what lessons can the U.S. Navy learn about littoral operations that may be applied to the present and future? Although we have learned much from traditional allies, others such as the Baltic navies may be untapped sources of significant littoral operation experience. Our ability to take the fight into the littorals against a modern and well-equipped enemy has not been challenged since World War II. However, the globalization of technology and information makes a near-term challenge to accomplish this very likely. A better understanding of how littoral navies “plan to fight” enables identification of the capabilities to assure access to the littoral combat space.

- Draft and defend a multinational maritime concept of operations (CONOPS) for eradicating the Gulf of Aden/Indian Ocean or Strait of Malacca piracy threat.
- *Air Defense in the Maritime Environment*. What is the recommended relationship among the Area Air Defense Commander (AADC), the Joint Force Air Component Commander (JFACC), and their super-ordinate operational commander, and why?
- Construct a hypothetical, operational-level naval force that is net-centric in nature. Put that force under attack by an adversary that is quantitatively and qualitatively similar, but platform-centric in nature. Disable-by-combat or eliminate key nodes in both forces, then argue the outcome.
- Develop an operational methodology for minimizing the time required to sanitize a maritime choke point to permit merchant ship flow and unfettered allied operations against an adversary possessing extensive mine-laying capability, credible submarine and torpedo threats, coastal anti-ship missiles, credible but limited air warfare and maritime strike capabilities, and significant small boat capability. Methodology must stress “in-parallel operations” such as concurrent MCM and ASW in an ASCM and small boat threat environment.
- Identify 20th century case studies where a naval action was intended by its initiators to signal non-provocative intention but was interpreted by the adversary to be a provocation. From these historical events, identify the characteristics of a planned naval action that are necessary to ensure unintended military and diplomatic consequences do not occur.
- Are there cases in the 20th century where a naval action meant to be a signal was instead taken by the receiver of that "signal" to be a provocation? How can a navy avoid acting in such a way as to produce unintended military and diplomatic consequences?

Maritime Strategy

Regardless of Service or Agency affiliation, students are encouraged to address issues associated with the U.S. Maritime Strategy promulgated in 2007 (*A Cooperative Strategy for 21st Century Seapower*). Any paper addressing maritime strategy should likely also address the implications of *Naval Operations Concept 2010*. The following list (not intended to be all-inclusive) offers topical ideas.

Historical

- Are there historical examples (U.S. or any other maritime nation) of success or failure at the operational level of war as a direct result of a new strategic concept? What lessons may be derived from these examples?

Information Operations

- Multinational information operations in a global maritime environment: As the “1000-ship navy” develops and adapts to multinational operations, how might coalitions use information operations to achieve strategic objectives?
- Are U.S Navy information operations (as currently organized within JFMCC staffs) sufficient to achieve the new maritime strategic goals?
- What is the role of maritime information operations in promoting safe and secure sea lines of communication?
- The "I" in DIME: how will the national element of Information power be affected by the 2007 Maritime Strategy?
- If influence is a key attribute of the 2007 Maritime Strategy, how will maritime information operations contribute?

Joint and Defense Issues

- How should the 2007 Maritime Strategy leverage other Service maritime capabilities?
- What is the impact of the Unified Command Plan on the 2007 Maritime Strategy?
- Will the 2007 Maritime Strategy include the possibility of the U.S. sea services having to “go it alone” in a major conflict or crisis?
- Will it be possible to “go it alone?”
- Does the 2007 Maritime Strategy integrate with concepts espoused in *Evolving Joint Perspective* published by the Joint Chiefs of Staff?

Maritime Commerce

- What is the U.S. Navy’s role with respect to commerce on the high seas?

- Is the 2007 Maritime Strategy consistent with *An Ocean Blueprint for the 21st Century* (published by the U.S. Commission on Ocean Policy), which offers recommendations for a new, coordinated, and comprehensive national ocean policy?

National Strategy for Maritime Security (NSMS)

- What likely problems and potential solutions will arise from the National Strategy for Maritime Security (NSMS) requirement that the 2007 Maritime Strategy be integrated and aligned with all other Federal maritime security initiatives and programs, to form a ". . . far-reaching and unified national effort. . ." (NSMS, p. 25) to achieve U.S. maritime security?
- What elements must the 2007 Maritime Strategy include to defeat not only nation-state threats, but also terrorist and trans-national criminal and piracy threats too? What are the challenges and potential solutions?
- The CNO's "1000-ship navy" concept recognizes that we cannot ensure U.S. maritime security unilaterally. How might the 2007 Maritime Strategy encourage and incorporate the efforts of other nations to ". . . take full advantage of strengthened alliances and other international cooperative arrangements..." (NSMS, p.1)? What are the challenges and potential solutions?
- Maritime threats to U.S. national security include terrorist and criminal actors, and military power alone will not defeat them. How might the 2007 Maritime Strategy incorporate ". . . innovations in the use of law enforcement personnel and military forces . . ." (NSMS, p.1) to accomplish effective U.S. maritime security? What are the challenges and potential solutions?
- The safe, effective, and efficient flow of maritime commerce is a vital U.S. national interest, but maritime commerce is at increasing risk to terrorist and trans-national criminal/piracy threats. How might the 2007 Maritime Strategy provide effectively for protection of maritime commerce? What are the challenges and potential solutions?
- Preserving the freedom of the seas is a strategic objective of the U.S. National Strategy for Maritime Security. How might the 2007 Maritime Strategy support this national objective? What are the challenges and potential solutions?
- How might the 2007 Maritime Strategy contribute to the National Strategy for Maritime Security (NSMS) mandate to ". . . use the agencies and components of the Federal Government in innovative ways to improve the security of sea-lanes that pass through international straits" (NSMS, p.15)? How might Navy efforts be integrated with those of

other interagency partners in the mission? What are the challenges and potential solutions?

- The National Strategy for Maritime Security calls for a layered defense against maritime terrorist and criminal threats. What should the 2007 Maritime Strategy establish as the Navy's role in establishing that layered defense? How should the Navy's contributions be integrated with DHS and other interagency partners? What are the challenges and potential solutions?
- Maritime Domain Awareness is a critical enabler for U.S. national maritime security. How might the 2007 Maritime Strategy support enhanced MDA? What are the challenges and potential solutions?
- How should the 2007 Maritime Strategy leverage U.S. growing capability for littoral operations to accomplish the strategic actions required by the National Strategy for Maritime Security (NSMS)? What are the challenges and potential solutions?
- How might the U.S. Seabasing concept be incorporated into the 2007 Maritime Strategy to accomplish the strategic actions required by the National Strategy for Maritime Security (NSMS)? What are the challenges and potential solutions?
- How should the 2007 Maritime Strategy address the National Strategy for Maritime Security (NSMS) requirement that in the effort to defeat maritime threats, ". . . maritime security actions at the operational and tactical levels will be based on a network-centric approach that employs resources, as needed, from multiple agencies - primarily from the Department of Homeland Security and the Department of Defense" (NSMS, p. 22)? What strategic concepts are needed for effective operational integration?
- How should the 2007 Maritime Strategy accommodate the NSMS requirement to integrate layered U.S. maritime defense across interagency lines? "In particular, to achieve unity of effort and operational effectiveness, maritime security forces from both the U.S. Armed Forces and law enforcement agencies must have the capability and authority to operate in mutually supporting and complementary roles against the spectrum of expected security threats" (NSMS, p.22). What are challenges and potential solutions?
- Is the current protocol for interagency coordination of operational response to maritime threats (the supporting MOTR plan to the NSMS) sufficient to ensure unity of effort between the Navy and the Coast Guard against maritime threats? How should the 2007 Maritime Strategy address the overlap of missions between the Navy and Coast Guard? What are the challenges and potential solutions?

Operational Art

- What is relationship between the 2007 Maritime Strategy and Maritime Operational Art? How does *Naval Operations Concept 2010* relate?
- How will the 2007 Maritime Strategy and *Naval Operations Concept 2010* affect the U.S. center of gravity at each level of war?

Military Operations in Urban Terrain (MOUT)

- MOUT, or Joint Urban Operations (JUO) as discussed in U.S. joint literature, are joint actions planned and conducted across the range of military operations on a topographical complex and its adjacent natural terrain where manmade construction and the density of noncombatants are the dominant features. U.S. joint force operations in urban areas are steadily increasing. For MOUT doctrine to be cohesive, exhaustive, and effective, it must address complicated and dangerous challenges. Topical areas are:
 - MOUT Stages -- USECT (understand, shape, engage, consolidate, transition)
 - Strategies -- surgical, precision, high intensity / smash-grab, pacify-preserve, seize-hold.
 - Operational Functions (movement, maneuver, intelligence, fires, logistics, C2, etc.)
 - Human Factors (morale, stress, discipline, culture, language, casualties)
 - Interoperability -- Joint and Multinational
 - Levels of Responsibility
 - Measures of Effectiveness
 - Alternatives to Close Combat (ISR enhancement, nodal operations, etc.)
 - Information Operations
 - Specialized Force Considerations
 - Technologies (training, lethal, non-lethal, equipment, sensors)
 - Rules of Engagement (collateral damage)
 - Interagency and Multinational Roles and Missions
 - MOUT Challenges across the spectrum of conflict (ROMO)
 - Joint Theory / Doctrine / Tactics-Techniques-Procedures (DOTMLPF-P)
 - Reduction of {friendly: enemy} combat ratio.

Multinational Operations

- How can Theater Security Cooperation improve the forming of a coalition? Explore TSC exercises, programs, and training efforts conducted by combatant commanders to demonstrate the value of TSC planning.
- There are many challenges to establishing and maintaining a coalition of the willing. Explore the challenges of any one of the following -- intelligence sharing, logistics

management, command and control, and operational planning -- to meet the needs of each coalition member.

- USPACOM's sponsored "Multinational Planning and Augmentation Team" – is it a concept of utility external to PACOM? What are the pros and cons of developing the MPAT planning document and how effective is it for PACOM or other combatant commanders?
- If legitimacy is a key principle of joint operations, how do coalitions of the willing develop legitimacy, and what are the metrics (qualitative and quantitative) for making a multinational operation legitimate?
- How can combatant commanders encourage, entice, or request nations to join a coalition? Issues such as defense interoperability, global influence, closer ties to the United States, and other incentives might be explored.

Non-Lethal Weapons

- Do non-lethal weapons have a pragmatic war-space role, or should they be used only for peacekeeping and humanitarian type missions?
- Develop an operational concept for the employment of non-lethal weapons in a war-fighting environment. Include projected scenarios, suitability of acoustic and directed-energy weapons, and automation implications such as UAV employment.
- Develop an operational concept for the employment of non-lethal weapons in a Phase IV environment. What are the cultural implications for an operational commander attempting to quell civil unrest by non-lethal means?
- What are the legal implications of non-lethal weapons for the operational commander? Include rules of engagement considerations.
- How vulnerable to countermeasures are non-lethal weapons?
- Identify and evaluate a process to measure the biological effects of non-lethal weapons for the purpose of assigning risk; include consideration of lethality curves in this evaluation.

Operational Law

- Is the Law of Occupation, as per the Geneva and Hague Conventions and Regulations, still relevant today? Are requirements from the mid-20th century still practical and effective today?
- *Automated Targeting and the Law of Armed Conflict.* If UAVs can identify and destroy targets, who is accountable per the LOAC for such targeting decisions? If the algorithm

proves faulty and civilians are killed or non-military targets are destroyed, who would be accountable - the JTF Commander, the programmer of the algorithm, the Service member, DoD contractor, DoD civilian monitoring UAV actions at a terminal (perhaps in a different AOR), or the commander who employs them? What if targeting with UAVs becomes automated? Who will be accountable? What are the principal considerations impacting the C2 issue for the JTF Commander?

- Are there emerging trends and concerns for the JTF Commander such as the extensive use of Special Forces with Afghanistan's Northern Alliance or in the Philippines, the use of CIA operatives, DoD contractors, civilian technical reps, and other civilians who now accompany coalition forces? Has the definition of "lawful combatant" changed? Given OEF Afghanistan and OIF Iraq, are the rules now different regarding the wearing of military uniforms on the battlefield? After Kosovo, Afghanistan, and Iraq, is there a new LOAC standard for collateral damage given availability of precision-guided munitions?
- Is there a growing body of international law in the "Overseas Contingency Operation" (formerly GWOT) that differs from past practice and with which the JTF Commander must be concerned? Should The Hague and Geneva Conventions be reconsidered? Is a new Law of Armed Conflict Convention necessary to reflect the U.S. view of the realities of the current Terror War or can existing treaties fill in the gaps? Do the terrorists have the advantage under international law?
- As we know from OIF, every O-PLAN must address effectively the post-hostilities phase. What does this mean in the context of the "Overseas Contingency Operation" (formerly GWOT) and the detainees being held around the world by members of the coalition? Are they POWs or criminals subject to prosecution? When will the "Overseas Contingency Operation" (formerly GWOT) "terminate" so that POWs, if any, would normally be released?
- Are customary practice, the UN Charter, and/or The Law of the Sea Treaty adequate to justify coalition Leadership Interdiction Operations (LIO), or the interdiction of WMD-capable weapons and parts in international waters? Is some other legal regime or authority needed? Should ROE for LIO be different based on the AOR of the flag of the ship? Does the JTF Commander have all necessary authorizations?
- What are the challenges facing the JTF Commander to ensure DoD forces engaged in Homeland Security, working side-by-side with federal civilian and state agencies, utilize common ROE or use-of-force rules? Is that possible? What about Canadian ROE concerns that may impact future HLS ROE issues in NORTHCOM?
- Identify and analyze the issues about which a U.S. Joint Force Commander should be concerned because of the complex relationship between the United States and the International Criminal Court (ICC).
- *Restrictions on Anti-Personnel Landmines in Coalition Operations.* Almost all likely future coalition partners are parties to the Ottawa Convention, banning the use of anti-

personnel landmines (APL) in combat. Examine the planning implications for a future JTF. Will U.S. forces be precluded from using APL in defending countries that are party to the Convention? If a coalition partner's force would receive a tactical benefit from a U.S. force's use of APL, will that partner be able to take part in a combined operation? How will the Convention affect overseas prepositioned stocks?

- *Legal tools in the Theater Cooperation toolbox.* Each U.S. Combatant Commander staff must develop a Theater Security Cooperation Plan with specific sub-plans for engaging individual countries in the AOR. Various federal laws authorize specific forms of assistance such as: transfer of excess defense articles, Presidential Draw-downs from DoD stocks, grant and sale of defense articles and services, International Military Education and Training, Humanitarian and Civic Assistance, Disaster Relief, "Combatant Commander Initiative Funds," Special Operations Training, and Combined Exercises. How might these authorities be used by a CoCom staff to assist a given country (e.g., Iraq, Afghanistan, Indonesia, Colombia, Nigeria, Poland, Liberia, and the Philippines)?
- *Economic Sanctions / Maritime Intercept Operations as a Flexible Deterrent Option (FDO) or Course of Action (COA).* In selecting a FDO or the best COA, when would the use of international economic sanctions enforced through military means be an attractive FDO or COA for a JTF Commander? What lessons can be learned from sanctions imposed against South Africa, Iraq, Haiti, and Serbia? What operational factors make selection of economic sanctions as a FDO or COA more or less attractive?
- *MOUT and LOAC.* Future conflicts will likely involve Military Operations in Urban Terrain (MOUT). What aspects of the Law of Armed Conflict (LOAC) must the JTF Commander consider in planning and executing such an operation? Will protecting non-combatants mean sustaining more U.S. military casualties, and if so, what are the operational implications? What OIF MOUT lessons have we learned?
- *Operational Implications of China's Excessive Maritime Claims.* Many of China's straight baselines are excessive under the customary international law of the sea. Additionally, China appears to claim to restrict the right of foreign military warships to innocent passage in its territorial sea, and to high seas freedoms of navigation and over-flight in its exclusive economic zone. How do these excessive claims impact future U.S. and allied operations along the Chinese coastline? What are the operational risks and benefits of challenging (or failing to challenge) these excessive claims?
- *Lessons from the Tanker Wars for a Conflict in the South China Sea in which the United States is a Neutral Party.* What happens if China and Vietnam engage in conflict over contested islands and adjacent waters in the South China Sea? What are the operational Commander's considerations for continuing to ensure such objectives as freedom of navigation, support for allies, etc.?
- *Consequence Management for Weapons of Mass Destruction: Are STRATCOM and NORTHCOM ready?* What does federal law authorize Active and Reserve Component forces to do in the event of a WMD incident inside or outside the United States? Is the

law adequate to allow DoD to respond? Are there still limits in *Posse Comitatus* that restrict DoD? Have DoD and the Department of Homeland Security resolved all coordination issues?

- *Assassination or Lawful Target: Going After Enemy Leadership.* What are the international and U.S. legal considerations affecting the selection of a COA involving an attack on the national leadership of an enemy state during international armed conflict? What are the political and military considerations? As a component of the “Overseas Contingency Operation” (formerly GWOT), can terrorist leaders be targeted in other nations?
- *Non-Flag State Enforcement of Counter-Drug Agreements.* Article 17 of the UN Convention Against Illicit Traffic in Narcotic Drugs and Psychotropic Substances allows high seas non-flag state enforcement of narcotics trafficking laws pursuant to treaties and agreements in force between the flag state and the enforcing state. The Department of State and the U.S. Coast Guard have completed a number of such agreements that allow, under agreed conditions, the United States to board and take appropriate enforcement action against foreign flag vessels on the high seas. Analyze these agreements, describe their common provisions, discuss the Law of the Sea provisions underlying each, and examine the implications for the recognized high seas freedom of navigation.
- *Law of Armed Conflict Implications for Information Warfare Operations.* Militaries are developing new capabilities using computers to disrupt enemy information systems. Such non-kinetic attacks have the potential to shut down electrical power, public water works, banking services, and commercial telephone and other communications systems. Analyze how the current Law of Armed Conflict applies to such attacks and how the Law may need to change in order to protect noncombatants more effectively during armed conflict between nations.
- *ROE in the Net Centric Environment.* Ideally, development of operational ROE results from operational and tactical level recommendations that are approved by higher authority for implementation. Analyze the potential for net centric capabilities to reverse this process, resulting in the creation / direction of uncoordinated "top-down" ROE. Can such a tendency be mitigated?

Peace Operations

- The US military has undertaken peace operations several times since the end of the Cold War. Explore peace operations principles. What lessons did the U.S. military learn from its experiences in Somalia, Haiti, Bosnia, Kosovo, and East Timor? What is the legitimate role of military advisors and should the United States continue to support UN observer missions? Related topics include exploring the Global Peace Operations Initiative and Combatant Commander use of peace operations to support Theater Security Cooperation programs.

- The United Nations recently published doctrine on peace operations. Critique this doctrine. Is it effective and what value does it have?
- Critique and analyze the UN planning process for peace operations – the integrated planning process outlined in the UN doctrine.
- Draw lessons learned from selected UN peace operations. Apply operational analysis to these operations, from planning to execution.

Precision Engagement

- It appears that no U.S. Armed Service has workable, effective concepts or technical means to engage moving targets - - the fastest growing target set ashore or afloat. Identify the main parameters of the problem and recommend a pragmatic, achievable methodology for implementing a solution.
- *Discriminate Effects in Precision Engagement.* “Discriminate effect” is a central tenet of precision engagement. If destruction of the target is not always the objective, then what are the alternative effects? Precision engagement describes an ability to identify objectives and bring the right combination of effects to bear at the right time to accomplish the mission. What are the different, alternative effects and how might each joint force functional component contribute to a Joint Force Commander’s possible courses of action across the range of military operations?

Relationship of Dominant Maneuver to Precision Engagement. If dominant maneuver and precision engagement depend on decisive control of the breadth, depth, and height of the warfighting space, and both focus on a desired effect or accomplishment of an objective, then what is the relationship between these two concepts? Can one exist without the other? Assuming they cannot, determine if conceptually they are simply two aspects of a single concept.

- What does the term "Overwhelming Power" mean to the operational commander? Will it work? What are the risks? Is there a point where overwhelming power won't work? The “Bloody-minded Brits” in World War II were determined to survive and persevere against the German bombing of their cities. What about 72 days of Kosovo, or Blitzkrieg, Dresden, and Hiroshima? What happens when shooter runs out of effects before “target” runs out of will?

Regional Security Issues

- *The Gulf Cooperation Council (GCC) Peninsula Shield Force (PSF).* From the perspective of CENTCOM planners, analyze the PSF to determine PSF potential influence as a deterrent force. Components of analysis should include force structure (current and planned) and applicability, capabilities and limitations, training, command relationships, and political limitations.

- *USPACOM Theater Strategy.* What should be PACOM's theater security and cooperation strategy for the Asia-Pacific region? What are some alternative strategies? How might the theater strategy evolve in the future?
- *Asia-Pacific Multilateralism.* Is multilateralism an appropriate approach to achieve security for the Asia-Pacific region? How might USPACOM cultivate multilateral security cooperation in Asia?
- *The Northwest Pacific Strategic Triangle.* Are good relations among China, Japan, and the United States essential to security and stability in the Asia-Pacific region? What is most likely to happen if one leg of the triangle collapses? How might the United States strengthen the China-Japan leg of the triangle?

Operational and Strategic Implications of India's "look east policy." India reportedly has oil and mineral exploration interests in the SCS. Discuss implications for the U.S., and perhaps also its allies and partners as India pursues its interests in the Pacific region.

- *China's Military Modernization.* What appear to be the highest priorities in China's military modernization plans? Do these plans threaten regional stability and/or the United States? What happens to China's modernization plans if its economic growth accelerates? Decelerates?
- *Opportunities for US-PRC Cooperation to Achieve Maritime Security and Stability in East Asia.* A particular model is US-PRC Coast Guard cooperation. Why does it work? Why is military cooperation so much harder to achieve? How can barriers to cooperation be overcome?
- Given a range of alternate futures for the Mediterranean basin, what should be the optimal U.S. naval presence deployed to that region? How should the Combatant Commander (EUCOM) and his Navy Component Commander (COMUSNAVEUR) employ these forces to maximize both an effective shaping of the maritime AOR, and effective response to instabilities and crises?
- What are the U.S. national security implications if the Panama Canal were to be controlled by a hostile Panamanian government or a narco-state?
- Analyze the new missile defense capability announced by Israel to counter current and future Iranian and Syrian ballistic and cruise missile systems. Analyze current Iranian and Syrian systems, and trends in research and development. Explain the impact Israel's new missile defense capability has on the balance of power in the region vis-à-vis deterrence of missile development and proliferation in the AOR. This is an OSD topic. POCs are Mr. Dan Devlin (DSN 287-3679) and Bill Bryant (DSN 287-3486).
- Describe the international mechanisms and propose feasible solutions available to U.S. Central Command (USCENTCOM) and its regional partners in their efforts to deter the proliferation of dual-use missile technologies and components within the CENTCOM

area of responsibility (AOR). This is an OSD topic. POCs are Mr. Dan Devlin (DSN 287-3679) and Bill Bryant (DSN 287-3486).

- In the Naval War College's Center for Naval Warfare Studies, the China Maritime Studies Institute (CMSI) solicits articles and research papers focused on China and security issues--especially as they relate to maritime topics. The Institute plans to publish at least six papers a year as *Newport Papers* and actively seeks high quality student papers to include in each year's mix. The POC is Prof. Peter Dutton, MLH 231A, 841-4613.
- The Rise of China. The following questions have been provided by the Office of the Deputy Secretary of Defense.
 - What steps can the U.S. military take, as part of a broader national strategy, to engage China constructively, while dissuading and deterring China from using force or threat of force against others?
 - How can the U.S. military conduct a campaign in an anti-access environment?
 - How should DoD structure Humanitarian Assistance / Disaster Relief (HA/DR) exchanges and cooperation with the PLA?
 - How should DoD adjust its long-term force posture and basing in the Asia-Pacific region (including Western Pacific and Pacific Islands)?
 - How would U.S. Navy - PLA Navy maritime security cooperation work in practice? What are the key operational challenges, obstacles, and risks?
- The debate over U.S. policy in the Afghanistan war features troubling parallels with the choices faced by Soviet general secretary Mikhail Gorbachev in the 1980s. Documents obtained from Russian archives reveal that history may not always repeat, but it most certainly rhymes. More than 20 years later, U.S. policy makers are encountering very similar choices and analyses as they discuss the options for prosecuting or ending the war. Compare and contrast the Soviet experience with the current U.S. experience, emphasizing the key Soviet decisions / outcomes and how those should be employed to advantage by current U.S. decision makers.
- *Arab Spring Repercussions on Africa Continent.* The turnover of state government, particularly in Libya post the ousting of Muammar Gaddafi, has allowed various terrorist groups, al-Qa`ida in the Islamic Maghreb (AQIM), to proliferate their forces and impact U.S. national interests in Africa. As these terrorists groups expand their influence to regions of poor African state control and begin a regionalization of terrorist activity in under-governed territory, what actions should the USG and DoD take in the region? What strategy should the U.S. pursue with African governments and organizations like the Economic Community Of West African States (ECOWAS) and the African Union (AU) in order to defeat and negate the terrorist groups within the African continent?

- *Actionable Vital U.S. Interests in Africa.* Identify and justify what U.S. interests currently exist in Africa and/or its sub-regions. What U.S. interests are sufficiently critical/vital to drive direct intervention or engagement by the U.S. military instrument of power? What U.S. interests are likely to drive us to that level in the future (2020 - 2025 time horizon)? How can the U.S. make use of other instruments of national power to safeguard those current and future vital interests?
- *USSOUTHCOM Theater Strategy.*
 - What is the impact of agricultural subsidies on the national security of the U.S. and Latin America?
 - Is the Gendarmerie a logical military transition for long term supply of law enforcement agencies in Latin America? Consider an analysis of countries with a Gendarmerie force in the SOUTHCOM AOR and their contributions to national and hemispheric security.
 - How can USSOUTHCOM support the foreign policy shift to the Pacific?

Space Operations

- Space support to navigation, information transfer, sensing, and other functions is vital to terrestrial operations conducted by all U.S. Military Services. Contemporary U.S. dominance of space is diminishing: advanced technologies make third-class entities into first-class threats; commercial space support is proliferating and available for open market purchase. Given diminishing U.S. space dominance, propose a U.S. operational plan for space.
- What is the proper role of space in contemporary operational art?
- Should space in and of itself be considered a fourth dimension of warfare?
- What Space Control effects should the U.S. Navy be able to achieve and contribute to a regional combatant commander's theater concept of operations?
- How does the increasing role of commercial space systems affect military operations, including joint air, land, and sea operations?

Special Operations and Warfare: Joint and Maritime

- How does or should SOF Command and Control (C2) change across the Range of Military Operations (ROMO - spectrum of conflict)? Should SOF C2 be the same for SOF actions in Irregular Warfare, large-scale COIN, Major Combat Ops, etc., or should

we develop doctrinal alternatives for the operational context and SOF's role in that context? Whichever the case, what are the primary factors driving the C2 construct?

- When compared to General Purpose Forces (GPF), do SOF require more centralized or de-centralized control? Under which rubric do SOF historically succeed most often? Do strategic, operational, or tactical level special operations have different characteristics that dictate either a centralized or decentralized command and control structure? How does information technology affect these considerations?
- What is the optimum command and control structure for deployed Naval Special Warfare (NSW) organizations? Examine utility, composition of deployable NSWTG/TU, and C4I cells to determine how best to integrate NSW forces into fleet and theater operational chains of command.
- Organizational friction and bureaucratic politics can impact the success of special operations and the way they are employed in a crisis or conflict. Is this more prevalent in strategic, operational, or tactical special operations? What is the best way to organize the special operations community in order to minimize this problem?
- *SOF Command and Control Element Doctrine*. The current doctrinal employment for SOF specifies the use of various command echelons below the JSOTF. It is relevant, however, that SOF very seldom deploy in a standardized doctrinal structure; it has even been suggested that this doctrinal structure may be outmoded due to advances in command and control, and logistics support capabilities. Study of this topic should review SOF employment in contingencies and exercises, and specifically address command and control, and logistics support issues. The objective is to determine recommended changes to SOF C2 doctrine that would result in more effective and efficient operational support to the operational commander.
- *SOF Non-Lethal Weapons Systems*. Examine the utility and applicability of “non-lethal” weapon systems for SOF. What analytical criteria should be used to determine the utility of these weapons systems? What types of NLW have applicability for SOF operations? What operational challenges do these weapons present? What policy challenges do these weapons raise?
- *Timing of High-Profile Special Operations Linked to National Policy*. In high profile special operations such as hostage rescues, timing can impact the success of an operation. Launching early in a crisis has pros and cons. While early operations allow for surprise and the hope of a quick resolution to a national crisis, they also pose risks including a more alert enemy force, or SOF planning and execution with minimal useful intelligence. Using SOF later in a national crisis also has pros and cons. While more time for planning and rehearsals allows for a better plan, the security risks increase over time and the target becomes more entrenched or hostages are dispersed. What is historically the ideal time to use SOF during a high profile national crisis? What future trends (technology, information warfare, etc.) will play a role in the timing of special operations? What is the best use of SOF in conjunction with coercive diplomacy?
- *Theater-Strategic and Operational Level Intelligence Preparation of the Environment for Special Operations*. Conduct a focused examination of the intelligence preparation of the

operational environment (IPOE) process directed toward identifying specific aspects of IPOE that will assist SOF planning. The elements of IPOE relevant to tactical SOF mission planning are relatively apparent, although further standardization of these processes would be useful. The more significant issue is emphasis on the operational level of war and SOF planning at the JTF / JSOTF level. What IPOE elements are directly transferable? What new aspects of the battlefield should be considered? Are there tools/techniques that can aid commanders in selecting appropriate SOF targets during the overall targeting process? The desired product is a paper to aid SOF planners and intelligence personnel in conducting IPOE.

- What is the utility of Special Operations in the maritime environment? How do
- SOF employments in the maritime environment differ from employments in a land environment, and what are the implications for the operational planner?

Spectrum of Conflict

- Current policy restrictions prevent the US, specifically DoD, from engaging in any advise, assist or training of militaries involved in any coup that has overthrown a democratically elected government. (General Provisions: Foreign Operations and Related Programs Appropriations Act, Section 7008). This is currently preventing US interaction with the Malian Defense and Security Forces. If it weren't for this policy (i.e., if DoD were allowed to advise, assist and train these forces despite the coup) the US would likely achieve greater success in disrupting, isolating, and ultimately destroying the AQ threat in North and West Africa. Under what circumstances should these type of policy exceptions be considered? How much of a direct threat to the homeland needs to be proven? Is it prudent to make exceptions to policy when there is a proven threat to US interests, citizens and our allies (in the absence of a direct threat to the homeland)?
- Define and defend the tenets to which a U.S. operational commander should adhere when dealing with indigenous warlords during complex missions.
- *Future Insurgencies*. A common basis for many 20th century insurgencies was Marxist / Leninist ideology. This may have influenced unduly the analysis of what are thought to be insurgency's common characteristics, regardless of roots. With waning Marxist / Leninist influence, and the concurrent rise of other influences, what are the more likely foundations (cultural, ethnic, religious, etc.) for 21st century insurgencies? Will a shift in insurgency's basis change insurgency common characteristics? Why not, or why / how?
- *Command and Control of Information Operations*. IO capability provides commanders multiple options, in addition to precision-guided munitions, to attack enemy centers of gravity across the range of military operations. Given that current coordination arrangements are simply too slow to accommodate 21st century operational tempo, how should commanders exercise C2 of these options, which often are controlled by other agencies or the U.S. National Command?

- *Nexus between Terrorist and Criminal Organizations.* Blurring of lines between profit-oriented criminal organizations and ideologically or religious-based terrorist groups began after the fall of the former Soviet Union and particularly since the Sep 2001 terrorist attacks. Enhancements in communications and travel, globalization, and technological developments have facilitated both organized crime and terrorist activities. Some organized crime groups resort to terror to undermine authorities or to otherwise influence events and behaviors. Many terrorist organizations engage in criminal activity or leverage criminal networks to finance their operations. Using real world examples, analyze why some organized criminal organizations resort to terrorist methods and in which ways terrorist organizations conduct criminal activities or leverage criminal networks to finance their operations. What is the difference between the terms “terrorist organization” and “violent extremist organization?” Describe some of the possible implications of closer collaboration between such diversely motivated groups.

Stability Operations

- Security, Stabilization, Transition, and Reconstruction comprise a relatively new concept that emerged from the signing of two documents, NDPD 44 and DOD Policy 3000.05. The U.S. military continues to develop its role in stability operations. Key questions to be explored are the military role in humanitarian assistance, governance, reconstruction or rehabilitation of infrastructure, the rule of law, and economic recovery. A related issue is to explore the security dimension of stability operations so non-military organizations can do the functions listed above.
- Who should command and control stability operations? Most often, the controlling nation’s preference is for a civilian lead. However, civilians often have struggled in such endeavors. Examples include: post US Civil War, post World War II Germany and Japan, Kosovo, Bosnia, East Timor, and Liberia. How should the JTF commander approach this command and control issue.
- How do unity of command / unity of effort play out in stability operations -- successfully or unsuccessfully? How does the JTF commander ensure unity of effort?
- Are information operations important in stability operations? What IO lessons from past operations might be useful to current U.S. joint force commanders?
- What is the value of the Provincial Reconstruction Team (PRT), and what lessons can be drawn from its use in Afghanistan and Iraq? Is the concept sufficiently valid that PRTs should be used in the future?
- There is much “academic anthropologist” criticism of U.S. Human Terrain Teams. What value do HTT bring to the operational commander? How do they facilitate the understanding of culture and how does such cultural understanding influence operational planning?

Strategic Communication

- The following questions have been provided by the Office of the Deputy Secretary of Defense.
- How should the Department of Defense institutionalize Strategic Communication as an integral component of warfighting?
- How can public-private partnerships be leveraged in DoD Strategic Communication?
- What are DoD's Strategic Communication considerations for a specific country or region (for example, Pakistan, Africa, Russia, Central Asia)?

Terrorism

- Critically evaluate the strategic implications of cruise missile proliferation and transfer from economically able countries to terrorist organizations, economically depressed countries, and countries that perceive the United States to be a threat. This is an OSD topic. POCs are Mr. Dan Devlin (DSN 287-3679) and Bill Bryant (DSN 287-3486).

Theater Security & Cooperation Plans

- Pick a particular category of Theater Security Cooperation and critique how a Regional Combatant Commander's program integrates with U.S. national security strategy. A category such as humanitarian assistance, peace operations, training and education, or exercises can be connected to U.S. national security objectives. Another approach is to pick a country (e.g., Indonesia, India, Pakistan, Peru, Colombia, Brazil, Panama, Chile, any African country, etc.) and use the TSC methodology to demonstrate how specific country programs support the relevant TSCP.

USNORTHCOM

- The CJCS is required to annually assess strategic and military risk to the Department's ability to accomplish the National Military Strategy. Should risk be assessed differently for USNORTHCOM vice other Combatant Commanders in the forward regions? How does vulnerability factor into risk for the homeland?
- NORAD and USNORTHCOM require indications and warnings to effectively perform their homeland defense and civil support missions. What intelligence collection restriction and policy restrictions should be changed to better support NORAD and USNORTHCOM's missions?
- Assess current measures for combining federal, state, and local resources for combating homeland threats. How can the interagency process work better to support both homeland security and homeland defense?

- Evaluate current measures for identifying and protecting DOD and/or non-DOD critical infrastructure. What are the operational implications for USNORTHCOM?
- How can we improve interagency planning and preparation for pandemics or complex disasters?
- How can we establish domestic and international information sharing mechanisms among homeland defense, homeland security, and civil support entities? To what extent is it desirable to do so? How should we define the limits of prudence with respect to international information sharing?
- Assess measures for integrating the private sector into USG responses to public health emergencies.
- Assess the need for distinguishing between crimes and acts of war for certain activities in cyberspace.
- National Guard: Operational or strategic reserve? What are the implications for homeland security and civil support of how we orient the force with respect to this issue?
- U.S. Reserve forces: Operational or strategic reserve? What are the implications for homeland security and civil support of how we orient the force with respect to this issue, especially in light of the new 12304a authorities?
- How can USNORTHCOM assess First Responder resources and sustainability (to include the private sector) to better anticipate DOD logistic requirements prior to requests for assistance?
- Cyber Defense Support of Civil Authorities (DSCA): What support can DOD provide to other agencies and/or the key operators within the private sector to detect, deter, prevent and thwart exploitation of the Global Information Grid (GIG)?
- Would USNORTHCOM benefit from a Joint Inter-Agency Task Force South (JIATF-S) type organization? Should JTF-N be combined with JIATF-S and JIATF-W to form JIATF Western Hemisphere?
- What is the optimal Maritime C2 arrangement in the NORTHCOM AOR?
- Now that Unified Command Plan 11 assigned USNORTHCOM and USEUCOM responsibility for the Arctic, what should be the distribution of Fleet responsibility in the region?
- Canada's former Chief of Defense (CHOD) Staff initiated an annual Arctic CHODs Conference in 2012. How can this body help USNORTHCOM and USEUCOM achieve their GEF end states?

- What is the optimal C2 organization for complex catastrophes that cross state and/or regional boundaries? What are the implications for Dual Status Command?
- How can US Northern Command support the US foreign policy shift to the Pacific?
- What is the impact of a shift from Pre-emptive to Precision Doctrine (regarding the use of force)?
- Strategic implications of legal frameworks for the People's Republic of China in the Arctic region. The PRC demands special consideration in the South China Sea regarding UNLOS issues: it wants special consideration and interpretation of the UNLOS to suit its purposes and to its advantage. On the other hand, the PRC clearly desires access to the Arctic but is at a geographic disadvantage vis a vis the arctic eight. In this case, the PRC demands fastidious adherence to the UNCLOS as a means to access arctic resources while using the law as a lever to keep its options open. There is clearly a contradiction in PRC policy based on the geographic area involved. Is there a lever linkage the GCC can exploit based on these contradictory policies that could moderate Chinese actions in the SCS?
- USNORTHCOM is the only GCC with global synchronizer responsibilities (such as Pandemic Influenza). In the context of defending the homeland, this has some merit. However, the global synchronizer role may or may not be a natural fit for a GCC with an AOR boundary. Should global synchronizer responsibilities be shifted to Functional Combatant Commanders, such as USSTRATCOM's responsibility as the Global Synchronizer for Countering Weapons of Mass Destruction (C-WMD)?
- Explore the benefits of the Global Synchronizer role for geographic combatant commands. Global Synchronizers are responsible for planning but have very limited to no execution authority (with execution authority resting with OSD and the Joint Staff). Explore whether or not Global Synchronizers actually provide enhanced unity of effort across DOD. Is there a better model?
- How can DOD better leverage the private sector in responding to a major disaster in the United States? Similar to the whole of government approach to planning and operations outside the United States, to what extent can we adopt a whole of nation model to more effectively utilize national resources? Explore whether or not there is a tipping point in complex catastrophes (e.g., New Madrid Seismic Zone) that would warrant federalizing all available resources, including the private sector. Address legal concerns, etc.
- Is the U.S. government benefitting from the Joint Inter-Agency Task Force South (JIATF-S) type organization? Should JIATF-S be combined with JIATF-N and JIATF-W to form JIATF Western Hemisphere?

U.S. Nuclear Weapons Policy, Strategy, and the Role of Deterrence

- The following questions have been provided by the Office of the Deputy Secretary of Defense.
- What is the impact of U.S. nuclear weapons policy, including extended deterrence, on the non-proliferation of weapons of mass destruction, especially nuclear weapons?
- What is the impact of increased numbers of nuclear weapons-capable states on the role and importance of U.S. deterrence policy?
- How does U.S. nuclear declaratory policy impact Negative Security Assurances (NSAs), as related to the Nuclear Nonproliferation Treaty (NPT)?

Weapons of Mass Destruction

- Joint doctrine specifies Combatant Commander planning responsibilities with regard to weapons of mass destruction (WMD). Evaluate this doctrine's utility to the operational commander in achieving an effective theater strategy.
- What policy and capability decisions are required to correct existing shortfalls in Navy and USMC overall competence to provide passive defense in a chemical / biological warfare environment?
- State and non-state actors on the African continent are often downplayed with respect to posing any credible WMD threat. Given that the continent has vast quantities of uranium ore, given South Africa once possessed nuclear weapons, given that Libya once pursued a nuclear weapons program and is now grappling with disposal of a stockpile of chemical weapons, and given that some of the world's most dangerous pathogens are found in Africa, should the U.S. dedicate more resources to countering WMD in Africa? If so, what strategy should the U.S. Government and DoD pursue to counter the potential for proliferation of WMD from the African continent?
- Investigate existing joint USCENTCOM and regional consequence management plans and programs. Propose modifications to existing plans, or propose new plans and programs to strengthen consequence management awareness and cooperation among USCENTCOM and its regional partners with respect to nuclear proliferation and other potential environmental crises. This is an OSD topic. POCs are Mr. Dan Devlin (DSN 287-3679) and Bill Bryant (DSN 287-3486).
- Should WMD be defined as CBRN, not CBRNE (Chemical, Biological, Radiological, Nuclear or high-yield Explosives)? U.S. counter proliferation groups have a conundrum: high-yield explosives, though recognized as WMD, are difficult to counter proliferate; yet, if the "E" is separated from CBRN for treaty purposes, it will affect U.S. ability to integrate counter-proliferation and law-enforcement functions domestically. How do we redefine this divide, and what can/should be done about this terminology distinction?

ENCLOSURE (3)

A QUICK GUIDE TO RESEARCH & WRITING

The most important factors in starting your JMO Research Paper are a well-defined research question and thesis statement, and a pragmatic research plan. Your moderators can help you with the former and provide tips on developing the latter. However, a working knowledge of Naval War College research tools mitigates the frustration that often characterizes the “starting out” process.

In addition to the guidance in this document, additional help can be found in the following:
Research and Library Guides, Naval War College Library web site.

Pocket Writing and Style Guide. Newport, R.I.: Naval War College, 2012. Scan for knowledge of what it contains. Available on the JMO portal.

The next step is to propose a paper topic, research question, and thesis statement using NWC 2062Y, enclosure (1) format. Criteria for suitable topics are contained in the JMO Syllabus. Topic ideas are in NWC 2062Y, enclosure (2).

Once your topic is approved, firm up your research plan and swing away. The NWC Library has superb hard copy and electronic resources, and peerless / fearless reference librarians. If you have not done so previously, take the Library tour.

The above suggestions will get you off to an excellent start. The remainder of this enclosure discusses the NWC (Eccles) Library and a recommended approach to effective writing.

ATTACHMENTS:

- Naval War College Library
- Writing Effectively

Naval War College Library

The following site will tell you everything you need to know about the Naval War College's Eccles Library and the many research resources available to you:

<http://nwcintranet/library/>

Writing Effectively

If you are not yet an experienced writer of papers and essays, here are important tips as you prepare for Master's degree-level written work at the Naval War College.

First, write in plain, concise English. There is no need to construct elliptical, sweeping, obtuse sentences and paragraphs. When we write papers, essays, and exam answers, in effect we are telling a story and our objective is reader understanding. We accomplish this with a clear premise or thesis (our main point or argument); a coherent, logical plan that comprises an introduction, some background if necessary, a main body (your arguments), and a conclusion; and a flow of chapters / sections / paragraphs /sentences in plain, concise English, understandable to the reader.

Second, significant assistance is available to you at the Naval War College Writing Center. Please visit Dr. Donna Connolly in Hewitt 210 to get started.

Third, maintain integrity at all times in written work. We are governed by the Exemplary Conduct Statute (Title X USC: 3583, 5947, & 8583), and the Academic Honor Code spelled out in NWC Instruction 5370.5C, Statement of Academic Policy 05-01, the Student Handbook andcourse syllabi. The Code fosters and maintains the professional ethical standards required of faculty, staff, and students at the Naval War College.

ENCLOSURE (4)

PROFESSIONAL WRITING AND RESEARCH AWARDS

A variety of prestigious awards are available for Naval War College student competition each academic year. Although these awards are usually presented during June commencement ceremonies, it is important to note that November and March “phased input” students are equally eligible with August-arrival students for such recognition. The following paragraphs provide a brief summary of the awards program as of January 2013. Students are forewarned that minor changes to these awards may occur during the upcoming academic year as specific submission suspense dates and guidance are provided.

1. PRIZES AND AWARDS.

Open to All Students (Resident, Non-Resident, International)

The Chairman of the Joint Chiefs of Staff and Secretary of Defense Strategic Essay

Competitions: The National Defense University will host the 32nd Annual SECDEF and CJCS Strategic Essay Competitions, culminating in the final round of judging at NDU sometime in 2013. As soon as information for this year’s contest is available on the NDU web site, Dr. Connolly will let you all know. If you are interested in submitting a paper, please read the information carefully when it is posted. Results from this competition will be released when they are available from NDU which is typically in late May.

Admiral Richard G. Colbert Memorial Prize: Awarded for the best paper focusing on an economic, military, political, strategic, or tactical aspect of an appropriate professional topic. Winner will receive a certificate and \$1000.

VADM James H. Doyle, Jr., Military Operations and International Law Prizes (2): Awarded to the best paper submitted by a U.S. student and the best paper submitted by an international student (in separate competitions within those two student categories) that make a significant contribution to the role of international law in military operations during peacetime or armed conflict. The general and comprehensive field of international law and military operations is intended to cover all aspects of the role international law plays in military operations. This includes planning, mobility, control of the transition from peacetime operations to armed conflict, and the developing role of international law in current operations. Issues pertaining to the law of the sea (including freedom of navigation and over flight, military uses of the seas and air spaces above, maritime law enforcement, and resource and environmental considerations), the law of armed conflict, and rules of engagement fall within this definition. Winners will receive a certificate and \$500.

FAOA Award (2): Awarded for best CNW and CNCS research paper on international affairs topics including regional area and policy issues, FAOA language/culture, and related intelligence and security cooperation matters. Winner will receive a certificate and a plaque, and the FAOA will consider the winning papers for publication in its journal.

Interagency Partnership Prize: Awarded for the best paper contributing to understanding and promoting innovation related to military or Defense Department collaboration with civilian departments and agencies. Winner will receive a certificate and \$500.

Admiral Ike Kidd Award: Awarded to the professional essay that makes the most significant contribution to intelligence support within a joint force operational context or to an area of interest to the Intelligence Community. Winner will receive a commemorative wall plaque, \$500 cash prize, and a 1-year membership in NIP

Jerome E. Levy Economic Geography and World Order Prize: This award recognizes the best paper that addresses and proposes potential solutions in the disciplines of economic geography and national/international security. Winner will receive a certificate and \$1000.

Marine Corps Association Award: Awarded for the best paper on topics relating to the Marine Corps or Marine Corps operations. Winner will receive a certificate and \$500.

J. William Middendorf II Award for Student Research: Awarded to a resident/non-resident student or group of students whose paper makes a significant contribution in a field related to strategic or tactical concepts, logistics, or readiness. Entry may be classified. Winner will receive a certificate and \$1000.

LT Michael P. Murphy Counterterrorism Prizes (2): Sponsored by the John Nicholas Brown Counterterrorism Chair, this prize honors the heroism of Lieutenant Murphy, the first Navy Medal of Honor recipient since Vietnam, who led a SEAL Team against Taliban fighters that besieged his four-member team. Ten times outnumbered, Lieutenant Murphy's team fought fiercely, all sustaining serious wounds. Lieutenant Murphy deliberately exposed himself to direct enemy fire while radioing for assistance, continued to engage the enemy until he was mortally wounded, gallantly giving his life for his comrades. The story of his heroism is the basis for the book, *Lone Survivor*. The Lieutenant Michael P. Murphy prize is awarded to the best paper submitted by a U.S. student and by an international student (in separate competitions). This is not a research effort. Rather, *demonstrating original thought*, the winning paper should offer substantive, succinct, and achievable solutions to prevent and deter future terrorist events that may be directed against the United States, its allies, and interests abroad. ****Note that submissions should focus on counterterrorism and not counterinsurgency**** Winners will receive a certificate and \$500.

Naval War College Foundation Award: Awarded for the paper making the most significant contribution to some aspect of maritime strategy or the operational level of warfare. This prize encourages original thinking on subjects related to maritime strategy and the operational or strategic issues in maritime theaters of operations; joint and combined operational or strategic considerations; and historical insights from naval, land, and air campaigns that can be applied to current strategic or operational issues. Winner will receive a certificate and \$1000.

B. Franklin Reinauer II Defense Economics Prize: Awarded for the best paper addressing an aspect of the impact of economic factors on U.S. national security interests. Papers must focus on a topic interrelating national defense with some economic issue or problem. Examples might

include (1) defense expenditure impacts on the national economy; (2) the relationship of economics to defense; (3) international economic issues and their relationship to national security. Winner will receive a certificate and \$1000.

Naval Submarine League Prize: Awarded for the best paper related to submarine warfare by any student at the Naval War College. A wide range of topics are eligible, including submarine operations, strategic submarine warfare, support to submarine warfare such as construction, training or logistics and innovative advances in submarine warfare such as UUVs. Eligible topics are not limited to the U.S. submarine force and may cover past, current, and future operations. Winner will receive a certificate, \$1,000, and an invitation to the Annual Symposium Awards Luncheon held in the Washington, DC area in October.

Surface Navy Association: Awarded to the best paper on the subject of operational employment of surface naval forces. Winner will receive a certificate and \$500.

Open to International Students Only

Robert E. Batemans International Prize: Awarded to International students attending the Naval Command College during their year of residence. Papers should focus on original thinking on force planning or current operational or strategic issues of maritime interest, which might include topics such as (1) concepts for the improved execution of some military task or mission; (2) concepts for the use of military forces--unilaterally, bilaterally, or regionally; or (3) historical insights from maritime campaigns which can be applied to current strategies or operations. Winner will receive a certificate and \$1000.

The Captain Walter B. Woodson Memorial Prize: Awarded to a Naval Staff College student in the six-month course who submits a paper that satisfies the Naval Staff College research paper requirement. Winner will receive a certificate and engraved clock and barometer set.

Zimmerman-Gray Naval Staff College International Prize: Awarded to International students attending the Naval Staff College's 10-month course during their year of residence. This paper should reflect original thinking focused on force planning or current operational or strategic issues which might include topics such as 1) concepts for the use of military task or mission; 2) concepts for the use of military forces—unilaterally, bilaterally, or regionally; 3) historical insights from maritime campaigns which can be applied to current strategies or operations; 4) a future security or strategy issue of relevance to a particular nation or region of the world. Winner will receive a certificate and \$1000.

Open to U.S. Resident Students Only

Armed Forces Communications and Electronics Association Award (AFCEA) (2): Awarded to resident students of the College of Naval Warfare and the College of Naval Command and Staff for papers prepared as part of the academic requirements for the Joint Military Operations (JMO) course. Within the scope of acceptable topics for the JMO paper, the award will recognize the **two papers** considered to be the best of the eligible papers, one from each of two general topic areas: (1) Information Operations, Information Warfare, or Command

and Control Warfare (IO/IW/C2W); (2) all other topics related to communications, electronics, command and control, and information systems. The latter area may include, but is not limited to, professionally worthy joint, combined, and service-related topics addressing avionics, command and control, computers, telecommunications, electronics, radar, satellites, and intelligence systems. Winners will receive certificates and table clocks with engraved brass nameplates.

Military Officers Association of America Prize (MOAA) (2): Awarded to one resident student from the College of Naval Warfare and one resident student from the College of Naval Command and Staff for the papers that are considered to have made a significant contribution to the study, implementation, and spirit of joint-service warfare. Winners will receive certificates and \$1000 each.

Available to Resident Students Only but Submissions Are Not Accepted

Michael Handel Prize: Professor Michael Handel, one of the most distinguished strategic thinkers ever to have served on the faculty of the Naval War College, was the author of nine books on strategy and military affairs, on subjects that ranged from the classical works of Clausewitz and Sun Tzu to the role of intelligence in modern war. Perhaps his most famous book is *Masters of War: Classical Strategic Thought*, now a classic in its own right and required reading at the College and other senior service schools. As a member of the Strategy and Policy Department from 1990 until his untimely death in 2001, Professor Handel made invaluable contributions to professional military education through his scholarship, lectures, classroom teaching, curriculum development, and service to the College. The Handel prize is awarded to a student who writes an outstanding essay for the final examination in the resident intermediate- or senior-level Strategy and Policy Course. This essay must exhibit the qualities that Professor Handel especially prized in strategic analysis: it will be a well-written, systematic examination of a difficult, recurring strategic question that derives insights from both history and strategic theory. ***The Strategy and Policy faculty will nominate exceptional examination essays for consideration by the prize committee.*** Winner will receive a certificate and \$1000.

** Entries not receiving top honors but considered to have exceptional merit will, upon recommendation to the Dean by the prize essay committee, be awarded "*Honorable Mention.*"**

2. Eligibility for the specific prize categories are indicated above. General eligibility is open to students in the College of Naval Warfare (CNW), the College of Naval Command and Staff (CNC&S), the Naval Command College (NCC), the Naval Staff College (NSC), and non-resident students. CNW/CNC&S November and March graduates have the opportunity to participate in two award cycles but can compete for an individual award only once during their academic year. Students in College of Distance Education non-resident programs are eligible to enter once for each individual award during their coursework (e.g., may submit a paper for the Colbert Award just once; may submit a paper for the Foundation Award just once, etc.).

3. Papers submitted for award competition may be the result of extracurricular effort or the product of written requirements of the student's academic program. With the exception of entries from non-resident students, papers must be prepared during the academic year of residence. ****A student may**

compete for more than one award but may not enter the same paper in more than one competition listed above** However, there are two exceptions: if the paper is submitted for the Marine Corps Association Award or the CJCS/SECDEF essay competitions, the same paper may compete in another subject-related competition listed above.

4. Text length of papers entered into the NWC Essay Competition, which does not include the preliminaries or end/footnotes and bibliography, must be 3000 – 5000 words and must be **UNCLASSIFIED (with exceptions noted in above descriptions)**. Word count will be strictly enforced. Longer papers are acceptable for the J. William Middendorf II Award, since this award accommodates larger projects such as those written by designated Research Associates under the auspices of the Advanced Research Program.

5. **ELIGIBILITY.** Unless specified otherwise in a prize category description above, students in the College of Naval Warfare (CNW), the College of Naval Command and Staff (CNC&S), the Naval Command College (NCC), and the Naval Staff College (NSC) are eligible to participate. November and March graduates have the opportunity to participate in two award cycles but can compete for a specific award only once during their academic year. Students in the Fleet Seminar and Monterey Programs are eligible to enter once for each individual award during their coursework (e.g., may submit a paper for the Colbert Award just once; may submit a paper for the Foundation Award just once, etc). Web-enabled and CD-ROM students may compete for an award during their last core course. Other restrictions may apply; for example, the Middendorf Award for Student Research is open to resident students only.

6. Papers submitted for award competition may be the result of extracurricular effort or the product of written requirements of the student's academic program. With the exception of entries from Fleet Seminar students, papers must be prepared during the academic year of residence. ****A student may compete for more than one award but may not enter the same paper in more than one competition listed above**** However, there are two exceptions: if the paper is submitted for the Marine Corps Association Award or the CJCS/SECDEF essay competitions, the same paper may compete in another “subject-related” competition listed above.

7. Text length of papers entered into competition, which does not include the preliminaries or reference material sections, should be 15 to 20 double-spaced typed pages and must be **unclassified**. Whereas a 15-20 page paper is appropriate for the J. William Middendorf II Award, longer papers are acceptable since this award accommodates larger projects such as those written by designated Research Associates under the auspices of the Advanced Research Program.

8. The Director of the NWC Writing Center is the central point of contact for prize and award competitions. In general, the SecDef/CJCS competitions require paper submissions in early April and all others in early May.

ENCLOSURE (5)

PROFESSIONAL JOURNALS AND PUBLICATIONS

There are many professional journals and publications that welcome papers written by Naval War College students. This means that papers you write for core courses and electives always have publication potential. However, it also means that you will invest precious discretionary time to polish a course paper and make it publication-ready. This is because each journal has its own rules for the content, length, format, and so forth for papers accepted for publication consideration; thus it is necessary to contact the journal or publication directly to determine the specific requirements. As a general rule, editors decide whether to publish a paper based on critical reviews conducted by editorial boards of three or more persons, often experts in the topic; board members conduct their reviews independently and without knowledge of author identity. Listed below are publications to which Naval War College students and graduates have contributed in recent years. This is just a sample; there are many more publications that are or might be amenable to publishing NWC student work. If you desire to submit a paper for publication, visit the periodicals section of the NWC Library and find the periodical of interest. Its publication policy, web site, digital and snail mail addresses, and telephone numbers are usually contained within the first few pages or end pages. This information is also available at publication web sites on the Internet.

Air Force Journal of Logistics

Air Land Sea Applications (ALSA) Bulletin

Air and Space Power Journal

Amphibious Warfare Review

Army Logistician

Campaigning, Journal of the Joint Advanced Warfighting School

Joint Force Quarterly

Leatherneck Magazine

Marine Corps Gazette

Military Review

National Guard

Naval Aviation News

Naval History

Naval War College Review

Parameters (U.S. Army War College)

RUSI Journal

Seapower Magazine (Navy League of the United States)

Small Wars Journal

Special Warfare

Strategic Insights, Center for Contemporary Conflict, Naval Postgraduate School

Strategic Review

The Submarine Review

Surface Warfare Magazine

Undersea Warfare: The Official Magazine of the U.S. Submarine Force

United States Naval Institute Proceedings