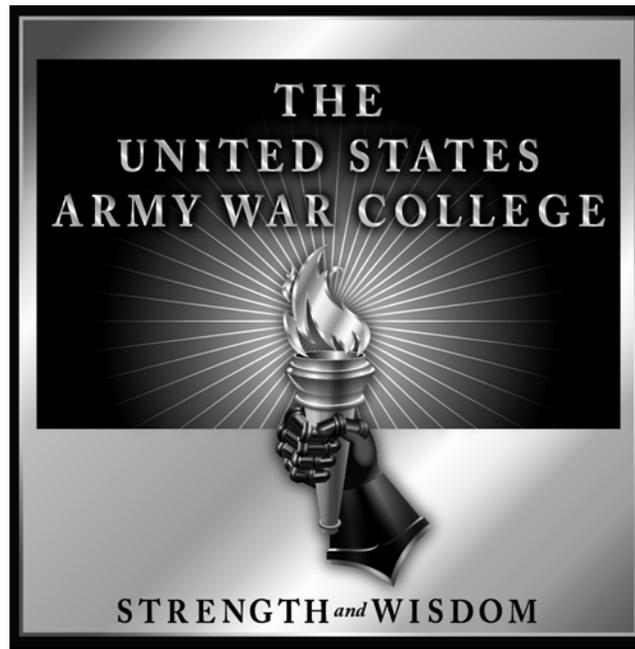


**U.S. ARMY WAR COLLEGE
ACADEMIC YEAR 2017**

CORE CURRICULUM

**DEFENSE MANAGEMENT
COURSE**

DIRECTIVE



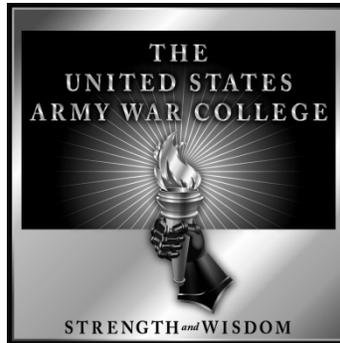
U.S. Army War College, Carlisle, PA 17013-5050

14 FEBRUARY thru 7 MARCH 2017

This document contains educational material designed to promote discussion by students of the U.S. Army War College. It does not necessarily reflect the views of the Department of the Army.

ACADEMIC YEAR 2017

DEFENSE MANAGEMENT



**COURSE DIRECTOR
PROF. LOUIS G. YUENGERT**

DCLM FACULTY INSTRUCTORS

PROF CHARLES D. ALLEN
DR. R. CRAIG BULLIS
PROF EDWARD J. FILIBERTI
PROF FREDERICK J. GELLERT
COL NANCY J. GRANDY
DR. ANDREW A. HILL
CH (COL) JOHN L. KALLERSON
COL GEORGE P. McDONNELL
COL BENJAMIN M. NUTT
COL JOHN E. SENA, JR.
COL EDWARD J. SIEGFRIED
PROF DOUGLAS E. WATERS
CDR MICHELLE D. WINEGARDNER
PROF LOUIS G. YUENGERT

COL ROBERT D. BRADFORD
COL ERIC S. CRIDER
DR. THOMAS P. GALVIN
DR. STEPHEN J. GERRAS
Col MARK W. HABERICHTER
COL MICHAEL P. HOSIE
DR. ANDREW J. LIPPERT
DR. RICHARD M. MEINHART
COL DOUGLAS J. ORSI
Col RICHARD C. SHEFFE
COL T. GREGG THOMPSON
COL DALE E. WATSON
DR. GEORGE J. WOODS III
Col MICHAEL P. ZICK

DALE E. WATSON, COL, AV
CHAIRMAN, DEPARTMENT OF
COMMAND, LEADERSHIP,
AND MANAGEMENT

RICHARD A. LACQUEMENT, JR., Ph.D.
DEAN, SCHOOL OF STRATEGIC
LANDPOWER

DISTRIBUTION: USAWC Students (387), AHEC/USAWC Library (4), DCLM (35),
DMSPO (1), DNSS (1), PKSOI (1), G3 (4), Assessment Office (3), IF Office) (2)

THIS PAGE INTENTIONALLY LEFT BLANK

TABLE OF CONTENTS

TABLE OF CONTENTS		<u>PAGE</u>
SECTION I - OVERVIEW		1
General		1
Purpose		1
Outcomes		2
Scope		2
Themes and Joint Professional Military Education (JPME)		3
Curriculum Relationships		3
SECTION II – STUDENT REQUIREMENTS		4
General		4
Preparation		4
Contribution		4
Presentations		4
SECTION III – PLANNING CALENDAR		8
SECTION IV LESSON INDEX		9
SECTION V - APPENDICES		55
Appendix I USAWC Mission and USAWC Institutional Learning Outcome		55
Appendix II USAWC Program Learning Outcomes		56
Appendix III Service Senior-Level College Joint Learning Areas and Objectives		57
Appendix IV Enduring Themes and Strategic Leadership Enduring Landpower Theme		60
Appendix V: Crosswalks		62
Appendix VI: Seminar Contribution Rubric		63
Appendix VII: Oral Presentation Rubric		64
Appendix VIII: Written Work Rubric		65

INTENTIONALLY LEFT BLANK

SECTION I

COURSE OVERVIEW

1. General.

a. Successful warfighting and other military operations do not occur without well-trained, properly equipped, and doctrinally sound forces. National security professionals invest the time to understand how the Joint community and Services develop, train, resource, equip, and sustain military forces. Defense Management (DM) is the course devoted to the study of the processes and systems within the U.S. Department of Defense (DOD) that develop and produce trained and ready forces and their resultant capabilities for employment by Combatant Commanders.

b. This course challenges students to understand decisions in complex and uncertain conditions particularly when resources are limited or strategic guidance is vague. The goal is to provide a learning environment that encourages reflection, reinforces critical thinking, and requires the exercise of strategic decision-making skills. Resource-related decisionmaking in the DOD environment requires systems thinking, visioning, consensus building, and other essential elements of strategic leadership. In addition, the DOD uses a variety of councils or groups to shape and process information for senior leaders to make decisions.

c. Through a combination of readings, lectures, exercises, and seminar dialogue, students will become familiar with the issues, processes and systems that drive the development of military capabilities. Students will study the relationship between various defense management systems and processes, and their functions and purposes. The basic knowledge acquired in this course provides students a foundation for continued professional education on DOD, Joint, and Army systems and processes that allows them to operate successfully within these systems and processes throughout their career, and assists them as they modify the systems to better lead and manage change.

2. Purpose.

a. Introduce students to the broad array of DOD organizations, systems, and processes used to determine the military capabilities required to attain national security objectives.

b. Provide students with an understanding of the Army's role in the development of landpower consistent with the guidance in national strategy documents.

c. Examine the decision support systems employed by strategic leaders to set priorities, develop the capabilities required by national strategic guidance documents and meet the operational needs of Combatant Commanders.

3. Outcomes.

a. **Comprehend** the Department of Defense's strategic planning, resourcing, and force management processes and senior leaders' roles and responsibilities in those processes.

b. **Analyze** the roles and responsibilities of the Secretary of Defense, Office of the Secretary of Defense, Joint Chiefs of Staff, and Combatant Commanders as they relate to strategic planning, resourcing, and force management.

c. **Comprehend** how the Department of Defense provides trained and ready forces and capabilities to Combatant Commanders.

d. **Analyze** the inherent tension between the military departments and Combatant Commanders with regard to the development of capabilities and the provision of trained and ready forces.

e. **Examine** the leadership and management challenges associated with organizations such as a military department, or the Department of Defense.

4. Scope.

a. The course leads students through the processes used by DOD and the military departments to translate strategic guidance and operational requirements into trained and ready forces and capabilities for use by the Combatant Commanders. It starts with an examination of the responsibilities of the Secretary of Defense, Office of the Secretary of Defense, the Chairman of the Joint Chiefs of Staff, and the Secretaries of the Military Departments as they interact with the Joint Staff, the Military Services and the Combatant Commanders to meet the country's military needs. The course examines the resource environment and the resource allocation process to provide a consistent frame of reference for the students, as most of Defense Management systems and processes provide input to and use output from this resource process.

b. Lessons review how Combatant Commanders and the Services identify requirements and measure the readiness of their forces. Additionally, the course examines the systems, processes, and issues associated with organizing, manning, equipping, and mobilizing the force; tasks assigned to the Military Departments in *U.S. Code Title 10*. While many of the lessons are Army specific, most of these systems and processes are replicated in some form across the DOD. For example, the Joint Capability Integration and Development System is examined from an Army perspective, but this is a Joint process used by all the Services. Students will spend some time understanding the interface between the military departments and the defense industrial base. Current DOD and Service transformation efforts will be used as a basis to assess current systems and processes including force management, manning, resource management, and the interaction with representatives from the Defense industry.

Additionally, students will examine mobilization processes and issues related to the Reserve, National Guard, and civilian components.

c. The course also includes an exercise providing students with the opportunity to synthesize national strategic guidance and a variety of other data sources into a prioritized missions list worthy of inclusion by the Chairman of the Joint Chiefs of Staff in his recommendations to the Secretary of Defense. After development of these priorities, the students will resource them in a severely constrained fiscal scenario.

5. Themes and Learning Areas for Joint Professional Military Education (JPME).

The USAWC curriculum addresses themes of enduring value. DM concentrates on the following themes through lectures, student readings, and faculty and student presentations: Strategic Leadership and the exercise of discretionary judgment, Relationship between policy and strategy, Professional ethics, Civil-Military relations, History. It focuses on JPME learning areas 1, 3, and 5 “National Security Strategy,” “National and Joint Planning Systems and Processes,” and “Strategic Leadership and the Profession of Arms.”

6. Curriculum Relationships. This course complements the core curriculum’s introduction to the strategic leader’s environment discussed in the Strategic Leadership course, as it introduces students to DOD resourcing challenges in the political environment that the most senior Service leaders experience in the Pentagon. Practical learning opportunities relate to the subjects of decisionmaking, planning, programming, force management, and other systems critical to the development of the Joint Force in general and landpower specifically. This course flows from the National Security Policy and Strategy course as it addresses how senior leaders use national defense and military strategies to develop trained and ready forces for Combatant Commanders. It also builds on the Theater Strategy and Campaigning course as it identifies how senior leaders ameliorate gaps in warfighting capabilities. Finally, it provides another opportunity to use the cognitive skills developed in the Strategic Leadership course.

SECTION II

STUDENT REQUIREMENTS

1. General. The Defense Management (DM) course offers numerous opportunities for students to share their experiences and knowledge while participating in the learning process. The Faculty Instructor (FI) will identify the overall requirements for students during the first lesson. At the end of this course, the FI will complete an evaluation of student performance; specifically: Contribution; 60% (contribution to seminar dialog, exercises and oral presentations), Writing; 40%, and Overall (an assessment of student mastery of the course learning Outomes). These evaluations, incorporated into the Course Evaluation Report (CER) in the Student Tracking System, will be included in individual academic electronic files from which the final Academic Efficiency Report (AER) is written.

2. Preparation. While not separately assessed, thorough preparation for each seminar discussion is essential to the learning process. Students must study the required readings specified in each lesson of this course directive, as that may be the only exposure they get to some of the more basic levels of knowledge about these systems. In addition, students may make presentations and lead discussions for various lessons. As a discussion leader, a student may have additional organizing, planning, or directing responsibilities, as well as the requirement to coordinate or conduct broader research into the suggested reading material and reserve references in the library. The FI will evaluate the quality of student preparation based on the demonstrated knowledge of the required course material.

3. Contribution. With varied background and experiences, each student brings invaluable, possibly unique, insights about the course material to the seminar. The mutual exchange of individual experience and perspective is vital to the learning process at the Army War College. Therefore, students are an essential part of both the active-learning process and the teaching team. Their active participation in all seminar activities, exercises, and discourse is important to the entire learning effort. Participation involves being a good listener, an articulate spokesperson, and an intelligent, tactful challenger of ideas. Different observer viewpoints often drive differing perspectives of these systems and processes. As previously mentioned, FIs will evaluate student contribution as part of the end-of-course evaluation based primarily on the quality of participation and not necessarily the frequency. A Rubric used to assess contribution is at Appendix VI.

4. Presentations.

a. General. Students' ability to express themselves clearly, concisely, and courteously is essential to the learning process. Students contribute to the seminar dialogue as part of group presentations or as individuals.

b. Specific. If possible, each student will complete a formal oral presentation. Additionally, there are two written papers for DM. The evaluations for these will be included in the end-of-course CER. Specific oral and written presentations are associated with different lessons throughout the course as follows:

(1) Oral. Student oral presentations provide valuable enrichment to seminar learning. The FI will match lessons to oral assignments during the first lesson. The assessment of student oral presentations will be included in their contribution evaluation.

(2) Written. All papers will use Arial 12 font. There are two written requirements for the DM course as described below. Both papers are due by 2400, 6 March 2017.

The first requirement is a 2-page position paper for a senior leader on a current and relevant defense management topic. The topic must be agreed by your faculty instructor (FI) NLT 24 Feb 17. Write the paper to convince a decision-maker to take some recommended action(s) regarding this strategic defense management issue. This paper should answer the question: "What decision should our organization embrace regarding this issue?" Students will use the Position Paper format provided by in the Communicative Arts Directive. The focus of this writing requirement is to include just enough information and analysis to provide the reader with a balanced discussion of the issue while also demonstrating the correctness of the paper's position. Assume the senior leader has sufficient background information to understand the basic tenets of the issue. This paper constitutes 60% of the written grade for the course.

The second requirement is a three to five-page paper on how to implement at least one of the recommendations in the position paper. This paper should provide sufficient detail to allow the senior-level reader an understanding of the purpose of the recommendation(s) and key implementation measures and associated challenges, but is not a detailed plan. The focus of this writing requirement is to articulate the most important defense management considerations regarding implementation of the recommendation(s) if chosen. This paper answers the question: "If the senior leader approves the recommendation(s), what are the principle challenges to implementation?" This paper constitutes 40% of the written grade for the course.

Both papers will be evaluated using the assessment rubric in Appendix VIII of this directive. The primary evaluation focus is whether the student demonstrated a strategic level understanding of the Defense Management concepts, systems, processes, and challenges discussed in this course. Writing the most innovative recommendation is not as important as proper application of DM concepts from the course in analyzing a strategic issue and articulating one or more recommendations to address the issue.

5. Standards. The purpose of oral and written presentations is to demonstrate a clear understanding of a particular aspect of DM material and to develop student personal oral (Appendix VII) and written communication skills (Appendix VIII). These

presentations will also demonstrate student ability to apply the elements of critical thinking that are appropriate to the subject and to understand how senior leaders should approach complex issues. Evaluation standards are detailed in the rubrics included in Appendices VI to VIII.

INTENTIONALLY LEFT BLANK

SECTION III

**PLANNING CALENDAR
February/March 2017**

Monday	Tuesday	Wednesday	Thursday	Friday
13 SRP-8	14 DM-1 Introduction to Defense Management and Defense Reform	15 DM-2 The Federal Budget	16 DM-3 Resourcing the Department of Defense <hr/> NTL: CRA(S)	17 RWR DAY
20 PRESIDENTS DAY	21 DM-4 Strategic Requirements I	22 DM-5 Strategic Requirements II <hr/> NTL: JCIDS	23 DM-6 Acquisition of Materiel <hr/> NTL: ATEC	24 DM-7 Strategic Issues in Force Management and Development
27 SRP-9	28 DM-8 Industry Day			
March 2017				
		1 DM-9 Strategic Issues in Manning the Force	2 DM-10 Strategic Issues in Equipping and Sustaining the Force <hr/> NTL: SRM	3 DM-11 Force Generation
6 DM-12 Resource Decisionmaking Exercise	7 DM-13 Capstone Speaker <hr/> AAR			

SECTION IV
LESSON INDEX

<u>LESSON</u>	<u>TITLE</u>	<u>PAGE</u>
DM-1-S	Introduction to Defense Management and Defense Reform	10
DM-2-S	The Federal Budget	13
DM-3-S	Resourcing the Department of Defense	16
DM-4-S	Strategic Requirements I	19
DM-5-L/S	Strategic Requirements II	22
DM-6 -S	Acquisition of Materiel	26
DM-7-S	Strategic issues in Force Management and Development	30
DM-8-S	Industry Day	35
DM-9-S	Strategic Issues in Manning the Force	37
DM-10-S	Strategic Issues in Equipping and Sustaining the Force	41
DM-11-S	Force Generation	44
DM-12-EX	Resource Decisionmaking Exercise	48
DM-13-L/S	CAPSTONE Speaker	53

INTRODUCTION TO DEFENSE MANAGEMENT AND DEFENSE REFORM

Mode: Seminar

DM-1-S

1. Introduction.

a. This is the introductory lesson for the Defense Management (DM) Course. The DM Course will concentrate on Department of Defense (DOD) priorities and decisions to address the nation's security challenges. This course will address the DOD's major systems and processes and examine how senior leaders use them to make resource decisions and develop capabilities to meet the competing demands of maintaining trained and ready forces to serve the nation today while modernizing to ensure capable forces for the future.

b. Using these systems and processes, senior leaders make complex planning and resourcing decisions that affect the ability of the Defense Department to execute responsibilities derived from the National Security Strategy, Quadrennial Defense Review, National Military Strategy, and other strategic documents. This course will identify the many challenges senior leaders will face in the national security and defense arena. As senior leaders, students need to know how to apply defense systems and processes so they can influence how well the DOD runs.

c. The course builds on the preceding courses. The linkage to the Introduction to Strategic Studies Course is that students should consider how forces used in the Gulf War would now be developed by the military Services using Defense Management systems and processes. Students will apply various leadership concepts discussed in the Strategic Leadership Course as they examine how leaders make defense management decisions. They should consider how some theories and strategies covered in the Theory of War and Strategy Course broadly influence the development of future capabilities. Students will examine how the military instrument of national power is developed and supported to achieve national policy and strategy objectives discussed in the National Security Policy and Strategy Course. Finally, they will examine the processes used to develop forces to meet the current and future operational needs of Combatant Commanders discussed in the Theater Strategy and Campaigning Course.

d. This lesson has two main parts. Part One consists of an overview from the Faculty Instructor to establish the overall context of the Defense Management Course and discuss specific course requirements. Part Two will first focus on the responsibilities of the Secretary of Defense, Chairman Joint Chiefs of Staff and Service Chiefs as covered in Title 10, U.S. Code. It will then examine the current military challenges and risks discussed in General Dunford's Joint Chiefs of Staff Posture

Statement to the Senate. It will conclude with broadly examining Defense Department challenges and concerns associated with Defense Reform initiatives.

2. Learning Outcomes.

a. Comprehend the DM course requirements including overall student contribution, writing, and exercise requirements.

b. Examine the roles and responsibilities of the Secretary of Defense, Chairman Joint Chiefs of Staff, and Service Secretaries.

c. Examine opportunities, challenges, and risks facing our Armed Forces associate with Defense Reform initiatives and military capabilities to meet current operations and potential future conflicts.

3. Student Requirements.

a. Required Readings.

(1) Department of Command, Leadership, and Management, *Defense Management Course Directive* (Carlisle Barracks, PA: U.S. Army War College, December 2016). (**Read Sections I – III**) **[DCLM Issue]** **[Blackboard]**

(2) Armed Forces, U.S. Code 10, Subtitle A, Part I, § 113, 131, 151, 153, 3013, and 3014 (accessed September 15, 2016). (Updated with 2017 NDAA changes) **[Blackboard]** **[Online]**

(a) <https://www.law.cornell.edu/uscode/text/10/113>

(b) <http://www.law.cornell.edu/uscode/text/10/131>

(c) <http://www.law.cornell.edu/uscode/text/10/151>

(d) <http://www.law.cornell.edu/uscode/text/10/153>

(e) <http://www.law.cornell.edu/uscode/text/10/3013>

(f) <http://www.law.cornell.edu/uscode/text/10/3014>

(3) General Joseph Dunford Jr., *General Joseph Dunford Jr., USMC 19th Chairman of the Joint Chiefs of Staff*, Posture Statement presented to the Senate Armed Service Committee, 114th Cong., 2nd sess. (Washington, DC: U.S. Marine Corps, March 17, 2016), http://www.armed-services.senate.gov/imo/media/doc/Dunford_03-17-16%20.pdf (accessed November 6, 2016). **[Blackboard]** **[Online]**

(4) Frank G Hoffman and Michael P. Noonan, "Defense Reform Redux," from the *Foreign Policy Research Institute Homepage*, February 25, 2016, <http://www.fpri.org/article/2016/02/defense-reform-redux/> (accessed September 19, 2016). **[Online]**

(5) General Dunford, Jr., USMC, *Advanced Questions for General Dunford, Jr., USMC, Nominee for the Position of Chairman Joint Chiefs of Staff before the Senate Armed Services Committee*, 114 Cong., 1st sess., July 9, 2015, http://www.armed-services.senate.gov/imo/media/doc/Dunford_07-09-15.pdf (accessed November 16, 2016). **(Read page 1) [Blackboard] [Online]**

b. Focused Readings.

(1) Samuel P. Huntington, Interservice Competition and the Political Roles of the Armed Services, *The American Political Science Review* 55, no. 1 (Mar., 1961), pp. 40-52, *JSTOR* (accessed September 19, 2016.) **[Database]**

(2) Defense 360, "Open Letter on Defense Reform," <http://defense360.csis.org/open-letter-defense-reform/> (accessed September 19, 2016). **[Online]**

(3) Uldric L. Fiore Jr, *Defense Secretariat REFORM*, Joint Force Quarterly (Autumn/Winter 1999-2000): 76-82, <http://www.dtic.mil/dtic/tr/fulltext/u2/a525700.pdf>, (accessed September 19, 2016). **[Blackboard] [Online]**

4. Points to Consider.

a. What are the most important responsibilities of the Secretary of Defense Chairman Joint Chiefs of Staff and Service Secretaries?

b. How would you characterize the challenges and concerns facing the Secretary of Defense, the Chairman Joint Chiefs of Staff, Services Secretaries, and Service Chiefs associated with current defense reform initiatives?

c. What are the key insights and concerns articulated by the US Senate in the National Defense Authorization Act for FY 17?

d. What are the military's strategic challenges and crosscutting sources of military risk.

THE FEDERAL BUDGET

Mode: Seminar

DM-2-S

1. Introduction.

The budget represents a crucial set of political decisions. Much of what we consider politically important--what the government does, who decides what it does, and who benefits from it--can be translated into the financial language of budget policy.

—Dennis Ippolito
Why Budgets Matter, 2003

a. Before we turn to the allocation of defense resources, we must understand the resource environment external to the Department of Defense (DOD). This is the world of taxes, deficits, mandatory and discretionary spending, appropriations committees, and the White House Office of Management and Budget, among others. These organizations, factors, and a host of others determine directly and indirectly how much defense the Nation can afford. This is where the “guns or butter” debate occurs.

b. Both the Executive and Legislative Branches of our government participate in the federal budget process. In some cases the two branches perform similar functions in parallel; for example, each independently forecasts expected revenues and expenditures. In other cases there is a sequential division of labor. The Executive Branch develops and presents a budget request based on governmental needs and an estimate of available resources. The Legislative Branch then reviews this request based on its own forecasts and analyses, adjusts it as it deems prudent, and then ultimately authorizes programs and appropriates resources.

c. It is important that National Security Professionals understand the political and macroeconomic dynamics surrounding the federal budget process. Once they understand these dynamics, they can better understand the implications for current and future year defense budgets.

2. Learning Outcomes.

a. Comprehend the key concepts and terms used in the federal budget and differentiate the roles and responsibilities of the Executive and Legislative Branches in the federal budget process.

b. Comprehend the scope and magnitude of the Federal Budget paying particular attention to the differences between mandatory and discretionary spending.

c. Evaluate the effects of Federal Fiscal Policy on future defense policies and programs.

3. Student Requirements.

a. Tasks. Read the required readings and participate in seminar dialogue.

b. Required Readings.

(1) Douglas E. Waters, "Defense and Military Challenges," in *Defense Management Primer*, Provisional Draft, ed. Thomas P. Galvin (Carlisle Barracks, PA: Department of Command, Leadership and Management, 2016), 9-20. **[Blackboard]**

(2) Harold W. Lord, "Authorization or Appropriation," Faculty Paper (Carlisle Barracks, PA: U.S. Army War College, April 16, 2012). (**Read** pp. 1-11) **[Blackboard]**

(3) Congressional Budget Office, *The 2016 Long-Term Budget Outlook* (Washington, DC: U.S. Government Printing Office, July 2016), <https://www.cbo.gov/sites/default/files/114th-congress-2015-2016/reports/51580-ltbo-2.pdf> (accessed January 30, 2017). (**Read** pp. 5-10 and 47-52) **[Blackboard]**
[Online]

(4) Donald B. Marron, "America in the Red," *National Affairs*, no. 3 (Spring 2010): 6-19, http://www.nationalaffairs.com/doclib/20100317_Marron.pdf (accessed December 5, 2016). **[Online]**

(5) Drew Desilver, "The Polarized Congress of Today Has its Roots in the 1970s," June 2, 2014, <http://www.pewresearch.org/fact-tank/2014/06/12/polarized-politics-in-congress-began-in-the-1970s-and-has-been-getting-worse-ever-since/> (accessed December 5, 2016). **[Online]**

c. Focused Reading.

(1) Peter G. Peterson Foundation, *The Solutions Initiative III* (New York: Peter G. Peterson Foundation, May 2015) 1-9, http://www.pgpf.org/sites/default/files/05122015_solutionsinitiative3_fullreport.pdf (accessed December 13, 2016). **[Online]**

(2) Gordon Adams, et al, "An Open Letter to Secretary Carter from the Defense Reform Consensus," https://www.aei.org/wp-content/uploads/2015/04/Defense_letter_april29Politico.pdf (accessed December 5, 2016). **[Online]**

4. Points to Consider.

a. What are the major challenges associated with the Federal Budget process for the Department of Defense and the military?

b. What are the implications of the forecasted trends in mandatory spending as it pertains to national security?

c. How can the DOD better posture itself to meet the requirements of the current defense strategy in a resource constrained environment?

RESOURCING THE DEPARTMENT OF DEFENSE

Mode: Seminar

DM-3-S

1. Introduction.

a. As discussed in Lesson 2 on the federal budget, the Department of Defense (DOD) is the largest portion of discretionary spending. Not surprisingly, the DOD has the largest and most complex organizations and processes in the federal government to plan, schedule, and execute its budgetary resources. This lesson studies the resource decision making processes used by DOD in conducting national defense activities in accordance with the National Security Strategy.

b. The Planning, Programming, Budgeting, and Execution (PPBE) process is the strategic management system used by the DOD and its subordinate departments, services and agencies for resource planning and allocation. A key competency for strategic leaders and their advisors is to understand how this process works and the types and complexity of issues that it must address. The lesson will not produce planners, programmers, or budgeters; however, it will provide an overview of how resource decisions are made at the department level and how all senior leaders and their advisors can and must participate in them.

c. The Joint Strategic Planning System (JSPS) is the primary means used by the Chairman, Joint Chiefs of Staff (CJCS) to meet the Title 10 responsibilities that were discussed in Lesson 1. The Chairman uses JSPS to assess risk, readiness, and joint military requirements; advise the President, Secretary of Defense (SecDef) and National Security Council on strategic direction, planning, the strategic environment, programs and budgets; and provide direction to the Joint Force. The CJCS must execute significant responsibilities without much directive authority. This requires the employment of several strategic leader competencies to include: envisioning the future for the Joint Force to provide relevant advice on strategic direction; building consensus among several diverse stakeholders; and strategically communicating to internal, national, and international audiences as a spokesperson for U.S. Armed Forces.

2. Learning Outcomes.

a. Comprehend the differences between resource plans, programs, and budgets, as well as the timelines and participants in the resource decisionmaking process.

b. Analyze how guidance from the President and Secretary of Defense is transformed into resource-related decisions that ultimately create military capabilities in support of the National Security Strategy.

c. Examine the Chairman Joint Chiefs of Staff's Joint Strategic Planning System, which enables him to provide formal advice on the prioritization and allocation of resources.

3. Student Requirements.

a. Tasks.

(1) Read all required readings plus the focused reading for your service.

(2) Attend lecture and participate in seminar dialogue.

b. Required Readings.

(1) U.S. Army War College, "Defense Management," July 28, 2016, streaming video, <https://internal.carlisle.army.mil/sites/dclm/default.aspx> (accessed November 21, 2016). (**View** the video from minute mark 31:00 to 45:30) **[Online] [Blackboard]**

(2) U.S. Army Force Management School, *Department Of Defense Planning, Programming, Budgeting, And Execution (PPBE) Process/ Army Planning, Programming, Budgeting, And Execution (PPBE) Process —An Executive Primer* (Fort Belvoir, VA: U.S. Army Force Management School, April 2015). (**Read**) **[Blackboard]**

(3) Department of Command, Leadership, and Management, *How the Army Runs: A Senior Leader Reference Handbook, 2015 - 2016* (HTAR) (Carlisle Barracks, PA: U.S. Army War College, 2015), <http://www.carlisle.army.mil/orgs/SSL/dclm/pubs/HTAR.pdf> (accessed November 15, 2016). (**Read** Pages 8-1 to 8-8 and 8-30 to 8-39) **[Blackboard] [Online] [Student Issue]**

(4) Department of Defense, *Defense Budget Overview: United States Department of Defense Fiscal Year 2017 Budget Request* (Washington, DC: Department of Defense, February 2016), http://comptroller.defense.gov/Portals/45/Documents/defbudget/fy2017/FY2017_Budget_Request_Overview_Book.pdf (accessed November 15, 2016). (**Read** Chapters 1 and 2; **Scan** remainder) **[Blackboard] [Online]**

(5) Richard M. Meinhart, "Joint Systems and Processes," in *Defense Management Primer*, Provisional Draft, ed. Thomas P. Galvin (Carlisle Barracks, PA: Department of Command, Leadership and Management, 2016). **[Blackboard]**

c. Focused Readings.

(1) Thomas A. Horlander and Davis S. Welch, *FY 2017 Army Budget Overview* (Washington, DC: Department of the Army, February 2016), <http://asafm.army.mil/Documents/OfficeDocuments/Budget/budgetmaterials/fy17/overview.pdf> (accessed November 15, 2016) **[Blackboard]** **[Online]**

(2) James Martin, *United States Air Force FY 2017 Budget Overview* (Washington, DC: Department of the Air Force, February 2016), <http://www.saffm.hq.af.mil/Portals/84/documents/FY17/AFD-160209-036.pdf?ver=2016-08-24-102126-717> (accessed November 15, 2016). **[Blackboard]** **[Online]**

(3) William K. Lescher, "Department of the Navy FY 2017 President's Budget," briefing slides, Washington, DC, Department of the Navy, February 9, 2016, http://www.secnav.navy.mil/fmc/fmb/Documents/17pres/DON_PRESS_BRIEF.pdf (accessed November 15, 2016) **[Blackboard]** **[Online]**

(4) Chairman Joint Chiefs of Staff, *Joint Strategic Planning System*, Joint Chiefs of Staff Instruction 3100.01C (Washington, DC: Chairman Joint Chiefs of Staff, November 20, 2015), http://www.dtic.mil/cjcs_directives/cdata/unlimit/3100_01a.pdf (accessed November 27, 2015). **(Read Enclosures A and C) (NOTE: Blackboard has only the required pages) [Blackboard] [Online]**

(5) Richard M. Meinhart, *Joint Strategic Planning System Insights: Chairmen Joint Chiefs of Staff 1990 to 2012* (Carlisle Barracks, PA: U.S. Army War College, Strategic Studies Institute, June 2013), <http://www.strategicstudiesinstitute.army.mil/pubs/display.cfm?pubID=1160> (accessed November 28, 2016). **[Blackboard]** **[Online]**

4. Points to Consider.

a. Is there something in the strategic environment that requires a change to the Planning Programming, Budgeting, and Execution (PPBE) system? What is wrong with the PPBE? What is right with it?

b. Should resource allocation and management be more joint in the future? If yes, how should defense leaders start to develop a more joint resourcing system?

c. How can strategic leaders and their advisors best influence resource decision making in their service and at the Department of Defense?

d. Is the link between the Joint Strategic Planning System (JSPS) and the Planning Programming, Budgeting, and Execution (PPBE) system sufficient to allow the Chairman and other senior leaders to influence the resource decisions in DOD?

STRATEGIC REQUIREMENTS I

Mode: Seminar

DM-4-S

1. Introduction.

a. This lesson is the first of two that explore the question, “How are strategic requirements determined?” Once the President issues the National Security Strategy and the Secretary of Defense and Chairman, Joint Chiefs of Staff translate that strategy into guidance for the Military Departments and the Combatant Commanders, these subordinate organizations must identify their readiness to implement the strategy and the capabilities they need to execute the guidance. The reality is that strategic requirements come from two very different perspectives. This lesson focuses on how the Combatant Commanders assess their ability to execute Theater Campaign Plans and the contingency plans the Joint Strategic Capabilities Plan (JSCP) directs them to prepare. DM lesson 5 will focus on how the Military Services and Joint community assess their ability to provide trained and ready forces to the current and future Joint Force and submit needed and anticipated capabilities through the Joint Capabilities Integration Development System (JCIDS). All of these assessments come together at the Joint Staff level. The Chairman then provides his advice on capabilities development and resource requirements to the Secretary of Defense.

b. The lesson begins with a holistic look at the highly complex concept of military preparedness, and how various processes and systems within the defense institution address its subcomponents--such as readiness assessment and capability gap identification. This encompasses a fundamental discussion about “what is *preparedness*?” As the readings will show, preparedness at the strategic level is less about the current states of personnel, equipment, and training and more about the alignment of available capabilities against established strategic requirements, expressed in national security documents. The readings present two models for considering readiness--Collins’ (1994) listing of nine measures of “preparedness” that any strategic readiness management system should consider and Betts’ (1995) studies of dichotomies, or tensions, facing decision makers when it comes to assessing readiness and acting upon readiness gaps.

c. Congress requires that the Secretary of Defense have a comprehensive readiness reporting system to include quarterly and monthly joint readiness reviews by the CJCS. This lesson will review the CJCS’s overall readiness assessment system, and examine how this readiness assessment influences the Defense Department’s preparedness and strategic requirements determination.

d. This sets up the remainder of the lesson where we will focus on the two primary means that Combatant Commanders use to identify requirements gaps. The first involves the development and submission of their Integrated Priority Lists (IPLs) for mid to long-term capabilities that need to be developed through established, deliberate processes. The second involves rapid requirements identification for immediate and emergent warfighting needs through Service and Joint urgent needs submissions.

2. Learning Outcomes.

a. Comprehend the enduring challenges and dichotomies that affect senior leader perspectives and decisions about military preparedness.

b. Examine the way the CJCS assesses joint readiness with a strategic perspective.

c. Comprehend the broad approaches employed by the joint community and services that take national security policy and strategy and combatant command requirements and generate trained and ready forces.

d. Analyze select readiness reports and IPLs to determine if they are aligned and how well they support development of capabilities needed to conduct missions required by the NSS/QDR/NMS/JSCP.

3. Student Requirements.

a. Required Readings.

(1) David Petraeus and Michael O’Hanlon, “The Myth of a U.S. Military ‘Readiness’ Crisis,” *The Wall Street Journal* (August 9, 2016), [ProQuest](#) (accessed January 24, 2017). **[Database]**

(2) Thomas P. Galvin, *Military Preparedness*, Faculty Paper (Carlisle, PA: Department of Command, Leadership, and Management, 2016). **[Blackboard]**

(3) U.S. Joint Chiefs of Staff, *CJCS Guide to the Chairman’s Readiness System*, Chairman of the Joint Chiefs of Staff Guide 3401D (Washington, DC: U.S. Department of Defense, November 15, 2014), http://www.dtic.mil/cjcs_directives/cdata/unlimit/g3401.pdf (accessed November 16, 2016). **(Read pp. 7-22). [Blackboard] [Online]**

(4) U.S. Government Accountability Office, *Defense Management: Perspectives on the Involvement of the Combatant Commands in the Development of Joint Requirements*, Report #GAO-11-527R (Washington, DC: U.S. Government Accountability Office, May 20, 2011), <http://www.gao.gov/assets/100/97501.pdf> (accessed November 15, 2016). **(READ pp. 9-18) [Blackboard] [Online]**

(5) Defense Science Board Task Force, *Fulfillment of Urgent Operational Needs* (Washington, DC: Office of the Under Secretary of Defense for Acquisition, Technology, and Logistics, July, 2009), <http://www.acq.osd.mil/dsb/reports/ADA503382.pdf> (accessed November 15, 2016). (**Scan Executive Summary**) [**Blackboard**] [**Online**]

(6) Ashton Carter, "Running the Pentagon Right," *Foreign Affairs* (January/February 2014), [ProQuest](#) accessed October 27, 2014). [**Database**]

b. Focused Reading.

Brad Carson and Morgan Plummer, "The Chickens are Ready to Eat: The Fatal Ambiguity of 'Readiness'," *War on the Rocks*, November 7, 2016, <http://warontherocks.com/2016/11/the-chickens-are-ready-to-eat-the-fatal-ambiguity-of-readiness/> (accessed November 15, 2016) [**Online**]

4. Points to Consider.

a. How do Collins' (1994) nine principles of preparedness apply to today's military and its approach to assessing both readiness and capabilities management?

b. How comprehensive is the Chairman's Readiness System in assessing the readiness of military forces in meeting the National Military Strategy?

c. Are Combatant Commander equities adequately represented within the Joint requirements development process?

STRATEGIC REQUIREMENTS II

Mode: Lecture/Seminar

DM-5-L/S

1. Introduction.

a. This lesson continues the discussion of military requirements and focuses on the deliberate processes that determine, validate and prioritize military requirements. Building upon the near-term demand driven processes in the previous lesson, designed to support current readiness and operational needs, this lesson considers key processes and organizations within the DOD that shape and inform decisions on future force requirements made by the Chairman Joint Chiefs of Staff (CJCS) and Secretary of Defense. The Services and Joint community use the Joint Capabilities Integration and Development System (JCIDS) to assess and document military requirements (capability needs) while the Joint Requirements Oversight Council (JROC) helps the CJCS execute his statutory responsibilities to identify, assess and approve joint military requirements. The requirements process heavily influences Joint capability decisions regarding military “ways” and “means” and is inseparable from the Department of Defense (DOD) Planning, Programming, Budgeting, and Execution (PPBE) process discussed in lesson 3, force readiness issues from lesson 4, and the Defense Acquisition System (DAS) addressed in lesson 6. Indeed, the great majority of capability solution recommendations and programs within the Services and DOD originate through the deliberate requirements analysis and development addressed within this lesson.

b. The Military Services and the Joint community assess, validate and prioritize new requirements using JCIDS, a capabilities-based process created in 2002 at the direction of Secretary of Defense Donald Rumsfeld. In a short note, often called a snowflake, Secretary Rumsfeld sent a directive to Gen Peter Pace, the Vice Chairman of the Joint Chiefs of Staff (VCJCS) and the Chairman of the Joint Requirements Oversight Council (JROC) to “get the requirements system fixed.” The note went on the say,

As Chairman of the JROC, please think through what we all need to do, individually or collectively, to get the requirements system fixed. It is pretty clear it is broken, and it is so powerful and inexorable that it invariably continues to require things that ought not to be required, and does not require things that need to be required. Please screw your head into that, and let’s have four or five of us meet and talk about it. Thanks.

—SecDef Donald Rumsfeld¹
Memo to VCJCS Gen Peter Pace, 18 March 2002

¹ Joint Staff J8 Capabilities-Based Assessment Users Guide, Version 3, March 2009

Subsequent staff work resulted in the creation of JCIDS founded upon three guiding principles: (1) Describing needs in terms of capabilities, instead of systems or force elements, (2) Deriving needs from a joint perspective, from a new set of joint concepts, and (3) Having a single general or flag officer oversee each DOD functional portfolio.

The CJCS Instruction 3170.01 details how the current JCIDS process supports and enables those overarching principles. Scan and/or read the CJCSI as necessary to gain a fundamental understanding of the process. The subsequent readings provide the basis for seminar discussion concerning JCIDS, focusing initially on the Army and then expanding the discussion to the joint force. The Army AL&T “Predicting the ‘Whether’” article address the broader notion of concept development by highlighting how the Army views the future and works to identify the right trends and concepts to underpin its capability development efforts. This is followed by a faculty paper, “Aligning Vision to Capability: Fundamentals of Requirements Determination,” that provides a practical look at how capability requirements develop through the major phases of JCIDS. We will then take a closer look at the Army’s Capability Needs Analysis (CNA) process that seeks to prioritize required capabilities across DOTMLPF-P, Warfighting Functions, and formations. The Joint Force Quarterly “Implementing Joint Operational Access: From Concept to Joint Force Development,” reading helps broaden the discussion by examining current DOD efforts to formalize and synchronize its joint approach to operational access capability development - in response to potential threat anti-access/area-denial (A2/AD) capabilities.

c. The JROC is the primary decision-making body used by CJCS to assist making assessments and providing advice on strategic requirements. The VCJCS chairs the JROC and the membership includes general officers of the military services and Combatant Commands as well as civilian advisors within the DOD. The JROC’s membership, broad responsibilities, and methods of sharing information with Congressional Defense Committees are specified in Title 10 U.S. Code. The CJCSI 5123.01F Charter of the JROC details how the JROC operates while the GAO Report “*DOD Weapons Systems: Missed Trade-off Opportunities During Requirements Reviews*” provides an interesting assessment of JROC capability development decisions made in FY2010.

2. Learning Outcomes.

a. Examine how JCIDS identifies, assesses, validates, and prioritizes joint military capability requirements.

b. Examine the role and responsibilities of the VCJCS and the JROC in supporting DOD military and civilian decision makers.

c. Evaluate how the JCIDS and JROC processes assist strategic leaders to interpret the strategic environment, determine future requirements, and align their organizations to meet expected needs.

3. Student Requirements.

a. Read the required materials, and be prepared to both ask questions of the guest Lecturer in Bliss Hall and discuss the readings and speaker comments in seminar.

b. Required Readings and Viewing.

(1) Joint Capabilities Integration and Development System

(a) Chairman, Joint Chiefs of Staff, *Joint Capabilities Integration and Development System*, CJCSI 3170.01I (Washington, DC: Chairman, Joint Chiefs of Staff, January 23, 2015), https://dap.dau.mil/policy/Documents/2015/CJCSI_3170_01I.pdf (accessed December 13, 2016). (**Scan** pp. 1-6, and A1-A19) **[Blackboard]** **[Online]**

(b) Defense Acquisition University, "Joint Capabilities Integration and Development System (JCIDS) Process Overview," November 4, 2012, *Defense Acquisition University YouTube Channel*, streaming video, 5:58, <https://www.youtube.com/watch?v=GfSCqy-riTQ> (accessed December 2, 2016). **[Online]**

(2) Chairman, Joint Chiefs of Staff, *Charter of the Joint Requirements Oversight Council*, CJCS Instruction 5123.01F (Washington, DC: Chairman, Joint Chiefs of Staff, January 10, 2012), http://dtic.mil/cjcs_directives/cdata/unlimit/5123_01.pdf (accessed December 13, 2016). (**Scan** pp. 1-6, and A1-16) **[Blackboard]** **[Online]**

(3) Gregg Thompson and Lou Yuengert, *Aligning Vision to Capability: Fundamentals of Requirements Determination*, Faculty Paper (Carlisle, PA: USAWC Department of Command, Leadership and Management, January 2015). **[Blackboard]**

(4) Benjamin M. Jensen, "Changes in War's Character, Small Forces and Crisis Management," *Parameters* 45, no. 1 (Spring 2015): http://strategicstudiesinstitute.army.mil/pubs/parameters/Issues/Spring_2015/12_JensenBenjamin_Small%20Forces%20and%20Crisis%20Management.pdf (accessed November 23, 2016). **[Blackboard]** **[Online]**

(5) GEN Mark A. Milley, Chief of Staff of the United States Army, *Remarks at AUSA 2016 – Dwight D. Eisenhower Luncheon*, October 4, 2016, *DVIDS*, streaming video, 1:27:30, <https://www.dvidshub.net/video/485996/ausa-2016-dwight-david-eisenhower-luncheon> (accessed December 2, 2016) (**View** video from 56:07 to 1:19:08) **[Online]**

(6) U.S. Government Accountability Office, *DOD Weapons Systems: Missed Trade-off Opportunities During Requirements Reviews*, Report GAO-11-502 (Washington, DC: U.S. Government Accountability Office, June 16, 2011),

<http://www.gao.gov/new.items/d11502.pdf> (accessed December 13, 2016). (Read pp. 1-7, Scan 8-24,) **[Blackboard]** **[Online]**

b. Focused Readings.

(1) U.S. Army, *The U.S. Army Operating Concept: Win in a Complex World*, TRADOC Pamphlet 525-3-1 (Fort Eustis, VA: U.S. Army Training and Doctrine Command, October 31, 2014), <http://www.tradoc.army.mil/tpubs/pams/TP525-3-1.pdf> (accessed November 27, 2015). **[Blackboard]** **[Online]**

(2) United States Marine Corps, *The Marine Corps Operating Concept: How an Expeditionary Force Operates in the 21st Century* (Washington, DC, Department of the Navy, September, 2016), <http://www.mccdc.marines.mil/Portals/172/Docs/MCCDC/MOC/Marine%20Corps%20Operating%20Concept%20Sept%202016.pdf?ver=2016-09-28-084156-190> (accessed December 13, 2016). **[Blackboard]** **[Online]**

(3) Richard M. Meinhart, "Leadership of the Joint Requirements Oversight Council," *Joint Force Quarterly* 56, 1st Quarter 2010, <http://www.dtic.mil/dtic/tr/fulltext/u2/a515164.pdf> (accessed December 1, 2016). **(NOTE: Blackboard has only the required pages)** **[Blackboard]** **[Online]**

(4) LTC James M. Dubik, "What are the Roots of the Army of 2015?" notional memorandum to CSA Gordon Sullivan, Washington, DC, 1995. **[Blackboard]**

(5) Edgar F. Raines, Jr., *The Army Requirements System, 1775-2009* (U.S. Army Center of Military History, March 31, 2009). (Read pp. 34-51) **[Blackboard]**

4. Points to Consider.

a. Does the current JCIDS process accommodate both Service and Joint capability needs? Is there a need to better develop Joint requirements? Why?

b. What recommendations would you advocate when advising the VCJCS on the best way to develop the future force?

c. Would you recommend any changes to the processes or organizational structures associated with the Joint Requirements Oversight Council?

ACQUISITION OF MATERIEL

Mode: Seminar

DM-6-S

1. Introduction.

a. The Defense Acquisition System (DAS) is the detailed “management process” used by the Department of Defense (DOD) to provide “effective, affordable, and timely systems to the users.”² So what does this mean? In layman’s terms, it is the DOD system used to acquire material items. “Materiel” can range from aircraft carriers, tanks, and airplanes to information technologies such as intelligence systems, command and control radios, and business systems. A basic understanding of the DAS is necessary to understand how our equipment is developed and procured and why it costs so much and takes so long.

The DAS has its detractors due to cost, schedule, and performance of its output from across the government, including the Office of the Secretary of Defense, Congress, and the Military Services. Additionally, the media targets the DAS for waste and its sluggishness. Yet, it is “our” system and it does produce excellent systems in defense of the Nation. Just take a look at the “Big 5” systems in the Army and make an honest evaluation of their performance over the last 30 years.

This lesson explores two primary topics: (1) DOD acquisition of materials and the DOD Science and Technology (S&T). Supporting readings are prioritized and should be read in the order offered. The first two readings support understanding defense acquisition. Watch the Defense Acquisition University video to help synthesize the first two readings and better understand the acquisition lifecycle. The third article focuses on science and technology in supporting military acquisition. Associated Focused Readings are to provide additional material for the lesson.

b. This lesson starts with a closer look at **acquisition of materiel** via the **Defense Acquisition System (DAS)** (first two hours). As highlighted in previous lessons, the DOD acquires capabilities through the interaction of three primary DOD decision support systems: the Planning, Programming, Budgeting, and Execution (PPBE) system, the Joint Capabilities Integration and Development System (JCIDS), and the Defense Acquisition System (DAS). The DAS (little “a”) is the primary DOD management process used to develop and acquire materiel and automated information system solutions in response to validated military requirements. Two primary readings support this portion of the lesson that will examine the broad components of the DAS and identify the fiscal, political and bureaucratic challenges inherent in developing,

² Department of Defense Directive 5000.01 May 2003 The Defense Acquisition System <http://www.dtic.mil/whs/directives/corres/pdf/500001p.pdf> (accessed 26 August 2016), 4.

testing, and modifying or producing major systems. The first reading, a Congressional Research Service (CRS) Report, “Defense Acquisitions: How DOD Acquires Weapon Systems and Recent Efforts to Reform the Process,” gives a good overview of the DAS, and to some degree, assesses recent DAS reform initiatives and reforms. The second reading, “Lessons from a Long History of Acquisition Reform,” discusses the history of acquisition reform and the difficulty of measuring change and its effectiveness in improving the system. The DAU video allows the student to hear and see the DAS put together in a 15-minute video, and reinforces the first reading.

c. The second portion of the lesson (last hour) will look at how the DOD is trying to maintain its technological advantage. The DOD remains heavily dependent upon advancements in technology to underpin its pursuit of superior joint force capabilities. Assuming that premise remains true, how can the DOD get promising technologies out of the labs, into the acquisition process, and into the force given the current and anticipated future fiscally constrained environment? This portion of the lesson will explore that broad question by examining current DOD Research, Development and Test and Evaluation (RDT&E) strategy and concerns - as offered in a more recent Joint Force Quarterly article, “The Defense Innovation Initiative,” co-authored by the Principal Deputy Assistant Secretary of Defense for Defense Research and Engineering, Mr. Alan R. Shaffer. The basic premise of Dr. William’s and Mr. Shaffer’s article is to make the case that DOD’s current RDT&E strategy and planned prototyping efforts will enable the department to deal with an erosion of US technologically based military advantage which poses increasing risk to US national security.

2. Learning Outcomes.

a. Analyze how the Defense Acquisition System (DAS) enables DOD senior leaders to make sound decisions in managing the acquisition of materiel solutions.

b. Understand the Acquisition Lifecycle and the “cradle to grave” concept of material development.

c. Understand how the DOD research and development strategy supports investment in long-term science and technology (S&T) efforts to sustain US military technological superiority and support future joint force capability needs.

d. Evaluate how the DAS guides development of materiel solutions to address gaps in joint military capability requirements identified during the JCIDS process, and how the DAS is associated with the PPBE process.

3. Student Requirements.

a. Required Readings & Viewing.

(1) Moshe Schwartz, *Defense Acquisitions: How DOD Acquires Weapon Systems and Recent Efforts to Reform the Process* (Washington, DC: U.S. Library of Congress,

Congressional Research Service, May 23, 2014), http://digital.library.unt.edu/ark:/67531/metadc306454/m1/1/high_res_d/RL34026_2014_May23.pdf (accessed December 13, 2016). (**Read** pp. 1-18) **[Blackboard]** **[Online]**

(2) Laura Baldwin and Cynthia Cook, “Lessons from a Long History of Acquisition Reform,” July 17, 2015, <http://www.rand.org/blog/2015/07/lessons-from-a-long-history-of-acquisition-reform.html> (accessed December 13, 2016). (**Read** entire article) **[Online]**

(3) Defense Acquisition University– Overview of the Defense Acquisition System, April 18, 2014, YouTube streaming video, <https://www.youtube.com/watch?v=M1oHhsyDXws> (accessed December 08, 2016). **[Online]**

(4) Edie Williams and Alan R. Shaffer, “The Defense Innovation Initiative,” *Joint Force Quarterly*, no. 77 (April 1, 2015), <http://ndupress.ndu.edu/Media/News/NewsArticleView/tabid/7849/Article/581867/jfq-77-the-defense-innovation-initiative-the-importance-of-capability-prototypi.aspx> (accessed December 3, 2016). (**Read** pp. 34-43) **[Online]**

b. Focused Readings:

(1) David C. Trybula, *‘Big Five’ Lessons for Today and Tomorrow* (Washington, DC: Institute for Defense Analyses, May 2012), <http://www.benning.army.mil/Library/content/NS%20P-4889.pdf> (accessed December 13, 2016). (**Read** Executive Summary (p. v), Introduction (pp. 1-4), Assessment (pp. 67-71), Environmental Changes (pp. 73-79), Lessons Learned (pp. 81-83), and Recommendations (pp. 91-94)). **[Online]**

(2) Dan Goure, “Acquisition Reform Must Start with Culture,” July 2, 2015, <http://lexingtoninstitute.org/dan-goures-speech-acquisition-reform-must-start-with-culture/> (accessed December 13, 2016). **[Online]**

(3) Sydney J. Freedberg, Jr., “Bridging the ‘Valley of Death’ for Navy Drones,” *Breaking Defense*, commentary posted November 23, 2015, <http://breakingdefense.com/2015/11/bridging-the-valley-of-death-for-navy-drones/> (accessed December 13, 2016). **[Online]**

(4) Jon Harper, “Navy Working on ‘Sci-Fi’ Weapons,” *National Defense*, November 2015, [ProQuest](#) (accessed December 08, 2016). **[Database]**

(5) Jesse Stalder, “Army Launches Rapid Capabilities Office,” August 31, 2016, https://www.army.mil/article/174290/army_launches_rapid_capabilities_office (accessed November 18, 2016). **[Blackboard]** **[Online]**

(6) Stew Magnuson, "Ground Robot Programs Finally Getting Underway," National Defense Industrial Association, December 2016, http://www.nationaldefensemagazine.org/archive/2016/december/Pages/GroundRobotProgramsFinallyGettingUnderway.aspx?utm_source=Sailthru&utm_medium=email&utm_campaign=Early%20Bird%20Brief%2011.16.2016&utm_term=Editorial%20-%20Military%20-%20Early%20Bird%20Brief (accessed December 1, 2016). **[Online]**

4. Points to Consider.

a. To what degree do you think current DOD acquisition processes and systems adequately address joint warfighter needs? Are DOD acquisition reform initiatives keeping pace with the dynamic and complex security environment?

b. How do DOD bureaucratic systems like the DAS support effective senior leader decision-making?

c. How does the DOD sustain a robust science and technology (S&T) effort to accelerate development and fielding of promising technologies and keep pace with current and future needs in a dynamic and complex security environment?

STRATEGIC ISSUES IN FORCE MANAGEMENT AND DEVELOPMENT

Mode: Seminar

DM-7-S

1. Introduction.

a. Army Force Management is the capstone process for the development and fielding of a trained and ready force. The Army's use of the term "Force Management (FM)" subsumes the two enabling Army sub-processes of "Force Development (FD)" and "Force Integration (FI)" associated with developing and fielding a balanced and affordable force. Army FM differs from the joint usage of the terms within "Global Force Management (GFM)." GFM is part of a joint sourcing system for the assignment, allocation, and apportionment of forces through a predictive, streamlined, and integrated process.

b. Within Army parlance, Force Development (FD) defines required military capabilities, designs force structures to provide these capabilities, and produces plans and programs that, when executed through Force Integration activities, translate organizational concepts based on doctrine, technologies, materiel, manpower requirements, and limited resources into a trained and ready military. Importantly, all services have established analytical processes that they use to establish their overall force structure. The Navy periodically conducts a formal "Force Structure Assessment;" when circumstances warrant, the Marine Corps conducts a "Force Structure Review;" similarly the Air Force uses their "Analytic Framework" to determine their force structure and the Army annually conducts the Total Army Analysis (TAA). Arguably, the most structured of all services, the Army practices a five-phased FD process to continually examine, update and modify its force structure that includes:

(1) Developing the need for new capabilities by comparing existing capabilities with current and future operational and strategic requirements. This phase involves the projection of the *future* operational and strategic environment, the development of concepts designed to prevail in that environment, and the identification of related capability "gaps" within the existing force structure.

(2) Developing the required capabilities to address the capability gaps. Capabilities can include solutions in the *domains* of doctrine, organization, training, materiel, leadership and education, personnel, facilities, and policy (DOTMLPF-P). This phase includes the Joint Capabilities Integration and Development System (JCIDS).

(3) When the solution dictates, developing detailed organizational models that specify the associated equipment and personnel requirements across all new and affected supported and supporting organizations. The solution could also require the

development of a new materiel solution using the Defense Acquisition System (DAS); also with organizational impacts.

(4) Determining the priority capabilities and related organizational authorizations (manpower and equipment) affordable within available/projected resources. This phase includes the Total Army Analysis (TAA) process that prioritizes Army force structure initiatives, stays within end strength limits, specifies the POM force and eventually results in a balanced and affordable operating and generating force.

(5) Documenting the organizational authorizations within approved plans and programs (databases) that allow for the acquisition, requisition and distribution of required personnel and equipment. Every organization in the Army has an authorization document identifying its mission, structure, personnel and equipment requirements and authorizations. Units use the authorization documents as authority to requisition personnel and equipment. The level of fill also serves as the basis for determining unit readiness.

c. The initial Army force development activity (Capabilities Integration and Development (CID) Process) parallels and is enmeshed with the Joint Capabilities Integration and Development System (JCIDS) covered in the DM Course strategic requirements lesson. The Army uses its own internal CID process to develop doctrine, organization, training, materiel, leadership and education, personnel, and facilities change recommendations that do not entail Joint Requirements Oversight Council visibility and management. Similarly, the Air Force, Navy and Marine Corps all use similar CID processes that feed into the JCIDS and develop required service capabilities. This lesson addresses the post-CID steps of the force-development process and specifically examines those procedures that establish a balanced and affordable force and the difficult resourcing function accomplished through the Army's Total Army Analysis (TAA) activity. However, the lesson's primary focus is on emerging strategic-level force structure issues for the Army and the other services introduced in the required and focused readings.

d. The follow-on "force integration sub-process" implements the FD approved plans and programs by modernizing organizations, manning, equipping, training, sustaining, deploying, stationing, and funding the force to provide trained and ready forces to the combatant commanders. The Army Sustainable Readiness Model (currently under development) is the primary Army force integration process used to synchronize the timing of major modifications to the Army operational organizations as well as manage force readiness and unit sourcing of Combatant Commanders' requirements. A subsequent lesson addresses the Sustainable Readiness Model (SRM) as well as the other services' force generation processes.

2. Learning Outcomes.

a. Comprehend the processes used to determine military force structure in support of the national and military strategies.

b. Evaluate the major challenges faced by the services in developing and resourcing current and future force requirements.

3. Student Requirements.

a. Read the required and assigned focused readings to prepare for seminar discourse on force management and strategy-to-force structure challenges.

b. Required Readings.

(1) U.S. Army Force Management School, *How the Army Runs Primer - Updated* (Fort Belvoir, VA: U.S. Army Force Management School, November 17, 2015). (**Read** pp. 1-7). [**Blackboard**]

(2) Mark Gunzinger, "Shaping America's Future Military," 2013, <http://www.csbaonline.org/publications/2013/06/shaping-americas-future-military-toward-a-new-force-planning-construct/> (accessed December 2, 2016). (**Read** Executive Summary (pp. i-vii) and **Scan** Chap. 3 & 4 (pp. 29-50)) [**Online**]

(3) Dr. James A. Russell et al., *Navy Strategy Development: Strategy in the 21st Century*, Project Number: FY14-N3/N5-0001 (Monterey, CA: Naval Postgraduate School: Naval Research Program, June 2015), <https://www.hsdl.org/?view&did=768350> (accessed November 8, 2016). (**Read**: pp. 14-23) [**Online**]

c. Focused Readings.

(1) **Army and Civilian Students:**

(a) Nathan Freier et al., "Beyond the Last War," April 2013, http://csis.org/files/publication/130424_Freier_BeyondLastWar_Web.pdf (accessed November 10, 2016). (**Read** Executive Summary (pp. vi-x) and CH X Conclusions (pp. 72-74) and **Scan** Chap IX (pp. 56-71)) [**Online**]

(b) Lawrence Kapp et al., *How Big Should the Army Be? Considerations for Congress* (Washington, DC: U.S. Library of Congress, Congressional Research Service, September 2, 2016), <https://news.usni.org/2016/10/04/report-congress-big-army> (accessed December 13, 2016). (**Read** Summary and pp. 7-17; **Scan** rest) [**Blackboard**] [**Online**]

(2) **Army National Guard Students:**

General Frank J. Grass, *The Army National Guard: A Solution For the Total Force In a Fiscally Constrained Environment: Presentation to the National Commission On the Future of the Army*, 115th Cong., 1st sess., September 21, 2015, <http://www.ncfa.ncr.gov/sites/default/files/CNGB%20Framing%20Paper%20and%20Enclosures%2020150924.pdf> (accessed November 9, 2016). (**Read** pp. 2-6; Summary of

Recommendations (pp. 1-3) and Position Papers #s: 1: Force Size and Mix; 3: Force Structure Distribution and Allocation; 4: Force Generation; 6. Readiness) **[Blackboard]** **[Online]**

(3) Marine Corps Students:

(a) Hope Hodge Seck, "The Marine Corps Has a New Ideal Force Size: 190,000 Troops," Sep 27, 2016, <http://www.military.com/daily-news/2016/09/27/the-marine-corps-has-a-new-ideal-force-size-190000-troops.html> (accessed November 9, 2016). **(Read pp. 1-3) [Online]**

(b) Robert P. Kozloski, "Marching Towards the Sweet Spot," *Naval War College Review* 66, no. 3 (Summer 2013): 11-37, <http://www.usnwc.edu/getattachment/3e4a9be3-74fe-4bfd-ad8f-7c34b76242fd/Marching-toward-the-Sweet-Spot--Options-for-the-U.aspx> (accessed November 9, 2016). **(Read pp. 11-33) [Online]**

(4) Navy and Coast Guard Students:

(a) Office of the Chief of Naval Operations, *FORCE STRUCTURE ASSESSMENTS*, OPNAV INSTRUCTION 3050.27 (Washington, DC: Department of the Navy, February 12, 2015), <http://doni.daps.dla.mil/Directives/03000%20Naval%20Operations%20and%20Readiness/03-00%20General%20Operations%20and%20Readiness%20Support/3050.27.pdf> (accessed November 9, 2016). **(Read pp. 1-5 and Slide at Encl. 1) [Blackboard]** **[Online]**

(b) Ronald O'Rourke, *Navy Force Structure and Shipbuilding Plans: Background and Issues for Congress* (Washington DC: U.S. Library of Congress, Congressional Research Service, September 21, 2016). **(Read 2-page Summary; Scan rest) [Blackboard]**

(c) John Patch, "The Maritime Strategy We Need," June 1, 2007, <http://www.armedforcesjournal.com/the-maritime-strategy-we-need/> (accessed December 13, 2016). **(Read pp. 1-6) [Online]**

(5) Air Force Students:

(a) Headquarters United States Air Force, "Air Force Guidance Memorandum to AFI 90-1001," memorandum to Distribution C (MAJCOMs/FOAs/DRUs), Washington, DC, January 20, 2016, http://static.e-publishing.af.mil/production/1/af_a5_8/publication/afi90-1001/afi90-1001.pdf (accessed November 9, 2016). **(Read Attachment 1 (para A1 to A1.2 and para A1.3 to A1.3.2.2.2); pp 3-5) [Blackboard] [Online]**

(b) Secretary of the Air Force Public Affairs, "AF Officials Announce FY 2017 Budget Force Structure Changes," February 12, 2016, <http://www.af.mil/News/ArticleDisplay/tabid/223/Article/655595/af-officials-announce-fy-2017-budget-force-structure-changes.aspx> (accessed November 8, 2016). (**Read** pp. 1-2) **[Blackboard]** **[Online]**

(c) Jeremiah Gertler, *The Air Force Aviation Investment Challenge* (Washington DC: U.S. Library of Congress, Congressional Research Service, December 17, 2015), <https://www.fas.org/sqp/crs/weapons/R44305.pdf> (accessed November 10, 2016). (**Read** Summary; pp. 1-7) **[Blackboard]** **[Online]**

4. Points to Consider.

a. How do the different services determine their force structure requirements and resource levels? How are future force requirements projected?

b. What role does Total Army Analysis play within the Army Force Management process?

c. What are some current challenges with the services' strategies-to-force structure implementation plans and programs? What are some alternative senior leader approaches to resolving strategy-to-resource mismatches?

INDUSTRY DAY: STRATEGIC CHALLENGES FOR THE DEFENSE INDUSTRIAL BASE

Mode: Lecture/Seminar

DM-8-L/S

1. Introduction.

a. Research, Development and Acquisition (RD&A) management processes provide materiel solutions supporting the nation's military policy and its trained and ready forces. Although the government has an organic industrial base, it relies heavily on the commercial industrial base to develop, produce and field these materiel systems. This lesson serves as a supplement to Lessons 4 and 6 in regards to the framework of identifying, resourcing, and fielding current and future defense capabilities. Students will have an opportunity to meet and engage with representatives from industry in both a lecture discussion and a seminar format.

b. In an address to the Economic Club of Chicago (July 16, 2009), SecDef Gates provided focus that should be applied to this lesson. He noted, "The security challenges we now face, and will in the future, have changed," and as such, DOD needs "a portfolio of military capabilities with maximum versatility across the widest possible spectrum of conflict." Emphasizing the need to meet Combatant Commander Requirements with delivery timelines that range from urgent (months) to agile (2 to 4 years) to traditional (more than 4 years), he noted that,

All these decisions involved trade-offs, balancing risks, and setting priorities--separating nice-to-haves from have-to-haves, requirements from appetites. We cannot expect to eliminate risk and danger by simply spending more--especially if we're spending on the wrong things. But more to the point, we all--the military, the Congress, and industry--have to face some iron fiscal realities.

c. How do we balance support for the operational requirements with other urgent priorities in an era of persistent conflict? Clearly, industry serves as an essential partner in successfully addressing this challenge. Senior security leaders need to have a good understanding of the relationship between the government and industry as part of the dynamics of the entire defense industrial base. This knowledge facilitates informed decisions that will best support operational requirements while balancing cost, schedule, performance and risk.

2. Learning Outcomes.

- a. Understand the role of industry in providing materiel solutions for current and future requirements.
- b. Analyze strategic issues that affect defense industries as well as ways to develop effective partnerships toward fulfilling materiel requirements.

3. Student Requirements.

a. Required Readings.

(1) Craig McKinley, "Innovation and the Defense Industrial Base," June 2015, <http://www.nationaldefensemagazine.org/ARCHIVE/2015/JUNE/Pages/InnovationandtheDefenseIndustrialBase.aspx> (accessed December 13, 2016). **[Online]**

(2) Aerospace Industries Association, *The Unseen Cost – An Update* (Arlington, VA: Aerospace Industries Association, July 3, 2012), <http://www.aia-aerospace.org/report/the-unseen-cost-an-update/> (accessed December 13, 2016). **(Read pp. 7- 19) [Online]**

4. Points to Consider.

- a. How can the government and industry work together to reduce development and procurement cycle times as well as design systems that are better able to exploit future advances in technology?
- b. How do changes in requirements affect a contractor's ability to manage a program's cost, schedule, performance and risk? How can the government better manage these changes to reduce program turbulence and still be responsive to users' changing requirements?
- c. How do industry and government strike an effective balance between the contractors' (and shareholders') desire for a good return on investment and the government's desire for high quality at an affordable price?
- d. A strong teaming relationship is required between government and industry to effectively deliver materiel solutions to our warfighters. How can that spirit of partnership be balanced with a desire for strong competition between contractors to keep costs down throughout the life cycle of a system?

STRATEGIC ISSUES IN MANNING THE FORCE

Mode: Seminar

DM 9-S

1. Introduction.

a. If your expectation for a class at the Army War College on strategic issues in manning revolves around a discussion of the interrelationships between the TAPDB, AAMMP, eMILPO, PMAD, and UAD, you are about to be disappointed. While these Army strategic systems are central to managing the manning of the force, the intent of this lesson is to introduce some complex, ill-structured challenges and topics that affect the long-term health of the Army and the military.

b. The cost of military pay and benefits approaches half of the Defense budget. At almost \$250 billion dollars, one might think the systems and processes associated with manning the force would be under constant scrutiny to justify this significant cost. One might also assume that the external labor market—the alternative employment available to potential and current members of the U.S. military—along with best practices from the corporate world, would be constantly analyzed to ensure that DoD was delivering value to taxpayers. The frustration with some DoD leaders at the lack of change with outdated human resource systems implies that the scrutiny expectations are not being met.

c. Some of the topics this lesson will tee-up are:

(1) How do we think about the appropriate mix of personnel types both within the armed services (active component, federal reserve component, or national guard) and across the DoD (military, civilian, or contractor)? What strategic problems would lead us to alter the mix?

(2) Which jobs or roles should be fulfilled by civilians and contractors versus military personnel?

(3) How should the military recruit, retain, and separate soldiers and civilians?

(4) What are the best models and systems to evaluate, promote, compensate, and develop the human resource talent in America's military?

Although there is no correct answer to any of these questions, there is often a wrong one. None of these questions can be discussed properly without first understanding some of the dynamics and factors in the external labor market.

2. Learning Objectives.

- a. Comprehend the current and anticipated national labor force dynamics and analyze their influence on the ability of the Department of Defense to attract, motivate, and retain the soldiers and civilians it requires.
- b. Comprehend the different types of personnel and the analyze the costs and benefits of manning the force with those types.
- c. Comprehend the challenges facing senior defense leaders as they work to develop and implement changes necessary to structure, man, and sustain a workforce capable of meeting current and future requirements.
- d. Comprehend some of the tools and approaches available to strategic leaders in managing personnel.

3. Student Requirements.

NOTE on readings: In this lesson, "SCAN" means reading superficially, reviewing section headings, tables and charts, and reading introductory and concluding sections more closely. "SKIM" refers to a very quick review just to familiarize yourself with what the document contains. SKIM does not produce comprehension. It merely familiarizes you with a document for future reference. Several of the readings in this lesson are included simply to introduce you to them for future use.

a. Required Readings.

(1) U.S. Government Accountability Office, *Additional Steps Needed to Help Determine the Right Size and Composition of DoD's Total Workforce*, GAO 13-470 (Washington, DC: U.S. Government Accountability Office, May 2013), <http://www.gao.gov/assets/660/654879.pdf> (accessed December 2, 2016). **(READ pp. 8-35) [Blackboard] [Online]**

(2) Andrew Feickert, and Lawrence Kapp, *Army Active Component (AC)/Reserve Component (RC) Force Mix: Considerations and Options for Congress* (Washington, DC: U.S. Library of Congress, Congressional Research Service, December 5, 2014), http://digital.library.unt.edu/ark:/67531/metadc491325/m1/1/high_res_d/R43808_2014Dec05.pdf (accessed December 2, 2016). **(SCAN pages 1-15, 18-21, 28-35) [Blackboard] [Online]**

(3) Amy Bernstein and Anand Raman, "The Great Decoupling: an Interview with Erik Brynjolfsson and Andrew McAfee," *Harvard Business Review*, June 2015, <https://hbr.org/2015/06/the-great-decoupling> (accessed December 2, 2016). **[Blackboard] [Online]**

(4) "Parkinson's Law," *The Economist*, November 19, 1955. **(Blackboard)**

(5) Ashton Carter, Remarks on "Building the First Link to the Force of the Future," public speech, George Washington University Elliott School of International Affairs,

Washington, DC, November 18, 2015, <http://www.defense.gov/News/Speeches/Speech-View/Article/630415/remarks-on-building-the-first-link-to-the-force-of-the-future-george-washington> (accessed December 28, 2016). **[Blackboard]** **[Online]**

(6) Cory Wallace, "A Tale of Two Majors: Talent Management and Army Officer Promotions," *War on the Rocks*, January 13, 2016, <http://warontherocks.com/2016/01/a-tale-of-two-majors-talent-management-and-army-officer-promotions/> (accessed December 28, 2016). **[Online]**

b. Focused Readings.

(1) Lawrence Kapp, *Recruiting and Retention: An Overview of FY2013 and FY2014 Results for Active and Reserve Component Enlisted Personnel* (Washington, DC: U.S. Library of Congress, Congressional Research Service, June 26, 2015). **(SKIM—read summary and review tables and charts)** **[Blackboard]**

(2) Military Leadership Diversity Commission Issue Paper #24, "Officer Retention Rates across the Services by Gender and Race/Ethnicity," <https://www.hsdl.org/?view&did=716147> (accessed December 2, 2016). **(SKIM—read abstract and review charts)** **[Online]**

(3) Lawrence Kapp, *Military Officer Personnel Management: Key Concepts and Statutory Provisions* (Washington, DC: U.S. Library of Congress, Congressional Research Service, May 10, 2016). **(SKIM—read summary and "Considerations" sections, review tables and charts)** **[Blackboard]**

(4) Andrew Tilghman, "Force of the Future: Career flexibility, Fewer Moves," *Military Times*, September 1, 2015, <http://www.militarytimes.com/story/military/careers/2015/08/28/force-future-report-ash-carter-review/32476549/> (accessed January 31, 2017). **[Online]**

4. Points to Consider.

a. What are some of the challenges in determining the personnel requirements for DoD and the services?

b. Think of manning in terms of a personnel life cycle (recruit, train, assign, develop, retain/transition to other component/separate, promote, retire). What are the greatest challenges at the various stages in the cycle? What do the readings suggest about how to meet these challenges?

c. How do dynamics in the external labor market potentially assist or hurt the military's ability to get the talent it needs?

d. What are the challenges to agreeing upon the right mix of AC and RC forces in the DoD?

STRATEGIC ISSUES IN EQUIPPING AND SUSTAINING THE FORCE

Mode: Seminar

DM-10-S

1. Introduction.

a. The focus of this lesson is the strategic challenges associated with equipping and sustaining land forces. Equipping the force involves the actions acquire, train, employ, sustain, and eventually dispose of equipment. Across the services, equipping the force includes the force integration activities of:

- Managing ASCC and GCC requirements
- Programming and budgeting for equipment and equipping-related activities.
- Repairing, sustaining, and improving currently fielded equipment.
- Replacing major end items with new and more advanced systems.
- Fielding materiel solutions for approved capabilities requirements.
- Distributing equipment to new or modified units and partner nations.
- Mobilizing and deploying forces.
- Disposing of damaged, worn out, or obsolete equipment.

b. Equipping strategies are linked to the DOD and Services' authorization systems, acquisition processes, budget systems, sustainment activities, mobilization processes, and readiness systems. While the acronym-laden systems and planning horizons may differ, the Army, the Navy, the Air Force, and the Marine Corps manage their equipment requirements under Defense instructions and federal acquisition regulations. Therefore, the services have similar systems and processes to forecast future requirements, develop plans and programs, and procure and distribute equipment. Reserve component forces are equipped as part of their parent services and are included in all equipping activities. Foreign Military Sales (FMS) is a DOD function and conducted under Department of State authorities. FMS has been providing approximately \$30B in equipment annually the last few years to partners and allies. These equipment sales must be factored into U.S. forces equipping plans and into the U.S. defense industrial base's production capacity.

c. In developing strategies and plans to equip and sustain forces, leaders at all levels must consider how to manage capabilities. At the tactical level, leaders are concerned with employing capabilities through training, maintaining, and operating military equipment to accomplish assigned missions. At the military service and joint operational level, leaders are concerned with sustaining capabilities by acquiring, distributing, logistically supporting, and disposing of material to provide long term, joint military capabilities. At the national or strategic level, leaders are concerned with developing capabilities by creating policies, strategies and plans; funding programs;

enabling science and technology research and development; managing the defense industrial base; and directing foreign military sales to meet national objectives. Complicating matters further, leaders must constantly balance current and emerging needs with long-term considerations and future requirements within constrained, and currently decreasing, funding levels.

d. Sustainment-related acquisition/contracting is procured and managed differently than materiel acquisition, but is no less significant to effective land power. Sustainment contracts are used across the defense department to sustain forces in and out of combat and to administrate Title 10 functions. These contracts and augmentation programs (e.g., the Army's Logistics Civil Augmentation Program [LOGCAP]) are a way for senior leaders to leverage the budget (base and overseas contingency funds) to provide capabilities to GCC commanders without impacting force structure authorizations. In this time of defense funding reductions, senior leaders must critically evaluate the right mix of spending to meet force structure, equipment, personnel, plus service and sustainment contracts requirements to provide the best military capability possible.

2. Learning Outcomes.

a. Comprehend the strategic level concepts and national challenges of equipping and sustaining the force in both peace and war.

b. Assess senior leader's decisionmaking considerations in meeting equipping and sustaining requirements associated with operational needs within budgetary constraints.

c. Assess the Army's programs and strategic challenges associated with providing full-spectrum sustainment capabilities.

3. Student Requirements.

a. Read the required readings to prepare for the seminar dialogue on equipping and sustaining the force. Students may also read some of the focused readings to learn more on service specific equipment capabilities and issues.

b. Required Readings.

(1) Andrew F. Krepinevich and Eric Lindsey, "The Road Ahead: Future Challenges and Their Implications for Ground Vehicle Modernization," 2012, http://csbaonline.org/uploads/documents/CSBA_TheRoadAhead_FullSize.pdf (accessed December 12, 2016). (**Read** Chapter 2, pp. 29-52, **Scan** remainder) **[Online]**

(2) Edward N. Luttwak, "Breaking the Bank: Why Weapons Are So Expensive," *American Interest* 3, no. 1, September/October 2007, <http://www.the-american-interest.com/2007/9/1/breaking-the-bank/> (accessed December 12, 2016). **[Online]**

(3) Department of Defense, *Maintenance of Military Materiel*, Department of Defense Directive 4151.18 (Washington, DC: Department of Defense, March 31, 2004), <http://dtic.mil/whs/directives/corres/pdf/415118p.pdf> (accessed December 12, 2016). **(Read Paragraph 3 “Policy” (pp. 2-8)) [Blackboard] [Online]**

c. Focused Readings.

(1) Katherine E. White, *Government Contracting Should be a Core Competence for U.S. Military Personnel* (Carlisle, PA: Strategic Studies Institute, December 12, 2014), <http://www.strategicstudiesinstitute.army.mil/pubs/display.cfm?pubID=1241> (accessed December 12, 2016). **[Blackboard] [Online]**

(2) Jacquelyn Schneider and Julia Macdonald, "Views from the Ground on the A-10 Debate," *War on the Rocks*, March 16, 2016, <http://warontherocks.com/2016/03/views-from-the-ground-on-the-a-10-debate> (accessed December 12, 2016). **[Online]**

(3) U.S. Department of the Army, *Army Equipment Program in support of President's Budget 2015* (Washington, DC: U.S. Department of the Army, May 2015), http://www.g8.army.mil/pdf/Army_Equipment_Program2016.pdf (accessed December 12, 2016). **(Read pp. 4-19, Scan annexes) [Blackboard] [Online]**

(4) Steven Hurt, "Three Ways the U.S. Department of Defense Can Achieve its Sustainment Objectives in Challenging Times," 2013, https://www.atkearney.com/documents/10192/719695/Three_Ways_the_US_DOD_Can_Achieve_Sustainment.pdf/fb6219fb-26c5-404b-a17d-0228c97634bc (accessed December 12, 2016). **[Instructor Handout] [Online]**

4. Points to Consider.

a. Have Krepinevich and Lindsey correctly stated the future environment of land war and the implications for equipping and sustaining ground forces?

b. Have the DOD and the Services correctly balanced funding requirements for equipment, sustainment, and service contracts? How should the services balance immediate, near-term, and long-term equipping and sustaining requirements given declining funding?

d. Where should requirements for equipping partner nations be placed in the competing priorities for resources? How much consideration of partner military requirements, capabilities, and limitations should be considered in planning for material development and acquisition?

FORCE GENERATION

Mode: Seminar

DM-11-S

1. Introduction.

a. Force generation is a complex activity that transitions available resources into employable capabilities. At the national level, those resources include the commitment of related materials, labor, capital, facilities, and services to sustain or create the required military capabilities. Within the military, force generation relates to the management of resources over time to produce the required capabilities needed for employment by the national authorities (President and Secretary of Defense) and the combatant commanders (CCDRs). While some of the required military capabilities already exist and are at the required readiness level to meet rotational and emerging requirements, others require time and additional resources to generate. Importantly, all services have force generation processes that manage portions of their active and reserve components at various levels of readiness to meet rotational, emerging and crisis-based requirements. Additionally, all services have related processes and plans that increases the readiness of available forces, deploys “surge” forces and expands the number of forces (capacity) to meet mid- to long-term operational requirements.

b. Global Force Management (GFM) is the DOD process that manages force assignment, apportionment and allocation to meet joint force requirements. The process also provides insights into the operational requirements for service forces and allows senior defense decision-makers to assess the risks of proposed force assignment, apportionment and allocation changes. The associated GFM Implementation Guidance (GFMIG) assigns forces to the Combatant Commands for daily use through the “Forces For Unified Command Memorandum.” Additionally, GFM also allocates service forces to Combatant Commands for rotational presence or planned employments through the Global Force Management Allocation Plan (GFMAP). Furthermore, Combatant Commands may receive additional forces by submitting a Request For Forces (RFF) for emerging requirements. Finally, DODs Guidance for the Employment of the Force (GEF) and the CJCS’s corresponding Joint Strategic Capabilities Plan (JSCP) also apportion forces to combatant commands for possible employment on planned theater contingencies. Overall, GFM and these associated guidance documents provides the process, roles, missions and requirements for the sourcing of service capabilities to Combatant Commanders to meet current, rotational, emergent and planned operational requirements. Correspondingly, the service-specific force generation processes seek to efficiently match unit readiness levels with near-, mid- and long-term force requirements consistent with the GFMIC, GFMAP, GEF and emerging approved RFF requirements.

c. As with most issues at the strategic level, available resources are seldom sufficient to meet all known and projected strategic requirements. Thus, strategic leaders must accept risk in determining what forces to fully resource and those they will resource at lower levels. Correspondingly, the service force generation concepts serve as “ways” to save funds that would ostensibly be expended on excess or unusable readiness. Unusable readiness would be higher levels of readiness maintained than required by the mission(s). This could include low risk mission requirements where lower readiness has little consequences; long lead-in time for deployment due to strategic lift constraints; or units that do not require lengthy post-alert training. Those funds could then be used to purchase additional force structure capacity that helps mitigate the risk of responding to low-probability but high-risk mid- to long-term strategic requirements. In this manner, each of the service force generation processes establishes the basis for efficiently providing a sustained flow of trained and ready forces for forward/rotational presence, immediate response/employment, and for near-, mid- and long-term emerging or planned operational requirements. Having sufficient forces at the appropriate readiness levels to respond to the range of current and future operational requirements accomplishes the mission requirements that generally shape the strategic environment and allows the Nation to deter and prevail over potential adversaries.

d. Closely related to unit force generation is the related joint mobilization planning and execution and the use of military facilities and infrastructure to support both the generation and projection of military forces. The reduction of major troop deployments in Iraq and Afghanistan and the corresponding drawdown of units provide unique challenges for the efficient management of supporting infrastructure. Facilities are costly, take a long time for construction and, once established, require expensive maintenance for many years. Moreover, once built, facilities are very difficult to eliminate due to political and public resistance. Similar to ‘buying’ unusable readiness, every dollar spent on excess infrastructure capacity are funds unavailable to pay for more force structure or usable unit readiness. Consistent with the drawdown and the associated requirement to enable future expansion, the military will need to ensure it has the right facilities, for the right force mix, at the right locations for both current and future strategic demands. Correspondingly, this lesson examines the strategic issues related to reducing or retaining facilities during this drawdown period and the potential for gaining economies and efficiencies.

2. Learning Outcomes.

a. Comprehend the processes used to generate service force capabilities in support of the national and military strategies.

b. Evaluate the major issues faced by the services in managing unit readiness and risk in meeting current and future operational requirements.

c. Assess the unique challenges associated with increasing or reducing supporting infrastructure to efficiently support current and future force generation requirements.

3. Student Requirements.

a. Read the required and assigned focused readings to prepare for seminar discourse on service force generation and infrastructure management.

b. Required Readings.

(1) Edward J. Filiberti, *Generating Military Capabilities* (Carlisle Barracks, PA: U.S. Army War College, 2017). **[Blackboard]**

(2) James M. Cunningham, "Readiness Tacker, Volume 2: On an Unsustainable Path, *AEI*, May 4, 2016 <http://www.aei.org/publication/readiness-tracker-volume-2-unsustainable-path/> (accessed November 9, 2016). (**Read** pp. 1-5) **[Online]**

(3) Mackenzie Eaglen, "Shrinking Bureaucracy, Overhead, and Infrastructure: Why This Defense Drawdown Must Be Different For the Pentagon," March 2013, http://www.aei.org/wp-content/uploads/2014/04/-shrinking-bureaucracy-report-v2_143022914571.pdf (accessed November 23, 2016). (**Read** Executive Summary (p. iii), 'Eliminating Excess Infrastructure While Realizing Savings' section (pp. 13-17) and **Scan** rest) **[Online]**

c. Focused Readings.

(1) Army and Civilian Students

Courtney McBride, "Abrams: Army 'Making Huge Progress' on Readiness, But Needs Time," *Inside Defense*, October 12, 2016, <https://insidedefense.com/daily-news/abrams-army-making-huge-progress-readiness-needs-time> (accessed November 9, 2016). (**Read** pp. 1-3) **[Online]**

(2) Marine Corps Students:

(a) Edward J. Filiberti, *Primer on Force Generation in the U.S. Marine Corps* (Carlisle Barracks, PA: U.S. Army War College, December 30, 2016). **[Blackboard]** **[Online]**

(b) LtCol Kevin F. Murray, "Marine Aviation Readiness," *Marine Corps Gazette*, October 2016, <https://www.mca-marines.org/gazette/2016/10/marine-aviation-readiness> (accessed November 9, 2016). (**Read** pp. 1-4) **[Online]**

(3) Navy and Coast Guard Students:

(a) Edward J. Filiberti, *Primer on Force Generation in the U.S. Navy* (Carlisle Barracks, PA: U.S. Army War College, 2017). **[Blackboard]** **[Online]**

(b) Megan Eckstein, "U.S. Fleet Forces: New Deployment Plan Designed to Create Sustainable Naval Force," *U.S. Naval Institute News*, January 19, 2016, <https://news.usni.org/2016/01/19/u-s-fleet-forces-new-deployment-plan-designed-to-create-sustainable-naval-force> (accessed November 9, 2016). (**Read** pp. 1-6) **[Online]**

(c) Megan Eckstein, "GAO: Rampant Maintenance Delays Caused By Contracting, Workforce Issues," *U.S. Naval Institute News*, May 3, 2016, <https://news.usni.org/2016/05/03/gao-rampant-maintenance-delays-caused-by-contracting-workforce-issues> (accessed November 9, 2016). (**Read** pp. 1-4) **[Online]**

(4) Air Force Students:

(a) Thomas P. Galvin, *Primer on Force Generation in the U.S. Air Force* (Carlisle Barracks, PA: U.S. Army War College, 2017). **[Blackboard]** **[Online]**

(b) Jennifer Griffin and Lucas Tomlinson, "Wiped Out': Air Force Losing Pilots and Planes to Cuts, Scrounging for Spare Parts," *FoxNews.com*, May 14, 2016, <http://www.foxnews.com/politics/2016/05/14/wiped-out-air-force-losing-pilots-and-planes-to-cuts-scrounging-for-spare-parts.html> (accessed November 9, 2016). (**Read** pp. 1-3) **[Online]**

4. Points to Consider.

a. How stratified are forces arrayed by readiness levels within the services? How difficult is it for each service to "surge" additional capabilities?

b. What are the main drivers of the various service force generation concepts? How efficient are the service concepts in maximizing their forces for employment? How effectively are the Reserve Components integrated into their respective services' force generation processes?

c. How vulnerable or sensitive are the current processes to small or large changes in service resourcing?

d. What role do facilities play in force generation? What are some of the strategic challenges in reducing, increasing and maintaining the required infrastructure?

RESOURCE DECISION MAKING EXERCISE

Mode: Exercise

DM-12-EX

1. Introduction.

a. The exercise focuses on using strategic leadership skills to synthesize what you have learned in this core course and the other college core courses. You will assess the strategic environment and determine if the mission priorities stated in the 2015 National Military Strategy (NMS) need to change as the nation's security challenges continue to evolve. When assessing the security environment and mission priorities, you need to incorporate insights from General Dunford's March 2016 Posture Statement as he identified key challenges and crosscutting sources of military risk. From this security environment assessment and mission analysis, you will then identify a resource strategy to influence future decisions over the next decade to best fund the needed force structure, capabilities and capacities to execute those missions in today's fiscally responsible environment. You will first role play as members of a Defense Working Group under the direction of the Undersecretary of Defense for Policy (USD(P)) to address these issues. The results of your work will be briefed to the Deputy Secretary of Defense (DEPSECDEF).

b. Following this strategic environment, mission priority and resource strategy analysis, you will role play a working group under the direction of the Director of Cost Analysis and Program Evaluation (D/CAPE) at the Office of the Secretary of Defense (OSD). You will propose specific force structure, programs, and platforms to address your resource strategy. These proposed changes will then be briefed to the DEPSECDEF for approval. Even in good years of resource availability, the Defense Department never has enough funding to meet all the requirements. Senior leaders and staffs must assess, prioritize, and then make tough choices regarding where to program and budget limited resources. The demands of current challenges create a tension between addressing immediate needs and making investments in future capabilities. The Planning, Programming, Budgeting and Execution (PPBE) process you have learned during this course, while complicated, addresses the processes of making choices in a large, complex government organization. The strategic goal is to create the optimal combination of defense force structure, capabilities and capacities to meet short, mid, and long range institutional and operational requirements under fiscal guidance and address the risk of your decisions.

2. Exercise Concept.

a. The exercise is the capstone event for the Defense Management course. Each seminar will initially answer questions related to the strategic environment before assessing mission priorities. The seminar will identify those key security challenges that will influence future U.S. Armed Forces mission priorities. Using the environment assessment, missions stated in the 2015 NMS, and insights from General Dunford's 2016 Posture Statement, you will first identify what is missing, has changed, or is likely to change in the strategic environment to influence military mission priorities. From your strategic environment assessment, you will identify recommend adjustments to the mission priority list to include if any missions need to be added or deleted from this list. Finally, you will identify a broad resource strategy to frame future Joint Force posture, capabilities, and capacities decisions.

b. Using the mission priority recommendations and broad resource strategy, the seminar will develop detailed budget and program recommendations to execute these missions and meet key security challenges now and in the future while addressing risk. Using realistic program data, students will develop and defend recommendations regarding adjustments to defense programs to generate the best possible combination of defense force structure, capabilities and capacities within fiscal guidance. The participants will role-play Colonel/GS-15 level defense, joint, and service staff personnel with differing resource priorities in a practical experience that will require the use of strategic thinking and leadership competencies to provide advice. Each member will represent their specific area, but also bring to the work group a variety of perspectives and ideas of how to achieve the reductions while still generating the best defense force structure, capabilities, and capacities while addressing risk. This effort is in preparation for a briefing to the DEPSECDEF.

3. Learning Outcomes.

a. Evaluate how a changing strategic environment can affect guidance in published Department of Defense strategic documents.

b. Apply knowledge gained in the Defense Management Course, as well as strategic thinking and leadership skills, while experiencing the practical application of determining resource priorities and making decisions on future military force structure, capabilities and capacities.

c. Synthesize concepts and processes discussed in the Defense Management Course related to mission and fiscal guidance.

4. Student Requirements.

a. Tasks.

(1) Initially organize as a working group under the leadership of USD(P). The group will have members representing Defense, Joint, Service, Reserve Component, and Combatant Command perspectives. Based on what you have learned at the Army War College, identify what has changed or stayed the same in the strategic environment since publication of the 2015 NMS mission priorities and key challenges and crosscutting sources of military risk in Chairman Dunford's 2016 Posture Statement. Then assess the NMS mission priority list to determine if you agree with those priorities and if any other missions should be added to the list. Finally, develop a broad resource strategy to frame future Joint Force posture, capabilities and capacities decisions. Conduct a briefing of the results of this analysis.

(2) Following the analysis of the strategic environment, mission priorities and broad resource strategy, you are now a working group under the overall leadership of the Director of CAPE to develop specific recommendations to defense force structure, capabilities and capacities within fiscal guidance. Try to obtain the best solution for the organization you represent; however, the overarching goal is to achieve a recommended solution within the fiscal guidance that remains consistent with defense objectives published in strategy and guidance documents.

b. Required Readings.

(1) Read Exercise Guidance (**Instructor Handout**) and Required Readings.

(2) U.S. Joint Chiefs of Staff, *National Military Strategy of the United States 2015* (Washington, DC: Department of Defense, June 2015), http://www.jcs.mil/Portals/36/Documents/Publications/2015_National_Military_Strategy.pdf (accessed November 18, 2016). (**Read** pages 1-17) **[Blackboard]** **[Online]**

(3) William J. Perry and John P. Abizaid, *Ensuring a Strong U.S. Defense for the Future: The National Defense Panel Review of the 2014 Quadrennial Defense Review* (Washington, DC: U.S. Institute for Peace, July 31, 2014), http://www.usip.org/sites/default/files/Ensuring-a-Strong-U.S.-Defense-for-the-Future-NDP-Review-of-the-QDR_0.pdf (accessed November 18, 2016). (**Read** pp. 40-51, **Scan** remainder) **[Online]**

(4) General Joseph Dunford, Jr., *General Joseph Dunford, Jr., USMC 19th Chairman of the Joint Chiefs of Staff*, Posture Statement presented to the Senate Armed Service Committee, 114th Cong., 2nd sess. (Washington, DC: U.S. Marine Corps, March 17, 2016), http://www.armed-services.senate.gov/imo/media/doc/Dunford_03-17-16%20.pdf (accessed November 6, 2016). **[Blackboard]** **[Online]**

(5) CSBA, *Joint Think Tank Exercise: Alternative Defense Strategies* (Washington, DC: Center for Strategic and Budgetary Assessments, November 28, 2016), http://csbaonline.org/uploads/documents/Joint_Think_Tank_Compiled_Briefings_%281_13_2016%29.pdf (accessed December 18, 2016). (**Scan** entire brief, then **Read** one think tank's alternative defense strategy in detail to understand their strategy and specific recommendations) **[Online]**

c. References.

(1) DOD:

(a) Department of Defense, FY 2017 Budget Request Overview (Washington, DC: Department of Defense, February 2016), http://comptroller.defense.gov/Portals/45/Documents/defbudget/fy2017/FY2017_Budget_Request_Overview_Book.pdf (accessed November 15, 2016). **[Blackboard]** **[Online]**

(b) Ashton Carter, *Stenographic Transcript of the Hearing on the FY 2017 Budget Request for the Department of Defense before the Senate Armed Services Committee*, 114th Congress, March 17, 2016, http://www.armed-services.senate.gov/imo/media/doc/16-34_3-17-16.pdf (accessed November 21, 2016). **[Blackboard]** **[Online]**

(c) Department of Defense, *Quadrennial Defense Review 2014* (Washington, DC: Department of Defense, March 4, 2014), http://archive.defense.gov/pubs/2014_Quadrennial_Defense_Review.pdf (accessed November 21, 2016). **[Blackboard]** **[Online]**

(2) Army:

(a) Thomas A. Horlander and Davis S. Welch, *FY 2017 Army Budget Overview* (Washington, DC: Department of the Army, February 2016), <http://asafm.army.mil/Documents/OfficeDocuments/Budget/budgetmaterials/fy17/overview.pdf> (accessed November 15, 2016). **[Blackboard]** **[Online]**

(b) Patrick J. Murphy and Mark A. Milley, *A Statement on the Posture of the United States Army 2016*, Posture Statement presented to the 114th Cong., 2nd sess. (Washington, DC: Department of the Army, March 2016), https://www.army.mil/e2/rv5_downloads/aps/aps_2016.pdf (accessed December 19, 2016). **[Blackboard]** **[Online]**

(3) Air Force:

(a) James Martin, *United States Air Force FY 2017 Budget Overview* (Washington, DC: Department of the Air Force, February 2016),

<http://www.saffm.hq.af.mil/Portals/84/documents/FY17/AFD-160209-036.pdf?ver=2016-08-24-102126-717> (accessed December 19, 2016). **[Blackboard]** **[Online]**

(b) Deborah L. James and Mark A. Welsh, U.S. *Air Force Posture 2016*, Posture Statement presented to the 114th Cong., 2nd sess. (Washington, DC: Department of the Air Force, February 10, 2016), http://www.af.mil/Portals/1/documents/airpower/FY16_AF_PostureStatement_FINALversion2-2.pdf (accessed December 19, 2016). **[Blackboard]** **[Online]**

(4) Navy and Marine Corps:

(a) William K. Lescher, "Department of the Navy FY 2017 President's Budget," February 9, 2016, http://www.secnav.navy.mil/fmc/fmb/Documents/17pres/DON_PRESS_BRIEF.pdf (accessed November 15, 2016). **[Blackboard]** **[Online]**

(b) Ray Mabus, *Statement of the Secretary of the Navy Before the House Subcommittee on Defense, Committee on Appropriations, on the Navy Posture*, Posture Statement presented to House Subcommittee on Defense, Committee on Appropriations, 114th Cong., 2nd sess. (Washington, DC: Department of the Navy, March 1, 2016), http://www.navy.mil/navydata/people/secnav/Mabus/Testimony/Posture%20TestimonyWRITTEN_HACD%20submit.pdf (accessed December 19, 2016). **[Blackboard]** **[Online]**

(c) GEN Robert Neller, *Statement of General Robert Neller Commandant USMC Before The House Appropriations Committee Subcommittee on Defense*, Posture Statement before the House Appropriations Defense Subcommittee, 114th Cong., 2nd sess. (Washington, DC: Department of the Navy, March 1, 2016), <http://docs.house.gov/meetings/AP/AP02/20160301/104529/HHRG-114-AP02-Wstate-RichardsonR-20160301.pdf> (accessed November 21, 2016). **[Blackboard]** **[Online]**

5. Points to Consider.

a. What are the challenges of responding to ever changing threats and managing risk when developing multi-year strategy and resource guidance documents?

b. What criteria are most important to strategic leaders in identifying and prioritizing U.S. Armed Forces missions?

c. How should a staff officer represent their area of responsibility while ensuring senior leaders receive the best advice in developing integrated and effective defense programs with limited resources?

CAPSTONE SPEAKER

Mode: Lecture/Seminar

DM-13-L/S

1 Introduction. The Tenth Vice Chairman of the Joint Chiefs of Staff, General Paul J. Selva, delivers the capstone speech and discussion with students in Bliss Hall. Opportunity for an in-depth review of the Vice Chairman's remarks occurs in seminar rooms following the presentation.

2. Learning Outcomes.

a. Examine the role and responsibilities of the VCJCS and the JROC in supporting DOD military and civilian decision makers in developing and resourcing current and future force requirements.

b. Analyze the effectiveness of DOD strategic planning, resourcing, and force management processes.

c. Examine the leadership and management challenges associated with an organization as large and complex as the DOD.

3. Student Requirements.

a. Read the required materials, and be prepared to both ask questions of the Vice Chairman in Bliss Hall and discuss the readings and speaker comments in seminar. General Selva should provide a presentation that touches on almost all aspects of the Defense Management course. Indeed, based on the responsibilities of the VCJCS, his presentation will almost certainly touch on most of the core curriculum, especially SL, NSPS and DM (with TSC a possibility if he discusses his time as the TRANSCOM Commander). His presentation offers an excellent opportunity for synthesis of many of the major concepts learned to date, and should provide an excellent transition into the Oral Assessments.

b. Required Readings.

(1) Joint Chiefs of Staff, "Biography of General Paul J. Selva," <http://www.jcs.mil/Leadership/ArticleView/tabid/3893/Article/611782/gen-paul-j-selva.aspx> (accessed November 21, 2016). **[Blackboard]** **[Online]**

(2) Senate Armed Services Committee, "Advance Questions for General Paul J. Selva, USAF, Nominee for the Position of Vice Chairman of the Joint Chiefs of Staff," http://www.armed-services.senate.gov/imo/media/doc/Selva_07-14-15.pdf (accessed

November 21, 2016). (Read 1- 6, 14-31) (NOTE: Blackboard has only the required pages) [Blackboard] [Online]

(3) Andrew Clevenger, "The Terminator Conundrum': Pentagon Weighs Ethics of Pairing Deadly Force, AI," *DefenseNews*, January 23, 2016, <http://www.defensenews.com/story/defense/policy-budget/budget/2016/01/23/terminator-conundrum-pentagon-weighs-ethics-pairing-deadly-force-ai/79205722/> (accessed December 5, 2016). [Online]

4. Points to Consider.

a. What recommendations would you advocate when advising the VCJCS on the best way to develop the future force? Are changes needed to the processes or organizational structures associated with the Joint Requirements Oversight Council? Are Combatant Commander equities adequately represented within the Joint requirements development process?

b. To what degree do you think current DOD acquisition processes and systems adequately address joint warfighter needs? Are DOD acquisition reform initiatives keeping pace with the dynamic and complex security environment?

c. How can the government and industry work together to reduce development and procurement cycle times as well as design systems that are better able to exploit future advances in technology?

d. What are the major issues surrounding readiness of the U.S. military? Is the Chairman's Readiness System an effective means to assess this, or does it need to be revised?

SECTION V – APPENDICES

APPENDIX I

USAWC MISSION

The USAWC educates and develops leaders for service at the strategic level while advancing knowledge in the global application of Landpower.

USAWC INSTITUTIONAL LEARNING OUTCOME

Our graduates are intellectually prepared to preserve peace, deter aggression and, when necessary, achieve victory in war. In pursuit of these goals, they study and confer on the great problems of national defense, military science, and responsible command.

Achieving this objective requires proficiency in four domains of knowledge:

- Theory of war and peace
- U.S. national security policy, processes, and management
- Military strategy and unified theater operations
- Command and leadership

And the ability and commitment to:

- Think critically, creatively, and strategically.
- Frame national security challenges in their historical, social, political, and economic contexts.
- Promote a military culture that reflects the values and ethic of the Profession of Arms.
- Listen, read, speak, and write effectively.
- Advance the intellectual, moral, and physical development of oneself and one's subordinates.

APPENDIX II

USAWC PROGRAM LEARNING OUTCOMES (PLOs)

The School of Strategic Landpower (SSL) establishes Program Learning Outcomes (PLO) that relate to critical fields of knowledge and appropriate jurisdictions of practice for our students to master. The core competence of our graduates is leadership in the global application of strategic landpower. The curriculum addresses the “great problems of national defense, military science, and responsible command.”

To accomplish its mission, SSL presents a curriculum designed to produce graduates who are able to:

PLO 1. Evaluate theories of war and strategy in the context of national security decisionmaking.

PLO 2. Analyze, adapt and develop military processes, organizations, and capabilities to achieve national defense objectives.

PLO 3. Apply strategic and operational art to develop strategies and plans that employ the military instrument of power in pursuit of national policy aims.

PLO 4. Evaluate the nature, concepts, and components of strategic leadership and synthesize their responsible application.

PLO 5. Think critically and creatively in addressing national security issues at the strategic level.

PLO 6. Communicate clearly, persuasively, and candidly.

APPENDIX III

SERVICE SENIOR-LEVEL COLLEGE JOINT LEARNING AREAS AND OBJECTIVES (JPME Phase-II)

SOURCE: The REP and DEP curricula address requirements for JLAs and JLOs derived from CJCSI 1800.01E, *Officer Professional Military Education Policy (OPMEP)*, May 29, 2015, Appendix E to Enclosure E.

1. Learning Area 1 - National Strategies.

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

2. Learning Area 2 - Joint Warfare, Theater Strategy and Campaigning for Traditional and Irregular Warfare in a Joint, Interagency, Intergovernmental and Multinational Environment.

- a. Evaluate the principles of joint operations, joint military doctrine, joint functions (command and control, intelligence, fires, movement and maneuver, protection and sustainment), and emerging concepts across the range of military operations.
- b. Evaluate how theater strategies, campaigns and major operations achieve national strategic goals across the range of military operations.
- c. Apply an analytical framework that addresses the factors politics, geography, society, culture and religion play in shaping the desired outcomes of policies, strategies and campaigns.

d. Analyze the role of OCS in supporting Service capabilities and joint functions to meet strategic objectives considering the effects contracting and contracted support have on the operational environment.

e. Evaluate how strategic level plans anticipate and respond to surprise, uncertainty, and emerging conditions.

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

3. Learning Area 3 - National and Joint Planning Systems and Processes for the Integration of JIIM Capabilities.

a. Analyze how DOD, interagency and intergovernmental structures, processes, and perspectives reconcile, integrate and apply national ends, ways and means.

b. Analyze the operational planning and resource allocation processes.

c. Evaluate the integration of joint, interagency, intergovernmental and multinational capabilities, including all Service and Special Operations Forces, in campaigns across the range of military operations in achieving strategic objectives.

d. Value a joint perspective and appreciate the increased power available to commanders through joint, interagency, intergovernmental and multinational efforts.

e. Analyze the likely attributes of the future joint force and the challenges faced to plan, organize, prepare, conduct and assess operations.

4. Learning Area 4 - Command, Control and Coordination.

a. Evaluate the strategic-level options available in the joint, interagency, intergovernmental and multinational environment.

b. Analyze the factors of Mission Command as it relates to mission objectives, forces and capabilities that support the selection of a command and control option.

c. Analyze the opportunities and challenges affecting command and control created in the joint, interagency, intergovernmental and multinational environment across the range of military operations, to include leveraging networks and technology.

5. Learning Area 5 - Strategic Leadership and the Profession of Arms.

a. Evaluate the skills, character attributes and behaviors needed to lead in a dynamic joint, interagency, intergovernmental and multinational strategic environment.

- b. Evaluate critical strategic thinking, decisionmaking and communication by strategic leaders.
- c. Evaluate how strategic leaders develop innovative organizations capable of operating in dynamic, complex and uncertain environments; anticipate change; and respond to surprise and uncertainty.
- d. Evaluate how strategic leaders communicate a vision; challenge assumptions; and anticipate, plan, implement and lead strategic change in complex joint or combined organizations.
- e. Evaluate historic and contemporary applications of the elements of mission command by strategic-level leaders in pursuit of national objectives.
- f. Evaluate how strategic leaders foster responsibility, accountability, selflessness and trust in complex joint or combined organizations.
- g. Evaluate how strategic leaders establish and sustain an ethical climate among joint and combined forces, and develop/preserve public trust with their domestic citizenry.

APPENDIX IV

ENDURING THEMES

Elihu Root's challenge provides the underpinnings for enduring themes within the USAWC curriculum. The enduring themes stimulate intellectual growth by providing continuity and perspective as we analyze contemporary issues.

- Strategic Leadership and the exercise of discretionary judgment
 - Evaluate leadership at the strategic level (national security policy and strategy, especially in war)
 - Understand the profession's national security clients and its appropriate jurisdictions of practice
 - Evaluate leadership of large, national security organizations
 - Evaluate strategic thinking about the future (second- and third-order effects)
 - Analyze the framework for leading and managing strategic change, specifically the components of organizational change and the process by which organizations change

- Relationship of policy and strategy (relationship between ends, ways, and means)
 - Analyze how to accomplish national security aims to win wars
 - Analyze how to connect military actions to larger policy aims
 - Analyze how to resource national security
 - Evaluate international relations as the context for national security

- Instruments of national power and potential contributions to national security
 - Comprehend Diplomatic Power
 - Comprehend Informational power
 - Evaluate Military Power
 - Comprehend economic power

- Professional ethics
 - Evaluate the ethics of military operations (to include jus in bello and post bello)
 - Evaluate the ethics of war and the use of force (to include jus ad bello)
 - Evaluate the ethics of service to society (domestic civil-military relations)

- Civil-Military Relations
 - Evaluate relationships between military and civilian leadership
 - Evaluate relationships between the military and domestic society
 - Evaluate relationships between armed forces and foreign populations

- Instruments of war and national security
 - Joint: Evaluate the capabilities and domains of joint forces (especially land, maritime, air, space, cyber)
 - Interagency: Understand other U.S. government agencies and departments
 - Intergovernmental; Understand potential relationships with other national governments
 - Multinational: Understand potential relationships with armed forces or agencies of other nations/coalition partners

- History as a vehicle for understanding strategic alternatives and choices
 - Identify and analyze relevant historical examples of strategic leadership and strategic choices (across time and around the world)
 - Evaluate historical examples relevant to war and other national security endeavors

Defense Management (DM)

Evaluate the nature of Army/landpower organizations with respect to budgeting and resourcing (for example, the potential segmentation and nature of landpower organizations with their 'smoother' capital profile versus the more "lumpy" capital of air and naval assets). Alternatively, evaluate the differences in the marginal cost of landpower versus other elements of power. Consider the expected time horizon of resource investments for landpower capabilities. Evaluate the importance of labor intensive vs. capital intensive requirements.

APPENDIX V

CROSSWALKS

DM Lesson Crosswalk with PLOs		Program Learning Outcomes					
		PLO 1: Evaluate theories of war and strategy in the context of national security decisionmaking.	PLO 2: Analyze, adapt and develop military processes, organizations, and capabilities to achieve national defense objectives.	PLO 3: Apply strategic and operational art to develop strategies and plans that employ the military instrument of power in pursuit of national policy aims.	PLO 4: Evaluate the nature, concepts, and components of strategic leadership and synthesize their responsible application.	PLO 5: Think critically and creatively in addressing national security issues at the strategic level.	PLO 6: Communicate clearly, persuasively, and candidly.
Lesson							
DM-1-S	Introduction to Defense Management		X				X
DM-2-S	Federal Budget		X				X
DM-3-S	Resourcing the DOD	X	X			X	X
DM-4-S	Strategic Requirements (Combatant Commanders)		X	X		X	X
DM-5-S	Strategic Requirements II (JCIDS and JROC)		X			X	X
DM-6-S	Acquisition	X	X			X	X
DM-7-L/S	Strategic Issues of Force Management and Development		X	X		X	X
DM-8-S	Industry Day		X			X	X
DM-9-S	Strategic Issues in Manning the Force		X			X	X
DM-10-S	Strategic Issues in Equipping and Sustaining the Force		X			X	X
DM-11-S	Force Generation		X	X		X	X
DM-12-EX	Experiential Exercise		X	X		X	X
DM-13-L/S	Capstone Speaker/AAR		X	X		X	X
AY17 DM Course Totals:		2	13	5	8	13	8

DM Lesson Crosswalk with JLAs		Joint Learning Areas																															
		JLA 1: National Strategies					JLA 2: Joint Warfare					JLA 3: National and Joint Planning Systems/Processes					JLA 4: Command, Control, Coordination			JLA 5: Strategic Leadership/ Profession of Arms													
Lesson	Joint Learning Area Objectives	a	b	c	d	e	a	b	c	d	e	f	a	b	c	d	e	a	b	c	a	b	c	d	e	f	g						
DM-1-S	Introduction to Defense Management	X				X									X		X	X	X								X	X	X				X
DM-2-S	Federal Budget														X	X	X											X					
DM-3-S	Resourcing the DOD					X									X	X		X		X							X	X	X				
DM-4-S	Strategic Requirements (Combatant Commanders)	X				X		X							X	X		X	X	X							X	X	X				X
DM-5-S	Strategic Requirements II (JCIDS and JROC)	X				X	X								X	X		X	X	X							X	X	X				X
DM-6-S	Acquisition					X									X	X	X	X	X								X	X	X				X
DM-7-L/S	Strategic Issues of Force Management and Development	X				X									X	X		X	X	X							X	X	X				X
DM-8-S	Industry Day		X			X				X							X										X	X	X				X
DM-9-S	Strategic Issues in Manning the Force										X						X	X	X								X	X	X				X
DM-10-S	Strategic Issues in Equipping and Sustaining the Force										X					X		X	X	X							X	X	X				X
DM-11-S	Force Generation					X									X	X		X	X	X							X						
DM-12-EX	Experiential Exercise	X				X	X		X						X	X		X	X	X							X	X	X				X
DM-13-L/S	Capstone Speaker/AAR	X				X	X								X	X		X	X	X							X	X	X	X			X
AY17 DM Course Totals:		6	1	0	0	10	3	1	2	3	0	0	10	10	4	11	10	9	0	2	13	11	6	3	0	10	0						

APPENDIX VI

SEMINAR CONTRIBUTION RUBRIC

Seminar Contribution Standard	
Outstanding (5)	Consistently exhibits sustained superior performance in seminar dialogue. Consistently offers insightful analysis, without prompting, which advances the dialogue. Comments demonstrate a depth of knowledge of the subject and assigned readings beyond that of peers and demonstrate active listening to other participants. Comes to the seminar prepared, often with notes and annotated readings, and frequently offers novel ideas which enhance learning. Consistently demonstrates the ability to synthesize material from previous lessons and personal experience which directly supports the lesson outcomes. Consistently supports others. Respects ideas, feedback and diverse opinions. Avoids use of logical fallacies. For group leadership roles, chosen by the faculty instructor to lead and effectively led one of the seminar's assigned work groups during a Capstone lesson for the course or one or more of the contributing lessons where group work was assigned.
Exceeds Standard (4)	Performed above the standard in contributions during seminar dialogue. Consistently offers solid analysis, without prompting, which advances the dialogue. Comments reflect a deep knowledge of subject matter and assigned readings and demonstrate active listening to other seminar members. Comes to the seminar prepared, often with notes or annotated readings. Demonstrates the ability to synthesize material from previous lessons and personal experience which directly supports the lesson outcomes. Rarely resorts to inaccurate assumptions, inferences, biases and heuristics. . For group leadership roles, effectively assumed an informal leadership role in group work assigned activities during the course. He/she helped structure the task and built consensus to achieve the group's assigned task. She/he voluntarily took the lead in summarizing the group's work in conveying his/her group's approach to the task for the benefit of the rest of the seminar.
Meets Standard (3)	Met the standard in contributions during seminar dialogue. Offers solid analysis without prompting. Comments reflect a solid knowledge of the subject matter and assigned readings and demonstrate active listening to other seminar members. Comes to the seminar prepared and offers insight and personal experience during seminar dialogue which contributes to group understanding of the lesson outcomes. Occasionally exhibits use of logical fallacies and bias. For group roles, effectively contributed to group work in seminar by adding relevant ideas or recommendations to aid the group in accomplishing its assigned task(s).
Needs Improvement (2)	Participated in seminar dialogue. Offers some analysis, but often needs prompting from the seminar leader and/or others. Comments demonstrate a general knowledge of the material and assigned readings. Sometimes seems unprepared, with few notes and no marked/annotated readings. Actively listens to others, but does not offer clarification or follow-up to others' comments. Relies more upon personal opinion and less on the readings to support comments. For group roles, actively listened and, on occasion, offered relevant thoughts that assisted the group in accomplishing its assigned task.
Fails to Meet Standards (1)	Did not participate in seminar dialogue. Does not complete readings and is unprepared for seminar. Occasionally listens to others but appears uninterested in the classroom interaction. For group work, appeared uninvolved or uninformed in her/his ability to contribute the group's task.

APPENDIX VII

ORAL PRESENTATION RUBRIC

Oral Presentation Standards	
Outstanding (5)	Exceptional presentation in content, organization and delivery. The presenter succinctly summarized the key points of the article(s) conveying a deep understanding of the main points the author conveyed. Further, the presenter provided an exceptional critical analysis of the author's article that revealed biases, logical fallacies, alternative points of view, etc... Moreover, the presenter synthesized the key points of the article to the material or topics covered in that particular lesson and/or with other lessons in the course. He/she masterfully communicated that understanding to the audience in a logical and stimulating manner. Finally, the presenter displayed exceptional confidence in his/her delivery and ably responded to questions or comments offered by his/her colleagues.
Exceeds Standard (4)	Excellent presentation in content, organization and delivery. The presenter skillfully summarized the key points of the article(s) conveying a mature understanding of the main points the author conveyed. Further, the presenter provided an excellent critical analysis of the author's article that revealed biases, logical fallacies, alternative points of view, etc... Moreover, the presenter analyzed the key points of the article and applied them to the material or topics covered in that particular lesson. He/she succinctly communicated that understanding to the audience in a logical and compelling manner. Finally, the presenter displayed confidence in his/her delivery and/or adequately responded to questions or comments offered by his/her colleagues.
Meets Standard (3)	Strong presentation in content, organization and delivery. The presenter successfully summarized the key points of the article(s) conveying a strong understanding of the main points the author conveyed. Further, the presenter provided some critical analysis of the author's article that revealed some of the biases, logical fallacies, alternative points of view, etc... Moreover, the presenter applied some of the key points of the article to the material or topics covered in that particular lesson. He/she also adequately communicated that understanding to the audience in a logical manner. Finally, the presenter displayed adequate confidence in his/her delivery and/or responded to questions or comments offered by his/her colleagues.
Needs Improvement (2)	Fair presentation in content, organization, and delivery. The presenter summarized the key points of the article(s) conveying some understanding of the main points the author conveyed. Further, the presenter did not provide a critical analysis of the author's article that revealed biases, logical fallacies, alternative points of view, etc... Moreover, the presenter displayed some knowledge in relating the key points of the article to the material or topics covered in that particular lesson and/or integrated with other lessons in the course. He/she communicated that understanding to the audience in a haphazard manner and was uninspiring. Finally, the presenter lacked confidence in his/her delivery and/or was unable to respond sufficiently to questions or comments offered by his/her colleagues.
Fails to Meet Standards (1)	Poor presentation in content, organization, and delivery. The presenter incorrectly summarized the key points of the article(s) conveying little understanding of the main points the author conveyed. Further, the presenter did not attempt to provide a critical analysis of the author's article that revealed biases, logical fallacies, alternative points of view, etc... Moreover, the presenter lacked comprehension of how to connect the key points of the article to the material or topics covered in that particular lesson. He/she failed to communicate that understanding to the audience and was unorganized. Finally, the presenter displayed no confidence in his/her delivery and/or was unable to respond at all to questions or comments offered by his/her colleagues.

APPENDIX VIII

WRITTEN WORK RUBRIC

	Criteria	Outstanding (5)	Exceeds Standards (4)	Meets Standards (3)	Needs Improvement (2)	Fails to Meet Standards (1)
Content – 60% (failure to achieve a 3 in this category requires resubmission)	Substantive Content Focus on academic approach and quality of research.	The paper stands as an exemplar of excellence in written communication. It displays exceptional insight and creativity, able analysis, solid research, and precise documentation. Reflecting both depth and balance, it advances a thoughtful explication of a problem, question or subject area, and is an inviting, compelling read—one suitable for publication with only minor edits and polishing. Deftly synthesizes two or more course learning outcomes.	Impressive and clearly above the norm, the paper is insightful and responsive to the task, well researched, and ably documented. The writer has a strong ability to analyze, synthesize, and integrate material. The work exhibits clarity in thought and expression and reflects an accomplished and continuously developing command of language. Demonstrates an above average grasp of concepts, using reputable literature to support discussions. Correctly, integrates two or more course learning outcomes in the paper.	The paper is an acceptable and competent response to a writing opportunity: informative, somewhat persuasive, and includes some evidence grounded in research. Major points are clearly identified and appropriately developed, often with support from properly documented credible sources. The author displays a mature ability to gather information, address important issues, express ideas/arguments in appropriate language, accomplish a stated task, and accommodate the reader. Conveys clear understanding of at least one of the course learning outcomes.	The paper is weaker than it should be and possibly deficient in one or more salient respects. The content is weak or the reasoning and logic noticeably flawed. The absence of substantial material severely undercuts the ability to fashion a thoughtful and articulate paper. A manuscript characterized by minimal analysis, deficient insight, lack of evidence, inadequate research, and slipshod documentation “needs improvement.” Demonstrates fair grasp of concepts, Marginally supported with excessive reliance on quotations and Internet sources. Weak documentation of sources. Unclearly conveys a connection to the course learning outcomes.	The paper is more than simply weak or deficient—it misses the mark substantially. The content is superficial at best. Knowledge claims and observations are offered without research support and appropriate source documentation. Failure to submit a paper within the specified timeframe also “fails to meet standards.” Does not connect the paper to any of the course learning outcomes.
	Critical Thinking Evidence of analysis, synthesis, and evaluation.	Advances a thoughtful explication of a problem, question or subject. Challenges assumptions and creatively defends positions. Provides innovative solutions to problems.	Goes beyond mere grasp of essentials to incorporate evaluation, synthesis, and analysis in using sources and concepts. Challenges assumptions somewhat effectively. Identifies and solves problems and issues.	Displays a firm grasp of essentials to incorporate evaluation, synthesis, and analysis in using sources and concepts. Identifies and resolves problems and issues.	Compares and contrasts positions, concepts, and data; identifies contradictions and gaps and routinely resolves most issues and problems when presented with them. Pragmatically applies concepts and experience	Merely summarizes known information. Rarely displays detailed analysis or creative approaches to problem solving. Fails to apply concepts and experiences to practical uses.

	Criteria	Outstanding (5)	Exceeds Standards (4)	Meets Standards (3)	Needs Improvement (2)	Fails to Meet Standards (1)
Style – 20%	Formatting Following USAWC guidelines for citations and references.	All writing format, mechanics, in-text crediting, and foot- or endnote entries follow the AY17 CAD with no errors.	Almost all writing format, mechanics, in-text crediting, and foot- or endnote entries follow the AY17 CAD. A few errors may exist.	Most writing, in-text crediting, and reference page entries follow the AY17 CAD, but some minor format errors exist.	Writing and in-text crediting is generally sound; however, the paper does not adequately follow AY17 CAD. Multiple errors exist.	Not evident that the provisions of the AY17 CAD are understood or followed.
	Grammar and Spelling In this respect, it should be perfect!	No errors in grammar and spelling.	All grammar, syntax, spelling, and punctuation conform to the AY17 CAD. Some discrepancies exist, but not consistent patterns.	Most grammar, syntax, spelling, and punctuation conform to the AY17 CAD. Some noticeable discrepancies, some pattern errors exist.	Grammar, syntax, spelling, and punctuation somewhat conform to the AY17 CAD, but major noticeable discrepancies exist, including pattern errors.	Noticeable and distracting errors in grammar, syntax, spelling, and punctuation. Inattention to details and patterns of consistent errors are excessive.
	Readability Writing flows naturally and is readable, reflecting an academic tone of voice.	Resonates in smooth expository prose, using concrete imagery and pertinent examples. Language is erudite and direct without ostentation. Incorporates examples and sources with the context effortlessly.	Resonates in smooth expository prose. Language is direct and exhibits a command of the language. Incorporates examples and sources with the context with minimum effort.	Communicates in straightforward manner and academic voice. Language is usually understandable and includes examples and sources efficiently.	Writes clearly, but without flair. Language is usually understandable and includes examples and sources that fit the context. Sometimes uses contractions, slang, or jargon.	Writing is choppy, forced, or gilded. Examples and illustrations do not fit the context. Uses contractions, slang, or jargon, and reverts to statements of opinion and authorial intrusion.
Organization – 20%	Organization Work well organized with logical flow. Makes coherent sense.	Work is well organized, with coherent, unified paragraphs and seamless transitions. A clear statement of purpose, summary of research and doctrine, well-supported with compelling rhetorical argument, sound conclusions, and recommendations.	Work is well organized, with coherent, unified paragraphs, and effective transitions. A clear statement of purpose, and summary of research and doctrine. The argument is well supported and consistent with theory and research presented in the analysis. .	Work is generally well organized, in clear expository prose. There is a discernible introduction, main body, and conclusion. Transitions are generally effective in maintaining a logical flow of ideas.	Work is weakly organized, with no clear statement of problem or purpose and weak theory and argument. Conclusions are a mere summary of previous points. Transitions are somewhat weak or ineffective.	Work is disorganized and it makes an argument that is inconclusive and hard to follow. Prose is rambling and the rhetoric is unfocused. Conclusions are nonexistent or weak, merely repeating previous statements. Transitions are awkward or entirely absent.

Assessment Guidance. CBks Memorandum 623-1 details that assessment of written work centers on the Content, Organization, and Style of a paper with Content being paramount. A paper in which Content receives an assessment of Needs Improvement or Fails to Meet Standards cannot receive an overall assessment of Meets Standards—even if both Organization and Style were Outstanding.