



INDUSTRIAL COLLEGE OF THE ARMED FORCES
PRESENTATION TO THE SUBCOMMITTEE ON OVERSIGHT AND INVESTIGATIONS
COMMITTEE ON ARMED SERVICES
UNITED STATES HOUSE OF REPRESENTATIVES

SUBJECT: THINKERS AND PRACTITIONERS: DO SENIOR PROFESSIONAL MILITARY
EDUCATION SCHOOLS PRODUCE STRATEGISTS?

STATEMENT OF: REAR ADMIRAL GARRY E. HALL
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UNITED STATES HOUSE OF REPRESENTATIVES

STATEMENT OF REAR ADMIRAL GARRY HALL, UNITED STATES NAVY
HOUSE ARMED SERVICES COMMITTEE
SUBCOMMITTEE ON OVERSIGHT AND INVESTIGATIONS
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Mr. Chairman, Mr. Wittman, and members of the Subcommittee, I want to thank you for the opportunity to appear before your committee to discuss the absolutely critical role professional military education plays in shaping our national security professionals. I am especially proud to share with you what I believe the Industrial College of the Armed Forces offers our current and future leaders as they move into an increasingly complex and dynamic national security environment.

ICAF contributes to the Nation's security and well being through the study of strategy, nurturing strategic thinking, and developing the critical analytical skills necessary for formulating and implementing high quality national security decisions. The entire ICAF program is carefully designed to develop strategic leaders capable of critical analysis of national security issues while considering their resource components. The program immerses students in a joint, interagency and international environment for 10 months and qualifies its graduates for a Joint Specialty Officer nomination and a Master of Science degree in National Resource Strategy.

Please allow me to share with you why ICAF is in a position to offer the leaders of tomorrow a well-rounded, high quality graduate-level education: ICAF is the government's only senior college to give its students the tools to understand and evaluate the fundamental dependence of national security upon the nation's economic capabilities, and the conversion of the economic and social elements of national power into a comprehensive national security strategy. In my statement today, I will describe not only our core curriculum, but the many additional opportunities we offer our students to develop strategic thinking skills that will pay huge dividends to not only themselves and their organizations, but to the American taxpayer. I will also discuss how we evaluate our students to ensure they are benefiting from the curriculum we offer. Finally, I will discuss the composition of both our student body as well as our faculty, and how each is selected.

Some have recently opined that our military leaders should attend civilian universities so they can "interact with diplomats and executives." Well, our students do just that. In fact, of the 320 students in the class of 2009, just 56 percent were U.S. military officers (an additional seven percent international). The remaining students are civilians from agencies including the State

Department, the Justice Department, the Department of Homeland Security, and USAID (among others). They are also industry fellows, with us from such companies as IBM, Boeing, and CSC. So, when we talk about our future leaders, we think not only of military officers, but all who will play an increasingly greater role in the formulation and execution of our government's national security strategy.

President Obama recently reiterated the increased integration of "all aspects of American power" to meet the "increasingly unconventional and transnational" threats of the future. I am confident ICAF will play a critical role in training the leaders who enable our country to successfully meet these threats and defeat them.

THE ICAF CURRICULUM

The mission of ICAF is to "prepare selected military and civilians for strategic leadership and success in developing our national security strategy and in evaluating, marshalling, and managing resources in the execution of that strategy." The structure of our curriculum is designed to ensure that graduates understand and evaluate strategic concepts, can formulate effective strategies to promote national security, and are able to marshal and manage resources in the execution of both a national security strategy and a national military strategy.

The first phase of the ICAF academic year focuses upon the domestic context of national security, assessing the foundations of the U.S. government, the checks and balances between branches, the fundamentals of national security and military strategies, the roles and missions of key departments and agencies involved with national security affairs, interagency dynamics and coordination, DOD processes for strategy development and allocation of strategic and operational resources, and U.S. economic policy and financial processes. Students also undertake a rigorous assessment of their own preferences and leadership skills, as well as the intellectual and leadership requirements at the strategic level with emphasis on critical and innovative thinking, and leading and transforming organizations in a time of rapid change.

The second phase of the ICAF academic year emphasizes the international context of national security, evaluating current and future strategic challenges the U.S. faces in the international system, logistical and international operational challenges in theater campaigning, international economic issues, regional security studies, and promoting the development of leadership strategies to ensure effective and agile leadership. By the conclusion of this phase ICAF students are expected to possess a critical understanding of strategic national security

affairs, civilian and military ways and means with regard to instruments of national power, joint, interagency and multinational dynamics, domestic and international economic influences on national security, and the skills necessary to lead effectively at the strategic policy level.

The final phase of the ICAF academic year stresses the resource context of national security. During this phase, ICAF students look in depth at the challenges of resourcing a national security strategy through the assessment of various domestic and international industrial/economic sectors related to national security affairs as well as the strengths, weaknesses, and challenges of the processes by which the U.S. government acquires goods and services to support the warfighter and ensure national security.

Since September 11th and the U.S. interventions in Afghanistan and Iraq, many parts of the ICAF curriculum have changed. The faculty undertakes in-depth departmental and program curriculum reviews on an annual basis to ensure that fundamental principles and continuities in strategic conditions and thought are properly balanced against contemporary and evolving strategic and operational policy challenges. At the heart of each curriculum review is a fundamental question: “What knowledge must ICAF graduates possess for effective leadership of strategic national security affairs when they achieve senior leadership positions?” Given the limited time available during the academic year to cover the multiple, complex dimensions of strategic national security affairs, ICAF carefully balances trade-offs among a number of pedagogical content areas with regard to determining what competencies and knowledge we believe every ICAF graduate should possess.

We believe it is a mistake to focus exclusively upon challenges from a purely threat-based perspective. To be certain, current and potential threats must be carefully analyzed and strategies, ways, and means developed for overcoming threats and achieving U.S. security objectives and goals. However, we believe that to focus exclusively on threat management diminishes the potential to exploit favorable conditions and other opportunities to achieve U.S. interests through the use of soft power.

ICAF CORE COURSES

Please allow me to offer a brief description of our core curriculum:

Military Strategy and Logistics (MSL): This course fundamentally addresses force planning and war strategy at the national level, to include the resourcing component. The curriculum provides students with the conceptual tools they need to assess a strategic military

situation, decide how to proceed, and construct a plan that meets national objectives. Coursework emphasizes the fundamentals of warfare, presenting the features of war that have remained constant through recorded history, and evaluating their relevance in today's environment. The curriculum also examines military strategy at the theater level: how a commander and his staff assess a situation, construct and select courses of action, build a plan, and adjust it for changing circumstances. Logistics are at the heart of this process, both for deployment and for execution. The MSL course studies joint logistics, joint logistics planning and the interrelation of this planning to joint strategic planning and to national policy planning.

National Security Studies (NSS): This course is designed to prepare students to effectively operate at the strategic level of crafting a national security strategy, national-level policies and evaluating "why" one policy is more likely to safeguard the nation's security than another. The course educates students to be able to craft and integrate a wide range of policy decisions across diverse content areas such as domestic and international politics, military strategy, economics, and informational and technological capabilities. Students become adept in the art and science of developing, applying and coordinating the instruments of national power to achieve strategic objectives that ensure national security. The course immerses students in the foundations of the ideals and structure of the American system of government, assesses key actors in the interagency national security system, and evaluates the role of congress, the media, and interest groups. The remainder of the course examines the role of the United States in international affairs, frameworks analyzing the major dynamics shaping the behavior of states in international affairs, current and future challenges in national security strategy including maximizing non-military instruments of power, evaluating the role and future of multilateral institutions, transnational issues (including non-state actors, energy issues, the environment, demographics, pandemics, and other topics), and critical examination of options and variants for future national security strategy.

Strategic Leadership (SL): This course is founded upon the college's conviction (based, in part, upon feedback from senior flag, ambassadorial, and cabinet officials) that leadership at the strategic level is significantly different from leadership at the tactical or operational level. We believe that the skill set required to be effective at senior levels is different when working with other services, agencies, countries, industry, and international actors. The course is designed to educate and develop senior leaders to critically understand the complexities

and interrelationships of the strategic (domestic & international) environment, as well as how to assess and address complex, multi-dimensional environments from multi-dimensional (i.e., interagency, inter-service, international, multi-cultural) perspectives. Strategic leadership further requires the ability to plan and lead organizational change in complex systems of systems in an ever-changing complex operational and strategic policy environment. Embedded throughout the course is a finely tuned program to develop student thinking skills and abilities required to operate effectively at the strategic level (e.g., conceptualization, expanding frames of reference, systemic and creative thinking, constructing and understanding complex models, ethical decision-making, strategic scanning of the environment, envisioning first and second order consequences, management as a strategic leader).

Economics: ICAF is the only war college with a Department of Economics. A primary objective of our economics curriculum is the development of practical knowledge about the relationships between economic dynamics and economic strength as a foundation of national security. Our fall course, “Economics of National Security,” is designed to provide students with the tools and perspectives necessary to analyze and develop economic strategy in the global world economy, analyze the domestic economic foundations of national security, study interactions among markets and industries, and critically evaluate the role of government in the allocation of resources within and between markets.

In the spring, “The Economics of Industry” provides students with tools of microeconomics and business strategy to help them analyze industries in general and a particular industry sector they evaluate in their concurrent Industry Study (IS). The spring course exposes students to basic principles of industry structure, regulation, the defense industrial base, and frameworks for business strategy.

We want our graduates to go beyond understanding economic principles and processes, and be able to integrate economic processes with political objectives as policy advisors and policy makers confronting contemporary problems. To strengthen this learning objective, ICAF uses Oxford Economics Ltd.'s Global Macro (economic forecasting) Model in a real world exercise. The Oxford Model is used by major corporations and financial institutions including various departments of the U.S. government, the World Bank, Asian Development Bank, government departments and central banks around the world for economic forecasting and policy planning. ICAF is one of the few academic institutions in the world (including Oxford

University's Executive Education Program) to use this highly sophisticated model to prepare future government leaders for real world strategic economic challenges.

Acquisition: This course provides students with a broad understanding of the defense acquisition process as well as the effects acquisition policies and practices have on the industrial base, the nation's economic well being and the nation's security strategy. The course enables students to evaluate the policies, principles and concepts used by the Federal government to acquire capabilities in support of a national security and military strategy, concentrating on the political, military and economic dimensions. Among the range of topics covered in the course are acquiring national defense capabilities; strategic resource allocation; defense acquisition system and acquisition strategy; acquisition logistics; and constituencies, politics and ethics. In response to evolving challenges from OIF and OEF, the course also critically evaluates acquisition issues related to acquisition and major services contracting in support of wartime operations, resourcing joint urgent operational needs, and evaluating the extent to which acquisition processes can respond to urgent or emergency requirements generated by wartime developments.

Industry Studies program: Our unique Industry Study (IS) program is designed to allow students to gain first-hand knowledge and experience in analyzing industries from a strategic national security perspective. Students spend five months evaluating the performance of various industry sectors in promoting economic well-being and supporting national security needs as well as examining the effects of government policy and regulations.

The evolution of our IS program is reflective of the changing national security landscape. Whereas areas of study used to focus primarily on traditional defense industrial base industries (aircraft, shipbuilding, space, land combat systems, weapons, etc), our program has grown over time to include areas that are now considered to be integral to national security policymaking: energy, environment, financial services, health care, education, and agribusiness, to name a few.

Our students benefit from numerous guest speakers who come to ICAF to speak to our students about cutting-edge trends in their respective industries and how these industries impact national security. They also benefit from the local, domestic and international field studies portion of the program which allows students the opportunity for first hand observation of industry facilities, capitalization, and quality of work as well as face-to-face discussions with corporate CEOs or other senior officials regarding their perspectives on industry-government

relations, contributions to national security, and their long-term business strategies in a highly competitive globalized economic system. Moreover, participating in both the domestic and international portions of the field studies program allows students the opportunity for a first-hand comparative assessment of U.S. industries vis-à-vis foreign competitors in important industry sectors related to national security.

Many of the opportunities our students have during the IS program are truly once in a lifetime. Students studying the Financial Services industry had meetings with the Security and Exchange Commission, the New York Federal Reserve bank and, while on international travel, with members of the Bank of China, the China Investment Corporation, and the China Banking Regulatory Commission -- the first time a DoD organization has met in an official capacity with Chinese financial regulators. Members of the Environment Industry study heard from the World Bank and scientists from NASA on the security implications of global climate change. The Health Care Industry Study met in Geneva, Switzerland, with the World Health Organization (WHO) to discuss global health issues, including the WHO's response to the ongoing H1N1 flu pandemic. These are just a few examples of the uniquely relevant and exciting opportunities ICAF students experience as a part of our Industry Study program.

Students graduate from ICAF with an in-depth understanding how national security rests upon the foundation of a strong economic system, how the domestic economic and industrial base operates, and how it interacts with a globalized, increasingly interdependent international economic system.

The Industry Study program is one of the crown jewels of the ICAF program and serves to integrate much of what the students have learned during their time here. At the end of the year, each IS prepares a written report as well as a presentation that is given to a distinguished visitor. These presentations allow the students to demonstrate what they have learned about the industry, trends and projections, and how it relates and contributes to national security.

Regional Security Studies program: In addition to the international politics component of the National Security Studies course, ICAF also conducts a required study of regional security that conducts an in-depth evaluation of cultural/political/economic/military characteristics in twenty countries or international regions. Courses examine political, cultural, social and religious differences, national and regional economic and political circumstances—including variations in hierarchies of political interests, goals and objectives. Students select their region

of study and also are exposed to a college-wide lecture series on each of the major regions of strategic importance to U.S. interests. These lectures are conducted by invited regional experts who typically emphasize cultural factors in addition to political-security-economic issues and U.S. interests and policy. There is no travel or language component in the RSS program, but students select their Industry Study area prior to selecting their Regional Security Study course. This scheduling allows students the opportunity to choose a regional study related to the area they will be visiting for the international field studies portion of the Industry Studies course, if they so desire.

The Elective Program: ICAF also participates in the National Defense University Electives Program which allows students the opportunity to deepen or broaden their knowledge through elective courses. Students are required to select four elective courses from the over 150 courses offered by the colleges and schools of the NDU. ICAF also offers several special concentrations.

SPECIAL CONCENTRATION PROGRAMS

ICAF has a number of special programs in which our students can enroll that gives them a more concentrated academic experience. The programs include:

The Senior Acquisition Course (SAC): The Senior Acquisition Course was directed by the “Defense Acquisition Workforce Improvement Act of 1990,” and passed as Title XII of Public Law 101-510, The National Defense Authorization Act for Fiscal Year 1991. Consequently, ICAF has been designated by the Under Secretary of Defense for Acquisition, Technology, and Logistics to conduct the SAC for selected acquisition professional students as part of the Defense Acquisition University (DAU). SAC is the preeminent course for members of the Acquisition Corps, and is designed to prepare selected military officers and civilians for senior leadership and staff positions throughout the acquisition community.

Supply Chain Management Concentration Program: Supply Chain Management is a driving force behind America’s economic growth and prosperity and Defense Logistics. It is important to understand the critical role supply chains play in supporting American industry and national security. This elective program looks specifically at concepts and the strategies that are transforming the DoD Supply Chain. The course of study includes an investigation supply chain network configuration, strategic alliances, international issues, supplier and customer

relationship management, and critical information technologies, as well as the impacts of these areas to joint logistics.

Information Operations Concentration Program (IOCP): The Information Operations Concentration Program complements the core curriculum of ICAF by integrating a wide range of elective courses and activities. The goal of the program is to prepare future national security strategists to employ the information component of power, and numerous graduates have achieved flag and SES rank.

CONCEPTS COVERED THROUGHOUT OUR CURRICULUM

Strategy: We believe that our graduates must be skilled in the understanding and crafting of national security strategy in order to properly be able to evaluate the objectives and requirements for marshalling and managing resources in the execution of that strategy and a national military strategy. This means developing critical thinking skills to be able to evaluate resource constraints, trade-offs, and usability issues that significantly affect the government's ability to advance its national interests and achieve its strategic goals.

The sum total of ICAF's curriculum is designed to progressively increase the ability of its students to understand and evaluate strategic concepts and to formulate effective strategies to promote national security. Early course work in all four fall core courses include numerous lessons addressing how to think about strategy from different perspectives--including grand strategy, political and military strategy, economic foundations of strategy, and personal requirements for senior leaders to be able to understand, devise, and implement strategies. Our students develop an understanding that strategic national security affairs is complex, multi-dimensional, and requires the connection of diverse issues into a coherent policy process.

ICAF takes a broad, multi-dimensional approach to the understanding of strategy and its successful development and execution. A 21st Century understanding of the dynamics of domestic and international politics requires an appreciation of resource allocation and economics. As the only PME institution responsible both for developing national security strategy and in evaluating, marshalling, and managing resources in the execution of that strategy, we are especially proud of our Departments of Acquisition and Economics and core courses on National and International Economic Policy, and the Economics of Industry. Economic and soft power instruments of policy have become equally, if not more, important than military power in safeguarding national security and securing U.S. interests abroad. Moreover, students learn that

establishing strategic priorities involves difficult resource allocation decisions involving budgetary trade-offs. I can't think of anything more relevant in today's economic environment.

ICAF's curriculum uses numerous case studies focusing on historical and modern problems that provide insight into how strategic leaders and nations have adapted over time. We believe history is a valuable tool for the critical analysis of past conditions and strategies, and for illustrating that the decision making process a military commander uses prior to undertaking any military operation contains many continuities that are little changed across the millennia. The real key is balance, because theory and historical perspective provide a useful framework for inquiry into current issues and challenges. The ICAF curriculum seeks to caution students against the misuses of history—including the danger of false analogies or of politically driven interpretations of history. Building upon the fundamentals of strategy, ICAF requires students to formulate their own strategies through exercises and writing papers addressing strategic concepts and problems and developing strategies for the future.

Mobilization: Returning to the question of how ICAF balances enduring principles and processes with new conditions and challenges, we believe that one substantive area related to the college's unique mission concerning the resource component of national security should be addressed. That area is mobilization--which was highlighted as one of ICAF's main study areas in the 1989 Skelton panel review of PME.

ICAF fully recognizes its unique responsibility to study and be a government resource on mobilization issues in the event of a national emergency. But as in other areas since the events of the end of the Cold War, September 11th, and OEF and OIF, the manner in which the U.S. will be able to mobilize in an emergency has changed significantly. The World War II-type mobilization of the broad U.S. industrial base is unlikely in the future. ICAF's year-by-year experience with the industrial base and acquisition processes has clearly revealed that future mobilization challenges will be different than changing assembly lines to produce tanks rather than automobiles, or fighters and bombers rather than commercial aircraft. As such, ICAF does not have a single mobilization course, but instead educates its students about the complexities of modern mobilization through several courses.

Future mobilization challenges are more likely to involve critical questions concerning:

- The economic viability of maintaining an adequate industrial base in the U.S. for specific fields relevant to defense

- Policy challenges for working with the private sector on technology development relevant to defense (including limiting export of sensitive technology while producing sufficient quantities to ensure profitability)
- Ensuring access to foreign firms during a crisis for critical technologies or specific components upon which the U.S. is dependent for defense platforms
- Devising and implementing capabilities for managing expedited procurements of urgently needed defense items (e.g., MRAP)
- Maintaining an adequate personnel base for active and reserve forces (including extended call-ups for reserves and use of contract personnel for security and security-support purposes).

Joint and Interagency Activities: Joint and interagency relations, interactions and coordination are a central focus of the ICAF experience for students, which is especially relevant due to current discussions underway to revamp the National Security Council and its processes. Because of our diverse student population, every seminar has two students from non-DOD civilian agencies, and at least three civilian students from DOD agencies in addition to nine military officers and one international officer. With students coming to ICAF possessing an average of twenty years of government service, this diverse service and interagency mix guarantees that discussions of first-hand experience in interagency and joint matters are a daily occurrence. It should be noted that the learning value of the day to day contact of students from across the joint and interagency spectrum cannot be approached by any correspondence or distance learning method.

Joint and interagency relations, interactions and coordination also are emphasized in all ICAF core courses. Understanding joint, interagency and multi-national operations is critical to understanding how the Department of Defense conducts its overseas contingency operations and also how it conducts its daily business. In addition, students role play as members of the interagency process during our two-week National Security Strategy Exercise (see below).

Multinational Collaboration: Multinational relations and multilateral interactions and collaboration are infused throughout the ICAF curriculum. As mentioned above, our Regional Security Studies program conducts an in-depth evaluation of cultural/political/economic/military characteristics, as well as assessing U.S. national interests and foreign policy in those regions in twenty countries or international regions. In our national security studies course, described in detail earlier, students experience a widespread assessment of regional global and transnational security challenges facing the United States and examine case studies dealing with contemporary multilateralism and multinational aspects of a 21st Century National Security Strategy. Our

economics curriculum devotes considerable time to issues of multinational relations, interactions and collaboration due to the evolution of the globalized economic system and its many interdependencies. Students analyze and critically evaluate international trade, finance, capital flows, economic globalization, economic development, and U.S. international economic strategy. Multinational and multilateral activities are also specifically addressed in our military strategy and logistics course, touching upon lessons drawn from Joint, interagency and multinational environment and the necessary to plan and execute a joint, interagency, and multinational military campaign.

Ethics: Of particular interest to me is the inclusion of ethics in our curriculum. In addition to ethics topics integrated into all core course areas, a review of all new curriculum revisions by academic departments must identify lesson issues (where appropriate) that also should address leadership ethics. Moreover, ICAF also holds special ethics programs in both the fall and the spring of the academic year. During the fall of 2008, ICAF sponsored a lecture by Major General Antonio Taguba, USA (Ret.) on the topic of “Instilling and Maintaining Ethics in Military Organizations” using Abu Ghraib as a case study. The feedback from the students on this session was overwhelmingly positive. In the spring of 2009, Ms. Wanda Denson-Low, Senior Vice President, Office of Internal Governance for the Boeing Corporation, gave a presentation on “Ethical Considerations—An Industry Perspective,” which discussed organizational ethics leadership and ethics related to government-private relations in acquisition.

Irregular Warfare and Stability, Security, Transition, and Reconstruction (SSTR)

Operations: ICAF uses a multi-departmental and multi-program approach to assess the changing nature of warfare and provide broad coverage of irregular warfare topics and related SSTR issues. Also, the college leverages the recent field and joint staff experience and interagency mix of both faculty and students to bring current Overseas Contingency Operations, Counterinsurgency (COIN), SSTR information and best practices into the classroom.

ICAF schedules speakers from across the services and interagency with direct field and staff experience at the operational and strategic planning, command, and policy levels for college-wide lectures, for informal lunchtime discussions with students and faculty, and for faculty development sessions. In particular, we conduct a half-day workshop for students on “International Intervention And Strategies For Conflict Transformation.” which includes a panel discussion involving senior government officials with experience in interagency SSTR

operations and policymaking. The panel discussion is followed by a processing session with the panelists to discuss the practical challenges of planning and conducting interagency SSTR operations and lessons learned for policymaking in this area. Major areas of focus for this workshop are conflict transition and transformation issues as well as determination of political, security, economic, and rule of law strategies for conflict transformation.

Language and Culture: ICAF seeks to provide cultural education and some language enhancing opportunities through a variety of mechanisms in our program. We have sought to address cultural issues wherever possible in our core courses and major program areas, increase and enhance courses dealing with cultural and language issues in elective program offerings, and even introduce specialized events and programs to increase student exposure to language and cross-cultural issues and improve understanding. Some of these programs are:

- **Language Programs.** ICAF recognizes that developing foreign language expertise requires intensive training and practice over an extended period of time. It is not practicable to learn a language at the Senior Service School level given the heavy study load in the many dimension of strategic national security affairs. Nevertheless, ICAF has voluntarily facilitated foreign language instruction opportunities for its students interested in maintaining or improving their language skills, or even learning a new language.
- **Cultural Awareness event.** ICAF holds a cross-cultural awareness event during the spring prior to international field studies. The goal of the event is to discuss cultural awareness and its strategic significance to decision makers and policy developers in both an international and domestic context. The first day includes speakers discussing conceptual aspects of cross-cultural understanding (e.g., cultural differences, ethnocentrism, and differences in beliefs, attitudes, and values), USG and DoD efforts to increase operational and strategic cross-cultural awareness, and practical information for personal conduct in foreign cultures. The second day includes a cultural diversity panel consisting of religious leaders and scholars from different cultural backgrounds.
- **Intercultural Development Inventory (IDI).** As part of its Cultural Awareness event, all students complete an Intercultural Development Inventory instrument. The IDI is a commercial instrument used for developing intercultural skills, consisting of a self assessment of an individual's capacity for exercising intercultural competence and identifying issues which limit or facilitate development of intercultural understanding.

- **Cultural Studies Courses.** With the National War College, ICAF co-sponsors a two-semester elective course dealing with Arabic Culture and Language. This is an intensive course designed to develop significant Arabic language skills and cultural understanding.

ADDITIONAL ENRICHMENT OPPORTUNITIES

Guest Speakers: I would be remiss if I did not mention how fortunate we are to have two outstanding guest speaker programs at National Defense University. The first we share with our sister school, National War College. The Distinguished Lecturer Program has brought to us some of the most influential actors inside and out of government. Most notably, the president of the United States has spoken to our students over the years. In fact, we were honored to hear from both President Bush last fall and President Obama this spring. We have also heard from distinguished members of Congress; military commanders such as Generals Petraus and Renuart; military service chiefs; high ranking officials in the Department of Defense, including the current Secretary of Defense; retired general officers such as Anthony Zinni, Peter Pace, Richard Myers and Colin Powell; important foreign nationals such as the Iraqi national security advisor and the Pakistani Chief of the Army Staff.

A guest speaker program that is unique to ICAF is our Commandant's Lecture Series. Each year I try to bring in speakers who, true to ICAF's mission, reflect a broad range of national security interests, to include members of the government, the military and private industry. This year we were privileged to hear from a vice president at Goldman Sachs, the director of the NSA, the CEO of the U.S. Chamber of Commerce, the CEO of Proctor and Gamble, a reporter from NPR, numerous distinguished authors, and the President, Center for Strategic and Budgetary Assessments, and many others.

The CLS and DLP speakers are an integral part of what we do at ICAF. No where else can our students hear from such a diverse collection of the great minds of our time.

Research & Writing Program: ICAF vigorously promotes student research and provides a number of opportunities and support systems for those students who wish to engage in research activities. Although all students are required to conduct some level of research for the many written papers required by core courses and programs, ICAF recognizes that not all students wish to engage in longer term, in-depth research projects. However, we believe that research is fundamental to the development of new ideas and strategies, and strongly encourages and supports student research efforts.

ICAF students and faculty engage in a vigorous Research & Writing Program as a part of the NDU Elective Program and in support of a series of special research efforts. For the past three years, ICAF has participated in the Deputy Secretary of Defense's Educational Initiative. Students also participate in the Chairman of the Joint Chiefs of Staff Annual Essay Competition, The Secretary of Defense National Security Essay Competition, Secretary of the Air Force's Energy Research Fellowship Program, and the Department of Defense Business Transformation Research Fellowship Program. It is clear that ICAF's research is intimately connected with issues of great concern to DOD. This partnership has allowed the Department to tap into the minds of the "best and brightest" minds while they are steeped in an academic environment, enabling them to focus on their research.

Exercises: Our College enjoys a dynamic exercise program that puts to the test the strategic thinking skills gained by our students at various points throughout the academic year. These include shorter exercises such as our "Interagency Exercise," which this year simulated an outbreak of Avian flu, and the Joint Land-Aerospace-Sea-Simulation exercise, a dynamic, unscripted wargame set 10 years in the future. We also have a longer event designed to exercise student capabilities to develop "strategies for the future": the two-week National Security Strategy Exercise (NSSE). This exercise had been held every spring for the past 15 years and occurs when students have completed most of their core courses, regional studies, and electives, and had significant exposure to resource, industry sector, and business strategy concepts during the spring semester.

The NSSE is strategy formulation at its highest levels. Students role play advisors to the National Security Advisor and are asked to develop a National Security Strategy report for the current administration that (1) evaluates domestic and worldwide political, economic, military, and social trends and conditions that the United States likely will face over the next ten years, and (2) results in an integrated strategy recommending policies and actions the U.S. should undertake. Following through on one of ICAF's fundamental tenants that "a national security strategy isn't worth the paper its written on if we are unable to adequately resource it," students must evaluate current fiscal policy, conduct forecasts of future economic conditions, and produce a fiscal plan that will finance their ten-year strategy.

Ultimately, we require our students to present and defend their strategy to a panel of current or retired senior policymakers. HASC Chairman Ike Skelton sometimes asks whether

service school graduates would be able to “engage in a conversation with George C. Marshall.” ICAF has put the principle behind this question into practice for over a decade by inviting 60 distinguished visitors (DVs) to hear the results of the strategies the students have crafted. Approximately one-third of the DVs are current or retired 3- or 4- star flag officers, one-third are current or former senior government executives, and the remaining third are senior private industry executives. Each student seminar presents their plan to three DVs (one from each category), followed by a critique of the strategy’s merits and extended general discussion about the challenges of developing and implementing strategy at strategic levels.

Brown Bags: In addition to our formal speakers, we periodically invite important visitors to what we call “brown bag” sessions. These are voluntary, less formal sessions that are scheduled over the lunch period. They allow for an exchange of ideas and generally tend to focus on professional development type issues. One example is our most current speaker, Lt Gen David Fridovich, Director of the Center for Special Operations, U.S. Special Operations Command. General Fridovich did not come to tell our students about life in special operations, but another subject near and dear to his heart: leadership and mentoring.

Prep-Ts: We have a number of voluntary short trips our students can sign up for that are designed to expand their knowledge of other agencies or concerns. These are scheduled during long weekends and costs are covered by the students. Some examples of our “Prep-Ts” trips are to Norfolk, FBI Headquarters, and the Panama Canal.

ACADEMIC RIGOR

I believe ICAF conducts a challenging and rigorous academic program. We hold students accountable for mastering course content through a letter grading system with rigorous criteria, and opportunities for award recognition for academic achievement (Distinguished Graduate Program and the Honor Student Award), exceptional research and writing, and leadership. Furthermore, we provide multiple mechanisms for feedback to and from students. Finally, each year we review the curriculum to ensure we appropriately balance “white space” and “contact time”.

Students are evaluated in all courses. Core course grades combine evaluation of seminar contribution (i.e., participation, quality of thought and enhancement of the overall seminar learning process), with evaluations of written papers of various kinds (*see Appendix 3 for a description of our grading standards*). Elective grades usually combine evaluation of seminar

contribution, evaluations of written papers, and/or evaluations of oral presentations. Finally, our faculty assesses the performance of students in all exercises, though they may not grade all exercises.

As previously discussed, we vigorously promote student research and provide a number of opportunities and support systems for those students who wish to engage in research activities. In addition to the Secretary of Defense National Security Essay Competition, and the Chairman's Annual Essay Competition, awards for excellence in research and writing are sponsored by a variety of organizations that recognize the high esteem ICAF attaches to writing. Sponsors include the Canadian Department of National Defense, the Department of Homeland Security, U.S. Transportation Command, and National Contract Management Association. It is clear that ICAF's research is intimately connected with contemporary issues of great interest to DoD, interagency, and international players.

Academic rigor and value are enhanced through an extensive student feedback/critique system for all courses, auditorium speakers, and some special programs. Student course critiques are anonymous to ensure that candid feedback is received about the quality of the ICAF educational and instructional programs. Student critiques and course grades are released simultaneously to ensure that neither is influenced by the other.

Finally, each year we review our curriculum to ensure we have the appropriate mix of learning methods spread correctly across the academic year. We find a combination of seminar learning with faculty facilitated discussion; participation in activities like field studies and exercises; lectures typically given by non-NDU speakers; and unstructured time ("white space") to allow students the opportunity to reflect and synthesize what they've learned and to prepare for future classes, provides this student population the best opportunity for learning. Of the structured, academic time, approximately 45-50 percent of the time is spent in the classroom seminar environment; 35-40 percent of the time is spent participating in exercises, field studies, and preparing seminar group papers and giving presentations; and approximately 10-15 percent of the time is spent in lecture.

STUDENTS AND FACULTY OF ICAF

OUR STUDENTS

Selection of Students: ICAF's decades of experience with students has demonstrated that the current selection process for attendance at ICAF is well-suited for an educational

program designed to develop strategic thinking capabilities and future strategic leaders. The Services select ICAF attendees through a competitive board process. DOD and non-DOD agencies select and nominate civilian students to attend ICAF. Civilian students complete a formal application that is reviewed by the Chief of Staff/Dean of Students. ICAF considers professional background, prior academic performance, and the agency's assessment of the individual's potential for future senior level leadership in making its admissions determinations. We select Industry Fellows using a virtually identical process to that used for civilian agencies.

A competitive selection process is appropriate for senior level colleges. Not all officers and civilians of appropriate grade and experience should attend a senior level college, because not all of them have the potential to lead at the strategic level. Students should attend a senior level college based on demonstrated potential for future growth to senior level positions of responsibility. While prior academic performance should be a factor in selection of senior level college attendees it should not be the only or the most important factor. The ideal officer at a senior level college has prior experience either as a commander, or in a policy level staff position on a Service or a Joint Staff. The ideal civilian student has been an intermediate level civilian agency leader on a senior staff and has demonstrated potential for promotion to senior leadership positions in the agency. All students should, at a minimum, possess a bachelor's degree.

ICAF's experience (and academic research on stratified systems) demonstrates that military officers and government officials require both a requisite number of years of experience and personal development and maturity before being able to fully grasp the complex, multidimensional realm of strategic issues and strategic thinking. ICAF believes that the current student admissions criteria (O-5 or O-6 /YA 3 / YC 3 / GS-14-15, with approximately 20 years, and of service and identified potential for senior positions) is optimal. Student should not attend senior level colleges too early in their careers, or late in their careers. More junior students, generally those less than age 38 – 42, typically lack sufficient experience and maturity of judgment to participate fully in strategic discussions and analysis, and substantially older students, generally those in their late 40s or 50s or may be too close to retirement.

ICAF Student Body: The caliber of students attending ICAF is very high. In keeping with Officer Professional Military Education Policy (OPMEP) guidelines, ICAF accepts military students at the rank of lieutenant colonel or commander (O-5) or colonel or captain (O-6) or civilians at the YA 3 or YC 3 (GS-14 or GS-15 level) who are selected, generally on a

competitive basis, by their service or agency. Generally, about 65-70 percent of each year's class has prior master's degrees; about 5 percent have prior doctorates or other terminal degrees. Nearly all come with over 20 years of government service and have achieved senior levels of leadership as squadron or battalion level commanders, served on service or joint staffs or as civilian department heads.

OUR SENIOR STAFF AND FACULTY

Senior Staff: The leadership of the senior level colleges should have a balance of operational and policy level experience together with leadership skills and an appropriate academic background. The balancing of these skill sets depends on the position. Commandants of the senior level colleges have direct impact on the students, faculty and curricula of the colleges. Accordingly, the ideal commandant should have recent operational experience, have prior experience in a policy level position in a Joint organization or command, and be a senior level college graduate. Commandants provide invaluable leadership and ensure that the curriculum remains operationally relevant and credible. Ideally, academic deans should have extensive teaching and supervisory experience together with policy experience in the military or an executive branch agency. Deans must have the credibility to lead a diverse faculty, the experience to design and execute an ever-changing curriculum, and the skill to manage the resources of the college. Prior experience in professional military education, or other professional educational settings, is a preferable attribute to ensure that the college's curriculum remains linked to the needs of the government and its future strategic leaders.

Faculty Composition: Overall, ICAF recruits and maintains a high quality faculty dedicated to fulfilling the college's educational mission according to the highest standards. Current faculty include active duty military officers, Title X civilian faculty, senior State Department Ambassadors and State and USAID Foreign Service Officers, a former acting Under Secretary of Commerce, Senior Executive Service Officials, Intelligence Community SIS, former congressional staff members, former White House staffers, and a senior executive from private industry. At some time during their careers, ICAF faculty members have lived for at least a year in 34 countries and/or worked in a temporary duty status in an additional 56 countries.

The faculty brings a wealth of experience — military, government, and international as well as an intense commitment to the educational mission of ICAF. The ICAF faculty consists of Title 10 Civilian faculty to provide academic structure and continuity to the curriculum. Military faculty from all services provide current and joint operational relevance; and visiting professors from 17 agencies and industry provide interagency expertise and up-to-date information on Agency policy and practice. Ninety-seven percent of the military faculty is either Joint Qualified Officers or PME senior level college graduates. All three parts of this faculty triad are essential to providing a first rate JPME II education.

Title 10 Faculty Selection: ICAF uses a competitive selection process to widely advertise for, interview and select new Title 10 civilian faculty members. We tailor each Title 10 vacancy announcement to meet the current needs of the college. For each faculty recruitment action, the Dean of Faculty, together with the department chairs, establish priorities for the discipline and experience level needed. Factors that ICAF typically considers in establishing highly qualifying criteria are: academic discipline, academic credentials, (doctoral or terminal degree required in most cases), teaching experience, prior policy-level experience in government or industry, regional expertise, industrial base expertise, and position specific criteria.

ICAF currently has 45 Title 10 faculty members who constitute 48 percent of the overall faculty. Ninety-one percent hold a Ph.D. or other terminal degree (the remaining nine percent are currently pursuing their Ph.D). Fifty-eight percent are retired military or have military experience, which provides a blend of academic and operational experience that enhances their credibility with students. Forty-four percent of our Title 10 faculty has graduated from a senior level PME institution, and 22 percent are Joint Service Qualified. In the past three years, ICAF has recruited faculty members for the Acquisition, Economics, and Strategic Leadership Departments and for a Director of Institutional Research and Assessment. In each case, ICAF was fortunate to receive between 20 and 80 applications for the positions and hired highly qualified individuals with Doctoral or other terminal degrees and substantial prior government experience. ICAF's experience with civilian faculty demonstrates that senior military or government experience is important for establishing credibility with students in the classroom. Nevertheless, ICAF has found it beneficial to recruit more traditional civilian academic faculty with expertise in specific areas (e.g., economics, executive leadership, foreign area studies) to enhance curriculum development and overall faculty growth in knowledge and expertise.

Military Faculty Selection: The Services assign highly qualified, experienced officers to ICAF. ICAF seeks officers with recent operational experience in Iraq or Afghanistan, Brigade Command or prior assignments in senior policy positions on the Joint Staff, the National Security Council, and Combatant Commands and with appropriate subject matter expertise for the ICAF curriculum. ICAF faculty members keep in touch with officers in their fields of expertise and actively recruit potential faculty members.

ICAF currently has 29 military faculty members (10 USA, 10 USAF, 6 USN, two USMC, and one USCG) who constitute 31 percent of the overall faculty. Seventeen percent hold a Ph.D. or other terminal degree, 90 percent have graduated from a senior level PME institution, and 55 percent are Joint Service Qualified. The average tour length for all military faculty members is three years, the same as it was before September 11th.

Ongoing operations have improved the quality of Army faculty members. Since 2007, Army Senior Leader policy requires Army officers assigned to ICAF to have recent deployment experience which brings front-line perspectives to the classroom. Conversely, over the past five years, the Services have found it difficult to assign O-6 officers with Acquisition Level III and Logistics expertise to the faculty. ICAF recognizes the importance of officers with these skills in the operational environment, but notes that the absence of these officers creates challenges for the college in balancing faculty across all departments.

Visiting Civilian Agency Faculty: ICAF also currently has 17 Visiting Faculty, from 15 different agencies and industry, serving as "Agency Chairs" from the interagency including faculty from the Department of State, USAID, Department of Commerce, Department of Energy, CIA, USAID, NSA, DLA, FBI, NGA, and NSA. ICAF also currently has one international faculty member from the Canadian Forces, and one Industry Chair, who currently is a senior executive from IBM Corporation. ICAF invites agencies to nominate senior officials with teaching and policy level experience to serve as Agency Chairs. ICAF interviews each candidate and has been very successful in having superb individuals serve as Agency Chairs. The presence of visiting faculty from other Executive Branch agencies and Industry brings vitality and real – world experience into the seminar room, faculty development sessions and the curriculum. ICAF fully integrates Agency Chairs and they perform all the functions of military and Title 10 Faculty. In particular, they mentor students from their home agencies.

ICAF historically (and currently) lacks sufficient numbers of authorized and assigned military and Title 10 faculty to meet its 3.5 to 1 faculty to student ratio. To make up for this shortfall, ICAF annually recruits senior level officials from other U.S. Government agencies to serve as Agency Chairs in order to meet OPMEP Student : Faculty ratios and to broaden the experience base of the assigned faculty. Unquestionably, ICAF's educational program benefits greatly from the interagency experience and perspectives of these faculty members, but because they are based upon memoranda of understanding these visiting faculty are subject to recall from their home agencies—in some cases in the middle of an academic year. At the beginning of this Academic Year, ICAF had three more Agency Chairs than we do today. Accordingly, at the present time, ICAF has fallen below its OPMEP-required 3.5 to 1 student-faculty ratio. As of 2 June 2009, the ICAF student-faculty ratio is 3.51 to 1, with 91 faculty members present, compared to the 92 that the OPMEP ratio requires.

ORGANIZATION/RESOURCES

ICAF is a component of the National Defense University and reports through the President of NDU to the Chairman of the Joint Chief of Staff. Funding support for the University comes from the Office of the Secretary of Defense. Joint Staff support comes from the DJ-7 as the staff proponent for Professional Military Education. ICAF finds this flat organizational structure to be suitable.

In general, this allows the faculty to focus on formulating and executing the curriculum with minimal distractions or external attempts to shape the curriculum. Minimizing special projects for senior headquarters produces an environment conducive to teaching and professional development. High quality faculty members are attracted to positions at ICAF for three reasons: the opportunity to work with highly motivated, bright professionals who will be the nation's leaders and possess a passion for learning; the opportunity to work in the nation's capital; and a good work environment with adequate pay.

The NDU Board of Visitors provides the President of the University with external, senior level advisors on matters of national security strategy and policy. The members of the Board of Visitors offer independent perspectives and insights on University programs and plans and can serve as advocates for the University needs.

CONCLUSION

Mr Chairman and Mr Wittman, I would like to thank you again for the opportunity to appear before your committee today. You can certainly gather from my remarks that I am proud to serve as the Commandant of the Industrial College of the Armed Forces. ICAF offers its students one of the most strategic, contemporary studies of today's dynamic and complex national security environment. Our graduates currently serve their respective agencies as senior decision makers all around the globe. As we tell our students on their first day, "Once you have entered the realm of a strategic thinker, you will never read the paper the same way again." I can honestly tell you I have heard from many graduates and that one remark has stayed with them; they think of it each time they are confronted with an important strategic decision.

APPENDIX 1

Composition of ICAF Student Seminar

ICAF carefully organizes the composition of each of its 20 seminars at the beginning of the academic year to maximize joint, international and interagency diversity. A typical ICAF seminar of 16 students has the following mix of students:

US Army	3 (representing different occupational specialties)
US Air Force	3 (representing different service specialty codes)
US Sea Service	3 (different service designators and sub-specialties)
International Fellow	1
DOD Agencies	3 (representing different agencies)
Non-DOD Agencies	2 (representing different agencies)
Private Sector	1 (limited to one-half of the seminars due to limit on number of private sector students allowed under 10 U.S.C. section 2167(a)).

Through careful organization of the seminar mix the college actively seeks a balance of military warfighters (operators) and war-supporters (logisticians, acquisition, etc.) as well as international, interagency and industry representatives. This student mix permits the war-supporters to hear directly about the needs of the warfighters and, conversely, the warfighters to learn firsthand about logistical and other support complexities, as well as the roles and missions of non-DOD agencies involved in national security affairs.

Student seminars are remixed completely in the spring according to the Industry Study selected by individual students. Students also participate in classes with a different mix of students in each of their four electives and in their Regional Security Study seminar (also selected by each student according to interest). Consequently, ICAF students can expect to engage in substantive seminar discussions with different classmates in seven different configurations during their academic year. Moreover, ICAF's concentration of all students on the third and fourth floor of Eisenhower Hall facilitates opportunities for informal discussions with an even broader range of classmates.

APPENDIX 2

Composition of ICAF Student Body

Since Academic Year (AY) 2006 ICAF has supported a class size of 320 students divided into 20 seminars. The ICAF class of AY2008-2009 has 179 U.S. military students (56%), 69 DOD civilians (22%), 39 non-DOD USG civilians (12%), 10 private sector Industry Fellows (3%), and 23 international officers (7%).

Military service composition included 59 USA officers, 60 USAF, 40 USN, 18 USMC, and 2 USCG. The ICAF student body meets the OPMEP standard that one-third of the officers in the class be from the Army, Air Force, and Sea Services. All U.S. officers began the academic year as lieutenant colonels, commanders, colonels or captains.

USG civilians in the class of 2009 from DOD represented the following agencies: Defense Acquisition University, Defense Contract Management Agency, Defense Information Systems Agency, Defense Intelligence Agency, Defense Logistics Agency, Department of the Air Force, Department of the Army, Department of Defense (at-large), Department of the Navy, Military Sealift Command, National Geospatial-Intelligence Agency, National Security Agency, Office of the Secretary of Defense.

USG civilians in the class of 2009 from non-DOD agencies represented the following interagency components: Central Intelligence Agency, Department of State, U.S. Agency for International Development, Department of Commerce, Department of Energy, Department of Homeland Security, Department of Justice, Department of Transportation, Department of Treasury, and the Government Accountability Office.

International Fellows in the class of 2009 came from Australia, Bahrain, Djibouti, El Salvador, Finland, Guatemala, Guyana, Israel, Italy, Japan, Jordan, Kazakhstan, Malaysia, New Zealand, Norway, Philippines, Poland, Saudi Arabia, Slovakia, and Ukraine. They hold ranks equivalent to 05-07 in the U.S. military.

Industry Fellows in the class of 2009 represented the following companies: BAE Systems, Battelle, Boeing, CSC (Computer Sciences Corporation), EADS, Harris Corporation, IBM, KPMG, L-3 Communications, and the LMI (Logistics Management Institute).

APPENDIX 3

ICAF Grading Standards: Overall Course Grades

“A” Work of exceptional quality at the executive/graduate level. This grade represents the work of an outstanding student whose performance is truly exceptional with regard to knowledge of course constructs, and the attainment of consistent understanding, analysis, evaluation, and application at the strategic level. Student performance attains a consistently exceptional balance between “listening” and regularly “contributing” exceptional quality content to seminar discussions that substantially advances the learning of the entire seminar. This grade recognizes a student who evidences exceptional preparation for every seminar, consistently demonstrates a comprehensive understanding of course constructs, and exhibits well developed complex, multi-dimensional, critical, and strategic thinking skills. Writing content reflects comprehensive understanding of course constructs, and exhibits well developed complex, multi-dimensional, critical, and strategic thinking skills and writing style demonstrates rigor and excellence in research (if relevant), command of the topic, logical organization, compelling argument, and excellence in English grammar and syntax. (4.0/credit hr)

“A-” Work of superior quality at the executive/graduate level. This grade represents the work of a superior student who attains a consistently advanced knowledge of course constructs, and understanding, analysis, evaluation, and application at the strategic level. Student performance attains a consistently superior balance between “listening” and regularly “contributing” superior content to seminar discussions that substantially advances the learning of the entire seminar. This grade recognizes a student who is well-prepared for every seminar, regularly demonstrates a comprehensive understanding of course constructs, and exhibits well-developed complex, multi-dimensional, critical, and strategic thinking skills. Writing content reflects comprehensive understanding of course constructs, and exhibits well developed complex, multi-dimensional, critical, and strategic thinking skills and writing style demonstrates rigor and excellence in research (if relevant), command of the topic, logical organization, compelling argument, and superior use of English grammar and syntax. (3.7/credit hr)

“B+” Work of high quality at the executive/graduate level. This grade represents the work of those students whose performance demonstrated high quality graduate/executive level work. The student must be able to regularly demonstrate an understanding of course constructs at the strategic level. The student must be a regular, constructive contributor to seminar discussions and achieving course objectives. The student must demonstrate mastery of course material and demonstrates the ability to understand and effectively apply other frames of reference. This grade recognizes a student who is well-prepared for every seminar, and demonstrates progressive understanding of course constructs and complex, critical, and strategic thinking skills. Writing content reflects high quality understanding of course constructs, and exhibits development of complex, multi-dimensional, critical, and strategic thinking skills and writing style demonstrates rigor and high quality in research (if relevant), command of the topic, logical organization, compelling argument, and high quality in English grammar and syntax. (3.3/credit hr)

“B” Work of acceptable quality at the executive/graduate level. This grade represents the work of those students whose performance demonstrated successful completion of all course requirements. The student contributes constructively to seminar discussions but not necessarily on a regular basis. This grade recognizes a student who is prepared for seminar sessions and whose contributions reflect some understanding of course material and constructs, and some development of strategic understanding. Writing content reflects understanding of course constructs and writing style demonstrates sound research (if relevant), command of the topic, logical organization, good argumentation, and acceptable quality in English grammar and syntax. (3.0/credit hr)

“B-” Work is below expected quality at the executive/graduate level. This grade represents the work of those students who did not fully meet course requirements, but were only deficient in a few areas. Student fails to demonstrate a sufficient understanding of course material and strategic concepts. Sometimes makes voluntary contributions to seminar discussions, but regularly makes no contribution. May demonstrate good knowledge in certain subjects, but has made insufficient progress in understanding other frames of reference and multi-dimensional aspects of strategic thinking. Writing content may reflect uneven understanding of course constructs and writing style demonstrates uneven research (if relevant), command of the topic, logical organization, argumentation, and quality in English grammar and syntax. (2.7/credit hr)

“C” Work is unsatisfactory at the executive/graduate level. This grade represents the performance of a student who failed to complete course requirements or whose work was of such poor quality that it clearly did not come close to meeting the course standards. Writing content reflects an unsatisfactory understanding of course constructs and writing style demonstrates unsatisfactory performance in some or all areas of research (if relevant), command of the topic, logical organization, argumentation, and quality in English grammar and syntax. Only in exceptional circumstances would a student earn a C, after failing to respond to counseling. (2.0/credit hr)

“F” Work is totally unsatisfactory in all aspects at the executive/graduate level. This represents the performance of a student whose work did not show even minimal satisfaction of any of the considerations. It is a grade of last resort. If the grade was earned as a course grade, and the student could not correct the deficiency after counseling, an F requires the student's removal from the student body. (0.0/credit hr)

