

ICAF RESEARCH AND WRITING HANDBOOK

ACADEMIC YEAR 2008-2009



NATIONAL DEFENSE UNIVERSITY
INDUSTRIAL COLLEGE OF THE ARMED FORCES
FORT LESLEY J. MCNAIR
WASHINGTON, DC 20319-5062

The contents of this document are the property of the U.S. Government and are intended for the exclusive use of the faculty and students of the Industrial College of the Armed Forces (ICAF) or the National Defense University (NDU). No further dissemination is authorized without the express consent of the ICAF Commandant and the NDU President.

Christina L. Lafferty, Ed.D.
Director of Research and Writing
Rm. 328, 685-4330

laffertyc@ndu.edu

TABLE OF CONTENTS

MILESTONES		5
CHAPTER 1	Research and Writing at ICAF	7
	Educating Strategic Thinkers	
	What is Research?	
	Why Research	
	Why Writing?	
CHAPTER 2	The Writing Program	11
	Program Objectives	
	Writing Requirements	
	Initial Writing Assessment	
	Writing Standards	
	Plagiarism	
CHAPTER 3	Formatting and Structuring the ICAF Paper	15
	Format	
	Help!!! How Do I Do References????	
	Ibid., and Other Mysteries	
	Useful Links to <i>Chicago</i>	
	Formatting Software	
	Organization of the Paper	
	Structural Elements of the ICAF Paper: A Closer Look	
	Supplemental Elements	
	Course paper Cover Sheets	
CHAPTER 4	The Research Program	25
	Purpose	
	The Research Process	
	Research Options	
	Faculty Research Advisor	
	The Paper Itself: Type and Content	
	Selecting a Topic	
	Getting Your Research Topic Approved	
	Research Program FAQs	
CHAPTER 5	The CJCS and SECDEF Transformation Essay Contests	35
CHAPTER 6	Research and Writing Awards	37
	Agency Awards	
	ICAF Commandant's Awards	
	CJCS Essay Contest	
APPENDIX A	Writing Standards and Writing Checklists	44
APPENDIX B	Research Proposal Form.....	47
APPENDIX C	Agency Sponsored Research.....	51
APPENDIX D	Faculty Areas of Interest.....	57

The ICAF Research and Writing Program

Vision

ICAF graduates consistently demonstrate mastery of written communication through coherent and cogent academic and research documents that reflect the highest levels of strategic thinking.

Mission

The ICAF Research and Writing Program's mission is to ensure that all ICAF graduates are capable of writing lucid academic papers that demonstrate sound and rigorous research, command of the topic, logical organization, compelling argument, and competence in English grammar and syntax.

Philosophy

Strategic leadership rests in part on analytical and communicative intellectual power. ICAF should provide the research and writing tools and exercises to prepare our graduates to return to the professional world of high-level strategic communication.

AY 2009 Research and Writing Milestones

August 11	Receive Writing Assessment tasker from Primary Faculty Advisor.
August 11-22	<u>Prospective Fall Research Students</u> (interested in doing research in lieu on one or two electives) and <u>prospective Research Fellows</u> (interested in doing a large research project in lieu of all four electives) identify a Faculty Research Advisor (FRA). (Students interested in doing research in Spring have until October to recruit an advisor.)
August 19	Fall Electives Open House.
August 19-22	Fall Electives registration. Students selecting research options must have their Preliminary Research Topic Approval Form, Part I, signed by their FRA and Dr. Chris Lafferty, Director of Research and Writing (Rm. 328), by 22 August – <u>before</u> registering for research.
August 22	Submit writing assessment electronically to Primary Faculty Advisor.
September 5	Review results of writing evaluation with Primary Faculty Advisor.
September 21	Fall Research Proposal Final Approval Form, Part II, signed by Faculty Research Advisor, due to Dr. Lafferty.
October 22	Spring Electives Open House.
October 22-23	Spring Electives Registration. Students selecting research options must have their Preliminary Research Topic Approval Form, Part I, signed by Dr. Chris Lafferty, Director of Research and Writing (Rm. 328), by 24 October – <u>before</u> registering for research in lieu of electives.
November 3-5	Research Director progress check with Faculty Research Advisor and student.
December 4	Submit Fall Research Project final paper to Faculty Research Advisor.
December 4	Spring Research Proposal Final Approval Form, Part II, signed by Faculty Research Advisor, due to Dr. Lafferty.
January 26-28	Research Director progress check with Faculty Research Advisor and student.
Before Domestic Travel	Submit final Research Project paper to Faculty Research Advisor.
Before Domestic Travel	Submit papers for CJCS & SECDEF essay competitions to Dr. Lafferty.
June 8 (tentative)	ICAF Awards and Recognition Ceremony

(BLANK)

CHAPTER 1

RESEARCH AND WRITING AT ICAF

Educating Strategic Thinkers

One of the major objectives supporting the mission of the Industrial College of the Armed Forces (ICAF) is to produce broadly educated strategic thinkers who possess in-depth expertise in the resource component of national security. Almost by definition, strategic thinkers are broadly educated, not narrowly trained.

A broad-based education expands and provides for the further self-administered expansion of one's horizons by developing the intellectual skills and inculcating the spirit of inquiry necessary for a lifelong pursuit of learning. Any program of study that provides such an educational experience requires its students to read (because they need to acquire knowledge); to discuss (because they need to subject their views to the rigors of dispute); to investigate (because at the strategic level, it's more about asking the right questions than answering the questions right); and to write (because they need to impose structure on their thoughts in order to communicate).

All of you who come to ICAF are successful, capable professionals. Most of you come fully prepared to discuss – you're experienced, you have strongly held opinions, and you'll be immersed in an environment where candor is encouraged and expected. Many of you come prepared to read -- you accept the inevitability of that at a graduate-level school, and besides, it's a luxury most senior level jobs don't accommodate easily. Some of you come prepared to do some writing. Probably few of you, though, come prepared to do research - it's much too academic; you've had too much of it in the past, and you don't expect to do much of it in the future; and, after all, you're preparing yourself to be a decision maker, not a scholar. Perhaps...then again, perhaps not.

What if we were to suggest to you that research and writing are incomparable instruments of intellectual development that could have a decisive effect in determining how good a decision maker you become: a true strategic thinker or a mere administrator; a rare and priceless diamond or a common, commercial rhinestone? For you to accept this proposition - which may fly well in the face of your most deeply entrenched beliefs -- we probably need, for starters, to define what we mean by research and writing.

What Is Research?

The term "research" has a myriad of different meanings depending on the context. Most of you have done academic research in your undergraduate, graduate or postgraduate work. Your job may have demanded some form of technical research; still others have been involved in scientific research.

Here at ICAF, research refers to *substantial inquiry into a problem, issue or subject area requiring the identification, collection and objective treatment of relevant evidence on all sides of the issue being investigated in order to arrive at a well-reasoned, defensible conclusion.*

Research at ICAF is an exercise in critical thinking, as opposed to a polemic or a diatribe; an investigation, not a crusade; a quest for truth, not the conveyance of

propaganda, evidence in search of an answer, not a preconceived conclusion in search of evidence.

Why Research?

To Acquire Knowledge

First, research adds to our knowledge. At least that should be its intent. In the words of the eighth-century Hindu theologian, Sankara: "Wisdom is not acquired save as the result of investigation." There is a wealth of information out there -- infinitely more than at any time in the past. However, relative to the amount of information available, there may be less knowledge today. There certainly is an overabundance of opinion -- on every conceivable topic. Opinion, however, is not knowledge; and what we want -- or what we ought to want -- is knowledge. That is what research helps us acquire.

To Aid Reason

Second, the process of doing research is a window to the process of reasoning. It is one thing to hold an opinion, an attitude, or a belief; it is quite another to understand how we arrived at such points of view -- whether through the gut or through the mind. When you enter ICAF, you come armed with many convictions. Your experience has produced what, in your mind, are unassailable truths. These convictions -- *your* truths -- many have blinded you and, in the process, may have caused you to deny the validity and even the legitimacy of other viewpoints. Research, aside from what knowledge it may afford us, has the added effect of opening our minds from the vice-like grip of certitude.

To Develop Savvy

Third, research requires you to ask good questions as well as search for answers. You learn where to look for evidence and how to weigh it. You learn what is defensible and what is not. In addition, you learn how to see through shoddy or specious reasoning. You thereby equip yourself to be a more perceptive decision maker—one who can spot the charlatans who pretend to dispense sage counsel.

Why Writing?

To Shape Strategic Thinking

Research has shown that writing activates a portion of your brain which otherwise lies dormant. Only when your hand and eye work in tandem to put those words on paper do some of those thoughts buried in the deep recesses of your subconscious come to life. Thus, writing helps you to think -- in ways that you otherwise would not.

You may argue, of course, that in the "real world" you only need to be able to produce cryptic one-page point papers and PowerPoint slides. That's more true than not. Decision makers want things brief and concise -- because they're busy; and they generally want to be briefed rather than to read. However, we're not talking about products here; that's training. We're interested in process: the process of education as a means of shaping a strategic mind. This isn't about what you're going to do. It's about how you need to think.

To Leave Your Mark

There is yet one other reason why writing should be important to you -- especially if you're a uniformed military officer. Does it ever bother you that virtually all those so-called experts on strategic affairs who appear on talk shows and whose articles appear in *The Washington Post*, the *Atlantic Monthly*, and *Harper's* magazine are civilian academicians and consultants? It should. Where are the great minds in our military establishment? Are there any? Or are they too busy putting out the daily fires?

Work is transitory. Talk is cheap. Ideas endure -- and they do so principally through the medium of writing. If Clausewitz, Mahan, and Liddell Hart, for example, are icons of strategic thought to us, it is because they transmitted their ideas -- and the wisdom embodied in those ideas -- through their writing. They have left a lasting legacy. There is absolutely no reason why our own military establishment cannot -- and should not -- be developing a new generation of Clausewitzes, Mahans and Liddell Harts who can leave a similarly rich legacy of written wisdom to future generations.

(BLANK)

CHAPTER 2

THE WRITING PROGRAM

Program Objectives

The ICAF Writing Program provides a variety of learning opportunities to crystallize and advance your thinking. At the same time, it provides the faculty tangible indicators of how well you're applying and extending the lessons you've learned in the classroom. Specifically, the program's objectives are to:

- Enhance student executive development processes.
- Advance student analytical and communicative intellectual power, keystones of strategic thinking.
- Reinforce the importance of improving writing abilities and, through practice, to afford opportunities for such improvement.
- Contribute to, and to provide means for, assessing, student retention, analysis, synthesis and evaluation of course material.
- Provide instructors and student faculty advisors information on the quality of both instruction and student performance.

We're concerned not only with what you learn in the classroom but with what you do with that knowledge. Writing is the *best* way we know how to improve strategic thinking and the *only* way we know to improve your writing. As the Greek Stoic philosopher Epictetus said, "If you wish to become a writer, write."

Writing Requirements

Core Courses, Regional Security Studies and Industry Studies

ICAF departments tailor writing requirements to meet course objectives. All students are required to write:

- Initial writing assessment
- Regional Security Studies policy paper (8-10 double-spaced pages)
- Core course papers, as required
- Individual Industry Studies paper
(as well as contribute to a seminar Industry Studies paper)
- Elective papers, as required

Each course syllabus specifies writing requirements; they'll vary from course to course depending on the course design. The Regional Security Studies policy paper, for example, requires you to advise a senior policy maker concisely on the importance of a regional issue for United States strategic interests and to evaluate and recommend a proposed U.S. course of action. Your seminar Industry Studies paper, however, will require that you survey and assess the "industrial health" of a vital segment of industry. Unlike the Regional Studies paper that reflects your analysis alone, the seminar Industry Studies paper is a team effort.

Elective Studies Papers

You are required to take four elective studies courses, two during the fall and two during the spring. For each course, your instructor will determine whether you (a) prepare a formal paper or (b) deliver an oral presentation supported by a point paper. In either case, there is a writing requirement, though the form may vary.

Research Projects

You may opt to undertake a major research project in lieu of one or more electives. If so, you'll produce a fully documented paper on a significant national security issue. Chapter 3 contains more details.

Initial Writing Assessment

Within your first weeks at ICAF, you'll complete a writing assessment. The purpose is to provide an ungraded opportunity to write in the manner and level expected here. The assessment also helps identify students who would especially benefit from workshops, tools and coaching to help them succeed.

Early in the academic year, your Primary Faculty Advisor will assess your ability to write an academic paper, ideally one that reflects both clearly structured strategic thinking and an ability to communicate clearly. The purpose of this writing assessment is to gauge each student's baseline as an academic writer. It will help you and your faculty advisor target areas for improvement before you undertake the first graded written assignment. As your faculty advisor assesses this effort, he or she will look at your writing skills primarily in terms of mechanics and structure; PFAs will look at content in terms of logic, coherence and critical thinking. If it appears that you're "writing challenged," your PFA may direct you to the Writing Workshop or individualized coaching.

Writing Standards

What standards should you apply in writing these papers? At a minimum, they should be the standards we'll use in evaluating your work. These standards, detailed in Appendix A, deal with what we consider to be the four most important aspects of your writing: (1) the use of higher order intellectual skills, (2) the logical organization, (3) the appropriateness of the style, and (4) grammatical and mechanical correctness. Mechanics and Structure Checklists also appear in Appendix A.

We're concerned, first and foremost, with the sophistication and clarity of your thinking. We want to see — and you should want to demonstrate — that you're able to go beyond merely regurgitating what someone else has said. You'll be asked to demonstrate that you can analyze (break things down and explain them), synthesize (combine things and develop new ideas), and evaluate (make sound judgments based on disciplined reason).

We're also concerned with the structure of your argument. Is there a logical flow from your introduction — where your thesis statement establishes your purpose — to the main body of the paper — where you develop your ideas and present evidence — to your conclusion — where you bring to closure what you have just developed? If not, if you

leave the reader confused and grasping futilely for your message, then you've lost the argument.

In addition to these substantive and structural considerations, we're equally concerned with your writing style. Do you express yourself clearly? Are there smooth transitions between ideas, sentences, and paragraphs? Do you use standard American English grammar and mechanics – punctuation, subject-verb agreement, spelling, typographical errors, and the like? (If there is little excuse at the master's degree level for failing to convey your ideas because of structural flaws, then there is absolutely *no* excuse for robbing yourself of credibility and thus diminishing your argument because of sloppy grammar and mechanics.)

Help yourself avoid common grammar errors by referring to the concise guide we have put in your study room: *The Wadsworth Brief Handbook* by Kirszner and Mandell. There are plenty of on-line sources available, too, like *The Blue Book of Grammar and Punctuation* (http://www.grammarbook.com/grammar/cnt_gram.asp). You may even consider purchasing your own copy or a similar writing guide. You'll be pleasantly surprised how much you can improve your writing through such low-cost self-help.

Finally, we encourage you to share your papers with your colleagues throughout the writing process. Sometimes a fresh eye helps you break up mental logjams, consider alternate perspectives; identify gaps in your analysis; and catch grammar and spelling errors. If someone is especially helpful, you can acknowledge such contributions (see Chapter 3 on format).

A Word About Plagiarism

Plagiarism is the unauthorized use, intentional or unintentional, of intellectual work of another person without providing proper credit to the author. While most commonly associated with writing, no types of scholarly work, including computer code, speeches, slides, music, scientific data and analysis, and electronic publications are to be plagiarized. Plagiarism may be more explicitly defined as:

- Using another person's exact words without quotation marks and a footnote/endnote.
- Paraphrasing another person's words without quotation marks and a footnote/endnote.
- Using another person's ideas without giving credit by means of a footnote/endnote.
- Using another person's organizational pattern without giving credit by means of a footnote/endnote.

ICAF is serious about academic integrity.

Cite your sources!

(BLANK)

CHAPTER 3

Formatting and Structuring the ICAF Paper

Format

ICAF follows *The Chicago Manual of Style, 15th Edition* (hereafter referred to as *Chicago*). There's a copy in each student room, along with *The Brief Handbook*, which also contains abbreviated directions for *Chicago* style. If certain assignments (some unique Industry Study products, for example) require a different style, your instructor will let you know.

Chicago allows considerable flexibility, recommending authors follow editorial preferences of the particular journal or magazine they're targeting for publication. For example, this handbook follows *Chicago* style, but its "requirements" differ from those of an ICAF paper (line spacing, for example). Here are some ICAF specifics:

- **Paper:** Use 8-1/2" by 11" paper.
- **Typeface and Size:** Times New Roman, 12-pitch.
- **Margins:** Top and bottom: 1.0 inch. Left and right: 1.0 or 1.25 inch.
- **Line Spacing:** Double-space your paper – between lines, between sections and between subheadings and text. Don't "innovate" with 1.5 or other alternative spacing to meet page limit requirements. Don't triple- or quadruple-space between text and subheads; most of the time, you'll need more space to make your case, not less!
- **Indenting:** Indent paragraphs 5-7 spaces or one-half inch.
- **Page Numbers:** Place page numbers one-half inch from the top right edge of the paper. Word will automatically place numbers for you (on the toolbar, go to "Insert, page numbers, top of page, right"; don't check the box for "show number on first page").
- **Headings:** Headings and subheadings improve structure and readability of your paper by acting as a guide and breaking up large blocks of text. *Use them*. Most ICAF papers will need only two or, at the most, three heading levels. *Chicago* allows for a variety of designs; just be consistent and make "readability" your guide. The system below, formatted as you would see it in a paper, is one good way.

Don't repeat the paper title on the first page of the text. Simply open the discussion, either with the first heading or with an introductory section without a heading if you so choose. While titling the introduction is optional, avoid belaboring the obvious by calling it Introduction.) Here is one method:

NOT the paper title! This is for chapter or major section titles

CHAPTER OR MAJOR SECTION TITLE

Use this for chapters in large papers such as research projects

Centered First Level Heading: Heading Caps

Second Level Side Head Set Flush Left: Heading Caps

This will be the Typical **first** level heading for most ICAF papers

Second Side Heading: Use When Needed

Third level paragraph heading. Follow with the first sentence of the paragraph.

Second Run-in Heading (Use When Needed): Follow with the first sentence of the paragraph.

Note what's bold,
what's italicized and
what's indented!

- **Block Quotations:** Format longer quotations as block quotes. Continuously indent them from the left margin the same distance as a paragraph indent. Do not use quotation marks. Use them for quotations of more than one paragraph or more than about 50 words. If there's a second paragraph, indicate it with an additional indent for the first line.
- **Endnotes or Footnotes?** Use endnotes for your ICAF papers. Endnotes don't count against the page limit of a paper.

Help!!! How Do I do References?????

The ICAF faculty would much rather you spend your effort on the content of your papers vs. spending hours sweating over the technical details of endnotes and bibliographies – especially since not every guide to *Chicago* style agrees! Don't get frustrated; just try to be complete and consistent. Chapter 17 of *Chicago* contains a wealth of detail on how to construct these elements. Remember, the point is to *credit* your sources and enable others to *find* your sources. Here are some samples from The University of Chicago Library Website, used with permission: <http://www.lib.uchicago.edu/e/using/instruct/chicago.html>

BOOK For more examples, see <i>The Chicago Manual of Style</i> 17.16-17.150	
Bibliography →	Example
Author's Name. <i>Book Title</i> . Place of publication: publisher, date of publication.	Goodspeed, E.J. <i>The University of Chicago Chapel: A Guide</i> . Chicago: University of Chicago Press, 1928.
Endnote →	Example
1. Author's Name, <i>Title</i> (Place of publication: publisher, date of publication), page number(s).	1. E.J. Goodspeed, <i>The University of Chicago Chapel: A Guide</i> (Chicago: University of Chicago Press, 1928), 15.
E-BOOK For more examples, see <i>The Chicago Manual of Style</i> 17.142-17.147	
Bibliography →	Example
Author's name. <i>Title</i> . Place of publication: Publisher, date of publication. URL.	Swanson, Richard A. <i>Results: How to Assess Performance, Learning, and Perceptions in Organizations</i> . San Francisco: Berrett-Koehler, 1999. http://www.netlibrary.com/ .
Endnote →	Example
1. Author's name, First name. <i>Title</i> (Place of publication: Publisher, date of publication), URL.	1. Richard A. Swanson, Results: How to Assess Performance, Learning, and Perceptions in Organizations (San Francisco: Berrett-Koehler, 1999), http://www.netlibrary.com/ .
BOOK CHAPTER For more examples, see <i>The Chicago Manual of Style</i> 17.68-17.75	
Bibliography →	Example
Author's name. "Chapter title." In <i>Book Title</i> , edited by Editor's Name, page numbers. Place of publication: publisher, year of publication.	Battin, Patricia. "The Management of Knowledge: Issues for the Twenty-First Century." In <i>Research Libraries: Yesterday, Today, and Tomorrow</i> , edited by William J. Welsh, 397-409. Westport, Conn.: Greenwood Press, 1993.
Endnote →	Example
1. Author's name, "Chapter title," in <i>Book Title</i> , ed. Editor's Name, page number(s) (Place of publication: publisher, year of publication).	1. Patricia Battin, "The Management of Knowledge: Issues for the Twenty-First Century," in <i>Research Libraries: Yesterday, Today, and Tomorrow</i> , ed. William J. Welsh, 397-409 (Westport, Conn.: Greenwood Press, 1993).

JOURNAL ARTICLE For more examples, see <i>The Chicago Manual of Style</i> 17.148-17.203	
Bibliography →	Example
Author. "Article title." <i>Journal title</i> . Volume.number (Year of publication): page number(s).	Fahs, Alice. "The Meanings of the Modern City: Chicago After the Linguistic Turn." <i>Reviews in American History</i> . 4, no. 3 (1996): 442-447.
Endnote →	Example
1. Author, "Article title," <i>Journal title</i> , Volume (Year of publication): page number(s).	1. Alice Fahs, "The Meanings of the Modern City: Chicago After the Linguistic Turn," <i>Reviews in American History</i> , 4.3 (1996): 443.
ARTICLE FROM AN E-JOURNAL (Including Stable URL) See <i>The Chicago Manual of Style</i> 17.180-17.181	
Bibliography →	Example
Author. "Article title." <i>Journal Title</i> Volume, no. (Year of publication): page numbers. URL.	Davies, Scott. "School Choice by Default? Understanding the Demand for Private Tutoring in Canada." <i>American Journal of Education</i> 110, no. 3 (May 2004): 233-255. http://www.journals.uchicago.edu/AJE/journal/issues/v110n3/110302/110302.web.pdf .
Endnote →	Example
1. Author, "Article title," <i>Journal Title</i> , Volume (Year of publication): page number(s) citing, URL.	1. Scott Davies, "School Choice by Default? Understanding the Demand for Private Tutoring in Canada," in <i>American Journal of Education</i> 110, no. 3 (2004): 235, http://www.journals.uchicago.edu/AJE/journal/issues/v110n3/110302/110302.web.pdf .
ARTICLE FROM AN ONLINE RESOURCE (Including Link to Library Database) See <i>The Chicago Manual of Style</i> 17.357 See also: http://www.press.uchicago.edu/Misc/Chicago/cmofaq/cmofaq.html	
Bibliography →	Example
Author. "Article title." <i>Journal Title</i> Volume (Year of publication): page numbers. Entry page of URL.	Fahs, Alice. "The Meanings of the Modern City: Chicago After the Linguistic Turn." <i>Reviews in American History</i> 4, no. 3 (1996): 442-447. http://muse.jhu.edu/ .
Endnote →	Example
1. Author, "Article title," <i>Journal Title</i> , Volume (Year of publication): page number(s) used, URL.	1. Alice Fahs, "The Meanings of the Modern City: Chicago After the Linguistic Turn," <i>Reviews in American History</i> , 4.3 (1996): 443, http://muse.jhu.edu/ .

WEB PAGE For more examples, see <i>The Chicago Manual of Style</i> 17.234-17.237	
Bibliography →	Examples
Author (if known). "Name of Page." <i>Name of Web Site</i> . URL.	The White House. "The Center of the House: The Blue Room." <i>Life at the White House</i> . http://www.whitehouse.gov/history/life/blueroom.html . Greenpeace International. <i>Greenpeace</i> . http://www.greenpeace.org .
Endnote →	Examples
1. Author (if known), "Name of Page or Section," <i>Name of Web Site</i> , URL, date accessed.	1. The White House, "The Center of the House: The Blue Room," <i>Life at the White House</i> , http://www.whitehouse.gov/history/life/blueroom.html , January 1, 2009. 2. Greenpeace International. <i>Greenpeace</i> . http://www.greenpeace.org , January 23, 2008.
If your source has more than one author, the form is slightly different. See Chicago 17.30 for more than three authors.	
Bibliography	
Leavitt, Steven, and Stephen Dubner. <i>Freakonomics: A Rogue Economist Explores The Hidden Side of Everything</i> . New York: William Morrow, 2005.	
Endnote	
1. Steven Leavitt and Stephen Dubner, <i>Freakonomics: A Rogue Economist Explores The Hidden Side of Everything</i> (New York: William Morrow) 133.	
ALWAYS INCLUDE THE PAGE NUMBER IN YOUR NOTES!	

Ibid., and Other Mysteries (*Chicago* 16.47-50)

- "Ibid." Use this in your endnotes when you're referencing the same author(s) several times in a row. The abbreviation comes from the Latin *ibidem*, meaning "in the same place."

1. Alice Fahs, "The Meanings of the Modern City: Chicago after the Linguistic Turn," *Reviews in American History*, 4.3 (1996): 443.
2. Ibid., 445.
3. The White House. "The Center of the House: The Blue Room." *Life at the White House*. <http://www.whitehouse.gov/history/life/blueroom.html>.
4. Ibid.

- “op. cit” and loc. cit.” These were formerly used followed by the author’s last name to indicate a work fully cited previously. *Opere citato* and *loco citato* mean “in the work cited” and “in the place cited,” respectively. Chicago now disallows these. Instead, use the short form.

45. Fahs, "The Meanings of the Modern City: Chicago After the Linguistic Turn," 446.

Useful Links for *Chicago*:

<http://www.docstyles.com/cmsguide.htm>

<http://library.osu.edu/sites/guides/chicagogd.php>

<http://www.lib.uchicago.edu/e/using/instruct/chicago.html>

<http://www.docstyles.com/cmscrib.htm>

Formatting Software

Making sure you format your paper’s references and bibliography correctly doesn’t have to be all frustration. Here’s a way to make it easier and quicker:

RefWorks is a web-based bibliographic management program available to all ICAF students. The NDU Library uses RefWorks to build all its bibliographies. You will have a RefWorks training session during your Library orientation. To get a RefWorks account, go to <https://www.refworks.com/Refworks/login.asp?WNCLang=false> and click on “Sign up for an Individual Account.”

Using RefWorks to build the bibliographies for your ICAF papers allows you to use a plug-in called Write-N-Cite that automatically formats papers. We’ve loaded Write-N-Cite on all student computers and provided each student with the *RefWorks User Quick Start Guide*.

Microsoft Word includes a simplified formatting program as well; click on Help and type in Footnotes and Endnotes.

IMPORTANT: Many formatting software programs (RefWorks/Write-n-Cite) create endnotes in very small type, with no spacing between lines. If you choose such a program, be remember to put your endnotes in 12-pitch and include correct spacing.

Organization of the Paper

Organize your paper as follows:

- Cover page
Unnumbered
- Acknowledgements (optional)
If someone was particularly helpful during your writing process, you can acknowledge such contributions on the page following the cover sheet. Be brief.
Example:

“I would like to thank COL John Doe for his insights regarding the Army’s role in civil reconstruction. His questions regarding roles and operations were particularly useful. Thanks also go to Ms. Mary Smith for her helpful feedback on building a balanced argument.”
- Main Elements
Abstract (for research projects only)
Introduction
Body
Conclusion
- Supplemental Elements
Appendices (if any)
Endnotes
Bibliography

Structural Elements of the ICAF Paper: A Closer Look

Remember, these are general considerations; individual course faculty directing the assignment may alter this somewhat. If you are in doubt about any details or the approach appropriate to the specific assignment, ask the faculty making the writing assignment.

Introduction

An introduction should serve four purposes:

- To get the reader interested (hook)
- To state the purpose of your paper (thesis).
- To present the organization of your paper (map)
- To lead the reader into the body (transition).

Starting with the main point, as opposed to building up to it, may seem hard. However, think of your audience. Senior leaders need to know the “so what” immediately. They need to know what to expect in terms of main points that will come up. Tell them your recommendations as well, and then let the rest of the paper explain how you get there. The body of the paper will constitute proof of your logic and include your supporting rationale.

Body: Discussion and Support

This is where the rubber meets the road when it comes to documented evidence of your strategic thinking ability, your skill at organizing and supporting your critical arguments, and your recommendations if appropriate. The actual assignment may pose a question, present an issue to examine or frame a case study to analyze. Moreover, it may have several components. Spend time understanding the exact assignment and address all parts comprehensively. Avoid make the mistake of simply writing about something related that might interest you more.

Conclusion

Your paper's conclusion should revisit your thesis, recap your key arguments and findings – or reiterate your recommendations – and wrap up the essay in a satisfying manner. Readers will now be able to understand not just what those conclusions, main findings and recommendations are, but also the logic for getting there. Avoid introducing new information in the conclusion.

Supplemental Elements

If you have additional supplementary material you want to present to the reader, but that doesn't contribute directly to your main presentation, you may attach appendices to the back of the paper. Do *not* use appendices as a way around a confining page limitation.

Course Paper Cover Sheets

Use the cover sheet provided on the following page as a template for all ICAF papers, with the exception of major research projects as covered in Chapter 3. A cover sheet template is available on the ICAF website. Go to the ICAF Portal and click on ICAF Internet Site; under Student Information, click on Research and Writing Program; then click on ICAF COVER SHEET TEMPLATE. Once again, you don't get style points for originality. *Please use the format provided* and make it *part of your document* (i.e., don't submit your text and the cover page separately).

Note: It may seem obvious, but check the spelling of faculty members' names before handing in your paper.

For Research Projects Only: The course paper cover sheet contains the following mandatory statement:

<p>The contents of this document are the property of the U.S. Government and are intended for the exclusive use of the faculty and students of the Industrial College of the Armed Forces (ICAF) or the National Defense University (NDU). No further dissemination is authorized without the express consent of the ICAF Commandant and the NDU President.</p>

AY 2008-2009

THE TITLE OF YOUR PAPER HERE

NAME OF THE COURSE HERE

NAME OF COURSE INSTRUCTOR HERE

**YOUR FULL NAME, RANK/GRADE HERE
YOUR SEMINAR NUMBER HERE**

[NAME OF YOUR PFA HERE], PRIMARY FACULTY ADVISOR

**The Industrial College of the Armed Forces
National Defense University
Fort McNair, Washington, D.C. 20319-5062**

The views expressed in this paper are those of the author and do not reflect the official policy or position of the National Defense University, the Department of Defense or the U.S. Government.

(BLANK)

CHAPTER 4

THE RESEARCH PROGRAM

RESEARCH DEADLINES

The Research Approval Form is at Appendix B.

- 22 Aug: Part 1 due for Fall research
- 19 Sep: Part 2 due for Fall research

- 24 Oct: Part 1 due for Spring research
- 5 Dec: Part 2 due for Spring research

Purpose

The research program is designed to complement and support the educational objectives of ICAF. Research provides the ICAF student with an opportunity to address a topic of significance related to national security with particular reference to the resources component of national power, materiel acquisition, joint logistics and their integration into national security strategy for peace and war. Research is invaluable as a means of nurturing a student's analytical and intellectual skills as well as enhancing the student's ability to communicate clearly and forcefully. A research program, consequently, improves those faculties of judgment and intellectual skills that are essential for decision making as well as enabling a student to have a better understanding of substantive issues.

Research Options

If you choose to undertake a formal research project in lieu of one or more electives, you have three basic research options: the Research Fellows Program, a Research Project, or a Group Research Project. ICAF has attempted to provide you with numerous options in order to accommodate your interests.

Research Fellows Program

Four course credits (Course 5654). The Research Fellows Program is not a substitute for the ICAF course of study. All Research Fellows are expected to fulfill all other academic obligations. The program exists to allow those interested students possessing research skills and interest to investigate a topic relevant to ICAF's substantive concerns throughout the academic year, and to nurture research and writing capability among those students who have not had sufficient opportunity to develop them. Research Fellows select research as all four of their Electives by applying to the Director of Research.

Research topics must be appropriate to the concerns of the ICAF mission and should be of sufficient scope and concern that they could not be completed without devoting the attention that would be given to two Fall and two Spring Elective courses to complete the project. Such manuscripts may examine current or fundamental issues. Because the lengths of projects vary from subject to subject, most student Research Fellowship projects will be more than 60 to 75 pages in length. This is, for example, the length of most of the National Defense University Press's McNair Paper series. All papers must be completed by the stipulated date at the end of the academic year.

A Research Fellow may request additional time at the end of the academic year to prepare a manuscript for publication. The Fellow's service or agency must give their approval to an extension as well.

Structure of the Research Fellows Program. A well-researched and written paper is demanding. Students selected to enter the Research Fellows Program will not be exempt from other ICAF written assignments that are essential to the fulfillment of course objectives.

Each Research Fellow will have a Faculty Review Committee comprised of their Faculty Research Advisor, one or two other associated faculty members selected by the Fellow and the advisor, and the Director of Research. Periodically (see Milestones), these individuals will meet with the Fellow in a Research Panel to review the Fellow's progress and provide guidance as needed.

Research Fellows are eligible to take up to five days to conduct research outside of the Washington, D.C. area. If necessary, a student may petition the Research Director to extend the length of time to conduct research outside of the area. All research days must be arranged with the approval of the Fellow's FRA, course instructors, and the Research Director. Fellows are responsible for the satisfactory completion of all work. Research Fellows are eligible for institutional support.

Limited funding is available to support such research and research fellows may submit a written request to the Research Director to have ICAF Research Funds allocated to support research.

Application procedures for the Research Fellows Program. Formal application to become a Research Fellow must be submitted to the Director of Research. To facilitate the selection of Research Fellows, the formal application must include:

- Part 1 of the research proposal
- A one-page biographical sketch describing the applicant's prior work experience and educational background.
- Samples of writing (articles, reports, etc.), if requested.

Agency Sponsored Research Fellowships

There are currently five agencies that directly sponsor research:

- The Office of the Secretary of Defense for Policy sponsors the Deputy Secretary of Defense Educational Initiative Research Fellowship.
- The Secretary of the Air Force sponsors the SECAF Energy Research Fellowship.
- Air Force Quadrennial Defense Review sponsors both a QDR Research Fellowship and smaller research projects.
- NORAD/USNORTHCOM sponsors research on Homeland Defense and Homeland Security.
- The Department of Defense Business Transformation Agency sponsors the BTA Research Fellowship.

Details on each program are at Appendix C.

Research Projects

One course credit (Course 5651). A student may choose a research project appropriate to the concerns of the ICAF mission in lieu of one elective. The project should be of such scope that it can be researched and written during one academic semester. A student may elect to take either the first or second semester to conduct research and complete the paper. The final paper is due at date designated for the last elective class for that semester. It is anticipated that such projects will normally be between 25-35 pages in length. Students who select this research option receive one Research course credit and will also take one elective during the same semester.

Appendix B of this *Handbook* contains the necessary registration forms for selecting a Research Project in lieu of one elective.

Two course credits (Course 5652 or Course 5653). ICAF will allow a student the opportunity to undertake a research project appropriate to the concerns of the ICAF mission for two Research credits. With the consent of the Research Director and Faculty Research Advisor, the project will be considered of such complexity or scope that the student's efforts warrant receiving an additional credit. A student may elect to take both Research credits the same semester (5652) or one Research course credit each semester (5653). The final paper is due at the designated date at the end of the appropriate academic semester (see Milestone Dates in this *Handbook*). It is anticipated that such projects will normally be between 35-50 pages in length.

Tutorial Readings/Independent Study, one course credit (Course 5650). Tailored to students' needs. To participate, a student must first obtain agreement of an ICAF faculty member to sponsor the elective. The student and faculty member will then plan the scope of the course, including expectations for student performance. Students may register for this course only once in each semester.

Group Research Projects

Any research project may be done with more than one student, providing the scope of the project warrants multiple authors. Group projects, like all others, require a faculty research advisor and approval of the Director of Research.

Faculty Research Advisor

All research projects are supervised by a Faculty Research Advisor (FRA). All Research Students are responsible for selecting their own FRA, with the exception of certain agency sponsored fellowships. Students should seek out FRAs who can provide advice and guidance in choosing a topic, defining a focused research question, setting bounds on the scope of research, selecting appropriate methods, identifying relevant source material and framing pertinent arguments.

In some cases, the FRA will be an expert in the area of your research and will be able to guide you through the subject matter. In other cases, the FRA will simply share an interest in the subject and will help you through the process. In both cases, the FRA will serve as another pair of eyes, commenting on your work as you go along and, ultimately, help determine whether you successfully meet the research requirement.

Whether selected because of substantive or methodological knowledge or simply interest, the FRA plays an intricate role in the research process. To aid in the selection of a faculty research advisor, Appendix D of this *Handbook* provides faculty skills and interests.

These are the functions the FRA performs:

- Providing advice and guidance to you in choosing a topic, defining a focused research question, setting bounds on the scope of research, selecting appropriate methods, identifying relevant source material, and framing pertinent arguments.
- Establishing milestones for you to complete all prescribed requirements successfully.
- Monitoring your progress, evaluating the quality of your work, and providing critical feedback.
- As appropriate, making recommendations for awards.

Each FRA has many other responsibilities. It therefore goes without saying that the FRA's job is not to *do* -- that's your job -- but to oversee what you do and to provide necessary counsel.

The Paper Itself: Type and Content

Standard Research Paper

A research paper, may, of course, take any of a variety of forms -- be it a technical report, a feasibility study, a historical analysis, a staff study, a systems analysis or policy analysis, the formulation of a model, or whatever. Your paper may take any of these forms -- or others, for that matter; the only limit is your own creativity.

Ideally, the paper will be an expository piece on an issue of your choosing (more on that momentarily), in which you define a problem or state a hypothesis, present the various arguments -- pro and con -- surrounding the issue, and reach a conclusion based on the strengths of the evidence. You may wish to go a step further and offer recommendations -- but you need not do so.

Bibliographic Essay

If you want to immerse yourself deeply in a particular subject and find out who has said what about it, but you don't feel comfortable venturing too far with your own original thoughts, you may want to consider doing a bibliographic essay. As the name suggests, the bibliographic essay combines features of the bibliography and the essay -- with the emphasis clearly on the latter. It's not just a list of readings but an interpretive review of a given body of literature.

If you choose this option, you need to recognize two things at the outset:

- You are expected to do a thorough survey of the literature on your chosen topic. That means if it's a narrow topic, you're going to have to dig, and if it's a broad topic, you're going to have to set some bounds on what you investigate.
- Cut-and-paste abstracts of the literature you've reviewed won't cut the mustard. We're looking for you to synthesize what you've read into manageable proportions; to analyze it by identifying common themes, points of disagreement, discernible motives and biases of authors, and the like; and to make some evaluative judgments about the state of thinking in the field.

Case Study

Case studies provide a tool for drawing the crucial link between theory (general concepts and principles) and practice (real-world experiences). There are a number of places in our curriculum where we need good, focused case studies -- but either they aren't available or we haven't been able to locate them in exactly the right form. Therefore, if you have a bent for history, a yen or a talent for sleuthing, and flair with the written word, you might think about preparing a case study or two. It could help enhance next year's curriculum.

Your initial point of contact should be the chair of one of our academic departments who probably will direct you to a faculty member with a more specific need. The particular focus of the case(s) you prepare will be a matter of negotiation and mutual agreement between you and the department. You may have an important story to tell that coincides with an identified need of ours -- let's say you were involved in a major weapon system acquisition program -- or we may be looking for something specific -- let's say the decision making process that led to the commitment of U.S. troops to Somalia.

If you choose this option, don't plan to get by with just a war-story narrative or a simple chronology of events. For your case to be useful and effective, it will have to be tailored to some specific learning objectives -- presented in other words, so that the incident, situation, or series of events portrayed highlights the themes or issues that are the focus of a given lesson or block of instruction.

Draft Joint Doctrinal Publication

The continued emphasis on jointness (increased interservice cooperation and unity of action) that was mandated by the 1986 Defense Reorganization Act has created a critical need for various joint doctrinal publications that do not now exist. You may want to draft a

publication that can be staffed and subsequently adopted as established doctrine for a particular area of joint military operations. The experience promises to be educational for you, since you will have to become truly expert in that domain of joint operations. Moreover, the fruits of your effort, if well done, have to the potential to exert a lasting impact on the military establishment.

Draft National Intelligence Estimate

The evolving nature of the international environment -- the apparent end of the Cold War, the continuation and possible expansion of regional conflicts, the ascendancy of the economic component of national power, and various critical international issues confronting the United States (debt, drugs, energy, terrorism, and the like) -- makes accurate and timely intelligence perhaps more important today than at any time in the past forty-five years.

This option, involving the preparation of a draft, unclassified national intelligence estimate on a specified regional or functional topic, provides a mechanism for ICAF students not only to acquire substantive knowledge of the subject at hand and an appreciation of the estimate process, but also to contribute original analytical insights that perhaps could be helpful to the intelligence and policy communities.

Selecting a Topic

Choosing one of the research options we've just discussed is only half of the decision you have to make in formulating your research project. The second half of the decision concerns your topic -- what are you going to research? In answering this question, you might want some advice on how to go about picking a topic, and you certainly need to know what ICAF considers a suitable focus for your project.

How to Pick a Topic

If you have come to ICAF with a burning issue already on your mind -- something you've wanted to investigate or to say, something that has been a burr under your saddle or that you think deserves the light of day -- then you're pretty well set. Others of you, though, may either have no idea what you want to research or so many ideas that you're in a muddle. That being the case, you might do the following:

- *Meet and Discuss:* Visit faculty members in their offices during the first two weeks of the academic year. Use the opportunity to explore various elective studies and research options. The list of faculty interest areas at Appendix D may give you some ideas.
- *Research and Writing Handbook*, Chapter 6: This chapter contains a list of last year's winning papers. You may find something here that gives you an idea.
- *Director of Research.* Talk to the Director of Research, Dr. Chris Lafferty (Rm 328, 685-4330, laffertyc@ndu.edu). Chris can provide you guidance on the feasibility and utility of research topics you're considering and direct you to faculty members with relevant experience and interests.

What Topic to Pick?

So, what are you actually going to research? Consider first the two cardinal imperatives that guide all researchers. First, pick a topic that interests you. Nobody benefits, least of all you, if you embark on a project that doesn't capture your heart and your imagination. Second, pick a doable topic -- taking into account the required length of the paper and the amount of time you have to do it.

You have wide latitude in choosing what to research. The only proviso in this regard is that *the topic you pick must deal with some aspect of national security*. This means any topic that directly or indirectly deals with how the United States obtains, generates, and/or utilizes the human, material, economic, and/or natural resources necessary to attain national objectives; protects national interests; provides for the safety and well-being of the American people; and preserves the American way of life.

Getting Your Research Project Approved

One of your first responsibilities is to obtain the agreement of an ICAF faculty member - or another qualified member of the NDU staff -- to serve as your Faculty Research Advisor. The list of faculty areas of interest at Appendix D can serve as a guide. The only piece of administrative paperwork you have to worry about is the two-part ICAF Student Research Application at Appendix B and on the ICAF web site: <http://www.ndu.edu/icaf/srwp/index.htm>. Use this form to flesh out and formalize the specifics of what you plan to do for your research project and how you plan to go about doing it.

Research Program FAQs

Here are some commonly asked questions (not already covered in Chapter 4) that you, too, may have about various aspects of the Research Program.

Who will read the paper?

You will. Your spouse probably will. Some of your ICAF colleagues may read it and offer suggestions. Your Faculty Research Advisor certainly will. If you wrote your paper in response to an agency's request, no doubt someone from that agency will.

Clearly, though, you don't want all your work spent for only a handful of people. So the real answer to the question is this: Even as you begin your research, you should have a fairly good idea which people -- specifically and generally -- you want to read your paper. Then, as you write the paper, you should keep that audience in mind, actually writing for them. When you're through, you then will have a written paper directed specifically at the audience you envisioned in the beginning.

When you finish your paper, you should consider actually sending it to the audience for which you wrote it. Your FRA and the Director of Research and Writing can help you with this process. All ICAF papers are subject to security review prior to publication; the clearance process can take several weeks.

What happens to the paper once I leave?

We'll archive an electronic copy of your paper. A number of research papers are published, either because ICAF marketed it, you sought publication, or an organization with a journal requested it.

Who owns my paper? May I copyright it?

In past years, some ICAF students – with varying degrees of seriousness – have annotated their writings as copyrighted material. Everything written by students and submitted for partial fulfillment of the requirements for a degree is the property of the U.S. Government and may *not* be personally copyrighted. Address any questions or issues concerning this policy to the NDU Legal Advisor.

How should I work with an agency point of contact?

If an agency sponsors your project, you should get in touch with the point of contact right away so each of you can have common expectations for the depth, breadth, and timing of your report. Does the agency expect you to travel? Then, since our travel money is *quite* limited, ask if they can fund it.

The ICAF research director will automatically send a copy of your final paper to the sponsoring agency. However, you might consider, if the agency is local, delivering your paper in person and giving a desktop briefing -- or even a formal one.

May I write a classified paper?

Yes, but . . . the simple mechanics of typing it, putting it in a safe, and transmitting it using the official procedures may eventually get to you.

A more serious problem is that students in the past have found a smaller readership for classified papers. You can easily send unclassified papers to anyone in the government; but the logistics get in the way of distributing classified papers.

What about conducting surveys?

Although conducting a survey may be very appealing, you should realize that many surveys require special approval, usually involving a lengthy and complex process. Often you will not be able to get such permission in time to prepare your research project. If you have questions, see the Director of Research and Writing.

What should I know about non-attribution?

If you heard it at NDU in a situation guaranteeing the speaker non-attribution, you must not then attribute the remarks in your paper. That is, you must not explicitly or implicitly connect the words or ideas of a speaker in such a situation with the speaker's name. Therefore, often you will not be able to use the information in your research paper that you've learned in a situation guaranteeing non-attribution.

Also, please be careful how you handle your interviews. Be sure the people you interview clearly understand whether you intend to attribute their remarks.

What is the ICAF position on plagiarism?

We don't allow it -- in any form, for any reason. Ordinarily the issue doesn't arise with professionals of your caliber. On rare occasions, though, there is the student who thinks it's okay to steal someone else's words or ideas without proper attribution. Wrong! It's not okay. The penalty for deliberate plagiarism is expulsion. That's how serious we are.

May I submit an identical paper for two different requirements?

Students may not submit an identical paper to satisfy multi-course requirements. Each course paper must stand on its own and be targeted to the specific course requirements. Students may use a previously written paper as supporting documentation for another paper if footnoted appropriately. Two different writing assignments may be concerned with related topics, but the assignments may *not* be satisfied by the submission of an identical paper.

(BLANK)

CHAPTER 5

CHAIRMAN OF THE JOINT CHIEFS OF STAFF AND SECRETARY OF DEFENSE TRANSFORMATION ESSAY CONTESTS

In May 2009, the National Defense University will host the 28th Annual Joint Chiefs of Staff Essay Contest and the 3rd Annual Secretary of Defense Transformation Essay Contest. Through this competition, the Chairman and SECDEF challenge students at our Service colleges to write about a significant aspect of national security strategy. The competition encourages original thought, and it rewards the best of that thought with substantial prizes through the generosity of the NDU Foundation and possible publication by NDU Press.

Competition Rules

1. **ELIGIBILITY:** Students enrolled in intermediate through senior-level PME/JPME schools including:
 - a. senior service colleges,
 - b. service intermediate and advanced schools,
 - c. senior joint NDU colleges (National War College, the Industrial College of the Armed Forces),
 - d. Joint Forces Staff College.

Essays must be original, not previously published, and completed during the given academic year (2008-09). Essays cannot be submitted for publication to any other journal or academic press concurrent with this competition.

2. **TOPICS:** Competitors may write on any aspect of *national security strategy*—the use of the political, military, economic, and informational instruments of national power to achieve strategic objectives. Essays with a joint, interagency, or integrated emphasis (particularly combating global terrorism, homeland defense, and historical contributions) are encouraged.
3. **CATEGORIES:**
 - a. *Strategic Research Paper:* Maximum of 5,000 words on an open topic. This traditional research essay has been mainstay of past CJCS competitions and encourages in-depth research, analysis, and critical thinking on strategic security topics.
 - b. *Strategy Article:* Maximum of 1,500 words on an open topic. Similar in length to many current JPME course papers, the Strategy Article is a scholarly but tightly focused research paper. It is long enough to encourage scholarly research but short enough to be more appealing to a broader audience.
 - c. *SECDEF Transformation Essay:* Government Transformation Research Paper: Maximum of 5,000 words. This essay contest encourages in-depth research, analysis, and critical thinking that is long enough to complete a thorough argument but short enough to rivet a broad audience. Manuscript length is not a factor in judging so long as the maximum length is not exceeded.

4. **SECURITY CLASSIFICATION:** All papers must be unclassified/

5. **SUBMISSION DEADLINE:** All ICAF nominations must be submitted to the Director of Research and Writing NLT the day prior to domestic travel (subject to change).

*In 2007, an ICAF student won the Strategy article category,
our first win in more than a decade. Last year we had a finalist.
Keep the trend going!*

CHAPTER 6

RESEARCH AND WRITING AWARDS

ICAF has an extensive recognition program for those students whose writing is of the highest caliber. Awards are presented by senior leaders, representatives from sponsoring organizations and agencies, and the ICAF Commandant. All research projects, whether from the ICAF Research Program, the Senior Acquisition Course, Supply Chain Management or certain other electives, are automatically considered for awards. In addition, awards are presented for top core course and Regional Security Studies papers. Research projects are read by an ICAF faculty panel and evaluated for both for form and substance. As you can see, no one service or agency has a monopoly on the prizes. The following are the awards and recipients from the Class of 2008; a number of them are pending publication:

Agency Awards

Commandant's Award for Excellence in Research in Support of the Deputy Secretary of Defense Educational Initiative

Commander Charles J. Cassidy, U.S. Navy; Lieutenant Colonel William E. King, U.S. Army; Lieutenant Colonel Christopher J. Kulas, U.S. Air Force; Colonel Mark D. Laviolette, U.S. Marine Corps; Lieutenant Colonel Andrew G. Shorter, U.S. Marine Corps

Unity and Resolve: Winning the Long War

Colonel Robert J. Lain, U.S. Marine Corps; Lieutenant Colonel Nathan J. Lindsay, Jr., U.S. Air Force; Lieutenant Colonel Terrance J. McCaffrey III, U.S. Air Force, Commander Lyle D. Stuffle, U.S. Navy

The Rise of China and Implications for U.S. Policy

Lieutenant Colonel Carl S. Ey, U.S. Army; Mr. Brian Todd Landers, Department of the Navy; Mr. Mark C. Toner, State Department

Planning Strategic Communications for Success

Commandant's Award for Outstanding Research in Support of the Deputy Secretary of Defense

Ms. Diane L. Meyer, Department of the Army, and Lieutenant Colonel Gerald A. Swift, U.S. Air Force, Chairs; Lieutenant Colonel Carolyn A. Benyshek, U.S. Air Force; Mr. Stephen M. Bloor, National Security Agency; Ms. Celestine Y. Booth, Department of the Air Force; Lieutenant Colonel Stacy McNutt, U.S. Air Force; Ms. Indra D. Niles, Department of the Air Force; Dr. Eric L. Parrish, Department of the Army; Mr. Michael E. Ryan, Department of the Army

Self-Sustainable Development through Entrepreneurship and Application in Nation Building

Secretary of the Air Force Energy Research Fellowship Award

Lieutenant Colonel David M. Koch, U.S. Air Force

A Case for Coal-to-Liquids Production at Malmstrom AFB, Montana

Lieutenant Colonel Martin R. Hertz, U.S. Air Force, and

Lieutenant Colonel Anthony B. Krawietz, U.S. Air Force

24/7 Solar-Fuel Cell Electricity

National Defense University President's Strategic Vision Award

Mrs. Dawn Lynn Rosarius, Department of the Army

Avoiding Misdiagnosis by Integrating Logistics Early into the Source Selection Process for Army Medical Equipment

National Defense University Foundation Writing Award

Lieutenant Colonel Brian F. Witeof, Air National Guard

The Strategic Reserve Paradigm: Converting to a Flexible Operational Force

Dr. James T. Currie, Research Advisor

National Defense University Foundation Excellence in Research and Writing Award

Lieutenant Colonel Lawrence M. Hoffman, U.S. Air Force

Turning D.i.M.E. into D.I.M.E.: How to Strengthen America's Information Instrument of National Power and Why We Must

Ambassador's Award for Excellence in Research and Writing in the Field of Diplomacy and International Affairs

Colonel Christopher C. Thurrott, Canadian Forces

In Case of an Atomic Bomb Attack, Wear a Hat: International Traffic in Arms Regulations

Armed Forces Communications and Electronics Association's "Sparky" Baird Award for Research Excellence

Colonel George M. Pierce II, U.S. Air Force

Unique and Radio Freq Identification Programs: What Are They and Where Are They Headed?

Association for Intelligence Officers' Earl Forrest Lockwood Award for Excellence in Research and Writing

Colonel Lawrence W. Hinkin, U.S. Air Force

Short-Sea Shipping: A Rising Intermodal Star

Association of the Industrial College of the Armed Forces Award for Excellence in Research

Mr. Paul P. Barany, Department of the Army

The Dual Compensation Legislation: An Examination of the History, Second Order Effects and Associated Implications

Association of the United States Army Award for Research Excellence

Colonel Richard B. O'Connor, U.S. Army

Collateral Damage: How Can the Army Best Serve the Soldier with Post-Traumatic Stress Disorder?

Canadian Department of National Defence Prize for Regional and International Studies

Lieutenant Colonel Tim V. Henke, U.S. Air Force

Supply Chain vs. Demand Chain: Changing U.S. Air Force's Logistics Risk in the Pacific

National Defense Industrial Association Award for Excellence in Research and Writing

Lieutenant Colonel Scott J. Tew, U.S. Air Force

Benefits to the Supply Chain of Using Alternative Power in the Deployed Environment

Defense Acquisition University Award for Excellence in Research and Writing

Lieutenant Colonel Andrew D. Bianca, U.S. Marine Corps

Acquisition Reform: Throwing Water on a Grease Fire

SOLE – The International Society of Logistics – Defense Acquisition University 2008 Acquisition Program Management Field Award

Mr. Richard D. Buhl, Department of the Air Force

Performance Based Logistics: The Organic Alternative

SOLE – The International Society of Logistics – Defense Acquisition University 2008 Life Cycle Support Field Award

Lieutenant Colonel James D. Kinkade, U.S. Army

The Army's Reset Supply Chain: Getting It Right

Defense Logistics Agency Award for Excellence in Logistics Research and Writing

Colonel Deanna Lynn Cooper, U.S. Air Force

DLA Stock Positioning Policy: How Best to Support the Pacific Theater

Department of Homeland Security Chief Learning Officer's Award for Excellence in Research and Writing

Lieutenant Colonel John S. R. Anttonen, U.S. Air Force

The Three Computer War

National Contract Management Association Award for Excellence in Research and Writing

Captain Robert Bestercy, U.S. Navy

The Hybrid Supply Chain Manager

Navy League Award for Excellence in Research and Writing

Lieutenant Colonel Christopher B. Snyder, U.S. Marine Corps

Speed and the Fog of War: Sense and Respond Logistics in Operation Iraqi Freedom-I

U.S. Transportation Command Award

Colonel Kenneth C. Dyer, U.S. Army

*Addressing Supply Chain Management Standards for the Department of Defense: A Means Towards a More Integrated Logistics Network***Best Economics Paper - Fall**

Mr. Vincent E. Grewatz, Department of the Army

*A Full Spectrum Policy Approach to Globalization***Best Economics Paper – Spring**

Colonel Gene R. King, U.S. Army

*Analysis of the U.S. Ethanol Market***Best Leadership and Information Strategy Paper**

Mr. Charles A. Arnold, LMI

*Children First: Assessing General Julius Becton's Approach to D.C. Public School System Reform***Best Military Strategy and Logistics Paper**

Mr. Charles A. Arnold, LMI

*Discord and Dissonance: An Examination of Protest Music and a Review of Three Popular Songs Born of American Anti-War Sentiments***Best National Security Studies Paper**

Mr. John E. Hittle, Defense Information Systems Agency

*The Relevance of States in the Future International Order***Best Regional Security Studies Paper**

Mr. Mark C. Toner, State Department

*The Afghan PRT: Evolution and Options for the Future***Excellence in Research and Writing in the Field of Acquisition**

Ms. Carolyn M. Gleason, Department of the Air Force

Caught in a Quagmire: The Effect of Contractor Misconduct on Our National Launch Capability

Mr. John E. Hittle, Defense Information Systems Agency

Acquiring Net-Centric Information Technology: Evolving to an Information Age Construct

Mr. John T. LaFalce, Department of the Army

Industry-AMC-Soldier: Transformation of Army Materiel Command Repair Parts Supply Chain Management

Ms. Joy E. Mullori, Defense Logistics Agency

Privatized Military Operations: The Broken Compact

Ms. Lisa Marie Radocha, Department of the Navy

*Managing Program Cost Risk through Tailored Acquisition Program Baselines***Excellence in Research and Writing in the Field of Logistics**

Lieutenant Colonel Todd A. Dierlam, U.S. Air Force

The Civil Reserve Air Fleet: Supply Chain Issues

Commander Steve Kinskie, U.S. Navy
Incentivizing the Customer to Optimize DOD's Supply Chain

Ms. Jennifer A. Lasichak, Department of the Army
Supply Chain Management in Europe

Mr. John P. Madden, Department of the Navy
Outsourcing and the Distribution Process: Joint Task Force - Port Opening (Sea Port Operations)

Colonel Joseph D. Martin, U.S. Air Force
Transitioning to Alternative Fuels: Issues for Consideration

Lieutenant Colonel Daniel J. Snyder, U.S. Marine Corps
Adapting Airline Industry Supply Chain Models to the Marine Corps Aviation Supply Chain

Commandant's Award for Excellence in Research

Mr. Peter R. Bodycoat, Department of the Navy
What's In It for Me? Future US/UK Submarine Collaboration

Mr. Fernando Cossich, U.S. Agency for International Development
USAID in the Stabilization and Reconstruction of Iraq and Afghanistan

Lieutenant Colonel Cathy Haverstock, U.S. Air Force Reserve
Managing Immigration: Two Centuries of Trial and Tribulation by the United States, Canada and Australia

Lieutenant Colonel Michael R. Taheri, Air National Guard
Clipped Wings: America's Air Force in a Constrained Budget Environment

Mr. James Richard Tyler, Department of the Army
Linking Science and Technology Needs and Efforts to the National Security Strategy

Excellence in Research and Writing in Industry Studies

Lieutenant Colonel David M. Koch, U.S. Air Force, and Lieutenant Colonel Daniel J. Snyder, U.S. Marine Corps
Strategic Sourcing for Government and Private Industry

Mr. James R. Tyler, Department of the Army
Interagency Cooperation and the Integration of Unmanned Aircraft Systems into the NAS

Chairman of the Joint Chiefs of Staff Essay Contest

Semifinalist: 5000-Word Strategy Article

Lieutenant Colonel John S. R. Anttonen, U.S. Air Force
The Three Computer War: Cyberwar Amongst the People

Semifinalist: 5000-Word Strategy Article

Colonel David W. Shin, U.S. Army
DoD Directive 3000.05 Action Plan: Setting DoD Priorities for Stability Operations and Identifying Solutions to Narrow the Gap

Semifinalist: 5000-Word Strategy Article

Commander Timothy J. White, U.S. Navy
National Information Strategy: Resiliency and Restraint

Semifinalist: 1500-Word Strategy Article

Colonel Welton Chase, Jr., U.S. Army
Global Response: A National Security Strategy for the Next Ten Years

Semifinalist: 1500-Word Strategy Article

Lieutenant Colonel James D. Kinkade, U.S. Army
Of Strength and Balance: Refocusing U.S. Strategy for a Turbulent World

Semifinalist: 1500-Word Strategy Article

Ms. Stephanie Lopez, Department of the Army
Integrating COCOMs' Functional Requirements and DoD Business Enterprise Logistics Efforts

Finalist: 1500-Word Strategy Article

Lieutenant Colonel Patrick T. Kumashiro, U.S. Air Force (Finalist)
Cultural Engagement: A New Approach to U.S. National Security Strategy in the Middle East

Secretary of Defense Transformation Essay Contest Semifinalists

Colonel John G. Ferrari, U.S. Army
Leveraging the Department of Defense to Enhance Interagency Nation Building Capacity

Lieutenant Colonel William E. King, U.S. Army
Homeland Security, Global War or Terrorism, and Combating Weapons of Mass Destruction: Are These Long War Strategies Supporting and Parallel or Competing and Incompatible?

Colonel David W. Shin, U.S. Army
"Awakening" Beyond Iraq: Time to Engage Islamic Extremists as Stakeholders

Colonel Brian A. Sundin, U.S. Army
Force Projection Strategy Threatened: Lack of Assured Access and Congestion at Strategic Seaports

APPENDIX A

WRITING STANDARDS AND WRITING CHECKLIST

WRITING STANDARDS

THE WRITTEN PRODUCT:

1. **Is the student's original work prepared for the specific assignment.** If the words reflect the ideas or concepts of anyone other than the student, **CITE THE SOURCE** in your paper. This includes direct quotations and paraphrasing.
2. **Reflects use of higher order intellectual skills.** The following intellectual skills are ordered from the least to the most complex; each requires concrete supporting evidence.

Analysis: Demonstrates understanding of concepts by explaining them, giving examples, breaking them into component parts, or applying them.

Synthesis: Combines concepts relevant to the development of the issue or thesis, including new ideas if appropriate.

Evaluation: Applies concepts through logically reasoned, thoughtful judgment on complex issues.

3. **Is logically organized.**

Introduction: Captures the reader's interest from the outset. Presents a clear thesis or purpose statement and states the key areas of discussion the writer will address. Transitions in a manner that leads the reader naturally into the main body.

Main Body: Presents ideas and supporting evidence in an orderly flow that logically leads the reader from concept to concept. Employs transition words and phrases to link ideas in a serial fashion.

Conclusion: Reinforces the thesis/purpose developed in the main body by summarizing the concepts and providing well-reasoned recommendations. Recaps the key arguments and gives a satisfying sense of completion.

4. **Uses appropriate style.**

Expression: Is written clearly for the reader; uses language that the intended reader speaks and hears every day – primarily active voice; includes personal pronouns, ordinary words, and an appropriate variety of punctuation.

Transitions: Leads the reader smoothly through composition; provides clear, natural linkage between ideas, sentences, and paragraphs.

5. **Is grammatically and mechanically correct.**

Grammar: Uses commonly accepted standards for:

Capitalization	Punctuation
Contractions	Subject-verb agreement
Possessives	Verb tense
Pronoun-antecedents	

Mechanics: Uses correct spelling; has no typographical errors; uses appropriate format

<i>Writing Checklist – Mechanics</i>	No Problem	Slight Problem	Serious Problem
Spelling			
Capitalization			
Sentence fragments			
Run-on sentences			
Comma usage			
Semicolon and colons			
Quotations (use and format)			
Subject/verb agreement			
Consistency of tense			
Parallel construction (using matching words, phrases, clauses or sentence structures to express equivalent ideas)			
Active (vs. passive) voice			
Consistent voice/person			
Format (references, footnotes/endnotes, bibliography, etc., according to style manual)			

Writing Checklist - Structure	No Problem	Slight Problem	Serious Problem
<p>Introduction Does the paper have an introduction, or does the writer start in the middle? Is there a thesis statement – the key point the writer will defend/prove – or at least a purpose statement? Does the introduction provide the reader with a preview of key ideas to be discussed?</p>			
<p>Thesis/Purpose Statement Is there an explicit or embedded thesis or purpose statement in the first or second paragraph?</p>			
<p>Body Is the essay divided into appropriate paragraphs? Are section headings used as appropriate?</p>			
<p>Conclusion Does the conclusion recap the essential arguments/points of the essay? Does the writer provide an appropriate summation? Does the writer err by providing “new” information in the last paragraph? Does the essay just stop?</p>			
<p>Logic Flow Is the paper well-organized? Are ideas/arguments presented in a logical order – or are the paragraphs so disconnected that they could be rearranged with no impact? Does the writer jump from one idea to another, or do the ideas build?</p>			
<p>Transitions Does the writer use transition words and phrases to link ideas smoothly? Are ideas presented in a “machine-gun” manner?</p>			
<p>Sentence Structure Are the sentences well constructed? Are they short and choppy? Long and rambling? Does the essay flow, i.e., “read” smoothly?</p>			
<p>Scope Does the writer try to cover too much material? Not enough?</p>			
<p>Language Is the language appropriate in terms of vocabulary/word choice? Is the tone conversational yet professional? Is the wording either pedantic or overly simplistic?</p>			
<p>Content Do the paper’s ideas relate to the assigned topic? Does the writer go off on a tangent or use the assignment to get on a soapbox? Does it make sense?</p>			
<p>Support Are the writer’s arguments logically supported? Does the writer support arguments through direct quotes and reference material as appropriate? Does the paper contain unsubstantiated assertions?</p>			
<p>References Does the writer follow the approved style guide for references? Are the references constructed correctly? Are they from robust, credible sources?</p>			

APPENDIX B

RESEARCH PROPOSAL FORM

ICAF STUDENT RESEARCH APPLICATION AY 2009

I. Preliminary Research Topic Approval: DUE 22 Aug 08 (Fall) or 24 Oct 08 (Spring)

NAME: _____
(Last, First, MI)

RESEARCH TOPIC: _____

COURSE NUMBER:

- 5650 TUTORIAL READING/INDEPENDENT STUDY FALL (2 credit hours)
- 5650 TUTORIAL READING/INDEPENDENT STUDY SPRING (2 credit hours)
- 5651 RESEARCH FALL (2 credit hours)
- 5651 RESEARCH SPRING (2 credit hours)
- 5652 RESEARCH FALL (4 credit hours)
- 5652 RESEARCH SPRING (4 credit hours)
- 5653 RESEARCH FALL/SPRING (4 credit hours)
- 5654 RESEARCH FELLOW (8 credit hours)
 - o ICAF
 - o DEPSECDEF
 - o SECAF
 - o OSD/BTA
 - o NORAD/USNORTHCOM
 - o QDR

PRELIMINARY RESEARCH QUESTION: _____

FACULTY RESEARCH ADVISOR: _____
(PLEASE PRINT NAME)

(Faculty Research Advisor Signature) Date: _____

Date: _____
CHRISTINA L. LAFFERTY, Ed.D.
Director of Research and Writing

II. Research Proposal Final Approval: DUE 16 Sep 08 (Fall) or 4 Dec 08 (Spring)

FINAL RESEARCH TOPIC: _____

FINAL RESEARCH QUESTION: _____

BRIEF STATEMENT OF METHODOLOGY: _____

PRELIMINARY OUTLINE: (attach separate sheet)

FACULTY RESEARCH ADVISOR: _____

(PLEASE PRINT NAME)

_____ Date: _____

(Faculty Research Advisor Signature)

_____ Date: _____

CHRISTINA L. LAFFERTY, Ed.D.

Director of Research and Writing

YOU MUST

- (1) Engage a Faculty Research Advisor,
- (2) Obtain Faculty Research Advisor and Director of Research approval of Part I before signing up for electives, and
- (3) Obtain Faculty Research Advisor and Director of Research final approval of Part II by the date indicated.

Director of Research and Writing: Dr. Chris Lafferty (laffertyc@ndu.edu);
Rm 328 @ (202) 685-4330.

APPENDIX C

AGENCY SPONSORED RESEARCH

Agency Sponsored Research Fellowship Information Meeting

**14 August 2008
1215-1315
Room 101**

Representatives from the five sponsoring agencies will talk about their Fellowships and answer questions. Faculty Research Advisors will start forming Research Fellowship teams as well as matching up with individual researchers.

Deputy Secretary of Defense Educational Initiative

Academic Year 2009 marks the second year of the Deputy Secretary of Defense Educational Initiative. Deputy Secretary of Defense Gordon England has invited senior and intermediate-level Joint Professional Military Education colleges to form one or two small student groups to help address major long-term strategic challenges in the Department and the nation.

Each group will conduct an assessment, produce a concise paper and supporting presentation as the final products, and be prepared, if selected, to brief DoD senior leaders on their findings and recommendations. Products may be classified or unclassified. Fresh thinking and new insights are particularly welcome.

The ICAF team(s) will select one of the broad, long-range issues of most interest to DoD senior leaders, to be provided in early August, and then work with Policy Planning in the Office of the Secretary of Defense (Policy) to refine a more specific paper topic that can be meaningfully addressed in 10 to 20 pages.

Secretary of the Air Force Energy Research Fellowship

Now in its second year, the SECAF Energy Fellowship operates under the direction of the Assistant Secretary of the Air Force for Installations, Environment and Logistics. Fellows seek to make a real-world, real-time difference in these critical energy areas:

- Synthetic jet fuels
- Solar energy
- Nuclear energy
- Coal-to-liquid
- And more!

Funding is available for travel and research costs. Fellows may work in teams or alone. Topics may also be modified for smaller scale research projects.

HQ NORAD/USNORTHCOM

This is the first year for the Headquarters North American Aerospace Defense Command – U.S. Northern Command Research Fellowship. NORAD/USNORTHCOM has framed 38 research questions that fit the ICAF curriculum, including:

- Use of Joint Special Operations Forces in Homeland Defense
- Cyber Defense
- Intelligence Fusion between Canada, the United States and Mexico.
- Changing the Intelligence Culture
- Asymmetric Threats Threatening Canada in the Near Term
- Bi-National Maritime Domain Awareness (MDA)
- Bi-national Interoperability Initiatives
- Defense Industrial Base, Critical Infrastructure
Unity of Effort for Civil Support Operations
- Mexico – U.S. Enhanced Intelligence Relationship
- CBRNE Capabilities-Based Strategic Risk Assessment
- Knowledge Management for Command Decision Making in Disaster Management
- Intel Fusion and Civil Liberties.
- Pandemic (i.e. Avian Bird Flu)

Funding is available for travel and research costs. Fellows may work in teams or alone.

Air Force Quadrennial Defense Review Research Fellowship

AY 2009 marks the inaugural year of the USAF QDR Research Fellowship. Under the direction of Mr. Mark Peterson, Associate Director of AF/CVAQ, this fellowship offers students the opportunity to research real-world issues that will impact Air Force strategic planning. Selected fellows will be offered the opportunity to brief their results at the Pentagon. Research topics are:

- **National Security Implications of Climate Change (per the FY 2008 NDAA section 951).** What are the implications of global climate change on the ability of the Air Force to conduct missions from major installations in CONUS and OCONUS? While the question is AF centric, AF/CVAX has the Naval Postgraduate School looking at this (there are a significant number of AF students there and they have a National Security Affairs division). The ICAF fellowship, in contrast, should look across the DoD from a joint perspective since much of what the AF brings to DoD is joint (e.g., mobility and space).
- **Combat Aircraft Industry Base Study.** This research specifically needs to look at the implications and risks of the reduced CAF industry base. Specifically, the focus is implications of going to a single supplier of 5th generation technology and the ramifications of losing the capability to adequately compete this advanced technology in our US industry base. Note that AT&L/PA&E are currently going through a major wargame on this topic –the research fellowship will use much of the data coming out of this wargame to help facilitate their research.

Funding is available for travel and research costs. Fellows may work in teams or alone.

This agency is also interested in research on the following smaller-scope issues:

Topic	Issues/Questions
Cyberspace	<ol style="list-style-type: none"> 1. Is Computer Network Attack capability necessary in more than one Service? 2. What should be the Air Force's long term investment strategy for cyber operations? What should the Air Force Cyber Command look like in 20 years? 3. There are restrictions associated with conducting computer network exploitation (Title 50) and computer network attack (Title 10). Do these restrictions inhibit military computer network operations? If so, what steps need to be taken to permit effective application of military power?
National security implications of global climate change	<ol style="list-style-type: none"> 1. What are the implications of global climate change on AF installations in CONUS and OCONUS? <ul style="list-style-type: none"> • Assess the long-term viability of AF installations based on an evaluation of a number of commonly-recognized climate degradation/deterioration scenarios
Alternative energy research	<i>Topics from DSB Task Force on DoD Energy Strategy</i>
UAS	<ol style="list-style-type: none"> 1. How should AF MQ-1/MQ-9 units be best structured to maintain proficiency in operational support to the JFACC while providing better support to deployed ground forces? Should the AF invest a portion of their equipment and operators in air liaison units attached to the Army brigades? 2. What Joint missions should the AF align MQ-9 with to take advantage of its weapons payload while retaining the flexibility to conduct reconnaissance? (e.g. CAS) What Joint missions would be enhanced by teaming MQ-9 with manned platforms (e.g. A-10, F-16, F-35)? 3. What limitations of current multi-mission UAS would preclude it being effective in other theaters (performance, weather)? What missions should UAS be optimized for in the future (SEAD/DEAD, long range strike, persistent surveillance)? 4. How should processing, exploitation, and dissemination evolve to prioritize detailed analysis and better determine appropriate level of analysis required? Should the current levels of exploitation be redefined? How can the different stakeholders better communicate the level of exploitation required?
Prompt Global Strike	<ol style="list-style-type: none"> 1. Analyze possible options for development and fielding of a prompt global strike capability <ul style="list-style-type: none"> • "Capability to deliver prompt, precise, conventional kinetic effects at inter-continental ranges." - CDRUSSTRATCOM
Electronic Warfare	<ol style="list-style-type: none"> 1. How can the AF address the expected EW capability gap beginning in 2012 and the Core Component Jammer IOC in 2015-2017? 2. What type of joint structure can DoD develop to ensure an integrated and sustained EW capability?
Strategic Deterrence	<ol style="list-style-type: none"> 1. What shape will strategic deterrence take in the post-OIF/OEF world? What will the AF's role be?
Missile Defense	<ol style="list-style-type: none"> 1. What is the long-term structure and role and mission of MDA? Analysis should include the following: <ul style="list-style-type: none"> • Whether MDA should be maintained in its current configuration; • Whether the scope and nature of MDA should be changed from an organization focused on research and development to an organization focused on combat support; • Whether any functions and responsibilities should be added to MDA, in part or in whole, from other entities such as the USSTRATCOM and the Services • Whether any functions and responsibilities of MDA should be transferred, in part or in whole, to other entities such as the USSTRATCOM and the

Department of Defense Business Transformation Agency Research Fellowship

The Department of Defense Business Transformation Agency (BTA) is offering a new Fellowship for AY09. The Fellowship will provide the opportunity for students to research how DOD can build a business enterprise that is agile, responsive, and accountable. Fellows will select from topics ranging from business best practices; enterprise integration; transformation planning and performance; warfighter support; expeditionary business operations; and financial, human resources, acquisition, and supply chain visibility.

Funding is available for travel and research costs. Fellows may work individually or as a team. Fellows will have the opportunity to brief the Director and senior members of the Business Transformation Agency on their findings.

In addition to the Research Fellowship, BTA is interested in sponsoring research projects on a smaller scale. Students will be provided a list of topics for consideration or may propose a topic for approval.

Agency Sponsored Research Team Formation

Each Research Fellowship team must follow the ICAF Research Fellow approval process outlined in the *Research and Writing Handbook*. The team(s) composition will depend on the nature of the topic and the level of interest – most likely from 3-5 students. Individuals may opt to work alone as well.

Prospective teams will submit a Preliminary Research Approval Form containing all team members' names. In addition, each applicant must present two samples of his or her writing. The package must be delivered to the ICAF Director of Research and Writing (Dr. Lafferty) by COB 22 Aug 2009.

If more teams apply than can be accommodated by OSD (Policy), final selection will be done by the Research Director and the Dean of Faculty or his designee.

Research Fellowship Timeline

- | | |
|---------------------|--|
| • 22 Aug 2008 | Preliminary Research Topic Approval Form due |
| • 19 Sep 2008 | Research Proposal Final Approval Form due |
| • 19 Sep 2008 | Confirmation of ICAF participation to sponsoring agency |
| • NLT 15 Jan 2009 | Mid-year informal progress update to sponsoring agency |
| • NLT 15 April 2009 | Nomination and submission of papers to sponsoring agency |

- May 2009

Selected teams present paper at sponsoring agency

APPENDIX D

ICAF FACULTY AREAS OF INTEREST

**ICAF FACULTY MEMBER AREAS OF INTEREST
(BY ACADEMIC DICIPLINE)**

ANTHROPOLOGY:

deVillafranca, Lafferty, Sullivan, Whittaker,
Vaitkus

ART AND ARCHITECTURE:

Montroll

DECISION SCIENCE/GAME THEORY:

M. Davis, Russo

ECONOMICS:

Abbott, Berg, Book, Brent, Crandall, Foulon,
King, Liss, Losman, Needham, Russo,
Sammis, Shipe, Sullivan, Weissman

EDUCATION:

(including Adult Learning)

A'Hearn, Basile, Browning, Corvette, Currie,
M. Davis, Gropman, Knowlton, Lafferty,
McGuire, Montroll, Severance, Stavrakis,
Whittaker

ENGLISH/AMERICAN LITERATURE:

Kramer, Lafferty

ENGINEERING:

Basile, Ford, Koprucu, Loomer. Montroll,
Yaeger

GEOGRAPHY:

Loomer, Severance

GEOPOLITICS:

Severance, Stavrakis, Sullivan

HEALTH CARE ADMINISTRATION:

Book, Browning, M. Davis, Eglan, King,
Knowlton

HERMANEUTICS:

Severance

HISTORY:

Abbott, Andrews, Berg, S. Brown, Cooling,
Currie, Goldberg, Gropman, Knowlton,
Kramer, Meyer, Moss, Myers, Myhre,
Randolph, Severance, Stavrakis, Sullivan,
Whittaker

Civil War and Reconstruction

History: Black, Cooling, Myhre, Severance

HUMAN DEVELOPMENT:

Browning, Corvette, M. Davis, Lafferty,
Severance, Sullivan

INTELLIGENCE:

Lawrence, McShane

INFORMATION SYSTEMS:

Altieri, Andrews, Basile, King, Kingscott,
Thompson

JOURNALISM:

Briggs, Carpenter, Currie, Gropman

LAW:

Abbott, Altieri, Corvette, Currie, Dorsey,
Goldberg, Keys, Moss, Terpinas

LEGAL SYSTEMS

Corvette

LOGISTICS:

Eglan, Kumashiro, Leignadier, Morris,
Needham, Vargo

MARKETING:

Leith, Needham

MEDICINE:

Book, M. Davis, Knowlton, Stavrakis,
Whittaker

MILITARY STRATEGY:

Andrews, Carpenter, Severance, Shaw

PHILOSOPHY:

Corvette, Goldberg, Moss, Stavrakis,
Sullivan, Whittaker

PHYSICS:

Basile, Ford, Kaplan, Yaeger

POLITICAL SCIENCE: (Includes
International Relations)

Abbott, Cooling, Currie, Goldberg, King,
Kingscott Koprucu, Kramer, Lawrence,
Loftis, Meyer, Moss, Pham, Russo,
Stavrakis, Sullivan, Terpinas, Whittaker

PUBLIC ADMINISTRATION: Russo,
King**PUBLIC SPEAKING:**

Corvette, Koprucu, Lawrence, Russo,
Stavrakis, Sullivan

PSYCHOLOGY:

Corvette, M. Davis, Knowlton, Lafferty,
McGuire, Whittaker, Vaitkus

RELIGION:

Book, M. Davis, Gropman, Meyer, Moss,
Russo, Sullivan, Vaitkus, Vargo

SOCIOLOGY:

Andrews, Corvette, M. Davis, Stavrakis,
Vaitkus, Whittaker

STATISTICS:

Book, Ford, Needham, Vaitkus, Weissman,
Yaeger

STRATEGIC LEADERSHIP:

Black, Browning, Carpenter, M. Davis,
Knowlton, Lafferty, Lawrence, McGuire,
Pham, Thompson

SUPPLY CHAIN:

Egland, Hauser, Leignadier, Morris,
Needham, Vargo

SYSTEMS MANAGEMENT:

Corvette, Ford, Montroll, Needham

TRANSPORTATION:

Book, Leignadier, Morris, Needham, Russo,
Shipe

WRITING: (Composition)

Berg, Corvette, deVillafranca, Lafferty

**ICAF FACULTY AREAS OF INTEREST
(BY GEOGRAPHIC REGION)**

CANADA/MEXICO:

Cooling, King, Lafferty, Liss,

CENTRAL AMERICA/CARIBBEAN:

Currie, Russo

SOUTH AMERICA:

Berg, Currie, King, Stavrakis, Swain

EUROPE: (Central/Northern)

Basile, Carpenter, Cooling, Gropman, Kramer, Kumashiro, Meyer, Moss, Randolph, Stavrakis, Whittaker

EUROPE: (Eastern)

Basile, Black, T. Brown, Kramer, Meyer, Randolph, Stavrakis, Whittaker

EUROPEAN UNION: (Incl. Southern Flank)

Abbott, Basile, Carpenter, Cooling, Kramer, Meyer, Moss, Myhre, Stavrakis, Whittaker

RUSSIA/NEW INDEPENDENT STATES:

Altieri, Babus, Black, Blair, Cooling, Crandall, Goldberg, King, Kramer, Meyer, Myers, Pham, Russo, Stavrakis, Whittaker

MIDDLE EAST/PERSIAN GULF:

Crandall, Foulon, Goldberg, Kumashiro, Leignadier, Losman, Moss, Sullivan, Whittaker

SUB-SAHARAN AFRICA:

Brent, Leignadier, Myers, Russo, Stavrakis

CHINA:

Altieri, King, Pham, Randolph, Russo, Stavrakis, Thompson, Whittaker

NORTHEAST ASIA:

Altieri, S. Brown, Whittaker

PANAMA:

Currie

OCEANS/WORLD'S COMMONS:

Severance, Sullivan

SOUTHEAST ASIA/SOUTH PACIFIC:

Gropman, Leith, Myers, Pham, Sullivan, Thompson

SOUTH ASIA:

Goldberg, Sullivan

**ICAF FACULTY AREAS OF INTEREST
(BY INDUSTRY)**

AGRIBUSINESS:

Abraham, Currie, Meyer, Randolph, Stavrakis, Sullivan

AIRCRAFT:

Abbott, Black, Briggs, Berg, Carpenter, DeDecker, Needham, Russo, Yaeger

BIOTECHNOLOGY:

Book, Dorsey, Goldberg, Lafferty, Montroll

RECONSTRUCTION AND VITAL INFRASTRUCTURE

Black, Brent, Myhre, Needham, Vargo

EDUCATION: Russo,

A'Hearn, Browning, M. Davis, Ford, Lafferty, McGuire, Myers, Severance, Stavrakis, Vaitkus

ENVIRONMENT:

Book, Meyer, Myers,

ELECTRONICS:

Losman, Moss, Yaeger

ENERGY:

Benton, Crandall, Kramer, Leith, Losman, Morris, Myers, Sullivan, Swain

ENVIRONMENT/OCEANS:

Foster, Meyer, Montroll, Sullivan

FINANCIAL SERVICES:

Abbott, Blair, Corvette, Kaplan, Kumashiro, Needham, Severance, Sullivan

HEALTH CARE:

Book, Briggs, T. Brown, Browning, M. Davis, Knowlton, Lafferty, Stavrakis

INFORMATION AND COMMUNICATIONS TECHNOLOGY:

Altieri, Book, Carpenter, Kaplan, King, Myers, Thompson

LAND COMBAT SYSTEMS:

DeDecker, Severance, Shipe

MANUFACTURING:

Abbott, Liss Basile,, Needham, Russo, Swain, Vargo

MEDIA:

Briggs, Carpenter, Corvette, Currie, Gropman, Herr, Lawrence, Randolph, Vaitkus

PRIVATIZED MILITARY OPERATIONS:

DeDecker, Hill, King, Swain, Vargo

SHIPBUILDING:

Book, Montroll, Yaeger

SPACE:

Carpenter, Ford, Loomer, Needham, Randolph, Russo, Swain

STRATEGIC MATERIALS:

Babus, M. Davis, Severance, Vargo

TRANSPORTATION:

(Air, Sea, Land, Rail)

Black, Book, Briggs, Leignadier, Myhre, Needham, Russo

WEAPONS:

Basile, S. Brown, Carpenter, Morris, Shaw

**ICAF FACULTY AREAS OF INTEREST
(BY FUNCTIONAL AREA)**

ACQUISITION:

Abbott, A'Hearn, Altieri, Brigg Basile,
S. Brown, Cooling, DeDecker, Dorsey, Montroll,
Needham, Vargo

ARMS CONTROL:

Carpenter, Moss, Sullivan, Whittaker

ARMS SALES:

Abbott, S. Brown, Losman, Needham, Sullivan

ATHLETIC INJURIES/TRAINING:

Severance

AVIATION (including Aeronautics):

Black, Briggs, Carpenter, Gropman, Randolph,
Russo, Severance, Swain

BIOTERRORISM:

Black, Carpenter, Goldberg

BUDGETING: (Incl. PPBS)

Briggs, Corvette, Gropman, King, Needham

BUSINESS-GENERAL:

Abbott, A'Hearn, Browning, Book, Cooling,
Corvette, Crandall, Foulon, Hauser, King, Leith,
Liss, Morris, Moss, Needham, Sullivan

BUSINESS, INDUSTRY AND DEFENSE:

Cooling, Hauser, Vargo

CAMPAIGN PLANNING:

The Military Strategy and Logistics Department
Faculty; Gropman

CHAOS/COMPLEXITY THEORY:

Book, Carpenter, Corvette, Sullivan

CIVIL AFFAIRS/CIVIC ACTION:

Currie, P. Goldberg, Sullivan

CIVIL DEFENSE:

Cooling

CIVIL-MILITARY RELATIONS:

Abbott, Cooling, Currie, Goldberg, Moss,
Randolph, Severance, Stavarakis

COALITIONS AND ALLIANCES:

Cooling

COGNITIVE PSYCHOLOGY

Corvette, M. Davis, Browning

COMMAND AND CONTROL:

Black, Carpenter, Cooling, Kaplan

COMMUNICATIONS THEORY:

Book, Carpenter, Corvette, Lafferty

COMPUTERS:

Altieri, Book, Kaplan, Loomer, Sullivan,
Whittaker, Yaeger

CONFLICT THEORY:

Brent, Carpenter, Corvette, Sullivan,
Whittaker

CONGRESS/LEGISLATIVE PROCESS:

Briggs, Corvette, Currie, DeDecker,
Goldberg, Lawrence, Moss, Whittaker

CONTRACTING:

Abbott, A'Hearn, Altieri, Corvette, DeDecker,
Dorsey, Morris, Needham

COST ANALYSIS:

Briggs, Corvette, King, Needham, Russo

CRIMINAL JUSTICE:

Altieri, Corvette, Keys, Lawrence

CRITICAL/CREATIVE THINKING:

The Leadership Department Faculty

CULTURE AND IDEOLOGY:

Lafferty, Morris, Vaitkus

DEATH, DYING and GRIEF:

M. Davis, Myers, Lafferty

DECISION MAKING:

Black, Briggs, Browning, Corvette, M. Davis,
King, Needham, Stavarakis, Whittaker

DEFENSE CONVERSION:

Abbott, S. Brown, Cooling, Needham,
Sullivan

DEFENSE SCIENCE:

Basile, Cooling, Ford, Kaplan

DEMOGRAPHICS:

Book, Sullivan

DEVELOPMENT ASSISTANCE:

Babus, Brent

DIPLOMACY:

Babus, Cooling, Corvette, Currie, Goldberg, Kramer, Meyer, Moss, Randolph, Sullivan, Stavrakis, Terpinas, Whittaker

DRUG TRAFFIC/CONTROL:

Stavrakis, Myers, Sullivan

EMERGENCY MANAGEMENT:

Black, Cooling

ENVIRONMENTAL SECURITY:

Sullivan

ETHICS:

Book, Briggs, Carpenter, Corvette, Goldberg, Gropman, Knowlton, Lafferty, Moss, Stavrakis, Sullivan, Whittaker

ETHNIC CONFLICT:

Brent, Gropman, Meyer, Myers, Stavrakis, Sullivan, Whittaker

EVALUATION THEORY:

Severance

EXECUTIVE COACHING/LEADERSHIP DEVELOPMENT

Browning, M. Davis

FINANCIAL MANAGEMENT

Corvette, Hill

FITNESS/HEALTH: M. Davis, Knowlton, Shaw, Sullivan, Vaitkus**Athletic Injuries/Training:** Shaw**FORECASTING/FUTURES:**

Needham, Pham, Sullivan

FOREIGN MILITARY SALES:

Abbott, S. Brown, Losman, Needham

GAMING/SIMULATION/ EXERCISES:

Altieri, Gropman, Needham, Sullivan, Weissman, Whittaker

GOVERNMENT/INDUSTRY RELATIONS:

Abbott, A'Hearn, Altieri, Basile, S. Brown, Cooling, Corvette, Crandall, Foulon, King, Losman, Moss, Sullivan

HEALTH/HUMAN SERVICES:

M. Davis, Whittaker

HOMELAND SECURITY:

Black, Cooling

HUMANITARIAN ASSISTANCE:

M. Davis, Knowlton, Myhre, Stavrakis, Whittaker

INDUSTRY CONVERSION:

Abbott, Cooling, Hauser, King, Needham, Sullivan

INDUSTRY – GENERAL:

Abbott, A'Hearn, Altieri, Basile, Book, Cooling, Corvette, Hauser, Losman, Needham, Sullivan

INFORMATION OPERATIONS:

Carpenter, Hauser, Koprucu

INSURGENCY/COUNTER-**INSURGENCY:**

Carpenter, Hill

INTEGRATION/INTEROPERABILITY:

Basile

INTELLIGENCE/COVERT ACTION:

Crandall, Currie, Hill, Lawrence, Loomer, Meyer, Moss, Stavrakis, Terpinas, Whittaker

INTERAGENCY PROCESS:

Black, Babus, Cooling, Meyer, Pham, Randolph, Severance, Sullivan, Terpinas, Whittaker

INTERNATIONAL LOGISTICS:

Leignadier, Myhre, Needham, Sullivan, Vargo

INTERNATIONAL ORGANIZATIONS:

King, Meyer, Myers, Pham, Stavrakis, Sullivan, Whittaker

INTERNATIONAL RELATIONS:

Cooling, Goldberg, Kramer, Lawrence, Meyer, Moss, Stavrakis, Sullivan, Whittaker

LEADERSHIP/MANAGEMENT:

A'Hearn, Black, Browning, Corvette, M. Davis, King, Knowlton, Lafferty, McGuire, Pham, Thompson, Whittaker

LOGISTICS:

Abbott, Cooling, Gropman, Hauser, King, Kumashiro, Leignadier, Liss, Morris, Myhre, Needham, Severance, Vargo

**LOW INTENSITY CONFLICT
REVOLUTION/TERRORISM:**

M. Davis, Goldberg, Gropman, Losman, Moss, Needham, Stavrakis, Sullivan, Whittaker

MACHINE TOOLS:

Basile, Needham

MANPOWER/PERSONNEL:

Corvette, Knowlton, Morris

MEDICAL GEOGRAPHY:

Severance

MILITARY GEOGRAPHY:

Carpenter, Loomer, Severance

**MILITARY OPERATIONS/ ORGANIZATION:
(AIR):**

Black, Carpenter, Cooling, Gropman, Hill, Randolph, Yaeger

**MILITARY OPERATIONS/ ORGANIZATION:
(Land):**

Cooling, Severance

**MILITARY OPERATIONS/
ORGANIZATION: (Sea):**

Abbott, Black, Cooling, Yaeger

**MILITARY OPERATIONS/
ORGANIZATION: (Joint)**

Black, Carpenter, Cooling, Gropman, Randolph, Severance, Shaw

**MILITARY OPERATIONS/
ORGANIZATION: (Combined-Multinational)**

Cooling, Gropman, Randolph, Stavrakis

**MILITARY OPERATIONS OTHER THAN WAR:
(MOOTW)**

Carpenter, Moss, Whittaker

MILITARY OPERATIONS/

ORGANIZATIONS: (Reserve Components):
Cooling, Currie, Lafferty, Randolph,

MIND AND BRAIN (Neuroscience):

Browning, Lafferty

MOBILIZATION:

Abbott, Cooling, Gropman, Hauser, Losman, Needham, Sullivan

MODELING:

Altieri, Basile, Kaplan, Needham

MULTILATERAL DIPLOMACY:

(including Global Governance)
Moss, Stavrakis

NATURAL DISASTERS:

Black, M. Davis, Lafferty, Sullivan

NATURAL RESOURCES:

Crandall, Myers, Sullivan

NEWS MEDIA:

Briggs, Corvette, Currie, Goldberg, Gropman, Lafferty, Lawrence, Sullivan, Vaitkus, Whittaker

**NUCLEAR-BIOLOGICAL-CHEMICAL
WEAPONS/EFFECTS:**

Black, Carpenter, Goldberg, Sullivan, Swain

ORGANIZATIONAL CHANGE

Black, Lafferty, Thompson

**ORGANIZATIONAL THEORY;
BEHAVIOR; STRATEGIC LEADERSHIP:**

Abbott, A'Hearn, Black, Browning, Carpenter, Corvette, M. Davis, King, Knowlton, Lafferty, McGuire, Severance, Thompson, Vaitkus, Whittaker

PEACEKEEPING/PEACE**ENFORCEMENT:**

King, Leith, Liss, Meyer, Sullivan, Vaitkus, Whittaker

PEACE RESEARCH:

Brent, Corvette, Goldberg, Meyer, Myers, Stavrakis, Sullivan, Whittaker

POLICY PROCESSES:

Abbott, Black, Book, Cooling, Corvette, Goldberg, Gropman, Pham, Stavrakis, Whittaker

POST-CONFLICT NATION BUILDING:

Brent, S. Brown, Leith, Myers, Stavrakis

POW/MIA AFFAIRS:

Lafferty

PROGRAM/PROJECT MANAGEMENT:

Corvette, DeDecker, Severance

PUBLIC DIPLOMACY/PSYCHOLOGICAL WARFARE:

Sullivan, Whittaker

PUBLIC OPINION:

Carpenter, Corvette, Currie, Lafferty, Whittaker

QUANTITATIVE METHODS:

Basile, Book, Lafferty, Leith, Needham, Russo, Thompson, Weissman

QUALITATIVE METHODS:

Abbott, Corvette, Lafferty, Severance

RACE/ETHNICITY/SEXUAL ORIENTATION:

Goldberg, Gropman, Whittaker

RESEARCH AND DEVELOPMENT:

A'Hearn, Basile, Book, S. Brown, Ford, Montroll, Sullivan

RESERVE COMPONENT:

Buonassisi, Currie, Lafferty

SAFETY

Severance

SECURITY ASSISTANCE/TECHNOLOGY TRANSFER/EXPORT CONTROL:

S. Brown, Cooling, Losman, Needham, Sullivan

SIMULATION:

Altieri, Carpenter, Needham, Whittaker

SOCIAL NEUROSCIENCE:

Browning, Lafferty

SPECIAL OPERATIONS:

DeDecker, Hill

STABILIZATION & RECONSTRUCTION: NATION BUILDING:

Brent, Carpenter, Gropman

STATE-LOCAL GOVERNMENT:

King, Russo,

STRATEGY:

Carpenter, Cooling, Corvette, Goldberg, Gropman, Hauser, King, Kramer, Meyer, Moss, Pham, Severance, Sullivan, Whittaker

STRATEGIC PLANNING:

Black, Browning, Cooling, Corvette, Kumashiro, Lafferty, Lawrence, Meyer, Montroll, Morris, Pham, Sullivan

SUPPLY CHAIN MANAGEMENT:

Hauser, Morris, Needham, Vargo

SYSTEMS THEORY:

Corvette, Ford, Kaplan

TECHNOLOGY-GENERAL:

Book, S. Brown, Cooling, Ford, Montroll, Moss, Sullivan, Yaeger

TECHNOLOGY TRANSFER AND EXPORT CONTROL:

Moss

TERRORISM:

Black, M. Davis, Goldberg, Losman, Sullivan, Terpinas, Whittaker

TEST AND EVALUATION:

(Weapons Systems, Live Fire T&E; Human Factors)

Basile, Severance

TRAINING:

Browning, Corvette, M. Davis, Lafferty, Knowlton, Whittaker

TRADE AND NATIONAL SECURITY:

Cooling, Foulon, Moss, Swain

TRANSNATIONAL CRIME AND CORRUPTION:

Stavrakis

TRUST:

Corvette, Lafferty

TRANSPORTATION-GENERAL:

Book, Lafferty, Montroll, Morris, Needham, Russo

WAR CRIMES:

Lafferty, Moss, Pham, Stavrakis

WAR STRATEGY DEVELOPMENT:

Carpenter, Cooling, Gropman, Randolph,
Severance, Shaw

WAR TERMINATION:

Cooling, Gropman, King, Moss, Randolph,
Severance, Stavrakis, Sullivan, Whittaker

WATER RESOURCES:

Losman, Severance, Sullivan

WOMEN'S ISSUES:

Pham, Sullivan, Vargo, Whittaker