

**AIR UNIVERSITY
CATALOG**

**Academic Year
2004–2005**



Air University Press
Maxwell Air Force Base, Alabama

August 2004

This catalog is nondirective and should not be used for quoting Air University, Air Force, or Department of Defense policy. It is intended as a compilation of Air University academic information. Cleared for public release, distribution unlimited.

Contents

| | <i>Page</i> |
|--|-------------|
| KEY AIR UNIVERSITY EDUCATIONAL STAFF, COMMANDANTS, AND COMMANDERS | vii |
| AIR UNIVERSITY COMMAND BOARD OF ADVISORS | ix |
| AIR UNIVERSITY BOARD OF VISITORS | xi |
| PREFACE | xiii |
| INTRODUCTION TO AIR UNIVERSITY | 1 |
| Vision | 1 |
| Mission | 1 |
| Scope | 2 |
| Accreditation and Degree-Granting Authority | 4 |
| Enrollment and Admission | 5 |
| SECTION I | |
| AIR UNIVERSITY DEGREE PROGRAMS | 7 |
| Air War College | 9 |
| Faculty Listing | 41 |
| School of Advanced Air and Space Studies | 45 |
| Faculty Listing | 50 |
| Air Command and Staff College | 51 |
| Faculty Listing | 77 |
| Air Force Institute of Technology | 83 |
| Community College of the Air Force | 105 |
| SECTION II | |
| OTHER AIR UNIVERSITY SCHOOLS AND PROGRAMS | 111 |
| PROFESSIONAL MILITARY EDUCATION PROGRAMS AND SCHOOLS | 113 |
| Squadron Officer College | 115 |
| Air and Space Basic Course | 116 |
| Squadron Officer School | 119 |

| | <i>Page</i> |
|---|-------------|
| College for Enlisted Professional Military Education | 123 |
| Educational Programs Cadre | 123 |
| Air Force Enlisted Heritage Research Institute | 124 |
| Air Force Senior Noncommissioned Officer Academy | 125 |
| Noncommissioned Officer Academies | 127 |
| Airman Leadership School | 129 |
| CEPME Distance Learning | 130 |
| | |
| OFFICER ACCESSIONS | 133 |
| Air Force Officer Accession and Training Schools | 135 |
| Air Force Reserve Officer Training Corps | 136 |
| Officer Training School | 141 |
| | |
| PROFESSIONAL CONTINUING EDUCATION | 147 |
| College of Aerospace Doctrine, Research and Education | 149 |
| Airpower Research Institute | 150 |
| Warfare Studies Institute | 152 |
| Air Force Wargaming Institute | 158 |
| Intelligence Directorate | 162 |
| US Air Force Public Affairs Center of Excellence | 163 |
| Ira C. Eaker College for Professional Development | 165 |
| Commanders Professional Development School | 166 |
| Air Force Human Resource Management School | 168 |
| International Officer School | 173 |
| Air Force Judge Advocate General School | 178 |
| DOD Professional Military Comptroller School | 183 |
| USAF Chaplain Service Institute | 186 |
| USAF First Sergeant Academy | 190 |
| USAF Historian Development School | 193 |
| | |
| EXTENDED STUDIES AND ADVANCED DISTRIBUTED LEARNING | 197 |
| Air Force Institute for Advanced Distributed Learning | 199 |
| | |
| CITIZENSHIP EDUCATION | 203 |
| Air Force Junior Reserve Officer Training Corps | 205 |
| Civil Air Patrol–US Air Force | 209 |

| | <i>Page</i> |
|--|-------------|
| SECTION III | |
| ACADEMIC SUPPORT AND TENANT UNITS | 217 |
| ACADEMIC SUPPORT | 219 |
| Air University Registrar | 221 |
| Air University Library | 222 |
| Air University Press | 223 |
| Air University Television | 224 |
| TENANT UNITS | 225 |
| Headquarters Air Force Doctrine Center | 227 |
| Air Force Historical Research Agency | 229 |
| ACRONYMS AND ABBREVIATIONS | 231 |

KEY AIR UNIVERSITY EDUCATIONAL STAFF, COMMANDANTS, AND COMMANDERS

AIR UNIVERSITY HEADQUARTERS

| | |
|------------------------------------|----------------------------|
| Commander | Lt Gen John F. Regni |
| Mobilization Asst. to Commander | Brig Gen James W. Graves |
| Chief Academic Officer | Dr. Glenward L. Spivey |
| Information Technology | Col Terry L. Williams |
| Director of Staff | Col Richard L. Anderson II |
| Plans and Programs | Col Robyn M. King |
| Financial Management and Personnel | Lt Col M. Allen Blume |

COMMANDANTS

| | |
|--|--------------------------------|
| Air War College | Maj Gen Robert J. Elder Jr. |
| Air Command and Staff College | Brig Gen Ronald R. Ladnier |
| School of Advanced Air and Space Studies | Col Thomas E. Griffith Jr. |
| Air Force Institute of Technology | Col (BG sel) David W. Eidsaune |

COMMANDERS

| | |
|--|---------------------------------|
| Air Force Officer Accession and Training Schools | Col (BG sel) Floyd L. Carpenter |
| Squadron Officer College | Col Noel T. Jones |
| College for Enlisted Professional Military Education | Col Albert J. Bowley Jr. |
| College of Aerospace Doctrine, Research and Education | Col (BG sel) Randal D. Fullhart |
| Community College of the Air Force | Col Eric A. Ash |
| Ira C. Eaker College for Professional Development | Col Howard Short |
| Air Force Institute for Advanced Distributed Learning | Col Kim A. Bowling |
| Headquarters Civil Air Patrol–US Air Force | Col George C. Vogt |
| 42d Air Base Wing | Col John A. Neubauer |

DIRECTORS

Air University Library & Press

Dr. Shirley B. Laseter

TENANT UNITS*

Headquarters Air Force Doctrine Center

Maj Gen Bentley B. Rayburn

Air Force Historical Research Agency

Dr. Frederick J. Shaw Jr.

* Tenant units not part of the Air University system

AIR UNIVERSITY COMMAND BOARD OF ADVISORS

PURPOSE: The purpose of the Air University Command Board of Advisors is to provide the commander of Air University feedback from the customer perspective of the major commands. Board members inform the Air University commander about the educational needs of their respective commands and their degree of satisfaction with Air University's products and programs.

MEETINGS: The board is advisory in nature and meets at least once a year at Maxwell Air Force Base.

MEMBERSHIP: The membership is comprised of all the vice commanders of the major commands, as well as the Air National Guard deputy director. They are advised by the Air Force deputy chief of staff, personnel, and the United States Air Force Academy vice commander.

MEMBERS

Vice Commander, Air Education and Training Command, Chair
Vice Commander, Air Combat Command
Vice Commander, Air Force Space Command
Vice Commander, Air Force Materiel Command
Vice Commander, Air Mobility Command
Vice Commander, United States Air Forces Europe
Vice Commander, Pacific Air Forces
Vice Commander, Air Force Special Operations Command
Vice Commander, Air Force Reserves
Deputy Director, Air National Guard

ADVISORS

Air Force Deputy Chief of Staff, Personnel
Vice Commander, United States Air Force Academy

AIR UNIVERSITY BOARD OF VISITORS

PURPOSE: The Board of Visitors is chartered to provide advice, views, and recommendations on the educational, doctrinal, and research policies and activities of Air University. The board meets with and advises the secretary of the Air Force on matters of policy regarding the mission of Air University.

MEMBERSHIP: The membership is selected from the fields of education, business, industry, the professions, and public service. Members normally serve annual renewable terms up to a maximum of nine years. Members are invited by the Air University commander in the name of the chief of staff, United States Air Force.

MEETINGS: The board meets at least twice a year—in April and November at Maxwell AFB, Alabama. The board presents a written report with its views and recommendations to the Air University commander. This report is then presented to the chief of staff, United States Air Force, and to the secretary of the Air Force.

MEMBERS*

Ms. Ann C. Petersen, Chair
Attorney-at-Law
Chicago, Illinois

Dr. E. Jan Kehoe, Chair Elect
Superintendent/President, Long Beach Community College District
Long Beach, California

Gen Jimmie V. Adams, USAF, retired
Vice President, Washington
Operations
L-3 Communications Corporation
Arlington, Virginia

Dr. Kyle T. Alfriend
Professor of Aerospace Engineering
Texas A&M University
College Station, Texas

Mr. Charles B. Alling Jr.
Kennebunk, Maine

Dr. James R. Anderson
Chancellor, Central Texas College
Killeen, Texas

CMSAF James C. Binnicker, USAF,
retired
President/CEO, Air Force Enlisted
Widows Home Foundation
Shalimar, Florida

Dr. Michael B. Bragg
Professor and Head, University of
Illinois at Urbana-Champaign
Urbana, Illinois

Gen Michael P.C. Carns, USAF,
retired
Pebble Beach, California

Dr. Ann H. Die
Managing Director, Academic Search
Consultation Service
Washington, D.C.

*As of 15 July 2004

Lt Col John R. Fergus, USAF, retired
Dean, Wallace Community College
Dothan, Alabama

Dr. Susan A. Graham
President, Aiken Technical College
Aiken, South Carolina

Dr. Tito Guerrero III
President, Stephen F. Austin State
University
Nacogdoches, Texas

Dr. Jack Hawkins
Chancellor, Troy University
Troy, Alabama

Lt Gen Bradley C. Hosmer, USAF
retired
Chair, Board of Directors, Armed
Forces Services Corporation
Cedar Crest, New Mexico

CMSgt Eugene Johnson, USAF,
retired
Satellite Beach, Florida

Maj Gen Donald L. Lamberson,
USAF, retired
Niceville, Florida

CMSAF James M. McCoy, USAF,
retired
Bellvue, Nebraska

Mr. Olan Mills III
CEO, Olan Mills Inc.
Chattanooga, Tennessee

Dr. Diana G. Oblinger
Vice President, EDUCAUSE
Boulder, Colorado

Dr. Antonio Perez
President, Borough of Manhattan
Community College
New York, New York

Brig Gen (Dr.) Roger C. Poole, USA,
retired
Faculty, The Citadel
Charleston, South Carolina

Dr. David W. Sink Jr.
President, Blue Ridge Community
College
Flat Rock, North Carolina

Dr. Dennis P. Slevin
Professor of Business, University of
Pittsburgh
Pittsburgh, Pennsylvania

Dr. Norman E. Thagard, M.D.
Associate Dean for College Relations,
College of Engineering
Florida A&M – Florida State
University
Tallahassee, Florida

Maj Gen Lucius Theus, USAF, retired
The US Associates
Southfield, Michigan

Dr. Kathryn C. Thornton
Professor, School of Engineering,
University of Virginia
Charlottesville, Virginia

Father David T. Tyson, C.S.C.
Provisional Superior, Province of the
Congregation of Holy Cross
South Bend, Indiana

Mr. Robert K. Wood
Rockville, Maryland

Preface

The *Air University Catalog* is the official Air University publication for disseminating information on Air University educational programs, including professional military education. Other publications including information on Air University are the *Air Force Institute of Technology (AFIT) Catalog*, the *Community College of the Air Force (CCAF) Catalog*, the *School of Advanced Air and Space Studies (SAASS) Catalog*, and the *Air Force Institute for Advanced Distributed Learning (AFIADL) Catalog*.

The *Air University Catalog* serves as both a source document and a planning document for Air University schools and staff personnel. It serves as a public relations medium for Air Force, Department of Defense, and civilian audiences. The catalog also provides a brief description of the schools and professional organizations that make up Air University. Finally, it sets forth the educational opportunities available in each school, the work performed by each related organization in carrying out the educational objectives of Air University, and a brief description of all Air University educational support organizations. The *Air University Catalog* and other information about Air University organizations are available over the World Wide Web on the Air University home page (<http://www.maxwell.af.mil/>).

INTRODUCTION TO AIR UNIVERSITY

Air University plays a vital role in fulfilling the mission of the United States Air Force. To uphold the national purpose and to achieve the nation's objectives, the Air Force must maintain a corps of officers, enlisted personnel, and civilians dedicated to the nation's defense. They must have an in-depth knowledge of war and the military sciences to meet the challenges of today and tomorrow's world. Air University contributes to the development of this knowledge through its professional and specialized education programs, research and doctrinal studies, and degree programs at civilian educational institutions.

Before World War II, the only school in the armed services that emphasized the organization and employment of airpower was the Army Air Corps Tactical School (ACTS), located initially at Langley Field, Virginia, and later at Maxwell Field, Alabama. Although other military schools taught aerial warfare, it was only an incidental part of their curricula. The doctrine for the use of airpower—generally accepted by the Army Air Forces during World War II—grew out of the Air Corps Tactical School. At the end of the war, the graduates of this school were instrumental in convincing the nation's defense leaders of the need to create Air University.

Air University, in all of its endeavors, serves Air Force personnel—officers, enlisted members, and civilians—to ensure the nation continues its leadership during another crucial period of history. Air University also contributes to the defense of the free world by offering educational opportunities to foreign students. Its alumni are prepared to serve in Air Force assignments, in comparable foreign air forces, and in other governmental positions.

Vision

Air University will be the world's premier military educational institution offering comprehensive programs and preparing its graduates to develop, employ, command, and support air and space power contributions to our national military strategy.

Mission

Air University provides the full spectrum of Air Force education, from precommissioning to the highest levels of professional military education (PME), including degree granting and professional continuing education (PCE)

for officers, enlisted, and civilian personnel throughout their careers. The university's PME programs educate Airmen on the capabilities of air and space power and its role in national security. These programs focus on the knowledge and abilities needed to develop, employ, command, and support air and space power at the highest levels. Specialized PCE programs provide scientific, technological, managerial, and other professional expertise to meet the needs of the Air Force. Air University conducts research in air and space power, education, leadership, and management. The university also provides citizenship programs and contributes to the development and testing of Air Force doctrine, concepts, and strategy.

Scope

Air University educates Air Force people to develop and lead the world's best air and space force—inspiring commitment to a war-winning profession of arms.

As part of Air Education and Training Command, Air University's educational programs range from precommissioning education through professional education. Its schools encompass enlisted and officer professional education, including professional military education, professional continuing education, and degree-granting education. Through the Civil Air Patrol and Air Force Junior Reserve Officer Training Corps, Air University plays a vital role in promoting citizenship awareness among today's youth.

Air University's schools include the College for Enlisted Professional Military Education; Squadron Officer College (comprised of the Squadron Officer School and Air and Space Basic Course); Air Command and Staff College; School of Advanced Air and Space Studies; Air War College; Air Force Officer Accession and Training Schools (comprised of the Officer Training School and the Air Force Reserve Officer Training Corps); the Air Force Institute of Technology; the College of Air and Space Doctrine, Research and Education; the Ira C. Eaker College for Professional Development; the Community College of the Air Force; and the Air Force Institute for Advanced Distributed Learning (AFIADL). The 42d Air Base Wing provides support for all Air University operations, as well as for the Maxwell Air Force Base, Gunter Annex.

Air University students are primarily Air Force officers, enlisted personnel, and professional civilians. A relatively small number of personnel from other services in the Department of Defense and from other government agencies attend Air University. International officers from more than 100 countries have studied in Air University schools. Air University includes all Air Force education programs except the United States Air Force Academy, which is a separate agency under Headquarters United States Air Force.

The precommissioning education and training organizations of Air University—the Air Force Officer Accession and Training Schools, including Officer Training School and Air Force Reserve Officer Training Corps—educate and commission highly qualified officer candidates for the United States Air Force.

The professional military education schools of Air University—Squadron Officer College (including the Air and Space Basic Course and the Squadron Officer School), Air Command and Staff College, Air War College, and the College for Enlisted Professional Military Education—prepare junior, midcareer, and senior commissioned and noncommissioned officers and civilians for progressively more responsible positions throughout the Air Force. Practically all commissioned officers who attend the professional schools of Air University possess academic degrees from civilian institutions. Their postgraduate studies in the Air University system emphasize the profession of arms.

Specialized organizations of Air University meet specific educational requirements of the Air Force. The School of Advanced Air and Space Studies is designed to produce tomorrow's air and space power strategists. Upon successful completion of 11 months of course work; production of a formal thesis that meets accepted standards of research, analysis, and expression; and successful completion of comprehensive examinations, graduates receive a master of airpower art and science degree. The College of Air and Space Doctrine, Research and Education assists Air University and Headquarters USAF in developing concepts, doctrine, and strategy; teaches the Joint Flag Officer War-fighting Course, the Joint Force Air Component Commander Course, the Joint Doctrine Air Campaign Course, and the Contingency Wartime Planning Course; and includes the Air Force Wargaming Institute. The Ira C. Eaker College for Professional Development provides professional continuing education for chaplains, judge advocates, comptrollers, personnel specialists, commanders, historians, first sergeants, and communication-computer systems managers. Schools operating within the college include the USAF Chaplain Service Institute, USAF First Sergeant Academy, Air Force Human Resource Management School, International Officers School, Air Force Judge Advocate General School, Commanders Professional Development School, Professional Military Comptroller School, and the USAF Historian Development School.

The Air Force Institute of Technology, located at Wright-Patterson AFB, Ohio, provides education to meet Air Force requirements in scientific, technological, logistical, managerial, and other designated professional areas as directed by Headquarters USAF. The institute consists of the Graduate School of Engineering and Management, the School of Systems and Logistics, the Civil Engineer and Services School, the Civilian Institution Programs, and the Center for Systems Engineering. Besides graduate degree

programs, the institute also offers numerous professional continuing education courses in residence at Wright-Patterson AFB and at selected locations within the continental United States. The Civilian Institution Programs are responsible for managing graduate, undergraduate, and continuing education programs at various civilian educational facilities and is responsible for Air Force health care education programs, education with industry, and numerous other programs.

Accreditation and Degree-Granting Authority

The Air Force Institute of Technology (AFIT) is accredited by the North Central Association of Colleges and Schools (30 North LaSalle Street, Suite 2400, Chicago, Illinois 60602-2504: Telephone number 800-621-7400) and, in appropriate engineering curricula, by the Engineering Accreditation Commission, Accreditation Board for Engineering and Technology, Inc.

Air University is accredited by the Commission on Colleges of the Southern Association of Colleges and Schools (1866 Southern Lane, Decatur, Georgia 30033-4097: Telephone number 404-679-4501) to award associate and master's degrees. Air University achieved regional accreditation in June 2004, effective at the beginning of the 2004 calendar year. Now a part of Air University's regional accreditation, both the Community College of the Air Force (CCAF) and the School of Advanced Air and Space Studies (SAASS) were separately accredited by SACS earlier—CCAF in 1980 and SAASS in 1998.

In October 1994, the Air University commander received congressional authority to confer the master of airpower art and science degree upon graduates of the School of Advanced Airpower Studies (now School of Advanced Air and Space Studies). In October 1999, the Air University commander received congressional authority to confer the master of strategic studies degree upon graduates of the Air War College and to confer the master of military operational art and science degree upon graduates of the Air Command and Staff College.

The Air Force Institute for Advanced Distributed Learning (AFIADL) (previously known as the Extension Course Institute or ECI) is accredited by the Accrediting Commission of the Distance Education and Training Council (1601 18th Street, N.W., Washington, D.C.: Telephone number 202-234-5100).

The Center for Adult Learning and Educational Credentials of the American Council on Education (ACE) has evaluated several Air University programs and recommends some graduate credit as well as some undergraduate credit for various programs.

Enrollment and Admission

Air University schools and educational programs are designed to enhance the professional knowledge of members of the US armed forces (primarily Air Force personnel) including the Reserves and National Guard and selected civilian employees of the Department of Defense and other government agencies. Air University programs and schools are not open to the general public except through special programs. As part of the United States' military assistance programs, officers from other countries are eligible to attend several Air University schools and courses. Selection for the Air University schools and educational programs is made according to Air Force and other relevant government standards.

Transfer Students and Withdrawal

Transfer students are not accepted in Air University's master's degree programs at Maxwell for two reasons. First, only students selected by an Air Force Personnel Center (AFPC) Board or by their respective organizations can attend. Secondly, all academic credits for degrees offered must be earned in residence. For policies and procedures concerning withdrawal from the institution, refer to AUI 36-2315, *Student Disenrollment Procedures*.

SECTION I

AIR UNIVERSITY DEGREE PROGRAMS

This section includes the degree programs offered by Air War College (AWC), the School of Advanced Air and Space Studies (SAASS), Air Command and Staff College (ACSC), Air Force Institute of Technology (AFIT), and the Community College of the Air Force (CCAF). It also addresses the nonresident programs of AWC and ACSC and other education programs conducted by AFIT.

AIR WAR COLLEGE

Maj Gen Robert J. Elder Jr., Commandant
Col Ben F. Young Jr., Vice Commandant

Internet Address

<http://www.maxwell.af.mil/au/awc/awchome.htm>

Mission: *To educate senior officers to lead at the strategic level in the development and employment of air and space forces, including joint, interagency, combined, and coalition operations, in support of national security.*

The War Department established the Air War College (AWC) in 1946 at Maxwell Field, Alabama, and the college has operated continuously since that time except for a period of six months during the Korean conflict. To accomplish the AWC mission, students demonstrate mastery of dual challenges—academic enhancement and professional development. To meet these challenges, the college develops the knowledge, skills, and attitudes in its students that are significant to the profession of arms with emphasis on air and space power and its application in joint, combined, and coalition operations.

Goals: To be prepared to lead at the strategic level in joint, interagency, and multinational environments, Air War College graduates will have demonstrated mastery in the following ways:

- Analyzed, articulated, applied, and/or evaluated concepts embodied in the following learning areas as listed in the Officer Professional Military Education Program, CJCSI 1800.10B, for senior-level colleges:
 - National Security Strategy,
 - National Planning Systems and Processes,
 - National Military Strategy and Organization,
 - Theater Strategy and Campaigning,
 - Information Operations and C4ISR, and
 - Joint Strategic Leader Development.
- Understood, analyzed, and articulated the development of air and space doctrine and the development and employment of air and space assets across the spectrum of potential conflict.
- Analyzed the role of air and space assets within the context of the broader military and national security environment.
- Compared and contrasted US air and space assets (both military and civilian) with those of allies as well as potential adversaries and competitors.

- Assessed regional cultures, resources, and issues including their potential influence on US national security.
- Examined the historical, economic, demographic, political, and military developments that resulted in present military doctrine, systems, and strategies.
- Examined national and global economic, demographic, political, and military trends and their effects on current and future national security environments.
- Examined in-depth evolving issues and concepts such as information operations, cultural intelligence, humanitarian operations, treaty negotiations, network centric operations, homeland security, and effects-based operations.

AWC is comprised of a command section, two academic directorates (Academics and Nonresident Studies), and two support directorates (Student Operations and Operational Support). Within the academics directorate, the program curriculum is developed and delivered through three departments—Leadership and Ethics, Warfighting, and Strategy and International Security. Additional support comes from two research centers, the USAF Counterproliferation Center and the Air University Center for Strategy and Technology that are separate from but integral to AWC. The centers offer elective courses and provide enhanced research opportunities to resident students.

Resident Program

The AWC resident program consists of one class for each 10-month academic year. The class membership includes persons from each US military service, civilian employees of federal government agencies, and officers from the international community of nations.

All US students must meet admission requirements for the master of strategic studies degree because they will be dually enrolled in the AWC senior-level professional military education (PME) program and the Air University (AU) master of Strategic Studies degree program. The AWC PME program includes Joint Professional Military Education (JPME) Phase I certification as defined for senior-level colleges in the Officer Professional Military Education Program, CJCSI 1800.10B.

International students, who qualify for entry in the AWC program, are enrolled in the AWC senior-level PME program, not including JPME Phase I, and may or may not choose to apply for admission to the master of Strategic Studies degree program.

Duration and Quotas

The resident program consists of 10 months of graduate-level study. The senior AF professional military education school, AWC annually educates about 265 resident students from all US military services, federal agencies, and 45 other nations.

Prerequisites and Selection

Lieutenant colonels and colonels or the equivalent in Navy rank or civil service grade are eligible to attend AWC. The Central Senior Service School Selection Board, Headquarters USAF, selects Air Force active duty officers who have demonstrated an outstanding potential for senior command and staff positions to attend AWC. Additionally, US Air Force Reserves (AFRES) officers, Air National Guard (ANG) officers, officers from other US military services, officers from other nations, and US federal civilians are selected to attend by their respective personnel systems. The *Air Force Education and Training Course Announcements (ETCA)*, formerly Air Force Catalog 36-2223, *USAF Formal Schools*, provides additional information on this topic.

Master of Strategic Studies Degree Admission Requirements and Procedures

To be admitted to the master of Strategic Studies degree program, an individual must (1) be selected to attend the AWC resident program; (2) present proof of academic capability by either holding a qualifying undergraduate degree (US bachelor's degree or its equivalent) or meeting admission requirements through the portfolio admission process; and (3) if required by the following guidelines, provide an acceptable score on the Test of English as a Foreign Language (TOEFL) test. Intent to apply for the master's degree program at AWC was due to the AU Registrar by 28 June 04.

- I. Proof of Academic Capability by Transcript
 - a. Air Force active duty, Guard, and Reserve officers selected to attend AWC will have their degree status verified by the AU Registrar through AFIT without action on their part.
 - b. Sister service and civilian students must have their official transcripts sent to the AU Registrar, 60 Shumacher Ave, Maxwell AFB, AL 36112 within the first month of the academic year.
 - c. International officers interested in pursuing the master's degree may submit a transcript of US bachelor's or bachelor's equivalent degree taken in the English language and/or an advanced degree

in languages other than English that has undergone a document-by-document evaluation of the academic records by an independent foreign credentials evaluation service that is a member of the National Association of Credentials Evaluation Services (NACES) or the Association of International Credential Evaluators (AICE) to determine if the records are equivalent to a US four-year bachelor's degree.

- i. Applications for this process are available from the AU Registrar.
- ii. When requesting one of these services to evaluate one's transcript(s), the individual should state the reason as "further education" or "admissions requirement for master's degree program."
- iii. Individual's seeking admission to the master's degree program is responsible for the costs associated with the transcript evaluation.
- iv. A copy of the evaluation must be mailed to the AU Registrar.

II. Proof of Academic Capability by Portfolio

Air University provides a portfolio option to those selected to attend AWC who wish to apply to the master of Strategic Studies degree program but who do not possess a US bachelor's or equivalent degree.

Those seeking to be admitted to the degree program using this option must submit their portfolios to the admissions committee through the AU Registrar. The committee will evaluate each applicant on his or her own merit to determine if the person's "preparation" is judged adequate for the rigors of the master of Strategic Studies degree program.

Minimally, the portfolio should contain as much information as necessary to demonstrate one's professional and educational history to include:

- a. Official evidence of all completed college, university and/or professional school coursework evaluated by an independent foreign credentials service (see transcripts above).
- b. Copies of certificates and diplomas evaluated by an independent foreign credentials service (see transcripts above).
- c. Detailed description of professional work including a current resume and, if appropriate, work-relevant evaluations.

- d. Two or more letters of recommendation from persons who (1) hold a terminal degree, (2) are past or present supervisor, or (3) can offer a professional reference attesting to your capacity to complete a graduate degree program.
- e. Program brochures, catalog pages, and/or descriptions as necessary to support these accomplishments.

III. Proof of English Language Proficiency

- a. International officers applying for admission to the master of strategic studies degree from countries where the official language is English are not required to take the TOEFL.
- b. International officers who have completed a bachelor's or higher degree in the US during the past three years are not required to take the TOEFL.
- c. International officers from countries where the official language is not English must achieve an acceptable score on the TOEFL to be admitted to the master's degree program.
 - i. The individual is responsible for the cost of this test.
 - ii. When taking the TOEFL, an individual must select Air University as the Institution Code (9069) for the official score to be sent to the AU Registrar.
 - iii. The minimum acceptable score for unconditional admission to the master's degree program is 540 for the paper-based test or 207 for the computer-based test. The minimum acceptable score for conditional admission is 500 for the paper-based test or 173 for the computer-based test.
 - iv. A student admitted conditionally must retake the TOEFL after beginning AWC classes but before the end of the first elective term.
 - v. A faculty committee must evaluate the academic progress of any student who does not achieve the minimum acceptable score for unconditional admission on the retest to determine whether he or she will be allowed to continue in the degree program.

International students not having a baccalaureate degree, not admitted through the portfolio process, not making the minimum TOEFL score, or not admitted at the end of the first elective term by the faculty committee with a conditional score will be allowed to attend AWC and will, upon graduation,

receive the AWC professional military education (PME) diploma but will not be awarded the master’s degree.

Graduation Requirements

To meet the requirements for completion of the AWC professional military education program and, for students admitted to the degree program, to meet the requirements of the AU master of Strategic Studies degree program, a student must

- a. demonstrate mastery of the following AWC curriculum with a minimum grade of B- in each course and a cumulative GPA of at least 3.0:
 - i. Five core courses (Leadership and Ethics; Strategy, Doctrine, and Airpower; International Security Studies; Warfighting; and Regional Studies (classified) for US students or Regional Studies (unclassified) for international students)
 - ii. Four 6000 series elective courses, and
 - iii. Individual Professional Studies Research.
- b. demonstrate fully satisfactory participation in other scheduled AWC programs such as the culminating war game (Solo Challenge), National Security Forum, Executive Wellness, and Commandant’s Lecture Series.

AWC Resident Curriculum Summary

| Course Title | Semester Hours |
|---|-----------------------|
| DFL 6200, Leadership and Ethics | 3 |
| ISS 6300, International Security Studies | 5 |
| SDA 6400, Strategy, Doctrine, and Airpower | 6 |
| DFW 6500, Warfighting | 7 |
| RS 6600, Regional Studies (classified) or RS 6650 Regional Studies (unclassified) | 3 |
| EL 6100, Individual Professional Studies Research or EL 6110, Individual Professional Studies Research-CSAT | 3 |
| Four EL 6000 series, Core Electives Program | 8 |
| TOTAL | 35 |

Note: All courses must be taken in residence at AWC. Courses taken in the nonresident program may not be used to satisfy course requirements of the resident master’s degree program.

Resident Program Course Descriptions

The AWC resident curriculum includes core curriculum and an elective program.

Core Curriculum

The core curriculum consists of four major areas: leadership and ethics; international security studies; strategy, doctrine, and airpower; and war fighting. The AWC resident curriculum consists of the following course offerings by the Departments of Leadership and Ethics (DFL); Strategy and International Security (DFS); Warfighting (DFW); and Regional Studies.

DFL 6200 Leadership and Ethics

3 semester hours

Leadership and Ethics educates students to synthesize the concepts of the strategic leadership environment. The course is based on two key assumptions: first, students are already successful leaders, but the challenges they will face in the future will be significantly different from those they faced in the past; and second, students can significantly improve their competence in areas vital to success as strategic leaders. The focus is on students comprehending the leadership characteristics and capabilities needed by strategic leaders, demonstration of critical and creative thinking skills, appraising the ethical demands of strategic leadership, assessing their personal leadership development, and justifying the strategic leader competencies for leading the institution. The course challenges students to develop their vision and expand their conceptual capacity through critical and creative thinking, communicating effectively, and developing the capability to lead change. In addition, the course focuses on responsibility, command, values, and an awareness of the strategic environment required to meet the challenges involved in leading large, complex organizations. The course includes a detailed assessment of each student's personal leadership capacities and personality preferences as a foundation for the development of a plan for lifelong personal growth.

ISS 6300 International Security Studies

5 semester hours

International Security Studies analyzes the development and implementation of US national security. The purpose of the course is to educate senior officers on the development and implementation of national security strategy.

The first half of the course, *National Security and Decision Making*, analyzes the components of the current US security strategy,

examines the impact of possible alternative US strategies for achieving national security in today's world, and evaluates the processes by which such strategies are developed.

The second half of the course, *Global Security*, surveys and evaluates the current international environment and examines the roles national, non-state, and regional actors play in shaping the global environment.

This course prepares students to articulate the national, regional, and international security issues shaping the global environment. It prepares students to appraise and participate in the US government's policy-making processes. Students should be able to develop strategies for coping with challenges in the international arena and to critique alternative approaches to national security considering all elements of state power, including political, economic, cultural, and military.

SDA 6400 Strategy, Doctrine, and Airpower

6 semester hours

The Strategy, Doctrine, and Airpower course instills in students an ability to judge the roles of strategy, doctrine, and the employment of air and space power in support of national security. The course builds on the following assumptions. First, the writings of classical military thinkers provide an enduring framework for the development and judgment of strategy. Second, strategy and doctrine are inextricably linked in the securing of national policy goals, and an understanding of both is critical for the senior leader. Finally, wars test the validity of specific strategies and doctrines with important lessons for the leaders of today and tomorrow. With these assumptions in mind, the course uses historical case studies—particularly the history of air and space power—as a vehicle for developing a framework for judging the employment of air and space forces in support of national security today and in the future.

DFW 6500 Warfighting

7 semester hours

War fighting prepares senior officers to develop, lead, and employ US and coalition air and space forces at the strategic and operational levels in joint, combined, interagency or coalition environments in support of the National Military Strategy. Special emphasis is placed on operational art; war fighting in a coalition environment; command and control of theater-level operations and the Air Operations Center as a weapons system; strategic implications of emerging technologies and capabilities on future force structure; future threats asymmetric to US experience and expectations; "Red Team" perspective; and the

global war on terrorism. The purpose is to permit agile, proactive, and future-focused USAF strategic planning for Air, Space, and Information superiority. Specifically, DFW accomplishes the following objectives:

- Compare and contrast how to employ combatant power as it addresses air and space power at the theater/combatant command level in a joint, combined, and coalition environment.
- Judge the issues associated with USAF future force structure, force employment, and emerging joint vision.
- Appraise sister services' visions and capabilities.
- Anticipate the emerging opposition capabilities and concepts of operation.

EL 6100 Individual Professional Studies

Research

3 semester hours

For the successful completion of the Individual Professional Studies Research course, students may choose to research and write on a topic from the lists or research interests provided by major commands and other military and civilian organizations or on a topic of their own interest. The product of that research, the Professional Studies Paper (PSP), is to be 25-30 pages long. With the author's permission, Air University places some papers on the Internet via the AU Web site and provides copies to the Defense Technical Information Center and the Air University and Air Force Academy libraries. Additionally, with the author's permission, if writing on a major command or other military or civilian organization's relevant topic, the paper will be forwarded to the requesting agency or office. The Individual Professional Studies Research course has the following objectives:

1. provide students the opportunity to conduct research on topics of their choice,
2. assist students to conduct thoughtful, logical, and critical research and analysis,
3. share the results of student research, writing, and analysis with key decision makers, and
4. assist students, if they desire, in submitting papers for publication in Air Force, sister service, and other professional journals and periodicals.

EL 6110 Individual Professional Studies

Research—CSAT

3 semester hours

This course is a research seminar devoted to the research, writing, and defense of the student papers begun in EL 6447, Strategy and Technology taken during Term 1. Individual TDYs may be arranged as part of a student's research. Some papers will be published by the Center for Strategy and Technology (CSAT), while others will be published in other venues.

RS 6600 Regional Studies (classified)

3 semester hours

RS 6650 Regional Studies (unclassified)

3 semester hours

The Air War College Regional Studies (RS) course is an integral part of the curriculum. It prepares students to address issues relevant to various regions of the world in support of US national security policy. RS provides students the opportunity to appraise an area of the world where a unified combatant commander must implement the national military strategy in support of US security policy. Understanding this implementation process requires an appreciation of the complex national and international environments in which it takes place and familiarity with the nations affected by US policies and vice versa. The RS course provides the opportunity for students to gain unique perspectives by studying and visiting one of 15 regions of the world. During the third term, each student completes 30 classroom hours of focused academic preparation on a selected region and begins work on a research paper dealing with security in the region. The research paper is completed following about a two-week field study trip to that region. The field study portion allows students to discuss security policy issues with their region's senior political, military, business, and academic leaders. Throughout the academic year, the students accomplish logistic and administrative preparation and travel planning for the field study portion of their Regional Studies course. A post-trip seminar provides a cross talk and the opportunity to wrap up the course. Additionally, the perspectives gained during RS will be immediately useful during the Global Studies curriculum and the execution of the Solo Challenge Wargame. For administrative continuity of the RS program, students prepare a detailed analytical trip report and continuity book at the end of the course.

Electives Program

The Electives Program has two major objectives:

1. Enhance and complement the core curriculum by providing students with opportunities to achieve greater depth and breadth of understanding in issues of special interest.

2. Provide the AWC curriculum with the flexibility to adapt quickly to changes in the international and domestic security environments.

Electives Requirements: All students must complete four electives (in addition to other requirements) to graduate. The three teaching departments of Leadership (6200-series), Strategy and International Security (6300 and 6400-series), and Warfighting (6500-series) sponsor all electives.

“English as a Second Language” (EL 1710), taught by the International Officers School for selected international officers only, provides intensive work in the English language. Because EL 1710 is not a graduate-level course, it does not count as one of the four electives required for a master’s degree.

EL 6121, 6122, 6123 Directed Study

2 semester hours

Students interested in intensive work on a particular topic can develop, with a faculty member, a research proposal and reading list designed to give them an in-depth understanding of the subject. Enrollment is limited and requires approval of the Associate Dean of Academic Programs (DFX).

AY05 Leadership Electives

EL 6210 Art of Command

2 semester hours

Many AWC students have served as squadron commanders. After graduation, command at the group level and higher will promise even greater challenges than those encountered at the unit level. What competencies are required to command at group level and above? How do personality, unit mission, situation, and other variables affect command? What can we learn from the lives and careers of previous great commanders? Are the qualities and skills required to be an effective air commander different from those required to be an effective ground or sea commander? What staff agencies are available to assist the commander? This course will address these questions.

EL 6211 Command and Conscience

2 semester hours

The late S. L. A. Marshall contended, “Respect for the reign of law, as that term is understood in the U.S., is expected to follow the flag wherever it goes.” The main safeguard against lawlessness and hooliganism in any armed body is the integrity of its officers. In a prudent and practical manner, this course will examine a variety of topics of immediate professional concern to the commander. How does today’s leader resolve the tension inherent in the occasional clash of command responsibility and ethical imperative? To whom or to what does the leader owe the highest loyalty—to his superior, the Constitution, or his religious and philosophical judgments? Which has priority—mission or men? If integrity is—as it must be—the heart of the officer corps, it must first be examined before it can be assimilated. This course, then, inquires into the nature of military integrity.

EL 6215 Leadership Case Studies

2 semester hours

Students will examine actual leadership situations that have confronted senior leaders in today’s military. Taken from real life, the case studies review ethical, legal, managerial, organizational, and general leadership dilemmas that may challenge the modern military leader. The course is intended to help prepare students to command large organizations and to address the types of problems they may encounter as senior officers on a joint or service staff. Reading will consist of case studies and appropriate background material. Each student will be required to prepare a one-page introspective paper and a comprehensive case study.

EL 6216 Leadership in the 21st Century

2 semester hours

What is different about the future that leaders must prepare for? This course examines a wide variety of topics to help leaders develop the skills

they need to succeed in the future. Lessons cover demographics of followers, trends in society, technology, innovation, leadership practices in industry, public affairs, leading change, and future organizations. Students will meet face-to-face with leaders serving at the group, wing, and general officer levels.

EL 6228 Inside the Heads of Friends and Foes: Cross-Cultural

Competencies for Strategic Leaders 2 semester hours

This course is about human behavior. It is anchored in the behavioral sciences, particularly cultural anthropology, and is designed to allow students to see behavior—and the ideas that underlie that behavior—through the filters of other cultures. More specifically, this course is about cross-cultural leadership—about the competencies required to motivate (or compel) others in a peculiar kind of leadership—the kind that generally is required of senior leaders in large, relatively diverse organizations. The basic approach of the course emphasizes in-class discussion of presentations and assigned reading materials. The faculty instructor and other subject matter experts will offer presentations, including panel discussions. The course also requires students to conduct primary social science research and share their findings with the class

EL 6230 Legally Leading the Fight

2 semester hours

This course will examine legal issues that arise at the group and wing commander level with a focus on expeditionary operations.

EL 6231 Commander and the Media

2 semester hours

Because the mass media continues to have an ever-increasing influence in American society, you, as a senior military or civilian government leader, must have a grasp of today's news business and the interview process. The underlying premise of this course is that DOD stands to benefit from effective communication with its many audiences via the news media. We have two principal goals to achieve: (1) to assist you in better understanding the sometimes difficult relationship between the military and the news media and (2) to develop specific tools and techniques to effectively engage the news media. We will strive to better understand today's news business and break down some of the mystique that often surrounds the news media. At AU Television, you will learn a variety of practical methods to control interview situations and get your messages across to the public. Guest media representatives and visits to media outlets, to include CNN in Atlanta, are included in this course.

EL 6234 Leading Change

2 semester hours

Senior leaders in the twenty-first century will almost certainly be expected to manage significant change—both for themselves and their organizations. In fact, the entire concept of “transformation” is about change. Yet however attractively it is packaged, individuals tend to fear change and organizations tend to resist it, making management of change one of the most difficult leadership competencies. This course examines what goes on inside the heads of individuals and within the culture of organizations to accept or resist change. Using the best available scholarship and case studies, the course examines examples of successful change, allowing students to develop the intellectual tools necessary for the mediation of change.

AY05 Strategy and International Security Electives

EL 6410 Congress and the Military **2 semester hours**

This course examines the organization of the Congress, the structure of the DOD in working with Congress, the legislative environment in which these two organizations operate, and the practical situations in which they interface. It includes case studies of effective and ineffective ways the military has engaged with Congress, visits from congressional staffers, a trip to Capitol Hill, and an examination of the president's budget. The course schedule varies based on the congressional calendar.

EL 6411 Negotiation Skills for Strategic Leaders **2 semester hours**

This course will develop skills necessary to successfully negotiate conflict resolution, treaties between countries, coalitions of forces, budgets between services, and memorandums of understanding between agencies. Considerations will be given to cross cultural factors, time constraints, negotiation styles and strategies, and profiling of involved parties. Topics to be covered will include logical analysis, group problem solving, conflict management, and methods of persuasion.

EL 6412 Air War in the Pacific **2 semester hours**

This course covers the development of the air war within the framework of the joint war-fighting effort across the vast expanse of the Pacific Ocean areas. It begins with Japan's full-scale war of aggression in China in 1937 and continues through the attack on Pearl Harbor to the Trans-Pacific War. The focus of the course will be on the relationship between strategy and airpower in a series of joint theaters of war—the South Pacific, the Southwest Pacific, the Central Pacific, and the North Pacific—with some examination of the China and India-Burma theaters in the war against the Japanese Empire. We will examine the joint command structures, the relationship between carrier and naval land-based air assets, the Army Air Forces' role in this war, and the Japanese side of war to the extent possible. There is a requirement for students to look at original records in the Air Force Historical Research Agency.

EL 6416 Airpower Theory, Doctrine, and Strategy, 1945–Present **2 semester hours**

This course studies changes in theory and doctrine from 1945 to the present. It stresses the complex nature of strategic requirements and the strengths and limitations of doctrinal and technological adaptations to change.

EL 6417 American Civil War **2 semester hours**

Using the experience of the American Civil War, this course analyzes the relationship between national objectives and the implementation of national and theater military strategy. It highlights the causes of the war; the dynamics of crisis periods; escalation of national objectives; the level, scope, and intensity of violence from limited conflict to total war; and war termination.

EL 6422 Psychology of Decision Making **2 semester hours**

This course examines specific cases of decision making in the realm of national security, focusing on how a psychological perspective may help us become better decision makers at the strategic level. It considers such issues as information overload, risk-taking, stress, personality, organizational culture, and how one can learn from history to make better decisions.

EL 6424 The American Aerospace Industry **2 semester hours**

This course examines the relationship between the US military and the American air and space industry, from its beginnings in World War I to the challenges posed by globalization, industry restructuring, and export control policy today. In the US the emergence of arms exports as “big business” has its origins in the 1969 Nixon Doctrine and the 1971 creation of the Defense Security Assistance Agency. The course considers military transports, commercial airliners, and space and missile systems, but its primary focus is on technological development of fighters and the politics behind military bomber development. Student case study presentations on such systems as the CV-22, F-16, and Joint Direct Attack Munition (JDAM) provide an opportunity for additional analysis and lessons learned.

EL 6426 Causes of War **2 semester hours**

This course uses historical and cross-cultural approaches to answer, “Why do countries wage wars?” It compares ancient and contemporary theories and views on wars, examines the origins and nature of war, considers the development of war as an institution in societies, and looks at the prospects of war and peace in the future.

EL 6428 Intelligence (Classified, US Personnel) **2 semester hours**

Intelligence—accurate and timely information about unfolding world events and international concerns or threats—is crucial to the successful conduct of US foreign policy. In the post–Cold War period, the United States may exercise even greater influence in international affairs

than it did previously. Yet the dynamics of international relations are more complex and the perception of threats to US interests may be less obvious. While US policy makers will continue to rely on intelligence to make judgments and decisions, the role of intelligence—with its need for secrecy and occasionally extra-legal activities—presents many dilemmas for a democratic society.

EL 6432 Military Innovation

2 semester hours

Military innovation requires harnessing new operating concepts, technologies, and organizational structures to conduct war in new ways. However, the interplay of strategy, doctrine, and technological innovation is what often influences military outcomes. Drawing on classic works by Rosen and Murray and Millett and recent books by Lorber and Binnendijk, this course analyzes cases of past and current military innovation and the factors that help determine whether or not innovations are adopted.

EL 6433 Globalization

2 semester hours

This course examines the political, economic, cultural, and demographic implications of globalization. It views the phenomenon from both western and nonwestern perspectives to bring out the main arguments for and against globalization.

EL 6435 The Iraq War and Its Aftermath

2 semester hours

This course focuses on the origins, planning, conduct, and consequences of America's second war against Iraq and its aftermath. Particular topics include the decision making that led up to the war, the relationship of Operation Iraqi Freedom to the global war on terrorism, and the utility of specific historical analogies to inform current US policy in Iraq. The course draws heavily on the author's own research and on published statements and accounts by principal decision makers.

**EL 6436 International Organizations and
Peacekeeping Operations**

2 semester hours

NATO, spearheaded by USAF, stopped Serbian forces from ethnically cleansing 1.8 million Kosovo Albanians. Could international organizations (IO), such as NATO or the UN, have stopped the genocidal killing of 800,000 Rwandans in 1994? In this course, you will examine the role of IOs, particularly as guarantors of peace and security, and come to understand what they can and cannot do. US armed forces have acted often within the framework of IOs (within NATO in Kosovo and Bosnia and the UN in Macedonia and Haiti), or with the endorsement of IOs (the UN in Operation Desert Storm). Thus, a

strategic military thinker must be cognizant of IOs and their functions. The course starts with the UN and recent cases of peacekeeping. It moves to regional organizations, including NATO and the European Union. Finally, we deal with international nongovernmental organizations (NGO) and their role in the prevention and resolution of conflict and relations with military peacekeepers.

EL 6440 Northeast Asian Security

2 semester hours

This course examines key elements in the US-Japan and ROK-US alliances and the security implications for the region, particularly with regard to China. Progress in the US-Japan alliance has tended to be incremental and the result of crises like the 1995 incident on Okinawa or the 1996 Chinese missile demonstrations in the Taiwan Strait. Similarly, ROK-US relations have been marked by crises, the two most recent being the one that produced the 1994 Framework Agreement and the current one with North Korea.

EL 6444 Russian/Soviet National Security Strategy

2 semester hours

This course focuses on the development of the Russian/Soviet military establishment within the overall context of nineteenth and twentieth century political, economic, and international history. The course analyzes the patterns of change and continuity in the organization, leadership, doctrine, and capabilities of the Russian/Soviet military establishment; the dynamics of civil-military relations in Russia and the Soviet Union; and the evolution of the Russian/Soviet national security objectives, grand strategies, and military strategies. The emphasis is on the period since 1917.

EL 6447 Strategy and Technology

2 semester hours

Enrollment in this course is by instructor permission. This seminar focuses broadly on readings and discussions of strategy, technology, and national policy. Designed to support research and publication on strategy, technology, and national policy, this seminar is supported by the CSAT at AWC. The intent of this seminar is to fit between strategy and technology in national policy decisions. It employs a variety of methodologies in investigating strategy and technology: guest lecturers, field trips, individual study, research, and seminar discussions, all of which are designed to generate topics for further study. The primary deliverable is a research proposal to include a problem statement, research design, bibliography, and a draft paper.

**EL 6448 US Foreign Policy: Strategy, Execution,
and the Use of Force**

2 semester hours

For the United States to achieve or protect its national interests, its foreign policy needs to be strategically sensitive to the nature of the international system and to the interests of other actors. Foreign policy inevitably focuses much of its attention on conflict. The decision to become involved in conflict and to use military force is the most important decision policy makers must make. But foreign policy also embodies relationships that are cooperative or nonviolently competitive. The course examines the assumptions, ideas, and perceptions that influenced various strategy and policy choices from World War II to the present day, analyzes the consequences of these choices, and debates the pros and cons of the alternatives chosen. What attitudes, concepts, and principles will be most useful for US foreign policy in the years ahead?

**EL 6449 Directed Energy: Transformation or Hype?
(Classified, US Personnel)**

2 semester hours

Since the demonstration of the Airborne Laser Laboratory in the early 1980s, Air Force technologists have been predicting that highly accurate, speed-of-light, dial-up-an-effect weapons are “just around the corner.” More than 20 years later, the promise is still on the horizon. This course introduces students to the state-of-the-art in directed energy (DE) technology and covers such topics as high-power microwaves, high-energy lasers, advanced beam-control technologies, and DE effects. The course examines both the promise of DE-weapons concepts from the aspect of their technological availability, sustainability, and added war fighting capability as well as their viability on the battlefield of the future.

EL 6453 Technology and the History of Warfare

2 semester hours

Since technological breakthroughs affect war fighting in both operational and doctrinal ways, understanding and coping with those effects is a daunting task and has often confounded warriors. This course examines, in an analytic framework, the approaches championed by I. B. Holley and Eugene Emme that have emerged from the study of these effects. Holley argues that every technological change affects either offense or defense and that an analysis of those effects can lead to a viable synthesis. Emme, however, argues that the multifaceted technology of the postindustrial age has befuddled the line between peace and war, thus making tasks of peacekeeping and war so difficult to discern that any synthesis is nearly impossible.

EL 6454 Technology in World War I

2 semester hours

World War I illustrates how weapons improvements overwhelmed military intellectual comprehension and seriously retarded doctrinal acceptance. We rely on Michael Howard and Martin van Creveld to invigorate our analyses into a viable synthesis. Howard described war as mass, firepower, and shock, and said we must determine which of those three was most affected by technology in World War I. Van Creveld described warfare as being composed of initiation, escalation, and termination. He said the effects of technology in World War I have to be analyzed in that light.

EL 6455 Network-centric Warfare

2 semester hours

This course examines the principles, merits, and limitations of network-centric warfare (NCW) and assesses its implications for military operations, particularly command and control. In addition, it analyzes actual cases of NCW application in OEF, OIF, and recent exercises and war games.

**EL 6460 Civil-Military Relations:
Concepts & Issues**

2 semester hours

This course examines the roots of the concept of the professional soldier and the relationship of professionalism to civil-military relations. The course begins by defining professionalism and examining the theoretical concepts that have shaped the military community's self-concept as professionals. The course examines the most important recent study of civilian control of the military and concludes with the ongoing debate on the relationship of the military to American society. At the end of the course students should be able to articulate their own understanding of the nature, values, and dangers of reliance upon traditional definitions and norms of professionalism.

EL 6461 Vietnam War

2 semester hours

This course addresses the causes, character, and consequences of the Vietnam War (1945–75). The course is organized into three major sections: (1) an overview of the war and its associated issues, (2) an examination of the foundations of post-World War II US foreign policy and domestic political considerations that propelled the United States into the Vietnam War, and (3) an assessment of America's conduct of the war and the reasons for its defeat.

EL 6472 Strategic Security Issues

2 semester hours

This elective is a policy-level course addressing a broad spectrum of related issues. Is traditional arms control dead? Is nuclear deterrence

irrelevant? The course reexamines the nuclear threat in three phases: (1) a brief historical foundation—process of arriving at our current nuclear policy, (2) technologies of nuclear proliferation and programs the United States is undertaking to prevent it, and (3) future plans and how to achieve them. Discussions focus on current issues and challenges facing policy makers today: how low to go, how to pursue future reductions, the impact of policy decisions like national missile defense, and the implications of these issues on our strategy, force structure, and allies. Many of the guest discussion leaders currently participate in the US government decision process.

EL 6476 Great Captains and American Mass Media:

Propaganda & Strategic Image

2 semester hours

This course will provide the students an overview of military image trends in American cinema and television from the early twentieth century to the present. Students will acquire a keen understanding of how image perceptions and realities influence public opinion, both for and against the military. They will learn how changes in political and social climates are reflected—or not reflected—by cinema and television and how those same reflections can foster changes in how the American military conducts itself. Finally, they will understand how cinema and television shape the public image of the US military and influence military strategy and doctrine.

EL 6481 European Security

2 semester hours

This course analyzes US security interests and policy in regard to Europe from the Atlantic to the Urals and how those are affected by political, economic, social, and military trends across the Continent. Specific topics include: the role of European countries and institutions in the war on terrorism, the evolution and enlargement of NATO, the enlargement and deepening of integration within the European Union, the impacts of a common currency and efforts to construct a European Security and Defense Policy, violence and intervention in the former Yugoslavia, and problems and potential for partnership with Russia.

EL 6483 Leadership in World War I

2 semester hours

Few conflicts offer as much apparent leadership failure as does World War I. To analyze this failure from the biographies and autobiographies of the participants is most useful to the current senior leader. Because much rich material is available, we have limited our study to the most relevant pieces of work.

EL 6485 Terrorism

2 semester hours

Terrorism is one of the oldest of military tactics and forms of warfare, historical evidence dating it to 5000 B.C. The root word for terrorism appears in ancient Greek, Roman, and Sanskrit languages. In more modern times, however, terrorism has become the most frequent form of conflict. In only 30 years, for example, recall the carnage at the 1972 Munich Olympics; the 1983 Beirut truck bomb attack that killed 241 Americans; the 1988 bombing of Pan Am Flight 103 that killed 259 passengers; the 1993 New York World Trade Center bombing that had 1,000 casualties; the 1995 attack on the federal building in Oklahoma City that killed 168 people; the 1996 Saudi Khobar Towers that took the lives of 19 US Airmen; the use of chemical weapons in a Tokyo subway that resulted in 12 deaths and 5,500 injured; the 1998 bombing of two US embassies in East Africa, which killed 214 people; the 2000 attack on the USS *Cole* which killed 17 US sailors; the September 2001 attacks on the World Trade Center and the Pentagon, which killed more than 5,000; and the subsequent Anthrax attacks via the US postal system. This course will examine why terrorism has re-erupted; the implications for political, economic, military, cultural, and religious institutions; the increasing lethality of terrorist acts; and the prospects for resort to nuclear, biological, radiological, and chemical weapons. Capabilities and limitations of governmental authorities will be addressed and also what the future may hold for deterring and countering terrorism.

EL 6491 Emerging Security Issues

2 semester hours

Though terrorism garners the headlines, other problems such as drug trafficking, money laundering, organized crime, human trafficking, and disease may pose more insidious threats to human security. Besides addressing these topics, this course also examines the interactions among population growth, climate change, rising energy consumption, and resource scarcity and their impact on international security. In addition, it explores policies required to reverse current trends and considers ways nations can cooperate to deter the potential for conflict.

EL 6492 Religion and Conflict in the Middle East

2 semester hours

This course analyzes the role of religion as a catalyst for terrorism and how the propensity of the world's religions affects international security. The course also covers the basic approaches to values, to include ethics, morals, and laws, and assesses the relationship between the church and state in various countries.

AY05 Warfighting Electives

EL 6510 Warrior Cultures

2 semester hours

This elective will address the issues relating to societies in which violence appears to be endemic. Using examples from such diverse environments as El Salvador, Jamaica, Yemen, East Africa, and West Africa, we will study how groups such as the cattle raiders of Karimojong and the “gangsta warriors” of Liberia and Sierra Leone turn into chronically violent entities. We will also analyze the impact that weaponization had upon these groups, with particular emphasis on how light weapons proliferation helped to encourage the creation of “Kalashnikov cultures.”

EL 6513 Air Mobility and the

Defense Transportation System

2 semester hours

This elective provides students a better understanding of the current and evolving capabilities of mobility and the critical role it plays and will continue to play during peace, war, and operations other than war. During the course, class members will draw from historical references, student case study presentations, classroom discussion, and guest speakers to gain a better understanding of how mobility resources and capabilities evolved, future directions in air mobility, and the resultant impact on our current and future national security and military strategies.

EL 6516 Modern Joint Warfare

2 semester hours

The employment of joint warfare has been a challenge to US armed forces throughout the military history of this country. This course examines historical examples of joint operations in an effort to provide an understanding of the advantages and disadvantages of employing more than one service in a military operation. An evaluation of joint operations conducted throughout the military history of this country will be used as the method of inquiry.

EL 6517 Command & Control of Aerospace Power:

Warfighter’s Perspective

(Classified, US Personnel)

2 semester hours

Enrollment in this course is by instructor permission. This is an advanced course specifically targeted towards those who may be given the opportunity to command in an air operations center (AOC), its sister-service equivalent, or to integrate their units’ efforts in the application of air and space power. Its content will, by its nature, complement the JCLASS electives. Initially, the student will be challenged with analyzing the requirements for the proper development of future air

and space leaders. The bulk of the course will then analyze and synthesize the critical elements in the command and control of air and space power, planning, execution, assessment, and identification as well as surmounting obstacles while preparing for future challenges. The course will include a field trip to observe either a Blue Flag or Fleetex, or both, from the perspective of the command and control of air and space power. A blue-ribbon panel of retired general officers whose expertise is in command and control and the application of air and space power will mentor students in this course. Nominations of students for this elective will be taken from the seminar directors.

**EL 6518 Command and Control of Air and Space Power
in Joint and Coalition Operations 2 semester hours**

This course is designed as a base-level introduction of past, current, and future issues concerning the JFACC. It is specifically intended for operators who may be assigned to a JFACC or Joint Air Operations Center (JAOC) staff. This course addresses the roles, operations, command relationships, and responsibilities of the JFACC in support of a joint force commander (JFC). It is not intended for experienced JFACC or JAOC staff officers. A blue-ribbon panel of retired general officers whose expertise is in command and control and the application of air and space power will mentor students in this course. Nominations of students for this elective will be taken from the seminar directors.

**EL 6519 JLASS-I (Classified, US Personnel)
EL 6520 JLASS-II (Classified, US Personnel) 2 semester hours**

JLASS is a war game that focuses on the strategic and operational levels. Selected students play the war game from all of the Senior Service Schools (SSS). AWC plays as the JFACC. In JLASS-I students develop options in response to multiple regional crises and prepare air campaign plans in coordination with the other senior schools to support regional combatant commander objectives in the event of a major theater war. JLASS-II is a six-day war-fighting exercise that brings the SSS students together here at Maxwell and allows them to execute their plans in a dynamic environment at the AFWI. JLASS-I consists of 30 contact hours over 15 instructional periods. JLASS-II involves 30 hours during the six-day exercise. Enrollment in this course is through seminar director or service chairs only.

EL 6523 America's Army

2 semester hours

This course is specifically designed for non-Army students who want to gain greater understanding about the Army. The Army is thoroughly explored, with a strong emphasis on how history and heritage influence current force and doctrine. Students will gain a comprehensive awareness of Army culture and develop an appreciation for what the Army can provide to a regional combatant commander or joint task force commander. This course will build a solid foundation of knowledge about the Army, including the US Army's force structure and capabilities, doctrine, terminologies, and idiosyncrasies. Students will analyze and evaluate Army doctrine relative to their own service and the joint community. The goal is to ensure students understand what it looks, feels, and smells like to be a soldier. Class culminates with a three-day practical exercise (MAPEX) to validate course classroom instruction.

EL 6524 Space Fundamentals

(Classified, US Personnel)

2 semester hours

This course focuses on the elements of space power, military applications of space systems, distribution of space-based information, and availability of commercial systems. It is primarily oriented toward current systems and those that will be available in the next few years. This course is intended for US students with little or no space background. Background information on space characteristics; limits imposed on use of space; and space organizations, missions, and functions will be provided in readings and in the first few lessons. The remaining lessons will focus on specific types of space systems and how they contribute to war fighting. Each lesson comprises a briefing and a discussion, with guest speakers supplementing the faculty. Students lacking a practical background in space operations should take this course before attempting the Term 2 Command and Control of Space Power elective.

EL 6529 Special Operations—Then & Now

(Classified, US Personnel)

2 semester hours

This course provides an understanding of the organization, capabilities, and missions of US Special Operations Forces (SOF) with particular focus on their support to the combatant commanders. It provides an awareness of the roles of the assistant secretary of Defense for Special Operations and Low-Intensity Conflict and the Joint Staff J-3 Special Operations Division (J-3 SOD). The course analyzes the integration of joint SOF capabilities with conventional forces and takes a brief look at SOF equipment, training, and support. Considerations for mission

employment and insights into civil affairs and psychological operations will also be covered.

**EL 6530 Chemical and Biological Warfare Issues for
the USAF (Classified, US Personnel) 2 semester hours**

This course examines chemical and biological warfare issues and addresses challenges posed by adversaries employing chemical and biological weapons to the successful execution of USAF roles and missions. The course analyzes threats posed by state and terrorist actions and alternative USAF responses to each in various scenarios.

EL 6532 World Space Issues (IOs Only) 2 semester hours

As a result of Operation Desert Storm, the importance of space force to the war fighters has grown significantly. To ensure the continued success of space forces, the United States must continue to educate our future leaders as well as those international officers who will lead the coalition forces in future conflicts. The main theme of this course will be to examine the basics of space operations: policies, law, and doctrine—and the capabilities and limitations of current space forces. Existing issues associated with the use of space forces will be identified throughout the course.

**EL 6533 International Rivals: Leaders & Strategic
Cultures in Potential Adversary States
(Classified, US Personnel) 2 semester hours**

This course will look at the leaders and strategic cultures of countries and groups of concern to US national security. Addressed will be the political-psychological profiles of the leaders of Iran, Iraq, Libya, Syria, China, Russia, North Korea, and various terrorist or revolutionary organizations like the Kurdistan Workers Party (PKK), Islamic Jihad, Hezbollah, and Osama bin Laden's organization. Who are these leaders and what formed their worldview? What values and ideas do they espouse and how can they be influenced? Who in their regime or group makes what kinds of national security decisions and why? How can they be deterred from war or escalation? What is their military doctrine and what are their military capabilities? How have they used force in the past and what is their relationship to other states in their region and to the United States? What are the internal power divisions within their country, group, or region?

EL 6534 ISR Support to the Warfighter

2 semester hours

JV 2020 calls for decision superiority—making and implementing better decisions faster than the adversary can react. Decision superiority is only achieved through the full integration of intelligence, surveillance, and reconnaissance (ISR) operations into the military campaign. This course addresses ISR as a weapons system for strategic and operational campaign planning and execution: the intelligence mission, organization, activities, and processes; how ISR operations are integrated into air and space operations; capabilities and limitations of the seven intelligence disciplines; and challenges of meeting the increasing information needs of military commanders, planners, and operators.

EL 6537 Navy and Marine Corps

Expeditionary Forces

2 semester hours

This course is designed to provide students a comprehensive introduction into Naval Expeditionary Warfare. It will cover current Navy and Marine Corps strategy and doctrine, emphasizing Navy/Marine Corps force planning, forces and capabilities, and military operations. Students will be given comprehensive briefings on US Navy and Marine Corps operations in support of joint strategy, will participate in panel discussions and case studies, and will travel on field trips for hands-on reinforcement of lessons.

EL 6545 Securing the Peace

2 semester hours

This elective examines national security through the lens of domestic policy, both at home and abroad. The underlying premise is that the long-term health and perhaps even survival of the United States (or any nation) may depend upon how it resolves its internal problems. Commanders in “nation building” circumstances would be well served to understand these issues, and the range of options (i.e., policy choices, national resources, NGOs, etc.) that are available as they set out to achieve post-hostility stability. The course evaluates American public policy choices in the areas of health care, education, criminal justice, and social welfare and then extrapolates this evaluation to the arena of failed and/or failing states. Rather than suggesting that US approaches are exportable or preferred, this methodology is employed to provide students the advantage of proximity and familiarity.

EL 6546 Future Total Force Issues

2 semester hours

From the initial vantage point of a historical review of the ANG and AFRES, students will engage the compelling issues affecting the Total Force today and through the next decade. This is not a course on the rudiments of the Air Reserve components; rather it is a forum for debating strategic issues facing air and space leaders as the twenty-first century closes in on the Total Forces. Some suggest that we will transition to a militia nation once again. Do you agree? Just exactly what is the right force mix for the active and reserve components? The course will include a sprinkling of outside speakers, two field visits, video teleconferences, with the top leaders of the Air Reserve components, and more. Strategic leaders of tomorrow will influence the makeup of the Total Forces of the next millennium. The course will give you the opportunity to establish multidimensional views on the issues at hand and pave the way for you to influence the Total Force beyond 2004.

**EL 6547 Logistics of Waging War: Issues
and Answers**

2 semester hours

Air and space power is based on high-technology weapons and support systems developed and sustained by an industrial base. Today acquisitions and logistics products and services command approximately 70 percent of the annual Air Force total obligation authority (TOA). Consequently, considerable attention is focused on making these processes as efficient as possible to secure adequate funding for force modernization. For future leaders this course creates an awareness of the logistics issues that impact military power. It examines the political, socioeconomic, and military dimensions of acquisition and logistics processes from a strategic, macro perspective.

EL 6548 Homeland Security Issues

2 semester hours

The purpose of this course is to look at the threats to the United States' homeland and the actors, organizational structures, plans, policies, programs, and resources required to defend the country against such threats. We are now in an era when mass casualty weapons make it possible for single individuals or small groups to inflict the kind of damage on societies that were within the capabilities of countries and governments. So, homeland security or homeland defense is necessary against the terrorist armed with mass casualty capabilities.

EL 6554 Budget Wars

2 semester hours

This course examines the current environment in which senior leaders prepare, defend, and communicate resource allocation decisions, to include consideration of military, political, economic, and social

influences. The course focuses on the key processes, players, and products that drive planning, programming, budgeting, and execution (PPBE) decision making at the strategic level.

EL 6557 Airpower in the Post–Gulf War Era **2 semester hours**

The allied coalition’s lopsided victory over Iraq in 1991 led many observers to declare that the Persian Gulf War heralded a new form of air-centric, high-technology warfare. Since 1991 the United States has waged several major air campaigns under physical and political conditions vastly different from those of the 1991 Gulf War. As the 1990s progressed, American airpower acquired a certain “mystique” as a military tool capable of successfully coercing America’s foes with little or no participation from US ground forces, resulting in minimal casualties and collateral damage. Sufficient evidence now exists to evaluate the efficacy of airpower as an instrument of coercion in a casualty-averse environment. This course examines the performance of American airpower in the post–Gulf War era in the context of current technological and political parameters.

EL 6558 Sun Tzu: Unconventional Strategic Thought **2 semester hours**

This course explores strategic thinking by examining several major works of classical Chinese strategy known collectively as *The Seven Military Classics of Ancient China*. Special attention is given to one of these works known in the West as Sun Tzu’s *Art of War*.

Additional Programs

Solo Challenge

AWC diploma credit

The culminating event of the year is an eight-day war game in which students are expected to synthesize and apply the knowledge gained during the academic year in a complex global scenario. Students are confronted with international and US homeland security challenges which must be dealt with through diplomatic, economic and the full range of military operations from humanitarian to full scale war. Scenarios and issues are drawn from Global Engagement and other service Title X war games. Students play the roles of key decision makers on the National Security Council, the Joint Staff, and regional combatant commanders. The game is directed and adjudicated by AWC faculty members and supported by the Air Force Wargaming Institute.

National Security Forum

AWC diploma credit

The National Security Forum (NSF) is an event sponsored by the secretary of the Air Force and hosted by AWC during the week before graduation. It is the capstone event of AWC's academic year. NSF brings together approximately 140 civilian leaders with diverse backgrounds from locations around the United States to join with the AWC class.

The primary objective of the NSF is a frank and candid exchange of views on national security matters among our invited guests, AWC students, and senior military and civilian leaders. The week is devoted to exploring the many issues that affect the current and future security of our country, focusing heavily on the role of air and space power as an instrument of national security. The forum's distinguished speakers, seminars, and social functions serve to broaden and solidify the participants' understanding of air and space power and national security issues.

Commandant's Lecture Series

AWC diploma credit

The Commandant and Dean of Academic Affairs invite approximately 25 distinguished speakers to address the class throughout the academic year. Speakers are drawn from the highest levels of the US and foreign governments, military services, members of the press, non-governmental organizations, and industry leaders. They are also selected based on their stature (former POWs, Medal of Honor recipients) or for their expertise on a fast breaking issue. The speakers integrate leadership themes or issues with which senior leaders should be familiar. Student preparation is limited to critical listening, questioning the speaker and applying lessons learned in seminar

discussions. The Department of Leadership and Ethics administers this program.

Executive Wellness Program

AWC diploma credit

The Air War College Executive Wellness Center (EWC) is Air War College's focal point for the Air Force "Fit to Fight" program. It offers extensive health and fitness activities designed to educate and encourage AWC students, faculty, staff, and their families in making appropriate lifestyle choices to enhance personal performance, longevity, and quality of life. The key objective of the EWC is to instill in each AWC member a personal philosophy of lifelong physical activity, healthful nutrition, and other beneficial lifestyle choices resulting in improved military readiness and personal well-being.

Nonresident Programs

The Air War College Nonresident Program combines our resident program's core curriculum with selected electives and a research paper to create a professional military experience for those officers and DOD civilians unable to attend AWC in residence. The mission, objectives, and philosophy of the resident program apply equally to the nonresident program. Note: Courses taken in the nonresident program may not be used to satisfy course requirements of the resident program if selected to attend.

Students may complete their requirements in student-led seminars, as independent correspondence learners, or by some combination of these two. Examinations and writing requirements, as well as course materials, are identical regardless of the completion method. Students may transfer from one study mode to the other. About 10 percent of AWC nonresident students participate in seminars at one of 50 locations worldwide.

Independent study is an excellent alternative for those students desiring a great deal of flexibility due to extensive TDYs, duty schedule, or family needs who may or may not have the option of participating in a student-led seminar. Ninety percent of AWC nonresident students choose independent learning and take the program by correspondence. Most students complete this self-paced program in 18 months.

Air University Catalog, 2004–2005

For enrollment information, contact your base education services officer or visit our Web site at <http://www.au.af.mil/au/awc/awc-ns.htm>. Inquiries may be addressed to AWC Nonresident Studies Directorate, 325 Chennault Circle, Maxwell AFB, AL 36112-6427; commercial phone number (334) 953-6093 or DSN 493-6093.

Air War College Faculty

Ben F. Young Jr., Col, Vice Commandant and Adjunct Professor; BA, Valdosta State College; MA, Central Michigan University.

Suzanne Logan, Educational Advisor to the Commandant and Adjunct Professor; BS, Midwestern State University; MEd, Texas Tech University; EdD, Texas Tech University.

Air University Advisors

Rex Forney Jr., Col, USA; Army Advisor; BS, Jacksonville State University; MA, Webster University; MSS, Air University.

Francis T. Scanlan, Department of State Advisor; BA, Loyola University; MNSS, Naval War College.

Juergen Lukas, Col, USMC, Marine Corps Advisor; BA, Jacksonville University; MS, Marine Corps University; MSS, Air University.

Sylvia B. Gage, CIA Advisor; BA, Louisiana State University; MA, Northeast Louisiana University.

Robert L. Cunningham Jr., CAPT, USN, Navy Advisor; BA, Rice University; MNSS, Naval War College; MSS, Air University.

Nigel M. Huckins, Group Capt, Royal Air Force Advisor; MSS, Air University.

Willi Heinz Kamuf, Lt Col, German Air Force Advisor; MSS, Air University.

Dean of Academic Affairs

Stefan Eisen Jr., Col, Dean; BS, US Air Force Academy; MS, St. Mary's University, San Antonio, Texas; MA, Naval War College, DPA, University of Alabama.

Judith Gentleman, Associate Dean for Academic Programs; AB, Trinity College; MA, State University of New York at Buffalo; PhD, State University of New York at Buffalo.

W. Michael Gulliot, Col; Associate Dean for Academic Operations, BSBA, University of Louisiana; MBA, University of South Dakota; MA, National Defense University.

John A. Shaud, General, USAF, retired, Distinguished Professor; BS, US Military Academy; MS, George Washington University; PhD, Ohio State University.

Dean of Students

Kent D. Williams, Col, Dean; BA, Angelo State University; MSS, Air University; MA, George Washington University; MA, Webster University.

David Lawton, Col, Chief, International Officer Affairs; BS, US Air Force Academy; MA, Air Force Institute of Technology; MNSS, National War College.

Leadership and Ethics

David S. Johnson, Col, Department Chair; MS, Air Force Institute of Technology; MSS, Air University.

Catherine Lee, Col, Deputy Chair; BS, Purdue University; MS, Air Force Institute of Technology.

John E. Ball, Col; BA, Texas A&M University; MS, University of Oklahoma; MSS, Air University.

Dan Henk, Col (USA, retired), Associate Professor; BA, The Citadel; MA, University of Florida; PhD, University of Florida.

Air University Catalog, 2004–2005

Duane A. Lamb, Col; BS, University of Alabama; MS, Golden Gate University.
Harry LeBoeuf Jr., Col; BS, Louisiana State University; MS, University of Arkansas.
Scott R. Phillips, Col; BS, University of North Dakota; MBA, University of Arkansas; MNSS, National Defense University.
James H. Toner, Professor; BA, St. Anselm College; MA, College of William and Mary; PhD, University of Notre Dame.

Strategy and International Security Studies

Edward C. Holland III, Col; Department Chair, BS, US Air Force Academy; MPA, Troy State University; MAAS, School of Advanced Airpower Studies.
Stephen F. Burgess, Deputy Chair; BA, Duke University; MSS, The Hague; PhD, Michigan State University.
Christopher D. Carr, Associate Professor; BA, University of Lancaster; PhD, London School of Economics.
Amit Gupta, Visiting Professor; BA, Delhi University; MA, Jawaharlal Nehru University; MA, Australian National University; PhD, University of Illinois, Urbana-Champaign.
Theodore M. Kluz, Professor; AB, Temple University; AM, Temple University.
Grant T. Hammond, Professor, Director, CSAT; BA, Harvard University; MA, Johns Hopkins University; PhD, Johns Hopkins University.
Theodore Hailes, Col (USAF, retired), Deputy Director, CSAT; BS, Troy State University; MS, Denison University.
Christopher M. Hemmer, Assistant Professor; BA, State University of New York at Albany; PhD, Cornell University.
Howard M. Hensel, Professor; BA, Texas A&M University; MA, University of Virginia; PhD, University of Virginia.
Daniel J. Hughes, Professor; BA, Wichita State University; MA, University of North Carolina; PhD, University of North Carolina.
Marsha Kwolek, Visiting Professor, BA University of Iowa, MBA Golden Gate University, PhD University of Georgia.
David Lai, Assistant Professor; BA, Guangzhou Institute of Foreign Languages; MA, University of Colorado; PhD, University of Colorado.
Glenn J. Lamar, Visiting Professor; BA, Auburn University; MA, Auburn University; PhD, Florida State University.
Christopher Layne, Visiting Professor; BA, University of Southern California; Diploma, Corpus Christi College, University of Cambridge; LLM, University of Virginia; JD, University of Southern California; PhD, University of California-Berkeley.
James Mowbray, Professor; PhB, Montieth College, Wayne State University; MA, Wayne State University; PhD, Duke University.
Jeffrey Record, Professor; BA, Occidental College; MA, Johns Hopkins University; PhD, Johns Hopkins University.
Steven D. Roper, Visiting Professor; BA, University of North Carolina-Greensboro; MA, University of Arkansas-Fayetteville; PhD, University of Missouri-Columbia.
Nicholas E. Sarantakes, Visiting Professor; BA, University of Texas; MA, University of Kentucky; PhD, University of Southern California.
Denise Schultz, Col; BA, Northern Kentucky University; MS, Florida State University; MSS, Air University.
Stephen Schwalbe, Col; BS, US Air Force Academy; MPA, Golden State University; MA, Naval Postgraduate School; MNSS, Naval War College.
Thomas C. Skillman, Col; BS, US Air Force Academy; MS, Houston Baptist University.

David S. Sorenson, Professor; BA, California State University-Long Beach; MA, California State University-Long Beach; PhD, University of Denver.
Robert I. Wendzel, Adjunct Professor; BA, Kalamazoo College; PhD, University of Florida.
Rae A. Williams, Col, Associate Dean of Academic Operations; BA, Georgia State University; MA, Embry-Riddle University; MSS, Air University; PhD, Walden University.
Guy Wills III, Col; BS, US Air Force Academy; MS, Oklahoma State University.
James E. Winkates, Professor; BA, Beloit College; MA, University of Virginia; PhD, University of Virginia.
Xiaoming Zhang, Professor; BA, Nanjing Teachers University; MA, University of Iowa; PhD, University of Iowa.
Toshi Yoshihara, Assistant Professor; BS, George Washington University; MS, The Johns Hopkins University; PhD, Tufts University.

Warfighting

George Earnhart, Col, Department Chair; BS, US Air Force Academy; MA, National Defense University.
Michael Ainscough, Col, SG Chair; BS, St Louis College; MSS, Air University; MS, Troy State University; MA, Pepperdine University; MD, Southern Illinois University.
Mark Conversino, Lt Col (USAF, retired), Professor; BA, Eastern Kentucky University; MA, Indiana University; PhD, Indiana University.
Ricky Cosby, Col; BS, US Air Force Academy; MA, National Defense University.
Karen Currie, Col; BA, Duquesne University; MA, University of Kentucky; MS, Air Force Institute of Technology; PhD, Texas A&M University.
John L. Emich Jr., Col; BS, Auburn University; MBA, University of Montana.
Stephen O. Fought, Lt Col (USAF, retired), Professor; BS, Georgia Institute of Technology; MS, University of Southern California; PhD, Brown University.
Mark Greenwood, Col; MA, University of Northern Colorado.
Todd G. Kemper, Lt Col; BA, Indiana University; MSS, Air University.
Lawrence E. Grinter, Professor; BS, University of Florida; MS, University of North Carolina; PhD, University of North Carolina.
Stephen Hagel, Col; BA, South Dakota State University; MS, Air Force Institute of Technology.
Jeffrey P. Hightaian, Col; BS, US Air Force Academy; MBA, Webster University.
Jeffrey Hood, Lt Col; BS, Grove City College; MAS, Emory-Riddle Aeronautical University; MSS, Air University.
John W. Hughes, Col; BS, Auburn University; MS, Auburn University.
Edward Johnson, CAPT, USN; BS, Virginia Military Institute; MSS, Air University.
Olen S. Key, Col; BBA, Memphis State University; MNSS, Naval War College; MA, Webster University.
John T. McMurtrie, CAPT, USN; BS, University of South Carolina; MS, Naval Post Graduate School.
Keith P. Maresca, Col; BA, US Air Force Academy; MA, Webster University.
Dennis A. Rea, Col; BS, US Air Force Academy; MS, Golden Gate University.
Carol D. Risher, Col; BS, University of North Texas; MS, Air Force Institute of Technology.
Michael Ritz, Col; BA, California State University; MA, University of Alabama.
James A. Rothenflue, Col, BS, University of Texas, MS and PhD, Air Force Institute of Technology.
Anthony Sabb, Lt Col; BA, East Stroudsburg University; MA, Webster University.
Barry R. Schneider, Professor, Director, CPC; BS, Purdue University; MA, Purdue University; PhD, Columbia University.

Air University Catalog, 2004–2005

Gary Servold, Col, USA; BS, Colorado State University; MSS, Air University.

Michael A. Stanley, Col, SOF Chair; BS, US Air Force Academy; MBA, University of Wyoming.

George J. Stein, Professor; BA, Assumption College; MA, Penn State University; PhD, Indiana University.

Stephen E. Wright, Col; BS, Texas A&M; MS, East Texas State University; MNSS, Naval War College; MAAS, School of Advanced Airpower Studies.

SCHOOL OF ADVANCED AIR AND SPACE STUDIES

Col Thomas E. Griffith Jr., Commandant and Dean
Dr. Stephen D. Chiabotti, Vice Commandant

Internet Address

<http://www.au.af.mil/au/SAASS>

Mission: *To educate strategists in the art and science of air and space warfare, thus enhancing the Air Force's capacity to defend the United States through the control and exploitation of air and space.*

A revolution in AF PME began in the late 1970s. As it continued in the 1980s, the revolution led Air Force chief of staff Gen Larry D. Welch to charter a new graduate school, the School of Advanced Airpower Studies (SAAS), at AU in 1988. The first class convened in the summer of 1991 and graduated in June 1992. Beginning with the graduation of the first class, SAAS has produced many of USAF's most influential and innovative airpower strategists and leaders. In November 2002, SAAS was redesignated the School of Advanced Air and Space Studies (SAASS).

SAASS is an 11-month, follow-on school for selected graduates of intermediate-level DOD PME schools. SAASS creates warrior-scholars who have a superior ability to develop, evaluate, and employ airpower. Upon completion of all requirements and with faculty recommendation, graduates receive a master of airpower art and science degree.

SAASS faculty members hold a doctorate or equivalent in their fields of academic expertise. The breadth, depth, and diversity of their expertise are enhanced by the fact that the SAASS faculty is divided between terminally credentialed field-grade or senior officers and civilian scholars.

Resident Curriculum

The SAASS curriculum is designed to accomplish two major objectives:

- I. Enhance the student's ability to *think critically* about airpower and warfare resulting from
 - a. a thorough evaluation of military and airpower theories, and
 - b. a thorough evaluation of the reality of the airpower experience, and resulting in
 - c. a reasoned synthesis of theory and experience the articulation of which informs the question of how modern airpower can best be applied across the spectrum of conflict.

- II. Enhance the student's ability to *argue effectively and responsibly* about airpower using evidence and logic resulting from experience in
 - a. introducing and defending propositions in a graduate colloquium environment,
 - b. composing interpretive arguments in prose that meets accepted publication standards, and
 - c. reducing complex formal arguments to comprehensible briefings.

The primary instructional forum is the graduate colloquium, which facilitates maximum interaction between students and the expert faculty.

Duration and Quotas

The SAASS curriculum is an intensive 51-week program. Class size is limited to 37 AF officers, two Army officers, and one officer representing the sea services.

Prerequisites and Selection

SAASS students are chosen by a central selection board at Air Force Personnel Center (AFPC). To apply for consideration, officers must have completed or be in attendance at an intermediate service school in residence.

Admission Requirements and Procedures

Admission to SAASS is highly competitive. Those wishing to be admitted must formally apply while or after attending an intermediate service school in residence. The application process includes a requirement to write an essay on a subject selected by the dean. Applicants must either already have a master's degree from an accredited institution or a bachelor's degree with an overall grade point average of 2.75 or higher on a 4.0 point scale. AFIT verifies all academic qualifications. A central selection board convened at AFPC makes the final admission selections among qualified applicants.

Graduation and Degree Requirements

To graduate, a student must

1. achieve a weighted grade point average for all letter-graded courses of 3.0 or higher;
2. achieve a "pass" grade for all courses graded "pass/fail";

School of Advanced Air and Space Studies

3. prepare a thesis based on research in original source materials that meets generally accepted standards of research, analysis, and expression at the master's-degree level; and
4. successfully complete an oral comprehensive examination conducted by a faculty board.

Curriculum Summary
(Not listed in order of presentation)

| Course Title | Quarter Hours |
|---|----------------------|
| SAASS 600 Foundations of Military Theory | 6 |
| SAASS 601 Decision Making: A Primer for Strategists | 6 |
| SAASS 627 Airpower History through WWII | 6 |
| SAASS 628 Air and Space Power History since WWII | 6 |
| SAASS 632 Strategic Airpower and National Security | 6 |
| SAASS 643 Small Wars and Terrorism | 3 |
| SAASS 644 Joint Wargame | 1 |
| SAASS 660 Technology and Military Innovation | 3 |
| SAASS 665 Space and Information Power | 3 |
| SAASS 670 Contemporary Defense Policy | 3 |
| SAASS 680 Formulating Strategy and Theory | 3 |
| SAASS 690 Thesis | 10 |
| SAASS 699 Comprehensive Examination | 3 |
| TOTAL | 59 |

Course Descriptions

SAASS 600 Foundations of Military Theory

6 quarter hours

This course analyzes the writings of military theorists who significantly influenced thought about the art and science of war. Through this analysis, students gain a broad background in the development of military thought and develop critical thinking skills as they test theoretical propositions against the criteria of logic and evidence.

**SAASS 601 Decision Making: A Primer
for Strategists**

6 quarter hours

A foundation “tools” course that provides a background and understanding of decision-making theories. These tools allow the student to better analyze airpower theories, ideas, issues, and concepts. Defense planning issues are discussed to illustrate decision-making challenges and issues pertinent to future airpower strategists.

**SAASS 627 Airpower History and
Theory through World War II**

6 quarter hours

This course examines the historical development of air and space power in terms of organizations, technology, doctrine, and application. It provides the experiential database required for students to evaluate the theory and practice of air power and to develop their personal theory of air and space power in SAASS 680. Theories of Douhet, Trenchard, Mitchell, de Seversky, and Slessor, among others are studied in detail.

**SAASS 628 Air and Space Power History and
Theory since World War II**

6 quarter hours

This course analyzes the development of air and space power theory and history from the end of World War II through the present. It examines the theories of John Warden, John Boyd, and effects-based operations and compares them with the practice of airpower over the past 60 years. The coercion theories of SAASS 632 also undergo the practical scrutiny of historical experience.

**SAASS 632 Strategic Airpower and
National Security**

6 quarter hours

This course analyzes modern theory and contemporary thought regarding strategic deterrence and coercion; crisis stability; strategic nuclear offense, defense, and proliferation; conventional strategic air attack; force projection; and the adaptation of US grand strategy to changes in the international distribution of power, focusing on the use of airpower to pursue and support these national security objectives.

SAASS 643 Joint Wargame

1 quarter hour

This war game, conducted in conjunction with the Advanced Studies Group schools of the sister services, provides the opportunity for students to synthesize the curriculum and experiment with their ideas about the application of airpower.

SAASS 644 Small Wars and Terrorism

3 quarter hours

This course develops the theory of small wars and examines the use of airpower in nonstate warfare with a particular emphasis on revolutionary and counterrevolutionary insurgent warfare. The phenomenon of terrorism and the “global insurgency” of radical Islam also receives treatment.

SAASS 660 Technology and Military Innovation

3 quarter hours

This course focuses on the theory and history of technological development and its impact on innovation in military affairs.

SAASS 665 Space and Information Power

3 quarter hours

This course examines the development of military space and information operations, organizations, strategy, and the contentious issues surrounding space and information operations in modern warfare.

SAASS 670 Contemporary Defense Policy

3 quarter hours

This course focuses on the main actors in the defense arena, from the president to the Congress, secretary of Defense, and individual service cultures. It examines topical areas of current and potential US defense concerns and surveys geographic regions likely to present issues in the near future.

SAASS 680 Formulating Strategy and Theory

3 quarter hours

This course helps students comprehend the entire SAASS curriculum. Colloquia throughout the academic year summarize and synthesize the various courses. Late in the school year, instruction focuses on developing a personal theory of airpower. Students must defend their theory during their comprehensive examination (SAASS 699).

SAASS 690 Thesis

10 quarter hours

The students develop and present to the faculty a research proposal. Once their proposal is approved, the students, with the advice and assistance of a faculty research advisor, prepare a 40- to 60-page thesis based on primary sources. In writing their theses, the students must demonstrate sound scholarship and conform to generally accepted stylistic and methodological canons.

SAASS 699 Comprehensive Examination

3 quarter hours

A two-hour oral examination by a board of three faculty members (one of whom is usually from outside the SAASS faculty) the exam is designed to determine if the student has satisfactorily synthesized the entire SAASS curriculum. Inquiry into a student's personal theory of airpower developed in SAASS 680 is often a prominent feature of the examination.

School of Advanced Air and Space Studies Faculty

- Thomas E. Griffith Jr., Col; Professor; Commandant and Dean; BS, US Air Force Academy ; MA, University of Alabama; MAAS, SAASS; PhD, University of North Carolina.
- Stephen D. Chiabotti, Professor; Vice Commandant; BS, US Air Force Academy ; MA and PhD, Duke University.
- Dennis M. Drew, Professor; Associate Dean; Professor of Military Strategy, Theory and Doctrine; BA, Willamette University; MS, University of Wyoming; MA, University of Alabama.
- Michael Grumelli, Col, USAFR; Individual Mobilization Augmentee to the Commandant; Associate Professor; Professor of Airpower History; BS, US Military Academy; MA and PhD, Rutgers University.
- Richard Andres, Assistant Professor; Professor of Comparative Military Studies; BA, Fresno-Pacific University; MA and PhD, University of California, Davis.
- James S. Corum, Associate Professor; Professor of Comparative Military Studies; BA, Gonzaga University; MA, Brown University; MLITT, Oxford University; PhD, Queen's University (Canada).
- Everett C. Dolman, Associate Professor; Professor of Comparative Military Studies; BA, Montana State University; MA and PhD, University of Pennsylvania.
- James Forsyth, Col; Professor; Professor of Strategy and Policy; BA, Kean College, NJ; MA, University of South Dakota; PhD, University of Denver.
- Gerald S. Gorman, Lt Col; Assistant Professor; Professor of Comparative Military Studies; BS, US Air Force Academy; MA, University of Indiana; MMAS, University of Kansas; PhD, Johns Hopkins SAIS.
- Thomas A. Hughes, Associate Professor; Professor of Airpower History; BA, St Johns University, Minnesota; MA, Bolling Green University; PhD, University of Houston.
- James Kiras, Assistant Professor; Professor of Comparative Military Studies; BA, University of Toronto; MA, University of Massachusetts, PhD, University of Redding.
- David R. Mets, Emeritus Professor; Professor of Technology and Innovation; BS, USNA; MA, Columbia University; MS, Troy State University; PhD, University of Denver.
- Stephen Rothstein, Lt Col; Assistant Professor; Professor of Comparative Military Studies; BS, US Air Force Academy ; MAAS, SAASS; PhD, Tufts University.
- Gary Schaub; Visiting Assistant Professor; Professor of Political Science; BS, Carnegie Mellon University; MA, University of Illinois, Urbana-Champaign; PhD, University of Pittsburgh.
- John G. Terino, Lt Col; Associate Professor; Professor of the History of Technology; BA, MA, and PhD, University of Pennsylvania.
- Edward B. Westermann, Lt Col; Associate Professor; Professor of Military History and Theory; BS, US Air Force Academy; MA, Florida State University, MAAS, SAASS; PhD, University of North Carolina.
- Harold R. Winton, Professor; Professor of Military History and Theory; BS, USMA; MA and PhD, Stanford University.

AIR COMMAND AND STAFF COLLEGE

Brig Gen Ronald R. Ladnier, Commandant
Col James E. Moschgat, Vice Commandant

Internet Address

<http://www.acsc.maxwell.af.mil/>

Mission: *A world-class team educating midcareer officers to lead in developing, employing, commanding, and supporting air and space power across the spectrum of service, joint, and combined operations.*

Air Command and Staff College (ACSC), the Air Force's intermediate PME school, prepares field-grade officers of all services (primarily majors and major selects), international officers, and US civilians to assume positions of higher responsibility within the military and other government arenas. Geared toward teaching the skills necessary to conduct air and space operations in support of a joint campaign, ACSC focuses on shaping and molding tomorrow's leaders and commanders. The college's academic environment stimulates and encourages free expression of ideas as well as independent, analytical, and creative thinking.

ACSC traces its roots to the Air Corps Tactical School (ACTS) located at Maxwell Field from 1931 to 1942. After World War II, as the independent Air Force was formed, grew, and developed, the requirements and expectations of the school evolved to fulfill the service's educational needs. The vision of pre-World War II leaders has withstood the test of time. Although six decades have passed since the founding of ACTS, the present 10-month curriculum still focuses on expanding understanding of air and space power and on the growth of midcareer officers. In 1962 the school became known by its current name, Air Command and Staff College.

During academic year (AY) 1994, ACSC undertook the most significant change to its educational program since the school's inception. The school transitioned from a traditional lecture-based program to a seminar-centered environment with an integrated curriculum geared to problem solving across the continuum from peace to war. In AY 1999, ACSC began efforts to align its curriculum under the AU commander's Strategic Guidance for the Continuum of Education. The ACSC program now functions as a portion of a comprehensive and integrated career-long PME program.

Goals: The ACSC curriculum encourages the development of higher order thinking by challenging students to think critically and exercise a combination of analytical and practical tools required as leaders charged with the nation's defense. ACSC graduates are well educated in the profession of arms with

emphasis on the use of air and space power in joint campaign planning and the operational art of war. The ACSC curriculum

- facilitates the air- and space-minded thinking of students,
- develops and enhances abilities for higher-level command and staff responsibilities,
- enhances students' abilities to think critically about operational air and space concepts in a dynamic international environment,
- broadens students' understanding of the nature of conflict and current and future threats to the United States and its allies, and
- develops and enhances students' abilities to plan and execute the joint campaign planning process and air and space operations to support the joint force commander.

ACSC's three deans—education and curriculum, students and support, and distance learning—provide academic leadership to the school's faculty and student body. The dean of education and curriculum, assisted by the vice dean for academic affairs and vice dean for operations, coordinates the integration of the final curriculum content and directs the planning and implementation of the academic programs of four curriculum departments: International Security and Military Studies; Joint Warfare Studies; Leadership, Command, and Communication Studies; and Specialized Studies. The dean of distance learning is responsible for planning, organizing, and delivering the nonresident program of instruction through the departments of curriculum and operations. The dean of students and support coordinates student activities and is responsible for student services. The dean and the commander and staff of the 21st Student Squadron are responsible for the health, morale, and welfare of 600 resident students and their families.

Resident Program

The primary form of instruction in the resident curriculum is seminars held in specially designed rooms featuring closed-circuit television, an array of multimedia equipment, and student access to a school-wide computer network and the Internet. Students are issued more than 80 books to expand their professional capabilities and a personal laptop computer to use to keep track of the academic schedules, online reading assignments, and for use in examinations throughout the academic year.

Duration and Quota

The resident program consists of 10 months of instruction. Approximately 600 officers from the USAF, Army, Navy, and Marine Corps; 80 international officers; and 20 civilian employees of selected agencies of the federal government attend this course.

Prerequisites and Selection

Air Force candidates to attend ACSC are selected in conjunction with O-4 promotion boards. A central PME selection board, with major command input, selects the actual ACSC class from these candidates based on their demonstrated potential for assignment to key field-grade command and staff positions. Majors, major selects (or equivalent rank), GS-12, and GS-13 government civilians are eligible to attend ACSC. Reference AFI 36-2301, *Professional Military Education* and the ETCA Web site at (<http://etca.keesler.af.mil/>), for additional information.

Master of Military Operational Art and Science Degree Admission Requirements and Procedures

To be admitted to the master of Strategic Studies degree program, an individual must (1) be selected to attend the ACSC resident program; (2) present proof of academic capability by either holding a qualifying undergraduate degree (US bachelor's degree or its equivalent) or meeting admission requirements through the portfolio admission process; and (3) if required by the following guidelines, provide an acceptable score on the TOEFL test.

- I. Proof of Academic Capability by Transcript
 - a. Air Force active duty, Guard, and Reserve officers selected to attend AWC will have their degree status verified by the AU Registrar through AFIT without action on their part.
 - b. Sister service and civilian students must have their official transcripts sent to the AU Registrar, 60 Shumacher Ave, Maxwell AFB, AL 36112 within the first month of the academic year.
 - c. International officers interested in pursuing the master's degree may submit a transcript of US bachelor's or bachelor's equivalent degree taken in the English language and/or an advanced degree in languages other than English that has undergone a document-by-document evaluation of the academic records by an independent foreign credentials evaluation service that is a member of the National Association of Credentials Evaluation

Services (NACES) or the Association of International Credential Evaluators (AICE) to determine if the records are equivalent to a US four-year bachelor's degree.

- i. Applications for this process are available from the AU Registrar.
- ii. When requesting one of these services to evaluate one's transcript(s), the individual should state the reason as "further education" or "admissions requirement for master's degree program."
- iii. Individual's seeking admission to the master's degree program is responsible for the costs associated with the transcript evaluation.
- iv. A copy of the evaluation must be mailed to the AU Registrar.

II. Proof of Academic Capability by Portfolio

Air University provides a portfolio option to those selected to attend ACSC who wish to apply to the master of Military Operational Art and Science degree program but who do not possess a US bachelor's or equivalent degree.

Those seeking to be admitted to the degree program using this option must submit their portfolios to the admissions committee through the AU Registrar. The committee will evaluate each applicant on his or her own merit to determine if the person's "preparation" is judged adequate for the rigors of the master of Military Operational Art and Science degree program.

Minimally, the portfolio should contain as much information as necessary to demonstrate one's professional and educational history to include:

- a. Official evidence of all completed college, university and/or professional school coursework evaluated by an independent foreign credentials service (see transcripts above).
- b. Copies of certificates and diplomas evaluated by an independent foreign credentials service (see transcripts above).
- c. Detailed description of professional work including a current resume and, if appropriate, work-relevant evaluations.
- d. Two or more letters of recommendation from persons who (1) hold a terminal degree, (2) are a past or present supervisor, or

(3) can offer a professional reference attesting to your capacity to complete a graduate degree program.

- e. Program brochures, catalog pages, and/or descriptions as necessary to support these accomplishments.

III. Proof of English Language Proficiency

- a. International officers applying for admission to the master of Military Operational Art and Science degree program from countries where the official language is English are not required to take the Test of English as a Foreign Language (TOEFL).
- b. International officers who have completed a bachelor's or higher degree in the US during the past three years are not required to take the TOEFL.
- c. International officers from countries where the official language is not English must achieve an acceptable score on the TOEFL to be admitted to the master's degree program.
 - i. The individual is responsible for the cost of this test.
 - ii. When taking the TOEFL, an individual must select Air University as the Institution Code (9069), for the official score to be sent to the AU Registrar.
 - iii. The minimum acceptable score for unconditional admission to the master's degree program is 540 for the paper-based test or 207 for the computer-based test. The minimum acceptable score for conditional admission is 500 for the paper-based test or 173 for the computer-based test.
 - iv. Students admitted conditionally must retake the TOEFL after beginning ACSC classes but in time to receive the score by 20 August 2004.
 - v. A faculty committee must evaluate the academic progress of any student who does not achieve the minimum acceptable score for unconditional admission on the retest to determine whether he or she will be allowed to continue in the degree program.

International students not having a baccalaureate degree, not admitted through the portfolio process, not making the minimum TOEFL score, or not admitted at the end of the first elective term by the faculty committee with a conditional score, will be allowed to attend ACSC and will, upon graduation, receive the ACSC professional military education (PME) diploma but will not be awarded the master's degree.

Graduation Requirements

Students fully admitted must complete the following 35-semester-hour ACSC resident program with an overall grade point average of 3.00 on a 4.00 scale to earn award of the master's degree.

ACSC Resident Curriculum Summary

| Course Title | Semester Hours |
|--|-----------------------|
| OC 5500, Orientation Program | 0 |
| LC 5500, The Art of Military Leadership | 5 |
| LE 5500, The Practice of Command | 2 |
| NS 5500, National and International Security Studies | 4 |
| ST 5500, Strategy and War | 3 |
| AP 5500, Expeditionary Air and Space Power Studies | 4 |
| JF 5500, Joint Forces | 3 |
| JP 5500, Joint Campaign Planning | 3 |
| JA 5500, Joint Air Operations | 3 |
| SS 5500, Specialized Studies | 5 |
| GE 5500, Gathering of Eagles | 0 |
| EL 5600, Research Seminars | 3 |
| TOTAL | 35 |

Note: All courses must be taken in residence at ACSC. Courses taken in the nonresident program may not be used to satisfy course requirements of the resident master's degree program.

Resident Program Course Descriptions

OC 5500 Orientation Program

noncredit

The orientation program provides an overview of the ACSC Program for Joint Education; USAF educational learning theory, policies, curriculum, and research; and the principles students will encounter throughout the academic year. The program includes an introduction to small group dynamics, communication skills, available technology, research requirements, student responsibilities, and available services to enhance learning.

LC 5500 The Art of Military Leadership

5 semester hours

Historian James L. Stokesbury wrote: “Leadership remains the most baffling of arts . . . as long as we do not know exactly what makes men get up out of a hole in the ground and go forward in the face of death at a word from another man, then leadership will remain . . . an art.” Midcareer officers tasked with leading greater numbers of subordinates to accomplish increasingly more complex missions are engaged in an “art” that places a premium on adaptive, flexible, and dynamic military leaders. This course examines the compelling qualities of leadership that makes it easier for subordinates to adapt to change, manage risk, accept uncertainty, and reach their full potential.

LE 5500 The Practice of Command

2 semester hours

This course enhances the students’ understanding of leadership and helps them apply that understanding as they personalize their approach to leadership and command. It stresses the importance of crafting a commander’s mindset appropriate for an expeditionary force. This course establishes a solid foundation and provides structured opportunities for students to reflect on contemporary leadership issues and analyze potential courses of action open to commanders faced with challenges to mission accomplishment. With a focus on command, the course also highlights responsibilities, opportunities, and resources available to all military leaders.

NS 5500 National Security

4 semester hours

The National and International Security Studies course provides perspectives for understanding the complex and dynamic national and international security environment in which military operations are planned and implemented. Students apply their understanding of course perspectives as they examine real-world national and international security concerns. Specific focus areas include national security strategy, the use of the national instruments of power to fulfill that strategy, and

the roles of major national security actors. Students concentrate upon the development of national military strategy through study of the Defense Planning System.

SW 5500 Strategy and War

3 semester hours

The Strategy and War course explores the relationship between the military instrument of power and the political objectives it is designed to serve. This relationship strikes to the heart of strategy, which JP 3.0 series defines as “the art and science of developing and employing armed forces and other instruments of national power in a synchronized and integrated fashion to secure national or multinational objectives.” Ultimately, this course is about the evolution and use of the military IOP to attain political objectives.

AP 5500 Expeditionary Air and Space Power

4 semester hours

The Expeditionary Air and Space Power course analyzes man’s quest for decision on the battlespace through the application of air and space power. Using a chronological approach, the course traces the evolution of air and space power from its humble beginnings as an adjunct to surface forces, to its emergence as a preeminent combatant in modern times. The course emphasizes the Airman’s perspective of warfare, describing air and space power through three phases of modern history: Airpower in the Age of Total War, Air and Space Power in the Cold War, and the Transformation of American Air and Space Power in Modern Era. In this final phase, the course focuses specifically on US Air Force capabilities and the manner in which Air Force capabilities and the manner in which the Air Force presents forces to the joint force commander.

JF 5500 Joint Forces

3 semester hours

The Joint Forces course presents fundamental joint and sister service doctrinal principles that provide basic guidelines for joint force commanders as they employ forces at the operational level. It also presents a fundamental overview of joint force organizations, capabilities, functions and sister service-specific capabilities and limitations at the operational level of war. Students demonstrate their understanding of course material by determining what the joint forces commander would require from the Services and functional commands given specific, various scenarios that mandate military action.

JP 5500 Joint Campaign Planning

3 semester hours

The Joint Campaign Planning course provides students an application level understanding of campaign-planning principles. The course provides exposure to doctrinal concepts and the tools used in Joint Campaign

planning, and compares and contrasts the Deliberate Planning and Crisis Action Planning processes. Students apply their understanding of these concepts and processes during realistic planning exercises.

JA 5500 Joint Air Operations

3 semester hours

The Joint Air Operations course introduces students to the people, processes, and products involved in planning, directing, and executing joint air operations in support of the joint force commander's campaign plan. The course specifically emphasizes Joint Force Air Component Commander responsibilities and Air Operations Center functions, culminating in a comprehensive war game that allows the students to apply their knowledge and skills. The war game recreates the stresses involved in planning and executing air operations. Students are tasked to build a theater wide plan for joint air operations from which several air tasking orders will be derived.

SS 5500 Specialized Studies

5 semester hours

The Specialized Studies course provides students with career broadening education tailored to meet the US Air Force's force development goals. This educational opportunity covers a broad spectrum of functional areas and operational disciplines. Students are assigned to study areas based on the developmental pattern established for them by either their service, agency, or by an appropriate US Air Force development team. The International Officer course examines US military operations, key political processes, and American culture through guest speakers and field trips. The following is a list of AY 05 specialized study areas:

SS5501 Air and Space Power Employment
SS5502 Acquisition Management
SS5503 Space Operations
SS5504 Political-Military Affairs
SS5505 Agile Combat Support
SS5506 Mobility Operations
SS5507 Information Operations
SS5508 Plans and Programs
SS5509 International Officer

GE 5500 Gathering of Eagles

noncredit

The Gathering of Eagles (GOE) is a unique course that stimulates the study of air and space history. Numerous historically significant air and space figures have participated in this course. While at ACSC the “Eagles” spend time with students and participate in teaching interviews. These interviews allow the students to better understand their heritage and learn lessons about air and space leadership from those who shaped it. GOE activities conclude with a special presentation at the graduation ball. Research conducted by students in EL 5680, Gathering of Eagles, forms the basis for the content of this course.

RS 5600 Research Seminars

3 semester hours

Students satisfy the three credit-hour research requirement by accomplishing a research paper through one of the Research Seminars. The Research Seminars complement ACSC’s core resident curriculum. They also enable students to investigate topics in a rigorous fashion, in a seminar setting, and under the direction and guidance of a subject matter expert. These seminars provide students the opportunity to develop their ability to define an issue succinctly; to conduct thoughtful, logical, and critical research and analysis; and elicit from students well-developed and supported conclusions and recommendations. This course provides the results of student research, writing, and analysis to interested parties, including key decision makers at the highest levels of command, on relevant national security topics at the operational and strategic levels. The quality of student projects parallels the quality of projects in graduate-level education and is competitive for publication in professional journals or distribution to other comparable sources, agencies, or institutions. The college currently offers the following Research Seminar courses.

RS 5601 The Military-Media Relationship. This course focuses on public opinion and support as a strategic center of gravity, and helps potential operational commanders understand how the global information environment affects the battlefield of the twenty-first century. The course includes extensive analysis of historical and contemporary roles that propaganda, public affairs operations, and the media have played in conflicts.

RS 5602-607, Regional Security Studies Analysis (International Officers—Masters). These courses involve an analysis of current regional security issues from the perspective of the nations in those regions. International officers conduct an analysis of the global security issues of their particular region of the world and work with students in EL 5692-697 to

present their perspectives on these issues during regional forums conducted throughout the year. In addition to the requirement for participation in the security forums, this seminar provides international officers an opportunity to pursue special research projects with selected faculty members on a wide range of topics dealing with the interaction of US policy with sociopolitical developments in their respective regions. Grade for the course is based on 50 percent assessment for participation in the forums and 50 percent for the individual research paper.

RS 5610 Patterns of Extraordinary Leadership. This course adds a powerful dimension to the studies of great military leaders by introducing a revealing (and perhaps surprising) look at the common traits, philosophies, and values of America's most accomplished leaders. A simple yet broad survey, which seeks the inputs of over 500 top leaders across America, will form the nucleus of this course. This survey will span the strata of business, politics, healthcare, government, education, science, technology, politics, finance, performing arts, media, social, sports, entertainment, law, and of course, the military.

RS 5620 Air Force Expeditionary Medical Support. This course examines the capabilities of the Air Force Medical Service (AFMS) in support of military operations as we begin the twenty-first century. The emphasis is on medical readiness and Expeditionary Medical Support (EMEDS), with much less emphasis on peacetime medical care. EMEDS evolved extensively in the 1990s, and, as a result, Medical Service doctrine was completely revised. Medical assets were modularized to be "light, lean, and lifesaving" — deployable in small packages while retaining their medical capabilities. This modularization continues to evolve based on real world operations. The course culminates with a senior leader's perspective on the future of the AFMS.

RS 5621 Advanced Logistics. This seminar explores issues and topics that are current and relevant to military logisticians. Individuals will gain a better understanding of other logistics issues, outside their specific research topic, by continually sharing their findings with other seminar members.

RS 5623 Future Trends and Their Impact on the Military. This course previews the strategic environment and commercial and military technologies anticipated in the 2010–30 time frame to help students explore capabilities and operational concepts that could be used by the military to support US national security. The course familiarizes students with the driving forces and key factors that affect planning, the

importance of planning for multiple futures, and how to identify signposts and indicators that given scenarios are coming to pass. Various predictive and nonpredictive planning models, with emphasis on scenario-based planning, are presented as viable tools for configuring the military of the future.

RS 5624 ISR Support to the Warfighter. Joint Vision 2020 Publication calls for decision superiority—making and implementing better decisions faster than the adversary can react. Decision superiority is only achieved through the full integration of intelligence, surveillance, and reconnaissance (ISR) operations into the military campaign. For this to happen, commanders need to fully understand the ISR weapon system. This course teaches students what every war fighter needs to know about strategic and operational intelligence operations across the spectrum of conflict.

RS 5626 Science and Technology Policy. Federal government policies take the products of our market economy and convert these products into instruments of power. While realists and liberalists compete for use of these instruments of power, both agree that technological determinism is the engine behind our instruments of power. This course examines the roots and current state of American technological determinism. The course's intent is to explain and predict the future direction and substance of federal science and technology policies.

RS 5627 Modeling, Simulation, & Wargaming. This course provides an overview of theoretical foundations of modeling, simulation, and war gaming. It includes a study of the historical uses of these tools in planning, manning, resource-allocation, education, and strategy development and explores the state-of-the art in war gaming. Finally, students research how to better exploit war games and simulations in the future.

RS 5628 Peace Operations. This course examines lessons learned from past peace operations and analyzes whether the US is prepared to use those lessons in improving the chances for success in the future. The course focuses upon the future role of peace enforcement and the United States' readiness to participate in future scenarios. The course facilitates students' understanding of peace operations in preparation for future command positions and staff roles.

RS 5629 Military Applications of Artificial Intelligence. This course provides an introduction to some of the fundamental issues in artificial intelligence

(AI) and how these issues affect military systems where they are applied. The course examines the key role AI has played in military operations to include such delegated tasks as error recovery, navigation, targeting, and electronic warfare.

RS 5632 The Military Commander and the Law. This course covers a broad range of issues including areas such as: maintenance of good order and discipline, the law of armed conflict, contracts and fiscal law in a deployed environment, homosexual policy, civilian personnel issues, free speech on military installations, environmental regulations, the Joint Ethics Regulation (JER), computer crimes, and dealing with private organizations. The course provides students an overview of current legal issues that commanders and senior leaders are likely to confront in their efforts to accomplish mission requirements.

RS 5633 The Total Force. This course examines the Total Force policy and the changing role of the Reserve Component forces. Analysis of current US policy will highlight the debate over positive and negative aspects of Reserve and Guard utilization in the different services. Students explore the continuing evolution of the Total Force and develop ideas about alternative future force structures.

RS 5634 Fourth Generation Warfare: Transformation into the 21st Century. In this course students explore the phenomena that for the last half millennia the West has defined warfare focusing on the application of technological applications on the battlefield. Since the power of the West surpassed that of the rest of the world, the West controlled military thought. However, times have changed. The West although still quite powerful, no longer dominates. Thus non-Western cultural traditions are gaining influence. In 1989 a new generation of warfare began to emerge from Islamic and Asiatic traditions—Fourth Generation Warfare (4th GW or 4GW).

RS 5635 Information Operations. This course examines Information Operations as an umbrella concept for several disciplines, which include electronic warfare, psychological operations, military deception, operations security, physical destruction, and computer network operations. The course provides an appreciation for the capabilities and limitations that information operations bring to the joint force. Students assess the interrelationship between air, space, and information operations, and the integration of Information Operations within joint air and space operations planning.

RS 5636 Strategy and Technology. This course is designed to broaden students' understanding of the relationship between technology and strategy. Students gain an appreciation for the current state of the art in a variety of fields to include directed energy (lasers and high-powered microwaves), sensors, communications, space systems, propulsion systems, computers, and micromechanical devices. Students develop an understanding of how these technologies impact military operations at the operational and strategic level.

RS 5638 Introduction to Special Operations. This course enhances students' understanding of US special operations organizations, missions, and capabilities for application at the operational level of war. The course covers the history of SOF, organization, and mission and the unique aspects of US Special Operations Command, such as involvement in the planning, programming, and budgeting system.

RS 5640 Asymmetric Warfare: The American Indian Wars. This course examines, analyzes, and interprets the Indian wars' heritage of the American military tradition. There is also posed an underlying question: Are these wars an ignored part of the military tradition of the United States, which can provide insight into aspects of what is now called "military operations other than war?" Study and assessments are made on a professional objective basis, exploring notable Indian success and white defeats, as well as the reverse. These wars are placed within a broader context than simply one of military operations, as they are also assessed as cultures in conflict.

RS 5641 The Causes of Military Unrest. This course investigates the underlying and immediate causes of mutiny, desertion, and insubordination in armies, navies, and air forces from a historical perspective. It will analyze the various avenues and levels of resistance to military authority, investigate both underlying causes of discontent and immediate triggers of insubordination, and examine the methods adopted to deter, crush, or alleviate unrest in the ranks.

RS 5642 Unmanned Aerial Vehicles (UAV) in Military Operations. This course provides an understanding of UAV and unmanned combat aerial vehicles (UCAV). Discussion includes all aspects of UAV/UCAV technology and concepts that involve the study of current UAV operational capabilities and issues. The course provides an understanding of the processes used to develop and field new and modified systems and to identify opportunities for improvement.

RS 5643 Colonial Conflict and Counter-Insurgency. This course explores basic problems of military strategy, tactics, and logistics, with specific application to the French, British, American, and Russian experiences of colonial warfare and the indigenous response to it from 1830 to the present. Military planners often focus on large-scale, conventional warfare. However, much of the conflict of the last two centuries has been on a smaller scale warfare and counterinsurgency. Western colonialism and imperialism in Africa and Asia were important phenomena of the nineteenth and the twentieth centuries.

RS 5645 War, Motivation, and Morale. This course examines the following questions through reading and discussing literature from many different perspectives and disciplines: Why do men pick up arms and wage war against one another, often for policies that they did not originally create nor for ones that often do not affect them at a personal level? When did war originate and under what circumstances? Is war part of human nature? What motivates man before and during war? Has the motivation for war changed throughout history? Is there hope for eliminating war?

RS 5647 World War II Operational Art. This course is constructed around an examination of important campaigns of the Second World War. World War II was a watershed in the evolution of modern roles and missions and offers many important lessons dealing with operational innovation, the integration of new technology, effective interservice cooperation, and other topics of current interest. Issues facing today's war fighters will be examined from a historical perspective. Students will conduct an in-depth examination of selected campaigns and develop an understanding of the impact of those campaigns on the development of modern operational doctrine.

RS 5648 Airborne Operations. This course provides the student with an in-depth operational analysis of parachute forces in the twentieth century. A comparison of the development of airborne forces and their application in combat assist the student in understanding the role that airborne forces have played in major combat operations and campaigns. Factors affecting the success of airborne operations, including transportation, timing, weather, opposing forces, leadership experience, and mission planning are analyzed.

RS 5649 The First World War: The Fall of Innocence and the Rise of the Modern Era. This course examines the implications of World War I on modern war and politics. Though 85 years have passed since the guns of the First World War fell silent, the horrors of that war and the ambiguity

of its outcome continue to influence the world even today. The unsuccessful search for decision on its battlefields, the resulting catastrophe of trench warfare, and the political results imposed by the victors upon the vanquished have influenced virtually every aspect of modern politics and war fighting since.

RS 5650 History of Aerospace Technology. This course explores the interaction between science, technology, and culture in the development of aviation and space flight. There are two objectives to this course. The first is to enhance the students' understanding of air and space history from the late nineteenth century to the present. In this regard, the course builds upon and complements airpower history in the ACSC core curriculum. The second objective is to develop an understanding of the various factors that have influenced the advance of air and space technology.

RS 5651 Operational History of the Vietnam War. This course studies the Vietnam War and provides several opportunities for students. The political and cultural contexts of the war served to channel much of what occurred. War is not only a series of combat actions, it is a process that changes society in unexpected ways; strategic effects often extend far beyond the battlefield. Operationally, the military suffered through mistakes and made adaptations that often bore fruit during subsequent decades.

RS 5652 Naval Operations. In this course students examine the US naval role of warfare and implications for the operational level commander. Through readings, seminar discussion, and research, students are introduced to naval warfare; presented the US Navy's warfare tasks in relation to a robust crisis scenario; and conclude with an introduction to contemporary naval innovation and experimentation. This course also encourages professional dialogue among the services to enable an understanding, and conduct of, effective joint operations at the tactical level of war.

RS 5653 Operational Art: Theory and Practice of Campaign Design. This course first builds a foundation on operational art and the Western way of war, examining the ideas and impact of key practitioners and theorists. However, it is more than a history course. The course then moves from intellectual foundations to practical application, challenging students to apply theoretical concepts, joint and service doctrines, and the processes of campaign design to the operational problem of linking battles, engagements, and major operations into a coherent operational design to

accomplish strategic objectives. The goal of this course is to give students an appreciation of the complex nature and vital role of operational art.

RS 5661 Non-State Security Threats. This course examines new security challenges and explores the growing security threats presented by globalization. Ethnic cleansing, suicide bombings, and drug running stem from the lack of good governance and in turn create the conditions that are ripe for civil distress. Civil distress can lead to the collapse of the entire government apparatus, mass flows of refugees, arms smuggling, and to the creation of safe havens for terrorists and criminal syndicates. These conditions and effects, although reminiscent of the Cold War, occur in a vastly different international environment. Moving beyond a mere examination of these threats and the analysis of the means used to meet them, this course looks at the sources of these threats for clues to developing better strategies. Further, students examine broad trends in the international system (such as economics and geopolitics), as well as latent subnational phenomena (such as religion and corruption), for these clues.

RS 5662 Radical Islamism. This course treats Islamism as a radical political religion with specific historical and political determinants. Students will examine concepts presented in this course and extrapolate attributes that can be applied to similar non-Islamist movements. A comparative approach of study will provide the student with working hypotheses by which tensions between states and societies may be evaluated. This course will help prepare students to comprehend the way radical political religion can shape the geopolitics of the twenty-first century.

RS 5664 Weapons of Mass Destruction (WMD) This course introduces students to the challenges posed by the spread of WMD and to understand responses to reduce this threat. The course analyzes the challenges and impact of the spread of chemical, biological, and nuclear weapons on national security policy and military operations.

RS 5665 Presidents, Politics and US Foreign Policy Since 1945. This course is an examination of US foreign and national security policy since 1945, with emphasis on the role of the president in the political process of policy making.

RS 5666 Post-Communist Europe. This course is an investigation of Communism, its impact, and the transition to democracy in Central Europe and the Balkans. It is principally a discussion of politics. The

course is organized as a graduate reading colloquium with seminar discussion and assignments devoted to review of the historical and scientific literature. The objective is to familiarize military professionals and government servants with the main patterns of politics and foreign relations as well as political culture in this important region of Europe.

RS 5667 The Arab-Israeli Conflict. This course introduces students to the history and current dynamics of the Arab-Israeli conflict, and discusses US interests and participation in the conflict and possible future involvement.

RS 5668 Challenges to US Interests in NE Asia. This course examines US national security interest, current strategy, policy, and possible policy alternatives affecting US interests and policy in Northeast Asia. In addition, a thorough examination will be made of cultural, religious, and economic influences on regional policies and perceptions influencing the ability of the US to achieve its interests.

RS 5669 Coalition Warfare. This course challenges the notion that coalitions are the weaker form of organizing and conducting warfare. Rather, history shows that coalition warfare, when properly conceived and conducted, is the more powerful, more flexible, and more resilient form of warfare. This course will also deal, to a lesser extent, with related issues such as the problems that arise in translating war plans into action (e.g., unanticipated events, unintended consequences, policy “blowback”), the relationship between ends and means, friction in war, the critical importance of leadership, and the necessity of innovation.

RS 5670 The Politics of NATO. This course explores numerous questions and issues related to NATO to include: What is NATO? Why does it persist? What and who drives it? Can it meet the increasing number of challenges it faces while maintaining internal cohesion? The course focuses on the political nature of NATO; an important objective is encouraging students to enter into the potentially complex debates that drive, divide, and define the alliance.

RS 5680 Gathering of Eagles (GOE). GOE is both a group research project as well as an opportunity for ACSC students, faculty, Air University, and community leaders to meet noted air and space pioneers. Started in 1982 to stimulate interest in aviation history, GOE is an annual series of events hosted by ACSC. Individuals who have made significant contributions to air and space heritage are invited to spend several days with ACSC students to share their experiences and lessons learned. Forums include

face-to-face meetings, on-stage interviews, panel discussions, and social events. GOE culminates with a presentation of the eagles at the ACSC graduation ball.

RS 5681 Future Joint Warfighting Forces. This course examines emerging concepts, capabilities, requirements, and service-provided forces that will be employed within future joint warfare and crisis resolution. It also seeks to identify and describe the key elements and desired capabilities that comprise the evolving American way of joint warfare for the foreseeable future. Students engage in research to capture and define both the emerging trends and potential limits of future joint war-fighting forces.

RS 5682 Independent Space Force/USAF Space Corps. This course examines the further reorganization of the DOD concerning space forces. The Goldwater–Nichols Department of Defense Reorganization Act is used as a springboard for analyzing how defense reorganization policy may be formed and then applying this analysis to a policy that addresses the possible reorganization of DOD Space forces as a separate service or corps.

RS 5683 Future Offensive/Defensive Space Capabilities. This course explores three major space-related topics of special interest to the Air Force chief of staff: weaponization of space, force application from space, and counterspace capabilities. It will broaden students' understanding of national space goals to better deal with the issues of developing and employing space capabilities.

RS 5684 Integration of Joint Air/Land/Sea/Space Operations. This course provides students the opportunity to develop their ability to define issues regarding the integration of joint forces at the operational level of war. Students will conduct thoughtful, logical, and critical research and analysis in order to produce well-developed and supported conclusions and recommendations. Specifically, students will analyze the path from deconfliction to integration, to interdependence.

RS 5685 National Military and Security Strategy. This course explores the critical concept of national security with a focus on the US National Security Strategy and the US National Military Strategy documents. Following the 9/11 attacks against the US homeland and subsequent operations in Enduring Freedom and Iraqi Freedom, what should be the basis of our national security strategy and national military strategy? In

this course students will address this and similar questions as they pursue research topics of specific interest.

RS 5687 Operation Iraqi Freedom: Buildup & Execution. This course examines lessons learned from recent expeditionary air and space operations, particularly Operations Enduring Freedom and Iraqi Freedom, and explores how these lessons might be applied in future operations.

RS 5688 USAF Intelligence, Surveillance and Reconnaissance (ISR) Programs and Platforms. This course supports individual research efforts providing independent critiques and creative solutions to present or future ISR road-map requirements. The objective is to produce research papers that validate or invalidate current ISR systems planning road maps, identify the proper mix of ISR programs and platforms, and/or identify future opportunities not currently considered by various ISR staff agencies working USAF and joint ISR transformation issues.

RS 5689 Effects-Based Planning and Operations. This course's specific areas of inquiry include criteria and methods used during campaign planning, execution, and postwar analyses to decide how well airpower produces desired effects. Key issues covered include how assessment has been performed in the past, how it is performed today, and how it should be performed in the future in response to effects-based operations (EBO) and other emerging concepts. The course also examines current USAF and joint doctrine relevant to airpower assessment.

RS 5692-697 Regional Security Studies Survey (International Officers—Non-masters). These courses involve an analysis of current regional security issues from the perspective of the nations in those regions. International officers conduct an analysis of the global security issues of their particular region of the world and prepare a collective summary research report of their findings. Students present their perspectives on these issues during regional forums conducted throughout the year. Notional regional grouping for the forums are: Africa, Asia/Pacific, the Americas, European Union States, Non-European Union States, and the Middle East. The course is graded pass/fail.

Other Programs and Activities

ACSC conducts several activities that support the resident core curriculum and enrich the experience of its students and their families during the academic year.

Commandant's Specials

These special presentations enhance the resident curriculum by giving students and faculty the opportunity to interact with distinguished leaders and experts across political, economic, and military environments. Speakers, past and present, include members of Congress, ambassadors, and top civilian and military leaders in DOD.

International Officer Program

International officers have attended ACSC every year since 1946. During its 54-year history, the college has graduated more than 2,500 international officers from 92 nations. Before attending ACSC, international officers attend a six-week preparatory course conducted jointly by the International Officer School (IOS) and ACSC. This course increases the officers' ability to speak and understand the English language while familiarizing them with the USAF organization and mission. In the past international officers graduated after completing seven months of the 10-month course. Beginning with the 1994 class, international officers attend ACSC the entire academic year, further enhancing their ACSC learning experience. During the year, these officers participate in field trips that supplement the curriculum objectives. As part of their educational experience, they tour Washington, D.C., New York City, and several military and air and space facilities.

Athletic Programs

The ACSC athletic program is designed to improve the quality of life for students and faculty by creating and sustaining an environment that promotes personal health, fitness, and professional growth. With that in mind, the objectives of the program are to help all personnel pass the fitness test on the first attempt and to put in place a program that fosters social interaction and team building in conjunction with healthy competition. The athletic program includes competitive seminar and intramural sports. It also includes mandatory participation in school scheduled sports activities by all 44 seminars. Students and faculty compete in base intramural activities as well. Finally, students and faculty members are afforded the opportunity and are encouraged to engage in personal fitness/aerobic activities at least three times

per week. ACSC conducts annual fitness testing in accordance with AFI 40-501, *The Air Force Fitness Program*.

Spouse Program

The Spouse Program helps integrate resident students' spouses into the ACSC experience. It offers many opportunities for spouses to learn, grow, and share the ACSC experience with students and faculty. This program acquaints spouses with the college's academic requirements, increases their awareness of current events and DOD issues, and provides opportunities for personal growth and development. Participation is completely voluntary, and the spouses determine the program's scope and direction.

Nonresident Program

Established in 1948, the ACSC nonresident program provides intermediate-level PME to officers unable to attend in residence. In 1969 ACSC expanded the scope of the program by implementing a seminar program to provide for the sharing of opinions, expertise, and experiences among the seminar members. Both the seminar and correspondence programs achieved Phase I Joint PME accreditation in 1992 and were reaccredited in 1997 and 2002. In 1999 the nonresident program was placed under the dean of distance learning (DL). The nonresident program provides PME to about 85 percent of all AF majors and major selects.

Today, technology offers opportunities to improve traditional seminar and correspondence programs. The DL staff continually explores new and better ways to meet the demand for PME of midcareer officers stationed throughout the world. By using computer-based education and the World Wide Web, the nonresident course is narrowing the gap between resident and nonresident education. These advances clearly identify ACSC as a pacesetter in AU and the educational community.

Eligibility. ACSC nonresident programs are offered to US active duty, Reserve, and National Guard major selects and above from all services. DOD civilian employees in the grade of GS-11 or above, or equivalent, may also enroll. Civil Air Patrol officers serving in the grade of major or above may enroll in the correspondence program only. International applicants for nonresident ACSC programs must be a major selectee or higher or equivalent-grade civilian employees of the military department of a country or international organization assigned to a DOD billet. International officers may also enroll through the Foreign Military Sales (FMS) training sponsorship program. Reference AFI 36-2301, *Professional Military Education*, the ACSC public Web site:

<http://www.acsc.maxwell.af.mil>, and the Education and Training Course Announcements Web site at <http://etca.keesler.af.mil>, for further information.

Program Description. The ACSC nonresident curriculum is designed to support ACSC's mission statement ". . . lead in developing, employing, commanding, and supporting air and space power across the spectrum of service, joint, and combined operations." The course of study is an integrated process. It begins with the studies designed to enhance the students' leadership and command skills and concludes with an AF exercise and lessons on strategy and commander's perspective. In between, the course explores international relations, why nations go to war, and what the Air Force and other services bring to the fight for the joint forces commander.

The ACSC distance-learning curriculum is delivered via printed books, CD-ROM, and the Internet. Students receive an integrated multimedia curriculum that includes textbook readings, video, and interactive applications. Students have 18 months to complete this program and must achieve a minimum score of 70 percent on each of six examinations and complete four online exercises. Students may choose one of two methods to complete the program. The same personnel record entry (nonresident) is made for both forms of enrollment upon successful course completion. Note that courses taken in the nonresident program may not be used to satisfy course requirements of the resident program if selected to attend.

Correspondence (self-study). This method affords students the opportunity to choose the time and place of study. ACSC provides the framework for completing this program by providing a recommended schedule for students to follow. Students may enroll at any time throughout the year.

Seminar. In this ten and one-half month program students meet weekly (on base) in a forum designed for the free exchange of ideas and opinions on vital issues facing the USAF, DOD, and the nation. Seminar participants share unique background experiences and technical expertise. ACSC provides the framework for conducting the seminar program by providing a schedule for the seminars to follow. The seminars are composed of 5 to 18 members and begin anytime throughout the year.

Internet. ACSC has a Distance-learning Electronic Campus on the Internet. Any student enrolled in the ACSC program may have access to the campus. The campus contains a library with lesson plans, audio/video files, readings, and interactive computer simulations. Additionally, students can post messages on the bulletin boards. For additional information or to obtain access to the campus, contact ACSC Distance-learning Directorate at DSN 493-7901, (334) 953-7901, 1-800-316-7042 or e-mail: acsmdl@maxwell.af.mil.

Curriculum. The ACSC nonresident program is organized into the following six curriculum blocks.

00030A: The Leadership and Command course is designed to establish a theoretical base to assist in successfully meeting the challenges in today's dynamic military environment. To accomplish this endeavor, the philosophy of the course is built upon four major premises. First, the foundation of the course is set upon timeless leadership principles and tools that can be applied to virtually any situation. The second premise is to weave Air Force centric philosophy, values, and ideals throughout the course to ensure the fabric of the course remains focused on issues facing our majority audience—field-grade Air Force officers. The third premise is to instill a joint and multinational flavor for successfully leading in future joint and multinational environments. The final premise is to have future senior leaders think about military command—a responsibility and challenge many of them will face.

00030B: The National Security Studies (NSS) course is designed to help students understand today's complex and uncertain environment by comprehending the basic structures, patterns, and key actors of the international system. Students are first introduced to major changes in the international environment that help shape the current national security and strategy. Two world perspectives, realism and liberalism, are presented to give students critical tools to help analyze the strategic environment. Students explore the central role the president of the United States has in the national security decision-making process and the president's use of the instruments of power. Students then examine the National Military Strategy that is derived from the National Security Strategy Program. The course also assesses threats to the security and interests of the United States. Building on the foundation of national security policy procedures, the course examines the basis for joint war fighting through study of the roles of senior civilian and military leadership, current joint doctrine, and unified action armed forces. The course builds on these factors to show how the defense planning systems provide direction for military force planning and joint operations planning to support joint war fighting. The course culminates with students examining the implications of the strategy development process and the factors that influence the formation and selection of strategy.

00030C: The Air and Space Expeditionary Force Operations (AE) course continues where the National Security Studies course left off by expanding the students' understanding of war theory by introducing modern perspectives on war fighting with specific emphasis on air and space power. The AE course seeks to discern the most effective methods of employing air and space power

through the survey of historical examples, leadership influences, and doctrinal development. The course focuses on the air and space component's operational level planning process and the subsequent execution of an air and space campaign. The course is divided into two phases. Phase I provides a historical basis for the formulation of doctrine and looks at the principles of war and tenets of air and space power. Phase II covers the air force capabilities along with the capabilities of the other services in the air and space environment. This phase also covers 11 of the essential Air Force functions required to build and execute an air campaign along with reviewing the expeditionary air force concept of force presentation. The last part of the phase and course will allow Airmen to understand how the air force presents its forces for use by the joint force commander (JFC). Taken as a whole, this course gives the students the knowledge required to be effective air and space power advocates.

00030D: The Joint Force Execution (JFE) course develops a foundational understanding of US military capabilities and functions that a JFC will tailor and use to accomplish the mission. It introduces joint air and space operations by explaining the facets of how we are postured and equipped to operate and fight. This course provides an operational-level view of JF capabilities and limitations and key mission areas that are critical to the JFC. The material is presented in a two-phased approach. Phase I begins by providing an overview of joint forces command structures, responsibilities, components and their staffs. It provides an overview of service capabilities and doctrine and how this expertise is utilized by component commanders to accomplish the joint mission. With this foundation established, the phase expands on the understanding of how a joint force command will execute its mission by best using the forces available. This understanding will allow for further expansion on the other functions that enable and enhance joint operations. Phase II develops an operational understanding of key mission areas for the joint war fighter, and also discusses their importance and limitations. This phase also covers how the JFC can best prioritize and obtain key assets and support necessary for the operation and sustainment of the joint force organization. By discussing the impact of limitations, this course also conveys to the student the relevant issues currently facing various unified commands.

00030E: To employ theater forces in military campaigns, it is necessary to have a thorough understanding of the art of campaign planning. The Joint Campaign Planning course will expand and apply the knowledge gained in previous courses by providing an understanding of joint operation planning at the theater level. Since campaign planning encompasses deliberate and crisis action planning, these will be the main systems discussed in this course. Phase I begins by providing an overview of the many factors that go into campaign planning and the facets of operational art, which are used in developing

campaign plans. This phase closes with a look at the planning processes for military operations other than war and considerations for dealing with multinational and nongovernmental organizations. Phase II builds on this foundation and covers doctrinal guidance of the deliberate planning process. Phase III develops an operational understanding of the crisis action planning process and the products used to plan for threats in a crisis situation.

00030F: The Joint Air Operations (JAO) course introduces students to the people, processes and products involved in planning, directing and executing joint air operations in support of the joint force commander's theater campaign plan. In so doing, it builds upon the foundation laid in previous courses, especially the Air and Space Expeditionary Force and Joint Planning courses. This course surveys the contribution and unique perspective of the joint force air and space component commander (JFACC) in joint warfare. It continues by introducing students to the joint air estimate process (JAEP) and the joint air and space operations plan (JAOP) outlined in JP 3-30, *Command and Control for Joint Air Operations*. It also examines how the joint air and space operations center (JAOC) staff supports the JFACC in planning, directing, and executing air operations.

Academic Credit

The American Council on Education (ACE) recommends 21 hours of graduate-level credit in four content areas for completion of the ACSC DL program. Several colleges and universities have offered to accept graduate transfer credits from the ACSC DL program. Awarding transfer credits is at the discretion of each college or university.

Air Command and Staff College Faculty

Ronald R. Ladnier, Brig Gen, USAF, Commandant; BS, US Air Force Academy; MBA, Webster University; MS, National Defense University.
James E. Moschgat, Col, USAF, Vice Commandant; BS, US Air Force Academy; MS, Troy State University; MAAS, School of Advanced Airpower Studies.
Tony V. Klucking, Lt Col, USAF; BS, US Air Force Academy; MS, Troy State University; PhD, Auburn University.
Allison E. Palmer, Lt Col, USAF, BS, University of Connecticut; MBA, Golden Gate University.
Jeffrey M. White, Maj, USAF; BS, University of Alabama; MBA, St Martin's College; MS, Air Force Institute of Technology; Master of Military Operational Art and Science, Air University.

Advisors

Glenward L. Spivey, Educational Advisor; BS, Auburn University; MS, Troy State University; MS and EdD, Auburn University.
Benjamin Williams III, COL, USA; BBA, Middle Tennessee State University; MSA, Central Michigan University.
Richard A. Payne, CDR, USN; BS, Texas A&M University; Master of Strategic Studies, Army War College.
Michael S. McGuire, Lt Col, USMC, Senior Marine Advisor; BS, University of Arizona.
Christopher Luck, Wing Commander, Royal Air Force; Master of Operational Art and Science, Air University.
William Franklin, Maj, Canadian Forces; BMASc, Royal Military College; Master of Military Operational Art and Science, Air University.
Anthony J. Thorpe, Squadron Leader, Royal Australian Air Force; BS, University of Melbourne; Master of Military Operational Art and Science, Air University.

Dean of Education and Curriculum

Anthony Cain, Col; Dean; BS, University of Wisconsin, Madison; MA and PhD, Ohio State University.
Bart R. Kessler, Lt Col, USAF; Vice Dean; BS, Duke University; MBA, Florida Institute of Technology; PhD, Auburn University.
John T. LaSaine Jr., Associate Professor; Professor of National Security Studies; Vice Dean; BA, MA, and PhD, Brown University.
Robert C. DiPrizio, Assistant Professor; Professor of National Security Studies; BA, Stonehill College; MA, University of New Hampshire; PhD, University of Delaware.
Kelli B. Pohlman, Maj, USAF; BS, Oklahoma State University; MAS, Embry-Riddle Aeronautical University; Master of Military Operational Art and Science, Air University.
Keith R. Tonnies, Maj, USAF; BA, Virginia Polytechnic Institute; MS, Central Michigan University; Master of Military Operational Art and Science, Air University.

Leadership Command and Communication Studies Department

- Michael Grumelli, Associate Professor; Professor of Comparative Military Studies; Department Chair; BA, MPA, MA, and PhD, Rutgers University.
- Dennis M. Armstrong, Lt Col, USAF; BS, US Air Force Academy; MS, Air Force Institute of Technology.
- Terry R. Bentley, Lt Col, USAF; BS, Wayland Baptist College; MS, Oklahoma State University; MA, University of Alabama; EdD, Auburn University.
- Kevin P. Carr, Lt Col, USAF; BS, Tulane University; MBA, University of Arkansas.
- William J. Conley, Maj, USAF; BS, Saint Leo University; MS, George Washington University; Master of Military Operational Art and Science, Air University.
- Kathlene R. Dowdy, Maj, USAF; BA, Rowan University; MS, Utah State University.
- Stephen M. Flippo, Lt Col, USAF; MPA, University of Oklahoma; PhD Candidate, Auburn University.
- Terry L. Goodrich, Lt Col, USAF; BS, University of Northern Colorado; MS, Touro University International.
- Gregory S. Gorski, Lt Col, USAF; MS, City University; Master of Military Operational Art and Science, Air University.
- Lance Hafeli, Lt Col, USAF; BS; MS, University of Southern Mississippi; Master of Military Operational Art and Science, Air University.
- Philip C. Hicks, Maj, USAF; BS, University of Florida; MS, University of Alabama, Huntsville.
- Sharon M. Latour, Lt Col, USAF; BA and MA, University of California at Santa Barbara; Master of Military Operational Art and Science, Air University; MS, Troy State University; PhD, University of Southern California.
- Edwin D. McCain, Maj, USAF; BS, University of Mississippi; MS, Troy State University; Master of Military Operational Art and Science, Air University.
- Thomas J. Mira, Lt Col, USAF; BS, Edinboro University; MPA, Golden Gate University; MBA, Florida Institute of Technology; MMDS, University of Canberra, Australia.
- James Norrix, Lt Col, USAF; BS, Cornell University; MAS, Embry-Riddle Aeronautical University.
- Frank W. Palmisano, Lt Col, USAF; BA, University of Arizona; MS, Baylor University.
- Jane Palmisano, Maj, USAF; BS, University of Wisconsin, Eau Claire; MS, University of Maryland.
- John R. Payne, Maj, USAF; BS, Middle Tennessee State University; MS, City University.
- Rick T. Petito, Maj, USAF; BS, DeVry University; MAS, Embry-Riddle Aeronautical University; Master of Military Operational Art and Science, Air University.
- Gregory E. Rollins, Maj, USAF; BS, Virginia Military Institute; MA, Webster University; Master of Military Operational Art and Science, Air University.
- Catherine J. Sauchuk, Maj, USAF; BA, University of New Hampshire; MAS, Embry Riddle Aeronautical University.
- Dorothy R. Schanz, Maj, USAF; BS Iowa State University; MS, University of Maryland; Master of Military Operational Art and Science, Air University.
- Kevin C. Taliaferro, Maj, USAF; BS, Virginia Military Institute; MAS, Embry-Riddle Aeronautical University; Master of Military Operational Art and Science, Air University.
- Chris Toner, Assistant Professor; Professor of Leadership and Ethics; BA, Notre Dame University; MA, Notre Dame University; PhD, Notre Dame University.
- James A. Tripp, Lt Col, USAF; BS, University of Alabama; MEd, Troy State University.
- Fred L. Warren III, Lt Col, USAF; BS, MS, California State University; PhD Candidate, Auburn University.
- Michael E. Washington, Maj, USAF; BS, Saint Leo University; MS, Air Force Institute of Technology; Master of Military Operational Art and Science, Air University.

Air Command and Staff College

Marcia M. Watkins-Ledlow, Assistant Professor; Professor of Leadership and Ethics; BA, University of Southern California; MS, Abilene Christian University; Master of Military Operational Art and Science Degree, Air University; PhD, Walden University.

International Security and Military Studies Department

Richard R. Muller, Professor; Professor of Comparative Military Studies; Department Chair; BA, Franklin and Marshall College; MA and PhD, Ohio State University.

John T. Ackerman, Lt Col, USAF; BS, Florida State University; MA, University of Southern California; PhD, University of Alabama.

Dennis P. Adams, Maj, USAF; BA, University of Utah; MS, Troy State University.

Carol L. Atkinson, Lt Col, USAF; BS, US Air Force Academy; MA, Indiana University; Master of Military Operational Art and Science, Air University; MA, Duke University; PhD, Duke University.

Robert E. Benning, Maj, USAF; BS, Rose-Hulman Institute of Technology; MA, University of Colorado, Colorado Springs; Master of Military Operational Art and Science, Air University.

Edwina S. Campbell, Professor; Professor of National Security Studies; BA, The American University; MA, MALD, and PhD, The Fletcher School of Law and Diplomacy, Tufts University.

Charles E. Costanzo, Assistant Professor; Professor of National Security Studies; BA, Saint Vincent College; MPA, University of Pittsburgh; PhD, University of Alabama.

Michael D. Craig, Lt Col, USAF; BS, Texas A&M University; MA, Chapman University.

William T. Dean III, Assistant Professor; Professor of Comparative Military Studies; BA, University of the South; MA, University of Chicago; PhD, University of Chicago.

Herbert L. Frandsen Jr., Assistant Professor; Professor of Joint Warfare Studies; BS, Auburn University; MS, Troy State University; MS, Naval Postgraduate School; MA, University of Alabama; PhD, Auburn University.

Leokadia B. Galka, Lt Col, USAF; BS, Manhattan College; MS, Manhattan College; MBA, University of West Florida; MA, University of Dayton.

Lewis K. Griffith, Assistant Professor; Professor of National Security Studies; BA Memphis State University; MA, University of Denver; PhD, University of Denver.

John O. Hagen Jr., Maj, USAF; BS, Boston University; MS, University of North Dakota; Master of Military Operational Art and Science, Air University.

Mary N. Hampton, Professor; Professor of National Security Studies; BA, University of Tennessee; MA and PhD, University of California, Los Angeles.

Kevin C. Holzimmer, Assistant Professor; Professor of Comparative Military Studies; BA, Oakland University; MA, Wayne State University; PhD, Temple University.

Paul R. Kan, Assistant Professor; Professor of National Security Studies; BA, Loyola Marymount University; MA, University of California, Santa Barbara; PhD, University of Denver.

Alexander N. Lassner, Assistant Professor; Professor of Comparative Military Studies; BA, Pennsylvania State University; MA and PhD, Ohio State University.

Robert P. Lott Jr., Lt Col, USA; BBA, North Georgia College; Master of Military Art and Science, US Army Command and General Staff College.

Kathleen A. Mahoney-Norris, Associate Professor; Professor of National Security Studies; BA, Wright State University; MA, University of Southern California; MS, National War College; PhD, University of Denver.

Paul J. Moscarelli, Lt Col, USAF; BS, State University of New York at Buffalo; MBA, Polytechnic Institute; MPS, Auburn University, Montgomery; MALD and PhD, Tufts University.

Air University Catalog, 2004–2005

- Tony R. Mullis, Lt Col, USAF; BA, Auburn University, Montgomery; MA, Virginia Tech University; PhD, University of Kansas.
- Douglas C. Peifer, Assistant Professor; Professor of Comparative Military Studies; BA, Miami University; MA and PhD, University of North Carolina.
- Jeffrey M. Plate, Lt Col, USAF; BA, Norwich University; MA, Golden Gate University.
- Matthew R. Schwonek, Associate Professor; Professor of Comparative Military Studies; BA, University of Dayton; MA and PhD, Ohio State University.
- Anthony Senci, Lt Col, USAF; BS, US Air Force Academy; MS, Troy State University, Montgomery.
- Matthew Stafford, Lt Col, USAF; BA, Bellevue College; MA, Embry-Riddle Aeronautical University; MA and PhD, University of Alabama.
- Lewis B. Ware, Professor; Professor of National Security Studies; BA, Middlebury College; MA, Harvard University; PhD, Princeton University.
- Michael E. Weaver, Assistant Professor; Professor of Comparative Military Studies; BA, University of Tennessee; MA, University of Georgia; PhD, Temple University.
- Cynthia A. Wright, Maj, USAF; BA, US Air Force Academy; MS, George Mason University; Master of Military Operational Art and Science, Air University.
- Mark O. Yeisley, Maj, USAF; BA, Texas A&M University; MS, Colorado State University; Master of Military Operational Art and Science, Air University.

Joint Warfare Studies

- Kenneth C. Coons Jr., Lt Col, USAF; Department Chair; BS, San Jose State University; MS, Troy State University.
- Edward D. Allard, Maj, USAF; BS, University of Maryland; MSA, Central Michigan University; MA, George Washington University; Master of Military Operational Art and Science, Air University.
- David R. Barker, Maj, USAF; BAS, University of Pennsylvania; Master of Military Operational Art and Science, Air University.
- Kris A. Bauman, Maj, USAF; BS, University of Colorado, Boulder; MPA, University of Oklahoma; Master of Military Operational Art and Science, Air University.
- Bruce E. Bechtol Jr., Assistant Professor; Professor of Joint Warfare Studies; BS, Escelsior College; MMS, USMC Command and Staff College; MA, Catholic University; PhD, The Union Institute.
- Robert J. Bois, Lt Col, USAF; BA, University of Maine; MPA, University of Maine; MS, Kansas State University; PhD, State University of New York, Albany.
- Jerry P. Brumfield, Maj, USAF; BS, Louisiana State University; MS, Lesley College; Master of Military Operational Art and Science, Air University.
- Matthew B. Caffrey, Instructor; Professor of Wargaming and Campaign Studies; BS, New Jersey Institute of Technology; MA, University of Alabama.
- Mark L. Devirgillio, Lt Col, USAF; BS, University of Hawaii, Manoa; BS, Air Force Institute of Technology; MS, University of Hawaii; PhD Candidate, George Mason University.
- Robert E. Dvorak, LCDR, USN; BS, Jacksonville University; MAS, Embry-Riddle Aeronautical University.
- Paula B. Flavell, Lt Col, USAF; BS, Ohio State University; MS, Troy State University.
- John R. Glock, Lt Col, USAF; Master of Military Operational Art and Science, Air University; PhD Candidate, Ohio State University.
- Sean M. Hackbarth, Maj, USAF; BA, University of San Diego; MBA, Webster University; Master of Military Operational Art and Science, Air University.
- James W. Harvard, Lt Col, USAF; BS, University of Georgia; MBA, City University.

Air Command and Staff College

Warren D. Hines, Lt Col, USAF; BS, University of Washington; MS, Central Michigan University.

Frederick J. Holland, Lt Col, USA; BA, Prairie View A&M University; MA, Webster University.

Roy F. Houchin II, Lt Col, USAF; MS, Western Kentucky University; PhD, Auburn University.

Mark T. Hubbard, Lt Col, USAF; BS Erskine College; MS, University of Georgia.

Terry C. James, Lt Col, USAF; BS, Southern Indiana University; MS, Embry-Riddle Aeronautical University.

Budd A. Jones, Instructor; Professor of Joint Warfare Studies; Department Chair; BS, US Air Force Academy; MA, University of Wisconsin; Post-Masters Work, Duke University.

Charles T. Kamps Jr., Instructor; Professor of Wargaming and Campaign Studies; BA, Norwich University; MA, Kansas State University.

Kirk Kimmett, Maj, USAF; BS, Delta State University; MS, Delta State University, Master of Military Operational Art and Science, Air University.

Walter E. Lavrinovich Jr., Maj, USMC; BS, University of Michigan; MS, Troy State University, Montgomery.

Matthew J. Lloyd, Lt Col, USAF; BS, US Air Force Academy; MAS, Embry-Riddle Aeronautical University; Master of Military Operational Art and Science, Air University.

David J. Luders, Lt Col, USA; AA, Marion Military Institute; BS, Birmingham Southern College; MA, Webster University.

Steven C. Marsman, Maj, USAF; BA, Calvin College; MPA, University of Oklahoma; MA, University of Oklahoma; Master of Military Operational Art and Science, Air University.

Jonathan R. May, Maj, USAF; BS, Wright State University; MS, Embry-Riddle Aeronautical University; MS, Joint Military Intelligence College; Master of Military Operational Art and Science, Air University.

Wayne A. McCaskill, Maj, USAF; BS, The Citadel; MS, Embry-Riddle Aeronautical University; Master of Military Operational Art and Science, Air University.

Peter M. Merriam, Maj, USAF; BS, US Air Force Academy; MBA, Troy State University.

Dan A. Novak, Lt Col, USAF; BA, Colorado State University; MA, Troy State University.

James E. Powell, Lt Col, USAF; MS, Boston University; Master of Military Operational Art and Science, Air University.

Aaron M. Prupas, Maj, USAF; BS, USAF Academy; MA, Webster University; Master of Military Operational Art and Science, Air University.

John R. Reese, Assistant Professor; BA, Huntingdon College; MAT, Emory University; MA, Auburn University; PhD, Kansas State University.

Joseph H. Reynolds, Lt Col, USAF; BS, US Air Force Academy; MS, University of Colorado; EdS, Troy State University, Montgomery; EdD, Auburn University.

Tom Ruby, Lt Col, USAF; BS, US Air Force Academy; MS, Joint Military Intelligence College; MS, Auburn University; PhD, University of Kentucky.

Specialized Studies

Leah F. Goerke, Lt Col, USAF; BAE, Georgia Institute of Technology; MA, Webster University; Master of Military Operational Art and Science, Air University.

William R. Donovan II, Maj, USAF; BS, Middle Tennessee State University; MS, University of Arkansas; Master of Military Operational Art and Science, Air University.

Technology

Theodore P. Henrich, Maj, USAF; BA, University of Virginia; MA, Webster University; Master of Military Operational Art and Science, Air University.

Air University Catalog, 2004–2005

Anthony J. Gould, Lt Col, USAF; MS, University of Massachusetts, Lowell; PhD, Candidate, University of Missouri, Columbia.

John M. Shepley, Maj, USAF; BS, The Pennsylvania State University; MA, Webster University; Master of Military Operational Art and Science, Air University.

Dean of Students and Support

Richard P. Pierce, Col, USAF, Dean; BS, California State University, Sacramento; MPA, Troy State University; MSS, Marine Corps War College.

George L. Caltabellota, Maj, USAF; Director, Facilities and Supply; BA, Arizona State University; MBA, Central Michigan University.

21st Student Squadron

Noel Zamot, Lt Col, USAF, Commander; BS, Massachusetts Institute of Technology; MS, University of Michigan.

Steven A. Estock, Maj, USAF; BS, University of Mississippi; MS, Central Missouri State University; Master of Military Operational Art and Science, Air University.

Brian W. Landry, Maj, USAF; BS, University of South Western Louisiana; MA, Webster University; Master of Military Operational Art and Science, Air University.

Joseph Lanzetta, Lt Col, USAF; MS, University of Northern Colorado; Master of Military Operational Art and Science, Air University.

Douglas W. Pohlman, Maj, USAF; BS, US Air Force Academy; MS, Embry-Riddle Aeronautical University.

Patricia M. Rinaldi, Maj, USAF; BS, US Air Force Academy; MS, Troy State University; Master of Operational Art and Science, Air University.

Dean of Distance Learning

Mike Harris, Col, USAF, Dean; BA, Central State University; MS, Embry-Riddle Aeronautical University.

Donald A. MacCuish, Vice Dean; BA, Virginia Military Institute; MEd, Wayne State University; EdD, University of Central Florida.

Mary E. Beverly, LCDR, USN; BS, Old Dominion University; MBA, Troy State University; Master of Military Operational Art and Science, Air University.

Michael R. Foster, Maj, USAF; BS, Metropolitan State College; MSSM, University of Southern California; MBA, Golden Gate University.

Robert M. Knapp, Maj, USAF; BS, The Citadel; MAS, Embry-Riddle Aeronautical University.

Robert A. Leonard, Maj, USAF; BS, Ohio State University; MS, University of North Dakota; Master of Military Operational Art and Science, Air University; MS, Air Force Institute of Technology.

Ronald D. Olienyk, Maj, USAF; BS, University of Arkansas; Master in Aviation Management, Embry-Riddle Aeronautical University.

Kimberly A. Olson, Lt Col, USAF; BS, Rensselaer Polytechnic Institute; MAEd, University of Phoenix; Master of Operational Art and Science, Air University; PhD Candidate, Capella University.

Phillip G. Pate, Lt Col, USAF; BS, Auburn University; MBA University of Nevada, Las Vegas.

Andrew J. Schlachter, Lt Col, USAF; BS, East Texas State University; MA, Webster University.

Christopher P. Walker, Lt Col, USAF; BS, University of Southern Mississippi; MA, Webster University; Master of Military Operational Art and Science, Air University.

AIR FORCE INSTITUTE OF TECHNOLOGY

Brig Gen (sel) David W. Eidsaune, Commandant
CAPT Kenneth L. Ginader, USN, Vice Commandant

Internet Address
<http://www.afit.edu>

Mission: *Provide responsive, defense-focused graduate and continuing education, research, and consultation to improve Air Force and joint operational capability.*

The Air Force Institute of Technology (AFIT) supports the Air Force and national defense through responsive degree-granting graduate and continuing education (PCE), research, and consulting services to AF and DOD agencies. Graduate-level work offers carefully selected officers, noncommissioned officers, AF civilians, and international officers the broad educational experience necessary for understanding the role of technology in national defense and in analyzing and solving defense-related problems. PCE courses support AF and DOD needs for immediately applicable knowledge and help prevent scientific and technical obsolescence.

Through integrated teaching and research, AFIT meets the challenges of advances in defense-related technologies. The effective relationships between the institute and other AF and DOD organizations create a unique environment in which education and research provide faculty and students a variety of courses in which to participate. The faculty members—highly qualified military and civilian professionals—stay abreast of ongoing and projected AF operations. Continuous updates of the academic course offer students the latest available technical knowledge and applications. The institute's flexibility enables it to respond quickly to changing AF requirements.

AFIT provides graduate education courses through the Graduate School of Engineering and Management. The School of Systems and Logistics and the Civil Engineer and Services School provide many PCE short courses to assist AF and DOD military and civilian members who wish to become more proficient in their technical and support tasks. The Civilian Institution Programs office manages specialized graduate school and professional continuing education assignments required by a variety of AF needs, including medical and instructional assignments. The Academic Library and the Directorates of Admissions/Registrar, Resources, Mission Support, Public Affairs, and Communications and Information support the educational and research courses of the institute.

Specific information about AFIT, its component schools, directorates, research, and consultation services, as well as the Graduate School of Engineering Management Catalog, are available on line at <http://www.afit.edu>.

AFIT History

AFIT traces its roots to the early days of powered flight when it was apparent that the progress of military aviation depended upon special education in this new science. In 1919 the Air School of Application was established at McCook Field in Dayton, Ohio, the home of Orville and Wilbur Wright.

When Congress authorized creation of the Air Corps in 1926, the school was renamed the Air Corps Engineering School and moved to Wright Field in 1927. Shortly after Pearl Harbor, the school suspended classes, but it reopened as the Army Air Forces Engineering School in 1944 to conduct a series of accelerated courses to meet emergency requirements.

After World War II, in 1946, the Army Air Force Institute of Technology was established as part of the Air Materiel Command (AMC). The institute was composed of two colleges: Engineering and Maintenance, and Logistics and Procurement. These colleges were later redesignated the College of Engineering Sciences and the College of Industrial Administration.

When the Air Force became a separate service in 1947, the institute was renamed the Air Force Institute of Technology. That same year, the School of Civil Engineering Special Staff Officer's Course began. In 1948 civilian institution courses were transferred to AFIT.

In 1950 command jurisdiction of AFIT shifted from AMC to AU with headquarters at Maxwell AFB, Alabama. The institute, however, remained at what was now known as Wright-Patterson AFB, Ohio. In 1951 the two AFIT colleges were combined into the Resident College.

The institute established a logistics education course at Wright-Patterson AFB in 1955, and Ohio State University conducted the first courses on a contract basis. In 1958 AFIT began a series of short courses in logistics as part of the Air Force Logistics Command (AFLC) Education Center. Later that year the School of Logistics became a permanent part of AFIT.

In 1954 the 83d Congress authorized the commander of AU to confer degrees upon students in the AFIT Resident College. The college was later divided into the School of Engineering, the School of Logistics, and the School of Business. The first undergraduate engineering degrees were granted in 1956, and the first graduate degrees in business in 1958. The School of Business courses were transferred to civilian universities in 1960.

In 1963 the School of Logistics was redesignated the School of Systems and Logistics. The Civil Engineering Center was also redesignated as the Civil Engineering School.

In 1967 AFIT became a member of the Dayton–Miami Valley Consortium (DMVC), which later changed its name to the Southwestern Ohio Council for Higher Education (SOCHE). The council is an association of colleges, universities, and industrial organizations in the Dayton area that are united to promote educational advancement. AFIT has traditionally been active in both the council and in other community and interinstitutional courses.

In 2003 the secretary of the Air Force and the secretary of the Navy signed an agreement to form an educational alliance between the services. The end result of this was a decision to move all DOD relevant graduate aeronautical engineering education to AFIT, making it the sole supplier to the Navy, Marine Corps, and the Army, in addition to the Air Force. In January of that year, the first seven non-Air Force officers arrived in Dayton, and since then the course has grown to include about 30 additional officers entering every year. In March 2004 the first group of six Marine Corps noncommissioned officers joined their Air Force brethren as they were awarded masters of science degrees from AFIT. AFIT has transitioned into the joint arena in graduate education, and is committed to providing increasing capability for all DOD components.

As AFIT begins its ninth decade of operation, the staff and faculty reflect with pride on the contributions its graduates of resident schools and civilian institutions have made to engineering, science, technology, medicine, logistics, and management throughout the Air Force. These immeasurable contributions have been vital to our national security.

AFIT's flexibility allows it to adjust quickly to changing AF requirements. The faculty, comprised of highly qualified military and civilian personnel, stays abreast of projected AF operations, and the courses are continually updated to offer its students the latest available material. For example, an *Air Force Software Review* in 1989 led to AFIT courses in software engineering and software systems management barely a year later.

When environmental concerns culminated in the *Pollution Prevention Act of 1990*, AFIT designed and implemented both graduate and professional continuing education courses in environmental engineering management. In 2000–01, working with Air Force Space Command, AFIT developed a new master's degree program in Air and Space and Information Operations. The first students for this program enrolled in the fall of 2001.

During the past 80 years, AFIT has granted over 15,000 degrees and more than 266,000 DOD personnel—including 30 US astronauts—have attended AFIT courses.

On 1 October 1999, AFIT's two graduate schools were combined to become the Graduate School of Engineering and Management.

In the fall of 2000, AFIT completed construction on an \$8.9 million engineering laboratory. The lab is used for experimental research in air and space engineering, electrical engineering, applied physics, and environmental science.

The future promises to be challenging, but AFIT will continue to provide the environment and the opportunity for AF personnel to develop the professional and technological skills needed to master this dynamic challenge.

AFIT Campus

The institute's campus at Wright-Patterson AFB, Ohio, consists of Bane Hall, which houses the Graduate School of Engineering and Management; Twining Hall, home of both the Center for Systems Engineering and the School of Systems and Logistics; and Kenney Hall, which houses the command section and main auditorium and connects Bane and Twining Halls. A fourth building is connected to Twining Hall and is the home of the Civil Engineer and Services School. A fifth building, the 30,000-square-foot graduate engineering research laboratory was officially opened in January 2001. The Civilian Institution Programs offices are collocated with the Aeronautical Systems Center in a building off the main AFIT campus. Due to a \$10 million renovation of Bane Hall, the Graduate School of Engineering and Management has temporarily relocated to Twining Hall. Subsequently, the School of Systems and Logistics has relocated to an off-base location in Kettering, Ohio.

Admission

AFIT's graduate education courses are designed to meet specific AF and DOD needs. Eligibility criteria for admission vary from course to course and are targeted for officers and DOD civilians. Academic qualification for admission to the institute's graduate courses, either in residence or at civilian institutions, is comparable to that of any quality graduate institution. In addition, the military accomplishments and potential of the candidate are considered before assignment to any course. Specific admission information as well as applications are available from the admissions link on the AFIT home page at <http://www.afit.edu>.

Attendance at AFIT's PCE courses is determined by functional duty requirements. The level of the course and the educational background and professional experience of the candidate are considered to ensure that the participant will be able to benefit from the learning experience.

International Affairs

Annett D. Robb, M.S., Director

Internet Address

<http://ia.afit.edu>

The International Affairs (IA) Directorate is responsible for assisting international military officers and international government civilian employees with the procedures of application for admittance to the graduate and PCE courses at AFIT. The Directorate arranges Informational Programs to ensure international students return home with an understanding of the responsibility of governments to protect, preserve, and respect the rights of all individuals. Prospective foreign students apply to AFIT through the US Security Assistance Officer (SAO) at the US Embassy in their home countries. Application packages for evaluation for eligibility should arrive at the International Affairs Directorate (AFIT/IA) by the end of April each year in preparation for entrance the following September. Application packages should include undergraduate transcripts reflecting the undergraduate degree; graduate transcripts, if applying for a PhD; Graduate Record Examination (GRE) or Graduate Management Admission Test (GMAT) score reports, as applicable for the course requested; and Test of English as a Foreign Language (TOEFL) scores. Packages should be mailed to

AFIT/IA
Bldg 641
2950 P Hobson Way
Wright-Patterson AFB, OH 45433-7765

Or, applicants may call (937) 255-6800, send a fax to (937) 255-9981, or send electronic mail to AFIT.IA@afit.edu.

Graduate School of Engineering and Management

Dr. Robert A. Calico Jr., Dean

Internet Address

<http://en.afit.edu>

The Graduate School of Engineering and Management offers advanced scientific, engineering, and management education to qualified AF officers and civilians. Graduates are assigned a wide range of positions in a rapidly changing technological environment. They become not only practicing engineers and managers but also broadly educated leaders capable of directing AF research, support, and development courses. The school is comprised of the Departments of Mathematics and Statistics, Electrical and Computer Engineering, Engineering Physics, Systems and Engineering Management, Operational Sciences, and Aeronautical and Astronautical Engineering. The school also houses centers of excellence in Directed Energy, Measurement and Signals Intelligence, Modeling and Simulation, and Information Assurance. In fact, the school's Center for Information Assurance has been recognized by the National Security Agency (NSA) as a NSA Center of Academic Excellence in Information Assurance Education.

Resident Degree Programs

AFIT's Graduate School of Engineering and Management offers resident graduate degree courses in which students can earn a master's or doctorate degree. The resident master's degree course is 18 months in length, while the PhD program generally requires three years. These courses prepare AF officers primarily for specially designated advanced assignments in areas of science, engineering, and management. In addition to providing quality academic instruction in a relevant discipline, the institute customizes degree courses to specific needs of the AF and the DOD as suggested by users and technological advancements.

The Graduate School of Engineering and Management currently offers master's degree courses in aeronautical engineering, air and space and information operations, applied mathematics, applied physics, astronautical engineering, computer engineering, computer systems, electrical engineering, electro-optics, engineering management, environmental engineering and science, materials science, nuclear engineering, operations research, space operations, and systems engineering. Other master's degree areas include courses in logistics management, cost analysis, strategic purchasing, and information resource management. Programs leading to the PhD degree offer

areas of specialization in aeronautical engineering, applied mathematics, applied physics, astronautical engineering, computer engineering, computer systems, electrical engineering, electro-optics, materials science, nuclear engineering, and operations research. All courses meet educational requirements common to a wide range of AF assignments.

Accreditation

AFIT is accredited by the Higher Learning Commission and is a member of the North Central Association. The North Central Association can be contacted at

The Higher Learning Commission
North Central Association of Colleges and Schools (NCA)
30 North LaSalle Street, Suite 2400
Chicago, IL 60602-2504
Phone: (800) 621-7400
Fax: (312) 263-7462

In addition to institutional accreditation, the Accreditation Board for Engineering and Technology accredits selected courses within the Graduate School of Engineering and Management. Their address is

Accreditation Board for Engineering and Technology, Inc.
111 Market Place, Suite 1050
Baltimore, MD 21202
Phone: (410) 347-7700
Fax: (410) 625-2238

Facilities

The Graduate School of Engineering and Management is located at Wright-Patterson AFB, near the headquarters of the Air Force Research Laboratory (AFRL) and five of its directorates—the largest air and space research facility in the Air Force. The academic courses offered at the school take advantage of the facilities and expertise available at these AFRL facilities. Students are able to interact directly with researchers and engineers working on AF projects. The full spectra of research, development, and acquisition facilities at Wright-Patterson AFB are used by a cadre of AF scientists, engineers, and management specialists, who assist AFIT as adjunct professors and lecturers through their association and aid to course work, development, and instruction.

The school includes extensive laboratories in the Departments of Aeronautics and Astronautics, Electrical and Computer Engineering, and Engineering Physics. The Department of Aeronautics and Astronautics laboratories include facilities for the study of internal and external aerodynamics, system dynamics and control, propulsion, combustion, heat transfer, fatigue, fracture, experimental stress analysis, task automation, and space systems.

The Department of Electrical and Computer Engineering operates facilities for the design and test of flight control and avionics concepts, integrated circuit fabrication and testing, low observables and electronic warfare support, and a full range of computer systems. The Department of Engineering Physics laboratories support research in laser spectroscopy, nonlinear optics, solid-state physics, nuclear radiation detection, nuclear effects, and environmental monitoring. The AFIT's Center for Directed Energy is housed within the Engineering Physics department. The Center for Directed Energy supports AF and DOD agencies in transitioning high-energy lasers and high-power microwaves to the battlefield through vigorous scientific and engineering research, graduate education courses, and diverse consulting activities. A new center was established during the 2001–02 school year in Measurement and Signals Intelligence (MASINT). This center, also housed within the Department of Engineering Physics, provides both MASINT education and research to a wide variety of DOD personnel.

A mixture of workstations and personal computers networked throughout the facility supports education and research. The Department of Operational Sciences operates the AFIT Center for Modeling, Simulation, and Analysis. This center provides computing and technological capability for research that applies state-of-the-art mathematical and computing technologies to the solution of operational problems to support better decision making, planning, and scheduling in complex command, control, and war-fighting systems.

Faculty

The faculty of the Graduate School of Engineering and Management consists of 100 members; one-half are military officers. All faculty members hold PhD degrees in their areas of specialty. Faculty members teach approximately 440 graduate-level courses per year and are heavily involved in research. In FY 2002, AFIT graduate faculty produced 130 refereed journal articles, 183 other publications, and 305 contributions to proceedings at national and international symposia. Faculty members were also involved in 143 funded research projects during this period.

Research and Consulting

Research and consultation activities are integral elements of the work of any university. AFIT requires a dissertation or a thesis in all resident graduate degree courses. AF organizations sponsor research performed by students who complete thesis requirements on topics of interest to the AF and DOD. AFIT's consultation services offer DOD organizations and other government agencies the expertise of the faculty in their professional disciplines. Consulting activities also provide the faculty an opportunity for professional development and growth and exposure to the latest in defense-related concepts and concerns, which are incorporated into instruction.

In FY 2003, AFIT graduate students completed 191 master's theses and 10 PhD dissertations. Of these, over 95 percent contributed to an Air Force, DOD, or government agency project. Over 46 percent of AFIT theses were in direct support of Air Force Materiel Command, headquartered at Wright-Patterson AFB. AFIT graduate student research efforts in FY 2003 resulted in approximately \$19.4 million in cost-avoidance savings for sponsors, and faculty research efforts produced over \$5 million in research grants.

The school's collocation with the AFRL, the Air Force's largest center of research, development, and materiel activity, produces a synergistic relationship resulting in an atmosphere that balances the theoretical and practical aspects of research and instruction. Close association with engineers and scientists actively engaged in AF research and development keeps research focused on AF technology needs.

Further Information

The Graduate School of Engineering and Management publishes several documents annually that provide detailed information about the graduate school's courses, degree requirements, and research activities.

Detailed information about the graduate school's courses is found in the *Graduate School of Engineering and Management Catalog*. The catalog is located on AFIT's Web site at <http://en.afit.edu>. Paper or CD-ROM copies of the catalog can also be requested by contacting the Registrar's Office at

AFIT/RRD
2950 Hobson Way
Wright-Patterson AFB, OH 45433-7765
(937) 255-6234, ext. 3137/3122

The Office of Research and Consulting publishes a research report documenting student and faculty research activity, sponsored course support, and research assessment questionnaire results. This report is

Air University Catalog, 2004–2005

routinely distributed to research sponsors and potential collaborators. Copies can be obtained upon request by contacting the ENR via any of the following ways:

Mailing address:

AFIT/ENR

2950 Hobson Way

Wright-Patterson AFB, OH 45433-7765

(937) 255-3633

E-mail address:

Research@afit.edu

Internet Address:

<http://en.afit.edu/enr>

School of Systems and Logistics

Col Diana Schulz, Dean

Internet Address

<http://ls.afit.edu>

The School of Systems and Logistics (LS) is the Air Force's professional continuing education (PCE) school for technical management disciplines. The school's mission is to plan, develop, and conduct courses and programs to satisfy technical management educational needs in the areas of logistics, systems, and acquisition for the Air Force, Department of Defense, and other federal agencies. Classes were presented to over 12,000 students in 2003. In addition to teaching formal courses, the school presented tailored workshops and seminars to over 2,450 students in 2003 in response to immediate requirements, provided consulting services in its areas of expertise, and conducted relevant research.

Traditional resident and on-site courses range in length from three days to three weeks. An extensive set of live and asynchronous Web-based courses vary in length based on mode of presentation and curriculum requirements. Over 5,500 students took advantage of the various distance-learning courses offered by the school in 2003.

Professional Continuing Education

The School of Systems and Logistics PCE equals:

- Highest quality PCE available anywhere
- Fully funded classes for AF activities
- The AF leader in Web-based education for the acquisition and logistics workforce
- Professional growth and development opportunities
- The tools, skills, and abilities to manage the entire spectrum of a system's life cycle

Disciplines

The School of Systems and Logistics offers over 60 courses, executive seminars, and tailored workshops in the following five general areas:

- Systems Engineering
- Acquisition Management
- Sustainment Management
- Financial Management

- Software Engineering

Examples of individual courses available include

- Reliability Centered Maintenance
- Data Management
- Operational Requirements
- Configuration Management
- Life-Cycle Costing
- Purchasing and Supply Chain Management
- Evolutionary Acquisition
- Risk Management
- Product Support
- Software Project Management
- Production Management
- Maintenance Management
- Test and Evaluation
- Transportation
- Combat Logistics
- Team Building
- Acquisition and Logistics Reform
- Affordability
- Earned Value Management

Faculty

The School of Systems and Logistics faculty is a unique combination of over 50 AF, Army, and Navy officers and DOD civilians who combine extensive practical field experience with academic expertise and a driving desire to provide whatever education, consulting, and other support our customers need.

Delivery Modes and Funding Information

Resident Course Offerings. The School of Systems and Logistics normally pays for travel and per diem for USAF students.

On-Site Course Offering. The School of Systems and Logistics normally pays for faculty travel and per diem for all scheduled course offerings. Additional offerings may be negotiated with the school.

Web-Based Course Offerings. The School of Systems and Logistics pays for all costs associated with our Internet courses.

Tailored Courses, Seminars, and Workshops

Resident and on-site presentations are both available. Individualized courses, seminars, and workshops designed to meet unique or recurring needs are the School of Systems and Logistics' specialty.

Management and Technical Consulting

The School of Systems and Logistics' faculty provide individualized consulting services to AF and DOD customers. This includes consultation in their areas of management and technical expertise and small group and team facilitation. They have a long and proven record of providing premier consulting services to such activities as acquisition program offices, depot maintenance organizations, other DOD and federal agencies, and friendly and allied nations, to highlight a few.

Civil Engineer and Services School

Col Jared A. Astin, Dean

Internet Address
<http://cess.afit.edu>

The Civil Engineer and Services School (CESS) provides professional continuing education (PCE) for individuals in the civil engineer and services career fields. In its capacity as a center of professional education and development, the school has established integrated programs including resident continuing education, nonresident courses and seminars, and consultation services.

Professional Continuing Education

Each of the school's PCE courses satisfies a specific career need of the Air Force and the students. These courses provide the education an officer or civilian needs over a lengthy career in AF civil engineers or services. The school offers management-oriented courses relating to Air Force civil engineer and services missions. The technical offerings update and broaden the professional and technical knowledge of architects and civil, electrical, mechanical, industrial, and general engineers. These courses provide both management doctrine and applications for development of career professionals as they rise in the management structure. The fundamental objective is to return the students to their assignments better prepared to do their jobs. Specific courses offered vary from year to year depending on the needs of the career fields served by the school.

In addition to resident classes provided at Wright-Patterson AFB, the school offers PCE courses at or near the student's normal duty location through a nonresident program consisting of on-site courses, seminars, Web, and satellite instruction. Some on-site seminars are conducted on a regional basis and focus on a specific function or field problem common to several bases in the area. For these seminars, faculty members conduct the educational program at a centrally located base. In FY 2003, CESS used the Air Technology Network (ATN) to deliver education to 5,252 students, while 656 students received education through on-sites, and 1,075 students attended resident classes at the school.

Faculty

CESS is organized into the Departments of Engineering Management, Environmental Management, Services Management, and the Academic Support Division. The faculty is composed mainly of AF officers with advanced degrees and recent field experience in civil engineering and services, as well as professional competence in a related professional discipline. Highly qualified civilian experts in specific management areas complement the military faculty. Guest lecturers further enhance the program of instruction.

Consultation

Faculty members provide consultation services to customers worldwide. Their research and consultation provide assistance to the Air Force through advice on and analysis of current problems. CESS is a source of knowledge and expertise tailored to support the technical and management needs of the AF and the DOD.

Civilian Institution Programs

Col Randall N. Paschall, Dean

Internet Address

<http://ci.afit.edu>

The Civilian Institution Programs manage AF officers pursuing educational programs needed to meet specific AF requirements. They provide this advanced education through civilian universities, research centers, hospitals, industrial and business organizations, and governmental agencies. This education covers a broad spectrum of academic disciplines at all degree levels, including postgraduate programs, continuing education programs, and programs jointly sponsored by the Air Force, other governmental agencies, and industrial and business organizations. The Civilian Institution Programs administers the F. Edward Herbert Armed Forces Health Professions Scholarship and Financial Assistance Program. This program is the largest source of physician and dental accessions annually.

Officers selected for extended programs are assigned to AFIT with duty stations at a university, research center, medical institution, industrial firm, or governmental agency. Those selected for continuing education courses attend in a temporary-duty status. Program managers provide administrative support to students and monitor each educational program to ensure that AF requirements are met in the shortest feasible time.

Regular Degree Programs

Regular degree programs qualify selected officers for validated advanced academic-degree positions. Annual requirements are established by Headquarters USAF. Typical academic fields of study include:

| | |
|-------------------------------------|-------------------------|
| Humanities | International Relations |
| Command, Control, and Communication | Meteorology |
| Mass Communication | Management |
| Computer Technology | Foreign Area Studies |
| Chemistry | Natural Science |
| Engineering | Physical Science |
| Finance | Social Science |

Graduate School Program

The Graduate School Program places selected US Air Force Academy (USAFA) graduates in 12-month graduate-degree programs immediately following their commissioning. Many of these officers proceed to operational assignments requiring an advanced academic degree and then perform follow-on duty as a USAFA faculty member. Degree disciplines mirror and supplement USAFA instructor preparatory requirements.

Instructor Preparatory Education Program

Instructor preparatory education programs prepare selected officers for faculty or staff assignments at the USAFA, AU, or the resident schools of AFIT. Programs in a variety of academic disciplines are determined by the needs of each organization.

Fellowships, Scholarships, and Grants Program

This program offers advanced degree and postgraduate research opportunities to officers who win scholarships in public competition. Quotas are subject to approval by Air Force Education Requirements Board.

Legal Education Degree Programs

There are three different categories of opportunities for legal education through AFIT. The first of these is the Funded Legal Education Program (FLEP). FLEP provides officers up to 36 months to obtain a juris doctorate (JD) degree from a civilian law school and to pass the bar exam.

In the second category is the Excess Leave Legal Education Program. During this program, students receive no pay or allowances, do not accrue annual leave, and pay their own tuition and fees. Students are allowed up to 36 months to obtain their JD degree and to pass the bar exam.

Finally, graduate-level education is available that enables judge advocate general officers to obtain a master of laws degree through a civilian institution. This program lasts nine to 12 months.

Chaplain Degree and Non-Degree Programs

The Chaplain's degree program, at Columbus State University and Tarleton State University, which is also associated with the Army Family Life Chaplain Training Centers at neighboring Army bases, Fort Hood, Texas, and Fort Benning, Georgia, are 15-month programs.

The Chaplain's non-degree program was developed for chaplain officers to attend universities for nine months and receive masters-level education without actually receiving an actual mater's degree thereby lowering AF costs.

Education Delay Program

The Education Delay Program allows selected college graduates in AFROTC to defer entry to active duty to pursue further education at their own expense. Major fields of advanced study are medicine, law, engineering, and physical science.

Education with Industry Program

The Education with Industry (EWI) Program is a 10-month, nondegree internship program sponsored jointly by AFIT, leading industries, and government agencies throughout the country. EWI programs are designed to develop qualities and abilities in selected officers and civilians necessary for effective acquisition management and professional or technical leadership.

Industrial Development Education in Acquisition Program

The Industrial Development Education in Acquisition Program is a short-term program designed to improve acquisition relationships between the government and defense contractors. The program places highly experienced officers and civilians with various defense contractors for five to six months. These selected AF personnel are provided an opportunity to experience the rewards and pitfalls of a defense contractor in an era of declining budgets and layoffs.

Basic Meteorology Program

The Basic Meteorology Program is a 12-month program designed to provide selected candidates with the necessary college-level coursework required to be classified for the 15W1 AFSC with follow-on inclusion into the Air Force Weather career field. Applicants for this program normally are AFROTC and USAFAS cadets in their senior year or OTS applicants.

Health Care Education Division

The Health Care Education Division manages graduate and postgraduate programs for Air Force Medical Service officers in response to the requirements of the AF Surgeon General. They include residency and

fellowship programs for active duty AF medical and dental officers, graduate and fellowship programs for Biomedical Science Corps officers, graduate programs for Nurse Corps and Medical Service Corps officers, and the F. Edward Hebert Armed Forces Health Professions Scholarship and Financial Assistance Program (HPSP/FAP). In addition, it manages the medical PCE program, satisfying the continuing education needs of AF Medical Service officers.

Medical/Dental Residencies and Fellowships Branch

Under this AF program, active duty Medical Corps and Dental Corps officers are sponsored in civilian, DOD, Army, and Navy institutions in advanced medical/dental programs. These residents and fellows are selected each year to maintain adequate numbers of specialty-trained physicians and dentists for clinical practice in the future. The selection process is very competitive. Once an officer has been selected for advanced education and assigned to AFIT, fellows and residents are closely monitored to ensure successful completion of their demanding programs.

Allied Health Education Branch

This program places Nurse Corps, Biomedical Sciences Corps, and Medical Service Corps students in AFIT-funded graduate- and postgraduate-degree programs at over 65 institutions nationwide. Candidates for these programs are selected each year by the AF Personnel Center to fulfill specific requirements identified by the Integrated Forecasting Board (IFB). Once placed, students are monitored to ensure their curricula align with IFB requirements and that they maintain a satisfactory academic performance and graduate in the shortest time possible.

Armed Forces Health Professions Scholarship and Financial Assistance Program Branch

HPSP/FAP scholarships are available to military and civilian applicants. The HPSP provides two-, three-, and four-year scholarships (including a monthly stipend) to qualifying students attending accredited medical, osteopathic, dental, and optometry schools. A scholarship leading to a master of science in nursing is also available. Scholarships of variable length are available for third- and fourth-year dental students. While in the HPSP, students serve as inactive Reserve officers.

The FAP provides an annual grant and monthly stipend to qualifying physicians completing residency requirements in selected specialties needed by the AF. While in the FAP, students serve as inactive Reserve officers.

Qualifications and application procedures for these programs are published in AFI 41-110, *Applying to Medical School and Medical Programs*, and for the HPSP/FAP in AFITI 36-101, *Armed Forces Health Professions Scholarship and Financial Assistance Program*. Both regulations can be found on line at <http://ci.afit.edu>.

Medical PCE Branch

This program randomly selects and funds active duty medical service officers (all corps) to maintain currency and accreditation in their area of specialization through short-course attendance at civilian-sponsored programs. Medical service officers select individual courses that are most appropriate for their professional specialty and meet AF criteria (e.g., appropriate sponsorship, continuing medical education credits). These courses are usually two to seven days in length. Qualifications and application procedures are outlined in the fact sheet located on line at <http://ci.afit.edu>. The fact sheet also contains a link to *The Education and Training Course Announcements Catalog*.

Center for Systems Engineering

Mr. Mark K. Wilson, Director

Internet Address

<http://cse.afit.edu>

The Center for Systems Engineering (CSE) is a directorate within AFIT and a recognized Center of Excellence for Systems Engineering within the Air Force and the DOD. This Center serves as the nucleus for the development and accumulation of academic, government, and industry SE best practices, processes, metrics, and training. The CSE collaborates with other members of the SE community to develop, publish, continuously refine, and advocate Systems Engineering processes and implementation guidance. The CSE coordinates with academia, industry, other services, and government agencies to establish and document best practices. The CSE makes policy recommendations to the Assistant Secretaries of the Air Force for Acquisition (SAF/AQ) and Space (SAF/US). It provides consulting and analysis services on Systems Engineering to Air Force and DOD organizations and publishes findings as necessary. The CSE identifies appropriate education for Air Force personnel associated with the systems engineering process. It works within AFIT and with other academic partners to provide requisite education programs.

Four major roles identified and assigned to the AF CSE:

Advocacy – The CSE will promulgate and document case studies of SE implementation during concept definition, acquisition, and sustainment. During the generation of these case studies, many SE standards and tools will be defined and their usage described. The CSE will identify, catalogue, and develop SE standards and tools. The CSE will identify and evolve the essential core SE processes and build a guidance document based upon these processes. The CSE will represent all stakeholders across the AF and is envisioned to become a nationally recognized SE information/tools portal. Where appropriate, the CSE may make policy recommendations to SAF/AQ, SAF/US, OSD, or other organizations chartered to establish and implement SE policy for the AF and/or DOD.

Collaboration – The CSE will provide means for collaborative SE work efforts across the Air Force, Navy, Army, Marine Corps, OSD, industry, professional organizations, and academia. Some areas of interest include best practices, core processes, and encouraging the study of SE. The CSE will capture and make available current SE knowledge that resides in a given

agency. The CSE will provide opportunities for other services, other government agencies, and industry to participate fully in Center activities, and will make all published CSE documents available to these same organizations. It will work with the Defense Acquisition University (DAU) and professional organizations, such as the International Council on Systems Engineering, on issues such as SE certification and program accreditation.

Consultation – The CSE will assist organizations in obtaining SE expertise for Advisory Boards and Review Panels. While it is anticipated that the SE Senior Council may recommend the CSE undertake studies of a general nature, MAJCOMs, program offices, and other organizations may request studies and analyses specific to their area of concern. Agreements to perform these studies will be negotiated between the CSE and requesting organizations based on the availability of manpower, expertise, and funding.

Education – The CSE will provide a forum to shape the academic curriculum for SE education across the AF. The CSE will use available resources of academia, industry, and professional organizations to meet AF education needs. The CSE will work with AFIT schools (AFIT/EN and AFIT/LS) and other sources to provide application education specifically tailored to AF needs throughout the life-cycle responsibilities and for all curriculum specialties.

Mailing address:
AFIT/SY
2950 Hobson Way
Wright-Patterson AFB, OH 45433-7765

COMMUNITY COLLEGE OF THE AIR FORCE

Col Eric A. Ash, Commander/President
Lt Col Michael J. Masterson, Vice Commander/Executive Vice President

Internet Addresses

Public site: <http://www.au.af.mil/au/ccaf>
Nonpublic site: <https://ccaf.maxwell.af.mil>
Air Force Virtual Education Center: <https://afvec.langley.af.mil/afvec/>

Mission: *Offer and award job-related associate in applied science degrees and other academic credentials that enhance mission readiness, contribute to recruiting, assist in retention, and support the career transitions of Air Force enlisted members.*

The Community College of the Air Force (CCAF) serves the educational needs of the AF enlisted community by offering associate in applied science degrees and other credentialing programs that enhance mission readiness, contribute to recruiting, assist in retention, and support the career transitions of AF enlisted members. It is the only federally chartered institution in the United States that awards college degrees solely to USAF enlisted personnel.

The college was established in April 1972 at Randolph AFB, Texas; relocated to its present location, Maxwell AFB, Alabama, in April 1979; and realigned under Air University in July 1993. The college mailed its first official transcript in November 1972 and issued its first career education certificate in August 1973.

The college received degree-granting authority in July 1976 and awarded its first associate in applied science degree in April 1977. From 1980 to 2004 the college was separately accredited by the Commission on Colleges of the Southern Association of Colleges and Schools (1866 Southern Lane, Decatur, GA 30033-4097; telephone number [404] 679-4501) to award the associate in applied science degree.

With more than 375,000 registered students, the college is the largest multicampus community college in the world. Its affiliated schools are located in 36 states, the District of Columbia, and six foreign locations. More than 7,000 CCAF faculty members provide quality instruction for the professional development of enlisted personnel. The college has awarded more than 25 1,000 associate in applied science degrees to enlisted members of the active duty Air Force; ANG; Air Force Reserve Command (AFRC); and enlisted members of the Army, Navy, Marine Corps, and Coast Guard teaching in CCAF-affiliated schools.

Associate in Applied Science Degree

CCAF awards an associate in applied science degrees in the following areas:

- Aircraft and Missile Maintenance
- Allied Health
- Electronics and Telecommunications
- Logistics and Resources
- Public and Support Services

CCAF degree programs consist of a minimum of 64 semester hours. To graduate, students must hold the journeyman (five) level in the appropriate Air Force specialty code (AFSC) at the time of program completion and have a minimum of 16 semester hours of CCAF credit applied to their degree program. Students must complete all degree requirements before separating, retiring, or becoming commissioned officers.

| Academic Requirements | Semester Hours |
|--|-----------------------|
| Technical Education | 24 |
| Leadership, Management, and Military Studies | 6 |
| Physical Education | 4 |
| General Education (3 hours in each of following) | 15 |
| Oral Communication | 3 |
| Written Communication | 3 |
| Mathematics | 3 |
| Social Science | 3 |
| Humanities | 3 |
| Program Elective | 15 |
| TOTAL | 64 |

The detailed listing and description of each CCAF degree program is available in a separate *CCAF Catalog*, published every three years. The detailed listing and description of individual CCAF courses comprising degree programs are available at each of the more than 100 affiliated schools specifically teaching those courses. Similarly, the listing of CCAF's more than 5,000 instructors and 2,000 student instructors is available at each school where those instructors teach or in a central database located in the CCAF administrative headquarters.

CCAF System

The college functions as a single institution with respect to credit documentation, records, and educational program management. The system is supported by the Air Force Recruiting Service, USAF Occupational Measurement Squadron, Airman Classification Squadron, and Headquarters AETC. These agencies provide the recruitment, job analysis, and staff support required for successful operation of the system.

Affiliated Schools

The instructional programs of the college are conducted by the Air Force in traditional learning environments. Even when advanced instructional technology and individualized instruction are used, students attend regularly scheduled classes and complete specified course work under assigned faculty in much the same manner as students in the classrooms of most traditional civilian colleges, except that students typically attend one course at a time, eight hours each day, five days a week until satisfactorily completing the course.

What is often perceived as nontraditional about the college is its form of organization and administration. AF schools provide instruction at numerous locations because of the geographic mobility of the students as they pursue their AF occupations. Accordingly, each of these separate education and training organizations, called affiliated schools, is a component of a worldwide educational system.

Education Services Centers

The general education component of every degree program must be completed in civilian colleges and/or through nationally recognized testing programs, during off-duty time, with the Air Force paying all or a portion of the tuition costs. Counseling of students is accomplished by trained education counselors located on all major AF installations and CCAF advisors at each ANG and AFRC installation.

The education services centers administer the College-Level Examination Program, Defense Activity for Non-Traditional Education Support Subject Standardized Tests, and Excelsior College Examinations. They also conduct formal graduations worldwide at least once each year, usually during the months of April and October.

Advisory Bodies

In addition to the Air University Board of Visitors, the college uses several advisory bodies composed of members from the CCAF administrative staff and the CCAF system. These advisory bodies provide the college with direction and customer feedback, set policies and procedures, and facilitate communication throughout the system.

Affiliated Schools Advisory Panel. Members represent categories of technical training, field training, and PME-sponsored schools affiliated with the college. The panel provides a forum for reaffirming CCAF's commitment to providing job-relevant educational opportunities to all enlisted personnel.

Education Services Advisory Panel. The panel includes the CCAF dean of academic affairs and education services advisor, Headquarters USAF and MAJCOM personnel, base-level education services personnel, and ANG/AFRC counterparts. The panel provides an interface between the college and the education services system.

CCAF Policy Council. Twenty-two representatives from all elements of the CCAF system make up the Policy Council. The council, chaired by the CCAF dean of academic affairs, meets twice a year and submits recommendations concerning academic policies, degree programs, award of credit, academic standards, affiliation of AF schools with the college, and other policy matters to the commander/president.

CCAF Transcript Requests

CCAF transcripts are provided free of charge. CCAF advisors can request transcripts electronically for students via the CCAF Web Progress Report Web site (<https://ccaf.maxwell.af.mil/webpr/index.asp>). To ensure compliance with the provisions of the Family Educational Rights and Privacy Act, CCAF advisors must verify the identity of each student prior to submitting transcript requests.

Students can order their own transcripts from any computer that has an "af.mil" address through the online Air Force Virtual Education Center Web site (<https://afvec.langley.af.mil/afvec/>). To ensure compliance with the provisions of the Family Educational Rights and Privacy Act, students can only order transcripts for themselves.

Students can also send a written request to CCAF/DFRS, 130 West Maxwell Boulevard, Maxwell AFB, AL 36112-6613. Each request requires requester's full name or former name, if appropriate; social security account number; current address with ZIP code; address with ZIP code where

transcript is to be sent; and requester's signature to legally authorize release of the transcript.

SECTION II

OTHER AIR UNIVERSITY SCHOOLS AND PROGRAMS

Professional military education for officers includes the Air War College and Air Command and Staff College, both addressed in the previous section. This section includes the remainder of officer PME conducted by Squadron Officer College and enlisted PME programs under the College of Enlisted PME. Officer accession and training schools, professional continuing education, advanced distributed learning, and citizenship education programs are also addressed in this section.

PROFESSIONAL MILITARY EDUCATION PROGRAMS AND SCHOOLS

Air University's professional military education schools prepare junior, midcareer, and senior noncommissioned and commissioned officers and selected civilians for progressively more responsible positions throughout the Air Force and DOD. All colleges, schools, and programs operate within the framework of the Air Force continuum of education, a coordinated and integrated educational system that links curricula across Air University so that each college, school, and program builds on the education provided at the previous level. This continuum includes five core areas: the profession of arms, military studies, international security studies, communication studies, and leadership and management studies.

SQUADRON OFFICER COLLEGE

Col Noel T. Jones, Commander

Internet Address

<http://www.maxwell.af.mil/au/soc/>

Vision: *Squadron Officer College will produce company grade officers with the heart and mind of a warrior and a passion for commanding air and space power.*

Mission: *To develop twenty-first century Airmen who can advocate the unique value of air and space capabilities, who value team achievement over individual success, and who are committed to the profession of arms.*

The Squadron Officer College (SOC) is designed to educate company grade officers on the basic concepts of modern-day air and space warfare and essentials of military leadership. Commissioned as an AU college in February 2000, SOC is composed of two educational schools: the Air and Space Basic Course (ASBC) and Squadron Officer School (SOS).

ASBC is a 30-training-day program organized to teach second lieutenants the essential concepts of how the Air Force prosecutes aerial wars. The course begins with a survey of key AF weapon systems and includes descriptions of how these weapons are employed in combat. Other lessons include an introduction to war theory, historical airpower principles, strategic concepts, and the basics of air and space doctrine. A new addition to the program is a four-day combined operations period with the Senior Noncommissioned Officer Academy. This integrated curriculum includes a focus on hands-on leadership skills, improved communication abilities, and a better appreciation of both officer and enlisted force development issues. During the entire ASBC program, students are required to act as military teams, using what they have learned in the ASBC curriculum to solve complex problems. After learning these fundamental concepts, students work as a combat team in a simulated Air and Space Operational Center and report to a joint force air component commander (JFACC). They develop and execute an aerial campaign plan in a complex war game. Through these efforts, ASBC provides the fundamental concepts and motivation for lieutenants to begin learning and inculcating the skills, values, and ethos of a professional Airman.

SOS was originally commissioned in the 1950s during the Korean War. Initially, it was organized as a war leadership school, teaching USAF captains the salient concepts of aerial warfare and the command responsibilities involved in combat situations. Col Russell V. Ritchey, USAF,

the school's founder, stated that SOS's primary purpose was to study war. "I wanted no off-shoots," explained Colonel Ritchey, "which would distract the student from his primary aim or compromise the purity of the profession."

Following these guidelines, today's SOS is designed to teach the essence of military leadership, air and space doctrine, international security issues, and communication skills. Students are not only exposed to these new concepts, they are required to apply these lessons in a variety of complex experiential learning exercises which involve the human emotions of fatigue, frustration, and esprit. Physical fitness, team problem solving, and proper military decorum are critical aspects of the school's offerings. Over the years, Medal of Honor recipients, astronauts, and principal military commanders—both in the United States and from various international countries—have graduated from this institution. SOS is a premier military leadership school.

SOC staff support divisions include an Education and Curriculum Directorate; Future Requirements Directorate; and Directorate of Mission Support. The Director of Education and Curriculum develops and maintains educational lessons, readings, and a distinguished speaker program for both ASBC and SOS; manages the day-to-day classroom schedules, evaluation procedures, and course surveys; and is responsible for initial and advanced faculty development. The Future Requirements Directorate conducts a long-range planning cycle, manages student throughput, and maintains all strategic planning documents. The Directorate of Mission Support oversees the manning of faculty, works on student personnel issues, and ensures maintenance of all facilities, including extensive athletic playing fields, physical fitness courses, equipment, and military leadership obstacle courses.

Air and Space Basic Course

Col Richard L. Perry, Commandant

Internet Address

<http://www.maxwell.af.mil/au/soc/asbc>

Mission: *To inspire new USAF officers to comprehend their roles as Airmen who understand and live by USAF core values, can articulate and advocate what air and space power brings to the fight, and are dedicated as warriors in the world's most respected air and space force.*

Goal: Through a shared dynamic experience, ASBC commissioned officers and civilians will comprehend how the unique capabilities of air and space

power support our national security objectives and value the importance of personal ownership of, and commitment to, their Air Force and the profession of arms.

ASBC is an educational program for newly commissioned second lieutenants and for selected civilians. It was originally created as a test program in 1997 and was commissioned as a formal AU educational program in January 1999. On 8 February 2001, it became one of the schools within SOC.

In April of 2003, the chief of staff of the Air Force directed an “order of magnitude” increase in officer and enlisted interaction in PME. From this guidance evolved ASBC’s new combined operations with the Senior Noncommissioned Officer Academy. This revolutionary change increases the ASBC course length from four weeks to six weeks, and includes new curriculum topics focusing on hands-on leadership, improved communications, and enlisted- and officer-force development issues. Test classes were conducted in August and October 2003 with full-scale implementation beginning in January 2004.

ASBC’s curriculum explores the foundations of air and space doctrine, the core competencies, and examines how air and space power is employed in combat. In all these lessons, the importance of the Air Force’s core values are continually reemphasized. Students attending ASBC are encouraged to comprehend and value their roles as Airmen in the world’s most respected air and space force. They are required to articulate how the USAF distinctive capabilities were forged in the fires of aerial combat in the skies over Europe, Japan, Korea, Vietnam, Iraq, and Serbia. They are required to demonstrate how the AF plans to fight and operate in wars as a key part of a joint or coalition force.

In this post-cold-war era, where the military threats are complex and elusive, ASBC was created to provide young officers with the logic and the grammar of their unique Air Force profession. “To prepare for an uncertain future,” stated Carl Builder, “the Air Force needed to readdress its fundamental ‘sense of identity and purpose.’ ” Because of its emphasis on heritage and on the study of air and space operational planning, ASBC is very different from the traditional curriculum used in most precommissioning programs.

The course is built around indoor and outdoor classroom activities. The pinnacle of the curriculum is “Blue Thunder,” a three-day war game where students are thrust into key roles in an AOC. Students exercise a theater air and space campaign, including development of a master air attack plan. This capstone war game demonstrates to the student that

teamwork is required to successfully plan a joint air and space campaign. War games and application-level exercises are used throughout the course to maximize student learning level and comprehension.

Curriculum

The ASBC curriculum consists of two interconnected methods of study. The first method is linear, in which each lesson is built upon the preceding one and addresses the achievement of the designated cognitive educational goal. The second method is nonlinear, which strives to create the affective changes to motivate students to consider themselves AF officers above all else.

To maximize the learning level of entry-level students into this intense six and one-half week curriculum, ASBC employs state-of-the-art educational technologies in the classroom and in various exercises. To help students learn and instructors teach, the learning material includes the following:

- DOD Digital Versatile Disk (DVD) classroom application “What Now, Lieutenant?” for presenting core values and ethics case studies for random access and full-screen, full-motion professional video segments.
- Multiplayer networked war games, AFEX and AIRGAP, are played to reinforce application-level learning, with an emphasis on the AF core competencies, joint-service teamwork, integration of theory and doctrine concepts, crisis-action planning under stress, and decentralized execution. Flights are broken up into two teams, with each team playing against its sister flight.
- An exported version of Air Force Wargaming Institute’s (AFWI) Air Force Command Exercise System (ACES) theater campaign simulation, which allows student flights to conduct an air and space campaign against an opposition force comprised of other students. This exercise, called Blue Thunder, is a capstone war game fought from an austere forward-deployment site, which includes a simulated AOC.

Duration and Quota

ASBC will conduct six classes during academic year 2004–05 for a total of 4,639 students. Each class lasts 30 training days.

Curriculum Summary

| Curriculum Area | Academic Hours |
|---------------------------|-----------------------|
| Profession of Arms | 99.08 |
| Leadership/Management | 43.50 |
| Military Studies | 16.00 |
| Communication Studies | 12.75 |
| International Studies | 3.75 |
| TOTAL INSTRUCTION | 175.08 |
| Other (Admin and Testing) | 19.40 |
| Course Total | 194.48 |

Academic Credit

The previous four-week version of the ASBC program was recommended for academic credit by the American Council on Education. They recommended five semester hours credit at the baccalaureate level.

Squadron Officer School

Col Jonathan Klaaren, Commandant

Internet Address

<http://www.maxwell.af.mil/au/soc/sos/>

Mission: *Develop dynamic Airmen ready to lead air and space power in an expeditionary war-fighting environment.*

Goals: Educated students will value their unique role as AF officers by

- applying air and space leadership to effectively execute military missions, and
- valuing the warrior-leader ethos and its impact on air and space power development.

SOS is an AU educational institution designed to teach USAF company grade officers the skills of command leadership. The institution originated in 1946 at Tyndall Field, Florida, and was called the Air Tactical School. In

1950 the Air Tactical School closed and the faculty transferred to Maxwell Field, Alabama. Here, under the leadership of Col Russell V. Ritchey, they developed a new educational program called “Squadron Officer Course.” The first company-grade officers began attending this institution on 23 October 1950. From 1950 to 1959, Squadron Officer Course was an organizational unit within ACSC. Above all, noted Colonel Ritchey, the course was developed primarily to educate officers within the expertise of the profession of arms. In 1959 this course was renamed Squadron Officer School (SOS) and began reporting directly to the AU commander.

SOS teaches all the key command and leadership concepts of being able to analyze situations, develop plans, train followers, perform as a team, and critique the effort. While attending SOS, students step away from their special technical skills and broaden their focus on the Air Force as an institutional fighting force. They prepare for command responsibilities, study the significance of the core values, and learn about air and space doctrine. After studying various military leadership concepts, they are required to apply these lessons in various experiential learning exercises.

SOS not only provides students with an opportunity to understand how leadership skills influence team achievement but also provides these officers the opportunity to experience the responsibilities of being an effective follower. This focus on followership includes such functions as taking risks, working with others, and constructively dissenting when the team or leader is headed in the wrong direction. In addition, the SOS experience helps students refine their written and oral communication skills as well as establishes a foundation of knowledge on how the Air Force fights wars.

Resident Curriculum

SOS presents air and space history, doctrine, and employment concepts to the students throughout the course. The students improve their knowledge of the Air Force and its mission through multiple readings, seminar discussions, and lectures presented by air and space power experts. In the Operation Atlantis war game, students organize and operate an air and space operations center. They get an opportunity to build and execute an air campaign plan while further applying the principles of leadership, communication skills, and team building.

To emphasize team building, leadership, and followership, the SOS curriculum lessons are sequenced concurrently, rather than sequentially. Students, therefore, are required to study a lesson, work as a team, and then apply the ideas in a complex exercise afterward. This approach to learning helps officers improve professionally and promotes the inculcation of the warrior-leader ethos.

Duration and Quota

SOS will conduct seven classes during academic year 2004–05 for a total of 3,302 students. Each class lasts 25 training days.

Prerequisites and Selection

Captains with at least four and less than seven years of total active federal commissioned service, who are not in a failed or deferred promotion status, are eligible to attend SOS. DOD civilians in the grade of GS-9 and above with at least four years of continuous civil service are eligible. See Air Force Catalog 36-2223, *USAF Formal Schools*, for additional information.

Curriculum Summary

| Curriculum Area | Academic Hours |
|--------------------------|-----------------------|
| Profession of Arms | 40.17 |
| Leadership/Management | 80.75 |
| Military Studies | 12.50 |
| Communication Studies | 19.00 |
| International Studies | 6.00 |
| TOTAL INSTRUCTION | 158.42 |
| Other | 24.25 |
| Course Total | 182.67 |

Nonresident Program

The SOS Nonresident Program 26 (book version) and Program 27 (CD-ROM version) consist of five courses: 26A/27A, Profession of Arms; 26B/27B, Military Studies; 26C/27C, International Studies; 26D/27D, Communication Studies; and 26E/27E, Leadership and Management Studies. Under normal circumstances, students must complete the entire program within 18 months.

The SOS Nonresident Program presents similar, but not parallel, material to the resident curriculum and is administered by AFIADL at Maxwell AFB, Gunter Annex. Captains or above and selected DOD civilians in the grade of GS-9 or above are eligible to enroll in the program. See the Squadron Officer College Advanced Distributed Learning Web site

(http://sos.maxwell.af.mil/socadl/course_info.htm) for detailed course description and enrollment information.

Curriculum Summary

| Curriculum Area | Academic Hours |
|------------------------|-----------------------|
| Profession of Arms | 12.00 |
| Military Studies | 21.00 |
| International Studies | 18.00 |
| Communication Studies | 18.00 |
| Leadership/Management | 27.00 |
| TOTAL | 96.00 |

Academic Credit

Resident Program. The American Council on Education recommends six semester hours, credit at the baccalaureate level, and three semester hours at the graduate level for the resident course.

Nonresident Program. The American Council on Education recommends six semester hours credit, at the baccalaureate level for the nonresident course.

COLLEGE FOR ENLISTED PROFESSIONAL MILITARY EDUCATION

Col Albert J. Bowley Jr., Commander

Internet Address

<http://www.maxwell.af.mil/au/cepme/>

Mission: *Provide the continuum of education necessary for the Air Force to develop the best enlisted leaders in the world.*

The College for Enlisted Professional Military Education (CEPME) was activated 15 December 1993. The college is responsible for the instructional programs and faculty development for the Airmen leadership schools (ALS), Noncommissioned Officer academies (NCOA), and the Air Force Senior Noncommissioned Officer Academy (AFSNCOA). These schools graduate approximately 27,500 students annually. The college conducts studies of enlisted professional military education (EPME) issues and advises Air Force leadership on EPME matters.

Goal: Expand the leadership ability of enlisted leaders and strengthen their commitment to the profession of arms by integrating sound leadership, communication skills, and military studies principles and concepts throughout the ALS, NCOA, and AFSNCOA curricula.

CEPME implements its missions and goals through its resident programs and distance-learning programs. The major components of CEPME are the Educational Programs Cadre (EPC), the Air Force Enlisted Heritage Research Institute (AFEHRI), the AFSNCOA, and nine NCOAs located in the continental United States (CONUS).

Educational Programs Cadre

Dr. Doug Savell, Dean

Internet Address

<http://www.maxwell.af.mil/au/cepme/epc/cadre.htm>

The Educational Programs Cadre (EPC) was formed in 1993 as the sole organization responsible for the development and standardization of professional PME for all levels of Enlisted PME (EPME) throughout the Air force. Responsibilities include resident and nonresident programs, as well as

faculty and staff development for personnel assigned to all EPME programs.

EPC consists of the dean and three directorates. The Education Directorate comprised of three instructional design teams (Profession of Arms, Leadership, and Communications Skills), develops and manages EPME curricula for all EPME programs. The Operations Directorate comprised of four operational teams manages, evaluates, and supports EPME's educational programs. The Faculty Development Directorate directs the professional development of EPME educational staff and oversees faculty certification.

Overall EPC develops, validates, and evaluates the curriculum for resident and distance-learning programs and formulates policies and procedures governing operations at all EPME schools located worldwide. EPC is responsible for developing, standardizing, and assuring the effectiveness of all EPME programs for the USAF. EPC is the office of chief responsibility for the 8T000 Career Field education and Training Plan (CFETP) as well as the Community College for the Air Force (CCAF) point of contact for all CEPME schools. The EPC staff provides technology assistance and password-protected Web access for EPME schools to ensure rapid updates of policies, procedures, and curriculum. The EPC develops and manages distance-learning courses for each level of EPME and trains new instructors assigned to ALS, NCOA, and AFSNCOA programs.

Air Force Enlisted Heritage Research Institute

CMSgt David L. Hamel, Director

Internet Address

<http://www.maxwell.af.mil/au/cepme/heritage/homepage.htm>

The Air Force Enlisted Heritage Research Institute (AFEHRI) was established on 23 May 1997 as a component of CEPME. It is comprised of a director, director of operations, and a curator. The AFEHRI provides curriculum and student support to all facets of CEPME and Airman Leadership Schools. It also provides secondary student support to the USAF First Sergeant Academy, USAF Historian Development Course, and 18 Air National Guard leadership schools. It captures, preserves, and archives, enlisted history and heritage, and assists in developing the Air Force Promotion Fitness Examination.

The institute is comprised of two elements. The research and archives element consists of a research center, archives storage, and a student computer lab. The historical holding element consists of the Enlisted Heritage Hall with many student teaching exhibits. It is also a city and state

tourist attraction and serves as a military museum to civilian visitors. The AFEHRI preserves the rich and dramatic heritage and tradition of the enlisted corps of the USAF and its antecedents: Aeronautical Division, Army Air Service; Army Air Corps; and Army Air Forces in the development of airpower to defend the United States. AFEHRI achieves its mission by featuring artifacts, art collections, pictorial exhibits, written and oral documentation, audiovisuals, equipment, and selected aircraft parts. Additionally, students use the in-house and online research capabilities to enhance learning and complete enlisted heritage research projects. A significant archival holding is also available, and efforts are systematically made to ensure its growth and availability to researchers and the public.

Air Force Senior Noncommissioned Officer Academy

CMSgt David Andrews, Commandant

Internet Address

<http://www.maxwell.af.mil/au/cepme/sncoa/sncoa.htm>

The Air Force established the Air Force Senior NCO Academy (AFSNCOA) in 1972 to fill a void in PME for AF senior NCOs. In January 1973, the academy began its first class with 120 senior NCOs and a curriculum divided into two major areas: military environment and military management. Presently, the academy has an annual enrollment of over 1,800 senior NCOs, chief petty officers, and international senior NCOs. Offering instruction in three major areas, the AFSNCOA is the capstone of enlisted PME.

In 2003 the secretary and chief of staff of the Air Force approved the testing of an initiative designed to improve interaction between officers and enlisted members in the PME environment. The initiative called for students attending the Air and Space Basic Course (ASBC) and AFSNCOA merging together in teams for a week of instruction with the goal of increasing understanding and appreciation of the talents officers and enlisted bring in projecting airpower.

The instruction provided by the AFSNCOA makes a positive impact on the careers of its graduates. Eight academy graduates have served as the chief master sergeant of the Air Force—Thomas N. Barnes, James M. McCoy, Arthur L. Andrews, Sam E. Parish, James C. Binnicker, David J. Campanale, Eric Benken, and Frederick J. Finch. Most command chief master sergeants are also academy alumni.

Mission: *Expand the leadership capabilities of senior enlisted leaders and reinforce a commitment to the profession of arms.*

Goal: Conduct a relevant and rigorous educational program contributing to the professional development and motivation of senior NCOs.

Eligibility: Air Force and selected AFRES and ANG senior NCOs attend the academy in residence. Selected Army, Navy, Coast Guard, and international military personnel also attend on a limited basis. Active duty AF personnel must have at least one-year retainability following graduation, and this course must be completed before they can be promoted to chief master sergeant.

Resident Curriculum

The academy's philosophy is that senior enlisted leaders have the need and desire for advanced PME to assist them in fulfilling their expanding leadership and management roles. The senior EPME program is based on sound educational principles with high academic standards. It strives to satisfy student needs with individualized instruction where possible.

Curriculum Summary

| Instructional Area | Academic Hours |
|---------------------------|-----------------------|
| Profession of Arms | 99.0 |
| Communication Skills | 33.0 |
| Leadership and Management | 95.0 |
| Collateral Curriculum | 23.0 |
| Commandant's Time | 12.0 |
| TOTAL | 262.0 |

Duration and Quota. The AFSNCOA conducts six 33 academic-day resident classes each year with a student quota of 420 per class.

Selection. The Air Force Military Personnel Center identifies and notifies active duty students for attendance. AF students must meet all AF standards. Students from other services must meet their service's standards. Complete eligibility and selection criteria can be found in AFI 36-2301, *Professional Military Education* and on line at the Air Force Education and Training Course Announcements (ETCA) (<http://etca.randolph.af.mil>).

Academic Credit. The AFSNCOA is affiliated through CEPME to CCAF, which is accredited through Air University by the Commission on Colleges of the Southern Association of Colleges and Schools. Graduates of the resident course are currently awarded nine semester hours of undergraduate credit from the CCAF.

Noncommissioned Officer Academies

In October 1993, a Headquarters USAF program action directive ordered the transfer of the 10 CONUS NCO academies from AF major air commands (MAJCOM) to Air Education and Training Command (AETC). In November 1993, AETC assigned these academies to the newly formed CEPME. Currently, nine NCO academies aligned under CEPME operate in CONUS at Goodfellow, Gunter, Keesler, Kirtland, Lackland, McGuire, Peterson, Robins, and Tyndall Air Force bases. An NCO academy, located at McGhee Tyson Airport, Knoxville, Tennessee, is under the functional control of the ANG. Air Force MAJCOMs overseas operate their own academies. Pacific Air Forces (PACAF) has three academies located at Elmendorf AFB, Alaska; Kadena AB, Okinawa, Japan; and Hickam AFB, Hawaii. US Air Forces, Europe, has one academy at Kapaun AS, Germany.

Mission: *Provide PME to prepare NCOs for positions of greater responsibility by broadening their leadership and supervisory skills and expanding their perspective of the military profession.*

Goal: Furnish an environment for students to gain an understanding of their positions in the military structure and develop the skills necessary for effectiveness in those supervisory positions.

Eligibility: Students are technical sergeants and technical sergeant (sel) with six months of retainability upon completion of the NCOA. Students must complete the NCOA before they assume the grade of master sergeant.

Resident Curriculum

The NCO Academy's 223-hour curriculum consists of three academic areas—profession of arms, communication skills, and leadership. The principal method of instruction used at this level of EPME is the guided discussion.

Curriculum Summary

| Instructional Area | Academic Hours |
|---------------------------|----------------|
| Profession of Arms | 42.0 |
| Communication Skills | 56.0 |
| Leadership and Management | 103.0 |
| Collateral Curriculum | 13.0 |
| Commandant's Time | 9.0 |
| TOTAL | 223.0 |

Duration and Quota

The NCOA is conducted at 14 locations worldwide and most NCOAs operate seven classes per year. This is a 28-academic-day course, and quotas are distributed by each MAJCOM annually.

Selection

Students are selected based on the eligibility criteria outlined in the ETCA and AFI 36-2301, *Professional Military Education*. Local MPFs manage this process for each base.

Academic Credit

The nine CONUS NCO academies are affiliated through CEPME to the CCAF. CCAF is accredited through Air University by the Commission on Colleges of the Southern Association of Colleges and Schools. Overseas NCOAs and the ANG NCOA located at McGhee Tyson Airport are affiliated directly with CCAF. All graduates of the resident course currently receive 12 semester hours of undergraduate credit with CCAF.

Airman Leadership School

In April 1991, the AF directed that Headquarters AU establish the Airman Leadership School (ALS) program. On 1 October 1991, a new and standardized program came online to teach senior Airmen PME. The stand up of the new ALS discontinued the Noncommissioned Officer Preparatory Course (NCOPC) and the Noncommissioned Officer Leadership School (NCOLS) programs. ALS became the first of three PME programs that enlisted professionals attend during their AF careers. Functional responsibility for each ALS rests with the local Mission Support Squadron.

Mission: *Prepare AF personnel in the rank of senior Airmen for supervisory duties and foster a commitment to the profession of arms.*

Goal: Provide senior Airmen an opportunity to more fully understand their position in the USAF organizational structure and the continued need for professional development to be effective NCOs.

Eligibility: Students are senior Airmen or staff sergeant selects with 48 months time in service and six months retainability in the Air Force upon graduation. ALS completion is required before attaining the rank of staff sergeant.

Resident Curriculum

ALS consists of 192 curriculum hours conducted over 24 academic days at 72 locations worldwide. The primary instructional methodology is the guided discussion. Instruction covers three broad academic areas including profession of arms, communication skills, and leadership. Flight Chief's Time and Collateral Curriculum round out the course.

Curriculum Summary

| Instructional Area | Academic Hours |
|---------------------------|-----------------------|
| Profession of Arms | 46.0 |
| Communication Skills | 42.0 |
| Leadership and Management | 86.0 |
| Collateral Curriculum | 12.0 |
| Flight Chief's Time | 6.0 |
| TOTAL | 192.0 |

Duration and Quota

The ALS is conducted at 69 active duty AF bases worldwide and three ANG bases located in the CONUS. This is a 24-academic-day course, and most ALS's operate eight classes per year. Quotas are locally assigned based on the eligible population.

Selection

Students are selected based on the eligibility criteria outlined in the ETCA and AFI 36-2301, *Professional Military Education*. Once selected, attendance is mandatory. Local MPFs work directly with each ALS to ensure eligible students are selected.

Academic Credit

All ALSs are individually affiliated with the CCAF, which is accredited through Air University by the Commission on Colleges of the Southern Association of Colleges and Schools. Graduates of the resident course currently receive nine semester hours of undergraduate college credit with CCAF. CCAF is automatically notified of class graduations for update of CCAF records and transcripts.

CEPME Distance Learning

The College for Enlisted Professional Military Education provides distance or distributed learning opportunities to the AF enlisted corps.

AFSNCOA Distance Learning Course

AFIADL Course 00012. The AFSNCOA distance-learning (DL) course on CD-ROM consists of five modules: Profession of Arms, Behavior Analysis, Human Resource Development, Organizational Management, and Communication Skills. There are five objective, multiple-choice tests.

NCO Academy Distance Learning Course

AFIADL Course 00009. The NCO Academy DL course consists of three areas of curriculum consisting of communication skills, leadership and management principles, and the profession of arms.

Airman Leadership School Distance Learning Course

AFIADL Course 00001. The ALS DL course covers three curriculum areas: profession of arms, leadership and management principles, and communication skills. There is one end-of-course test.

Eligibility

Eligibility criteria, course responsibilities, and academic credit are outlined in the online *Air Force Institute for Advanced Distributed Learning Catalog* (<http://www.maxwell.af.mil/au/afiadl/curriculum/catalog/html/contents04-01.htm>).

OFFICER ACCESSIONS

Air University's Headquarters Air Force Officer Accession and Training Schools provide centralized leadership and coordinate policies and curriculum for two of the Air Force's three commissioning programs. The third program is the United States Air Force Academy—a direct reporting unit under the chief of staff of the Air Force.

AIR FORCE OFFICER ACCESSION AND TRAINING SCHOOLS

Brig Gen (sel) Floyd L. Carpenter, Commander

Internet Address
<http://www.afoats.af.mil>

Mission: *Produce leaders for the Air Force and build better citizens for America.*

In 1995 the Air University Board of Visitors—an advisory board to the AU commander consisting of educators, business leaders, and retired Air Force personnel—recommended that AU bring together officer accession sources to streamline the organizational structure and reduce the commander's span of control. Air Force Officer Accession and Training Schools (AFOATS) was activated on 14 February 1997, merging Officer Training School (OTS) and the Air Force Reserve Officer Training Corps (AFROTC). AFOATS also directs the AF's high school citizenship training program, AF Junior ROTC (JROTC).

AFOATS furnishes coordinated leadership and policy direction for the AF's officer recruiting, training, and commissioning programs at OTS and at AFROTC detachments at 144 host universities. AFOATS staff manages support and develops curriculum to train tomorrow's AF officers. The merger of AFROTC and OTS provides

- a single focal point for AETC's officer accessions,
- centralized support and curriculum areas,
- one organization to commission and train over 80 percent of AF line officers and more than 95 percent of nonline (medical professionals and chaplains) and legal officers, and
- a method to smooth production flow between AFROTC and OTS.

Air Force Reserve Officer Training Corps

Col Steven E. Wayne, Commander

Internet Address
<http://www.AFROTC.com>

The Air Force Reserve Officer Training Corps is the Air Force's largest and oldest commissioning program. Initially based on the Morrill Act of 1862 and the National Defense Act of 1916, the ROTC program underwent a major change with the ROTC Vitalization Act of 1964. This act, which eliminated compulsory ROTC at state land-grant colleges and universities, offered two- and four-year scholarships with a focus on academics and leadership. The Vitalization Act established the Junior ROTC program and paved the way for today's AFROTC program. AFROTC currently operates at 144 colleges and universities and has nearly 900 cross-town agreements with other institutions. As of October 2003, cadet enrollment was over 17,000 college students. AFROTC's scholarship program includes more than 8,300 cadets and a scholarship budget of \$70 million in fiscal year 2004.

Programs and Operations

AFROTC offers three primary routes to an Air Force commission for college students: the four-year program, the two-year program, and the one-year program for critical-need majors. Students attend Air Force ROTC classes along with other college courses. The four-year program is divided into two phases: the General Military Course (GMC) and the Professional Officer Course (POC). The GMC, which encompasses the freshman and sophomore years, consists of one hour of classroom work and two hours of leadership laboratory each week. Upon completion of GMC requirements, cadets who wish to compete for entry into the last two years of the program, the POC, must do so under the requirements of the POC selection system. After POC selection, students must complete a four-week summer field training unit at an assigned Air Force base to assess their potential as officers. Cadets enrolled in the POC attend class three times a week and participate in a weekly leadership laboratory (LLAB) lasting two hours. Once enrolled in the Professional Officer Course, all cadets are enlisted in the Air Force Reserve and assigned to the Obligated Reserve Section. This entitles them to a monthly nontaxable subsistence allowance.

Cadets not enrolled in ROTC as freshmen or sophomores attend a six-week summer field training unit. These two-year applicants must satisfactorily complete an extended field training unit. This six-week field

training allows extra time for these cadets to gain the leadership skills GMC cadets acquire in LLAB during the first two years of ROTC. Students entering the two-year ROTC program also complete entry-level classroom work during this field training. Two-year applicants are not committed to the Air Force until they return to school in the fall and make a decision to enlist through AFROTC.

A one-year program is utilized to meet very specific AF production shortfalls in certain fields. This program is only used in certain situations and may not be available at all times. After satisfactorily completing requirements, the cadet is commissioned as an AF officer.

AFROTC continues to institute initiatives to improve its program, retain students and conserve resources.

Special Programs

There are many AFROTC optional programs that provide cadets with specialized off-campus learning experiences. These include professional development training, base visits, and orientation flights on Civil Air Patrol aircraft.

Professional Development Training (PDT)

The Professional Development Training Program provides cadets with specialized and individual professional development. The learning experience is similar to an intern program. Cadets are placed at AF bases to acquaint them with life, duties, and responsibilities of AF personnel. This is a voluntary program that provides an important transition for a cadet between training conducted at field training, and commissioning as a second lieutenant.

Cadets are assigned to AF bases normally for two to four weeks. Limited opportunities are also available in parachuting, glider, and survival training courses.

Base Visits

Base visits give cadets a firsthand look at operational AF bases. They are normally conducted during the academic year. An AFROTC instructor accompanies each visit to add personal knowledge of the Air Force mission to the cadets' base visit experience. This program shows cadets the AF professional environment.

Scholarships

AFROTC currently issues well over half of its College Scholarship Program (CSP) awards to candidates pursuing undergraduate engineering or other scientific and technical disciplines. However, students in every degree program enjoy scholarship opportunities, as the AF seeks to engage students who excel both academically and militarily. The In-College Scholarship Program (ICSP) has both competitive and fully qualified programs targeting the best and brightest college students interested in a career as an officer in the United States Air Force.

AFROTC awards scholarships in increments ranging from one-half year to four full years. AFROTC offers several types of scholarships. Type 1 covers full tuition and most required fees. Type 2 covers tuition and fees but is capped at \$15,000 annually. Type 3 covers tuition and fees but is capped at \$9,000 annually. Type 6 covers tuition and fees but is capped at \$3,000 annually. Seven scholarships pay full college tuition and most fees at a college/university where the tuition is less than \$9,000 per year, or at any institution where the student qualifies for the in-state tuition rate. All scholarships provide an allowance for books and a monthly nontaxable subsistence allowance.

All scholarship cadets are required to meet certain academic, military, and physical fitness standards to earn and maintain scholarship benefits. Also, scholarship recipients must be younger than 31 as of 31 December of the calendar year during which commissioning is scheduled.

Extracurricular Activities

AFROTC cadets participate in a variety of extracurricular activities. Several units have special drill teams, color guards, and honor guards. Many students enrolled in AFROTC also participate in unit-sponsored intramural sports and social functions.

Enrollment Criteria

The first two years of the AFROTC college program, the General Military Course, are open to all students who are at least 14 years old. Second-year scholarship cadets and all cadets entering the last two years of the college program—the Professional Officer Course—must be at least 17. These contract cadets must meet AFROTC and Department of Defense eligibility standards ranging from physical fitness to US citizenship.

Faculty

The teaching staff of AFROTC units is composed of experienced AF officers. Selection is determined by professional experience, academic background, and qualifications as instructors. Professors of Air and Space Studies and Assistant Professors of Air and Space Studies are required to complete faculty development training at Maxwell AFB, Alabama, to enhance their teaching skills and learn more about their jobs before reporting for their teaching assignments. Professors of Air and Space Studies complete the following course:

MAFOATS005 – AFROTC Professor of Aerospace Studies Course

A 10-training day, mission essential course hosted by AFOATS Curriculum Directorate (AFOATS/CR). This course supports newly assigned AFROTC detachment commanders to teach within the AFROTC academic environment as well as orient and prepare them for AFROTC detachment duties at geographically separated units. Major areas of study include learning theory, teaching methods, critiquing of student writing, and speaking and evaluation. Students receive AFROTC instruction in curriculum, professional relations, leadership, counseling, legal issues, and meet with subject-matter experts concerning instructional levels.

Similarly, Assistant Professors of Air and Space Studies complete:

MAFOATS002 – AFROTC Assistant Professor of Aerospace Studies Course

A 15-training day, mission essential course hosted by AFOATS Curriculum Directorate (AFOATS/CR), Maxwell, AFB, AL. This course prepares newly assigned AFROTC instructors to teach within the AFROTC academic environment as well as orient and prepare them for AFROTC detachment duties at geographically separated units. Major areas are learning theory, teaching methods, critiquing of student writing, speaking and evaluation. Students receive AFROTC instruction in curriculum, professional relations, leadership, counseling, legal issues, and meet with subject-matter experts concerning instructional levels.

Each detachment has enlisted personnel (3S) and information manager (3A) specialists assigned to assist with daily operations. These individuals are required to complete the following course.

MAFOATS001 – AFROTC NCO Orientation Course

A 10-training day, mission essential course hosted by the AFOATS Curriculum Directorate (AFOATS/CR). The faculty is composed of enlisted personnel currently assigned to AFROTC detachments. Newly assigned NCOs are taught the critical aspects of personnel and information management as they relate to the day-to-day operations at AFROTC detachments and the interface between detachments and HQ AFROTC. The course purpose is to improve performance, enhance productivity, and enhance mission accomplishment of new AFROTC cadre members. This course covers the basic skills and knowledge in AFROTC mission and structure, unit support, logistics support, cadet personnel and financial management programs and various computer functions. Course scope of training includes various documentation processes, regulatory guidance procedures and other programs related to the AFROTC arena.

Curriculum

The main curriculum areas are leadership studies, field leadership, profession of arms, military studies, international security studies, and communications skills. Teaching methods include informal lecture, guided discussion, case studies, readings, and practical exercises (athletics, group leadership problems, and the leadership reaction course). The table below summarizes the AFROTC curriculum.

Curriculum Summary

| Instructional Area | Academic Hours |
|---------------------------|-----------------------|
| Leadership Studies | 55.0 |
| Communication Skills | 45.0 |
| Profession of Arms | 46.0 |
| Military Studies | 64.0 |
| Admin/Testing | 30.0 |
| LLAB | 180.0 |
| Field Training * | 310.0 |
| TOTAL | 730.0 |

*Standard Field Training 310 Hours
 Extended Field Training 463 Hours

Officer Training School

Colonel David K. Gerber, Commander

Internet Address

<http://ots.afoats.af.mil/>

Air Training Command activated Officer Training School (OTS) at Lackland Air Force Base, Texas, on 1 July 1959. OTS moved to the Lackland Training Annex in 1961. In November 1971, the Air Staff launched an extensive curriculum review that produced a core curriculum common to the Air Force Academy, AFROTC, and OTS. On 25 September 1993, OTS relocated to Maxwell AFB and began a new era when it became a part of Air University. From inception, OTS has been committed to providing top-quality officers.

Throughout its history, OTS has adapted to a challenging training environment. After graduating 12 women and 78 men in its first class, OTS successfully commissioned more than 500 second lieutenants its first year. By 1964 more than 10,000 individuals had graduated, and to date more than 103,000 officers have entered the AF through OTS. Over the years, OTS has functioned as a “flexible partner” to the other accessions sources to meet AF changing manning requirements. Additionally, the school began to train commissioned medical students, chaplains, and judge advocates in 1981 and medical service officers in 1991. In 1996 the Commissioned Officer Training School combined training programs for chaplains, judge advocates, and medical service officers and has trained over 10,000 newly commissioned officers.

OTS commissioning and training programs

- instill a commitment to the profession of arms,
- inspire internalization of AF core values,
- enhance officership skills,
- provide a relevant, up-to-date curriculum, and
- meet USAF production goals.

Courses

OTS consists of two programs: Basic Officer Training (BOT) and Commissioned Officer Training (COT). BOT leads to a line officer commission as a second lieutenant. COT provides initial officership training for AF judge advocates, chaplains, and medical officers.

Basic Officer Training

BOT is a challenging program that imparts to its graduates the importance of discipline, attention to detail, dedication to service, and leadership. It stresses commitment to the profession of arms and motivates graduates to achieve the highest standards of integrity, excellence in all they do, and service before self. This challenging environment provides numerous tests for leadership skills through classroom and field training exercises and operation of the officer trainee wing. A four-day, three-night Air and Space Expeditionary Force (AEF) exercise is the capstone event for BOT.

Commissioned Officer Training

COT was developed in 1996. It provides the fundamentals of officership and the initial leadership training required for newly commissioned AF officers (active duty, Air National Guard, and Air Force Reserve). It stresses commitment to the profession of arms and motivates graduates to achieve AF core values. The rank of COT students ranges from second lieutenant to lieutenant colonel depending on the newly commissioned officers' professional qualifications. A three-day, two-night AEF exercise is the capstone event for COT. The Medical Readiness Indoctrination course (MRIC) is incorporated into the AEF exercise for medical service officers.

The Reserve Commissioned Officer Training (RCOT) course was developed in 1999. This course was designed to train (hard to recruit) Guard and Reserve medical professionals. It combines preattendance correspondence work and a Web-based pretest with a demanding 14-day in-residence course.

Programs and Operations

OTS conducts training for BOT and COT at Maxwell AFB. The AEF exercise for both programs is conducted at the Blue Thunder training site and confidence course located at the north end of the runway at Maxwell AFB.

The OTS program is continually assessed with survey data, and course content is reviewed to improve program effectiveness. Construction to build a single OTS campus is nearly complete. The campus consists of two academic buildings, three dormitories, a dining facility, and fitness center. A fourth dormitory is under construction with an estimated completion date in FY 04.

OTS makes every effort to furnish incoming officer candidates with information to facilitate their transition to commissioned officer status. The OTS home page (<http://ots.af.foats.af.mil/>), gives prospective trainees access to current information on OTS. The home page assists students with preparing mentally and physically for OTS.

Curriculum

The major areas of instruction are leadership studies, military training and application, profession of arms, military studies/international security studies, and communications skills. OTS teaching methods include auditorium lectures, readings, flight room classes (informal lecture, guided discussion, and case studies), and practical exercises (sports campaigns, a Leadership Reaction Course, and the end-of-course AEF exercise).

Duration and Quota

OTS currently conducts eight BOT classes, seven COT classes, and two RCOT classes each year. The BOT program is 12 weeks long (60 training days), the COT program is four weeks long (23 training days), and the RCOT program is two weeks long (14 training days) plus the correspondence portion. In FY 2003 BOT graduated approximately 1,590 students, and COT graduated nearly 1,550 students—total yearly production over 3,100. In FY 2003, BOT averaged about 200 officer trainees per class. COT had an average of 140 students per class. In FY 2004 it is expected that these numbers will decrease to approximately 1,000 BOT graduates and 1,400 COT graduates.

Prerequisites and Selection

Students attending BOT must have a bachelor's degree, be less than 30 years of age (waiverable to the age of 35), and meet minimum physical requirements for becoming an officer. Competition for entry into this program is quite rigorous. The tables below summarize BOT, COT, and RCOT curriculum.

Student Curriculum Summaries

Basic Officer Training

| Instructional Area | Academic Hours |
|--------------------------------------|-----------------------|
| Leadership Studies | 42.0 |
| Communication Skills | 41.0 |
| Profession of Arms | 36.0 |
| Military Studies | 13.0 |
| Military Training and Application | 127.0 |
| Admin/Processing/Testing/Orientation | 147.0 |
| TOTAL | 406.0 |

Commissioned Officer Training

| Instructional Area | Academic Hours |
|-----------------------------------|-----------------------|
| Leadership Studies | 32.0 |
| Communication Skills | 12.0 |
| Profession of Arms | 27.0 |
| Military Studies | 7.0 |
| Military Training and Application | 17.0 |
| Admin/Testing | 37.0 |
| AEF Exercise | 30.0 |
| TOTAL | 162.0 |

**Reserve Commissioned Officer Training
(In-Residence Portion)**

| Instructional Area | Academic Hours |
|---------------------------|-----------------------|
| Leadership Studies | 17.0 |
| Communication Skills | 8.0 |
| Profession of Arms | 19.0 |
| Military Studies | 5.0 |

Officer Accession and Training

| Instructional Area | Academic Hours |
|-----------------------------------|-----------------------|
| Military Training and Application | 11.0 |
| Admin/Testing | 27.0 |
| AEF Exercise | 30.0 |
| TOTAL | 117.0 |

OTS Faculty

Prior to assuming leadership of a flight, each Flight Training Officer (FTO) must attend and be certified through the OTS Academic Instructor School.

MAFOATS004 – OTS Academic Instructor Course

A 10-training day, mission essential course hosted by the AFOATS Curriculum Directorate (AFOATS/CR). This course prepares instructors to teach at OTS. Students learn and practice basic instructor skills with much of the course devoted to small-group activities. Major curricular areas focus on communication skills, teaching methodologies, cognitive lesson planning, evaluation methodology, and construction of basic instructional aids. Students receive instruction in teaching lessons that meet their individual schools' needs.

Additionally, FTOs attend an in-house, initial qualification course to familiarize them with the procedures associated with classroom operational duties and field leadership activities in the OTS curriculum.

PROFESSIONAL CONTINUING EDUCATION

Resident and distance learning professional continuing education (PCE) remains an important part of the careers of Air Force enlisted, officer, and civilian personnel. Air University offers short courses of continuing education in different Air Force specialty areas through the Air Force Institute of Technology (included in Section I); the College of Air and Space Doctrine, Research and Education; and the Ira C. Eaker College for Professional Development. Note: The Academic Instructor School (AIS) was discontinued as a separate school effective 1 October 2003. As a result, each AU school assumed responsibility for faculty education and training.

COLLEGE OF AEROSPACE DOCTRINE, RESEARCH AND EDUCATION

Brig Gen (sel) Randal D. Fullhart

Internet Address

<http://www.cadre.maxwell.af.mil/>

Mission: *Develop, examine, teach, and wargame concepts of air and space power, doctrine and strategy . . . provide research and publishing expertise . . . educate war fighters in the art of air and space power.*

The College of Aerospace Doctrine, Research and Education (CADRE) carries on the traditions of the Air Corps Tactical School where, in the 1930s, future leaders of the USAF were trained and the basic doctrine and concepts of US airpower for World War II were formulated. As much as ACTS instructors such as generals Harold L. George, Haywood S. Hansell Jr., Claire L. Chennault, and George C. Kenney shaped doctrine and strategy in World War II, the college's staff is committed to providing the Air Staff and the major commands with original thought and applications of air and space power in the modern world. CADRE is located in Walker Hall—named for Brig Gen Kenneth N. Walker, an ACTS instructor and Medal of Honor winner in the Pacific during World War II.

The college educates AF and joint communities on war fighting at the operational and strategic level through research, war gaming, fellowships, and professional continuing education courses and publication. CADRE provides

- doctrinal research and analysis and development of employment concepts for air and space power;
- education of the Air Force in air and space doctrine and the doctrinal application of air and space power;
- study and analysis of dynamics of warfare through modeling, simulation, and war gaming; and
- intelligence support to AU and its subordinate units.

Also, CADRE conducts

- research on public affairs and mass media issues and assists schools and organizations in developing military news media curricula, and
- research on air and space power topics of interest to senior leaders, research support for all AU schools, and publication of the AF's only professional journal, the *Air and Space Power Journal (ASPJ)*.

The college creates an interface between research and concept development, testing, and publication. It gives AU the capability to fulfill its mission of assisting in the development of AF doctrine, concepts, and strategy.

CADRE's resident curriculum offerings consist of eight specialized courses: the Joint Flag Officer Warfighting course (JFOWC), the Joint Force Air Component Commander course (JFACC), the Combined Force Air Component Commander course (CFACC), the Senior Information Warfare Applications course (SIWAC), the Senior Executive Services (SES) seminar, the Joint Doctrine Air Campaign course (JDACC), the Contingency Wartime Planning course (CWPC), and the Information Warfare Applications course (IWAC). These resident courses

- provide flag officer attendees the opportunity to participate in joint combat operation exercises;
- provide training to active duty captains through colonels of all services for air campaign planning in conjunction with assignment to joint, combined, and air component command staffs;
- provide USAF staff planners an understanding of DOD planning relationships from a joint deployment perspective;
- instruct future war planners in the art and science of contingency planning; and
- apply and value the principles of information warfare to enhance war-fighting capabilities.

Airpower Research Institute

Colonel Dale L. Hayden, Director

Internet Address

<http://www.cadre.maxwell.af.mil/> (select "Inside CADRE")

The Airpower Research Institute (ARI) advances the theory and application of air and space power through research, analysis, and publication. The institute focuses on a single, overriding objective: contributing as warrior-scholars to an improved combat capability for the USAF.

In support of that objective, ARI performs a number of missions. First, ARI produces books and original research pamphlets, papers, and briefings related to air and space power. Second, the institute facilitates the research of students and faculty throughout the Air University school system by managing various research databases and electronically publishing faculty/student research papers and making them available on the Internet. Third, ARI publishes the *Air and Space Power Journal*, the Air Force's

professional quarterly and primary institutional forum for exchanging ideas about airpower and other matters relating to national defense. In addition, the institute publishes *Air and Space Power Chronicles*, an electronic Internet version. Fourth, ARI is home to the administration of the Air Force Fellows program, which sends nearly 50 highly select field grade officers to civilian universities and “think tanks” throughout the United States and Canada to serve as Air Force “ambassadors” and researchers.

The institute is composed of three divisions:

Research Division. The Research Division, composed of civilians and part-time Reserve defense analysts, conducts independent and professional research on topics of interests to USAF leaders and policy makers. The division produces original research papers and briefings that address USAF and air and space power doctrine, strategy, and operations, in an effort to assist and guide the senior leadership of the Air Force. Topics include analyses of Air Force Task Force CONOPS, such as Air Combat Operations (air superiority, strategic attack, interdiction, and close air support); Air Mobility Operations (airlift and air refueling); Command and Control; Space Operations; Information Operations; Intelligence, Surveillance, and Reconnaissance; and Homeland Security/Defense. The Division writes and distributes materials of importance to the Air Force leadership as well as to students at the Air University and throughout the Air Force and Department of Defense community.

Research Support Division. The Research Support Division supports research efforts in the institute and throughout Air University schools with computer databases, Web server support, and electronic publishing, and facilitates collaboration with external research institutions—DOD laboratories, military service schools, and civilian universities—worldwide. The Database Branch maintains databases of proposed research topics and completed research papers. The Division helps set standards for the conduct of research throughout Air University by providing research education, tools, and resources—along with technical support—to Air University faculty and students. The AF Fellows Branch provides research guidance and administrative support to 50+ field grade officers assigned for one year to civilian universities and think tanks that study national security strategy. The dual objectives of the program are to provide highly proficient officers to serve as visiting military ambassadors to prestigious institutions and to secure highly relevant and timely research products to meet Air Force needs. The Fellows Division develops a Fellows orientation program, approves research topics, provides computer support, processes travel orders and per diem vouchers, manages leave, writes training reports, and holds an end-of-tour conference.

Professional Journals Division. The Professional Journals Division accomplishes the management oversight and editorial development functions of the Air Force’s professional journal—the *Air and Space Power Journal*—in English, Spanish, and Portuguese quarterly editions. The English edition of *Air and Space Power Journal* is an internal Air Force professional development instrument designed to serve as an open forum for the presentation and stimulation of innovative thinking on air and space power doctrine, strategy, tactics, force structure, readiness, and other matters of national defense. The two foreign language editions are Air Force chief of staff-directed foreign policy arms used to disseminate core USAF doctrine, strategy, policy, operation art, and current issues that relate to the Western Hemisphere. They serve as military-to-military foreign policy instruments of the United States. The division also produces *Air and Space Power Chronicles*, an online publication, which uses all three versions of *Air and Space Power Journal* as a springboard to publish continuously updated dialogue, thought pieces, and book reviews on the World Wide Web. Division personnel include both military and civilian editors. The Electronic Publishing Branch publishes several hundred student papers annually from Air War College, Air Command and Staff College, Air Force Institute of Technology, and Air Force Fellows Program for delivery via the World Wide Web.

Warfare Studies Institute

Col Ernest G. Howard, Director

Internet Address

<http://www.cadre.maxwell.af.mil/default.htm> (select organization)

The Warfare Studies Institute (WSI) conducts eight professional continuing education courses designed to develop the judgment and skills required to employ air and space power effectively in combat. The courses offered and supported through the resources of the institute have significantly contributed to the war-fighting capabilities of all US military forces.

The institute conducts the JFOWC, JFACC, CFACC, and SIWAC courses. These premier, executive-level courses prepare officers at the one- and two-star rank from all four services for combat leadership responsibilities in the joint and combined arenas. The institute also conducts the SES Seminar designed to expose key senior civilian leaders to air and space power concepts and USAF and joint doctrinal issues affecting the conduct of warfare in the twenty-first century. The Flag Officer Division staff develops, plans, and manages PCE courses for senior officers from all branches of the US armed forces and SES members from the Department of the Air Force. This

select staff has a wide range of expertise needed to meet the special requirements of senior flag officers and civilians attending these courses.

The faculty and staff of WSI also conduct courses that contribute significantly to the war-fighting preparedness of US military forces. These courses include the Contingency Wartime Planning, Joint Air Operations Planning, and Information Warfare Applications courses.

MAAFNJ 007 Joint Flag Officer Warfighting Course (JFOWC)

JFOWC is the senior PCE course in the DOD. The chiefs of staff of all four branches of the US armed forces own and control the course. They delegate course development and execution to their executive agents: commandant, Army War College; president, Naval War College; president, Marine Corps University; and commander, Air University.

The course prepares two-star officers of all four services for the responsibilities of theater-level combat leadership. It is tailored to provide our future theater combatant commanders, service component and joint task force (JTF) commanders with a broad perspective of the strategic and operational levels of war. Instruction for the course comes from senior national-civilian and military representatives, flag officers serving as combatant commanders, and retired, battle-tested officers. Retired warrior generals draw from their combatant and component commander experience to lead war-gaming scenarios focused in various parts of the world, across the continuum of conflict.

Through the study of war fighting, military doctrine and application of unified, joint and combined combat forces, the attendees will be better prepared to face future crises. JFOWC is a two-week course offered twice a year. Each class is limited to 18 flag officers who represent all military services. The desired attendee mix is six US Air Force, six US Army, four US Navy, and two USMC flag officers.

MCADRE004 Joint Force Air Component Commander (JFACC) Course

The JFACC course is a senior-officer-level PCE course hosted by the USAF and sponsored by all four branches of the US military services. The course is designed to prepare potential JFACCs for responsibilities of theater-level combat leadership. The attendees study war fighting, military doctrine, and the application of unified, joint, and combined combat forces, with particular emphasis on air and space power employment in theater-level operations.

The one-week-long course is conducted annually in the February time frame. The first three days are conducted at Maxwell AFB and the last two days are usually held at an exercise location. The course is limited to 17 active duty one-star (or one-star select) attendees. The desired attendee mix is eight US Air Force, four US Navy, three US Marine, and two US Army flag officers.

MCADRE 007 Combined Forces Air Component Commander (CFACC) Course

The CFACC course is hosted by the US Air Force and sponsored by all services, attended by service chief-selected flag officers and international air force officers. The attendees study operational-level war fighting, military doctrine, and the application of joint and combined combat forces with particular emphasis on air and space power employment in theater-level operations.

The Air Force hosts and conducts a one-week CFACC course annually in the August time frame. The first three to four days are held at Maxwell AFB, Alabama, and the last two days are usually held at an operational exercise location. Eighteen active duty officers—one-star, one-star select, or equivalent rank—are selected to attend. The desired attendee mix is five USAF, two US Navy, two US Marine, one US Army and eight allied flag officers.

MCADRE 006 Senior Information Warfare Applications Course (SIWAC)

The four-day SIWAC is an interagency course and an innovative step in the continuing education of flag officers from all branches of the US armed forces and senior executive service members. It is designed to bridge the public and private sectors and enhance senior leaders understanding of how current and emerging technologies are impacting human decision making and operations in the information age.

Attendees study war fighting and doctrine as related to information warfare (IW) concepts and principles. Course objectives are to understand current DOD and joint doctrinal concepts for IW, understand the integration of weapons systems and IW capabilities from different services or nations to provide effective theater- and national-level IW capabilities, understand and respond to service perspectives on IW employment concepts, and understand IW's role in campaign development. Attendees should be able to execute theater IW strategy and understand IW capabilities and limitations. Attendance is limited to 16 US flag officers in the grade of brigadier general or major general and *equivalent* members of the Senior Executive Service.

Senior Executive Service (SES) Seminar

The SES Seminar is designed to provide senior civilian leadership with in-depth knowledge of key air and space concepts and an integrated view of warfare in the twenty-first century. The seminar is a three-day course taught twice per year. Enrollment is limited to 12 attendees in the grades of SES-1 through SES-4.

MCADRE 002 Contingency Wartime Planning Course (CWPC)

The two-week CWPC educates Airmen in grades E-5 through O-5 in the art and science of contingency war planning. The CWPC graduates approximately 700 students each year during their 10 programmed courses.

Curriculum Summary

| Area of Instruction | Academic Hours |
|----------------------------|-----------------------|
| Orientation and Testing | 12.5 |
| Foundations of Planning | 7.0 |
| Systems | 4.0 |
| Planning | 16.0 |
| Exercises | 25.5 |
| TOTAL | 65.0 |

MCADRE 003 Joint Air Operations Planning Course (JAOPC)

The JAOPC prepares personnel from all services who have been designated, or may be designated, to serve on the staff of a JFACC. Participants gain in-depth familiarity with the fundamental concepts, principles, and doctrine required to develop and execute a joint or combined air operations plan. Students focus on the campaign planning process at the operational level of war. Attendees are

normally captains through colonels. Classes are offered 10 times per year, with an enrollment of 25 to 35 students per class.

Curriculum Summary

| Instructional Area | Academic Hours |
|---------------------------------------|-----------------------|
| Course Administration | 3.5 |
| Air Campaign Planning Fundamentals | 16.0 |
| Air Campaign Planning Process | 3.5 |
| Historical Campaign Plan Case Studies | 3.5 |
| Air Campaign Planning Exercise | 38.0 |
| Crisis Action Planning Exercise | 7.5 |
| TOTAL | 72.0 |

MCADRE 005 Information Warfare Applications Course (IWAC)

The IWAC is a one-week course that teaches students to apply and value the principles of Information Operations to enhance war-fighting capabilities. The course is taught at the college level and is divided into three blocks of material: the Definition and Components of IW, the IW Operational Environment, and the Applications of IW. Through lectures, seminars, practical exercises, readings, and computer-based lessons, students gain a better understanding of how current and emerging technologies are affecting decision making. Classes are offered eight times per year with an enrollment of 70 to 80 students per class.

Curriculum Summary

| Instructional Area | Academic Hours |
|---------------------------|-----------------------|
| Course Administration | 1.0 |
| Fundamentals of IW | 27.0 |
| Exercises | 12.0 |
| TOTAL | 40.0 |
| | |

Warfighter Planning Course (<http://www.cadre.maxwell.af.mil/warfaresudies/wpc/start.htm>)

The Warfighter Planning course (WPC) is a combination of three requisites: the *WPC On-line*, the respective in-residence course tracks—Contingency Wartime Planning course (CWPC) or Joint Air Operations Planning course (JAOPC)—and the combined (CWPC & JAOPC) Crisis Action Planning exercise. *WPC On-line* is the Web-based prep course for all students attending the resident CWPC or JAOPC at CADRE. All

students attending either CWPC or JAOPC must complete *WPC On-line* prior to their arrival at Maxwell AFB. *WPC On-line* covers the basics that military planners need to know before beginning an in-depth study of planning. Topics include the development of national-level strategy, the organizations that develop national-level strategy, the organization of joint military forces, and the broad capabilities the services provide to joint force commanders. After arrival, students take one of two tracks: CWPC or JAOPC. Each course provides eight days of specific planning education. Upon completion of each course track, students combine to perform the Warfighter Crisis Action Planning exercise.

Air and Space Power Course

The Air and Space Power course (ASPC) is available online for users with high-speed Internet connections at <http://www.apc.maxwell.af.mil>. The ASPC is a self-paced, interactive course consisting of 12 separate lessons. The course helps students develop a broader comprehension of air and space power principles, concepts and applications. Although the course is primarily designed to help prepare AF officers in joint duty assignments to articulate and advocate air and space power principles and beliefs, it can benefit all air and space power enthusiasts. As the course progresses through the history of airpower, lessons learned from past applications, and discussions of how air and space power contributes to attaining national security and theater objectives, the student is exposed to many of the air and space power doctrinal tools necessary to perform joint staff duties. A CD-ROM version of the course is also available for those without the necessary high-speed Internet connection. For more information, contact the Air and Space Power course development team at apch@maxwell.af.mil.

Air Force Forces Staff Training Course

The Air Force Forces (AFFOR) Staff Training course is available online for users with high-speed Internet connections at <http://www.affor.maxwell.af.mil>. The AFFOR course is a self-paced, interactive course. The course provides students an in-depth look at the role of the commander of Air Force forces (COMAFFOR) in organizing and employing air and space forces within joint operations. This role involves service component responsibilities as well as operational employment considerations. The heart of the course focuses upon the various staffs the COMAFFOR uses to accomplish these duties. This course is required for any personnel transitioning to duty on a Numbered Air Force or AFFOR staff or in an Air Operations center.

Air Force Wargaming Institute

Col Craig C. Goodbrake, Director

Internet Address

<http://www.cadre.maxwell.af.mil/wg/default.htm>

In 1975 the Clements Blue-ribbon Panel on Excellence in Professional Military Education cited a need for service schools to stress war fighting and decision making in combat. In 1976 the AF chief of staff's Constant Readiness Tasking directed AU to "put more war in the War College." The concept for the Air Force Wargaming Institute (AFWI) evolved from these two initiatives. The facility opened in 1986 at Maxwell AFB, Alabama. The institute supports a broad range of war games and exercises to meet the needs of AF, DOD, and international sponsors.

Operations and Wargame Support

AFWI is housed in a special-purpose, 56,000-square-foot facility. It can operate in whole or in part as a secure, classified working area. The building contains 22 seminar or game rooms and two conference rooms—all with audio and video capabilities.

The War Gaming Operations Division (WGO) is responsible for the entire war-gaming life-cycle process, to include definition, design, development, testing/preplay, preparation, execution and post war-game analysis. With a \$2-million annual budget, WGO provides war-game support to a variety of customers from around the world. The professional men and women assigned to the two branches within WGO provide full-spectrum war gaming to accomplish the AFWI Director's mission.

The division also maintains the communications-computer infrastructure supporting war-gaming operations as well as the rest of CADRE. WGO designed and implemented state-of-the-art local area networks (LAN)—unclassified and classified—that can be modified to accommodate a wide spectrum of war-gaming scenarios. The division maintains these LANs and evaluates emerging technologies to ensure that AFWI's computing environment remains on the cutting edge.

The War Gaming Technology Division (WGT) develops, maintains, and operates models to support war games. WGT is currently creating a new model, SIMWAR XXI, to better support the Air and Space Basic course and exploring other government models to replace the ACES model. AFWI is currently using the following models and tools:

1. air Force Command Exercise System (ACES)—a joint, theater campaign-level, combat-simulation model;
2. rapid Scenario Generator (RSG)—a scenario building tool capable of rapidly building real-terrain and infrastructure-based scenario's for use in the ACES model;
3. joint Educational Mobility Model (JEMM)—a theater-mobility model used to generate time-phased force and deployment data (TPFDD) for war games;
4. atlantis model—a real-time, tactical air and space employment model;
5. bottom Line—simulates the impact of national budget decisions on the state of the nation;
6. accelerated Combat Timeline (ACT)—an operational-level graphical user interface to the ACES model; and
7. forceView—an automated map display tool that allows one to view and move forces. This tool is capable of interfacing with ACT, ACES, and JEMM.

The division also provides technical advice and critical analyses on all aspects of modeling and simulation (M&S) and war gaming. The division's staff members hold advanced degrees in operational sciences and have experience in weapons employment, mobility, space operations, and information operations. These operations analysts provide course management and platform instruction for M&S-supported activities (war games, exercises, and analyses). Teamed with the Air Force Doctrine Center, the division analyzes the logic, mathematics, and algorithms of combat models to ensure doctrinally sound outcomes at joint exercises.

War Games and Simulation Exercises

In a typical year, AFWI plans, develops, and conducts approximately 30 war games and exercises for more than 9,000 participants. AFWI provides a “laboratory environment” in which current and future commanders and staffs study warfare to identify problems before they face them in combat.

Joint Air and Space Exercise (JAEX). JAEX is the Air Command and Staff College (ACSC) capstone war game. It helps ACSC students to understand and appreciate the complex and time-critical operational control processes that occur within the Combined/Joint Air Operations Center (C/JAOC) and between the air component and other functional components during execution of air and space operations. JAEX demonstrates what air and space power, forces, and concepts bring to the fight at the operational level of war. It emphasizes the complexities of warfare through simulated combined and joint forces, air component commander activities, and air tasking order execution. Students apply basic concepts of air campaign planning and execution in a simulated air operations center environment and continually assess the effectiveness of their joint air operations plans.

Blue Thunder II (BT). Air and Space Basic course (ASBC) is the first level of PME instruction for commissioned officers. ASBC inspires new USAF officers to comprehend their roles as Airmen who understand and live by USAF core values and articulate and demonstrate USAF distinctive capabilities and core competencies. Blue Thunder, the pinnacle of the six-week course, challenges officers to demonstrate lessons learned about basic air operational and tactical warfare. Blue Thunder focuses on the employment of air forces at the operational and tactical levels of war. The officers apply basic concepts in planning the air portion of a campaign plan in a dynamic educational environment. They continually assess the effectiveness of their plan and make changes as required.

Exercise in National Budget Priorities (XNBP). XNBP supports the Professional Military Comptroller School. It is an unclassified, stand-alone, computerized executive-planning exercise, addressing national budget priorities as impacted by presidential and cabinet-level decisions. This strategic-level exercise utilizes the “Bottom Line” model, which analyzes presidential, economic, political, and military budget decisions and their impact on the state of the nation by combining the allocations of 17 key areas of a proposed budget with accepted economic analytical tools such as the Phillip’s Curve and Okun’s Law. The “Resulting Model” projects the effect of a presidential administration’s policies upon the state of the nation. Its product, a Projected State of the Nation Report, is a compilation of social and

economic indices including voter support, unemployment, gross national product, war risk, and inflation. XNBP stimulates participants to actively test their understanding of budgetary and economic relationships in a realistic and enjoyable environment. It reinforces the relationships between foreign and domestic policy decisions and how allocation of scarce resources to support those decisions affects the state of the nation.

Joint Land, Aerospace, and Sea Simulation (JLASS). JLASS is a joint-sponsored war game by the following US military senior-level colleges: Air War College, Naval War College, Army War College, Marine War College, and Industrial College of the Armed Forces. The war game focuses on joint and combined warfare at the operational and strategic level with the goal of enhancing joint PME by examining potential US military responses to regional crises.

Joint Warrior/Cold Roof. Joint Warrior and Cold Roof are theater-level seminar war games conducted in conjunction with the Joint Flag Officer Warfighting course. They focus on issues associated with joint and coalition warfare from the perspective of the theater combatant commander and component commanders. Joint Warrior involves senior Air Force, Army, Marine, and Navy officers in deliberate planning. Cold Roof is a crisis-action planning exercise.

Operation Atlantis. Operation Atlantis is Squadron Officer School's capstone exercise. The exercise reinforces teachings of the principles of war, fundamentals of military force application, and basic concepts of tactical air operations. Students simulate operations from an air operations center. They conduct battle-staff planning for an air campaign in the combat plans section and then execute their plan in an interactive computer exercise.

Pegasus–Australia. Pegasus–Australia is a computer-assisted theater-level war game used by the Australian Defense Forces Command and Staff College. The exercise models a war between two fictional alliances. Participants assume the role of the combined command staffs of two opposing alliances.

Pegasus–UK. Pegasus–UK is a computer-assisted theater war game for the United Kingdom's Joint Services Command and Staff College. The exercise models a war between two fictional alliances. The participants assume the role of the staffs of the opposing alliances.

Solo Challenge (SC). SC is the capstone war game of the Air War College (AWC) academic year and includes the themes of leadership, doctrine, strategy, political/military affairs, joint/combined warfare, air and space

power and technology. It provides AWC students the opportunity to translate national-level decisions into operational-level action. During SC, participants manage ongoing global crises and a homeland security scenario, while confronting limited force structure and overseas basing.

Theater Campaign Warfare (TCW). TCW is the capstone war game for the School of Advanced Air and Space Studies. This seminar-based educational war game provides students an opportunity to synthesize concepts about the nature and employment of military forces they have developed during the school year. The game consists of six parallel but independent seminars and includes planning, execution and analysis phases, lasting five days. Educational objectives are facilitated by game moves covering periods varying from a few days to several weeks. Students from the Army's School of Advanced Military Studies at Fort Leavenworth, Kansas; Naval Operational Planning course at Newport, Rhode Island; and the USMC's School of Advanced War Fighting at Quantico, Virginia, augment the game.

Intelligence Directorate

Col James R. Miller, Director

Internet Address

<http://www.cadre.maxwell.af.mil/default.htm> (select organization)

As AU's only intelligence organization, the Intelligence Directorate (IN) supports the AU commander; AU schools' commandants, staffs, and students; the Air Force Doctrine Center (AFDC); CADRE; and 42d Air Base Wing by providing ISR expertise. Products include curriculum development, platform lectures/instruction, current intelligence presentations and analysis, as well as scenario development, opposing force, and ISR play in support of war games.

The directorate's personnel provide current and projected force structures of nations (scenario development) represented in war games. These games simulate the capabilities and tactics of opposing forces and represent the role intelligence plays in national- and operational-level decision making. The directorate provides intelligence research assistance and resources to more than 7,000 students and 200 faculty members at AU, many of whom participate in special studies directed by the Air Force chief of staff and the Air Staff. The directorate supports AWC, ACSC, CPD, SOC, ABC, and OTS through intelligence briefings and academic course work (intelligence education).

The directorate reviews and critiques joint and AF doctrine documents to ensure intelligence capabilities are accurately represented. IN also

provides intelligence instruction to CADRE's JDACC, IWAC, JFOWC, and JFACC. As senior intelligence officer (SIO) for AU, the director maintains regular liaison with Air Force director of Intelligence, Surveillance and Reconnaissance (AF/XOI) and fellow AF SIOs and chairs the AU Intelligence Curriculum Committee.

The AU Special Security Office (AU/SSO) controls, safeguards, and ensures proper use of sensitive compartmented information (SCI). The SSO manages more than 900 SCI billets, operates AU's only SCI communications center, and provides physical security for the AU SCI facilities.

US Air Force Public Affairs Center of Excellence

Lt Col Matthew J. Durham, Director

Internet Address

<http://www.cadre.maxwell.af.mil/>

The US Air Force Public Affairs Center of Excellence (PACE) emphasizes the importance of how public affairs doctrine and the global information environment influence the twenty-first century battlefield. The Center infuses military/news media relations education at almost all AU schools and outreach courses in the Joint Special Operations University at Hurlburt Field, Florida. Finally, the center strives to infuse realistic news media and information operations play into the many war games.

PACE offers media and public affairs doctrinal education to the war fighter by:

- Teaching electives in Air War College and Air Command and Staff College, facilitating and providing lectures and case studies for core curriculum, at conducting hands-on media training during war games at AWC and ACSC.
- Conducting lectures at Squadron Officer College in both Squadron Officer School and Air and Space Basic Course and to provide media training, when requested, during war games.
- Presenting blocks of study at the CPD, including lectures and on-camera training at the Wing and Group Commanders courses, the On-Scene Commanders course, Human Resource Management School, Judge Advocate General School, and First Sergeants Academy.
- Supporting the College of Enlisted Professional Military Education by providing lesson materials to the US Air Force Senior NCO Academy, NCO academies, and leadership schools Air Force-wide.

Air University Catalog, 2004–2005

- Lecturing in CADRE’s Information Warfare Applications Course, the Contingency Wartime Planning course, and the Joint Air Operations course.
- Infusing media play into war games hosted by CADRE’s Air Force Wargaming Institute, preparing participants to consider the “battlespace” of public opinion, as impacted by the news media during the course of a military campaign.
- Assisting students in conducting research on public affairs and mass communications issues, analyzing case studies, and promulgating information operations and public affairs doctrine throughout the AF.
- Employing a video-based PA/IO war game as a distributive educational tool, preparing public affairs professionals to apply DOD’s Principles of Information and Information Operations doctrine to enhance war-fighting capabilities.

Reaching beyond Air University, PACE instructors support courses taught at the Joint Special Operations University.

IRA C. EAKER COLLEGE FOR PROFESSIONAL DEVELOPMENT

Col Howard Short, Commander

Internet Address

<http://www.maxwell.af.mil/au/cpd/>

Mission: *Provide quality professional continuing education and technical training to US Air Force, DOD, and international students.*

The Air University Center for Professional Development was activated on 1 August 1986. In October 1993, the center was redesignated the Ira C. Eaker College for Professional Development (CPD) to honor General Eaker's significant contributions to the advancement of aviation, to the Air Force, and to the continuing professional development of its members.

The CPD umbrella spans eight schools: Commanders Professional Development School, Air Force Human Resource Management School, International Officers School, Air Force Judge Advocate General School, DOD Professional Military Comptroller School, USAF Chaplain Service Institute, USAF First Sergeant Academy, and USAF Historian Development School.

Goals:

- At least 90 percent of students, graduates and graduates' supervisors state CPD courses accomplished their stated mission.
- At least 90 percent of students, graduates and graduates' supervisors state the quality of instruction, course effectiveness, and overall value of each course are "Excellent" or higher.
- Foster unit teamwork through information sharing, promoting cooperation to get the job done and respect for one another.
- Foster an environment that consistently encourages top performance by faculty and students.
- Continuously strive to improve facilities, equipment, and resources.
- Ensure each member understands and practices Operational Risk Management in their personal and family lives.
- Ensure each member has a personal health and wellness program.

Academic Credit

The Ira C. Eaker College for Professional Development is affiliated with the CCAF. Through this relationship, CPD is—for accreditation and degree purposes—a CCAF affiliate school. CPD course offerings for enlisted personnel result in the award of academic credit by CCAF. Course graduates may request a transcript from CCAF free of charge. See page 110 for additional information. The Commission on Educational Credit of the American Council on Education recommends several CPD courses for college-level credit.

Commanders Professional Development School

Col Christine D. Prewitt, Director

Internet Address

<http://www.maxwell.af.mil/au/cpd/>

The Commanders School conducts six courses—the USAF Wing Commanders' Seminar, the USAF Mission Support Group Commanders' course, the USAF Maintenance Group Commanders' course, the USAF Medical Group Commanders' course, the USAF Operations Group Commanders' course, and the USAF On-Scene Commanders' course.

Attendance at the wing and group commanders' courses is determined by the Air Force Senior Leader Management Office (AFSLMO). These courses are tailored to provide attendees current information on DOD and AF leadership and management issues. The chief of staff of the Air Force approves the curriculum. Adjunct faculty and senior subject matter experts from DOD, Air Staff, MAJCOMs, and field operating agencies present the course material.

The four group commanders' courses are two weeks in duration and are held concurrently. The first week the courses are combined and students receive a core curriculum that applies to all group commanders. The second week the four courses are divided into discipline-specific seminars.

Attendance at the On-Scene Commanders course is mandatory for all USAF personnel designated as on-scene commanders and senior installation fire officials. The course is optional for security forces commanders/operations officers/flight chiefs, command inspector general team chiefs, and installation exercise evaluation team chiefs/members. Resident and adjunct faculty teach personnel how to properly conduct disaster responses (aircraft accidents, hazardous material incidents,

tornadoes, etc.), save lives and resources, and limit damage to the environment.

Mission: Prepare Air Force members for duty as wing, group, and emergency response on-scene commanders; develop, schedule, and conduct tailored courses that help attendees deal with critical leadership and management.

Goals: Provide AF wing, group and on-scene commanders with a better understanding of the environment, responsibilities and resources required to enhance their effectiveness as commanders.

Through executive-level short courses, the school provides AF officers selected for command with

- updates on critical issues affecting themselves, their people, and their mission;
- specific training concerning command responsibility, accountability and discipline; and
- practical skills that may be used to enhance their immediate effectiveness as new commanders.

Duration and Quota

The courses convene up to five times each year with 15–25 attendees. The On-Scene Commanders course is the exception, offered 15 times yearly at Maxwell and 13 times each year at other selected locations.

Prerequisites and Selection

The courses are open to individuals selected to serve in the positions described by the courses. The AFSLMO manages attendance at the wing and group commanders' courses.

Curriculum Summary

| Course Title | Academic Hours |
|---|-----------------------|
| USAF Wing Commanders' Course | 42.5 |
| USAF Mission Support Group Commanders' Course | 79.0 |
| USAF Maintenance Group Commanders' Course | 77.5 |
| USAF Medical Group Commanders' Course | 80.5 |
| USAF Operations Group Commanders' Course | 75.0 |
| AF On-Scene Commanders' Course | 32.0 |

Initiatives Summary

The Commanders Professional Development School collaborates with the Air Staff, major air commands, and other AF organizations to further customize its curricula for commanders. This effort enables the school to better serve as a lever for implementing current AF policy.

Air Force Human Resource Management School

Col Abraham Morrall Jr., Director

Internet Address

<http://www.maxwell.af.mil/au/cpd/>

The Air Force Human Resource Management School (AFHRMS) was established at Maxwell AFB in 1965 as the Air Force Professional Personnel Management School. The school began with one course, the Professional Personnel Management Course. In July 1977, the AFHRMS absorbed the former Civilian Personnel School located at what was then Gunter AFB. The Civilian Personnel School, originally established in 1948 at Kelly AFB, Texas, was moved to Gunter in 1957 where it remains today and is known as the Civilian Personnel Management Division of the AFHRMS. It is one of only two training facilities devoted to teaching personnel management philosophies' policies and techniques.

In 1983 the school was renamed the Air Force Professional Manpower and Personnel Management School to reflect more closely the merger of manpower and personnel functions at Headquarters USAF, the Air Force Manpower and Personnel Center (as it was then designated) and the major air commands. While the close organizational links between manpower and personnel functions were severed at most headquarters levels in 1985, the school nonetheless retained a manpower element in both name and curriculum.

In 1988 the school expanded the curriculum to address professional continuing education (PCE) requirements in the Air Force Family Matters Program. The Family Support Center (FSC) Readiness Qualification course educates and equips Family Readiness NCOs and Coordinators with the skills and knowledge to manage the Family Support Center Family Readiness Program. Additionally, the FSC Manager Qualification course was initiated to educate FSC directors and select managers. The school will continue to be heavily involved in the effort to educate and train family matters specialists to assist in taking care of AF people and their families. A third family matters course, Community Readiness Consultation (CRC), was recently developed with the first class held in May 2004. The mission of the

course is to provide FSC Community Readiness consultants and technicians with the skills needed to help leadership, the individual, and families to build community readiness through personal preparedness. In 1993, recognizing the broad range of human resource activities represented in its curriculum, the school adopted its current name. Also, in concert with the office of the chief of staff's 1992 Year of Training initiatives and requirements, the Air Force Professional Manpower and Personnel Management course name was changed to the Advanced Personnel Officer course (APOC).

In 1996 the Professional Manpower Staff Officer course was added to the school's PCE course inventory. However, the course was revised in 1997 as the Manpower and Quality Staff Officer course to reflect the merging of the manpower and quality communities. In 1999 the course was renamed the Manpower Staff Officer course. Also in 1999 the school activated the Wing Manpower and Organization (MO) Chief course in an effort to provide knowledge and skills to help wing MO chiefs effectively execute their roles and responsibilities. This course filled a crucial void as there was previously no AF training program specifically targeted to this important segment of the manpower career field.

In 2001 APOC was discontinued and replaced with the Mission Support Squadron (MSS) Leadership course and the Military Personnel Flight (MPF) Leadership course. These two courses are designed to focus on the unique challenges of MSS and MPF leaders with an understanding that many crossover commanders have limited MSS or MPF experience. In 2004 the MSS course incorporated manpower lessons as a result of the manpower/personnel merger.

Mission: Provide world-class continuing education for the development and competence of Air Force personnel.

Goals:

- Provide students with the tools to operate and successfully contribute to organizational effectiveness.
- Provide an optimal learning environment.
- Foster an environment that encourages professional and personal development.

Initiatives Summary

The Civilian Personnel Management Division has developed several new civilian personnel courses to support the concept of "multiskilling" (competency in two or more of the traditional subdisciplines of the profession). These courses were developed through close cooperation with

the Air Staff civilian personnel managers in anticipation of the direction toward smaller staffs and more integrated operations in local civilian personnel flights; single subdiscipline courses were also retained in curriculum to meet customer needs. As the Air Force and DOD move to implement the new National Security Personnel System (NSPS), the school will continue to review its curriculum to support NSPS training requirements.

The AFHRMS has initiated a joint project with the Air Force Institute for Advanced Distributed Learning to transfer its fundamental civilian personnel courses to CBT format. Five courses have been transferred to CBT. This endeavor will result in significant cost savings when compared to resident courses. The USAF Supervisors course as well as the Military Personnel Management course are both available to download from the AFPC Web site. They are taught by either contractors or the local CPF.

A significant endeavor for the AFHRMS in 2002 was the design, development and implementation of the Air Force GS-15 Leadership Seminar. The seminar was developed on the basis of needs created by the accelerating pace of change confronting leaders at the GS-15 level, with the mission “to provide executive professional development education to newly promoted GS-15 and equivalent civil service employees by emphasizing the Air Force vision, core values, and competencies, guiding principles, strategic goals and operational objectives.”

Through these initiatives the school has better postured itself to meet the needs of customers to have training immediately available on an “as needed/when needed” basis, rather than having to wait for a resident course. In response to a secretary of the Air Force, direction to expand the education of AF officials on alternate dispute resolution methods, the school developed Basic and Advanced Mediation courses.

The school will continue to be heavily involved in the effort to educate and train family matters specialists to assist in taking care of AF people and their families. The FSC Managers’ Qualification course has been extensively revised to educate and equip attendees on how to implement and utilize the Work Life Consultant Service Delivery Model in their community.

Duration and Quota

Courses vary in length from five days to three weeks.

Prerequisites and Selection

Requirements for participants vary for each course.

Course Summaries

| Course Title | Academic Hours |
|---|-----------------------|
| Civilian Personnel Flight Leadership Course | 60.0 |
| Position Classification Course | **30.0 |
| Intermediate Position Classification Course | 67.0 |
| Advanced Position Classification Course | 62.0 |
| Affirmative Employment Course (Basic) | 40.0 |
| Principles of Affirmative Employment Course | 67.0 |
| Affirmative Employment Advanced Course | 62.0 |
| Employee Development Specialist Course | 47.0 |
| Employee Development Advanced Course | 52.0 |
| Employee-Management Relations Course | 67.0 |
| Employee-Management Relations Advanced Course | 67.0 |
| Resource Management Course | 38.0 |
| Competitive Sourcing and Privatization for Personnelist | 38.0 |
| EEO Manager Course | 40.0 |
| Equal Employment Opportunity Counselor Course | 36.0 |
| Basic Business Objects | 32.0 |
| Advanced Business Objects | 32.0 |
| Basic Mediation Course | 36.0 |
| Advanced Mediation Course | 32.0 |
| Labor Management Relations Course | **141.0 |
| Labor-Management Relations Course | 58.0 |
| *Civilian Personnel Management Course | 40.0 |
| Military Personnel Flight Leadership Course | 39.0 |
| Mission Support Squadron Leadership Course | 51.25 |
| Family Support Center Community Readiness Consultation Course | 40.0 |
| Family Support Center Managers' Qualification Course | 40.0 |
| Family Support Center Readiness Qualification Course | 40.0 |
| Manpower Staff Officer Course | 109.0 |
| Wing Manpower Officer Course | 42.75 |
| Air Force GS-15 Leadership Seminar | 37.85 |
| *USAF Supervisor's Course | 40.0 |
| *Military Personnel Management Course | 16.0 |

*Course is offered via computer-based instruction.

**Hours are applicable to Air Force Reserve and National Guard personnel only. Academic hours do not count toward continuing education for active duty personnel or civilians.

Academic Credit

The Center for Adult Learning and Educational Credentials of the American Council on Education recommends three semester hours' graduate credit for the Manpower Staff Officer course. Students desiring credit should contact the Registrar, Air University, AU/CFRR, 60 W. Shumacher Ave., Maxwell AFB, AL 36112-6337, and have the registrar send a course transcript to the college or university where they are enrolled.

Through affiliation of the Ira C. Eaker College for Professional Development with the CCAF, graduates of the Family Support Center Manager's Qualification course and the Family Support Center Readiness Qualification course earn two hours of credit respectively. Course graduates may request a transcript through CCAF free of charge. See page 110 for additional information. For further information see the *CCAF Catalog* available in your base education services office.

International Officer School

Col Gerald R. Hust, Director

Internet Address

www.au.af.mil/au/cpd/ios/ios.htm

The International Officer School was established in 1954 as the Allied Officer Preparatory School. Since then 9,602 international military students from 132 countries have completed the program. Each year the school conducts three preparatory courses, consisting of five six-week classes: three for SOS and one each for ACSC and AWC.

The preparatory courses improve the ability of students to express their ideas clearly (in both speaking and writing) and to read and comprehend written and spoken materials used in AU classes. A program of planned classroom activities, informational trips and a civilian sponsorship program (called Alabama Goodwill Ambassadors) introduces students to the political, military, and socioeconomic aspects of American culture. This orientation enables students to adjust more readily to the USAF and civilian communities. Academic requirements for each course are geared specifically to the PME school the students will attend.

The IOS Operations division functions as the International Student Military Office and provides administrative support to all international students attending any AU school.

Mission: Prepare international officers for in-residence PME; support international officers and their families before, during, and after attending Air University courses; and manage Air University's International Affairs program.

Goals: Expand the capacity of international officers to participate more effectively in military education and duty assignments.

Objectives: The three IOS preparatory courses develop an

- appreciation of American society, institutions, and ideals;
- awareness of the mission and organization of US military forces and US military terminology;
- ability to speak and understand American English;
- awareness of the organizational structure, curriculum content, and instructional methods employed in AU schools; and
- ability to participate in physical training activities (SOS, ACSC, and AWC only).

Initiatives Summary

Believing that the school's vitality demands change and innovation, ongoing research is an integral part of the faculty's responsibility. Research—ranging from instructional methodology to cross-cultural communications—identifies academic subject areas, lesson formats and instructional techniques required for the curricula. Such research and the resulting innovations enhance student learning and the achievement of school objectives. Examples of improvements are the continuing expansion of the core curriculum, computer-assisted instruction laboratory, and the formalization of language training to provide integrated American English instruction with other curriculum topics.

Curriculum

The school's curriculum consists essentially of preparatory courses that have three basic functions. First, they provide curriculum orientations to follow-on school topics and methodologies. Second, they serve as periods of cultural adjustment for international officers and their families. Third, they accomplish the administrative requirements and informational program objectives outlined in international military training management directives. Attendance at IOS is a prerequisite for international officers attending SOS, ACSC, and AWC. International students coming to AU for the ACSC and AWC should preview *Air University Catalog* for the relevant master's degree, accreditation, degree-granting authority and eligibility requirements spelled out in the descriptions of each school in this catalog.

Duration and Quota

Course titles, duration, and student quotas for classes are as follows:

| Course Title | Duration | Quota |
|-------------------------|-----------------|--------------|
| SOS/IOS (three classes) | 6 weeks | 32 |
| ACSC/IOS | 6 weeks | 80 |
| AWC/IOS | 6 weeks | 45 |

Prerequisites and Selection

IOS/SOS and IOS/ACSC require an English comprehension-level (ECL) test score of 70 while IOS/AWC requires an ECL test score of 80.

Students are also expected to meet certain physical standards outlined in the *Air Force Education and Training Course Announcements*, formerly AFCAT 36-2223, *USAF Formal Schools*.

Course Areas

Each course includes the following phases:

Student Administration. During this phase of the course, international officers in-process and receive tours and briefings about Maxwell AFB and Montgomery. They receive orientations in various aspects of the individual IOS courses. This area includes welcome and graduation ceremonies, curriculum and schedule briefings and a tour of the AU Library. Students participate in formal, structured feedback conferences with instructors; informal conferences take place throughout the courses as needed.

Informational Program. The Informational Program provides opportunities for students to gain a better understanding of US ideals, institutions, and culture. Some of the topics included are the American way of life, education in the United States, US government institutions and the US news media. A significant portion of this program is devoted to human rights and related training in keeping with State and Defense Department objectives for security assistance training. Field trips and tours are conducted in the Montgomery area, Southeast Region and to Washington, D.C.

Communications Development. Communications Development constitutes a significant portion of the instruction at IOS. It includes English enhancement instruction designed to increase the student's ability to speak and understand American English and communicate ideas both orally and in writing.

In addition, basic writing and briefing instruction, with application exercises, is provided based on the PME follow-on school's communication techniques. This area also includes computer instruction with hands-on training in applications appropriate to the specific follow-on PME school.

Military Studies. The Military Studies area introduces the students to the mission, organization, policies, concepts and terminology of the US military.

Leadership. Students are provided an introduction to various leadership concepts and models. Again, the instruction is geared at a level

appropriate to the follow-on PME school. This area also introduces the physical training requirements of the follow-on PME school with emphasis on field leadership and teamwork—particularly important for students preparing to attend SOS.

Curriculum Summaries
Squadron Officer School Course

| Instructional Area | Academic Hours |
|---------------------------|-----------------------|
| Student Administration | 18.5 |
| Informational Program | 69.5 |
| Communication Development | 60.0 |
| Military Studies | 9.0 |
| Leadership | 42.0 |
| TOTAL | 199.0 |

Air Command and Staff College Course

| Instructional Area | Academic Hours |
|---------------------------|-----------------------|
| Student Administration | 20.0 |
| Informational Program | 64.5 |
| Communication Development | 61.0 |
| Military Studies | 47.0 |
| Leadership | 4.0 |
| TOTAL | 196.5 |

Air War College Course

| Instructional Area | Academic Hours |
|---------------------------|-----------------------|
| Student Administration | 22.5 |
| Informational Program | 76.0 |
| Communication Development | 68.0 |
| Military Studies | 32.0 |
| Leadership | 4.0 |
| TOTAL | 202.5 |

Other Programs

IOS conducts several nonacademic programs to enhance the experience and education of international officers and their families.

Alabama Goodwill Ambassadors. Alabama Goodwill Ambassadors is the AU official sponsorship program for international students and their

families. This program makes the international students and their families feel welcome and acquaints them with aspects of American culture that they may not otherwise be exposed to through their formal AU courses and activities.

International Family Loan Program. This program lends international students and their families (for a nominal fee) such essential household items as dishes and utensils. This service relieves students of the need to spend large sums of money on items they would discard before leaving AU.

International Family Orientation Program. This two-week family orientation course is conducted each summer for the wives and children of the international officers who will attend ACSC and AWC. The course provides an orientation to American culture and to the Montgomery public school system. When possible, basic English language instruction is provided. Many recreational activities are also conducted for the children.

Air University International Honor Roll. This honor roll recognizes international graduates of AU PME courses who have gone on to become heads of service, ministers of defense, heads of state, or other high-level officials within their own countries.

International Dependents English Course (IDEC). This six-week course, conducted each fall or winter, provides conversational English skills that spouses and adult children of international officer students will need in their day-to-day activities. The course is taught entirely by volunteers from the on- and off-base local community.

Air Force Judge Advocate General School

Col Thomas L. Strand, Commandant

Internet Address

<http://www.maxwell.af.mil/au/cpd/jagschool>

The Air Force Judge Advocate General (AFJAG) School was established in 1950 at Maxwell AFB. The school went through an inactive period in the 1960s before becoming part of the Institute of Professional Development, the predecessor of the Ira C. Eaker College for Professional Development, in 1969. The initial charter of the AFJAG School was to teach military law to new AF judge advocates. That charter has expanded substantially as the school now conducts many advanced and specialized courses. The school currently offers 30 different resident and nonresident courses in 42 offerings.

The annual student body of some 4,000 consists of a selected group of active duty, AFRES and ANG judge advocates, paralegals and civilian attorneys from the Air Force, the other armed services and many federal agencies.

The AFJAG School faculty also provides instruction on legal subjects to students attending AWC, ACSC, SOS, AFSNCOA, IOS, ABC, other CPD schools and other AU colleges and schools.

The AFJAG School performs several other educational functions including administering the Judge Advocate General Department's continuing legal education (CLE) program for AF attorneys; publishing *The Air Force Law Review* (semiannually), the Air Force legal magazine *The Reporter* (quarterly) and *The Military Commander and the Law* (biannually); and teaching principles of American constitutional democracy, military justice and human rights to foreign military officers and civilians through the Expanded International Military Education and Training Program.

Mission and Goals: The AFJAG School provides high-quality legal education and training to judge advocates, civilian attorneys and paralegals to meet Air Force and DOD needs. The school's formal and CLE courses contribute to the professional development of its courses. Courses of study broaden and refine the students' understanding of the complexities of military legal practice. Graduates will have the ability to analyze and comprehend the

- foundations of military law and basic advocacy skills;
- management and leadership skills necessary to supervise a base legal office;

- methods and techniques used in courtroom advocacy and specialized handling of expert witnesses, forensic evidence, complex evidentiary issues, and demonstrative evidence;
- principles of civilian personnel management and litigation;
- principles and concepts of federal and state environmental law and DOD procedures for compliance;
- principles of international military operations, the law of armed conflict, and rules of engagement;
- principles and concepts of claims and tort litigation;
- basic information on federal tax laws, estate planning, and the administration of a full-service tax program; and
- technical issues encountered in dealing with the systems acquisition process.

Initiatives Summary

The AFJAG School has adopted several initiatives based on research studies, technological innovations, and other creative curriculum developments to enhance the ability of graduates to perform their professional duties. These initiatives include

- integrating more hands-on practical procedure exercises into each course,
- creating mentoring opportunities for faculty and students in resident courses,
- integrating distance-learning methodologies and the latest information technology advances into all courses and publications, and
- adding specialized and updated courses to meet the increasing needs of new AF missions and of attorneys and paralegals in the field.

Resident Curriculum

The academic environment of the AFJAG School encourages free expression of ideas and an opportunity for independent and analytical thinking. The resident curriculum fosters advanced learning in the areas of advocacy, environmental law, labor law and law office leadership and management so that judge advocates and paralegals can ensure that the best legal service and advice are provided to AF commanders, staff agencies and personnel.

Duration and Quota

Frequency of presentation, length and number of students varies for each course. Contact the AFJAG School or its Internet home page for specific information.

Prerequisites and Selection

Requirements vary for each course.

Curriculum Summary

| Course Title | Academic Hours |
|--|-----------------------|
| Judge Advocate Staff Officer Course | 337.50 |
| Staff Judge Advocate Course | 85.00 |
| Reserve Forces Judge Advocate Course | 35.75 |
| Air Force Reserve Annual Survey of the Law | 24.00 |
| Air National Guard Annual Survey of the Law | 24.00 |
| Total Air Force Operations Law Course | 20.00 |
| Military Judges Seminar | 32.00 |
| Law Office Managers Course | 81.90 |
| Claims and Tort Litigation Course | 56.00 |
| Federal Employee and Labor Law Course | 35.00 |
| Advanced Labor and Employment Law Course | 20.00 |
| Environmental Law Course | 33.70 |
| Trial and Defense Advocacy Course | 44.00 |
| Advanced Trial Advocacy Course | 38.00 |
| Operations Law Course | 69.75 |
| Advanced Environmental Law Course | 19.00 |
| Environmental Law Update Course | 19.50 |
| International Law Course | 18.50 |
| Federal Income Tax Law Course | 41.00 |
| Legal Aspects of Information Operations Course | 24.00 |
| Accident Investigation Board Legal Advisor Course | 24.00 |
| Military Justice Administration Course | 36.00 |
| Paralegal Apprentice Course | 248.00 |
| Paralegal Craftsman Course | 240.00 |
| Reserve Forces Paralegal Course | 80.00 |
| Fiscal Law Course (teleseminar) | 28.00 |
| Air Force Systems and Logistics Contracting Course (teleseminar) | 32.50 |

| Course Title | Academic Hours |
|--|-----------------------|
| Deployed Fiscal Law and Contingency Contracting Course | 24.00 |
| Information Operations Law Course | 36.00 |
| Negotiation and Appropriate Dispute Resolution Course | 32.50 |

Enrichment Offerings

These programs are designed to help AF attorneys and paralegals update and refresh their skills in several areas. State CLE credit is not offered for these tapes. They give attorneys and paralegals who are unable to attend resident courses the opportunity to benefit from some of the AFJAG School's best presentations. The enrichment tapes may be ordered by contacting the CLE director.

These tapes include discussions, presentations and lectures on specific subjects in the areas of criminal law, trial advocacy, environmental law, labor law and federal claims and tort litigation. Paralegal enrichment offerings include subjects in the areas of claims and tort litigation and in the law officer managers' course.

Nonresident Curriculum

The AFJAG School utilizes a number of distance-learning methodologies to provide nonresident students with advanced training and education in specialized legal areas. The school currently has the following nonresident tapes available for CLE credit. Note that the specific number of credit hours allowed for each course sometimes varies with each state. You should contact the AFJAG School CLE director (CPD/JA, 150 Chennault Circle, Maxwell AFB, AL 36112-6418, DSN 493-4472), to determine how many hours each state allows and also to order any of the courses or tapes.

Curriculum Summary

| Course Title | Academic Hours |
|--|-----------------------|
| Professional Responsibility (Ethics) for Air Force Lawyers | 1 |
| Professionalism (Only Required by a Few States) | 1 |

Academic Credit

The AFJAG School offers two types of CLE: credit and enrichment. CLE credit can be earned by participating in programs counting toward state minimum CLE requirements. The school obtains state approval for three

categories of CLE credit: resident courses taught at the AFJAG School; nonresident teleseminar or video courses prepared by the AFJAG School and broadcast or distributed on request; and conferences, workshops and seminars conducted by various offices in the Air Force Judge Advocate General Department. The nonresident videotapes consist of reading materials (syllabus) and viewing a videotape presentation. Credit can be obtained for conferences, workshops, and seminars on a case-by-case basis. You should contact the CLE director at least 30 days in advance of the date of the session.

Although the AFJAG School serves as a liaison with state bars in obtaining approval for CLE credit programs, the main goal remains that of providing meaningful legal education to judge advocates who need an update in a certain area or are moving to a new position and are unable to attend the appropriate resident course. With this goal in mind, the AFJAG School offers enrichment programs that do not include any written materials. These offerings are designed to provide a wide variety of information, from particulars for the practitioner to advanced discussions on recent legal issues. The nucleus of these noncredit enrichment programs is a collection of lectures from various resident specialized courses.

Through this dual system of credit and enrichment programs, the AFJAG School is committed to providing the Judge Advocate General's Department with advanced legal education that responds to the department's training and educational needs. This CLE ensures that judge advocates and paralegals have the tools to do their jobs professionally.

For formal nonresident CLE credit, after notifying CLE director 30 days in advance of the start of the course, you will be provided with state CLE forms that must be completed and returned. Those forms are certified by the CLE Director, and forwarded to the individuals state bar. For further information, see the CCAF catalog in your base education services.

Through affiliation of the Ira C. Eaker College for Professional Development with the CCAF, graduates of the Paralegal Craftsman Course (14 hours), Paralegal Apprentice Course (14 hours) and the Law Office Managers Course (2 hours) who are enrolled in CCAF may receive the annotated number of semester hours of credit toward an associate degree. Course graduates may request a transcript through CCAF free of charge. See page 110 for additional information office.

DOD Professional Military Comptroller School

Col Michael E. Outten, Director

Internet Address

<http://www.au.af.mil/au/cpd/>

In 1966 the assistant secretary of the Air Force (financial management) established a joint service task group to study financial management education in the Department of Defense (MEDOD). This group issued its report, called the MEDOD study, in March 1967.

In 1968 the Professional Military Comptroller course (PMCC) was developed in response to this study. In 1973 financial managers from Army, Navy, and other DOD agencies began participating in PMCC; and the Army and Navy began assigning highly qualified officers to the faculty. Then in 1977 the PMCC became the DOD Professional Military Comptroller School (PMCS).

Mission: To improve accountability and fiscal readiness of DOD personnel by providing world-class financial management education.

Goals:

- Develop students' ability to adapt to changing economic, political and technical environments
- Promote an understanding of issues affecting financial management and military organizations
- Expand awareness of diverse financial management disciplines within DOD
- Encourage personal interaction and growth in areas of wellness, communication, and leadership
- Continuous focus on primary mission of supporting the commander and war fighter

Initiatives Summary

The DOD Professional Military Comptroller School has expanded several curriculum initiatives to enhance the ability and productivity of its graduates. These initiatives include student research and writing programs, a wellness emphasis, and personal computer support.

Student Research Programs

A prerequisite for graduation is one essay paper and one research paper. The first must address the following question: “What are three immediate actions senior leaders can take to improve financial management.” The second must address a current Army, Navy, Air Force, Marine Corps, DOD, or other federal agency comptroller or resource management issue—specific topics will be given once a student is selected to attend. The papers provide students with opportunities to examine current topics and to convey their ideas to others for action. The research papers often go directly to service headquarters or other top organizational levels for review.

Students conduct individual research under the guidance of a faculty research advisor. Through their research efforts, students have the opportunity to enhance their professional competence and to make meaningful contributions to subjects relevant to DOD resource management.

Total Personal Wellness

The DOD Professional Military Comptroller School provides a total personal wellness program for the benefit of its students. This program covers nutrition, stress management, type A behavior, and exercise. It focuses on having students identify potentially unhealthy lifestyle habits in order to effect changes in their lifestyle and improve their overall wellness.

Personal Computer Support

Students have access to laptop computers for use both inside and outside the schoolhouse. The laptops allow students to work at their own pace and in the comfort of their seminar or individual rooms. Students also have the capability to print from the seminar rooms, as well as correspond by e-mail with their home stations. PMCS students receive considerable exposure to application software programs. Beginning students can advance their expertise in using graphics software by attending elective computer labs.

Each of the five seminar rooms has computer workstations. An additional computer lab is available for student use. Computers are used for data-automation assignments, computer-based resource management exercises, and seminar support.

Curriculum

The curriculum consists of two courses. The DOD Professional Military Comptroller course provides mid- and senior-level comptrollers, resource managers, and other financial staff with information concerning the tasks, environments, and skills associated with military comptrollership. The Reserve Forces Professional Military Comptroller course develops (in selected Guard and Reserve officers) an understanding of the role of the comptroller as a staff officer and head of a management service organization.

Duration and Quota

The DOD Professional Military Comptroller course is held five times each year meeting for 30 class days. The quota for each class is 60 students.

The Reserve Forces DOD Professional Military Comptroller course is held once each year and meets for 10 class days. It also has a quota of 60 students.

Prerequisites and Selection

The target grades for attendance at PMCS are major (O-4) through colonel (O-6 and Navy equivalents), GS-12 through GM-15, and CMSgt/SGM assigned as a MAJCOM functional manager/comparable Army equivalent. Captain (O-3) and GS-11 selections are made on an exception basis only—with time-in-grade, experience, and strong endorsements the determining factors. With few exceptions, Air Force captains should have completed FMSOC and should have a graduate-level degree. Nominating commands may provide any additional facts that support an exception-basis selection.

Attendance is authorized for personnel outside the comptroller career area when the training requirement is assessed against positions and responsibilities in resource- and associated-fund management. Non-comptroller personnel packets must include a statement, endorsed by the MAJCOM/agency comptroller, highlighting the benefits of attendance.

Curriculum Summary

| Course Title | Academic Hours |
|---|-----------------------|
| Professional Military Comptroller Course | 240.0 |
| Reserve Forces Professional Military Comptroller Course | 80.0 |

Academic Credit

The Center for Adult Learning and Educational Credentials of the American Council on Education recommends three graduate semester hours in managerial accounting or public finance and three graduate semester hours in organizational management or managerial economics credit for the DOD Professional Military Comptroller Course.

Students desiring credit for attendance should request that the Registrar, Air University, AU/CFR, 60 W. Shumacher Ave; Maxwell AFB AL 36112–6337, send a transcript to the college or university where they are enrolled.

USAF Chaplain Service Institute

Chaplain (Col, sel) Howard D. Stendahl, Director

Internet Address
www.usafhc.af.mil

On 1 July 1953, when the Air Force was given responsibility of training its own chaplains, the United States Air Force Chaplains course was established at Lackland AFB, Texas, and placed under the Officer Basic Military course. The chaplains' course became part of Officer Military Schools (OMS) in June 1955. Based on a Department of the Air Force authorization, the USAF Chaplain School was established in June 1960; however, it remained under OMS. From 1958 to 1965, judge advocates also reported to the Chaplain School for training. OMS was discontinued in July 1962 and was assigned to OTS. The Chaplain School was made a separate unit and was placed directly under the commandant, Lackland Military Training Center, in February 1965. USAF Chaplain School was established at Maxwell AFB and assigned to Headquarters Air University on 20 May 1966.

The chaplain service has a rich and varied legacy of supplying resources in support of ministry. The USAF Chaplain Service Resource Board was formed in July 1959 under the AU Command Chaplain. Initially

called the USAF Chaplain Writers Board, it prepared written lectures and identified audiovisual resources for the Air Force Moral Leadership Program.

In 1976 the board's name was changed to USAF Chaplain Resource Board to reflect its central role and mission in developing a variety of ministry support resources. In January 1989 the word *service* was added to the board's name—USAF Chaplain Service Resource Board—to reflect the mission of providing resources to *all* chaplain service professionals: chaplain assistants, religious education coordinators, laity, and chaplains.

The Resource Board became a part of the Chaplain Service Institute and was known as the Chaplain Service Institute Resource Division. In October 2003, the Resource Board was realigned as part of the office of the USAF chief of the Chaplain Service, assisting in the plans and programs function as an action office for Air Staff. The USAF Chaplain Service Resource Board remains collocated with the Chaplain Service Institute at Maxwell AFB, Alabama. Its members assess the needs of chaplain service personnel and provide support to the varied ministries of the service. This support facilitates the free exercise of diverse religious practices and beliefs worldwide.

The USAF Chaplain Service Institute (CSI) was activated under the Ira C. Eaker Center for Professional Development on 31 October 1992. It provides the chief of the AF Chaplain Service with a centrally managed, centrally located complex for all education, technical training, research, and resourcing activities of the USAF Chaplain Service. The new organization consolidated and functionally integrated four separate organizations. Two elements of the institute, the USAF Chaplain School and the USAF Chaplain Service Resource Board, were already located at Maxwell AFB. The USAF Chaplain Service Film Library, previously located at Norton AFB, California, as an operating detachment of the Center for Professional Development, collocated with the institute at Maxwell AFB in December 1992. Technical training for enlisted chaplain assistants was transferred to Maxwell in September 1993 from Keesler AFB, Mississippi, under Air Force Year of Training Initiatives.

The creation of the USAF CSI was a hallmark in the tradition of the USAF chaplain service profession. Its goals are to more effectively enable the ministries of the USAF chaplain services and thus enrich the lives of AF members and their families.

The USAF CSI is composed of active duty Reserve component chaplains and chaplain assistants. This composition lends itself to a close collegial relationship with students and staffs worldwide and ensures curriculum and resources are designed and organized to solve and explore practical issues concerning today's AF chaplain service members.

The Education Division designs, develops, and manages the professional continuing education (PCE) of all AF chaplains. The division

conducts one Air Force specialty awarding/accesion course and two supervisory leadership courses. The division offers three-day issue and subject-specific courses to ensure that chaplain and chaplain assistants maintain vocational excellence throughout their careers. The division further offers a chaplain candidate course for seminarians who are USAF Reservists, as they explore career ministry opportunities in the USAF Chaplain Service.

The Technical Training Division designs, develops and manages technical training for all AF chaplain assistants. The division offers one AF specialty code awarding course and one supervisory leadership course. Specific readiness training for entry-level chaplain assistants is integrated with chaplains to ensure maximum effectiveness of team readiness ministry during deployments, contingency operations, and wartime.

The USAF Resource Board is charged with staying abreast with the best tools and information in support of ministry for the AF community. It assesses needs and delivers resources, primarily through the AF chaplain service Web site (<http://www.usafhc.af.mil>) and the chief of the chaplain service's bimonthly electronic publication called the *Leading Edge*. The Resource Board communication tools serve two primary purposes. They furnish resources and information that directly support and inform ministry in the field, ranging from suicide prevention to balancing the chapel's books. The chaplain service's home page also provides an opportunity and channel for chaplains and chaplain assistants to submit ideas, critiques, or any other input that might further the purposes of the ministry.

The Resource Board also presents resources to the field by developing and distributing on-demand, interactive training CD-ROMs such as the Chaplain Service Mentoring CD. It also facilitates Air Force-wide conferences such as the Marriage and Family Ministry Conference.

Mission: Provide education, training and resources that promote professional excellence, and enhance the free exercise of religion for the USAF family.

Goals: Achieve vocational excellence, professional integrity, and service to others by

- providing knowledge, skills and resources for students to better perform their duties;
- attracting, mentoring, and recognizing quality people;
- ensuring that faculty and course directors properly apply instructional system development principles;
- securing resources to support mission requirements;

- improving information flow and ensuring effective communication; and
- monitoring the quality of support services and seeking necessary improvements.

Initiatives Summary

Instruction of enlisted students in crisis intervention skills, trauma pastoral care and pluralism, and faith group-support requirements will further their professional abilities to support chaplains in peacetime and contingency operations. State-of-the-art integrated technology mediums have enhanced worldwide chaplain service training efforts in readiness, mentoring and global ministry efforts. Officer and enlisted evaluation systems have been added to all levels of instruction, ensuring that chaplain and senior-enlisted support personnel will use evaluation and supervisory skills appropriately.

Curriculum

The USAF CSI encourages an academic environment that recognizes the value of each student's prior education and experience. Through free expression of ideas and immediate application of knowledge gained, the atmosphere of the institute remains progressive as it strives to prepare students for the AF chaplain service of the future. The faculty and staff of the institute advocate top-quality ministry and support of ministry.

Curriculum Summary

| Course Title | Academic Hours |
|--|-----------------------|
| Basic Chaplain Course | 180.0 |
| Intermediate Chaplain Course | 80.0 |
| Wing Chaplain Course | 80.0 |
| Chaplain Candidate Course | 80.0 |
| Chaplain Professional Continuing Education | 24.0 |
| Chaplain Service Support Apprentice Course | 247.0 |
| Chaplain Assistant Craftsman Course | 74.0 |

Academic Credit

Through affiliation of the Ira C. Eaker College for Professional Development with the Community College of the Air Force, graduates of enlisted apprentice and craftsman courses may receive 11 and four semester

hours of credit respectively toward an associate degree in social services. Course graduates may request a transcript through CCAF free of charge. See page 110 for additional information. For further information, contact a base education office or see the CCAF catalog.

For further information, contact the Chief, Education Division or Chief, Technical Training Division, USAF Chaplain Service Institute, 155 N. Twining Street, Maxwell AFB, AL 36112–6429.

CSI's Education and Technical Training Divisions and the USAF Chaplain Service Resource Board are investigating ways to further develop learning opportunities through video home system (VHS) format video, CD-ROM integrated technology and text-based projects. The Resource Board's primary objectives currently include improving the quality of service and delivery of materials through automation technology and targeting needs assessments to fill resource "vacuums."

USAF First Sergeant Academy

CMSgt Sandra J. Williams, Commandant

Internet Address

www.maxwell.af.mil/au/cpd/fsa

The importance of the position of first sergeant has long been recognized in American military ranks. In 1778 at Valley Forge, Baron Von Steuben wrote in the *Regulation for the Order and Discipline of the Troops of the United States*, "The soldier having acquired that degree of confidence of his officers as to be appointed first sergeant of the company, should consider the importance of his officers; that the discipline of the company, the conduct of the men, their exactness in obeying orders and the regularity of their manners, will in great measure depend on his vigilance. The first sergeant . . . is to be always in camp or quarters, to answer any call that may be made."

Through the years, persons selected for first sergeant duty primarily trained themselves in their duties and responsibilities, taking over where their predecessors left off. With increases in technology, advances in the complexity of administrative and legal procedures and the need for improved human relations, the USAF saw that first sergeants needed to receive formal training.

The First Sergeant course was established at Keesler AFB, Mississippi, in October 1973 and was renamed the USAF First Sergeant Academy in 1982. The academy remained at Keesler until July 1993 when it was moved to Maxwell AFB under the authority of order G-65 and aligned with the Ira C. Eaker College for Professional Development.

Mission: Provide education and training to selected active duty, Air Force Reserve, and Air National Guard senior noncommissioned officers to become the best first sergeants in the world.

Goals: Educate and train first sergeants in the diverse areas of responsibility, accountability, and discipline in which they will serve America's dynamic Air Force well into the next century.

Initiatives Summary

The USAF First Sergeant Academy has put forth several initiatives that will increase the efficiency and effectiveness of the academy and improve the quality of instruction.

Based on surveys from field-experienced first sergeants, graduates, commanders, and a Utilization and Training Workshop, the academic curriculum is continually being revised. These revisions allow the academy to adjust the curriculum to meet current needs of Air Force First Sergeants.

Web-based training has been initiated to provide continuation training on demand using technologies such as interactive training and digitized role-playing.

The school's Web page has been upgraded to provide a one-stop service for first sergeants to access critical reference material they use on a daily basis as well as information for continuity purposes.

Scenario based learning as well as role-playing exercises continue to challenge each student to higher levels of learning.

Curriculum

The academy's curriculum is divided into five major areas: unit administration, human resources preventive intervention, quality force management, military justice, and deployment issues.

Duration and Quota

The USAF First Sergeant Academy course is 20 academic days and can train up to 58 students per class. The First Sergeant Academy Air National Guard course and Air Force Reserve Command course are a 10-day course that can train up to 32 (ANG) and 20 (AFRC) students per class. Both courses have six offerings each fiscal year.

Prerequisites and Selection

On 24 May 2002, HQ USAF/CC established a three-year initial tour for first sergeants entering duty after 1 October 2002. Historically, the Air Force relied solely on volunteers; unfortunately first sergeant manning left critical enlisted leadership billets unfilled. Air Force leaders sought a change to the selection process and sought out our best SNCOs to fill this demanding duty while volunteers are the foundation. A central selection process was implemented to augment the volunteer process. Application procedures are the same as well as eligibility criteria. Criteria for selection is as follows: MSgt/E7, be highly motivated and have exceptional leadership and managerial skills, minimum physical profile of 322221 and be worldwide deployable, have 36 months' retainability, and image must exceed minimum standards, as well as other requirements. Additionally each applicant must be interviewed by their unit commander, who will in turn make a recommendation to the installation command chief master sergeant. Ultimately, the applicant's package will be forwarded to the MAJCOM command chief master sergeant through AFPC. For more information you can refer to <http://www.afpc.randolph.af.mil/procedures.specat.htm>.

Curriculum Summary

| Course Title | Academic Hours |
|---|-----------------------|
| USAF First Sergeant Academy | 160.0 |
| Air National Guard First Sergeant Academy | 87.0 |
| USAFR First Sergeant Academy | 87.0 |
| Additional Duty First Sergeant Symposium | 40.0 |

Academic Credit

Through affiliation of the Ira C. Eaker College for Professional Development with the CCAF, graduates of the USAF First Sergeant Academy Course receive seven semester hours of credit. Graduates of the First Sergeant Academy Air National Guard Course and the Air Force Reserve command version receive three semester hours of credit, respectively. The Additional Duty First Sergeant Symposium receives two semester hours of credit. Course graduates may request a transcript through CCAF free of charge. See page 110 for additional information. For further information, contact a base education office or see the CCAF catalog.

USAF Historian Development School

MSgt Dennis W. Pinner, Director

Internet Address

www.maxwell.af.mil/au/cpd/

The USAF Historian Development School became operational in January 1995. The school is responsible for technical training as well as Professional Continuing Education throughout the historian career field. It conducts two in-residence courses—the Historian Apprentice and Historian Craftsman courses—and develops and maintains one distance learning course—Historian Journeyman.

The Historian Apprentice course is 18 academic days long and is designed for new historians entering the AF history program. The curriculum provides a foundation in the principles and methods of preparing periodic histories and managing a wing history program.

The Historian Journeyman course capitalizes on technology and is built for the midlevel, enlisted historian. This distance-learning course expands on the areas of the historian career field, security, periodic history, reference services, contingency and administration. The state-of-the-art course on CD-ROM approaches technical training via an interactive, multimedia, computer-based format. The course is available through the Air Force Institute for Advanced Distributed Learning (AFIADL).

The Historian Craftsman course is 10 academic days long and places the experienced historian in a dynamic environment similar to what is experienced in the field. Following an intense, practicum-based curriculum, the prospective craftsman historian will research and write a historical special study, conduct an oral history interview, evaluate actual periodic histories, and conduct an analytical oral briefing during a mock commander's stand-up.

All courses cited above prepare historians to assist today's commanders in the decision-making process and capture the Air Force's corporate memory for the senior leaders of tomorrow.

Mission: Provide skill-level awarding courses to train active duty, ANG, and AFRES enlisted and selected civilian historians on basic, intermediate, and advanced responsibilities concerning the principles, methods, and techniques for conducting a comprehensive unit history program.

Goals: Provide historian trainees with a strategic framework for acquiring three-, five-, and seven-skill level competencies in the enlisted historian career field. The objectives are to

- develop curriculum and conduct resident and distance learning historian instruction including a correspondence course distributed through AFIADL,
- represent the historian career field in forums involving training issues,
- provide consultation to the Headquarters USAF Office of History (USAF/HO) and other organizations, and
- assist in developing and revising promotion tests, training standards and related materials.

Initiatives Summary

The Air Force History and Museum Program is currently undergoing a transition from an enlisted force to a totally civilian force by FY 2007. The USAF Historian Development School will begin to hold the Historian Basic Course in FY 05. This course replaces the Historian Apprentice course. Additionally, the schoolhouse is currently writing the new Historian Deployment course. This course will replace the Historian Craftsman course.

Curriculum

The school curriculum enables historians to prepare organizational histories more effectively.

Duration and Quota

The apprentice course is held four times each year for 18 academic days with an average of 13 students per class. The craftsman course is held four times annually for two weeks with an average of 11 students per class.

Prerequisites and Selection

The prerequisites for selection and attendance differ for each skill level in the historian career field specialty.

Three-level Course Prerequisites. AF enlisted personnel (active duty, Reserve, or Guard) approved for retraining into the historian AFSC 3H0X1 will be given priority for class seats. With approval of the major command history office and the course director, the following individuals may attend on a space-available basis: enlisted personnel assigned additional or part-time duties as unit historians, civilian personnel with collateral or part-time duties as unit historians, and civilians interning as historians. All attendees

must be proficient typists and familiar with computers and word processing software.

Five-level Course Prerequisites. All students Must complete the in-residence Historian Apprentice course.

Seven-level Course Prerequisites. All students must complete the Historian Journeyman course through correspondence. The student must be a staff sergeant or higher, be enrolled in seven-skill-level upgrade training and have met the minimum time requirement in upgrade training. The student must also be familiar with Microsoft Word and Microsoft PowerPoint.

Curriculum Summary

| Course Title | Academic Hours |
|-----------------------------|----------------|
| Historian Apprentice Course | 144.0 |
| Historian Journeyman Course | * |
| Historian Craftsman Course | 80.0 |

*20–30 hours to accomplish 959 individual on-screen modules.

Academic Credit

Through affiliation with CCAF, graduates of the Historian Apprentice course receive six hours of CCAF credit on their transcripts. Graduates of the Craftsman Course earn three semester hours of CCAF credit.

Course graduates may request a transcript through CCAF free of charge. See page 110 for additional information. For further information, contact a base education office or see the CCAF catalog. For further information on the Air and Space Historian Degree Program, see the *CCAF Catalog* on the college Web site or contact the base education services office.

EXTENDED STUDIES AND ADVANCED DISTRIBUTED LEARNING

The Air University, through the Air Force Institute for Advanced Distributed Learning, supports the Air Force extension course programs and the Air Force distance-learning mission, and exercises operational control of the Air Technology Network.

AIR FORCE INSTITUTE FOR ADVANCED DISTRIBUTED LEARNING

Col Kim A. Bowling, Commander

Internet Address

<http://www.maxwell.af.mil/au/afiadl>

Mission: *Promote, deliver, and manage advanced distributed learning for our air and space forces.*

The Air Force Institute for Advanced Distributed Learning, located at Maxwell AFB/Gunter Annex, formally came into being on 1 February 2000. The institute was established by the merger of two distinct organizations: the Air Force Distance-learning Office (AFDLO) and the Extension Course Institute (ECI). At that time, the AFDLO had operational control of the Air Technology Network Program Management Office (ATN PMO). AFDLO was established 7 November 1995 to serve as the focal point for all AF distance-learning (DL) matters. ECI was established in 1950 as one of AU's professional specialized schools. As the Air Force's only correspondence school, ECI's original mission was to provide voluntary nonresident courses for both active duty and reserve AF personnel. The ATN PMO was created in February 1996 as an outgrowth of AFIT's Center for Distance Education and served as the focal point for the management of the Air Force's DL satellite network, ATN. On 2 July 2001, ATN was realigned as AFIADL operating location "A." Today AFIADL supports formal training and educational programs of the AF, ANG, and AFRES by providing career-broadening advanced distributed learning courses to people throughout the DOD and to civil service employees in all federal agencies.

Advanced distributed learning is an evolution of distributed learning (distance learning) that emphasizes collaboration on standards-based versions of reusable objects, networks, and learning management systems, yet may include some legacy methods and media. DL media include interactive television (ITV), interactive multimedia instruction (IMI), Internet-based instruction (IBI), paper-based instruction, and other instructional technologies. Advanced distributed learning (ADL) includes all DL media. In the future distance learning will also consist of instructional modules comprised of "sharable content objects" delivered through several technologies.

The ADL initiative (ADLI) is a structured, adaptive, and collaborative effort between the public and private sectors to develop the standards, tools, and learning content to provide "anytime, anywhere" instruction to US

Forces. AETC is the lead command for ADL within the Air Force. AFIADL serves as the focal point and executive staff agent on these efforts under the guidance of AETC's directorate of education.

AFIADL promotes, delivers, and manages advanced distributed learning for our air and space forces. Over the years the mission has undergone several major changes. In 1963 when ECI started providing self-study materials for the Air Force's official upgrade training program, the institute became an essential and mandatory part of the dual-channel concept for the enlisted training program. In 1969 ECI was given the additional mission of providing study reference materials to AF enlisted personnel to use in preparing for specialty knowledge testing under the weighted Airman promotion system (WAPS).

AFIADL operates in a fully automated environment. Course development, production, distribution, and student administration functions are managed on a sophisticated system of personal computers and a mini-mainframe. The data is accessible worldwide to AFIADL, ACSC, SOS, SNCOA, course authors, education service offices, and unit/base-level training sections. To profit from rapidly growing technological capabilities, AFIADL has departed from entirely paper-based curricula to include interactive television and computer-based courseware. AFIADL is, with the rest of DOD, exploring the standards required for Internet delivery and management of courses. In print-based curricula, AFIADL enhanced its efficiency and productivity by moving to a print-on-demand process for course examinations and is planning for use of new learning technology for courseware delivery.

The Air Force delivers many of its courses via ATN, an interactive television (ITV) network. ATN (<http://atn.afit.edu/>) reaches 207 classrooms at 133 AF bases within the United States (including Alaska and Hawaii) and nine locations in Europe (five locations are currently being installed in Japan and Korea), with education and training programs broadcast from uplinks at Wright-Patterson (the first uplink on ATN), Maxwell, Sheppard, Fairchild, and Keesler AFBs. The connection to Europe is being made through the *Global Broadcast Service* with a gateway uplink at Norfolk, Virginia. Since its development in 1991, ATN has been used to provide continuing education and training to over 40,000 students.

AFIADL conducts a one-week course for authors to provide new writers of CDCs with the basic knowledge and experience needed to produce effective extension course materials. The course, which is offered three times a year, is a practicum in the use of instructional systems development to write and revise CDCs. During the week, new writers work under the tutelage of institute educators and gain hands-on experience in every phase of course development: writing topical statements, developing tests and text, and processing and evaluating a course. New writers also become familiar

with AFIADL's procedures and become acquainted with staff members with whom they will be working.

AFIADL administers and distributes more than 450 courses. They fall into four categories: PME, PCE and training courses via ATN, specialized courses, and CDCs. The institute distributes the following nonresident courses:

PME Courses

Both commissioned and noncommissioned officers take PME courses. These courses teach leadership, management principles, techniques of effective communication, problem solving, analysis of professional reading materials, international relations, national decision making, and defense management. They also cover the psychology of learning, individual differences, and the techniques of teaching. The courses give students the broad skills and knowledge needed to be effective at various stages in their careers.

AFIADL distributes nonresident PME through distance-learning products ranging from paper-based through CD-ROM. PME is also available by seminar or in residence through the schools.

PCE and Training Courses

AFIT and the various schools within Second AF use AFIADL's satellite network, ATN, to reach thousands of students every year to fulfill their PCE and training needs.

Specialized Courses

Specialized courses focus on technical and special subjects that are useful in many career fields. Examples are contracting, finance, and logistics courses. These courses also provide career broadening to individuals as they progress to higher levels and are required to become more knowledgeable in career fields other than their own.

Career Development Courses

CDCs constitute the largest portion of AFIADL's curricula. These self-study courses help Airmen complete the task-knowledge portion of the dual-channel concept for the enlisted training program. The dual-channel concept is an on-the-job training program that requires the completion of CDC courses for skill-level upgrade—a requirement for promotion. Airmen

must complete CDCs successfully at various stages to advance in their careers. CDCs are also available on a voluntary basis for career broadening.

Air Force members can obtain further information about the institute's courses and enrollment through their base education or training office. The *AFIADL Catalog* provides up-to-date information on courses, programs, and policy and procedures. You can access the catalog online at: http://www.maxwell.af.mil/au/afiadl/curriculum/catalog/cattoc_fr.htm. The institute's Web page provides information about CDCs required by AFSC, available test control facilities, names and phone numbers of staff members to assist with student inquiries, and other useful information available to students all over the world. The catalog also provides information on academic credit recommendations for these courses. A list of credit recommendations for AFIADL courses also can be found in the current *Guide to the Evaluation of Educational Experiences in the Armed Services*. AFIADL also publishes *Curriculum Update* as a forum to discuss updates in the area of curriculum development.

CITIZENSHIP EDUCATION

Besides its professional military and continuing education, Air University supports two nationwide programs—the Civil Air Patrol and Junior Reserve Officer Training Corps—that instill citizenship values among our nation's youth.

AIR FORCE JUNIOR RESERVE OFFICER TRAINING CORPS

Col Harry B. McCarraher III, Director

Internet Address

<http://www.afoats.af.mil/AFJROTC/default.htm>

The Air Force Junior Reserve Officer Training Corps (JROTC) can track its heritage to a program founded in 1911 in Cheyenne, Wyoming, by Army Lt Edgar R. Steevers. Lieutenant Steevers was assigned as an inspector-instructor of the organized military of Wyoming. During his assignment, he envisioned a noncompulsory cadet corps comprised of high school students. His program was aimed toward making better citizens.

The National Defense Act of 1916 authorized a junior course for non-college military schools, high schools, and other non-preparatory schools. The Army implemented JROTC in 1916. Public Law 88-647, commonly known as the ROTC Vitalization Act of 1964, directed the secretaries of each military service to establish and maintain JROTC units for their respective services. The first Air Force JROTC programs were opened in 1966.

“(The) purpose of Junior Reserve Officers’ Training Corps [is] to instill in students in United States secondary educational institutions the value of citizenship, service to the United States, personal responsibility, and a sense of accomplishment.” (10 *United States Code* Sec 2031)

Air Force JROTC (AFJROTC) is a continuing success story. From a modest beginning of 20 units in 1966, AFJROTC has grown to 744 units throughout the world, with over 106,000 cadets. The AFJROTC program positively influences our country by helping one student at a time. Comprised primarily of active duty Air Force retirees, the AFJROTC instructor force is helping to form tomorrow’s nation by educating proud and patriotic cadets—tomorrow’s leaders.

Mission: *The mission of Air Force Junior Reserve Officer Training Corps is “Building better citizens for America.”*

The objectives of JROTC are to educate and train high school cadets in citizenship; promote community service; instill responsibility, character, and self-discipline; and provide instruction in air and space fundamentals.

Programs and Operations

The AFJROTC program enrolled approximately 106,000 cadets, employed more than 1,600 instructors and operates units in 48 states, the District of Columbia, Puerto Rico, Italy, Germany, Belgium, Netherlands, United Kingdom, Japan, Korea, and Guam in academic year 2004. AFJROTC units are located in host high schools, public and private, and, by law, the program is limited to students in grades 9–12. AFJROTC instructors are employees of the host school.

There are two branches within the AFJROTC Headquarters at AFOATS: Instructor Management and Operations.

Instructor Management. This branch recruits, certifies eligibility to teach AFJROTC, monitors performance of AFJROTC instructors, and recommends decertification of AFJROTC instructors as necessary. It provides assistance and authoritative guidance to instructors and school officials, including assistance in the selection and hiring of instructors. Additionally, it processes instructor applications and administers the instructor evaluation system. Each instructor is required to complete the AFJROTC Academic Instructor course (MAFOATS003) prior to assuming faculty responsibilities in their units.

MAFOATS003 – AFJROTC Academic Instructor Course

A 10-training day, mission essential course hosted by the AFOATS Curriculum Directorate (AFOATS/CR), this course prepares newly assigned AFJROTC faculty (AF retired officers and NCOs) to teach in private, public, and DODD high schools around the world. Students focus on participative learning, seminar, and teaching experiences. Students receive AFJROTC instruction in curriculum, professional relations, leadership, counseling, and legal issues.

Operations. This branch provides staff initiatives and policy to implement the air and space science and leadership education curriculum. It ensures the program is conducted pursuant to DOD and Air Force instructions; develops policies and procedures for the day-to-day operation of the program; and establishes standards for unit operations, instructor qualifications, and cadet performance.

Curriculum

The AFJROTC program is grounded in Air Force core values. The curriculum emphasizes Air Force heritage and traditions, the development of flight, applied flight sciences, military air and space policies, and space exploration.

Curriculum opportunities include:

- Academic studies
- Character education
- Life skills education
- Leadership opportunities
- Team-building experiences
- Intramural competition
- Field trips/training opportunities

The success of the AFJROTC program lies in its progressive and academically sound curriculum and the numerous extra-curricular activities AFJROTC offers students. The curriculum is two part: air and space studies and leadership/life skills education. Host schools may elect to emphasize either portion of this curriculum based upon the needs of the students.

Aerospace Studies. The first year covers the heritage and development of flight and military air and space policies. The second year includes the environment in which aircraft and spacecraft operate. Flight and navigational principles and the requirements for human flight are also included. Rocketry, space vehicles, and the exploration of space are covered in the third year. The fourth year offers three options: Option 1, Management of the Cadet Corps; Option 2, Honors Program-Ground School; and Option 3, Laboratory Manual, Geography, and Survival. The table below shows a typical AFJROTC curriculum emphasizing air and space studies.

**Curriculum Summary
Emphasizing Aerospace Studies**

| Year | Aerospace Science | Hrs | Leadership Education | Hrs | Total Hrs |
|-------------|-------------------------------|------------|---------------------------------|------------|------------------|
| 1 | Frontiers of Aviation History | 108 | Introduction to Air Force JROTC | 72 | 180 |
| 2 | The Science of Flight | 108 | Intercommunication Skills | 72 | 180 |
| 3 | The Exploration of Space | 108 | Life-Skills | 72 | 180 |
| 4 | Options | 108 | Principles of Management | 72 | 180 |

Leadership/Life-Skills Education. AFJROTC emphasizes leadership education with emphasis on development of life skills while exposing cadets to opportunities to learn and practice basic leadership. The leadership/life-skills course work helps prepare cadets for positions in any career. Classes provide cadets with a basic knowledge of military customs and courtesies, military organization and principles of leadership, flag etiquette, drill and ceremony. The table below shows a typical AFJROTC curriculum emphasizing leadership and life-skills education.

**Curriculum Summary
Emphasizing Leadership and Life Skills**

| Year | Aerospace Science | Hrs | Leadership Education | Hrs | Total Hrs |
|-------------|-------------------------------|------------|---------------------------------|------------|------------------|
| 1 | Frontiers of Aviation History | 72 | Introduction to Air Force JROTC | 108 | 180 |
| 2 | The Science of Flight | 72 | Intercommunication Skills | 108 | 180 |
| 3 | The Exploration of Space | 72 | Life-Skills | 108 | 180 |
| 4 | Options | 72 | Principles of Management | 108 | 180 |

Extracurricular Activities. Extracurricular activities and opportunities are important parts of AFJROTC. Cadets can participate in summer leadership camps, drill meets, orienteering, debates, and discussion forums. AFJROTC does not engage in marksmanship training or teach individual combat skills.

CIVIL AIR PATROL-US AIR FORCE

Col George C. Vogt, Commander

Internet Address

<http://capusaf.maxwell.af.mil>

The Civil Air Patrol–US Air Force (CAP-USAF) is the active duty Air Force organization that provides advice, liaison, and oversight to America's volunteer auxiliary of the Air Force, the Civil Air Patrol (CAP). CAP-USAF headquarters at Maxwell AFB, along with eight CAP-USAF regional commands, provides training, policy guidance, and assistance to more than 60,000 CAP members throughout the United States, Puerto Rico, and on several overseas Air Force installations. CAP-USAF military and government civilian personnel, as well as Air Force Reservists who participate in the CAP Reserve Assistance Program (CAPRAP), play a key role in helping CAP meet its congressionally mandated missions.

Civil Air Patrol

Internet address

<http://www.cap.gov>

CAP was created on 1 December 1941 as a part of the Office of Civilian Defense. During World War II, CAP was an integral part of North American defense, patrolling the 1,200 miles of coastline from Halifax, Nova Scotia, to the Florida Keys searching for enemy submarines and other signs of enemy activity. In 1943 CAP transferred to the Army Air Forces. In 1946 CAP was chartered by congressional act as a nonprofit, benevolent organization devoted to humanitarian activities. By another act of Congress in 1948, CAP became the official auxiliary of the USAF.

CAP's congressional charter mandates the organization to:

- provide an organization to encourage and aid US citizens in contributing their efforts, services, and resources in developing aviation and in maintaining air and space supremacy;
- provide air and space education and training, especially to its senior and cadet members;
- encourage and develop private citizens, by example, to voluntary contribution to the public welfare;
- encourage and foster civil aviation in local communities; and

- provide an organization of private citizens with adequate facilities to assist in meeting local, state, and national emergencies.

Through its varied programs, CAP provides the American public with emergency services, air and space education, and administration of the CAP cadet program.

CAP furnishes trained volunteers who support noncombat AF missions throughout the United States. CAP conducts approximately 90 percent of the inland search and rescue missions authorized by the Air Force Rescue Coordination Center at Langley AFB, Virginia. Daily operations include aerial reconnaissance missions for the US Customs Service, Drug Enforcement Administration (DEA), and US Forestry Service to support counterdrug operations. CAP maintains an extensive, survivable radio network providing emergency communications when disasters strike.

CAP provides air and space education for CAP members and the nation at large through its comprehensive outreach program, including the annual National Congress of Aviation and Space Education (NCASE). CAP air and space education reaches the classrooms of more than 300,000 students each year, encouraging an interest in aviation and the sciences.

The CAP cadet program fosters personal discipline, patriotism, and leadership in young people across the nation and on AF installations worldwide.

Today's CAP has more than 35,000 senior members and more than 27,000 cadets in 1,600 units. Additionally, over 1,400 school teachers nationwide are educator members. CAP units have an organizational pattern and rank structure similar to that of AF units. CAP has eight geographical regions composed of 52 wings—one for each state, Puerto Rico, and the District of Columbia. Wings are divided into groups, squadrons, and flights. CAP's National Headquarters is located at Maxwell AFB, Alabama.

CAP has adopted several initiatives to furnish better service to the public. These efforts include an ongoing recruiting drive to attract new members, modernizing and improving its aircraft fleet and equipment, and a screening program of all adult members associated with the cadet program.

Emergency Services

CAP's primary operational emergency services missions include air and ground search and rescue (SAR) and disaster relief (DR)—whether in response to man-made events or natural disasters. CAP has access to some 550 corporate-owned general aviation light aircraft, plus vast amounts of ground-rescue equipment and radios. CAP operates national, regional, and local high frequency (HF) and very high frequency (VHF) radio networks with more than 12,000 radios, including a robust VHF-FM repeater system.

These networks provide valuable connectivity during national, state, or local emergencies or disasters.

SAR operations are carried out primarily under USAF authority at the request of the Air Force Rescue Coordination Center and other DOD joint-rescue coordination centers. DR operations during peacetime are coordinated by local and state emergency management authorities and authorized by the Air Force National Security Emergency Preparedness Office. In 2003 CAP aircrews flew 115,000 flying hours and saved 140 lives.

Homeland Security

CAP has continued to support recovery efforts from the terrorist attacks of 11 September 2001. More than 8,700 volunteer CAP members were mobilized nationwide after the attacks, flying a total of 564 hours in transportation, reconnaissance, and airborne-imagery missions. More than 450 of these members assisted their state or federal emergency management agencies.

CAP also flew 57.5 hours in support of Operation Noble Eagle for the Air Force. As this assignment continues, CAP planes fly as target aircraft to simulate terrorist activities and train our US military forces to detect, monitor, and intercept suspicious aircraft.

CAP flew security missions for the Space Shuttle Columbia lift-off in 2003, and then later assisted in its recovery. In May 2003, CAP wings in Illinois and Washington assisted in the Topoff 2 exercise, a national simulated exercise to evaluate the nation's ability to respond effectively to a massive terrorist attack.

Olympics and Paralympics Support

At the request of the DOD, more than 250 CAP members provided security and traffic observation for the 2002 Winter Olympic and Paralympic Games in Salt Lake City, Utah. Prior to the Games, CAP took airborne digital photographs of various Olympic sites as baseline photos for comparison in the event of a terrorist attack. CAP flew 179 reconnaissance sorties, logging nearly 535 hours, flying from sunrise to sunset each day the games were in session.

CAP took 2,232 aerial photos, using high-resolution digital cameras and single-frame video downlink systems. Uploaded on a limited-access Web site for security agencies, these photos resulted in at least one law enforcement action per day.

Future Support

CAP has submitted a Concept of Employment (CONEMP) for homeland security to both the secretary and the chief of staff of the Air Force. This CONEMP demonstrates how CAP can provide civil support for homeland security today and in the future. The plan also supports all six critical mission areas in President Bush's National Strategy for Homeland Security. To streamline and centralize mission support, CAP opened a National Operations Center (NOC) at its headquarters on Maxwell AFB, Alabama.

Congress has appropriated \$6 million for CAP to acquire hyperspectral-imaging technology and training. CAP has also already begun inflight testing for the new-night vision and thermal imaging equipment.

Counterdrug Operations

Since the mid-1980s, CAP has been an integral player in counterdrug operations. Many federal agencies, such as the Drug Enforcement Administration, US Customs and Border Protection, US Forest Service, and numerous state and local law enforcement agencies routinely call on CAP for aerial reconnaissance and communications support for their counterdrug missions. A key element of this program is the single-frame video equipment CAP uses to transmit near-real-time still photos via computer to law enforcement agencies. Additionally, CAP provides "low slow flier" intercept training and radar monitoring support to the Department of Defense.

Drug Demand Reduction

CAP's Drug Demand Reduction (DDR) program began in 1994 to support the Air Force family within 30 miles of active duty Air Force bases, reserve bases or stations, and Air National Guard bases. The mission of the program is to implement substance abuse prevention through a comprehensive program of education and awareness. One of the highlights of the DDR program is the former Middle School Initiative, now called the CAP School Program, which allows CAP participation either during or after school. Schools throughout the US sponsor the programs.

Cadet Programs

The CAP cadet program is open to young men and women between the ages of 12 and 21. CAP cadets are involved in a leadership training program based on activity and achievement. The cadet program includes 16 achievements in four phases with five milestones. Accomplishments in each

phase and achievement lead to progression in rank from cadet basic to cadet colonel. Cadets may also take part in other activities such as the International Air Cadet Exchange program. CAP offers the cadets opportunities to receive training in gliders and powered aircraft, radio communications, and various emergency service specialties. The cadet program also provides study and involvement in five program elements—air and space education, leadership laboratory, moral leadership, physical fitness, and air and space-related activities.

Aerospace Education. This portion of the cadet curriculum orients the cadets to the diversity of the air and space community. It develops an understanding of flight; aircraft and space-vehicle power plants; navigation; weather; air traffic control; and the social, political, and economic impact of air and space endeavors. Career exploration is inherent in all aspects of the air and space education element of the cadet program.

Leadership Skills. This area helps cadets learn and practice basic leadership, administration, and management techniques. Cadets are trained in leadership theories and concepts as well as practical hands-on applications.

Character Development and Moral Leadership. This portion of the cadet curriculum furnishes cadets with a forum to discuss contemporary issues under the leadership of chaplains and specially trained adult leaders, called moral leadership officers, and local clergy. The purpose is not to espouse any specific religious doctrine or teachings but to draw cadets into moral and ethical discussions based on various case studies.

Physical Fitness. Scaled to the cadet's age group, gender, and capabilities, the physical fitness program is tied directly to the President's Council on Physical Fitness and Sports, which provides an exposure to physical fitness as a lifetime requirement for good health.

Activities. Cadets may complete air and space-related activities at all levels of CAP: local, wing, regional, and national. These activities are grouped into three categories: flying related, career exploratory, and professional development. Examples of these activities include Cadet Officer School, National Cadet Competition, Engineering and Technology Academies, glider- and powered-flight training, and eight USAF career-field familiarization courses.

CAP is a full participating member of the US Department of State's Interagency Working Group on US Government-Sponsored International Exchanges and Training.

The cadet program also includes opportunities to travel abroad. Each summer since 1948, CAP cadets and senior-member escorts, with AF assistance, have participated overseas as US representatives in the International Air Cadet Exchange—a program that promotes international understanding, goodwill, and friendship among young people who have a

common interest in aviation. The CAP cadets go through a structured curriculum in Washington, D.C., before departing for their host country.

Likewise, a 16-day exchange to the United States allows cadets from other countries to tour air and space industries and museums, visit airports and AF installations, take orientation and training flights in gliders and powered aircraft, and visit the homes of host CAP families. The program exchanges approximately 100 people with 17 other nations.

Aerospace Education

CAP's air and space education effort works, both with its membership and with the general public, to develop an understanding and appreciation of the importance of air and space power for our country. Internally cadets and senior members take part in a structured air and space education program and have access to current air and space events.

The program's purpose is to develop a membership that can provide grassroots understanding and leadership in air and space education in local communities. Through its external outreach programs, CAP provides air and space education to American citizens through professional educators. These outreach efforts include teacher workshops, curricular materials, educational liaison, and cooperative programs.

Teacher Workshops. CAP cosponsors air and space education workshops through partnerships with other organizations, colleges, universities, and associations, reaching over 3,000 teachers a year. These projects provide teachers and school administrators with a basic understanding of air and space activities and prepare them to include air and space education in their curricula at all levels.

Curricular Materials. CAP produces courses of study, textbooks, instructor guides, audiovisual materials, and other supplementary materials. Many schools (private, public, and parochial), homeschoolers, and other organizations/associations use this material to present air and space education to their students.

Educational Liaison. CAP maintains a close liaison with state school officials, college and university administrators, and private, public, and parochial school systems to promote air and space education through out the country.

Cooperative Programs. CAP maintains a close working relationship with other air and space education groups to develop cooperative air and space education programs. These groups include the Federal Aviation Administration (FAA), National Aeronautics and Space Administration (NASA), National Air and Space Museum, state aeronautical commissions, American Institute of Aeronautics and Astronautics, General Aviation Manufacturers Association, Air Transport Association, Aircraft Owners and

Pilots Association, Young Astronaut Council, and the Air Force Association/ Air and Space Education Foundation. An example of this cooperation is the annual National Congress on Air and Space Education (NCASE), the only national-level convention for air and space education held in our nation.

NCASE is sponsored annually by CAP and plays a significant role in fulfilling its congressional charter to educate the American public about air and space topics. Hundreds of educators attend the three-day national conference annually. They return to their classrooms to teach students and parents using educational materials and techniques learned during their NCASE experience.

Chaplain Service. CAP fields the largest volunteer chaplaincy in the world. Numbering close to 900 chaplains and moral leadership officers, the Chaplain Service mission is dedicated to: the free exercise of religion for all CAP members; promoting spiritual care, moral leadership, and character development; responding as trained crisis responders to community and military contingencies such as disasters, aircraft accidents, or acts of terrorism. The CAP chaplain service regularly supports active duty and reserve components as an USAF Chaplain Service authorized asset and meets the same educational, ecclesiastical, and professional standards for appointment.

SECTION III

ACADEMIC SUPPORT AND TENANT UNITS

ACADEMIC SUPPORT

The Air University resident and distance education programs are supported by several supporting organizations that provide essential research facilities—some not equaled at any other academic institution. Air University has top-notch broadcasting and multimedia capabilities that allow its schools and organizations to provide worldwide educational opportunities to Air Force and Department of Defense personnel. These agencies enable the Air University to furnish essential mission support to a wide range of Air Force units and commands, including Headquarters Air Force.

AIR UNIVERSITY REGISTRAR

Dr. Irene Pearson-Morrow

Internet Address

<http://www.maxwell.af.mil/au/registrar.php>

The Air University Registrar oversees three branches: Services and Student Records, Officer PME, and Central Scheduling and Requirements Analysis. Through its Services and Student Records Branch, the registrar provides a 30-year archival data trail for AU schools, produces transcripts for graduates of those schools, and serves as admissions officer for AWC and ACSC master's degree programs. The registrar enrolls distance education students, monitors their progress, and produces their completion certificates and diplomas. The Officer PME Branch functions as the single input source for updating USAF records with PME course completions and supports promotion boards by screening graduate records to provide PME graduate data. The Central Scheduling and Requirements Analysis Branch manages course requirements, allocations, schedules, and program changes. Additionally, this branch supports the Air Force Education Requirements Board (AFERB) through data tracking and analysis for AF advanced academic degree programs and professional continuing education requirements.

Air University Transcript Requests

Individuals must request transcripts in writing from the Services and Records Branch, Air University Registrar (AU/CFRR), 60 W. Shumacher Ave., Maxwell AFB, AL 36112-6337. All requests must include the student's name, any previous names used, social security number, dates of attendance, school or course completed, complete address where the transcript is to be mailed, the student's signature, current address, and phone number. The above information may also be faxed to (334) 953-8127. For additional information call DSN 493-8128 or (334) 953-8128. See page 110 for information on ordering CCAF transcripts.

AIR UNIVERSITY LIBRARY

Dr. Shirley B. Laseter, Director

Internet Address

<http://aulibrary.au.af.mil/lane.htm>

The Air University Library (AUL), founded in 1946, is the premier library in the DOD. It houses well-balanced collections especially strong in the fields of war fighting, aeronautics, AF and DOD operations, military sciences, international relations, education, leadership, and management. AUL improves AF education by providing access to the world of information through quality library services.

The library holds more than 2.6 million items, including 419,000 military documents; 460,000 monographs and bound periodical volumes; 462,500 maps and charts; 150,000 current regulations and manuals; and 900,000 microforms.

AUL sits at the center of Chennault Circle. The library building, Fairchild Library, is named after the founder and first commander of AU, Gen Muir Stephen “Santy” Fairchild. Air University Library also operates the Henry “Red” Erwin library at Maxwell AFB/Gunter Annex. This branch provides tailored information collections and services for the NCO Academy and the Senior NCO Academy.

An active program of bibliographic publications and indexes facilitates access to the library’s holdings and information. Special subject bibliographies and school support pages are published throughout the year and posted contemporaneously on the library’s Web page. Published since 1949, the *Air University Library Index to Military Periodicals* is searchable in the online catalog, accessed through the library’s Web site.

Electronic information technologies are critical to the delivery of library resources and services. A third-generation integrated library system automates identifying, locating, and circulating library-owned materials. A robust Web site provides Internet access to the Special Bibliography Series, other PME curriculum support materials, map and image sites, full-text journals, e-books, newspapers, online databases, and links to key Web sites.

AIR UNIVERSITY PRESS

Dr. Shirley B. Laseter, Director
Ms. Bessie E. Varner, Deputy Director

Internet Address

<http://aupress.maxwell.af.mil>

The Air University Press, a division of AUL, is the professional publishing arm of AU. First established in October 1953, the press celebrated its 50th anniversary in August 2003. Press publications help promote creative thought on and appreciation for the value of air and space power. The Air University Publication Review Board, composed of senior officials from AU's officer PME schools, helps the press by assisting in acquiring manuscripts and advising on the academic and research value of potential manuscripts.

The press seeks to establish itself as a university press and a leading not-for-profit publisher on air and space power and national security. To achieve this goal, the press engages in an active marketing and acquisitions program to attract manuscripts on relevant topics from a wide range of authors, including active duty military, civilian scholars, and independent researchers.

Through its unique design and in-house editorial capabilities, the press staff provides a complete range of publication services. It offers creative assistance in prepress production functions (design, layout, typesetting, and creation and use of illustrations and photographs) for all AU Press publications, including the *Air and Space Power Journal*, which is published in three languages—English, Spanish, and Portuguese.

Information on press publications is available through the *Air University Press Publications* catalog—in hard copy and on the Internet (<http://aupress.maxwell.af.mil>). To inquire further about obtaining publications or submitting manuscripts, contact the Deputy Director, Air University Press, 131 W. Shumacher Ave., Maxwell AFB, AL 36112-6615 or visit the Web site.

AIR UNIVERSITY TELEVISION

Warren Jones Jr., Acting Director

Air University Television (AUTV) is AU's dedicated television facility, the AF's southeastern regional television production center, and one of five Air Force distance-learning uplink (broadcast) sites. From a full-service, \$3 million physical plant, AUTV provides video production and editing, DVD and CD-ROM production, cable distribution, internet distribution, satellite uplink and downlink (receive) services, and television engineering consultation to support AU's professional military and continuing education courses locally and Air Force-wide.

As a part of the ATN, AUTV provides satellite uplink and downlink services. Courses are transmitted from the broadcast studio to downlink sites throughout DOD and the federal government. Downlink signals are distributed through Air University Cable Network (AUCN). AUTV also provides digitized video clips for inclusion in interactive courseware.

Production personnel produce broadcast quality videotape programs for a wide range of applications, from short video supplements to faculty lesson plans to full-length programs for widespread distribution. Video programming to support daily classroom needs is aired over the AUCN. The AUCN signal is received in all AU classrooms on Maxwell AFB and Gunter Annex. Presentations in each school's main auditorium are distributed live or recorded for delayed playback and entry into the video archive.

Engineering personnel provide the technical services required to maintain, and repair the more than 1,400 pieces of video equipment in the AUTV facility and its subsystems throughout the Maxwell-Gunter community. AUTV engineers also provide consultations to customers planning new requirements or modifications of existing multimedia presentation systems.

TENANT UNITS

Maxwell AFB is host to two tenant units: the Air Force Doctrine Center is a direct reporting unit (DRU) and the USAF Historical Research Agency is a field operating agency (FOA). These organizations pursue joint ventures with AU faculty, staff, and students to research and develop solutions to and an understanding of vexing problems relating to future doctrine and war fighting.

HEADQUARTERS AIR FORCE DOCTRINE CENTER

Maj Gen Bentley B. Rayburn, Commander

Internet Address
<https://www.doctrine.af.mil>

In August 1996, Gen Ronald R. Fogleman, Air Force chief of staff (CSAF), decided to reorganize Air Force doctrine institutions. He based this decision on the growing importance of joint war fighting and the perceived need to increase the Air Force's understanding of air and space power doctrine. He realized that the other services had well-staffed organizations dedicated to writing doctrine, and that their members were better educated in their services' doctrine practices.

Established in February 1997, Headquarters Air Force Doctrine Center (AFDC), a DRU to the Air Force chief of staff, became the US Air Force's main doctrine service center. The unit's location at Maxwell AFB, Alabama, gives its members immediate access to the resources of AU, including AU Library, Air War College, Air Command and Staff College, Squadron Officer College, and College of Aerospace Doctrine, Research and Education.

Headquarters AFDC serves as the "single voice" for all doctrinal matters within the Air Force and to the joint community. The center researches, develops, and produces Air Force basic and operational doctrine, as well as joint and multinational doctrine. In addition, the center coordinates with the major commands on their development of tactical doctrine and assists other services with their doctrinal development efforts.

Approximately 100 individuals, military and civilian, are assigned to Headquarters AFDC. The commander's office, Doctrine Development, Doctrine Applications, and Doctrine Deployment Directorates are located within the headquarters building at Maxwell. The Joint Integration Directorate is located at Langley AFB, Virginia. In addition to these locations, Headquarters AFDC also maintains a liaison office within the Pentagon, and six operating locations, five of which are located at major Army training centers and one located at Nellis AFB, Nevada.

The Doctrine Development Directorate researches, develops, and produces Air Force basic and operational doctrine, as well as joint, and multinational doctrine, spanning the full range of military operations. The Doctrine Applications Directorate is responsible for affecting the accurate representation of air and space power in service, joint and multinational events of doctrinal significance. In addition, the Applications Directorate participates in Air Force and other services' joint war games and key exercises to ensure scenarios provide a realistic depiction of the uses and impacts of air and space power. Since autumn 1997, Doctrine Applications

staff members have participated in numerous exercises, experiments, and war-games events. They have also briefed and advised MAJCOM and numbered Air Force (NAF) commanders, their staff, and planners on air and space doctrine applications, current issues, and initiatives. The Doctrine Deployment Directorate advocates and deploys timely and focused air and space doctrine, and provides support to the CSAF Mentor Program. This directorate also develops and implements doctrine-specific instruction for Air Force senior officers and senior mentors, and prepares selected war fighters in preparation for participation in war games and exercises. This support is provided through the Air and Space Doctrine Applications Exercise (ADAX), a CSAF-directed requirement for all new NAF commanders; and the Air and Space Doctrine Outreach (ASDO) program, which provides tailored doctrinal briefings to war-fighting staff and other AF organizations upon request. The Joint Integration Directorate at Langley (Detachment 1) represents the AFDC in the joint arena, providing Air Force doctrinal advocacy in the Tidewater area and the National Capital Region.

The six operating locations maintained by Headquarters AFDC are military sites where air and space power is an integral part of Army training. These locations are National Training Center, Nellis AFB, Nevada; air defense training, Fort Bliss, Texas; armor training, Fort Knox, Kentucky; combined arms training, Fort Leavenworth, Kansas; aviation training, Fort Rucker, Alabama; and artillery training, Fort Sill, Oklahoma. At each site, Headquarters AFDC personnel serve as AF representatives to the Army. The operating locations provide USAF representation to the activity assigned or attached to on air and space power doctrine, organization, mission, equipment and capabilities, tactics, techniques and procedures, as well as providing advice to the installation commander on all doctrinal issues pertaining to the Air Force.

AFDC staff has worked diligently to refine the AF doctrine development process. Today, AF doctrine is codified in a series of 34 AF doctrine documents (AFDD), most of which are entirely new publications. A few of the publications are revisions of previously existing doctrinal publications, notably, AFDD 1, *Air Force Basic Doctrine*. As part of a two-year review process, several AFDDs can be found in various stages of revision at any given time. Changes to an existing AFDD, or a proposal for a new AFDD, can be proposed through the Air Force Doctrine Working Group (AFDWG). The typical AFDD takes about one year for writing, staffing, coordinating, and publishing. Each AFDD is assigned to an action officer within Headquarters AFDC, who shepherds the document through the development process. Headquarters AFDC has taken advantage of available technology to publicize and disseminate doctrinal issues. All AFDDs, including those published and those under development, are available for review and comment through the

Headquarters AFDC Web page. This comprehensive Web site also includes lessons learned and doctrinal initiatives for review and comment.

Headquarters AFDC hosts an AFDWG semiannually to provide Air Force-wide involvement in doctrine development. The major commands and Air Staff agencies send senior officers to this conference to provide recommendations on doctrine to the Headquarters AFDC commander. Any Air Force organization may introduce issues before the AFDWG. Official recommendations require majority approval by senior officer representatives. Air Force Doctrine Working Committees (AFDWC) were established to supplement the AFDWG process and to ensure that doctrine is written by the Air Force. AFDWCs include subject matter experts from all Air Force agencies with an interest or link to the proposed doctrine document to participate in the formulation or revision process of doctrine documents. After a series of checks and balances and approval by the commander, the final products are released to the military public. However, the doctrine development/revision process will not stop here. As new experiences and advances in technology pave the way for creating the force of the future, doctrine development will continue to evolve and provide Air Force leaders the tools needed to effectively win wars.

AIR FORCE HISTORICAL RESEARCH AGENCY

Dr. Frederick J. Shaw Jr., Acting Director

Internet Address

<http://www.maxwell.af.mil/au/afhra/>

The Air Force Historical Research Agency (AFHRA), collocated with AUL, is the repository for AF historical documents. The agency's collection, begun in Washington, D.C., during World War II, moved to Maxwell in 1949 to support AU. The AFHRA is a field operating agency under the policy guidance of the Air Force Historian at Headquarters USAF.

AFHRA's current holdings exceed 100 million pages and represent the world's largest and most valuable organized collection of historical documents on US military aviation. Materials cover subjects ranging from the use of balloons in the Civil War through AF activities in World War II, Korea, Vietnam, Operation Desert Storm, air war over Serbia, and Operations Noble Eagle, Enduring Freedom, and Iraqi Freedom. About three-fourths of the documents are USAF unit histories. The entire collection is open to the public except for classified or otherwise restricted documents (approximately 25 percent of the holdings). The agency's finding aids include

a computerized database and bibliographies for identifying and locating individual documents on specific topics of interest to the researcher.

Special collections, some dating back to the early 1900s, complement the unit histories. Among the collections are historical monographs and studies; more than 2,000 oral history interviews; end-of-tour reports of major overseas commanders; course materials of the Air Corps Tactical School from the 1930s; and working papers of key Army Air Forces staff offices, the British Air Ministry, and the Luftwaffe during World War II. Extensive Gulf War documentation (approximately 2,000,000 pages) and an electronic database (nearly 85 gigabytes) on the air war over Serbia have been added to the agency's holdings. The Gulf War holdings include chronologies, working papers, message traffic, and oral history transcripts, as well as unit histories and contingency historical reports. Collections of the personal papers of more than 500 key AF civilian and military officials, including Secretaries of the Air Force John L. McLucas, Robert C. Seamans Jr., and Eugene M. Zuckert, as well as Generals George S. Brown, George C. Kenney, Curtis E. LeMay, John D. Ryan, and Thomas D. White, are available to researchers. Currently, the agency is receiving historical reports from Operations Noble Eagle, Enduring Freedom, and Iraqi Freedom.

In addition to being the Air Force's primary archive for historical documents, the Historical Research Agency performs research and other historical services. The agency's historical collection is readily available to AU students, faculty, and staff. Agency staff members provide research and advisory services to AU students to assist them in preparing papers and theses. Beyond its support to AU, the agency's staff answers requests for historical information from Congress, the DOD, the Joint Chiefs of Staff, the Air Staff, MAJCOM, and the general public. Other key functions include publishing historical reference works, conducting the AF's oral history program, and maintaining records showing the status of AF organizations and aircraft. As the AF authority on unit lineage and honors, the agency provides research assistance on heraldic emblems, prepares lineage and honors histories for AF units, and verifies the lineage and honors of AF units.

The agency conducts annual oral history and archival training courses for professional staff members of the Air Force History and Museums program. The agency deploys contingency historical information preservation teams during war and other contingencies to capture and archive documentation of AF activities.

ACRONYMS AND ABBREVIATIONS

| | |
|---------|---|
| ACE | American Council on Education |
| ACES | Air Force Command Exercise System |
| ACSC | Air Command and Staff College |
| ACTS | Air Corps Tactical School |
| ADL | advanced distributed learning |
| ADR | alternate dispute resolution |
| AECP | Airman Education and Commissioning Program |
| AEF | Air and space Expeditionary Forces |
| AETC | Air Education and Training Command |
| AF | Air Force |
| AFB | Air Force Base |
| AFCAT | Air Force Catalog |
| AFDC | Air Force Doctrine Center |
| AFDD | Air Force Doctrine Document |
| AFDLO | Air Force Distance-learning Office |
| AFDWG | Air Force Doctrine Working Group |
| AFEHRI | Air Force Enlisted Heritage Research Institute |
| AFHRA | Air Force Historical Research Agency |
| AFHRMS | Air Force Human Resource Management School |
| AFI | Air Force Instruction |
| AFIADL | Air Force Institute for Advanced Distributed Learning |
| AFIT | Air Force Institute of Technology |
| AFJAG | Air Force Judge Advocate General |
| AFJROTC | Air Force Junior Reserve Officer Training Corps |
| AFM | Air Force Manual |
| AFM&S | Air Force Modeling and Simulation |
| AFOATS | Air Force Officer Accession and Training Schools |
| AFPC | Air Force Personnel Center |
| AFPD | Air Force Policy Directive |
| AFRC | Air Force Reserve Command |
| AFRES | Air Force Reserves |
| AFRL | Air Force Research Laboratory |
| AFROTC | Air Force Reserve Officer Training Corps |
| AFSC | Air Force specialty code |
| AFSNCOA | Air Force Senior Noncommissioned Officer Academy |
| AFWI | Air Force Wargaming Institute |
| AIS | Academic Instructor School |
| ALS | Airman Leadership School |
| ANG | Air National Guard |
| AOC | air operations center |

Air University Catalog, 2004–2005

| | |
|----------|---|
| ARI | Airpower Research Institute |
| ASBC | Air and Space Basic Course |
| ATN PMO | Air Technology Network Program Management Office |
| ATN | Air Technology Network |
| AU/CC | Air University Commander |
| AU/CF | Air University Academic Office |
| AU/CFR | Air University Registrar |
| AU/FM | Air University Financial Management and Personnel |
| AU/SC | Air University Information Technology |
| AUI | Air University Instruction |
| AUL | Air University Library |
| AUTV | Air University Television |
| AWC | Air War College |
| | |
| BDU | battle-dress uniform |
| BOT | Basic Officer Training |
| BOV | Board of Visitors |
| | |
| CADRE | College of Aerospace Doctrine, Research and Education |
| CAO | Chief Academic Officer |
| CAP | Civil Air Patrol |
| CAPS | counterproliferation and planning system |
| CBI | computer based instruction |
| CBW | chemical biological warfare |
| CCAF | Community College of the Air Force |
| CCM | Office of the Command Chief Master Sergeant |
| CDC | career development courses |
| CDX | crises decision exercise |
| CEP | core electives program |
| CEPME | College for Enlisted Professional Military Education |
| CESS | Civil Engineer and Services School |
| CFACC | combined forces air component commander |
| CFC | Canadian Forces College |
| CFETP | career field education and training plan |
| CHIP | contingency historical information program |
| CLE | continuing legal education |
| COA | courses of action |
| COMPUSEC | computer security |
| CONUS | continental United States |
| COT | Commissioned Officer Training |
| CP | counterproliferation |
| CPC | Counterproliferation Center |
| CPD | [Ira C. Eaker] College for Professional Development |

Acronyms and Abbreviations

| | |
|-------------|---|
| CPSP | commandant's professional studies paper |
| CS&P | competitive sourcing and privatization |
| CSAF | chief of staff of the Air Force |
| CSAT | Center for Strategy and Technology |
| CSI | Chaplain Service Institute |
| CV | vice commandant |
| CWPC | Contingency Wartime Planning Course |
| | |
| DEA | Drug Enforcement Administration |
| DL | distance learning |
| DOD | Department of Defense |
| DODD | Department of Defense Directive |
| DODIP | Department of Defense Informational Program |
| DR | disaster relief |
| DSN | Defense Switching Network |
| | |
| ECI | Extension Course Institute |
| ECL | English comprehension-level |
| EEW | experiments, war games |
| EPC | Educational Programs Cadre |
| EPME | enlisted professional military education |
| EPMEI | Enlisted Professional Military Education Instructor |
| ETCA | Education and Training Course Announcements |
| EWC | Executive Wellness Center |
| EWI | education with industry |
| | |
| FLEP | Funded Legal Education Program |
| | |
| GRE | graduate record examination |
| | |
| HPSP/FAP | Health Professions Scholarship and Financial |
| HQ AFDC | Headquarters Air Force Doctrine Center |
| HQ/AETC | Headquarters Air Education and Training Command |
| HQ/AU | Headquarters Air University |
| HQ USAF/CVA | Headquarters US Air Force/Assistant Vice chief of staff |
| | |
| IA | International Affairs |
| IFB | Integrated Forecasting Board |

Air University Catalog, 2004–2005

| | |
|-----------|--|
| IO | international officer |
| IOS | International Officer School |
| ISD | instructional systems design |
| ISR | intelligence, surveillance, and reconnaissance |
| ITV | interactive television |
| IW | information warfare |
| IWAC | Information Warfare Applications Course |
| | |
| JAOC | Joint Air Operations Center |
| JDACC | Joint Doctrine Air Campaign Course |
| JEMM | Joint Educational Mobility Model |
| JFACC | joint force air component commander |
| JFC | joint force commander |
| JFOWC | Joint Flag Officer Warfighting Course |
| JLASS | joint land air and space and sea simulation |
| JPME | joint professional military education |
| JTF | joint task force |
| | |
| LAN | local area network |
| LLAB | leadership laboratories |
| | |
| M&S | modeling and simulation |
| MAJCOM | major command |
| MEDOD | management education Department of Defense |
| | |
| NACES | National Association of Credential Evaluation Services |
| NAVWARCOL | Naval War College |
| NCA | National Command Authorities |
| NCASE | National Congress of Aviation and Space Education |
| NCOA | Noncommissioned Officer Academy |
| NCOIC | noncommissioned officer in charge |
| NCOPC | Noncommissioned Officer Preparatory Course |
| NGO | nongovernmental |
| NMD | National Missile Defense |
| NSF | National Security Forum |
| NSS | National Security Studies |
| | |
| OI | operating instruction |
| OMS | officer military schools |
| OTS | Officer Training School |
| | |
| PACE | Public Affairs Center of Excellence |
| PCE | Professional Continuing Education |

Acronyms and Abbreviations

| | |
|---------|--|
| PMCC | Professional Military Comptroller Course |
| PMCS | Professional Military Comptroller School |
| PME | Professional Military Education |
| PSP | Professional Studies Paper |
| RCOT | Reserve Commissioned Officer Training |
| ROTC | Reserve Officer Training Corps |
| RS | Regional Studies |
| SAASS | School of Advanced Air and Space Studies |
| SAO | security assistance officer |
| SAR | search and rescue |
| SCI | sensitive compartmented information |
| SES | senior executive service |
| SIO | senior intelligence officer |
| SIWAC | Senior Information Warfare Applications Course |
| SNCOA | Senior Noncommissioned Officer Academy |
| SOC | Squadron Officer College |
| SOF | Special Operations Forces |
| SOS | Squadron Officer School |
| SSS | Senior Services School |
| TOA | total obligation force |
| TCW | theater campaign warfare |
| TDY | temporary duty |
| TOEFL | test of English as a foreign language |
| USAFA | US Air Force Academy |
| USG | United States government |
| USSOCOM | United States Special Operations Command |
| WMD | weapons of mass destruction |
| WSI | Warfare Studies Institute |