



AIR UNIVERSITY CATALOG ACADEMIC YEAR 2011-2012

AU-10

The Air University Catalog

Academic Year
2011-2012



October 2011

The Air University Catalog is the official Air University publication for disseminating information on Air University educational programs, including professional military education. This catalog is supplemented by the following publications: *Air Force Institute of Technology (AFIT) Catalog*; *Community College of the Air Force (CCAF) General Catalog*; and *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 statements set forth in this catalog outline the current rules, regulations, and policies of Air University and are for informational purposes only. They should not be construed as the basis of a contract between the student and the university. While the provisions of this catalog normally will be applied as stated, the university reserves the right to change any provision listed in this catalog.

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.au.af.mil/au>.

Air University, Maxwell Air Force Base, Alabama, provides the full spectrum of Air Force education, from precommissioning to the highest levels of professional military education, including degree granting and professional continuing education for officers, enlisted, and civilian personnel throughout their careers. Air University is accredited by the Commission on Colleges of the Southern Association of Colleges and Schools.

Disclaimer

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>
INTRODUCTION TO AIR UNIVERSITY	
Air University Key Staff	<i>vii</i>
Air University Advisory Bodies	<i>ix</i>
Air University Academic Units	<i>xv</i>
General Information	<i>xvii</i>
Air University Admission Requirements.	<i>xxvii</i>
AIR UNIVERSITY INSTITUTIONS	1
School of Advanced Air and Space Studies	3
Carl A. Spaatz Center for Officer Education	3
Curtis E. LeMay Center for Doctrine Development and Education	9
Jeanne M. Holm Center for Officer Accessions and Citizen Development	24
Thomas N. Barnes Center for Enlisted Education	26
Ira C. Eaker Center for Professional Development	28
AIR UNIVERSITY GRADUATE PROGRAMS	29
Master of Philosophy in Military Strategy	31
Doctorate of Philosophy in Military Strategy	31
Master of Strategic Studies	41
Master of Military Operational Art and Science (Resident)	74
Master of Military Operational Art and Science (Online)	84
Master of Science in Flight Test Engineering	99
Air Force Institute of Technology	109
AIR UNIVERSITY UNDERGRADUATE PROGRAMS	111
Enlisted Professional Military Education Instructor Course	113
Airman Leadership School Resident Program	117
Airman Leadership School Distance Learning Program	121
Noncommissioned Officer Academy Resident Program	124

	<i>Page</i>
NCOA Distance Learning Program	127
AF Senior Noncommissioned Officer	
Academy Resident Program	130
SNCOA Distance Learning Program	135
Chief Master Sergeant Leadership Course	138
USAF First Sergeant Academy	141
AIR UNIVERSITY NONDEGREE PROGRAMS	147
Air War College Distance Learning	148
Air Command and Staff College Nonresident	
IDE–Nonmaster’s Program	156
Squadron Officer College Faculty	
Development	163
Squadron Officer School Resident Program	166
Squadron Officer School Distance Learning	
Program	171
Squadron Officer College Leadership	
Development Program Professional	
Continuing Education	175
International Officer School	180
Officer Training School Academic	
Instructor Course	186
Officer Training School	189
Civilian Acculturation and Leadership	
Training Course	197
Air Force Reserve Officer Training Corps	199
Air Force Reserve Officer Training Corps	
Instructor and Orientation Courses	202
Air Force Junior Reserve Officer Training Corps	
Academic Instructor Course	207
Ira C. Eaker Center Academic Instructor	
Course	211
Commanders’ Professional Development	
School	213
Air Force Human Resource Management	
School	216
Defense Financial Management and	
Comptroller School	220

	<i>Page</i>
USAF Chaplain Corps College	223
National Security Space Institute	226
Joint Flag Officer War-Fighting Course	228
Joint Force Air Component Commander Course	233
Combined Force Air Component Commander Course	237
Senior Joint Information Operations Applications Course	241
Contingency Wartime Planning Course	249
Joint Air Operations Planning Course	252
Information Operations Fundamentals Application Course	254
Air Force Senior Executive War-Fighter Perspective Seminar	256
Cyberspace Operations Executive Course	259
Senior Leader Airpower Doctrine Seminar	261
 ACADEMIC SUPPORT	 265
Air University Registrar	267
Directorate of Education Logistics and Communications	268
Air Force Research Institute	269
Air Force Enlisted Heritage Research Institute . . .	271
Air Force Historical Research Agency	272
Muir S. Fairchild Research Information Center . . .	274
 AIR UNIVERSITY FACULTY	 277
School of Advanced Air and Space Studies	277
Air War College	278
Air Command and Staff College	283
USAF Test Pilot School	293
 ACRONYMS AND ABBREVIATIONS	 299

Introduction to Air University

AIR UNIVERSITY KEY STAFF

Maj Gen David S. Fadok	Commander
Maj Gen Maurice H. Forsyth	Vice-Commander; Curtis E. LeMay Center for Doctrine Development and Education Commander
Dr. Bruce T. Murphy	Chief Academic Officer
Dr. John A. Shaud, Gen, USAF (Ret.)	Air Force Research Institute Director
Maj Gen Scott M. Hanson	Carl A. Spaatz Center for Officer Education Commander
Brig Gen Roger H. Watkins	Jeanne M. Holm Center for Officer Accessions and Citizen Development Commander
Brig Gen Walter D. Givhan	Air Force Institute of Technology Commander
Col Stewart S. Price	Thomas N. Barnes Center for Enlisted Education Commander
Col John M. McCain	Ira C. Eaker Center for Professional Development Commander
Col Noel Zamot	USAF Test Pilot School Commandant
Col Brian M. Killough	42d Air Base Wing Commander

AIR UNIVERSITY ADVISORY BODIES

Command Board of Advisors

The Air University (AU) Command Board of Advisors provides the commander of AU with feedback from the customer perspective of the major commands (MAJCOM). Board members inform the AU commander about the educational needs of their respective commands and their degree of satisfaction with AU's products and programs.

The board is advisory in nature and generally meets periodically at Maxwell AFB, AL or the Department of Defense (DOD) at the Pentagon.

The membership is comprised of the vice-commanders of the MAJCOMs, as well as the Air National Guard deputy director. The Air Force deputy chief of staff, personnel; and the US Air Force Academy vice-commander advise them.

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, US Air Forces Europe
Vice-Commander, Pacific Air Forces
Vice-Commander, Air Force Special Operations Command
Vice-Commander, Air Force Reserve
Deputy Director, Air National Guard

Advisors

Air Force Deputy Chief of Staff, Personnel
Superintendent, US Air Force Academy

Board of Visitors 2011

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

The board meets at least twice a year—in the spring and the fall—at Maxwell AFB, Alabama. The board presents a written report with its views and recommendation 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.

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.

Dr. Jack Hawkins, Chair
Chancellor, Troy University, Troy, AL

Mr. Norman Augustine, Chair-Elect
Former Chairman and CEO
Lockheed Martin Corporation, Bethesda, MD

Dr. Tito Guerrero III, Past Chair
President, Cambridge College, MA

Dr. Susan Aldridge
President, University of Maryland
University College
Adelphi, MD

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

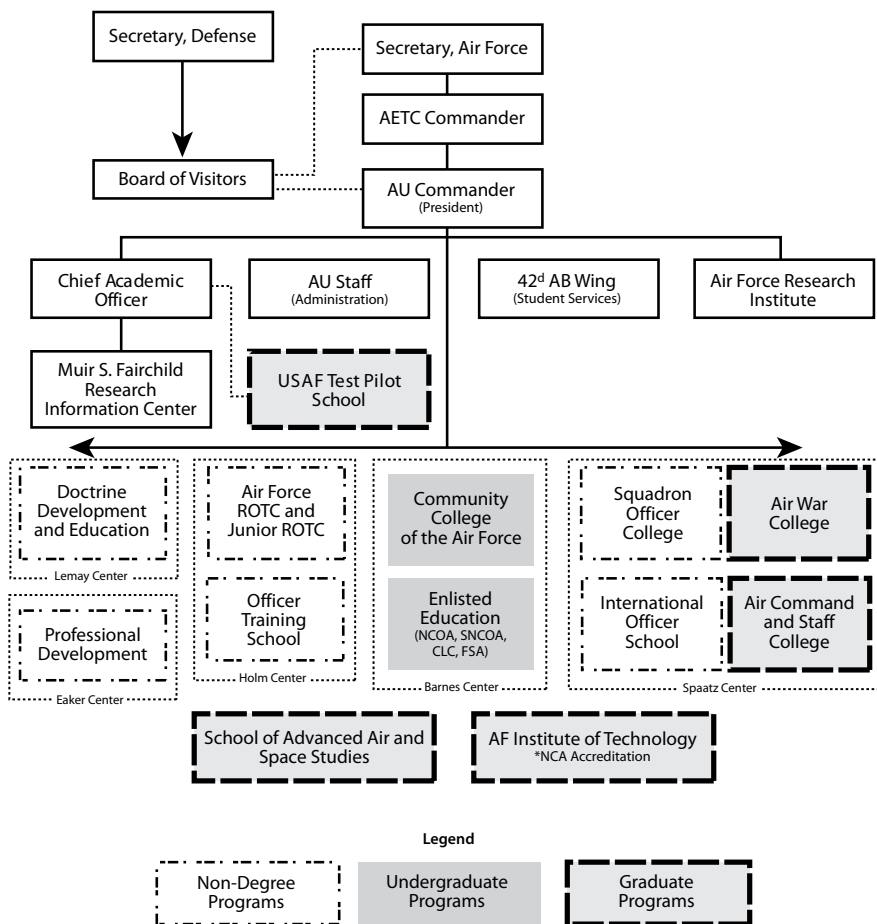
Col Robert Beasley, USAF, Ret
Principal Research Engineer
Georgia Tech Research Institute
Atlanta, GA

Reverend Edward Beauchamp
President, University of Portland
Portland, OR

Mrs. Mary Boies Attorney-at-Law, Boies & McInnis, LLP Armonk, NY	Gen Charles Boyd, USAF, Retired Former President and CEO Business Executives for National Security Washington, DC
ADM Vern Clark, USN, Retired Former Chief of Navy Operations Goodyear, AZ	Dr. (Maj Gen) Stephen P. Condon, USAF, Retired Aerospace Consultant
Amb (Maj Gen) Gary J. Cooper USMC, Retired and Chairman, CNB Bankcorp Mobile, AL	Dr. Ding-Jo Currie Chancellor, Coast Community College District Costa Mesa, CA
Dr. Don Daniel Former Vice President, University of Tennessee Tullahoma, TN	Mr. Henry Fong Managing Director Gulf Stream Financial Partner Englewood, CA
Dr. Stephen Fritz Dean, Honors College Texas Tech University Lubbock, TX	Gen Patrick K. Gamble, USAF, Retired President, University of Alaska System
Dr. Mildred Garcia President, California State University Carson, CA	Dr. Rufus Glasper Chancellor, Maricopa Community College Phoenix, AZ
Dr. Muriel Howard President, American Association of State Colleges and Universities Washington, DC	Dr. Benjamin Lambeth Senior Researcher, RAND Corporation Santa Monica, CA
Dr. Joe A. Lee Interim President and Provost Cambridge College, MA	CMSgt Karl W. Meyers, USAF, Retired Realtor, Realty Executives, Simmonds Group San Antonio, TX
Dr. Ann Millner President, Weber State University Ogden, UT	CMSAF Gerald R. Murray, USAF, Retired Senior Manager, F22 Sustainment Lockheed Martin Corporation Marietta, GA

<p>VADM Daniel T. Oliver, USN, Retired President, Naval Post Graduate School Monterey, CA</p>	<p>Maj Gen Richard Paul, USAF, Retired Former Vice President, Strategic Development & Analysis, Boeing Company Seattle, WA</p>
<p>Dr. (Brig Gen) Roger C. Poole, USA, Retired Former Provost, The Citadel Charleston, SC</p>	<p>Dr. (Maj Gen) Ronald Segal, USAF, Retired Woodward Professor of Systems Engineering and Vice President for Energy, Environment and Applied Research Colorado State University Fort Collins, CO</p>
<p>Dr. Eugene H. Spafford Professor of Computer Science Executive Director of CERIAS Purdue University, IN West Lafayette, IN</p>	<p>Mr. Fletcher Wiley Attorney Bingham McCutchen, LLP</p>

AIR UNIVERSITY ACADEMIC UNITS



GENERAL INFORMATION

Introduction to Air University

Internet Address

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

Mission. *As the intellectual and leadership center of the Air Force, Air University provides dynamic comprehensive education to prepare graduates to develop, employ, command, research, and champion air, space, and cyberspace power at all levels.*

Vision. *The intellectual and leadership center of the Air Force. We produce the future.*

Air University (AU), headquartered at Maxwell AFB, is a major component of Air Education and Training Command (AETC) and is the Air Force's center for professional military education (PME).

Air University provides the full spectrum of Air Force education, from precommissioning to the highest levels of professional military education, including degree-granting and professional continuing education for officers and enlisted and civilian personnel throughout their careers. The university's PME programs educate Airmen on the capabilities of air and space power and their 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 professional continuing education (PCE) programs provide scientific, technological, managerial, and other professional expertise to meet the needs of the Air Force. Air University conducts research in air, space, and cyberspace power and education, leadership, and management. The university also provides citizenship programs and contributes to the development and testing of Air Force doctrine, concepts, and strategy.

History. The Wright brothers established the first US civilian flying school in Montgomery, Alabama, in 1910. In the 1920s,

Montgomery became an important link in the growing system of aerial mail service. In the early 1930s, the Army Air Corps Tactical School (ACTS) moved to Maxwell, and Montgomery became the country's intellectual center for airpower education.

Air University, established in 1946, continues the proud tradition of educating tomorrow's planners and leaders in air and space power for the Air Force, other branches of the US armed forces, federal government civilians, and many international organizations. Air University's current worldwide reach affects the careers of every Air Force member.

Organizational Structure. The university's primary operating locations are concentrated on three main installations. Most AU programs are located at Maxwell AFB in northwest Montgomery; some are located across town at the Maxwell-Gunter Annex; one is located at Wright-Patterson AFB, Ohio; and another at Edwards AFB, California. Although AU draws students from throughout the Department of Defense (DOD) and from the military forces of other nations, its mission is more easily described in terms of the two main groups it is primarily organized to serve: US Air Force commissioned officers and enlisted members.

Air University institutions include the Carl A. Spaatz Center for Officer Education (the Spaatz Center), Curtis E. LeMay Center for Doctrine Development and Education (the LeMay Center), Jeanne M. Holm Center for Officer Accessions and Citizen Development (the Holm Center), Thomas N. Barnes Center for Enlisted Education (the Barnes Center), Ira C. Eaker Center for Professional Development (the Eaker Center), Headquarters Civil Air Patrol, and several other support organizations. Support for the AU organizations on Maxwell-Gunter is provided by 42d Air Base Wing, the host organization. Another important part of AU is the Air Force Institute of Technology (AFIT), located at Wright-Patterson AFB and the United States Air Force Test Pilot School (USAFTPS) at Edwards AFB, California.

Accreditation and Degree-granting Authority

AU is accredited by the Southern Association of Colleges and Schools, Commission of Colleges (SACS-COC), to award associate and master's degrees. Both the Community College of the Air Force (CCAF) and the School of Advanced Air and Space Studies (SAASS) were separately accredited by SACS prior to 2004—CCAF in 1980 and SAASS in 1998. Air University achieved regional accreditation in June 2004, effective at the beginning of the calendar year. At that time CCAF and SAASS became part of Air University's regional accreditation. Contact the commission at 1866 Southern Lane, Decatur, Georgia, 30033-4097 or call 404-679-4501 for questions about the accreditation of Air University.

Since AU is a federal entity, Congress must grant authority to award degrees. In October 1994 the AU commander received congressional authority to confer the master of airpower art and Science degree upon graduates of the School of Advanced airpower studies (SAAS), now called the School of Advanced Air and Space Studies (SAASS). In October 1999 Congress granted AU the authority to confer the master of strategic studies upon graduates of the Air War College (AWC) and to confer the master of military operational art and science degree upon graduates of the Air Command and Staff College (ACSC). An on-line distance learning version of the ACSC master's degree was approved by SACS-COC on 24 April 2007. On 21 January 2008 Congress granted AU the authority to award the master of science in flight test engineering to the graduates of the USAF Test Pilot School (USAFTPS). This approval included students enrolled in the program in April 2007 and those who graduated in USAFTPS classes 06B and 07A. In 2010 Congress granted authority for AU to grant all degrees appropriate to its mission.

Policies

Privacy Act. As a federal military education institution, AU must adhere to established federal and services policies and guidelines on records. Air University adheres to the guidelines of the Privacy Act of 1974 to protect the confidentiality and integrity of student records. Though not mandated by law, AU also complies with the basic tenets of the Federal Family

Educational Rights and Privacy Act (FERPA). However, the Department of Education, Family Policy Compliance Office, views AU as a DOD Section 6 school that is solely funded by the DOD under 10 *United States Code (USC)* Section 2164, and is therefore exempt. The security and confidentiality of student records are central to the academic integrity of AU. AU is committed to protecting, to the maximum extent possible, the right of privacy of all individuals about whom it holds information, records, and files.

Academic Integrity. Air University is uncompromising in its adherence to a code of ethics, morality, and conduct related to scholarship and academic activity. (See Air University Instruction [AUI] 36-2309, *Academic Integrity*.)

Admission and Enrollment. Though developing personnel to meet the needs of the Air Force is its primary mission, AU also offers its educational programs to members of US sister services including the Reserves, National Guard, and selected civilian employees of the DOD and other government agencies. Air University programs and schools are not open to the general public except through special programs. An exception is AFIT, where non-DOD US citizens may enroll in academic programs provided they meet the admissions standards. As part of the US military assistance programs, officers from other countries may attend several AU schools and enroll in the courses. Selection for the AU schools and educational programs is made according to Air Force and other relevant government standards. (See AUI 36-2317, *Air University Degree Granting and Accreditation*.)

Grading Policy for Degree Programs. Students in degree-granting programs will receive course grades based on a four-point system with plus and minus grades. Pass or fail grades may be awarded for designated courses according to school policy. Pass grades will count only toward hours attempted/earned and will not affect the grade point average (GPA). Fail grades will count only as hours attempted but will not count as hours earned nor will they affect the GPA. (See AUI 36-2327, *Grading and Course Numbering for Air University Degree Programs*.)

Transfer Credit. AU's master's degree programs do not accept transfer credit.

Assigning Credit. AU graduate schools including AWC, ACSC, SAASS, AFIT, and the USAFTPS follow sound practices for determining the amount and level of credit awarded for courses. Credit is usually awarded by assigning one semester hour to each 15 hours of classroom time. ACSC distance learning degree credit is awarded at the ratio of one semester hour for each 40 hours of preparation or classroom time.

Degree Program Withdrawal. Withdrawal/disenrollment is the removal of any enrolled AU student from a course or school before completion. Disenrollment may be accompanied by expulsion from academic credit programs. (See AUI 36-2315, *Student Disenrollment Procedures*.)

Academic Credit. The American Council on Education (ACE) recommends credit for completion of some AU programs. Several colleges and universities accept transfer credits from AU. Accepting/awarding transfer credits is at the discretion of each college or university. For more information, visit <http://www.militaryguides.acenet.edu>.

Educational Documents

Fraudulent Documents. Air University Registrar Student Services personnel authenticate transfer credit, degrees, diplomas, certificates, and certifications. They pursue appropriate action when fraud is suspected to include disenrollment and/or legal action. The offending student's AU transcript will be annotated with "student was disenrolled for submitting fraudulent documents."

Information Release. A student must authorize release of information pertaining to his or her educational record to a third party. Students must submit a release letter (with an original signature) to the college's registrar. The student must state what information to release and to whom the information may be released. The Federal Family Educational Rights and Privacy Act

of 1974, 5 USC 301, 10 USC 8013, and Executive Order 9397 dictate the policy regarding release of student data. These directives specify that an educational record may not be released without the student's written consent specifying records to be released and to whom.

Transcript Request. Individuals must complete the AU Transcript Request form at <http://www.au.af.mil/au/registrar.asp>, sign it, and e-mail it to student.services@maxwell.af.mil (electronic signature accepted), or fax it to Defense Switching Network (DSN) 493-8127 or Comm 334-953-8127, or mail it to Air University Registrar, 60 Shumacher Ave., Maxwell AFB, AL 36112-6337.

Transcripts will normally be mailed within seven duty days of receipt. AU transcripts will not be faxed or e-mailed.

Students

Students should rely on the information listed below to monitor their rights. This information applies to all students.

Air University Policy Regarding Student Rights

Upon admission, AU schools/centers must inform new students in both residence and distance learning programs of the specific rights afforded them by virtue of their student status. Schools/centers must also ensure this AU policy is extended to all faculty and staff.

Nothing in this policy is intended to replace or supersede the procedures provided for actions under the *Uniform Code of Military Justice (UCMJ)* or disciplinary or administrative actions provided for in DOD directives or Air Force, Air Education and Training Command, or Air University instructions.

In addition to any rights conferred on students by individual AU schools/centers, this policy letter prescribes that any AU student has a right to appeal any adverse action by following the appropriate courses of appeal described below:

- a. For academic issues involving non-AFIT students, the chain of appeal follows this order:

1. Course instructor. If the appeal is not resolved at this level, the student informs the course director if an appeal is forthcoming. . . .
 2. Course director. If the appeal is not resolved at this level, the student informs the course director of his/her intention to elevate the appeal to the
 3. School commandant/commander. If the appeal is not resolved at this level, the student informs the commandant/commander of his/her intention to elevate the appeal to the
 4. Center commander (if different from the school commandant/commander). If the appeal is not resolved at this level, the student informs the center commander of his/her intention to elevate the appeal to the
 5. AU chief academic officer. If the appeal is not resolved at this level, the student informs the chief academic officer of his/her intention to elevate the appeal to the
 6. AU commander. This is the highest level of appeal for academic issues. A decision made at this level is final.
- b. For nonacademic issues involving non-AFIT students, the chain of appeal follows this order:
1. Course instructor. If the appeal is not resolved at this level, the student informs the course instructor of his/her intention to elevate the appeal to the
 2. Course director. If the appeal is not resolved at this level, the student informs the course director of the intention to elevate the appeal to the
 3. School commandant/commander. If the appeal is not resolved at this level, the student informs the commandant/commander of his or her intention to elevate the appeal to the
 4. Center commander (if different from the school commandant/commander). If the appeal is not resolved at this level, the student informs the center

commander of his or her intention to elevate the appeal to the

5. AU Chief Academic Officer. If the appeal is not resolved at this level, the student informs the AU Chief Academic Officer of his or her intention to elevate the appeal to the
 6. AU Commander. This is the highest level of appeal for nonacademic issues. A decision made at this level is final.
- c. For academic or nonacademic issues involving AFIT students, the chain of appeal follows this order:
1. The first military person providing oversight to the student. This position may be the course instructor. If the appeal is not resolved at this level, the student informs the course instructor of his or her intention to elevate the appeal to the next military person in the chain of command. This person may or may not be the course director.
 2. Course director. If the appeal is not resolved at this level, the student informs the course director of his or her intention to elevate the appeal to the next military person in the chain of command. This person may be the applicable AFIT school dean.
 3. Applicable AFIT school dean. If the appeal is not resolved at this level, the student informs the dean of his/her intention to elevate the appeal to the
 4. AFIT vice-commandant. If the appeal is not resolved at this level, the student informs the vice-commandant of his or her intention to elevate the appeal to the
 5. AFIT commandant. If the appeal is not resolved at this level, the student informs the commandant of the intention to elevate the appeal to the
 6. AU commander. This is the highest level of appeal for academic and nonacademic issues. A decision made at this level is final.

Responsibilities. All students must abide by the *UCMJ*, Air Force Instructions (AFI), and Air University Instructions (AUI), as applicable. The *UCMJ* is available in the legal office on each Air Force installation, and other AFIs and AUIs are available via the Air Force Portal. Students must read and understand the provisions of this catalog. Additionally, students must follow the standards of behavior established by the school in which they are enrolled. All other categories of personnel are expected to follow the same guidelines.

Air University Admission Requirements

Admission. To be admitted to the AU degree programs, an individual must

- be selected to attend the resident programs or meet eligibility requirements for the online program,
- provide proof of academic credentials, and
- Obtain an acceptable result on the Test of English as a Foreign Language (TOEFL), if you are an international student. (See TOEFL information below.)

Selection. See AFI 36-2301, *Professional Military Education*, and/or the *Education and Training Course Announcement (ETCA)* for selection processes and eligibility criteria.

US Personnel - Proof of Academic Credentials.

- Air Force active duty, Guard, and Reserve officers selected to attend AU degree programs will have their degree status verified by the AU registrar office without action on their part.
- Civilian students must have no less than a bachelor's degree from a regionally accredited college or university. Students must request that an official transcript be mailed from their degree-granting school to the AU registrar. Transcript must be received by the AU registrar no later than 31 August of the academic year in which the student is attending. Mail transcripts to:

Air University Registrar
ATTN: Admissions
60 Shumacher Avenue
Maxwell AFB, AL 36112-6337

- Sister-service students and civilian students must request that an official transcript be mailed from their degree-granting school to the AU registrar. Transcript must be received by the AU registrar no later than 31 August of the academic year in which the student is attending. Mail transcripts to:

Air University Registrar
ATTN: Admissions
60 Shumacher Avenue
Maxwell AFB, AL 36112-6337

- The student is responsible for honoring the costs incurred in providing academic documents.

International Students. For admission to any AU degree program, international students must meet two requirements: Have a US bachelor's degree or equivalent from a regionally accredited college or university and meet the minimum Air University requirement on the Test of English as a Foreign Language (TOEFL). International students selected, but who do not meet the admission requirements for the AU degree programs, will be allowed to attend the schools and will, upon graduation, receive a diploma from the school.

- **Official Academic Documents.** International students must possess undergraduate or graduate degree qualification equivalent to these required of US students.
 - International students who have completed a regionally accredited US undergraduate or graduate degree must request that an official transcript be mailed from their degree-granting school to the AU registrar. Transcript must be received by the AU registrar no later than 31 August of the academic year in which the student is attending. The student is responsible for honoring the costs incurred in providing academic documents. Mail transcripts to:

Air University Registrar
ATTN: Admissions
60 Shumacher Avenue
Maxwell AFB, AL 36112-6337

- International students who do not have a regionally accredited US bachelor's degree must submit their academic records from institutions outside the US for evaluation by an independent foreign credentials evaluation

service. The credentialing agency must be a member of the National Association of Credentials Evaluation Services (NACES) or the Association of International Credential Evaluators (AICE).

- Applications for foreign credential agencies are available from the AU registrar's office.
- An official copy of the evaluation must be mailed to the AU registrar's office.
- The student is responsible for honoring the costs incurred in providing academic documents.

• **Portfolio Option.**

- International students who do not have a US bachelor's degree or equivalent may submit a portfolio to be considered for admission to any AU degree program. Information regarding the portfolio process can be obtained from the AU registrar's office.
- Students must also submit their TOEFL result with the portfolio, if applicable. (See TOEFL information below.)

• **Test of English as a Foreign Language.**

- International students from countries where the official language is English are not required to take the TOEFL.
- International students who have completed a bachelor's or higher degree in the United States during the past four years are not required to take the TOEFL.
- International students from countries where the official language is not English must achieve an acceptable result on the TOEFL to be admitted to the master's degree programs.
- International students who have taken the TOEFL within the past two years and have met the AU minimum acceptable result or higher are not required to take the TOEFL. Student must provide an official copy of the TOEFL result to the AU registrar for admission.

- When taking the TOEFL, an individual must indicate Air University Institution Code 9069 for the official result to be sent to the AU registrar.
- The student is responsible for honoring the costs for the test and for travel to and from the test center.
- The minimum acceptable TOEFL result for admission in all AU degree programs is as follows:
 - 83 for the Internet-based test (iBT), or
 - 560 for the paper-based test (pBT).
- **TOEFL Appeal.** Students who have a TOEFL result between 75 and 82, and have completed a US bachelor's degree or equivalent, may submit a TOEFL Appeal to the AU registrar no later than 12 September of the year in which the student is attending. The TOEFL Appeal must include:
 - Student's TOEFL result, and
 - Academic documents.

AIR UNIVERSITY INSTITUTIONS

The Air University institutions include the School of Advanced Air and Space Studies, the Carl A. Spaatz Center for Officer Education, the Curtis E. LeMay Center for Doctrine Development and Education, the Jeanne M. Holm Center for Officer Accessions and Citizen Development, the Thomas N. Barnes Center for Enlisted Education, the Ira C. Eaker Center for Professional Development.

School of Advanced Air and Space Studies

Internet Address

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

Mission. *Produce strategists through advanced education in the art and science of air, space, and cyberspace power to defend the United States and protect its interests.*

Air University's School of Advanced Air and Space Studies (SAASS) is the US Air Force graduate school for airpower and space power strategists. A highly qualified and motivated faculty, a small and carefully selected student body, a coherent and challenging curriculum, outstanding educational and research resources, and a well-designed facility combine to produce tomorrow's senior military leaders who are experts in the employment of air and space forces.

Carl A. Spaatz Center for Officer Education

Internet Address

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

Mission. *The Spaatz Center for Officer Education develops leaders, spurs innovation, and nurtures partnerships to advance air, space, and cyberspace power. The Spaatz Center for Officer Education also ensures that each school, squadron, and center has the required support and resources to advance its education, research, outreach, support, and engagement opportunities appropriate to its missions.*

Named after the first chief of staff of the United States Air Force (USAF), the Spaatz Center develops and instructs the entire USAF continuum of officer professional military education.

It does this through its various organizations, which include the Air War College (AWC), Air Command and Staff College (ACSC), Squadron Officer College (SOC), International Officer School, Spaatz academic research centers, and the Education Support Squadron.

The academic research centers located within the Spaatz Center provide a focused capability that meets the requirements of Air University and an external sponsoring agency. Centers create professional military and continuing education curriculums and focused research on a subject of particular educational importance. The centers also enhance the prestige of Air University through their research and outreach programs within the larger military and academic communities.

Currently, the following centers support this mission: the Air Force Culture and Language Center (to include the Air Force Negotiation Center of Excellence), Air Force Counterproliferation Center, Air Force Public Affairs Center of Excellence, and Air Force Center for Strategy and Technology.

The Air Force Culture and Language Center is an institution designed to enhance cross-cultural and language competencies within the Air Force. The center functions as a primary source of expertise for conceptual tools to communicate, collaborate, build relations, negotiate, and influence across cultural barriers. Within the Culture and Language Center, one additional center focuses on a niche within the domain. The Air Force Negotiation Center of Excellence spearheads the development and application of negotiation, collaboration, and problem-solving skills as a core competency throughout the Air Force.

The Air Force Counterproliferation Center undertakes education and research, both within and external to Air University, that includes such topics as appropriate military and diplomatic strategy when confronting weapons of mass destruction (WMD) opponents, international nonproliferation diplomacy, nonproliferation and arms control treaty regimes, counter-terrorist activities, and deterrence of conflicts. The center also organizes and conducts the annual Air Force Combating WMD Conference. The center also publishes books and occasional papers on related issues.

The Air Force Public Affairs Center of Excellence provides education and training on effective strategic communication

and associated tactics, techniques, and procedures. The center is responsible for coordinating the instruction of strategic communication topics across professional military and continuing education courses and training programs. In addition, the center serves as the office of primary responsibility for strategic communication research and analysis. Staff members at the center serve as advisors in the development of strategic communication doctrine.

The Air Force Center for Strategy and Technology focuses on education, research, and publications that integrate technology into national strategy and policy. This center supports faculty and student research; publishes research through books, articles, and occasional papers; and engages in collaborative research with academic institutions around the world. The center is responsible for the development and execution of the annual Blue Horizons Study, directed by the AF chief of staff (CSAF). This study provides a 20- to 30-year strategic and technological estimate that feeds Air Force planning and programming efforts.

Air War College

Internet Address

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

Mission. *To prepare students to lead in a joint environment at the strategic level across the range of military operations; to develop cross-domain mastery of joint air, space, and cyberspace power and its strategic contributions to national security; and to advance innovative thought on national security, Department of Defense, and Air Force issues.*

The War Department established the Air War College in 1946 at Maxwell Field, AL, and the college has operated continuously except for a six-month period during the Korean conflict. An interesting trivia item is that no graduates of the first class were members of the US Air Force; the Air Force wasn't created until after that first Air War College class graduated in 1947.

To accomplish the AWC mission, students must 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 and multinational war fighting.

Air Command and Staff College

Internet Address

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

Mission. *Prepare field-grade officers to develop, employ, and command air, space, and cyberspace power in joint, multinational, and interagency operations.*

Air Command and Staff College (ACSC), the Air Force's intermediate PME institution, prepares field-grade officers of all services (primarily O-4s and O-4 selects), international officers, and US civilians for positions of higher responsibility within the military and other government arenas. Geared toward teaching the skills necessary to conduct air, space, and cyberspace 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 and 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 curriculum still focuses on expanding understanding of air, space, and cyberspace power and on increasing the number of midcareer officers. In 1962 the school became known by its current name, Air Command and Staff College.

ACSC is comprised of a command section, two academic directorates (Resident and Distance Learning), a support directorate (Mission Support), and the 21st Student Squadron.

Within the resident academic directorate, the curriculum is developed and delivered through three teaching departments—Department of Leadership and Strategy, Department of Warfighting, and the Department of International Security Studies. Within the distance learning academic directorate, the curriculum is developed and delivered through the Curriculum and Operations Departments. The two deans at ACSC—the dean of academic affairs (DE) and the dean of distance learning (DL) programs—provide academic leadership to the school's faculty and students. The DE, assisted by the associate dean for academic affairs and associate dean for operations, coordinates the integration of curriculum content and directs the planning and implementation of the academic program through the three teaching departments.

The dean of DL is responsible for planning, organizing, and delivering the college's distance learning program of instruction through two departments. The Curriculum Department develops courseware and provides instruction and guidance to students and online instructors, and the Operations Department receives, converts, and delivers curriculum through a spectrum of multimedia delivery methods.

The 21st Student Squadron's leadership consists of a squadron commander and four operations officers. This staff is responsible for the health, morale, and welfare of some 500 resident students and their families.

Air Command and Staff College Online Master's Program

Internet Address

<http://www.au.af.mil/au/dlmasters.asp>

In March 2006 the secretary and chief of staff of the Air Force authorized Air University to design, build, and launch an on-line master's program (OLMP). The program provides Air Force officers an educational opportunity to meet service needs while also accommodating today's high-operations tempo. The pro-

gram, launched in June 2007, is currently open to Air Force active duty, Guard, Reserve, and selected civil service employees. The OLMP is currently exceeding expectations across the board by creating quality educational opportunities for war fighters at home and abroad.

Squadron Officer College

Internet Address

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

Mission. *Develop company grade officers (CGO) as leaders of integrity ready to fly, fight, and win in air, space, and cyberspace.*

The Squadron Officer College (SOC) is chartered and resourced to educate CGOs in air, space, and cyberspace operations and the essentials of military leadership. Commissioned as an AU college in February 2000, SOC encompasses the Air and Space Basic Course (ASBC) and the Squadron Officer School (SOS) but also offers a leadership development program (LDP), a series of specially tailored online courses, and the leadership concentration for ACSC's distance learning offering.

SOC provides support to these programs through its senior staff, the Academic Affairs Directorate, and the Directorate of Mission Support. The dean of academic affairs develops and maintains curriculum; manages the day-to-day classroom schedules, evaluation procedures, and course surveys; executes advanced technology, simulations, and DL programs; and is responsible for initial and advanced faculty development. The Directorate of Mission Support oversees student support and associated processes; ensures maintenance of facilities, including extensive field leadership facilities, equipment and the infrastructure supporting SOC's physical fitness and military leadership obstacle courses; and supervises the distribution of equipment and supplies across the college.

International Officer School

Internet Address

<http://www.au.af.mil/au/spaatz/ios>

Mission. *Prepare international officers for resident PME; support international students attending AU courses and their families; and execute Air University's International Affairs Program.*

The International Officer School (IOS) is the lead-up course to prepare all international officers for attending Air War College (AWC), Air Command and Staff College (ACSC), and Squadron Officer College (SOC). With the help of IOS, they are able to hit the ground running when integrated into the academic culture with the US officers in each school.

Curtis E. LeMay Center for Doctrine Development and Education

Internet Address

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

Mission. *The LeMay Center develops war fighters for the Joint and Combined team through doctrine, education, and war gaming.*

Merging the Headquarters Air Force Doctrine Center (AFDC) and the College of Aerospace Doctrine, Research, and Education (CADRE) created the Curtis E. LeMay Doctrine Development and Education Center (the LeMay Center) on 2 August 2007. The center continues the traditions of the Air Corps Tactical School (ACTS), 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. Whereas such ACTS instructors as Gens Harold L. George, Haywood S. Hansell Jr., Claire L. Chennault, and George C. Kenney shaped doctrine and strategy in World War II, the center's staff is committed to

providing the Air Staff and the MAJCOMs with original thought and applications of air and space power in the modern world. Placing the AFDC and CADRE into the LeMay Center unites doctrine development with education, concept development, and evaluation. It also gives the Air Force, AETC, and Air University (AU) a central repository for the development of Air Force doctrine, concepts, and strategy.

The LeMay Center combines doctrine development, education, and war gaming into one integrated organization. The LeMay Center is responsible for the development and production of Air Force basic and operational doctrine, critical leadership input for joint and multinational doctrine development activities, doctrine education for the Air Force, and doctrine application within war games and simulations.

The center is administratively aligned under Air University and reports directly to the AU commander for doctrine professional continuing education (PCE) and for PME war gaming. It also serves as the executive agent to the CSAF for doctrine development. This unique mission organization and reporting hierarchy ensures that doctrine is produced with a clear connection into the USAF professional education system and the AF senior leadership. Not only is doctrine education in the classroom assured, but it can be effectively applied through war-gaming support also offered by the LeMay Center. The center provides

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

The LeMay Center resident curriculum offers eight specialized courses: the Joint Flag Officer Warfighting Course (JFOWC), the Joint Force Air Component Commander (JFACC) Course, the Combined Force Air Component Commander (CFACC) Course, the Senior Information Warfare Applications Course (SIWAC), the Senior Executive Service (SES) Seminar, the Joint

Air Operations Planning Course (JAOPC), the Contingency Wartime Planning Course (CWPC), and the Information Operations Fundamentals Applications Course (IOFAC).

These resident courses

- provide general and flag officer attendees the opportunity to participate in joint combat operation exercises;
- provide education and 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;
- offer USAF staff planners from staff sergeant through colonel an understanding of the 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.

The LeMay Center has four directorates: Warfighting Education directorate, Doctrine Development directorate, Warfighting Applications directorate, and Intelligence directorate.

Warfighting Education Directorate

Internet Address

<https://www.mil.maxwell.af.mil/au/lemay/main.asp>

<http://www.au.af.mil/au/lemay/main.htm>

The Warfighting Education Directorate conducts PCE courses to develop the judgment and skills required to employ or support airpower effectively in combat. The courses significantly contribute to the war-fighting capabilities of all US military forces.

At the senior-leader level, the directorate conducts the JFOWC, JFACC Course, CFACC Course, and Senior Joint Information Operations Applications Course (SJIOAC). 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 director-

ate conducts the Air Force Senior Executive Warfighter Perspective Seminar 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 directorate conducts the Cyberspace Operations Executive Course to introduce three- and four-star Air Force officers and their civilian equivalents to cyberspace operations.

Doctrine Development Directorate

Internet Address

<https://www.mil.maxwell.af.mil/au/lemay/>

The Doctrine Development Directorate researches, develops, produces, and disseminates basic and operational-level doctrine for the CSAF. Its mission is to lead the Air Force in basic and operational-level service, joint, and multinational doctrine development; to advocate Air Force doctrinal equities in joint and multinational publications and fora; and to provide doctrinal advice and solutions to shape Air Force senior leader decisions.

The directorate is comprised of Airmen from various backgrounds and training, bringing a breadth of experience to doctrine development. One third of the directorate is composed of civilian employees, providing depth of doctrinal knowledge. Directorate personnel are chartered by the CSAF to be his doctrinal voice and are directly responsible to the CSAF on all matters of basic and operational-level doctrine. This directorate supports the commander of the LeMay Center in his capacity as the CSAF's executive agent for doctrine. To accomplish these duties, the directorate established two divisions: Service Doctrine Development (SDD) and Joint Doctrine Development.

Service Doctrine Development Division. This division researches, develops, produces, and disseminates Air Force doctrine documents for the service. Service doctrine provides the foundation for what the Air Force takes to the joint doctrine development arena, providing the Air Force's best practices to drive joint doctrine. SDD is responsible for producing the service's capstone doctrine publications, Air Force Doctrine Document (AFDD) 1, *Air Force Basic Doctrine*, and AFDD 2, *Operations and Organization*. It also develops and produces doctrine

in air warfare; space operations; irregular warfare; agile combat support; information operations; air mobility; special operations; command and control; intelligence, surveillance, and reconnaissance (ISR); homeland operations; cyberspace operations; and nuclear operations.

Joint Doctrine Development Division. This division is the Air Force voice in the development of joint doctrine publications for the chairman of the Joint Chiefs of Staff (CJCS) and in the development of multinational doctrine publications for the North Atlantic Treaty Organization (NATO). The director for doctrine development is the Air Force chair at the Joint Doctrine Planning Conference. The division chief is the US head of delegation to the NATO Air Operations Working Group, NATO Air Operations Support Working Group, NATO Joint Identification Panel, NATO Joint Unmanned Aerial Vehicles Panel, and Air and Space Interoperability Council. Personnel research and present the consolidated Air Force position for the production of all joint publications and for the specific production of five joint publications for which the Air Force is the lead agent.

Additional Doctrine Development Directorate Activities.

In addition to producing service and joint doctrine as executive agent to the CSAF for doctrine, this directorate provides the subject matter experts to present briefings to general officers and SES civilians at courses presented by the LeMay Center/Warfighting Education (WE), along with pre-CAPSTONE courses, sister-service war colleges, and other far-reaching courses both within and outside the Air Force. It teaches doctrine development to foreign partners from around the globe and assists sister-service doctrine developers with their efforts. The course also provides doctrinal advice to commanders throughout the service, from numbered Air Force commanders to commanders of Air Force forces in joint task forces (JTF).

Warfighting Applications Directorate

Internet Address

<https://www.mil.maxwell.af.mil/au/lemay/index.asp>

In 1975 the Clements Blue-Ribbon Panel on Excellence in Professional Military Education cited a need for service schools

to emphasize warfighting and decision making in combat. In 1976 the Air Force 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, AL. When the Air Force Doctrine Center and the College of Aerospace Doctrine Research and Education (CADRE) merged to become the LeMay Center for Doctrine Development and Education, AFWI's Wargaming Directorate was renamed Warfighting Applications (WA) to reflect the new mission to develop, educate, and apply Air Force doctrine. WA supports a broad range of war games, electives, and events to meet the needs of the Air Force, DOD, and international sponsors.

Facility and Organization. WA 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 has moveable walls, can be configured to make 28 game rooms, and has two conference rooms—all with audio and video capabilities. WA has three divisions: Operations, Information Technology, and Technology.

The Wargaming Operations Division is responsible for the war-gaming life-cycle process, to include definition, testing/pre-play, preparation, execution, and post war-game analysis.

The Wargaming Information Technology Division is responsible for the IT support of all war-gaming events and other organizational needs.

The Wargaming Technology Division plans, develops, integrates, and maintains web-based, client-server, and stand-alone software on several hardware and software platforms in support of war-gaming events and other organizational needs. This division houses the specialists who acquire, operate, develop, and maintain the WA suite of models. Together, the suite of war-gaming models is called the Air Force Educational Wargaming Toolset (AFEWT).

AFEWT includes the following tools:

1. Simulated Warfare (SIMWAR) XXI is a joint, theater campaign-level, combat-simulation model. This tool allows students to simulate the air operations center (AOC) planning process by planning the next day's air tasking order (ATO), while simultaneously flying out the current ATO.

2. Rapid Scenario Generator is a scenario-building tool capable of rapidly building real-terrain and infrastructure-based scenarios for use in the SIMWAR XXI model.
3. Accelerated Combat Timeline (ACT) is an operational-level graphical user interface to the SIMWAR XXI model.
4. WebForces is an automated map display tool that allows viewers to see and move forces. This tool can interface with ACT and SIMWAR XXI and stand alone for manual war games.
5. Air Web Planner (AWP) is a web-based planning tool that allows the players to input the air campaign plans.
6. Wargame Interactive Support System Online is a multi-purpose tool that facilitates collaboration, reference libraries, requests for information, adjudication, posting documents, channeling communication, and electronic surveys.
7. Web Reports is a web-based reporting tool that provides results to the players on the previous day's adjudication as computed by SIMWAR XXI.
8. Bottom Line simulates the impact of national budget decisions on the state of the nation.

War Games and Simulation Exercises. In a typical year, WA plans, develops, and conducts approximately 17 war games (including three international war games conducted via foreign military sales) and exercises for over 5,625 participants. WA uses computers, simulation models, and seminars to address how military forces deploy, fight, and sustain combat. The institute provides a "laboratory environment" in which current and future commanders and their staffs are given the opportunity to study warfare realistically to identify problems in peacetime before they face them in combat.

WA conducts the following war games:

Joint Planning Exercise. The Joint Planning Exercise (JPEX) is the culminating event of the ACSC Joint Campaign Planning course. The primary focus of JPEX is to demonstrate how joint campaign planning requires the integration of leadership, critical thinking, and doctrine through the application of

operational art and design to attain unified action across the range of military operations. This gives the students the functional abilities to serve as planners on a joint staff. During JPEX students, as members of a joint planning cell, will develop and present mission analysis and commander's estimate and concept of operations briefings to their seminar directors. The concept of operations will serve as the combatant commander's direction to the air component commander to execute in the Joint Air and Space Exercise (JAEX).

Joint Air and Space Exercise. JAEX is the culminating event of the ACSC Joint Air and Space Operations Course. JAEX is designed to equip 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. For JAEX, students will role-play as members of a combined/joint force air component commander (C/JFACC) staff. Students will focus on the joint air estimate process, evaluating national and theater objectives and military courses of action (COA) to develop a joint air operations plan (JAOP). Students will also focus on C/JFACC guidance, apportionment, targeting, and development of master air attack plans.

Joint War Game. The Joint War Game (JWAR) is the culminating event for the Department of Joint Warfare Studies' (DEW) course structure. The primary purpose of the JWAR is to integrate the materials throughout the entire joint war-fighting curriculum. This exercise will serve as a culminating event where students will apply their knowledge of the joint force, joint planning, and joint air and space operations. The exercise is designed to emulate the fluid environment that exists within a joint air operations center and will require the students to demonstrate their critical thinking skills as they address a rapidly evolving problem focused on joint air operations supporting the joint force commander's requirements. To facilitate student adaptability to a rapidly evolving situation, an adjudication process will be employed to facilitate performance assessment to provide student feedback. There was no change to this year's scenario, and this war game is played at the unclassified level.

Joint Intermediate Planning Staff Exercise. The Joint Intermediate Planning Staff Exercise (JIPSE) focuses on collaborative planning at the JTF and component command levels, providing students from the colleges involved an opportunity to plan and role-play in selected representative staff groups. The exercise is designed to equip students to understand and appreciate the complex and time-critical operational processes that occur within the JTF and C/JAOC and between the air component and other functional components during planning of air and space operations. JIPSE demonstrates what air and space power and forces—using joint concepts and doctrine—bring to the fight at the operational level of war. It emphasizes the complexities of warfare through simulated JTF and C/JFACC activities. Student officers apply the basic concepts of campaign planning. This challenging environment requires officers to continually assess the effectiveness of their joint air operations plans and to modify them, if required. Students from ACSC, Army Command and General Staff College (CGSC), Navy College of Naval Warfare (CNW), and the Marine Training and Education Command (TECOM) are invited to participate in this joint exercise annually as part of their joint intermediate-level PME program. Army and Air Force highly qualified experts (HQE) participate in the exercise as JTF commanders. This war game is played at the unclassified level.

Theater Campaign Warfare. Theater Campaign Warfare (TCW) is a capstone war game sponsored by the School of Advanced Air and Space Studies (SAASS). Students from SAASS at Maxwell AFB, AL; the School of Advanced Military Studies (SAMS) at Fort Leavenworth, KS; the USN Maritime Advanced Warfighting School (MAWS) at Newport, RI; and the USMC School of Advanced Warfighting (SAW) at Quantico MCB, VA, all participate in the war game. TCW is designed to develop a greater cross-service appreciation of joint, strategic, and operational-level war-fighting issues. The game is a seminar-based educational war game designed to provide students an opportunity for synthesis through the application of service concepts in a joint environment about the nature and employment of military forces. Students evaluate the efficacy of their classroom concepts using the war game as one of the data points in their continuing education and develop a greater cross-service

appreciation of joint theater, strategic, and operational issues. The game consists of two separate worlds, each with four independent seminars, playing over five days. Game moves facilitate educational objectives by covering periods varying from a few days to several weeks. TCW is played at the unclassified level.

Air Sea Battle. Air Sea Battle (ASB) is a multi-event war game for the Grand Strategy Program (GSP) for AWC (as of December 2010). The primary purpose of the war game is to develop a “fresh look” at the ASB operational concepts. AWC students participate in a war game, in the format of a small group discussion, over a three-day period based on a WESTPAC (Western Pacific) scenario in the South China Sea. All monitoring, controlling, and evaluating of students during the war game is accomplished by AWC faculty. The second event is in support of the DOD “Net-Assessment” war game, which the GSP students travel to support.

Global Challenge. Global Challenge (GC) is the capstone war game of AWC’s academic year and includes the themes of leadership, doctrine, strategy, political/military affairs, joint/combined warfare, airpower, and technology. GC was previously known as Solo Challenge, but the name was changed in 2010 to acknowledge the worldwide nature of the war game. GC provides AWC students with the opportunity to demonstrate their ability to translate national-level decisions into strategic and operational-level action. During GC participants manage ongoing global crises and a homeland security scenario, while confronted with projected limits on force structure and overseas basing. This war game is conducted at the unclassified level and includes international officers.

Joint Land, Air, and Sea Strategy Exercise. Joint Land, Air, and Sea Strategy Exercise (JLASS-EX), is a computer-assisted, theater-level seminar war game. It is the only joint-sponsored war game conducted by the professional military education senior-level colleges. Its overall goal is to enhance joint PME through an examination of potential US military responses to regional crises. The primary focus is on joint and combined warfare conducted at the operational and strategic levels. Air War College, US Army War College, US Marine Corps War College, College of Naval Warfare, Naval War College, and Industrial College of the Armed Forces students make up the

Blue team, while AWC acts as the Southwest Asia area of responsibility (AOR) Red-team staff. Red teams for Pacific Command (PACOM) and Africa Command (AFRICOM) AORs come from sister-service college faculty members and the LeMay Center contract intelligence support personnel. Participants start with a crisis scenario that involves regional conflicts 10 years into the future. The distributive phase of the game takes place at the player and faculty home stations in December. The teams make inputs via a collaborative web site. World situation and specific scenario briefings establish the crisis at hand. The teams also identify national interests and objectives of all concerned nations and establish allied relationships. The teams then create a combined command and subordinate component command staff and develop a theater campaign plan. They establish their campaign strategy, evaluate enemy intent and capability, posture forces, and determine logistical requirements to sustain combat operations. With the completion of the campaign planning phase, participants assemble at the LeMay Center/WA in April and begin the war game. Force-on-force employment of player assets occurs through written move orders. Adjudication is then performed through a combined manual/computer analysis of alliance inputs. The war game continues for up to four additional moves, with game time intervals varying from days to several weeks or months. Ongoing intelligence and situation updates apprise participants of campaign performance.

Pegasus–Australia. Pegasus–Australia is an unclassified, computer-adjudicated, theater-level war game developed by the WA and used by the Australian Command and Staff College (ACSC). The simulation models the first days of war between two opposing alliances. The ACSC divides participants into Blue and Red teams that assume the role of the combined command staffs of the two opposing alliances. Approximately 60 participants are divided into Blue and Red syndicates and are pitted against each other. The game covers one day of pre-war maneuvering followed by four days of computer-adjudicated warfare. The game begins with the development of theater campaign plans by opposing syndicates. Assuming roles as commanders and their staffs, participants develop strategy, evaluate enemy intent and capability, posture forces, and determine logistical re-

quirements to sustain combat operations. Computer-generated map displays and web-based status reports provide intelligence support. Once the campaign plan is complete, participants move to the execution phase of the war game, making air, land, and sea order inputs on personal computers using AWP and WebForces software. Participants assign aircraft packages to accomplish offensive, defensive, interdiction, reconnaissance, airspace control, and support missions. They accomplish land and sea moves and also have the opportunity to task certain space-based reconnaissance assets. After players finish their moves at the end of the day, the SIMWAR XXI model adjudicates the inputs. Updated electronic map displays and web-based status reports provide battle damage assessment and current intelligence. Armed with the previous move's results, syndicates continue the game cycle by returning to the planning phase, where they either continue or modify their campaign plan and enter a new set of inputs, as they deem appropriate. After the last day of battle, syndicates debrief their campaign plans and provide insights into their successes and failures. Pegasus–Australia is typically conducted in the May–June time frame.

Pegasus–UK. Pegasus–UK (United Kingdom) is a computer-adjudicated, theater-level war game of the SIMWAR XXI series developed by WA for Britain's Joint Services Command and Staff College (JSCSC). The exercise models the first days of a notional war between two fictional alliances. The JSCSC directing staff divides the participants into Blue and Red syndicates (teams) that assume the role of the Combined Forces Command (CFC) staffs of the two opposing alliances. Approximately 100 participants divide into five Blue and five Red syndicates pitted against each other in simultaneous and independent games. The game covers one day of pre-war maneuvering followed by four days of computer-adjudicated warfare. The remainder of the week is similar to the Pegasus–Australia game. Pegasus–UK is typically conducted in the fall.

Pegasus–Netherlands. Pegasus–Netherlands is a computer-adjudicated, theater-level war game of the SIMWAR XXI series developed by WA for the Netherlands Defense College Joint Advanced Staff course. This is a two-week event starting with a review of joint air operations followed by a computer-based

simulation. The exercise models the first days of a notional war between two fictional opposing alliances. The Netherlands Defense College directing staff divides the participants into Blue and Red syndicates that assume the role of the CFC staffs of the two opposing alliances. Approximately 16 participants divide into Blue and Red syndicates pitted against each other. The game covers one day of pre-war maneuvering followed by three days of computer-adjudicated warfare. The students and staff participate in this war game at LeMay Center/WA in the summer.

JAGWAR/JAGGED SWORD. Judge Advocate General Wargame (JAGWAR) and JAGGED SWORD are computer assisted capstone war-game events for the Air Force Judge Advocate General's School (AFJAGS). JAGWAR supports GATEWAY, a three-week professional continuing education course for JAG Corps officers in the grade of major. GATEWAY is the first JAG Corps 21-era course and is designed to prepare students for leadership challenges that field grade judge advocates face at every level. The war game is designed to reinforce the concepts taught in the course by presenting a scenario highlighting front-burner legal issues and allowing each student to hone leadership, management, and communications skills. JAGGED SWORD supports the AFJAGS entry-level course, Judge Advocate Staff Officer's Course (JASOC). JASOC is an entry-level, AFSC awarding course with officers in the grade of lieutenant as the primary participants.

Future Capabilities Game. Futures Capabilities Game (Futures) is one of the CSAF's two Title X war games. Futures is a long-range strategic planning activity designed to compare alternative futures and force structures to support strategic planning inputs. The game influences (and is influenced by) the Air Force's other Title X war game, the Unified Engagement series. The insights gleaned from the game impact Air Force strategic planning, concept development, and force structure investment streams. As a long-range planning activity, Futures focuses on evaluating strengths and weaknesses of future concepts based on the Air Force vision and strategic plans and testing alternative force structures to help shape future investment strategies. AF/A8XC, in coordination with AF/A5XS, is responsible for game design and execution, and it is hosted at the AFWI.

Exercise in National Budget Priorities. The Comptroller School executes Exercise in National Budget Priorities (XNBP) several times each year. This is an unclassified, stand-alone, computerized executive planning exercise that addresses national budget priorities as impacted by presidential and cabinet-level decisions. This strategic-level exercise utilizes the Bottom-Line computer model, which analyzes presidential, economic, political, and military budget decisions and their impact on the state of the nation. Each game year provides a state-of-the-nation report, which is a compilation of social and economic indices including voter support, unemployment, gross national product, war risk, and inflation. The 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 shows how allocation of scarce resources to support those decisions affects the state of the nation. The Bottom-Line model resides on one compact disk and can be executed on any portable computer. XNBP is conducted as an independent three-hour game with each seminar acting as a team. The game represents a four-year presidential term, with participants making four moves in the form of constructing four annual budgets.

Intelligence Directorate

Internet Address

<https://www.mil.maxwell.af.mil/au/lemay/index.asp>

The Directorate of Intelligence (IN) delivers intelligence, surveillance, and reconnaissance (ISR) education throughout the AU continuum. Its goal is to educate AU resident and distance-learning students and develop faculty on the core tenets of ISR operations in the air, space, and cyberspace domains, thereby preparing them to create innovative solutions to operational and strategic issues. IN personnel focus on ISR doctrine, policy, programs, strategy, employment, and vision for current and future ISR operations and issues essential to leaders' understanding of the operational environment. IN develops ISR curriculum guidance for AU schools, centers, and educational organizations. This directorate is the Air University ISR curriculum chair re-

sponsible for overseeing intelligence and ISR language in key guidance documents and ensuring the appropriate issues are taught at all levels of Air University. The IN coordinates the research and publication of materials on key ISR issues facing the Air Force, joint war fighter, and nation. As the AU senior intelligence officer, the IN supports the AU commander and AU colleges and centers by providing ISR expertise and guidance and by coordinating guest speakers throughout the year. The senior intelligence officer maintains regular liaison with the Air Force A2 and other senior members of the national intelligence community. The IN coordinates ISR issues with senior leaders and students assigned to AU. The IN conducts the following educational activities:

- teaches ISR electives at AWC and ACSC, emphasizing the full integration of ISR operations into military operations;
- instructs ISR research seminars at ACSC by allowing students to investigate ISR issues in depth;
- provides lectures on ISR doctrine and operations at the Spaatz Center, the Holm Center, and the LeMay Center;
- provides lectures on ISR doctrine and operations within AU distance learning curricula; and
- leads the AU intelligence mentoring and cross-talk program, consisting of over 100 ISR professionals assigned to AU.

The LeMay Center/Intelligence Security is the AU Special Security Office (SSO). The SSO controls, safeguards, and ensures proper use of sensitive compartmented information (SCI), manages over 1,300 SCI billets, and provides physical security for four temporary secure working areas and three accredited SCI facilities. The SSO also operates AU's SCI communications center, maintaining the Joint Worldwide Intelligence Communications System for users at Maxwell-Gunter AFB, AL.

Jeanne M. Holm Center for Officer Accessions and Citizen Development

Internet Address

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

Mission. *Develop the best Air Force leaders and citizens of character who are dedicated to serving the nation.*

In 1995 the Air University Board of Visitors 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).

The Jeanne M. Holm Center for Officer Accessions and Citizen Development (the Holm Center) was formally established at Maxwell AFB, AL, in June 2008. The Holm Center is named for the first female Air Force officer to achieve general officer rank. Four distinct organizations make up the Holm Center: AFROTC, OTS, Civil Air Patrol-USAF (CAP-USAF), and the Air Force Junior Reserve Officer Training Corps (AFJROTC). AFROTC, located at 144 host universities and at more than 1,000 associated colleges and universities, is designed to educate, train, and commission officers for the US Air Force. The AFROTC program is a four-year university-level program that presently commissions approximately 2,000 new Air Force officers each year. OTS, located at Maxwell AFB, is the Air Force's flexible officer commissioning program and is capable of increasing its enrollment rapidly to meet changing Air Force officer-accession requirements. Currently, OTS Basic Officer Training (BOT) produces approximately 600 new Air Force officers per year (500 active duty and 100 Air Force Reserve), the Academy of Military Science (AMS) produces about 500 new Air National Guard (ANG) officers per year, and OTS Commissioned Officer Training (COT) trains about 1,400 newly commissioned medi-

cal professional, chaplain, and judge advocate general officers for active duty, Air Force Reserve (AFRES), and Air National Guard (ANG) assignments. AFROTC and OTS taken together produce over 70 percent of the current Air Force requirement for newly commissioned line officers and train nearly all of the newly commissioned nonline officers. The Holm Center also directs the Air Force's high school citizenship training program: the AFJROTC and the Civil Air Patrol (CAP) cadet program. The AFJROTC program, located at 884 high schools worldwide, is a citizenship-development program with a current enrollment of about 119,000 cadets. In June 2009 the Holm Center added Headquarters CAP-USAF, which acts as a liaison providing assistance and oversight for the CAP in its role as the Air Force's official auxiliary. The CAP's 61,000 senior and cadet members operate a fleet of 550 aircraft, perform emergency services, and provide cadet program activities and aerospace education support for federal, state, and local customers. As of fiscal year 2010, the civilian training program Civilian Acculturation and Leadership Training (CALT) became a course of the Holm Center. Nearly 300 CALT graduates will complete the course each year.

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

- a single focal point for AETC's officer accessions,
- centralized support and curriculum development,
- one organization to commission and train over 70 percent of Air Force line officers, 100 percent of new Air Force Reserve and Air National Guard lieutenants, and nearly 100 percent of nonline (medical professionals and chaplains) and legal officers, and
- a method to smooth production flow between AFROTC and OTS.

Thomas N. Barnes Center for Enlisted Education

Internet Address

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

Mission. *Train, educate, and graduate America's enlisted Airmen in skills and competencies that enhance their ability to accomplish the Air Force mission.*

The Thomas N. Barnes Center for Enlisted Education was activated in July 2008. The Barnes Center provides degree and professional development education opportunities to more than 300,000 enlisted Airmen each year. The center provides oversight and direction for eight enlisted academic program areas. Educational programs organized under the Barnes Center for Enlisted Education are affiliated through the Community College of the Air Force (CCAF), which is accredited through Air University by the Commission on Colleges of the Southern Association of Colleges and Schools (SACS) to award the associate degree.

The CCAF provides associate in applied science degrees and other academic credentials that enhance mission readiness, contribute to recruiting, assist in retention, support the career transition of Air Force enlisted members, and facilitate enlisted members in completing their bachelor's degrees.

Enlisted professional military education (EPME) programs are managed through the center's dean of academic affairs. Academic Affairs is responsible for the development and standardization of four resident EPME programs and three distance learning programs encompassing all levels in the continuum of enlisted leadership development. Academic Affairs is also responsible for faculty and staff development for personnel assigned to EPME programs AF-wide. More than 50,000 enlisted Airmen complete EPME programs each year.

The Airman Leadership School (ALS) is the first level of the EPME continuum and prepares senior Airmen to be professional, war-fighting Airmen who can supervise and lead Air Force work teams to support the employment of air, space, and

cyberspace power. Currently, there are 68 ALS programs worldwide. ALS is also available via distance learning (DL).

The Noncommissioned Officer Academy (NCOA) is the second level of enlisted PME and prepares technical sergeants to be professional, war-fighting Airmen who can manage and lead Air Force units in the employment of air, space, and cyberspace power. Currently, there are 11 NCOAs worldwide with a DL option.

The Air Force Senior Noncommissioned Officer Academy (SNCOA) is the third level of enlisted PME. SNCOA prepares senior noncommissioned officers to lead the enlisted force in the employment of air, space, and cyberspace power in support of US national security objectives. There is a single resident SNCOA located at the Maxwell-Gunter Annex, with a DL option.

The Chief Master Sergeant Leadership Course (CLC) is the culminating level of enlisted PME. It provides chief master sergeants a strategic perspective in their role as senior enlisted leaders. The CLC is an in-residence only program graduating some 600 chief master sergeants annually.

In addition to the above EPME programs, the Barnes Center also provides oversight to the Air Force First Sergeant Academy (FSA). The FSA—a professional continuing education program—educates, trains, and prepares select senior noncommissioned officers to serve as advisors to commanders on issues that impact Airmen in successfully accomplishing the Air Force mission.

The Barnes Center is also home to the Air Force Enlisted Heritage Research Institute (EHRI). EHRI is dedicated to preserving the rich and dramatic heritage and tradition of the enlisted corps of the US Air Force dating back to the US Army Aeronautical Division, Army Air Service, Army Air Corps, and Army Air Forces.

Ira C. Eaker Center for Professional Development

Internet Address

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

Mission. *Provide the highest-quality multidisciplined professional continuing education and technical training to 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 Center for Professional Development to honor General Eaker's significant contributions to the advancement of aviation, the Air Force, and the continuing professional development of its members.

The Eaker Center umbrella spans five schools: Commanders' Professional Development School, Air Force Human Resource Management School, Defense Financial Management and Comptroller School, the USAF Chaplain Corps College, and the National Security Space Institute.

AIR UNIVERSITY GRADUATE PROGRAMS

This section includes degree programs offered by Air University and the description of each.

- Master of Philosophy in Military Strategy
 - School of Advanced Air and Space Studies (SAASS)
- Doctorate of Philosophy in Military Strategy
 - School of Advanced Air and Space Studies (SAASS)
- Master of Strategic Studies
 - Air War College (AWC)
- Master of Military Operational Art and Science
 - Air Command and Staff College (ACSC)
- Master of Science in Flight Test Engineering
 - USAF Test Pilot School
- Air Force Institute of Technology

Master of Philosophy in Military Strategy

Doctorate of Philosophy in Military Strategy

School of Advanced Air and Space Studies

Internet Address

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

Mission. *Educate strategists for the Air Force and the nation.*

The mission of the School of Advanced Air and Space Studies (SAASS) is to educate strategists for the Air Force and the nation. The school represents the leading edge of air and space strategy. SAASS was given authority by Congress in 1994 to award a master of airpower art and science degree. It was accredited by the Southern Association of Colleges and Schools (SACS) in 1999. In December 2004 SACS accredited Air University, with SAASS as one of its master's-degree-granting programs. In 2010 SACS gave preliminary approval to begin admitting students for a doctor of philosophy degree in strategic studies. The student body is made up of intermediate service school graduates with proven ability to handle the rigorous, 11-month SAASS curriculum and includes Air Force officers, sister-service officers (Army, Navy, and Marine Corps), USAF Reserve or Guard officers, and international officers (as invited by the CSAF). The school is authorized 16 full-time PhD faculty (nine civilian and seven military), a visiting professor, and an Air National Guard faculty member.

Curriculum. The SAASS curriculum is an intensive 50-week program. The primary instructional forum is the graduate colloquium, which facilitates maximum interaction between students and the expert faculty. Class size is limited to 45 AF of-

ficers, five joint-service officers from the Army, Navy, and Marines, three officers from the Air Reserve Component, and several officers from closely allied nations upon invitation from the chief of staff, United States Air Force. Total enrollment will not exceed 60 students. SAASS creates warrior-scholars who have a superior ability to develop, evaluate, and employ airpower as a component of military force in support of state objectives. Upon completion of all requirements and with faculty recommendation, graduates receive a master of airpower art and science degree.

Learning Outcomes. The SAASS curriculum is designed to accomplish two major objectives.

- Stimulate the student's ability to *think critically* about the relationship of military force to statecraft resulting from
 - a thorough evaluation of military and airpower theories, and
 - a thorough evaluation of the reality of military experience, resulting in
 - a reasoned synthesis of theory and experience, the articulation of which informs the question of how modern military force and its airpower component can best be applied across the spectrum of conflict.
- Enable the student's ability to *argue effectively and responsibly* about military strategy using evidence and logic resulting from experience in
 - introducing and defending propositions in a graduate colloquium environment,
 - composing interpretive arguments in prose that meet accepted publication standards, and
 - reducing complex formal arguments to comprehensible briefings.

Faculty. 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.

Duration. SAASS is an 11-month, follow-on school for selected graduates of intermediate-level DOD and international PME schools.

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

Admission Requirements. Admission to SAASS is highly competitive. Those wishing to be admitted must formally apply while or after attending an intermediate development education program. The application process includes a requirement to write an essay on a subject selected by the commandant. 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 3.25 or higher on a 4.0 point scale. The Air Force Institute of Technology (AFIT) verifies academic qualifications for applicants attending non-degree-granting intermediate residence programs. A central selection board convened at AFPC makes the final admission selections among qualified applicants.

International students must be native English speakers or score in the 95th percentile of the Test of English as a Foreign Language (TOEFL) within the three years before entering SAASS. Non-native English speakers must have attended an English-speaking, residence, intermediate developmental education program, preferably Air Command and Staff College. Those attending ACSC must attend the International Officer School prep course. Those entering without having attended ACSC must have attended an English-speaking intermediate program in residence but will forego the prep course due to conflicts with the SAASS course schedule. International students should possess undergraduate or graduate-degree qualifications equivalent to those required of US students.

Graduation Requirements. To graduate with a master of philosophy in military strategy degree, a student must

- achieve a weighted grade point average for all letter-graded courses of 3.0 or higher;
- achieve a “pass” grade for all courses graded “pass/fail”;
- 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
- complete an oral comprehensive examination conducted by a faculty board with a grade of “B” or higher.

To graduate with a “certificate” in military strategy, a student must

- achieve a weighted grade point average for all letter-graded courses of 2.5 or higher;
- achieve a “pass” grade in all courses graded “pass/fail”;
- prepare a thesis based on original research that meets generally accepted standards of research, analysis, and expression for Air Force staff work; and
- complete an oral comprehensive examination conducted by a faculty board with a grade of “B-” or higher.

Air University Doctoral Program

SAASS is the foundation for an Air University doctorate of philosophy in military strategy. Successful completion of the SAASS program at the standards required for the master of philosophy in military strategy degree is necessary, but not sufficient, for the PhD program. Key components of the PhD program occur before, during, and after the year at SAASS, which runs from early July to mid-June.

Admission Requirements. In addition to completing the SAASS master of philosophy in military strategy, students must (parenthetical expressions denote when during the year at SAASS these events occur):

1. Provide a letter of application for admission with a dissertation topic (early April).
2. Earn a cumulative GPA of 3.7 or higher (throughout the SAASS year).
3. Have earned 14 semester hours of graduate credit in a field related to strategy or security studies from an accredited institution (before attending SAASS).
4. Complete the Graduate Record Exam (GRE) within the five years before entering SAASS or while at SAASS and prior to the written qualifying examination (early April at the latest).
5. Complete a written qualifying examination in the fields of theory, military practice, and strategic synthesis to an A-standard (early April).
6. Complete an oral comprehensive examination to an A-standard (early June).
7. Complete a thesis that meets standards expressed for the master of philosophy in military strategy and also indicates ability to (a) research a dissertation over the next three to seven years and (b) compose the findings into a publishable manuscript (throughout the SAASS year).
8. Be recommended by the SAASS PhD Selection Committee for admission into the SAASS PhD program (late April).

Program-Level Learning Outcomes. Through a series of research papers, oral arguments, comprehensive written and oral exams, and a dissertation, graduates will

- demonstrate the ability to think critically about the relationship of military force to statecraft,
- articulate a thorough understanding of military history and military, airpower, and political theories and their modern application to air, space, and cyberspace power,
- articulate a thorough understanding of military history and military, airpower, and political theories and their

modern application as a strategic instrument of national policy,

- articulate, using a reasoned synthesis of theory and experience, how modern military force and its airpower component can best be applied across the spectrum of conflict, and
- argue effectively and responsibly about military strategy using evidence and logic.

Post-SAASS PhD Activity. PhD candidates (those who have completed all but dissertation [ABD]) will form a committee, with the chairman normally being a long-term SAASS faculty member. The chairman will aid in finding additional committee members suitable for the proposed topic. One committee member normally will be from outside of SAASS and Air University. Candidates normally will have seven years from SAASS graduation to write and defend their dissertation. During that time SAASS will fund research as candidates serve in post-SAASS duty assignments. Active-duty Air Force candidates may be awarded a Stephen R. Lorenz Fellowship, from three to five years after SAASS graduation. The fellowship is one year in duration for the research and composition of a PhD dissertation and holds equivalency for in-residence senior developmental education. The Lorenz fellowship is an aid to, but not a requirement for, completion of the dissertation.

Degree Requirements. To graduate with a doctor of philosophy in military strategy, a student must research, write, and defend a publishable dissertation on a subject related to strategy or military security studies that presents original research, higher-level critical thinking, and interpretation to the fields of strategy and/or military security studies. Normally, the dissertation must be completed within seven years of graduation from the SAASS residence program.

**Curriculum Summary
(Not listed in order of presentation)**

Course Title	Semester Hours
SAASS 600 Foundations of Military Theory	4
SAASS 601 Foundations of Strategy	3
SAASS 627 History of Airpower I	4
SAASS 628 History of Airpower II	4
SAASS 632 Strategy and Coercion	4
SAASS 643 Strategy and Campaign Planning	3
SAASS 644 Irregular Warfare and Terrorism	3
SAASS 660 Technology and Military Innovation	3
SAASS 665 Space Power	3
SAASS 667 Information and Cyber Power	3
SAASS 670 Contemporary Defense Policy	3
SAASS 690 Thesis	6
SAASS 699 Comprehensive Examination	3
Total	46

Course Descriptions

**SAASS 600 Foundations of
Military Theory**

4 semester 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 Foundations of Strategy

3 semester hours

This is a “tools” course that provides a background and understanding of decision-making theories and strategy. 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 History of Airpower I **4 semester hours**

This course examines the historical development of air and space power in terms of organizations, technology, doctrine, and application. It provides an experiential database required for students to evaluate the theory and practice of airpower. Theories of Giulio Douhet, Hugh M. Trenchard, Billy Mitchell, Alexander P. de Seversky, and Sir John C. Slessor, among others, are studied in detail. The transition point to the second course in the sequence (History of Airpower II) is governed by the staff ride, a field trip to the locations where the historical events occurred. For this year the staff ride will explore airpower in France surrounding the Normandy invasion during World War II. The staff ride will also include a visit to the Verdun battlefield of World War I, which many consider to be the cradle of modern airpower. Hence, the history sequence will break with the end of World War II.

SAASS 628 History of Airpower II **4 semester hours**

This course analyzes the development of air and space power theory and history from the end of World War II to the present. It examines the theories of John Warden and others as well as 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 Strategy and Coercion **4 semester hours**

This course examines contemporary theories of international politics and the role of force in international relations. It focuses on deterrence and compellence; 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.

SAASS 643 Strategy and Campaign Planning **3 semester hours**

This course examines both the substance and process for making strategy and applies it to a real-world situation through

a war game. The military decision-making process receives a thorough review, as does the process of formulating commander's intent and translating that to a campaign plan. The unique approach to campaign planning taken by the different services receives treatment. The joint war game includes participants from other advanced study groups—Army, Navy, and Marine. The course includes seminar sessions with Air Force senior mentors to clarify course concepts in the context of current planning and operations.

**SAASS 644 Irregular Warfare
and Terrorism**

3 semester 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 Salafist jihad” of radical Islam also receives treatment.

**SAASS 660 Technology and
Military Innovation**

3 semester hours

This course focuses on the theory and history of technological development and its impact on innovation in military affairs. The course attempts to develop habits of mind and patterns of inquiry that inform successful military innovation. Theories of technological determinism, social construction, and heterogeneous engineering form the basis of inquiry.

SAASS 665 Space Power

3 semester hours

This course examines the development of military space operations, organizations, strategy, and policy. It explores the contentious issues surrounding space in modern warfare and deals explicitly with weaponization as well as the organization of space forces in the Department of Defense.

**SAASS 667 Information and
Cyber Power**

3 semester hours

This course defines the cyber domain and explores networks, intelligence, influence operations, and the paramount role of

information in modern warfare. The history of computers and network development as well as the implications for terrorism receive treatment.

**SAASS 670 Contemporary
Defense Policy**

3 semester 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 690 Thesis

6 semester 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 50- to 100-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 semester 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. The interrelationship among courses and the embedded material is often a prominent feature of the examination.

Master of Strategic Studies and Diploma Program

Air War College

Internet address

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

Mission. *Prepare students to lead in a joint, interagency, and multinational environment at the strategic level across the range of military operations; develop cross-domain mastery of joint air, space, and cyberspace power and its strategic contributions to national security; and advance innovative thought on national security, Department of Defense, and Air Force issues.*

The War Department established the Air War College (AWC) in 1946 at Maxwell Field, AL, and the college has operated continuously except for a six-month period 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, space, and cyberspace and its application in joint, interagency, and multinational war fighting.

AWC is comprised of a command section, one academic directorate (Academic Affairs), and one support directorate (Student Operations). Within Academic Affairs, the residence program is developed and delivered through three departments—the Department of Strategy, the Department of Leadership and War Fighting, and the Department of International Security Studies. These three departments also develop nonresidence curriculum.

Curriculum. The AWC resident program class membership includes officers from each US military service, civilian employ-

ees of federal government agencies, and officers from the international community.

US students will be dually enrolled in the AWC senior-level professional military education (PME) program and the AU master of strategic studies degree program and, therefore, must meet admission requirements for the master of strategic studies degree. The AWC PME program is accredited for joint professional military education (JPME) Phase II as defined for senior-level colleges in the Chairman of the Joint Chiefs of Staff Instruction (CJCSI) 1800.01D, *Officer Professional Military Education Policy*. International fellows who qualify for entry in the AWC program are enrolled in the AWC senior-level PME program and may choose to apply for admission to the master of strategic studies degree program.

Faculty. Air War College's unique mission requires a distinctive mix of faculty qualifications and credentials. Traditional civilian academics provide the depth and breadth of subject matter expertise to guarantee the academic rigor of the college's offerings while simultaneously ensuring adherence to validated educational theory and practice. Military officers contribute unparalleled currency and expertise in the operations topics critical to the college's success.

Learning Outcomes. AWC has adopted five program learning outcomes specific to the five core-curriculum areas designated in the Air University Continuum of Education Strategic Guidance Learning Areas (LA) noted after each outcome. AWC produces graduates who

- lead in a joint environment at the strategic level across the range of military operations (LA1-Profession of Arms),
- make sound judgments on the cross-domain use of joint air, space, and cyberspace power to maintain national security (LA2-Warfare Studies),
- exercise transformational leadership at group/wing command and above levels in service, joint, and coalition settings (LA3-Leadership Studies),

- advance innovative thought on national security, Department of Defense, and Air Force issues (LA4-International Security Studies), and
- communicate complex information in a clear, concise, and logical manner in both written and oral formats. (LA5-Communication Studies).

Duration. The resident program consists of 10 months of graduate-level study. As the senior Air Force PME school, AWC annually educates about 240 resident students from all US military services, federal agencies, and 45 other nations.

Eligibility. Lieutenant colonels and colonels or the equivalent in sister-service 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 Reserve (AFRES) officers, 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. Reference AFI 36-2301, *Professional Military Education*, and the Education and Training Course Announcements (ETCA) web site at <https://etca.randolph.af.mil> for additional information.

Degree Admission Requirements.

- US Students. Sister-service and civilian students provide the AU Registrar's Office with an official undergraduate transcript. Students must request this transcript directly from the college/university of the earned degree and have that institution forward it to the AU Registrar's Office.
- International Fellows. To be admitted to the master of strategic studies degree program, selected individuals must (1) present proof of academic capability by either holding a qualifying undergraduate degree (US bachelor's degree or its equivalent) or meet academic credentials admission requirements through the portfolio admission process; (2) meet the AU score standards for the Internet-Based Test (iBT) or Paper-Based Test (pBT) of the Test of English as a

Foreign Language (TOEFL) unless from an English-speaking country; and (3) complete the TOEFL for scores to be submitted to the AU Registrar's Office in accordance with AU deadlines.

Graduation Requirements. Students fully admitted to the degree program must complete the AWC resident program depicted in the curriculum summary below. They must achieve a grade of "C" or higher on each academic course with an overall grade point average of at least 3.00 on a 4.00 scale, achieve a "pass" in the war game, and fully participate in the National Security Forum and Distinguished Lecture Series.

Resident Diploma. International fellows who do not meet the admission requirements for the degree program are, on a case-by-case basis, allowed to attend AWC and will, upon graduation, receive the Air War College Resident Diploma but will not be awarded the master's degree. Students may not opt out of the master's degree program after admission. Students in resident diploma status cannot be considered for the degree once diploma status is established.

International fellows receiving the diploma participate in core (6200–6800 series) and elective courses, the Global Challenge War Game, the National Security Forum, and the Distinguished Lecture Series. Students earning the diploma may enroll in the research course. Core courses completed for the diploma are graded on a pass/fail basis; elective courses are taken in an audit status.

Curriculum Summary

Course Title	Semester Hours
EL 6000 Electives	4
RES 6100 Research	5
LD 6200 Joint Strategic Leadership	3
NSDM 6300 National Security and Decision Making	3
FS 6400 Foundations of Strategy	5
WAR 6500 War Fighting	6
RCS 6600 Regional and Cultural Studies	4
GS 6700 Global Security	3
WG 6800 Global Challenge War Game (pass/fail)	3
Total	36

Note. All courses must be taken in residence at AWC. Courses taken in the distance learning program may not be used to satisfy course requirements of the resident master's degree or diploma.

Grand Strategy Program. The Grand Strategy Program (GSP) is an intense course of study for selected students seeking a deeper understanding of the development and implementation of grand strategy than can be attained through the regular curriculum. The program examines the historical practice of the strategic art, the challenges of leadership and innovation at the strategic level, the relationship between the military instrument of power and national political objectives, and the interplay of global and regional security trends. Those selected for this program must be degree-eligible students and must complete all courses required for the master of strategic studies. LD 6200-G, NSDM 6300-G, WAR 6500-G, GS 6700-G, and WG 6800-G are enhanced versions of the regular courses. The descriptions for the GSP core courses follow the regular course descriptions below.

Course Descriptions

The AWC resident curriculum includes the core curriculum and an elective program. The core curriculum consists of four major areas: leadership and ethics, international security studies, national and military strategy, and joint war fighting. The

AWC resident curriculum consists of the following course offerings by the dean of resident programs and the Departments of Strategy, Leadership and War Fighting, and International Security Studies.

RES 6100 Research

5 Semester Hours

The research requirement allows students to perform in-depth critical analysis on a subject of US national security interest. The research process provides the opportunity to improve student argumentation and expression skills while creating products that address strategic and operational issues and topics vital to the national security community and its senior leadership. For successful completion of the research course requirement, students must produce a professional studies paper (PSP) that does not exceed 5,000 words or approximately 20 pages in length. Most research will be conducted as an individual effort, but the AWC may offer selected students the opportunity to complete this requirement via a faculty-led group research project. Resident diploma pass/fail grade status for this course will be coded as “-P” after the course number.

LD 6200 Joint Strategic Leadership **3 Semester Hours**

The Joint Strategic Leadership (JSL) course introduces and develops the concepts and skills required of professional leadership through an examination of responsible command, leadership, and management practices. Successful leadership at the strategic level in today’s environment calls for unique sets of knowledge, skills, and abilities. The course facilitates these objectives through thoughtful reflection, critical assessment, creative thinking, and consideration of the issues found in the current volatile, uncertain, complex, and ambiguous environment. At the conclusion of the course, the students will better understand the role of leaders as change agents for their organizations and the expanding challenges of leading at the strategic level. Resident diploma pass/fail grade status for this course will be coded as “-P” after the course number.

LD 6200-G Joint Strategic Leadership (GSP)

JSL I - Strategic Thinking. This directed-reading course introduces students to several influential arguments regarding thinking and decision making at the strategic level. Specifically, students will read three influential studies examining the use of historical analogies by decision makers, the impact of complexity in international relations, and the difficulty of predicting sudden and significant changes in the international environment.

JSL II - Advanced Strategic Leadership. The Advanced Strategic Leadership course evaluates the skills needed to lead in a joint, intergovernmental, interagency, and multinational strategic environment. It focuses in particular on the complexities and unique challenges involved in leadership at the senior level. Through a series of historical and contemporary case studies, students examine senior leader decision making, the impact of ethics on senior leadership, the role of the senior leader as an agent of organizational transformation and change, failures in leadership, and leadership in extremis.

NSDM 6300 National Security and Decision Making

3 Semester Hours

The National Security and Decision Making (NSDM) course assesses the context and processes for developing US security strategy and policy as well as the use of the national instruments of power in support of that policy and strategy. The context assessment encompasses the overarching political and economic currents that influence global, regional, and national security environments. The course assesses the influence of various institutions and factors on the national security decision-making process, including individual psychology, bureaucratic politics, Congress and the presidency, interest groups, public opinion, think tanks, civil-military relations, intelligence, and the interagency process. The course synthesizes context and processes by analyzing the politics of planning, developing, and acquiring military forces. To enhance the practical elements of the curriculum, the course includes instructional periods that incorporate State Department members in the seminar. Resi-

dent diploma pass/fail grade status for this course will be coded as “-P” after the course number.

NSDM 6300-G National Security and Decision Making (GSP)

National Security Policy. This course examines the context and processes for the development of American national security strategy and policy and the use of the nation’s instruments of power in support of that strategy and policy. It begins with an examination of the history of American national security strategy and contemporary debates regarding the future orientation of this strategy. It then assesses the influence of various institutions and factors, such as Congress, government agencies, interest groups, the media, and public opinion on the national security decision-making process. To enhance the practical elements of the curriculum, the course includes a trip to Washington, DC, involving visits to government institutions and agencies as well as nongovernmental entities involved in the development of American national security policy.

FS 6400 Foundations of Strategy 5 Semester Hours

The Foundations of Strategy (FS) course is designed to develop senior leaders who can think incisively about, develop, and implement strategy at the highest levels of war in the context of national policy objectives and available resources; work comfortably while considering a broad range of strategic issues which constantly change depending upon a range of circumstances at the local, national, and international level; and work effectively in a joint and multinational environment. The course pays special attention to strategy development for the venues of air and space and to the impact of airpower on national and military strategy. The course uses seminar discussions, readings, lectures, case studies, practical exercises, and student-written (and briefing) products to facilitate the evaluation of various themes such as the challenges of strategy development, implementation, and analysis; the influence of politics across the full spectrum of warfare; the importance of local circumstances; the challenges of converting military victory into political success; the challenges of coalition warfare; and the chal-

lenges of warfare in an age of information and globalization. The course also serves as the foundation for further study in other resident courses that examine the national security decision-making process and the application of military power as a means to attain national objectives. Resident diploma pass/fail grade status for this course will be coded as “-P” after the course number.

WAR 6500 War Fighting

6 Semester Hours

The Department of Leadership and War Fighting course develops senior leaders with the skills to plan, deploy, employ, and control US and multinational forces throughout the range of military operations with an emphasis on air, space, and cyber space forces as they contribute to joint, multinational, and inter-agency operations. During the war-fighting curriculum, students will synthesize and evaluate current and emerging joint war-fighting/enabling capabilities with special emphasis on the employment and sustainment of air, space, and cyberspace forces in a joint, interagency, and multinational military environment. The course analyzes how weapons of mass destruction/effects, information operations (IO), cyberspace operations, security, stability, transition, and reconstitution (SSTR), joint intelligence, joint logistics, and strategic communications are integrated to support the national military and national security strategies across the spectrum of national security threats.

Additionally, students analyze the concepts of theater campaign plans, design, and the joint operation planning process through which combatant commanders set the military conditions for attaining national and coalition objectives as both a supported and supporting instrument of power. The intent is to prepare each AWC student for agile, proactive, and future-focused national security planning. Resident diploma pass/fail grade status for this course will be coded as “-P” after the course number.

WAR 6500-G War Fighting (GSP)

War Fighting I - Campaign Design. The Campaign Design course evaluates the development of theater strategies, campaign plans, and their execution in the contemporary operating

environment. It also assesses the integration of joint, inter-agency, and multinational capabilities, as well as the joint air domain in contemporary campaign planning and execution. The course consists of an in-depth case study of Operations Enduring Freedom and Iraqi Freedom, evaluating each phase of these campaigns chronologically. Evaluation of these campaigns includes an assessment of the application of joint, service, and interagency doctrines and capabilities. Focus is on the strategic and operational levels of war. The course emphasizes a book-based approach in which students read most or all of a number of contemporary books on the wars in Iraq and Afghanistan. The course concludes with a student-led Afghanistan campaign assessment, based on the current situation, and formulation of a campaign design that achieves US strategic objectives.

War Fighting II - Practicum Exercises. Students participate in three practicum exercises during the year, which consider three different aspects of a hypothetical conflict scenario. Each exercise requires students to analyze a particular military or diplomatic problem and to devise a solution in response. The practicum exercises prepare students for the capstone war-gaming exercise at the end of the academic year.

RCS 6600 Regional and Cultural Studies

4 Semester Hours

The Regional and Cultural Studies (RCS) course is an integral part of the curriculum. It prepares senior leaders to evaluate the socioeconomic, political, cultural, and security issues within a particular region. To meet the challenges of the Air and Space Expeditionary Force, the RCS course provides students the opportunity to evaluate an area where a unified combatant commander must implement the national military strategy in support of US security policy. The RCS course provides the opportunity for students to gain unique perspectives by studying and visiting one of approximately 13 regions. During the third term, students complete 32 classroom hours (16 instructional periods) of focused academic preparation. The regional field study allows students to discuss security

policy issues with senior political, military, cultural, and academic leaders. Logistic and administrative preparation and travel planning for the regional field research are accomplished throughout the academic year. Resident diploma pass/fail grade status for this course will be coded as “-P” after the course number.

GS 6700 Global Security

3 Semester Hours

The Global Security (GS) course is designed to give students the ability to evaluate today’s complex, interdependent, and dynamic international system and to show how it affects global, regional, and national security. The course uses a comparative approach to identify growing and emerging security concerns, analyze power politics from a region-to-region perspective, examine the roles nations and nonstate actors play in addressing key issues that shape the global environment, assess potential challenges to US security, and evaluate the relationship between economic factors and international security. The GS course follows and is symbiotic with the Regional and Cultural Studies program. It capitalizes upon students’ experiences from their RCS academics and field study. Resident diploma pass/fail grade status for this course will be coded as “-P” after the course number.

GS 6700-G Global Security (GSP)

Global Security I - Strategic Art. This course examines a series of case studies of the formulation and execution of grand strategy by rising powers, declining powers, and hegemonic powers seeking to maintain their status in a variety of historical and regional contexts. Where possible, students will read “classic” studies of strategy and conflict that remain the best analyses of specific cases, but which time and space constraints exclude from the core curriculum. Rather than examining American grand strategy, the course exposes students to examples of the strategic art as practiced by decision makers in other states and other periods of history. This provides students with valuable comparative context for the subsequent study of American strategy in the National Security Policy course. It

also encourages them to consider the role of culture and historical context in shaping the strategic priorities and decisions of states and leaders.

Global Security II - Global Studies. The Global Studies course analyzes the complexity of security issues in selected regions of the world through an emphasis on particular themes, including the requisites for democracy, the relationship between democracy and internal/regional stability, models of economic development, environmental issues, internal order, civil-military relations, and the role of religion and politics. These themes allow a focus on a range of developing countries, enabling analysts to interpret conditions of political, economic, and social stability in particular countries of interest. The design of the course is thematic with applications so that thematic readings are reinforced by regional or national applications of the pertinent themes. The Global Studies course follows and is symbiotic with the Regional and Cultural Studies program. It capitalizes upon student experience from field study. The course allows students to develop an analytical framework that incorporates the role factors such as region, society, culture, and religion play in shaping the desired outcomes of policies, strategies, and campaigns.

WG 6800 Global Challenge War Game 3 Semester Hours

AWC conducts this six-day unclassified capstone war game (set 10 years into the future) at the strategic and operational levels with full play by every student and the faculty. As a summative application of the knowledge, skills, and attributes gained during the academic year, the Global Challenge (GC) mission focuses on experiential learning versus doctrinal experimentation and research. With that mission, it challenges students to assess (critically think, creatively address, and decisively communicate) complex scenarios in a time-constrained environment, prepare and defend courses of action, and pursue national objectives using all the instruments of national power (diplomatic, informational, military, and economic) while applying an understanding of regional cultural issues, as directed by the GC president (a faculty member). Faculty teams

and subject matter experts manually adjudicate game play to ensure synthesis of critical issues affecting national policy within the various regions of the world. The faculty's mission in directing game play and adjudicating student actions is to shape game inputs that realistically reinforce joint professional military education and AWC learning objectives. As objectives are met, the game continues its spiral development by presenting continual challenges to test student critical thinking and synthesis of the instruments of national power. The war game is graded pass/fail.

WG 6800-G Global Challenge War Game (GSP)

The Grand Strategy Program's war-gaming curriculum provides a future-oriented look at emergent defense problems. The program consists of three war-gaming practicums held at Maxwell AFB and culminates in an Office of the Secretary of Defense (OSD) Net Assessment-sponsored war game in Washington, DC. The objective of the war-gaming practicums is to provide an intensive, three-day examination of a future operational challenge. Leveraging outside expertise assembled from across the DOD, students apply the broader themes of the Grand Strategy Program to analyze an operational-level military problem in a joint and coalition context. The OSD Net Assessment game, the capstone event for the Grand Strategy Program, brings together policy and technical experts from across the US government to examine strategic-level issues of interest to the secretary of defense. Participation in this high-level war game not only provides the student with a platform to synthesize and internalize the program's themes, it also provides an opportunity for students to network with active policy planners in government and think-tanks. The connections built through these networks provide a lasting avenue for students to shape debate and impact policy discussions upon graduation.

EL 6000 Electives. All students must complete either two 2-semester hour courses or one 4-semester hour course in the electives program. Electives enhance and complement the core curriculum by providing students with opportunities to achieve greater depth and breadth of understanding in issues of special

interest. They also provide the AWC curriculum with the flexibility to adapt quickly to changes in the international and domestic security environments. Elective course options follow:

EL 6122 Directed Study

2 Semester Hours

Students interested in intensive work on a particular topic can develop, with a faculty member, a resource proposal and reading list designed to give them in-depth understanding of the subject. Enrollment is limited and requires approval of the associate dean of academic programs. Directed study is not available as an audit status course.

Leadership Electives

EL 6231 Command and Conscience

2 Semester Hours

In a prudent and practical manner, this course examines a variety of topics of immediate professional concern to the commander. How does today's leader, for example, resolve the tension inherent in the occasional clash of command responsibility and ethical imperative? To whom or to what, for instance, does the leader owe the highest loyalty? To his superior? To the Constitution? To 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. Resident diploma students receive audit status for this course.

EL 6232 Right, Wrong, and In-Between:

Philosophy and Ethics

for Senior Leaders

2 Semester Hours

This traditional liberal arts course emphasizes analysis of what is publicly advertised or socially accepted as “good.” It is a challenging examination of those “core values” which have, over the centuries, been the answers to the questions, “what is the best way to live?” and “what is the best way to lead?” Resident diploma students receive audit status for this course.

**EL 6234 Expeditionary Leadership
in World War II**

2 Semester Hours

Eric Larrabee's *Commander in Chief* is as good a case study file of biographies of World War II leaders as appears anywhere. This course dissects Larrabee's biographies as well as looking at James Stokesbury's short history of the same war to provide reference points and target sets. Resident diploma students receive audit status for this course.

**EL 6235 Legally Leading the Fight:
Military Operations and the Law**

2 Semester Hours

The increasing deployment operational tempo and the issues arising during Operations Enduring Freedom, Iraqi Freedom/New Dawn, and Noble Eagle have caused the US armed forces to carefully examine the legal framework within which military forces operate, whether domestically or during international operations. The military's role in homeland security and defense, resulting in closer cooperation with and support of civilian law enforcement and disaster relief authorities, has intensified the complex role of commanders and senior military leaders. At the same time, US forces deployed throughout the world are encountering a host of novel or unanticipated operational/legal considerations. This seminar analyzes the evolving responsibilities of commanders as the US military continues to conduct its worldwide missions. It focuses on the roles of operational commanders in the interface of operations and law to support national security. Resident diploma students receive audit status for this course.

**EL 6236 Communicating for Effect:
Global Media Engagement Battlespace**

2 Semester Hours

Senior military leaders must understand the information environment; how it can be exploited for military gain; the statutory and policy limitations our government places on the exploitation of information and the mass communication mediums it passes through; what effects various public affairs actions, integrated into information operations, can generate on US citizens, allies, and adversaries; what measures must be

taken to safeguard information and communication mediums; and how the evolving opportunities and challenges in the information environment affect military decision making. This elective provides a broad-brush approach to how military public communication—in particular, global media engagement—contributes to the exploitation of the information environment. This approach explains how the unique capabilities of joint public affairs operations contribute to achieving effects to ensure successful joint force employment. Resident diploma students receive audit status for this course.

**EL 6238 Negotiation Theory
and Application**

2 Semester Hours

This course develops a critical understanding of and ability to apply a set of essential negotiation skills. It not only enhances negotiating skills but also improves the ability to assess the processes that people, groups, and even nation-states go through to successfully resolve conflict. Consideration is given to cross-cultural factors, time constraints, negotiating styles and strategies, and assessment of involved parties. Topics include logical analysis, group problem solving, conflict management, and methods of persuasion. This course is built around faculty and guest presentations, mini-lectures, research, application and assessment exercises, and seminar discussion. Resident diploma students receive audit status for this course.

**EL 6239 Cross-Cultural Perspectives
in Negotiations**

2 Semester Hours

This course develops the critical understanding needed to better manage interpersonal conflict and seek a negotiated resolution between parties with cultural and/or organizational differences in their approach to negotiations. Emphasis is placed on cross-cultural factors and their impact on the negotiating styles and strategies of the involved parties. Topics in the course include how different cultures view and use the concepts, processes, and intended results of a negotiation. This course is built around faculty and guest presentations, mini-lectures, application and assessment exercises, and seminar

discussion. Resident diploma students receive audit status for this course.

**EL 6240 Navigating Terra Incognita:
Cultural Tools and Perspectives
for Today's Senior Leader** **2 Semester Hours**

From Bagram to Balad and Haiti to Hoa, today's Airmen operate across cultures, working daily with host nation counterparts, nongovernmental organizations (NGO), international organizations (IOs), and civil society. The *Quadrennial Defense Review*, Guidance for Development of the Force, International Security Assistance Force Commander's Guidance, and other key documents make it clear that culture is now a core war-fighting skill in the DOD. This places enormous expectations on senior officers to adapt their leadership and strategic skills, yet most force development efforts to date have focused on junior personnel and operational requirements. This elective helps to fill this void, providing a concrete set of tools and perspectives to help officers fly, fight, and win in culturally complex environments. Resident diploma students receive audit status for this course.

**EL 6241 Just War: Classical Wisdom
and Contemporary Conflict** **2 Semester Hours**

Despite Clausewitz's famous dictum, "War is an act of force that can theoretically have no limits," political, military, religious, and social leaders do seek to restrain both the occasions for war and the means of fighting. Just war theory is useful for structuring the terms of debate about the justice and injustice of particular wars and tactics. Any question of significance to students (regarding ethics and war) will be fair game in this seminar. Resident diploma students receive audit status for this course.

**EL 6242 Civil-Military Relations and
Senior Leadership** **2 Semester Hours**

This course examines the concept of civil-military relations as expressed in the relations between senior civilian and military

leaders. Is there a clear distinction between the roles and responsibilities of senior civilian and military leaders? Are officers professionals in whose realm civilians are ill-equipped and ill-advised to meddle? Does military professionalism extend to the strategic realm of policy? These views are examined theoretically and through case studies of senior leader interaction. The students will develop their own points of view on these fundamental questions in an examination on the final day of class. Resident diploma students receive audit status for this course.

Strategy Electives

EL 6401 Military Innovations and Effectiveness

2 Semester Hours

This course is a book-based, focused study of the drivers of military innovation and change. The course analyzes the process of innovation and change at multiple levels: conceptual, societal, resource-driven, organizational, and individual. The course has a loosely chronological organization but does not seek to cover military innovation and change during all periods and places. Instead, the course seeks to evaluate military innovation and change from multiple perspectives, drawing upon key books from various disciplines to develop a broad, synergistic understanding of innovation. This course is offered to Grand Strategy Program students only.

EL 6449 China's Use of Force: A Case Study of a Non-Western Approach to Warfare

2 Semester Hours

This course examines the ways China might use force to advance or protect its interests. It analyzes the logic of Chinese threat perception in the light of calculation or miscalculation of consequences, with particular attention given to the Taiwan situation. Resident diploma students will receive audit status for this course.

**EL 6455 Group Research: Blue Horizons
(Classified, US Personnel)**

4 Semester Hours

The CSAF has directed that the Center for Strategy and Technology Blue Horizon study for the 2011–2012 academic year will focus on Global Strike. Maintaining a Global Strike capability is essential to preserving a deterrent relationship. This capability could be nuclear, conventional, and/or cyber. In 2035 the USAF will face a new set of strategic and technological realities. Societies will have transitioned to an exponentially changing technological environment vastly different than the one with which we are familiar today. Threats will consist of multiple nuclear-capable states possessing advanced area denial networks. To be successful in this environment, the USAF will have to develop new strategies and address new capabilities. Both will be critical to the USAF's success in providing deterrent options to a future president. This study explores the technologies and strategies necessary to conduct Global Strike in this future environment.

**EL 6459 Why Can't We All Just Get Along?
Debating the Big Questions about
War and Peace**

2 Semester Hours

Policy makers frequently complain that the academic study of international relations (IR) has produced little in the way of useful knowledge. The reigning perception is that most IR scholarship is either irrelevant or inaccessible. In this course, we bridge the theory-policy divide by an overview of some important contributions IR scholars have made to the study of international security. The overarching goal is to assess what, if anything, the military profession can learn from the security studies literature. Resident diploma students receive audit status for this course.

**EL 6462 Why Insurgencies
Win (and Lose)**

2 Semester Hours

This course assesses the phenomenon of materially weak insurgent victories over far more powerful states by examining the relatively small literature on this timely subject. Explana-

tions of insurgent victories include superior political will and readiness to sacrifice blood and treasure, superior strategy, nature of the enemy regime, and the availability of foreign assistance. Resident diploma students receive audit status for this course.

EL 6464 Strategies of Coercion 2 Semester Hours

This course addresses the intellectual foundations of air-power strategy, focusing upon how the threat or use of air-power can achieve political objectives. It discusses coercion theory, the history of coercive airpower strategies, and the operationalization of these strategies in planning the use of air-power in anticipated and actual conflicts. In addition, the course evaluates the strengths, weaknesses, disappointments, and triumphs of these strategies. Resident diploma students receive audit status for this course.

EL 6467 The Vietnam & Iraq Wars 2 Semester Hours

This course addresses the causes, character, consequences, and lessons of the Vietnam War (1945–1975) to facilitate an informed understanding of the challenges the United States faces in Iraq today. It focuses on both the foreign policy context of US intervention in Vietnam and the conduct of US military and other operations during the war. The course is organized into four major sections: (1) an overview of the Vietnam 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; (3) an assessment of America’s conduct of the war and the reasons for its defeat; and (4) an analysis of the differences and similarities between the Vietnam and Iraq Wars. Resident diploma students receive audit status for this course.

**EL 6469 War and Ideologies:
The Just Use of Military Force 2 Semester Hours**

Values and perspectives help determine normative standards of human behavior, and these, in part, serve to influence indi-

vidual and collective behavior. The course examines a variety of ideological and philosophical perspectives and certain non-Western perspectives, including Islamic, Hindu, and classical Chinese perspectives concerning the legitimate use of armed force. Finally, these various perspectives concerning the legitimate use of armed force are used to formulate individual beliefs and approaches concerning the decision to legitimately resort to the use of armed force and the degree to which force should be limited in its application. Resident diploma students receive audit status for this course.

EL 6471 Development of Expeditionary Airpower

2 Semester Hours

The USAF and a number of its closely allied airpower partners have considerable experience in employment of air, and later air and space, power in an expeditionary role. Understanding through evaluation how the operational and strategic concepts of employment developed is the focus of this course. Resident diploma students receive audit status for this course.

War-Fighting Electives

EL 6515 Defense Acquisition: Providing Military Capability to the War Fighter

2 Semester Hours

Defense acquisition is a political and administrative process by which the department converts material resources into military capabilities. This course examines the basics of acquisition, including research, development, test, and evaluation (RDT&E), procurement, and life-cycle support. It also examines the intersection with the user community, as well as with industry and foreign states. As the acquisition system evolves continually, the course studies some of the internally and externally driven changes affecting the current process. Resident diploma students receive audit status for this course.

EL 6517 Public Communication and the Culture of American War Fighting 2 Semester Hours

This elective examines the significant influence of written, spoken, and visual mediums in reflecting and shaping the US military's national and global public image, as well as its strategy, doctrine, and war-fighting policies. Moreover, from the beginning of World War I, through the interwar years, to World War II, the Cold War years, and on into the twenty-first century, students review, analyze, and synthesize textual and mass media (motion pictures, television, and radio) examples and case studies affecting the perceptions and realities of American war-fighting culture. Resident diploma students receive audit status for this course.

EL 6540 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 continues to play during peace, war, and operations other than war. During the course, class members 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 impact on our current and future national security and military strategies. Resident diploma students receive audit status for this course.

EL 6541 Navy and Marine Corps Expeditionary Forces 2 Semester Hours

This course provides students a comprehensive introduction into naval expeditionary warfare. It covers current Navy and Marine Corps strategy and doctrine and emphasizes Navy/Marine Corps force planning, forces and capabilities, and military operations. Students are given comprehensive briefings on US Navy and Marine Corps operations in support of joint strategy, participate in panel discussions and case studies, and travel on field trips for hands-on reinforcement of lessons. Resident diploma students receive audit status for this course.

**EL 6542 Command and Control of
Air and Space Power**

2 Semester Hours

This course is a base-level introduction of past, current, and future issues concerning the joint force air component commander (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. Resident diploma students receive audit status for this course.

EL 6543 America's Army

2 Semester Hours

This course is specifically 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 gain a comprehensive awareness of Army culture and develop an appreciation for what the Army can provide to a regional combatant commander or JTF commander. This course builds a solid foundation of knowledge about the Army, including the US Army's force structure and capabilities, doctrine, terminologies, and idiosyncrasies. Students analyze and evaluate Army doctrine relative to their own service and the joint community. The goal is for students to understand what it looks, feels, and smells like to be a soldier. Class culminates with a three-day practical exercise/map exercise to validate classroom instruction. Resident diploma students receive audit status for this course.

EL 6544 Intelligence, Surveillance, and Reconnaissance (ISR) for the War Fighter (Classified, US Personnel) 2 Semester Hours

Since September 2001 the national intelligence community and the DOD have embraced a transformation strategy that “rests on a foundation of modern high performance intelligence, surveillance, and reconnaissance (ISR) capabilities.” With the continuing challenges of global war, senior leaders must have a clear understanding of how to effectively leverage national and DOD intelligence capabilities. The course focuses on AF and joint ISR capabilities at the operational-strategic level by critically examining “what to expect” and “what not to expect” from intelligence. Against the backdrop of ISR transformation, this course enhances senior-level leaders’ decision-making abilities to critically analyze and synthesize ISR capabilities from the war fighter’s perspective.

EL 6545 Special Operations: Then and 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; looks at SOF equipment, training, and support; and considers mission employment, civil affairs, and psychological operations.

EL 6546 Total Force 2 Semester Hours

From the initial vantage of a historical review of the ANG and Air Force Reserve (AFRES), students engage in discussions surrounding the compelling issues affecting the total force today and through the next decade. Some suggest that we will transition to a militia nation once again. What is the right force mix for the active and reserve components? The course includes a sprinkling of outside speakers, field visits,

and teleconferences with the top leaders of the Reserves. It gives students the opportunity to establish multidimensional views on the issues at hand. Resident diploma students receive audit status for this course.

EL 6548 Intelligence, Surveillance and Reconnaissance (ISR) Requirements for Cyberspace (Classified, US Personnel) 2 Semester Hours

On 7 December 2005, the secretary of the Air Force proclaimed a transformational mission for the AF “to fly, fight, and win in Air, Space, and Cyberspace.” This vision was echoed by the Joint Chiefs of Staff in September 2006, when they promulgated their own definition of cyberspace. This course examines the role of ISR in cyberspace. It begins with an overview of ISR at the strategic level of war and a discussion of the exact nature of cyberspace, moves into legal issues associated with the cyber domain, and concludes with an in-depth examination of the three pillars of cyber operations exploitation, defense, and attack.

EL 6551 Group Research: Nuclear Issues (Classified, US Personnel) 4 Semester Hours

This course examines the strategic, technical, and policy dynamics of nuclear weapons, as well as the interactions between the three, and culminates in a group research report on the myriad implications of nuclear arms reductions. Students pursue this end through guided reading and seminar discussions on four core themes: first, nuclear deterrence in concept and in application during the Cold War, post-Cold War, and post-9/11 periods; second, the US nuclear enterprise (i.e., the components, organizations, and rules related to maintaining the competence and reliability of the US arsenal); third, the global nuclear landscape (i.e., competing explanations of proliferation, how proliferation affects international stability, and the threat posed by nuclear terrorism); fourth, the arms control and counterproliferation tools available to the United States.

EL 6552 Strategy, Technology, and War 2 Semester Hours

Military innovation requires technology as well as the right people to put in place the appropriate doctrine and organizational structures and processes. This framework can be used to analyze past innovations and deduce lessons for implementing future innovations. This course examines the relationship between strategy and technology and the impact of technological breakthroughs on military strategy. The last portion considers future technologies, particularly those related to the genetics, nanotechnology, and robotics revolution, using recent works by Raymond Kurzweil, Joel Garreau, and J. Storrs Hall. Resident diploma students receive audit status for this course.

**EL 6553 National Reconnaissance Office
(NRO): Foundations, Cultures,
Consequences, and Possibilities 2 Semester Hours**

The National Reconnaissance Office (NRO) is grounded in our nation's need for strategic reconnaissance. After World War II, the Air Force began to investigate the feasibility of a reconnaissance satellite; such a spaced-based system would complement existing airpower capabilities. From these initial aspirations, the Eisenhower administration created the foundations for the first independent space force: the National Reconnaissance Office.

The course begins with overviews of early technological innovations and their impact on strategy by Michael Howard and transitions to Roy F. Houchin's Industrial Age case study of theater strategic reconnaissance in the American Civil War. These are followed by a discussion of the history of technology by Melvin Kranzberg and a few insights regarding NRO acquisition by Lee Battle. Resident diploma students receive audit status for this course.

**EL 6554 Space Operations
(Classified, US Personnel) 2 Semester Hours**

This course is for students with a minimal knowledge of space operations. It addresses space issues from the perspective of all services as well as an international view. It also discusses the capabilities, limitations, vulnerabilities, and dependencies of all

space systems and then analyzes the command and control of space forces. We assess how space systems affect US freedom of action in joint war fighting, including the integration of space in the domains of land, sea, air, and cyber. Students assess current and future space systems.

EL 6560 Homeland Security and Defense (Classified, US Personnel) 2 Semester Hours

This course examines the threats to and vulnerabilities of the US homeland and the actors, organizational structures, plans, policies, programs, and resources required to secure and defend the country. During the Cold-War era, only sovereign nations could create mass casualty and society-destroying events. Today, individuals and small groups can inflict this type of misery. Given this asymmetric threat, homeland security and defense have become a top national priority. The United States must have a military strategy to protect and defend our nation. The al-Qaeda attacks on the World Trade Center and the Pentagon on September 11th, the subsequent anthrax attacks, thwarted 2006 airline mishaps, and the ongoing war on terrorism all highlight the need to secure and defend the American homeland.

EL 6590 JCLASS Blue Team (Classified, US Personnel) 4 Semester Hours

EL 6591 JCLASS Red Team (Classified, US Personnel) 4 Semester Hours

The Joint Land, Aerospace, and Sea Simulation (JCLASS) course is a future war game that focuses students' attention toward the operational and strategic levels of warfare. Selected students from all of the senior-level war colleges participate in the war game. AWC contributes two teams to the effort. The "Blue Team" plays the role of US Central Command's Joint Planning Group, responsible for developing options to regional crises in their AOR. The "Red Team" plays the role of Iran's senior leadership, developing a national security strategy to survive and thrive in the Middle East. The game is divided into a distributive phase and an actual war-fighting phase. In the dis-

tributive phase, students collaborate and plan with war college counterparts using the collaborative force analysis, sustainment, and transportation web-based tool. The actual war game brings students together at Maxwell's Air Force War-Gaming Institute, allowing them to execute their plans in a dynamic environment. JCLASS Phase I consists of 30 contact hours over 10 instructional periods, and JCLASS Phase II involves 30 hours during the six-day exercise. Enrollment in this course is through the JCLASS course director only.

EL 6595 Group Research: Space Issues
(Classified, US Personnel) 2 Semester Hours

This research course assesses how space capabilities, limitations, vulnerabilities, and dependencies affect US freedom of action in space. The course evaluates the integration of space with the domains of land, sea, air, and cyber as well as the command and control of space forces. Students consider space-focused ideas that may enhance national security and evaluate current and future space systems. Specific issues receive additional emphasis as students define their professional studies paper (PSP) topics; students are matched with PSP advisors during the course.

EL 6596 Group Research:
Cyberspace (Classified, US Personnel) 4 Semester Hours

This seminar focuses on the integration of information operations (electronic warfare, network warfare, and especially influence operations) supporting a joint force commander. Issues ranging from the technical/scientific through the ethical/legal are discussed. Students write their PSP on an information operations topic related to research projects from Cyber Command, Eighth Air Force, and other organizations.

International Security Studies Electives

EL 6743 Globalization 2 Semester Hours

This course familiarizes the student with the different trends that are under way in the globalization process and how they

impact US grand strategy and national security interests. This course examines globalization in several parts. First, it attempts to identify the scope of globalization. Second, it looks at specific trends in the globalization process—how the world is getting economically, technologically, and demographically integrated. Third, it examines the cultural impact of globalization. Fourth, it discusses the security implications of globalization for state actors. Resident diploma students receive audit status for this course.

**EL 6744 Between Power and Plenty:
International Economics and
National Security**

2 Semester Hours

The ongoing financial crisis has highlighted the importance of economic factors in the foreign and domestic policies of the United States and other countries. What are the United States' economic interests? Does the international economic system make the United States more or less secure? Will the economic growth of China, India, and other developing countries undermine the existing system of international economic management that was in large measure created by the United States? Are the political structures that regulate world financial and trading markets sufficient to manage crises, or are fundamental reforms required to provide sustained stability in international economic relations? This course examines the evolution and functioning of the major countries, institutions, and issues in the international economic system to analyze the relationship between international politics and international economics. The course critically evaluates the current structure of the world economy and analyzes whether it contributes to or undermines the long-term interests of the United States. Resident diploma students receive audit status for this course.

EL 6745 US Grand Strategy

2 Semester Hours

As the United States enters the twenty-first century, how should it use the resources at its disposal to preserve and enhance its long-term interests? What is America's role in the world? In other words, what should be America's grand strategy? This course tackles this question by analyzing and evalu-

ating the different ways the United States has conceived of and implemented its grand strategic designs since it emerged as a world power at the start of the twentieth century. The course critically examines the fundamental ideas that have underpinned America's attempts to make itself more secure to better understand what the United States' grand strategy should be today and in the future. Resident diploma students receive audit status for this course.

**EL 6746 Psychology of
Decision Making**

2 Semester Hours

How do people make decisions? What mistakes do decision makers often commit? How can the decisions of others, including potential allies and enemies, be better understood? What can I do to become a better decision maker? This course explores how psychologists answer these questions and what they have to offer to the strategic decision maker in national security. The course also examines such questions as these: How should one deal with the overwhelming amount of information that inevitably confronts the strategic decision maker? What are the promises and perils of using the lessons of history or intuition in the strategic decision-making process? How should the issue of risk taking be addressed? How can emotions, stress, culture, and personality affect the decision-making process? What is the best way to manage decision-making groups? We examine these questions in each class by looking at specific cases of decision making in the realm of national security. The course focuses on how a psychological perspective may help us become better decision makers at the strategic level. Resident diploma students receive audit status for this course.

EL 6747 Cultures of Violence

2 Semester Hours

This course examines areas and activities around the world where chronic violence has created ungoverned spaces and anarchic behavior. The course looks at such phenomena as "hyper-gangs," militia warfare, organized criminal groups, and traditional armed groups such as the pastoral warrior societies of East Africa. The seminar also considers activities that flow from and to the cultures of violence, such as arms trafficking, re-

source theft, the conduct of refugee communities, child soldiers, and trafficking in humans and drugs. Students look at, among others, urban gangs in Latin America and Papua New Guinea; militias in Africa; tribal and ethnic groups in Yemen, Somalia, and Pakistan; and organized crime in the Caribbean and Europe. This course focuses on behavior, activities, and areas that fall through the cracks when studying more formal state-on-state conflict. This seminar investigates the messy and dangerous world where violence is endemic and where such violence has created its own environment of power politics, control structures, and aberrant economic activity. Resident diploma students receive audit status for this course.

EL 6754 Central Intelligence Agency (CIA)

Roles, Missions, and Military Support

(Classified, US Personnel)

2 Semester Hours

To successfully craft national security policy, the US government requires intelligence—accurate, timely, relevant information and analysis—about current or projected threats to US national interests. The CIA’s primary mission is to support the White House by collecting, processing, analyzing, and disseminating strategic intelligence to support the policy process. The CIA supports other agencies and departments to include defense across the spectrum of conflict. As the United States seeks to better integrate elements of its national power, successful military leaders need to understand the capabilities and limitations of intelligence to effectively plan and execute joint, interagency, and coalition operations.

EL 6758 International Rivals

(Classified, US Personnel)

2 Semester Hours

This course looks at the leaders and strategic cultures of countries and groups of concern to US national security. Addressed are the political-psychological profiles of the leaders of Iran, Syria, China, Russia, North Korea, and various terrorist organizations like the Kurdistan Workers Party, 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?

**EL 6780 Peace and Stability
Operations**

2 Semester Hours

This course focuses on the problems of planning, deploying, sustaining, and reconstituting forces in peace and stability operations, including stabilization/reconstruction/Phase IV operations. In doing so, it examines the most important peace and stability operations of the past 15 years and the roles played by the military. The course addresses the strategic and operational decision-making and planning processes of the United Nations, US Department of Defense, regional organizations (including the North Atlantic Treaty Organization [NATO]), and coalition partners. The course also analyzes the force structure requirements and capabilities and limitations of multinational and coalition and joint forces in meeting security objectives, especially in the execution of peace and stability operations and post-war reconstruction. Resident diploma students receive audit status for this course.

Additional Programs

National Security Forum. 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 110 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.

Distinguished Lecture Series (DLS). The DLS consists of approximately 25 distinguished speakers to address the class throughout the academic year. Speakers come from the highest levels of government, military services, the press, nongovernmental organizations, and industry. They are also selected based on their stature (former prisoners of war or Medal of Honor recipients) or for their expertise on current issues.

Executive Leadership Feedback Program (ELFP). The ELFP offers a unique, state-of-the-art program that uses a 360-degree multirater assessment (self-ratings compared to ratings by superiors, subordinates, and peers) and allows individual ratings to be compared to those of other senior service college students. The ELFP also combines a detailed assessment of personality attributes arrayed with relevance toward strategic leader competencies (e.g., personality attributes related to negotiation, interpersonal leadership, etc.) as well as an assessment of team roles and offers raters the opportunity to provide text comments for developmental purposes. An individualized, 104-page Leadership Assessment Portfolio report is generated for each student, and one-on-one feedback is provided by a member of the ELFP program certified to provide the feedback. The results are presented with the intent of enhancing self-awareness to focus on and accelerate leader development in our students.

Language Programs. English as a Second Language (ESL) is taught by the International Officer School for selected international officers only and provides intensive work in the English language. US and international students may participate in language courses taught by the Defense Language Institute (DLI). These non-credit, non-graded courses are Arabic, Chinese, Dari, French, German, Russian, Spanish, and Swahili for advanced skills students. Because these language courses are

optional and not graduate-level, they do not count toward the master's degree or AWC graduation requirements.

Master of Military Operational Art and Science Degree

Resident Program

Air Command And Staff College

Internet Address

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

Mission. *Prepare field-grade officers to develop, employ, and command air, space, and cyberspace power in joint, multinational, and interagency operations.*

Curriculum. The Air Command and Staff College (ACSC) curriculum is designed to develop higher-order thinking within the context of the war-fighting profession by challenging students to think critically and exercise a combination of analytical and practical tools required of field-grade officers serving in operational-level command headquarters staff positions. ACSC courses emphasize applying air, space, and cyberspace power in joint campaign planning and the operational art of war.

The primary form of instruction in the resident program is through seminars held in specially designed rooms featuring closed-circuit television, an array of multimedia equipment, and student access to a college-wide computer network and the Internet. Students receive more than 80 books to expand their professional knowledge and a personal laptop computer to keep track of the academic schedules, online reading assignments, examinations, research, and other writing requirements throughout the academic year.

Learning Outcomes. ACSC's resident program builds upon the knowledge and skills imparted through basic development education (BDE) and experiences gained as a company grade officer, delivering educated field-grade officers prepared to develop, employ, and command air, space, and cyberspace power in joint, multinational, and interagency operations. The ACSC program produces field-grade officers who

- are capable command and staff leaders who understand operational and strategic leadership in a joint, whole-of-government, and multinational context;
- possess well-developed analytic capabilities and creative/innovative thought processes;
- are well versed in joint and service perspectives and understand joint planning and operations within the context of operational art across the range of military operations;
- are well grounded in military history, theory, and doctrine across the range of military operations;
- comprehend the US national strategic decision-making process and how the actors and systems translate policy into action through use of the instruments of power;
- comprehend regional expertise and cultural competence as war-fighting enablers; and
- communicate effectively, both verbally and in writing (succinct, comprehensive, and accurate accounts of operational-level issues).

Faculty. ACSC employs a blend of expert faculty members exceptionally qualified to accomplish its mission and goals. The college's unique mission requires a distinctive mix of faculty qualifications and credentials. Traditional civilian academics provide the depth and breadth of subject matter expertise to guarantee the academic rigor of the college's offerings while simultaneously ensuring adherence to validated pedagogical theory and practice. Military officers contribute unparalleled currency and expertise in the operations topics so critical to the college's success.

Duration. The resident program consists of 10 months of graduate-level study. As the center for US Air Force IDE and as a joint-accredited institution for providing the first phase of joint professional military education, ACSC annually educates about 500 students from all US military services, selected federal agencies, and international officers from over 60 different nations.

Eligibility. Air Force candidates who attend ACSC's resident program are selected in conjunction with their O-4 promotion boards. A central PME selection board, with major command input, selects the actual college class from these candidates based on their demonstrated potential for assignment to key field-grade command and staff positions. Sister-service O-4, O-4-select (or equivalent rank), and GS-12 and GS-13 (National Security Personnel System Permanent [NSPS] Pay Band Two and above) government civilians are eligible to attend ACSC and are selected by their respective personnel systems.

Reference AFI 36-2301, *Professional Military Education*, and the Education and Training Course Announcements (ETCA) web site at <https://etca.randolph.af.mil> for additional information. ETCA Course number: MACSC001.

Admission Requirements. To be admitted to the master of military operational art and science degree program, individuals must (1) present proof of academic capability either by holding a qualifying undergraduate degree from a regionally accredited college/university (US bachelor's degree or its equivalent) or by meeting academic credentials admission requirements through the portfolio admission process and (2) provide an acceptable score on the Test of English as a Foreign Language (TOEFL), unless they are from an English-speaking country.

International students not meeting the admissions requirements for the master's degree program will be allowed to attend ACSC and will, upon completion of the resident program with a cumulative grade point average of 2.7 or higher, receive the ACSC resident diploma but will not be awarded a master's degree.

Graduation Requirements. Students fully admitted must complete the following 33-semester-hour ACSC resident program. Students must achieve a grade of “C” or higher on each academic course with an overall grade point average of 3.00 on a 4.00 scale and demonstrate fully satisfactory participation in other scheduled ACSC programs and activities to earn the master’s degree.

Curriculum Summary

Course Number and Title	Semester Hours
OC 5510 Orientation Course	Noncredit
LW 5510 Leadership and Warfare	3
LC 5510 The Practice of Command	3
NS 5510 International Security Studies	3
WS 5510 Warfare Studies	3
AP 5510 Air, Space, and Cyberspace Power Studies	3
JF 5510 Joint Forces	3
JP 5510 Joint Planning	3
JA 5510 Joint Air and Space Operations	3
CS 5510 Regional/Cultural Studies	3
RE 5612 Research/Electives I	3
RE 5613 Research/Electives II	3
GE 5510 Gathering of Eagles	Noncredit
Total	33

Note. Courses in the nonmaster’s distance learning program may not be used to satisfy course requirements of the resident master’s degree program.

Course Descriptions

OC 5510 Orientation Course

Noncredit

The Orientation Course provides an overview of the ACSC program for joint education; US Air Force educational methodologies, policies, curriculum, and research requirements; and key principles and concepts that students encounter throughout their academic experience. The program includes an introduction to small-group dynamics, communication and critical-thinking skills, the technology employed within the program,

actors and systems translate policy into action through the use of the IOPs.

WS 5510 Warfare Studies **3 semester hours**

The Warfare Studies course introduces students to the canon of military theory, focusing on such issues as the nature of war, the levels of war, the range of military operations, military strategy, and operational art. It looks specifically at traditional forms of warfare but also examines such alternative forms as guerilla warfare, insurgency, and counterinsurgency.

AP 5510 Air, Space, and Cyberspace Power Studies **3 semester hours**

The Air, Space, and Cyberspace Power Studies course enhances students' understanding of military theory by introducing perspectives on war fighting with specific emphasis on air, space, and cyberspace power. It looks specifically at the development of air, space, and cyberspace power and examines the organizations and strategies that have been involved in their employment. In addition, the course analyzes the role these elements might play in future operations.

JF 5510 Joint Forces **3 semester hours**

The Joint Forces course presents the joint and service doctrinal perspectives that guide joint force commanders and their staffs as they seek to achieve assigned theater security objectives. The course provides an overview of joint force organizational structures and the framework within which joint forces are created, employed, and sustained. It also examines each of the military services, exploring their capabilities and limitations. In addition, the course analyzes the ways in which joint force commanders integrate service and functional component command support to achieve success at the operational level of war.

JP 5510 Joint Planning **3 semester hours**

The Joint Planning course introduces students to the complexities and requirements of joint planning. Students study pertinent doctrine and the joint operation planning process,

analyze the challenges joint force commanders face in attaining unified action, and examine ways in which operational art and design are applied to achieve objectives. Additionally, the students examine planning considerations across the range of military operations. The course culminates with students synthesizing what they have learned to create key elements of a campaign plan.

**JA 5510 Joint Air
and Space Operations**

3 semester hours

The Joint Air and Space Operations course introduces students to the people, processes, and products involved in planning, directing, and executing joint air operations in support of joint force commanders' campaign plans. The course specifically focuses on the important role of the JFACC, looking at the doctrinal responsibilities of that position and the actors, processes, and products that comprise the JFACC's air operations center. Equipped with this understanding, students analyze the employment of air and space power across the full range of military operations.

CS 5510 Regional/Cultural Studies

3 semester hours

The Regional/Cultural Studies course introduces students to regional and cultural factors and discusses how these factors motivate actors within the international security environment. Through this course, students grasp the important role that culture plays in determining operational success. Students are also exposed to the unique ways in which their own cultural perspectives influence both their outlook and interaction with other societies. Through this experience, students come to understand the unique security challenges and opportunities posed by culture and how best to respond to ensure success.

RE 5612 Research/Electives I

3 semester hours

The Research/Electives I program complements ACSC's core curriculum, providing an opportunity for students to investigate topics of particular interest in a rigorous fashion under

the direction and guidance of a subject matter expert. Through this program, students develop their ability to define an issue succinctly; conduct thoughtful, logical, and critical research and analysis; and create well-supported conclusions and recommendations of potential benefit to today's war fighters.

RE 5613 Research/Electives II **3 semester hours**

The Research and Electives program II complements ACSC's core curriculum, providing an opportunity for students to investigate topics of particular interest in a rigorous fashion under the direction and guidance of a subject matter expert. Through this program, students develop their ability to define an issue succinctly; conduct thoughtful, logical, and critical research and analysis; and create well-supported conclusions and recommendations of potential benefit to today's war fighters.

GE 5510 Gathering of Eagles **Noncredit**

The Gathering of Eagles (GOE) is a unique course that stimulates the study of air and space history. While at ACSC, the Eagles gather with students and participate in teaching interviews. These interviews allow students to understand their heritage and learn lessons about air and space leadership from those who shaped it. Research conducted by students in the GOE Research Seminar forms the basis for the content of this course.

Other Programs and Activities

The Air Command and Staff College conducts several activities that support the resident core curriculum and enrich the experience of its students and their families during the academic year. These programs are listed below.

Cross-Domain Operations Concentration. The Domain Operations Concentration is an advanced honors program open to a limited number of selected students that centers on the planning, execution, and integration of air, space, and cyberspace operations. The concentration centers on real-world operations and current best practices in all three domains, to include a number of hands-on, experiential learning opportunities, with

the intent of preparing the selected students for future operational and command assignments that require advanced knowledge and synthesis of the capabilities, methods, and challenges associated with operations in and across air, space, and cyberspace. The concentration specifically addresses both planning and execution in each of the three domains in question separately as well as driving the participating students to integrate across domains to analyze and resolve a range of operational challenges.

Commandant's Speaker Series. 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 the DOD.

International Officer Program. International officers have attended ACSC annually since 1946. During its 54-year history, the college has graduated more than 2,500 international officers from 92 nations. Before attending this college, 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 US Air Force organization and mission. During their stay, international officers participate in field trips that supplement the curriculum objectives.

Special Operations Command Exchange. In response to a Special Operations Command (SOCOM) request that ACSC provide a cadre of students with joint planning expertise to SOCOM as part of an experiential learning opportunity, ACSC annually sends four students and an instructor or five students (depending on year and faculty availability), all of whom must meet the qualifications requested by SOCOM, to the Center for Special Operations for assignment to planning staffs/offices as best suits SOCOM's needs. Students are selected via an application and interview process conducted by the Joint Warfare Department.

Embassy Immersion Program. Students enrolled in ACSC's Political-Military Affairs Strategist elective course may apply for the Chief of Staff of the Air Force (CSAF) Political Advisor (POLAD) Embassy Immersion Program. Selected students, currently seven from each class, are assigned by the CSAF/POLAD to work on the civilian side of US embassies and missions and in the Department of State for five weeks during the spring semester. The students are matched with countries by the SAF/POLAD. They are deployed in the spring of the academic year, and after their return, they submit a short paper and give a briefing about their experience.

Athletic Program. 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 program helps personnel to pass the fitness test on their first attempt and to install a program that combines social interaction and team building with healthy competition. The athletic program includes competitive seminar and intramural sports. It also includes mandatory participation in school-scheduled sports activities by all 40 flights. Students and faculty compete in base intramural activities as well. They are required to engage in personal fitness/aerobic activities at least three times each week. ACSC conducts annual fitness testing in accordance with AFI 10-248, *Air Force Fitness Program*.

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

Master of Military Operational Art and Science Degree

Online Master's Program Air Command and Staff College

Internet Address

<http://www.au.af.mil/au/dlmasters.asp>

Mission. *Prepare field-grade officers to develop, employ, and command air, space, and cyberspace power in joint, multinational, and interagency operations.*

In January 2010 the Air Force decided to leverage the success of the existing Air Command and Staff College (ACSC) online master's program program (OLMP) and began to offer more tailored, expanded, professional education opportunities to mid-level captains under a new "concentration" construct. Within this construct, seven of the existing OLMP courses (21 credit hours) comprise the core curriculum required of all students.

Majors, majors-select, and civilian equivalents enrolled in the program pursue a joint warfare concentration, which consists of the core curriculum, an additional leadership course, and three joint-focused courses. Students graduating from the Joint Warfare concentration will receive intermediate-level professional military education (PME) (nonresident) and JPME Phase 1 credit along with an accredited master of military operational art and science degree.

For captains enrolled in the expanded program, the core curriculum is supplemented by 12 credit hours of concentration courses that examine specific educational/professional areas. The leadership concentration includes four leadership courses specifically designed to meet the developmental needs of captains. Captains graduating from the Leadership concentration receive an accredited master of military operational art and science degree but will not receive Intermediate Developmental Education (IDE) or JPME credit. However, once selected for pro-

motion to major, students are eligible to complete their IDE and JPME requirements and receive credit.

The Joint Warfare and the Leadership concentrations mirror the ACSC resident program's learning outcomes through asynchronous, online interaction between faculty and students. Asynchronous online discussions replace the seminar discussions that are a hallmark of the resident course. Students are guided by credentialed instructors, hand-picked for their academic expertise and/or operational experience.

The OLMP, a paradigm-shifting innovation, is now the benchmark for distributed learning PME. The program continues to grow because students value the "deep thinking" educational experience. This globally accessible, resident-like, student-centered education provides higher-order thinking within the context of the war-fighting profession. More than 1,100 students are currently enrolled, with 438 graduates to date.

The Operational Warfare Concentration is based upon the memorandum of agreement among Air University (AU), Air Education and Training Command, the US Air Force Weapons School, and Air Combat Command and resources required to award 12 graduate credit hours in the online master of military operational art and science degree (OLMP). This concentration is available to students enrolled in the 23-week Weapons Instructor Course (WIC) who graduate after January 2009.

Curriculum. The curriculum is designed to produce more effective officers serving in operational-level command or staff positions. The more successful officers possess and demonstrate abilities in several diverse areas, including academic, personal, professional, and interpersonal. The program fosters the ability to encourage the development of higher-order thinking by challenging students to think critically and to exercise a combination of analytical and practical tools required as leaders charged with the nation's defense. Courses place special emphasis on applying air, space, and cyberspace power in joint campaign planning and the operational art of war.

All three concentrations are separate from ACSC's traditional distance learning nonmaster's program. They are not an addendum to it. The OLMP curriculum covers such topics as contemporary Air Force operations, national security, leadership, and

joint warfare challenges and opportunities. Due to the level of work required, beginning students are allowed to take only one course each term; however, they may be approved to take two courses each term after they have successfully completed their first three courses. Each course requires 10 to 15 hours of work each week. Tuition is free, and there is no active-duty service commitment associated with the program; however, students incur the cost of required books, personal computer, and Internet connectivity.

Students who work steadily should complete their master's degree in two years; however, students have up to five years to meet degree requirements. Due to the inherent flexibility of the program, student deployments, unique duty schedules, and/or job/personal demands while enrolled can be easily managed. Since members must enroll for each term, students can manage their course schedules to better coincide with personal/professional commitments.

The courses are hosted on the Blackboard® Learning Management System and are facilitated by adjunct instructors who have been selected, trained, reviewed, and credentialed by ACSC. Assessments are submitted online, and confidential instructor feedback is returned to students to assist them in improving both their understanding of course materials and their communication skills.

As previously mentioned, upon successful completion of the program, students earn an accredited master's degree in military operational art and science. The program was reviewed by a joint staff accreditation team and received initial JPME Phase I certification in 2007 and full accreditation in 2009. More importantly, students can participate in a learning opportunity that is focused directly upon the needs of the modern war fighter—gaining knowledge and developing skills that will serve them in their current positions, throughout the remainder of their military careers, and once they leave the military.

Faculty. The college employs a blend of expert faculty members exceptionally qualified to accomplish its mission and goals. The college's unique mission requires a distinctive mix of faculty qualifications and credentials. Traditional civilian academics provide the depth and breadth of subject matter expertise to

guarantee the academic rigor of the college's offerings while simultaneously ensuring adherence to validated pedagogical theory and practice. Military officers contribute critical military and operational perspectives, as well as unparalleled currency and expertise, to the subject matters addressed.

Joint Warfare and Leadership Concentrations

Learning Outcomes. ACSC's OLMP builds upon the knowledge and skills imparted in basic developmental education (BDE) and experience gained as a company grade officer, delivering educated mid- to senior-level captains and field-grade officers (FGO) prepared to develop, employ, and command air, space, and cyberspace power in joint, multinational, and interagency operations. ACSC's OLMP delivers relevant student-centered educational experiences globally, meeting the unique demands of expeditionary Airmen. The OLMP produces FGOs who

- are capable command and staff leaders who understand operational and strategic leadership in a joint, whole-of-government, and multinational context;
- possess well-developed analytic capabilities and creative/innovative thought processes;
- are well grounded in military history, theory, and doctrine across the range of military operations;
- comprehend the US national strategic decision-making process and how the actors and systems translate policy into action through the instruments of power;
- comprehend regional expertise and cultural competence as war-fighting enablers;
- communicate effectively by providing succinct, comprehensive, and accurate accounts of operational-level issues; and
- are well versed in joint and service perspectives and understand joint planning and operations within the context of operational art across the range of military operations (joint warfare concentration).

Duration. The academic program consists of 11 eight-week courses (seven core courses and four concentration courses) for a total of 33 semester hours of credit. Students have up to five years from the start date of their first course to complete the program. Although the typical student can complete the program in about two years, the program's rigor requires a significant time commitment to meet that goal.

Eligibility—Joint Warfare Concentration

- **Military:** Eligible personnel include O-4-selects and O-4s on active duty or in the AFR and ANG. Individuals who have a master's degree or who have completed IDE—to include ACSC—may apply. Individuals who have previously completed *both* a master's degree *and* IDE are ineligible.
- **Civilians:** Air Force civilians in grades GS-12 and above or NSPS Pay Band 2 and above may be competitively selected to enroll in the program. Air Force civilians should contact their local civilian personnel office if interested in consideration.

Eligibility—Leadership Concentration

- **Military:** Eligible personnel include USAF active duty O-3s who have total active federal commission service between six to seven years and have completed SOS but do not have a master's degree.
- **Civilians:** Currently civilians are ineligible for the Leadership Concentration.

Admission Requirements

- **Military:** Students can access enrollment information through the Air University Portal. Before applying, students must ensure military records accurately reflect current educational level. Refer to the Air Force Personnel Center web site, education and training link, to do so. Students must confirm that the education data accurately reflects all degrees earned. If it does not, contact AFIT/RRC (DSN 785-6234) to update this information.

- **Civilians:** Applicants must scan and e-mail a completed AF Form 4059, Air Force Civilian Competitive Development Nomination, to the AFPC/DPIF Leadership Development group box (can be found in the global). The AF 4059 form must be signed by your first-level supervisor, and the endorser signature should be your second-level supervisor, although the signature level should not exceed the GS-15/colonel level. If your second level is higher than a GS-15/colonel, have your first-level supervisor endorse it.

If selected to attend, you will be notified by AFPC/DPIFA with instructions for submitting your application. If you have any questions, please contact AFPC/DPIFA at DSN 665-2524 (210-565-2524) or contact your functional career field team (CFT).

Graduation Requirements. Students fully admitted must complete the 33-semester-hour program and must achieve a grade of “C” or higher on each academic course with an overall grade point average of 3.00 on a 4.00 scale and successfully complete student orientation to earn the master of military operational art and science degree.

Curriculum Summary

MACSC010 Joint Warfare Concentration	Semester Hours
OC5510 Orientation Course	Noncredit
LW5510 Leadership and Warfare	3
AP5510 Air, Space, and Cyberspace Power Studies	3
NS5510 International Security Studies	3
WS5510 Warfare Studies	3
CS5510 Regional/Cultural Studies	3
RE5610 Research and Electives I	3
RE5611 Research and Electives II	3
LC 5510 Practice of Command	3
JP5510 Joint Forces	3
JA5510 Joint Air and Space Operations	3
JF5510 Joint Planning	3
Total	33

Curriculum Summary

MAULDR010 Leadership Concentration	Semester Hours
OC5510 Orientation Course	Noncredit
LW5510 Leadership and Warfare	3
AP5510 Air, Space, and Cyberspace Power Studies	3
NS5510 International Security Studies	3
WS5510 Warfare Studies	3
CS5510 Regional/Cultural Studies	3
RE5610 Research and Electives I	3
RE5611 Research and Electives II	3
EL5301 Expeditionary Leadership in Intercultural Environments	3
FO5301 Foundations of Officership	3
OL5301 Organizational Leadership	3
TL5301 Team Building Leadership	3
Total	33

Course Descriptions

OC 5510 Orientation Course

Noncredit

The Orientation Course provides an overview of the entire online master's degree program—including US Air Force educational methodologies, policies, curriculum, research requirements—and key principles and concepts that students will encounter throughout their academic experience. The course includes an introduction to small-group dynamics, communication and critical-thinking skills, the technology employed within the program, student responsibilities and requirements, and additional services that are available to enhance student success.

LW 5510 Leadership and Warfare

3 semester hours

The Leadership and Warfare course analyzes factors that guide military leaders' actions in establishing and maintaining an effective leadership environment. The course also seeks to educate and inspire students to reach their full leadership potential by studying great commanders and their conduct of warfare and current problems of command in contemporary joint operations. Through these studies, students gain a unique

understanding of the specific leadership challenges that leaders face in guiding people and organizations through crises and environments of change.

AP 5510 Air, Space, and Cyberspace

Power Studies

3 semester hours

The Air, Space, and Cyberspace Power Studies course enhances students' understanding of military theory by introducing perspectives on war fighting with specific emphasis on air, space, and cyberspace power. It looks specifically at the development of air, space, and cyberspace power and examines the organizations and strategies that have been involved in their employment. In addition, the course analyzes the role these elements might play in future operations.

NS 5510 International Security

Studies

3 semester hours

The International Security Studies course provides a foundation for understanding the international security environment, its implications for the United States, and how the United States both shapes and responds to this environment. The course also examines the instruments of power (IOP) and how these are wielded by both state and nonstate actors to affect the international environment. In addition, the course examines the US national strategic decision-making process, examining how the actors and systems translate policy into action through the use of the IOPs.

WS 5510 Warfare Studies

3 semester hours

The Warfare Studies course introduces students to the canon of military theory, focusing on such issues as the nature of war, the levels of war, the range of military operations, military strategy, and operational art. It looks specifically at traditional forms of warfare but also examines such alternative forms as guerilla warfare, insurgency, counterinsurgency, and other forms of warfare. Through this study, students apply the lessons of military theory and their understanding of

warfare to operational challenges facing both today's and tomorrow's US military.

CS 5510 Regional/Cultural Studies 3 semester hours

The Regional/Cultural Studies course introduces students to regional and cultural factors and discusses how these factors motivate actors within the international security environment. Through this course, students grasp the important role of culture in determining operational success. Students are also exposed to the unique ways in which their own cultural perspectives influence both their outlook and interaction with other societies. Through this experience, students come to understand the unique security challenges and opportunities posed by culture and how best to respond to ensure success.

RE 5610 Research/Electives I 3 semester hours

The Research Electives I course complements ACSC's core curriculum, providing an opportunity for students to begin investigating topics of particular interest in a rigorous fashion under the direction and guidance of a subject matter expert. Through this program, students develop their ability to define an issue succinctly; conduct thoughtful, logical, and critical research and analysis; and create well-supported research proposals that will serve as the intellectual basis for the scholarly research papers produced in Research Electives II.

RE 5611 Research/Electives II 3 semester hours

The Research Electives II course complements ACSC's core curriculum, providing an opportunity for students to complete investigating topics of particular interest in a rigorous fashion under the direction and guidance of a subject matter expert. Through this program, students refine their ability to define an issue succinctly; complete thoughtful, logical, and critical research and analysis; and synthesize well-supported conclusions and recommendations that serve as the foundation for a scholarly research paper of potential benefit to today's war fighters. Research Electives I (RE 5610) is a prerequisite for this course.

LC 5510 Practice of Command**3 semester hours**

The Practice of Command course provides an opportunity for students to reflect on their personal philosophy on the art and craft of command, honing that philosophy through interaction and the study of responsibilities and challenges unique to commanding an Air Force squadron. The course introduces students to the resources available to assist squadron commanders with their duties and stresses how important it is for commanders to meld their personal philosophies on command with the unique requirements of their situation and their responsibilities to service, mission, people, and themselves.

JF 5510 Joint Forces**3 semester hours**

The Joint Forces course presents the joint and service doctrinal perspectives that guide joint force commanders and their staffs as they seek to achieve assigned theater security objectives. The course provides an overview of joint force organizational structures and the framework within which joint forces are created, employed, and sustained. It also examines each of the military services, exploring their capabilities and limitations. In addition, the course analyzes the ways in which joint force commanders integrate service and functional component command support to achieve success at the operational level of war.

JP 5510 Joint Planning**3 semester hours**

The Joint Planning course introduces students to the complexities and requirements of joint planning. Through the course, students study pertinent doctrine and the joint operation planning process, analyze the challenges joint force commanders face in attaining unified action, and examine ways in which operational art and design are applied to achieve objectives. Additionally, students examine planning considerations across the range of military operations. The course culminates with students synthesizing what they have learned to create key elements of a campaign plan. This course is a prerequisite to the Joint Air and Space Operations (JA 5510) course.

**JA 5510 Joint Air and
Space Operations**

3 semester hours

The Joint Air and Space Operations course introduces students to the people, processes, and products involved in planning, directing, and executing joint air operations in support of joint force commanders' campaign plans. The course focuses specifically on the importance of the JFACC, looking at the doctrinal responsibilities of that position and the actors, processes, and products that comprise the JFACC's air operations center. Equipped with this understanding, students analyze the employment of air and space power across the full range of military operations. Joint Planning (JP 5510) is a prerequisite for this course.

**EL 5301 Expeditionary Leadership
in Intercultural Environments**

3 semester hours

The Expeditionary Leadership in Intercultural Environments course provides an understanding of regional factors that affect national foreign policy and explores global, regional, and cultural issues associated with participating in joint and coalition operations. It stresses the importance of cultural awareness and intercultural competence when dealing with the peoples of regions likely to require US military assistance. The course also examines deployment-specific leadership issues focusing on warrior ethos, including mental and physical preparation, military bearing, and self-discipline.

FO 5301 Foundations of Officership

3 semester hours

The Foundations of Officership course addresses followership, regarded as a critical element of leadership and officership, followed by an examination of skills related to effective spoken and written communication in the context of the twenty-first-century Air Force. Through this course, students develop broad perspectives of current issues and associated tools aimed at enhancing professional competence beyond individual specialties; increase their value to their units by understanding and being able to apply interoperability; develop skills neces-

sary to lead, follow, and manage; and become better wingmen who care for peers and subordinates alike.

OL 5301 Organizational Leadership 3 semester hours

The Organizational Leadership course is designed to develop officer organizational and management skills to better support and lead change in complex institutional structures. The course focuses on basic organizational theory and communications, change management, strategies for continuous improvement, and resource stewardship. It enhances officers' ability to deal with the financial, informational, technological, and human resource issues that may affect mission capabilities, while utilizing appropriate methods to identify opportunities, implement viable solutions, and measure the impact of outcomes. Further, this course advocates a commitment to continuous improvement—necessary to ameliorate processes, products, and people—while meeting the needs of internal and external stakeholders to accomplish Air Force mission requirements efficiently.

TL 5301 Team Building Leadership 3 semester hours

The Team Building Leadership course examines command from the perspective of officers in formal leadership billets. The course explores building leaders, motivation, force development, mentoring, organizational design and decision making, power and authority, morality and ethics, leading change, organizational culture, and communication. It examines the composition, function, and purpose of the flight in the context of the roles, responsibilities, knowledge, skills, and attitudes expected of officers in leadership positions. Academic content and practical examples are integrated with activities from operational fields to leverage officers' education, training, and experience to equip them with new or enhanced skill sets, including the ability to inspire, develop, and take care of diverse groups of individuals while leading them to mission success.

Operational Warfare Concentration

Learning Outcomes

- Comprehend the fundamentals of communication.
- Comprehend structured problem solving.
- Comprehend the fundamentals of instructorship.
- Comprehend the fundamentals of electro-magnetic theory.
- Comprehend the fundamentals of adversary threat capabilities, limitations, tactics, and employment.
- Comprehend the fundamentals of US munitions capabilities, limitations, and employment.
- Comprehend advanced mission design series and/or mission area capabilities and limitations.
- Comprehend and apply advanced mission design series and/or mission area employment in an adversary threat environment.
- Apply the fundamentals of instructorship.
- Comprehend advanced adversary threat capabilities, limitations, tactics, and employment.
- Comprehend advanced US munitions capabilities, limitations, and employment.
- Comprehend the fundamentals of mission design series and mission area integration.
- Analyze a given tactical problem scenario and apply the fundamentals of integration to derive an effective solution.
- Apply the fundamentals of instructorship.
- Comprehend the fundamentals of mission commander roles and responsibilities.
- Synthesize mission design series and mission area capabilities and limitations to solve a given tactical problem.

- Analyze a given tactical problem scenario to derive an effective solution.
- Apply the fundamentals of instructorship.
- Apply the fundamentals of oral and written communication.
- Apply the fundamentals of mission commander roles and responsibilities.

Duration. The academic program consists of 23 weeks.

Eligibility

- Military: active duty
- Successful Weapon Instructor School course completion after January 2009.

Admission Requirements

- Regionally accredited bachelor's degree
- No master's degree
- SOS complete

Graduation Requirements. Fully admitted students must complete the 33-semester-hour program and must achieve a grade of "C" or higher on each academic course with an overall grade point average of 3.00 on a 4.00 scale and successfully complete student orientation to earn the master of military operational art and science degree.

- The BAC+ transcript after completing 15+ semester hours does not include OW-5302.
- OW-5302 will not be awarded until other academic courses are completed.

Operational Warfare Curriculum Summary

MAUWIC010 Operational Warfare Concentration	Semester Hours
OC5510 Orientation Course	Noncredit
LW5510 Leadership and Warfare	3
AP5510 Air, Space, and Cyberspace Power Studies	3
NS5510 International Security Studies	3
WS5510 Warfare Studies	3
CS5510 Regional/Cultural Studies	3
RE5610 Research and Electives I	3
RE5611 Research and Electives II	3
OW-5302 Operational Warfare Studies	12
Total	33

Course Descriptions

OW-5302 Operational Warfare Studies

12 Semester Hours

The Operational Warfare Studies concentration provides students a seminar format course, including academic and practical instruction on the full spectrum of military operations. It looks specifically at operational strategy, Air Force tactical weapons systems application in warfare, and intense integration among those systems in the form of large force exercising and academic or seminar settings. Through this study, students apply the lessons of integration and warfare through the capstone mission employment phase, specifically designed to address the operational challenges facing the US Air Force today and tomorrow.

Master of Science in Flight Test Engineering

USAF Test Pilot School

Internet Address

<http://www.edwards.af.mil/library/factsheets/factsheet.asp?id=6467>

Mission. *Produce highly adaptive, critical-thinking flight-test professionals to lead and conduct full-spectrum test and evaluation of aerospace weapon systems.*

Established in 1944 at Wright Field, the Test Pilot School (TPS) has always been known for producing high-quality flight testers and engineers. In 1951 the school was moved to Edwards AFB, CA. In 1961 the Aerospace Research Course was added, and the school was renamed the USAF Aerospace Research Pilot School (ARPS). In 1972 the ARPS course was terminated, and the systems phase was added. This is when the school officially became the USAF Test Pilot School. Due to the sophistication of aircraft, as turbojets became more prevalent in the Air Force, the flight test engineering (FTE) program was initiated in 1973, and the flight test navigator (FTN) program was initiated in 1973. This development created three curricula for TPS students: flight test pilot, FTN, and FTE. In 1990 a test management project (TMP) was added to facilitate the understanding of the full flight-test process. In this TMP, TPS students work in groups to create a test package, execute the test, and present the results to the TPS faculty. The school also offers a number of short courses to support various levels of test and evaluation education.

There are 2,468 TPS graduates, including 109+ general officers. Sixty-two of the current 272 National Aeronautics and Space Administration astronauts graduated from TPS. There have been 75 civilian and 39 female graduates, including astronaut Eileen Collins, as well as 310 international graduates from 24 different countries.

On 21 January 2009 the president of the Southern Association of Colleges and Schools approved the awarding of a mas-

ter's degree in flight test engineering to those students enrolled in the program from April 2007 onward.

Curriculum. A typical day at TPS includes a combination of flying and academics. For the academics portion, there are four main subdisciplines taught by the USAF TPS Education Division: Performance, Flying Qualities, Systems, and Test Management. To assist students in their studies, TPS issues to students 15 loose-leaf textbooks and 10 bound and stamped textbooks for their personal libraries. Students also receive a notebook computer and accessories for use during the course. The USAF TPS portal is the online access point for students and staff for the entire curriculum taught at TPS. Housed on the portal are the most current slides for lectures, flight cards, virtual drop boxes for reports, and many other resources.

Learning Outcomes. Graduates of TPS should have a thorough grounding in the following core competencies:

- Diverse aerospace vehicle exposure. The graduate will have flown different types of aerospace vehicles and flown/monitored various operational tasks to ensure a solid fundamental understanding of a broad range of military missions using rapid adaptability or unfamiliar aerospace vehicles and systems.
- Flight test engineering. The graduate will have sufficient math, science, and engineering skills to evaluate aerospace vehicle, system, and munitions design and apply academic theory, flight-test techniques, and modeling and simulation to successfully determine the specification compliance and military utility of the system under test.
- Flight test techniques (FTT). The graduate will be able to select, develop, understand, and execute the appropriate FTT to achieve a test objective.
- Flight test planning. The graduate will be able to comprehend and apply the test-management process to effectively plan and execute a flight test to include how to access and efficiently allocate test resources.

- Safety planning and risk management. The graduate will be able to consistently apply a test-safety process for identifying test-unique hazards and developing procedures to mitigate risk.
- Flight test execution. The graduate will be able to safely, effectively, and efficiently conduct a mission as part of a test team either on board the aircraft or in the control room.
- Data management. The graduate will be able to collect and analyze the data required to determine if an airplane or system meets mission requirements and/or specifications and the type, quantity, accuracy, and precision of the data required; how the data is to be collected and used; and the type of data analysis to be used.
- Flight test evaluation. The graduate will be able to apply knowledge and skills gained through critical thinking by analyzing, synthesizing, and evaluating test results to reach substantiated conclusions and recommendations.
- Flight test reporting. The graduate will be able to effectively communicate in written, oral, and graphical form to clearly document test and safety planning and test accomplishments and deficiencies and to assess their mission impact.
- Integrated test teaming. The graduate will have an understanding of the acquisition life cycle and know where test and evaluation (T&E) fit into the process; know how to apply governing regulations, directives, and requirement processes for developing a test program; and know how to build an integrated, multidisciplinary test team of development and operational personnel from the military, government, and contractors.

Faculty. TPS faculty members hold a master's, a doctoral, or an equivalent degree in their fields of academic expertise. The breadth, depth, and diversity of their expertise are enhanced by the fact that the faculty includes terminally credentialed field-grade or senior officers and civilian scholars.

Duration. Two classes each year, 48 weeks each.

Eligibility. The following are the current requirements that enrollees must meet to be eligible for a slot at the USAF TPS.

Curriculum	Time in Service (at class entry)	Education	Experience (at class entry)	Physical Qualification	Clearance
Experimental Test Pilot	Active: TAFCS (Guard and Reserve: TFCS) Fewer than 9 years and 6 months (10 years and 3 months for helo pilots)	BS in engineering, mathematics, or physics. Minimum grade point average (GPA) of 3.0 on a 4.0 scale.	Pilots on extended active duty (EAD) and not in suspended flying status. Pilots must have served at least 12 months as an aircraft commander in a manned major weapon system. Pilots must be qualified instructor pilots (minimum 50 hours instructor time) in a major weapon system or have at least 750 hours total time (150 hours may be remotely piloted aircraft [RPA] time).	Annual Flying Class II	Secret
Experimental Test Combat Systems Officer / RPA Pilot	Fewer than 9 years and 6 months	Same as above	Combat Systems Officers (CSO): Must be qualified instructor CSOs in a major weapon system (minimum 50 hours instructor time) or have at least 500 hours total time in a major weapon system. (Total time excludes student time and RPA time.) RPA Pilots: Must be qualified instructors (minimum 50 hours instructor time) or have at least 500 hours total time.	Annual Flying Class II	Secret
Experimental Flight Test Engineer	Active: TAFCS (Guard and Reserve: TFCS) Fewer than 8 years	Degree requirements same as above Technical master's degree is highly desired	On EAD with a minimum of 2 years of experience in one of the following Air Force specialty codes: 13XX, 14NX, 21AX, 21CX, 21LX, 21MX, 33SX, 61SX, 62EX, or 63AX (Civilians: minimum 2 years' experience in T&E) FAA flying certifications or military flying is highly desired.	Annual Flying Class III	Secret

Note: The term *combat systems officer* includes rated navigators, electronic warfare officers, and weapon system operators.

Admission Requirements. Admission to the USAF TPS is extremely competitive. In addition to Air Force personnel, civilian, Navy, Marine Corps, and allied nation personnel are encouraged to apply for these programs. Refer to AFI 99-107, *Test Pilot School*, for application details.

Graduation Requirements. The USAF TPS curriculum is designed to grant a master of science degree in flight test engineering at the end of a 48-week course. Students are required to take the 13 offered courses to graduate. This is a total of 50 credit hours for the 48-week course. Each of the four phases consists of three or four main lecture courses. Along with these courses there are allocated laboratories or simulator work and flights. A student must be in good standing and satisfactorily complete all academic tests, oral and written reports, and curriculum flying missions and complete the comprehensive written and oral evaluations. Students must achieve a grade of “C” or higher on each academic course with an overall GPA ≥ 3.0 .

Curriculum Summary

Course Number and Title	Semester Hours
PF 5416 Fixed-Wing Aerodynamics	3
PF 5417 Performance Data Standardization	3
PF 5418 Performance Optimization	3
FQ 5426 Unaugmented Airplane Motion	4
FQ 5427 Flight Control Systems Testing	4
FQ 5428 Stall, Departure, and Spin Failure State Test	4
FQ 5429 Handling Qualities and Envelope Expansion Testing	4
SY 5436 Human Factors and Avionics	3
SY 5437 Airborne Sensors	3
SY 5438 Weapons and Integrated Systems Evaluations	3
TM 5446 Test Planning and Reporting	4
TM 5449 Test Management Project and Comprehensive Exams	9
QE 5459 Single-Look Qualitative Evaluation Program	3
Total	50

Course Descriptions

PF 5416 Fixed-Wing Aerodynamics 3 Semester Hours

This course contains academic theory lectures for introduction to aerodynamics, compressible aerodynamics, and cruise performance. This theory is the basis of flight and aerodynamics for fixed-wing aircraft. The flight-test techniques included in this course are mission director, aerodynamic modeling, cruise data, fighter performance check ride, and high and low lift-over-drag ratio.

PF 5417 Performance Data Standardization 3 Semester Hours

This course consists of pilot statistics, modeling and simulation, and propulsion. These courses form the basis for atmosphere-measuring devices on aircraft and different thrust-generating devices for aircraft. The flight-test techniques for this course consist of tower fly-by, pacer/survey/global positioning system (GPS), and the propulsion demonstration.

PF 5418 Performance Optimization 3 Semester Hours

This course consists of takeoff, landing, and energy. These areas demonstrate the equations needed for normal flight and departure from flight. The flight-test techniques for this course consist of takeoff and landing, C-12 level accelerated/turn, level accelerated/saw tooth climb, turn performance, and multi-engine performance final check ride.

FQ 5426 Unaugmented Airplane Motion 4 Semester Hours

This course consists of unaugmented equations of motion, trim, and stability. It provides a basic overview of the flying qualities of flight testing. The flight-test techniques for this course include C-12 longitudinal static stability/maneuvering flight demonstration, LJ-24 Variable Stability System (VSS) introduction and longitudinal demonstration, C-12 lateral-directional stability, LJ-24 VSS lateral-directional demonstration, and T-38 dynamics demonstration.

**FQ 5427 Flight Control
Systems Testing**

4 Semester Hours

This course consists of an introduction to flight control systems, parameter estimation, analog flight control systems, aero/servo/elasticity, criteria for flight control system design, frequency content, aliasing and filters, frequency response estimation, digital flight control systems, redundancy management systems, flight control systems ground testing, and flight test simulators. This course demonstrates the origins and history of flight control systems. The flight-test techniques include a variable-stability in-flight simulator test aircraft (VISTA) handling qualities demonstration. The lab test techniques for this course include the flight control system project and the flying qualities simulator.

**FQ 5428 Stall, Departure, and
Spin Failure State Test**

4 Semester Hours

This course consists of stall, departure, and spin failure state (engine out) tests. It demonstrates the qualities and testing of an aircraft departing from normal, straight, and level flight. The flight-test techniques for this course consist of glider spin demonstration, T-38 stall demonstration, T-38 handling qualities demonstration, C-12 engine out demonstration/data, KC-135 engine out demonstration/data, F-16 departure demonstration, F-16 departure data, and T-38 departure chase.

**FQ 5429 Handling Qualifying and
Envelope Expansion Test**

4 Semester Hours

This course consists of an overview of flying qualities testing, configurations for flying qualities testing, taxi testing, first flight flying qualities testing, flying qualities envelope expansion testing, handling qualities evaluation, one-flight evaluations of flying qualities, stores certifications, and structures. It previews the types of flying accomplished during a typical test program. The flight-test techniques consist of F-16 limit cycle oscillation, multi-engine flying qualities demonstration, KC-135 ground school, glider flying qualities demonstration, C-12 first flight check ride, F-16 handling qualities demonstration, F-15

check flight phase (CFP)/asymmetric stores demonstration, AT-38B CFP check ride, and F-16 structures check ride.

SY 5436 Human Factors and Avionics 3 Semester Hours

This course consists of the systems phase introduction, human factors, integrated navigation systems, communications and data link systems, avionics systems integrations (ASI), and remotely piloted aircraft (RPA) lectures. It demonstrates different systems within the cockpit and how their design is tested. The flight-test techniques for this course include the F-15E systems demonstration. The lab test techniques in this course consist of the avionics systems integration lab and the integration facility for avionics system testing (IFAST) lab. Also, within this course is the F-15E systems ground school.

SY 5437 Airborne Sensors 3 Semester Hours

This course consists of the electro-optics lecture and the radar lecture. It demonstrates different sensor systems used in modern-day warfare. The flight-test techniques for this course consist of F-16C/D electro-optics and the F-16D (or VISTA) air-to-air systems evaluation. The labtest techniques in this course consist of the electro-optics lab and the IFAST Radar. Also, within this course is the F-16C/D electro-optics systems academics/ground school.

**SY 5438 Weapons and Integrated
System Evaluations 3 Semester Hours**

This course consists of the electronic warfare lecture, the weapons delivery testing lecture, the F-16C/D air-to-ground lecture, the smart weapons air-to-air lecture, the smart weapons air-to-ground lecture, and the weapons and tactics overview lecture. This course demonstrates different weapons systems and the test of their delivery for modern warfare. The flight-test techniques for this course consist of electronic combat testing, F-16 weapons delivery demonstration, and the F-16D systems evaluations check ride.

TM 5446 Test Planning and Reporting 4 Semester Hours

This course consists of the test management phase introduction, probability and statistics, test conduct, intermediate test and evaluation, test management, unit safety officer training, test article modification planning, design of experiments (DOE), all-weather testing, deficiency reports, and executive test and evaluation. These courses demonstrate the proper planning and execution procedures for flight testing. Also, this course contains the USAF TPS reports program, initial flight reports, technical report formatting, and the DOE project.

TM 5449 Test Management Project and Comprehensive Exams 9 Semester Hours

The test management projects are customer-funded flight-test projects performed by teams of four to six students with guidance from the USAF TPS staff. The customer provides the research concept or the part that is to be flight-tested and funds specialized support of major aircraft modifications. The USAF TPS provides the test aircraft, which are normally Air Force flight test center assets. The USAF TPS also funds minor aircraft modifications and the cost for flight hours of testing and evaluations. Using flight-test data, USAF TPS students reduce the data, conduct data analysis, and provide a defense technical information center-ready technical report for the customer at the end of the process.

The comprehensive written test is a closed-book, four-hour exam. Each subdivision is allocated an hour of the exam, in which the master instructors can ask about all related material the students have seen over their time at the USAF TPS.

The comprehensive oral test is a panel examination of the individual students to ensure their comprehension of test principles and concepts. A panel of four to five USAF TPS faculty presents the students with a possible test scenario. The students must then develop a test concept and defend it to the panel.

QE 5459 Single-Look Qualitative Evaluation Program

3 Semester Hours

As future flight testers, USAF TPS students must graduate with a broad range of knowledge of flying and testing aircraft. An important part of the USAF TPS curriculum is the qualitative evaluation program. Throughout the USAF TPS course, students are given the opportunity to fly and test several types of aircraft. They learn to apply basic flight test and data collection techniques to investigate unique aircraft attributes in unfamiliar aircraft. The “final exam” for the qualitative evaluation program is the capstone qualitative evaluation. Students use their experience from previous qualitative evaluations for a more detailed investigation over one or two flights in an unfamiliar aircraft. Students select their own flight test techniques based on what they have learned at the USAF TPS to properly evaluate qualitative and quantitative flight test data with respect to aircraft type and mission.

Additional Programs

Field Trip. Students visit other bases to perform qualitative evaluations on the F-15D Eagle, F-15E Strike Eagle, SH-60 Seahawk, F/A-18 Hornet, U-2, A-10, and other aircraft not available at Edwards AFB, CA. Students also may visit a foreign test center to perform qualitative evaluations on their available aircraft. Foreign test centers visited in the past include those located at Empire Test Pilot School (Boscombe Down, United Kingdom), Ecole du Personnel Navigant d’Essai et de Reception/School (France), Italy, Brazil, India, Germany, Spain, and Sweden.

Air Force Institute of Technology

Internet Address

<http://www.afit.edu>

Mission. *Advance air, space, and cyberspace power for the nation, its partners, and our armed forces by providing relevant defense-focused technical graduate and continuing education, research, and consultation.*

The AFIT, located at Wright-Patterson Air Force Base, OH, is a key component of Air University and Air Education and Training Command. The Institute educates more than 6,300 students daily through in-residence, on-site, and distance learning courses offered by its three schools: the Graduate School of Engineering and Management, the School of Systems and Logistics, and the Civil Engineer School. It is also the home of the Air Force Center for Systems Engineering and the Air Force Cyberspace Technical Center of Excellence along with the Institute's Advanced Navigation Technology Center, the Center for Directed Energy, the Center for Measurement and Signature Intelligence Studies and Research, and the Center for Operational Analysis.

Since resident graduate degrees were first granted in 1956, AFIT has awarded more than 17,100 master's and 560 doctoral degrees. In addition, every year more than 28,000 students attend AFIT's professional continuing education in civil engineering, acquisition and logistics, and cyberspace operations career fields.

Accreditation. AFIT is separately accredited by the Higher Learning Commission of the North Central Association of Colleges and Schools (NCACS), is a member of NCACS, and maintains its own official catalog. The NCACS can be contacted at the Higher Learning Commission, North Central Association of Colleges and Schools, 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 programs within the Graduate School of Engineering and Management. Contact this agency at Accreditation Board for Engineering and Technology, Inc., 111 Market Place, Suite 1050, Baltimore, MD 21202, phone: (410) 347-7700, fax: (410) 625-2238.

AIR UNIVERSITY UNDERGRADUATE PROGRAMS

Air University undergraduate degree programs are provided by the Community College of the Air Force (CCAF) located at the Maxwell AFB-Gunter Annex, AL. The CCAF serves the educational needs of the Air Force 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 Air Force enlisted members. It is the only federally chartered institution in the United States that awards college degrees solely to enlisted personnel. CCAF awards undergraduate credit for PME courses toward an associate in applied science degree. These PME courses focus on the profession of arms, warfare, leadership, international security, and communication.

The college received degree-granting authority in July 1976 and awarded its first associate in applied science degrees 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 (SACS) (1866 Southern Lane, Decatur, GA 30033-4097, telephone number: [404] 679-4501) to award the associate degree.

The college functions as a single institution with respect to credit documentation, records, and educational program management. The detailed listing and description of each CCAF degree program is available in the separate CCAF *General Catalog*, published every three years and available online at <http://www.au.af.mil/au/ccaf/>.

Transcripts for enlisted PME courses are provided by CCAF. Students can order their free transcripts online through the CCAF web site at <http://www.au.af.mil/au/ccaf/transcripts.asp>. To ensure compliance with the Family Educational Rights and Privacy Act, students may order only their own transcripts.

Enlisted Professional Military Education Instructor Course

Internet Address

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

Mission. *To educate and train Airmen in skills and competencies that enhance their ability to accomplish duties in enlisted professional military education.*

The Enlisted Professional Military Education Instructor Course (EPMEIC) was established after the stand-down of Air University's Academic Instructor School (AIS). The EPMEIC satisfies the requirements of the Air Force for enlisted instructors who can teach in diverse educational environments using state-of-the-art educational skills and technologies. The school provides AF enlisted PME instructors with student-centered learning experiences through a supervised practice of carefully defined methods of instruction. The course satisfies the requirements set by the Southern Association of Colleges and Schools (SACS) for accrediting instructors who teach in Community College of the Air Force (CCAF)-affiliated courses.

Curriculum. The EPMEIC is CCAF-affiliated and consists of 158 hours of in-residence classes. Each student earns 10 hours of undergraduate credit upon completion of the course.

This course prepares graduates to instruct in EPME schools and academies. It is a rigorous, comprehensive, and fast-paced, experiential course that requires extensive reading and writing and moderate research. Major curricular areas include learning theory, communication skills, instructional design, teaching methods, and evaluation. The course provides maximum participation in learning. The majority of class time is devoted to small-group activity. Students write level-of-learning objectives, develop rating scales, and create test items. They must write well and create test items using interactive methods and master-selected academic content areas. The instructional methods include an informal lecture, guided discussion, a case study, and experiential instruction. Students develop the critical

thinking skills involved in teaching interactive lessons as well as an understanding of the dynamics of learning styles and classroom management.

Learning Outcome. Develops unrivaled EPME instructors who are skilled in interactive teaching methodologies and who have a broad understanding of educational activities as described in the Air Force Instructional Systems Development (ISD) process.

Faculty. EPMEIC faculty must have an associate's degree (or be within one year of completion) and complete the EPMEIC before assignment to EPME instructor positions. EPMEIC faculty must be 1750-series civilians or military, preferably with EPME instructor experience.

Duration. The EPMEIC is delivered in 20 academic days.

Eligibility. Air Force personnel must be selected through an application process to teach enlisted PME schools. Reference AFI 36-2301, *Professional Military Education*, and the Education and Training Course Announcements (ETCA) web site at <https://etca.randolph.af.mil> for additional information. ETCA course number: MESCO03.

Curriculum Summary

Instructional Areas	Contact Hours
Administrative	6
Educational Foundations	28
Communication Skills	4
Methods	68
Evaluation	18
Instructional Design	15
EPME Specific	19
Total	158

Instructional Area Descriptions

Administrative

6 Contact Hours

The administrative block introduces students to the faculty with whom they will interact. They are informed of the local conditions and safety and security concerns. The staff gathers information for registrar and survey purposes. Structured activity creates a focus on developing teaching skills with emphasis on affective aspects of teaching. This block provides time to conduct graduation and facilitate return of supplies and equipment.

Educational Foundations

28 Contact Hours

Students learn the principles of teaching adults. Since adult learners exhibit a wide range of learning styles, the exploration of learning styles, personality types, and cognitive processes is conducted in this area and adds valuable insight. The faculty emphasizes and demonstrates use of preventive techniques that can anticipate numerous problems in the classroom.

Communication Skills

4 Contact Hours

The communication skills block provides the delivery principles necessary to effectively convey educational information and to promote student learning. This block focuses on the structure, organization, and support needed to prepare and to teach lessons efficaciously. Emphasis is placed on proper questioning techniques that are critical for interactive, experiential methods of instruction.

Methods

68 Contact Hours

Students learn several interactive, experiential methodologies and must teach the lessons they create. The practice teaching (PT) portion of this block permits students to experience real-world classroom dynamics in a safe laboratory environment. Students receive feedback on all PTs and lesson plans. They also experience the impact that well-developed lesson plans have on teaching and the criticality of effective questioning in interactive classrooms.

Evaluation**18 Contact Hours**

The evaluation block offers a broad overview of the evaluation process common in education. Students are shown the relationship of feedback to improving student performance and to gauging the effectiveness of the courses. In their seminars, students create rating instruments and use them to evaluate and critique their peers. They construct and analyze multiple-choice test items. The EPMEIC faculty models techniques appropriate for classroom feedback, critiquing, and testing.

Instructional Design**15 Contact Hours**

The instructional design block covers the ISD model that is the centerpiece of Air Force education. Other blocks in the EPMEIC reflect the phases and functions found in the ISD model. Such activities as lesson planning and practice teaching illustrate the dynamics of this systems model. Students must learn the ISD process and practice it through various interactive, experiential activities.

EPME Specific**19 Contact Hours**

The EPME specific block provides the students the opportunity to network with key members of the Barnes Center for Enlisted Education community and representatives of agencies unique to the Barnes Center for Enlisted Education. The information provided by the professionals in this block adds to the commitment of the students to EPME programs and enables the professionals to articulate to their EPME students the importance of their chosen profession and its value to them and their country.

Airman Leadership School Resident Program

Internet Address

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

Mission. *Prepares senior Airmen for increased responsibilities as professional war-fighting Airmen who can supervise and lead USAF work teams to support the employment of air, space, and cyberspace power.*

Airman Leadership School (ALS) is an Air Force education program implemented at the base level to prepare senior Airmen for positions of greater responsibility. In April 1991 the USAF directed that AU establish the ALS program. On 1 October 1991 a new and standardized program came online to deliver EPME to senior Airmen. The stand-up of the new ALS discontinued the Noncommissioned Officer Preparatory Course and the Noncommissioned Officer Leadership School program. ALS is the first level of four EPME programs that enlisted professionals attend during their USAF careers. Functional responsibility for each ALS rests with the local mission support/force support squadron. ALS is currently available as a resident program and a distance learning program.

Curriculum. This Community College of the Air Force (CCAF)-affiliated course consists of 192 hours of in-residence classes accredited through the Southern Association of Colleges and Schools (SACS). Each student earns 10 hours of undergraduate credit upon completion of the course.

ALS is the critical foundation for EPME and sets the tone for present and future professional development. The program focuses on leadership skills required of supervisors and reporting officials throughout the Air Force. ALS enhances the development of senior Airmen by strengthening their ability to lead, follow, and manage while they gain a broader understanding of the military profession. The student-centered, guided-discussion methodology allows students to share ideas and experiences and work together to achieve various educational objectives in a

cohort-designed classroom setting. Formative exercises are an integral part of the ALS curriculum and serve as feedback tools for the student and instructor. Summative objective and performance evaluations are used to determine whether the educational requirements outlined in the program are met. Students must accomplish lesson objectives, including those pertaining to fitness, uniform inspections, and drill and ceremonies using the criteria outlined in the program curriculum.

ALS is conducted at 67 active-duty Air Force bases worldwide and one ANG base located in the United States. More than 350 ALS faculty members facilitate the thorough and rigorous standardized curriculum. The program is student-centered, and the curriculum is written in plain language; both are focused on developing students' critical-thinking skills. The prominent instructional methodologies are the guided discussion and the case study. Successful completion of the ALS resident program results in college credit from the CCAF.

Learning Outcome

- Prepares senior Airmen to supervise and lead work teams
- Prepares senior Airmen to effectively communicate rank-appropriate tasks
- Prepares senior Airmen to exhibit several professional military attributes

Faculty. The ALS faculty is required to have an associate's degree (or fall within one year of completion) and must complete the Enlisted Professional Military Education Instructor Course (EPMEIC) before assignment to an EPME school or academy. Within the first year of teaching, the faculty must complete a 180-hour internship at their respective schools.

Duration. The ALS program is delivered in 24 academic days. Most schools conduct eight classes each year.

Eligibility. As a general rule, students are senior Airmen with 48 months' time in service or a staff sergeant selectee. Students must have a minimum of six months of retainability in the Air Force from the class graduation date. The local military

personnel flight works directly with the ALS commandant to ensure eligible students are selected.

Students are selected based on the eligibility criteria outlined in AFI 36-2301, *Professional Military Education*, and the Education and Training Course Announcements (ETCA) web site at <https://etca.randolph.af.mil>. ETCA course number: ZZ41007.

Curriculum Summary

Instructional Areas	Contact Hours
Profession of Arms	38.50
Warfare Studies	11.00
Leadership Studies	81.00
International Security Studies	6.50
Communication Studies	51.00
Collateral Curriculum	4.00
Total	192.00

Instructional Area Descriptions

Profession of Arms

38.5 Contact Hours

This course offers a study of the military as a profession and the characteristics of the culture that separate the uniformed service from the society it serves. It focuses on distinctive knowledge, exclusive group coherence, career structure, and the Airman's role in society. The course also addresses core values, discipline, professional ethics, fitness, dress and appearance, oath of office, professional relationships, drill and ceremonies, customs and courtesies, accountability, warrior ethos, and security awareness.

Warfare Studies

11 Contact Hours

This course provides a study of the military instrument of national power. This core area develops an understanding of the nature of war and the art of employing military power across the spectrum of operations. War fighting includes historical and modern people, roles and missions, doctrine, strategy, force structures, joint operations, core competencies, and tac-

tics along with the domains of land, sea, air, space, and cyberspace supporting national security objectives.

Leadership Studies

81 Contact Hours

This course develops and inspires the human dimension from an individual to an organizational level. Broad categories in this area include leadership styles, organizational leadership, functions of management, supervisory skills, mentoring, evaluation systems, diversity management, followership, team building, and group dynamics. In addition, change management, problem solving, time management, and developmental opportunities are integrated.

International Security Studies

6.5 Contact Hours

This course develops an understanding of the nature and functioning of the international system and the strategic environment. Broad categories in this core area include the nature and causes of war and peace, patterns of change and global and regional trends, contemporary problems and issues, and global vigilance. Emphasis is placed on nonmilitary instruments of power and how they affect global, regional, and national security conditions. Global, regional, and cultural awareness is integrated.

Communication Studies

51 Contact Hours

This course helps students develop an understanding and ability to apply principles of effective communication (speaking, listening, writing, researching, communicating nonverbally, negotiating, and critical thinking). Broad categories in this core area include interpersonal communications, group dynamics, cross-cultural communications, and the attendant processes and networks for communication.

Collateral Curriculum

4 Contact Hours

The collateral curriculum is time given for the course introduction, course wrap-up, student surveys, administration, and commandant.

Airman Leadership School Distance Learning Program

Course 00001

Internet Address

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

Mission. *Prepares senior Airmen for increased responsibilities as professional, war-fighting Airmen who can supervise and lead USAF work teams to support the employment of air, space, and cyberspace power.*

The ALS DL course was activated in September 1988 and has undergone several revisions. The ALS DL program (course 1) is an Air Force education program that prepares AFRES and ANG senior Airmen for positions of greater responsibility. The non-resident DL program is the critical foundation for EPME and sets the tone for present and future professional development.

Curriculum. This CCAF-affiliated course consists of 114 hours accredited through the SACS. Each student earns six hours of undergraduate credit upon completion of the course.

The program focuses on leadership skills required of supervisors and reporting officials throughout the Air Force. The ALS DL program enhances the development of senior Airmen by strengthening their knowledge about leadership, followership, and management while they gain a broader understanding of the military profession. The ALS DL program is a voluntary, three-volume, paper-based, self-study course administered by AU. This EPME DL program is designed to provide professional development to enlisted military members at a specific and critical point in their career. Students must review the AU catalog frequently during their enrollment to ensure compliance with any changes in administrative policies. A single, closed-book, end-of-course examination covering the three volumes of material in the ALS DL program is administered at a designated/authorized test control facility located on almost every

military base. Successful completion of the ALS DL program results in college credit from the CCAF.

Learning Outcome

- Prepares senior Airmen to supervise and lead work teams
- Prepares senior Airmen to effectively communicate rank-appropriate tasks
- Prepares senior Airmen to exhibit several professional military attributes

Duration. The course consists of a single academic term of 12 months. This enrollment period begins on the date course materials are mailed to the student. The 12-month enrollment period includes time required to receive materials, order/receive tests, and submit tests for scoring/posting. There is no waiver to the 12-month enrollment period except as noted in the administration section of the *Directorate of Education Logistics and Communications (A4/6)* catalog (<http://www.au.af.mil/au/afiadl/main.htm>).

Eligibility

- Air Force Reserve personnel in the grade of E-4
- Air National Guard personnel in grades E-4 or E-5 (promoted under the ANG EPME Air Force promotion deferment policy)
- Other US military service members: US DOD military component personnel (Army, Navy, Marines, Coast Guard) in the grade of E-4 with at least 42 months time in service
- Nonmilitary technician civil service members in the grade of GS-4 or equivalent wage grade, wage leader, and wage supervisor
- Reference AFI 36-2301, *Professional Military Education*, and the Directorate of Education Logistics and Communications (A4/6) catalog at <http://www.au.af.mil/au/afiadl/main.htm> for more information

Curriculum Summary

00001 Instructional Areas	Contact Hours
Volume 1 Profession of Arms	30
Volume 2 Leadership Studies	57
Volume 3 Communication Studies	27
Total	114

Instructional Area Descriptions

Profession of Arms

30 Contact Hours

This study of military culture characteristics separates the uniformed service from the society it serves. This core area integrates six units of instruction focusing on students' knowledge, understanding, and skills necessary to succeed as supervisors supporting national security strategy. Broad areas of enlisted heritage, dress and appearance, Air Force standards, total and joint force concepts, and military citizenry are designed for students to value their evolving role as Airmen in the profession of arms.

Leadership Studies

57 Contact Hours

This course enables students to develop the human dimension of organizational professionals and prepares students for many situations involving human interaction. This core area is divided into six units of instruction focusing on philosophy, concepts, principles, and operating practices of effective leadership. Broad areas cover the enlisted force structure, the enlisted evaluation system, organizational leadership and management skills, the professional environment, and human resources development. Numerous exercises are used throughout this core area to reinforce concepts and principles.

Communication Studies

27 Contact Hours

This course helps students to understand principles and techniques that are keys to effective communication. This core area is divided into three units of instruction that focus on broad categories to develop the writing and speaking skills nec-

essary to be more effective communicators. Other topics include barriers to effective communication and the supervisor's role and responsibilities in recognition programs. Numerous exercises are used throughout this core area to reinforce concepts and principles.

Noncommissioned Officer Academy Resident Program

Internet Address

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

Mission. *Prepares technical sergeants to be professional, war-fighting Airmen who can lead and manage Air Force units in the employment of air, space, and cyberspace power.*

In October 1993 a Headquarters USAF program action directive ordered the transfer of the eight continental US (CONUS) noncommissioned officer academies (NCOA) from Air Force major commands (MAJCOM) to AETC. In November 1993 AETC assigned these academies to the newly formed College for Enlisted Professional Military Education (now the Barnes Center). Currently, six NCOAs aligned under the Barnes Center operate in the CONUS at Maxwell-Gunter, (AL), Keesler (MS), Lackland (TX), Peterson (CO), Sheppard (TX), and Tyndall (FL) Air Force Bases. The CMSgt Paul H. Lankford Enlisted PME Center's noncommissioned officer academy at McGhee-Tyson ANG Base is located near Knoxville, TN, and falls under functional control of the ANG training and education center (TEC). The Lankford Center is an affiliated CCAF campus that meets USAF standards and executes Barnes Center academic policies and curricula. Air Force major commands overseas operate their own academies. Pacific Air Forces has three academies located at Elmendorf AFB, AK; Kadena AB, Okinawa, Japan; and Hickam AFB, HI. US Air Forces, Europe, has one academy at Kapaun Air Station, Germany. NCOA is currently available as a resident program and a nonresident distributed learning program.

Curriculum. This CCAF-affiliated course consists of 223 hours of in-residence classes accredited through the SACS. Each student earns 11 hours of undergraduate credit upon completion of the course.

This PME course prepares NCOs to be professional, war-fighting Airmen who can lead and manage Air Force units in the employment of air and space power. The NCOA's 223-hour curriculum consists of five academic areas—profession of arms, warfare studies, international security studies, communication studies, and leadership studies. The principal method of instruction is the guided discussion and case studies. Formative exercises are integral to NCOA curriculum and serve as feedback tools for the student and instructor. Summative objective and performance evaluations determine whether established educational requirements outlined in the course are met. Students must accomplish lesson objectives, including those pertaining to fit-to-fight and drill and ceremonies using the criteria outlined in the course curriculum.

Learning Outcome

- Prepares NCOs to lead and manage units
- Prepares NCOs to effectively communicate rank-appropriate tasks
- Models professional military attributes

Faculty. NCOA faculty members are required to have an associate's degree (or fall within one year of completion) and must complete the EPME Instructor course before assignment to an EPME school or academy. Within the first year of teaching, the faculty must complete a 180-hour internship at their respective schools.

Duration. The NCOA program is delivered in 28 academic days and is conducted at 11 locations worldwide, with most NCOAs operating seven classes each year.

Eligibility. Students are technical sergeants and technical sergeants-select with six months of retainability upon comple-

tion of the NCOA. Students must complete the NCOA before they assume the grade of master sergeant. Local military personnel flights manage this process for each base. Quotas are distributed by AETC and managed by each MAJCOM annually.

Students are selected based on the eligibility criteria outlined in AFI 36-2301, *Professional Military Education*, and the Education and Training Course Announcements (ETCA) web site at <https://etca.randolph.af.mil>. ETCA course number: YNCOA XXX.

Curriculum Summary

Instructional Areas	Contact Hours
Profession of Arms	26
Warfare Studies	18
Leadership Studies	85
International Security Studies	10
Communication Studies	61
Collateral Curriculum	23
Total	223

Instructional Area Descriptions

Profession of Arms

26 Contact Hours

The Profession of Arms is a study of the military as a profession. It focuses on distinctive knowledge, wellness, core values, professional ethics, dress and appearance, and drill and ceremonies.

Warfare Studies

18 Contact Hours

Warfare Studies examines the military instrument of national power and develops an understanding of the nature of war and the art of employing military power across the spectrum of operations.

Leadership Studies**85 Contact Hours**

Leadership Studies explores a wide range of leadership from the individual to the organization, including situational leadership, discipline, human behavior, performance management, problem solving, change, and conflict management.

International Security Studies**10 Contact Hours**

International Security Studies consists of the national security strategy; instruments of national power; security issues; and global, regional, and cultural awareness.

Communication Studies**61 Contact Hours**

Communication Studies develops an understanding, appreciation, and ability to apply principles of effective communication relevant to an NCO (speaking, listening, writing, editing, counseling, and communicating nonverbally).

Collateral Curriculum**23 Contact Hours**

Collateral curriculum is time given for course introduction, course wrap-up, student surveys, administration, and commandant's time.

NCOA Distance Learning Program

Course 00009*Internet Address*<http://www.au.af.mil/au/barnes/>

Mission. *Prepares technical sergeants to be professional, war-fighting Airmen who can manage and lead Air Force units in the employment of air, space, and cyberspace power.*

The NCO PME DL course was activated in May 1964 and has undergone several revisions. The NCO PME DL course (course 9) prepares technical sergeants for positions of increased responsibility by broadening their leadership and supervisory skills and expanding their perspective of the profession of arms. It provides professional development to enlisted military members at specific and critical points in their career. The course presents similar, but not parallel, material to the resident program.

Curriculum. This CCAF-affiliated course consists of 123 hours accredited through the SACS. Each student earns eight hours of undergraduate credit upon completion of the course.

The NCO PME DL program is a voluntary, three-volume, paper-based, self-study course administered by AU. The 12-month enrollment period includes time required to receive materials, order/receive tests, and submit tests for scoring/posting. There is no waiver to the 12-month enrollment period except as noted in the administration section of the Directorate of Education Logistics and Communications (A4/6) catalog at (<http://www.au.af.mil/au/afiadl/main.htm>).

A single, closed-book, end-of-course examination covering all three volumes of material in the NCO PME DL program concludes the course. The test is administered at the designated/authorized test control facility located on almost every military base. Successful completion of the NCO PME DL program results in college credit from the CCAF.

Learning Outcome

- Prepares NCOs to lead and manage units
- Prepares NCOs to effectively communicate rank-appropriate tasks
- Models professional military attributes

Duration. The course consists of a single academic term of 12 months. This enrollment period begins on the date course materials are mailed to the student.

Eligibility

- Air Force Reserve personnel in grades E-5 and E-6 with a 7-skill level in their primary Air Force Specialty Code
- Air National Guard personnel in grades E-5 and E-6 with a 7-skill level in their primary Air Force Specialty Code or an E-7 (promoted under the ANG EPME Air Force promotion deferment policy) with at least two years' completion of ALS—resident or DL
- Other US military service members: US DOD military component personnel (Army, Navy, Marines, Coast Guard) in the grade of E-6
- Nonmilitary technician civil service members in the grade of GS-5 or equivalent wage grade, wage leader, and wage supervisor
- Reference AFI 36-2301, *Professional Military Education*, and the Directorate of Education Logistics and Communications (A4/6) catalog at <http://www.au.af.mil/au/afiadl/main.htm> for more information

Curriculum Summary

00009 Instructional Areas	Contact Hours
Profession of Arms	22
Leadership and Management	72
Communication Skills	29
Total	123

Instructional Area Descriptions

Profession of Arms

22 Contact Hours

The Profession of Arms course addresses subject matter that uniquely characterizes and separates uniformed service from the society we serve. The lessons thoroughly address the obligation of each NCO to promote the occupational professionalism of the profession of arms.

Leadership and Management**72 Contact Hours**

The Leadership and Management course covers human resources and organizational management. These topics provide technical sergeants with the basic understanding of human behavior, human relations, and human resource development—critical aspects they will need to develop their subordinates.

Communication Skills**29 Contact Hours**

This course curriculum consists of basic communication, writing, and speaking skills. It is designed to help technical sergeants become effective in both spoken and written communication.

AF Senior Noncommissioned Officer Academy Resident Program

Internet Address

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

Mission. *Prepares senior noncommissioned officers to lead the enlisted force in the employment of air, space, and cyberspace power in support of our national security objectives.*

The Air Force established the Air Force Senior Noncommissioned Officer Academy (AFSNCOA) in 1972 to fill a void in the professional military education for Air Force senior NCOs. In January 1973 the AFSNCOA began its first class with 120 senior NCOs and a curriculum divided into two major areas: military environment and military management. The academy now has an annual enrollment of over 1,800 senior NCOs, chief petty officers, sergeants major, and international senior NCOs and offers instruction in five major areas.

In 2003 the secretary of the Air Force and Air Force chief of staff 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 to merge in teams for instruction with the goal of increasing understanding and appreciation of the talents officers and enlisted Airmen bring in projecting airpower.

Curriculum. This CCAF-affiliated course consists of 264 hours of in-residence classes that are accredited through the Southern Association of Colleges and Schools (SACS). Each student earns 13 hours of undergraduate credit with CCAF upon completion of the course. This course provides an advanced PME program for selected senior NCOs to better prepare them for leadership responsibilities by expanding their leadership and managerial capabilities and their perspective of the military profession. The curriculum, designed to meet senior NCO needs, consists of lectures and small group work seminars. The primary instructional methodology is the 12-to-16-member guided discussions. In this forum, students share ideas and experiences and work collectively to achieve various educational objectives. Members of the academy's faculty and speakers from Headquarters USAF, AU, other commands, and civilian agencies lecture at the academy. The academy's curriculum advances the belief that the senior NCOs attending the course bring with them some understanding and competence in all areas of the curriculum.

Learning Outcome

- Prepares senior NCOs to lead the enlisted force
- Prepares senior NCOs to effectively communicate rank-appropriate tasks
- Models and develops professional military attributes

Faculty. The AFSNCOA faculty is required to have an associate's degree (or fall within one year of completion) and to complete the EPME Instructor course before assignment to the academy. Within the first year of teaching, faculty must complete a 120-hour internship at the school.

Duration. The AFSNCOA program is delivered in 33 academic days. There are five classes each year with 300 to 450 students in each class.

Eligibility. Air Force, selected Air Force Reserve (AFRES), and Air National Guard (ANG) senior NCOs attend the resident AF-SNCOA. Selected Army, Navy, Coast Guard, and international military personnel also attend on a limited basis. Active-duty Air Force personnel must have at least one year of retainability following graduation and must complete this course before being promoted to senior master sergeant. The Air Force Military Personnel Center identifies and notifies active-duty students for attendance. Air Force students must meet Air Force standards. Students from other services must meet their service's standards.

Reference AFI 36-2301, *Professional Military Education*, and the Education and Training Course Announcements (ETCA) web site at <https://etca.randolph.af.mil> for additional information. ETCA Course number: MAFSNCOA100.

Curriculum Summary

Instructional Areas	Contact Hours
Military Professional	53
Joint War Fighter	36
Operational Manager	70
Senior Communicator	41
Combined Operations	21
Objective Exercises/Evaluations	17
Collateral Curriculum	26
Total	264

Instructional Area Descriptions

Military Professional

53 Contact Hours

This course offers a study of the military as a profession and the characteristics of the culture that separate the uniformed services from the society they serve. It focuses on distinctive knowledge, exclusive group coherence, career structure, and

the Airman's role in society. It also addresses core values, discipline, professional ethics, fitness, dress and appearance, oath of office, professional relationships, drill and ceremonies, customs and courtesies, accountability, warrior ethos, and security awareness.

Joint War Fighter

36 Contact Hours

This study promotes the notion that the responsibilities for protecting our nation, preventing future conflicts, and prevailing against adversaries require SNCOs to fully understand the joint environment. SNCOs must be prepared to deploy, employ, fight, and survive across the spectrum of conflict in joint, combined, and multinational environments. Joint war fighters are well versed in joint operations, possess an in-depth understanding of the culture and capabilities of all involved forces, and are able to convey and incorporate the strengths that each force brings to the fight. They understand elements of the planning processes and recognize strategic implications of the emerging war-fighting concepts and capabilities. Joint war fighters help leadership make informed decisions by assessing the best ways to plan, present, and control military resources as they serve the unique requirements of the combatant commander.

Operational Manager

70 Contact Hours

This study enables students to focus on the organizational and personnel management functions that all SNCOs face at their home stations as well as in deployed and joint environments. Operational managers drive change and execute missions through the efficient and effective use of resources; produce excellence through a wide range of career-broadening experiences, education, and training; attract, retain, and develop Airmen and prepare them to operate in all environments; inspire a willingness to do what is right; ensure professional duties take precedence over personal desires; and master processes that ensure the Air Force remains the world's premier air and space force.

Senior Communicator**41 Contact Hours**

This study develops an understanding of and an ability to apply principles of effective communication (speaking, listening, writing, researching, communicating nonverbally, negotiating, and critical thinking). Broad categories in this core area include interpersonal communications, group dynamics, cross-cultural communications, and the attendant processes and networks for communication.

Combined Operations**21 Contact Hours**

This three-day portion of the course allows SNCOs to share perspectives with company grade officers (CGO) attending the ASBC. The SNCOs and CGOs participate in lessons and exercises designed to establish a foundational framework for an SNCO mentor relationship with CGOs. This Air Force chief of staff initiative expects CGOs, when supervising and commanding, to team up with senior enlisted personnel to ensure a united front in matters involving personnel and operations.

Objective Exercises/Evaluations**17 Contact Hours**

These hours allow time for administering and reviewing tests.

Collateral Curriculum**26 Contact Hours**

Collateral curriculum is time given for the course introduction, course wrap-up, student surveys, administration, and commandant.

SNCOA

Distance Learning Program

Course 00014

Internet Address

<http://www.au.af.mil/au/cepme/course12/>

Mission. *Prepare senior noncommissioned officers to lead the enlisted force in the employment of air, space, and cyberspace power in support of our national security objectives.*

The SNCO professional military education (PME) distance learning (DL) course was activated in October 1973 and has undergone several revisions. This program prepares SNCOs for positions of greater responsibility and enhances the development of SNCOs by strengthening their knowledge about leadership and management while they gain a broader understanding of the military profession. The SNCO PME DL program is a mandatory self-study course administered by AU. This program is designed to provide professional development to enlisted military members at a specific and critical point in their careers.

Curriculum. The SNCO PME DL course is a CCAF-affiliated course delivered via the World Wide Web (course 14). SNCO PME DL consists of 61 hours accredited through the SACS. Students earn four hours of undergraduate credit upon completion of the course. As of 6 January 2009, course 12, the CD-ROM version, is not available for new enrollments; however, support is available for students still enrolled who wish to complete the course.

Students must review the administration section of the Directorate of Education Logistics and Communications (A4/6) catalog (<http://www.au.af.mil/au/afiadl/main.htm>) frequently during their enrollment to comply with any changes in administrative policies. There is no single end-of-course examination for the SNCO PME DL program. Students are evaluated following each subcourse through summative examinations at a des-

ignated/authorized test control facility located on almost every military base.

Learning Outcome

- Prepares senior NCOs to lead the enlisted force
- Prepares senior NCOs to effectively communicate rank-appropriate tasks
- Models and develops professional military attributes

Duration. The SNCO PME DL program consists of a single academic term of 72 months for students to complete the program. This enrollment period begins on the date course materials are mailed to the student.

Eligibility

- Air Force members in grade of E-6 who have completed NCOA and have at least two years time in grade, or in grade of E-7, E-7 select, or above
- Air Force Reserve personnel in grade of E-7 (or promoted to E-8 under the ANG EPME Air Force promotion deferment policy) with at least one year since completion of NCOA-resident or DL
- ANG personnel in grade of E-7 (no minimum service required) or E-8 (promoted under the ANG EPME deferment policy)
- Other US military service members: US DOD military component personnel (Army, Navy, Marines, Coast Guard) in the grade of E-7 and above
- Nonmilitary technician civil service members in the grade of GS-6, or equivalent wage grade, wage leader, and wage supervisor; must have verification from their supervisor or commander that they are occupying a management position
- Reference AFI 36-2301, *Professional Military Education*, and the Directorate of Education Logistics and Communications (A4/6) catalog at <http://www.au.af.mil/au/afiadl/main.htm> for more information

Curriculum Summary

00014 Instructional Areas	Contact Hours
Profession of Arms	13
Communication Skills	15
Behavior Analysis	9
Human Resource Development	9
Organizational Management	15
Total	61

Instructional Area Descriptions

Profession of Arms

13 Contact Hours

Students must understand and communicate to subordinates how unit-level duties fit into the larger context of joint operations that support national policy. They also gain knowledge of the heritage and history of the enlisted corps. The profession-of-arms topics expand student knowledge of the role of the Air National Guard and the Air Force Reserve. Such subjects as strategy and foreign policy are discussed. Students also hear perspectives of a former AF chief of staff, a former prisoner of war, and other influential people.

Communication Skills

15 Contact Hours

Students are exposed to developmental lessons designed to help them understand how effective communication skills enhance their leadership ability. They receive instruction in preparing and organizing both written and spoken communications, developing effective paragraphs, supporting assertions, and editing written communication.

Behavior Analysis

9 Contact Hours

This area enables leaders to know and understand why people act and react as they do. With lessons examining behavior from many angles, students gain a broader perspective of the diverse patterns of behavior displayed by subordinates.

Human Resource Development

9 Contact Hours

This series of lessons provide students with leadership tools and methods used to improve subordinates' overall job performance and to adjust leadership and supervisory style to subordinates' experience and needs. These lessons allow students to explore the different theories of motivation and learn how to motivate workers to do their best.

Organizational Management

15 Contact Hours

The lessons in this area provide students with a broad view of organizational design and structure. Students learn how to be proactive in a leadership role as they face organizational restructuring and constant change.

Chief Master Sergeant Leadership Course

Mission. *Provide newly selected chief master sergeants with an operational perspective in their role as senior enlisted leaders.*

In January 2004 the Air Force chief of staff announced the stand-up of a new top level of enlisted PME for personnel selected for promotion to chief master sergeant. This capstone of enlisted PME, aptly named the Chief Master Sergeant Leadership Course (CLC), provides new chief master sergeants (CMSgt) with foundational strategic-level leadership knowledge that is invaluable to the employment of air, space, and cyberspace forces in support of national security. In August 2004 the inaugural CLC completed a successful test run and entered full production in February 2005. The CLC is conducted at the Air Force Senior NCO Academy at Maxwell-Gunter AFB, AL.

Curriculum. The curriculum consists of approximately 70 hours across three broad domains of learning: the developing chief master sergeant, the expeditionary chief, and the chief as

senior enlisted leader/manager. The primary instructional methodologies include the formal lecture, informal lecture, guided discussion, question and answer sessions, panel discussions, and guided activity used to facilitate the achievement of refined learning objectives, with all instruction tied back to one or more of the core curriculum areas.

Mentors. Each class of several hundred students is divided into smaller seminars of 12 to 14 students so they can participate in guided discussions with their flight facilitator and a chief master sergeant mentor. The mentors set the tone for their seminars and play a pivotal role in the development of new chief master sergeants. Mentors are experienced and mature chief master sergeants who must have a minimum of two years' time in grade, have completed CLC (if promoted to chief master sergeant in 2006 or later), meet fitness standards as well as lead and participate in fitness programs, possess outstanding oral and written communications skills, and hold a Community College of the Air Force associate's degree.

Learning Outcome. Provides chief master sergeants an operational-level perspective of the Air Force and its mission.

Faculty. The AFSNCOA competitively selects faculty members from the AFSNCOA faculty to facilitate this course. Each faculty member is required to have an associate's degree (or fall within one year of completion) and have completed the EPME Instructor course and the required internship at the AFSNCOA.

Duration. The AFSNCOA conducts two, eight-day resident CLC classes each year.

Eligibility. Active-duty chief master sergeants/selects may attend. Chiefs selected for promotion attend within the year of selection. Selected AFRES and ANG personnel also attend on a limited basis. The Air Force Chief Master Sergeant Management Office is the lead agent for CLC seat-allocation management and student selection.

Reference AFI 36-2301, *Professional Military Education*, and the Education and Training Course Announcements (ETCA) web site at <https://etca.randolph.af.mil> for additional information. ETCA Course number: MCLC001.

Curriculum Summary

Instructional Areas	Contact Hours
The Developing CMSgt	19.50
The Expeditionary CMSgt	15.00
Senior Enlisted Leader/Manager	25.00
Collateral Curriculum	10.50
Total	70.00

Instructional Area Description

The Developing CMSgt

19.5 Contact Hours

This block of instruction is focused on self-awareness and provides the opportunity for continuous development. It also provides the chief master sergeant a self-assessment; feedback from above and below and lateral sources; and a plan for continued leadership development.

The Expeditionary CMSgt

15 Contact Hours

This course provides a broad strategic overview of the US expeditionary Air Force and the challenges faced both now and in our future. It also provides the chief master sergeant a perspective of what leadership issues were faced, what competencies were needed, and the methodologies used in the AOR. This block of instruction also includes information regarding the total force with inputs from the ANG and AFRC.

Senior Enlisted Leader/Manager

25 Contact Hours

This study focuses on the strategic levels of leadership and provides the student with a broad-based perspective and some tools to be used as higher levels of responsibility are assigned to the chief master sergeant.

Collateral Curriculum

10.5 Contact Hours

Collateral curriculum is time given for the course introduction, course wrap-up, student surveys, administration, and commandant.

USAF First Sergeant Academy

Internet Address

<http://www.au.af.mil/au/barnes/fsa/>

Mission. *Develop, through education and training, selected senior noncommissioned officers to serve as advisors to commanders on issues that impact Airmen in successfully accomplishing the Air Force mission.*

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, MS, in October 1973 and was renamed the USAF First Sergeant Academy (FSA) in 1982. The academy remained at Keesler until July 1993, when it was moved to Maxwell AFB, AL, under the authority of order G-65 and aligned

with the Ira C. Eaker College for Professional Development. In January 2006 the academy became "Total Force," training men and women from active duty, ANG, and AFRC side by side in the classrooms. In July 2008 the academy was realigned under the Thomas N. Barnes Center for Enlisted Education. Additionally, the USAF First Sergeant Academy offers training through a mobile training team to those personnel identified by their commander to perform duties of a first sergeant when personnel numbers do not justify the permanent position of a first sergeant. These mobile training teams are available to all three Air Force components. The course of instruction's title is the Additional Duty First Sergeant Seminar. The duration of this course is five academic days for Active Duty and Guard personnel and three academic days for Reserve personnel.

Curriculum. This CCAF-affiliated course consists of 122 hours in residence with the additional duty seminars consisting of 40 hours. All programs are accredited through the SACS with student credit earned as follows: USAF First Sergeant Academy, five credits; USAF First Sergeant Additional Duty, two credits; USAF First Sergeant Academy ANG Add Duty, two credits; and USAF AFRC First Sergeant Academy Add Duty, one credit. In 2006 the in-residence curriculum was revised to reflect the background of its students and to produce first sergeants capable of meeting the needs of the Air Force as well as their assigned components. The academy's curriculum is divided into five major areas: unit administration, human resources preventive intervention, quality force management, military justice, and deployment issues.

The USAF First Sergeant Academy constantly puts forth initiatives and course updates to increase the efficiency and effectiveness of the academy and improve the quality of instruction. Based on surveys from field-experienced first sergeants, graduates, commanders, command chiefs, and utilization and training workshops, 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. The school's web page provides a one-stop service for first sergeants to access critical reference material used daily and information for continuity purposes. Scenario-based learning

and role-playing exercises continue to propel each student to higher levels of learning.

Learning Outcome

- The First Sergeant Academy graduate possesses skills to advise and assist commanders with all matters affecting health, morale, discipline, and welfare.
- The First Sergeant Academy graduate possesses skills to identify and react to quality force indicators in the enlisted force to support the USAF mission.
- The First Sergeant Academy graduate possesses skills to lead, advise, and mentor the enlisted force.
- The First Sergeant Academy graduate possesses skills to support his or her unit during drills and ceremonies.
- The First Sergeant Academy graduate possesses skills to be effective in the deployed environment.
- The First Sergeant Academy graduate possesses skills to advise commanders on legal issues (UCMJ, NJP, federal and state).
- The First Sergeant Academy graduate possesses skills to epitomize the Air Force core values.
- The First Sergeant Academy graduate possesses skills for effective written and oral communication.

Faculty. All personnel selected as FSA faculty must carry the first sergeant special duty identifier. The FSA faculty is required to have an associate's degree and must complete the Enlisted Professional Military Education Instructor Course (EPMEIC) after arrival. Within the first year of teaching, the faculty must complete a 180-hour internship at the FSA.

Duration. The USAF FSA course is 15 academic days long and enrolls up to 44 active duty, 25 ANG, and 10 AFRES students per class. There are eight classes each fiscal year.

Eligibility. The USAF FSA course enrolls master sergeants from active duty, ANG, and AFRES personnel. Refer to AFI 36-2113, *The First Sergeant*, for the application, training, and selection process for first sergeant duty in each of the three components.

Reference AFI 36-2301, *Professional Military Education*, and the Education and Training Course Announcements (ETCA) website at <https://etca.randolph.af.mil> for additional information. ETCA course number: MFSA8F000.

Curriculum Summary

Instructional Areas	Contact Hours
School Administration	12
Physical Training	10
Testing	3
Commandant Time	13
Unit Administration	25
Human Resource Preventive Intervention	17
Quality Force Management	14
Military Justice	14
Deployment Issues	14
Total	122

Instructional Area Descriptions

School Administration

12 contact hours

Accomplish the administrative details incidental to the USAF First Sergeant Academy, conduct in-processing, and review course curriculum.

Physical Training

10 contact hours

Students participate in physical training programs.

Testing

3 contact hours

Evaluate level of understanding with end-of-course test; instructors conduct test review.

Commandant Time **13 contact hours**

The commandant and other guest speakers share information/views about their policies and programs impacting the role of the first sergeant.

Unit Administration **25 contact hours**

Comprehend the scope and responsibilities of a first sergeant.

Human Resource Preventive Intervention **17 contact hours**

Comprehend and value how preventive intervention impacts the unit.

Quality Force Management **14 contact hours**

Comprehend quality force management policies, practices, and procedures as a tool for corrective actions.

Military Justice **14 contact hours**

Know contents of *Manual for Courts-Martial* and comprehend the applications of its principles.

Deployment Issues **14 contact hours**

Comprehend the first sergeant's role and responsibilities in a deployment process and apply the information in a deployment scenario.

AIR UNIVERSITY

NONDEGREE PROGRAMS

Professional Military Education (PME). The Carl A. Spaatz Center for Officer Education is the Air Force's unifying organization for officer professional military education. Air University's PME schools prepare junior, mid-career, and senior commissioned officers, selected civilians, and select international officers for progressively more responsible positions through the Air Force and the 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, warfare studies, international security studies, communication studies, and leadership studies. Air University PME courses are available for officers through Air War College, Air Command and Staff College, Squadron Officer College, and the International Officer School.

Professional Continuing Education (PCE). The Ira C. Eaker Center for Professional Development provides professional continuing education to Air Force and other DOD personnel as well as international students. The center is composed of five schools: the Commanders' Professional Development School, the USAF Chaplain Corps College, the National Security and Space Institute, the Defense Financial Management and Comptroller School, and the Air Force Human Resource Management School.

Officer Accession and Training Schools. The Jeanne M. Holm Center for Officer Accessions and Citizen Development provides coordinated leadership and policy direction for the Air Force's officer recruiting, training, and commissioning programs at Officer Training School and at Air Force Reserve Officer Training Course (ROTC) detachments at colleges and uni-

versities. The Holm Center also directs the Air Force's high school citizenship training program—Air Force Junior ROTC—which oversees Air Force Junior ROTC units on high school campuses around the world. The aim of this program is to build better citizens for America.

Air War College Distance Learning

Internet Address

<http://www.au.af.mil/au/awc/DL/>

Mission. *To prepare students to lead in a joint, interagency, and multinational environment at the strategic level across the range of military operations; to develop cross-domain mastery of joint air, space, and cyberspace power and its strategic contributions to national security; and to advance innovative thought on national security, Department of Defense, and Air Forces issues.*

Many military officers and federal government employees do not have the opportunity to attend senior developmental education in residence. Air War College Distance Learning (DL) offers a challenging senior professional development opportunity regardless of their location. The AWC DL program reflects the subject areas covered in the resident program's core curriculum along with selected electives to create a professional military education experience for those officers and DOD civilians unable to attend AWC in residence.

Students may complete their requirements in student-led seminars, as independent learners, or by a combination of these two. Examinations, writing requirements, due dates, and course materials are identical regardless of the completion method.

Independent study is an excellent alternative for those students desiring a great deal of flexibility due to an extensive temporary duty schedule or unique family needs or for those who may or may not have the option of participating in a student-led seminar.

Unlike the resident students, AWC DL students do not receive a master's degree or JPME credit upon completion of the program. However, they can request a transcript from the AU Registrar's office and apply for admission with one of several participating universities and colleges offering master's degree programs for AWC DL graduates. These programs vary in the number of credits they accept towards completion of their degree programs.

Curriculum. The AWC DL program is a senior developmental education program. The curriculum consists of one elective and five core courses. The elective must be completed first, within 6 months. The core courses should be completed in the following order: Foundations of Strategy (FS), National Security and Decision Making (NSDM), Global Security (GS), Joint Military Operations (JMO), and Joint Strategic Leadership (JSL). All elective and core course requirements must be completed within 36 months of initial enrollment.

In addition to completing an elective and the core courses, there is one more mandatory requirement, the Readiness for Education at a Distance Indicator (READI) assessment. The READI assessment gives students a variety of basic distance learning skills (typing, reading comprehension, and computer skills) and identifies their learning styles. Average time to complete assessment is one hour.

Learning Outcome

AWC has adopted five program learning outcomes specific to the five core-curriculum areas designated in the Air University Continuum of Education Strategic Guidance Learning Areas (LA) noted after each outcome. AWC produces graduates who

- lead in a joint environment at the strategic level across the range of military operations (LA1-Profession of Arms),
- make sound judgments on the cross-domain use of joint air, space, and cyberspace power to maintain national security (LA2-Warfare Studies),

- exercise transformational leadership at group/wing command and above levels in service, joint, and coalition settings (LA3-Leadership Studies),
- advance innovative thought on national security, Department of Defense, and Air Force issues (LA4-International Security Studies), and
- communicate complex information in a clear, concise, and logical manner in both written and oral formats (LA5-Communication Studies).

Faculty. DL military faculty members are experienced career officers who have served in various specialties. DL civilian faculty members provide continuity and typically serve beyond the tenure of the military faculty. All faculty members have at least a master's degree and are graduates of a senior developmental education program.

Duration. Students are enrolled in the DL program for 36 months. All course material must be successfully completed in this time period. The time a DL student takes to complete the program depends on such factors as official duties, deployments, and other time commitments. Students are encouraged to set realistic goals to proceed through the AWC distance learning program at a reasonable pace. Completing one lesson each week allows the student to graduate in about 20 months.

Eligibility

- **Military.** The list includes O-5 selects and above. Persons may be active duty, AFRES, or ANG; sister-service active duty, Guard, or Reserve; or Civil Air Patrol. Refer to AFI 36-2301, *Professional Military Education*, 27 July 2002, paragraph 3.3 for guidance.
- **Civilian.** Federal civil service employees in the grade of GS-14/15, National Security Personnel System (NSPS) employees in pay bands 3/4, or lab/demo employees in grades DR-III/IV.

- **International.** International applicants must be an O-5 select or higher. International officers must request enrollment via the Air Force Security Assistance Training (AFSAT) program office. Refer to AFI 36-2301, *Professional Military Education*, 27 July 2002, paragraphs 3.7.2 through 3.7.6, for guidance.

Reference AFI 36-2301, *Professional Military Education*, and the Education and Training Course Announcements (ETCA) web site at <https://etca.randolph.af.mil> for additional information. ETCA course number: MAWC002.

Enrollment. Military personnel should enroll in AWC DL via the Air University Student Information System (AUSIS) at <https://ausis.maxwell.af.mil>. Eligible civilian personnel must contact AWC/DL to accomplish the enrollment. International students will be enrolled by AWC/DL once approved by AFSAT.

Completion Requirements. Students must score 70 or better out of 100 to graduate and receive program credit.

Curriculum Summary (17th Edition)

MAWC002 Curriculum Areas	Lessons	Contact Hours
FS 42A Foundations of Strategy	12	99
NSDM 42B National Security and Decision Making	12	99
GS 42C Global Security	12	99
JMO 42E Joint Military Operations	12	99
JSL 42F Joint Strategic Leadership	12	99
EL 42D Electives Program (one required)	10	60
Total		555

Note: Courses taken in the DL program may not be used to satisfy course requirements of the resident program.

Course Descriptions

The DL program (17th edition) includes the core curriculum and an elective. The core curriculum consists of five courses: Foundations of Strategy (FS), National Security and Decision Making (NSDM), Global Security (GS), Joint Military Operations (JMO),

and Joint Strategic Leadership (JSL). Additionally, students must complete one elective before enrolling in the first core course.

FS 42A Foundations of Strategy **99 Contact Hours**

The FS course develops senior leaders who can think strategically using key conceptual tools, theories, and insights. The course analyzes the meaning and dimensions of strategy; theories of international relations; scientific, Clausewitzian, and classical Chinese perspectives on strategy and war; and readings addressing the phases of war, civil-military relations, insurgency and counterinsurgency, coercion theory, and coalition warfare. This course serves as the foundation for other courses that examine the national security decision-making process and the application of military power as a means to attain national objectives.

NSDM 42B National Security and Decision Making **99 Contact Hours**

The NSDM course assesses the processes for developing US security strategy and policy as well as the use of the national instruments of power in support of that policy and strategy. The course does this by evaluating the current US national security strategy and interests, state and nonstate threats, and the roles of the instruments of power in countering those threats. The course also focuses on the national security decision-making processes by assessing the role and impact of civil-military relations, the interagency process, Congress, and public opinion in policy development and execution.

GS 42C Global Security **99 Contact Hours**

The Global Security course examines the roles of nations in addressing key issues shaping the global environment. The course also identifies growing and emerging security concerns beyond the military capabilities of state and nonstate actors (e.g., energy security, environmental security, migration, and population growth). The course uses a comparative approach to examine the political and economic elements of actors and their impact across a wide range of global issues. It assesses the relationship between efforts to democratize states, eco-

conomic development, and national and international security. The course also analyzes power politics from a region-to-region perspective and the impacts of these regional features with regard to international security.

JMO 42E Joint Military Operations 99 Contact Hours

The Joint Military Operations course prepares senior leaders to deploy, employ, and control joint forces across the spectrum of conflict. The course emphasizes the employment of air and space forces as they contribute to the joint, combined, or coalition environment in support of the national military strategy. The course assesses the best ways to present, plan, and control military resources (United States and coalition) as they serve the unique requirements of the combatant commander. The course analyzes the strategic implications of emerging war-fighting concepts (sister service, global strategic operations, logistics, and special operations), and planning for and evaluation of future threats that are asymmetric to the US experience and expectations. The course also evaluates the friction between joint and service operational concepts as applied to the employment and control of air and space power.

JSL 42F Joint Strategic Leadership 99 Contact Hours

The JSL course educates students in the competencies and awareness needed to move from tactical and operational leadership levels to strategic leadership. The course examines senior leadership competencies required to be successful in today's complex, multicultural expeditionary, and war-fighting environment. It challenges students to develop their vision, expand their conceptual capacity through critical analysis and creative thinking, improve their communication skills, expand their capacity for executive decision making, and refine their capability for change. In addition, the course focuses on acceptance of responsibility, accountability, command, moral values, and awareness of the strategic environment to meet strategic and senior-leader challenges involved in leading large, complex organizations. The course concludes with an interactive simulation to provide cultural awareness and familiarization. It is designed to develop an understanding of the dimensions of culture and other group dy-

namics in a realistic setting and how those may impact operations and senior-level decision making. Additionally, the Intercultural Development Inventory (IDI) assessment tool is part of this course. The IDI will be completed pre- and post-JSL to measure intercultural sensitivity.

Electives Program

60 Contact Hours

All students must complete one elective before enrolling in the first core course. The Electives Program's major objective is to enhance and complement the core curriculum by providing opportunities to achieve greater depth and breadth of understanding in issues of special interest.

EL 42D1 Language Elective. A language familiarization program is offered in Arabic, French, Mandarin Chinese, Russian, and Spanish.

EL 42D2 Space Operations. This course focuses on military applications of space systems and includes capabilities, limitations, dependencies, and vulnerabilities. Space policies, law, and doctrine establish the guidelines for using space, while orbital mechanics and the space environment place physical limits on the use of space. The course provides an understanding of current space systems and how space supports the war fighter as well as the issues facing senior leaders in applying space power. The readings include background information on space characteristics, limitations, organizations, missions, functions, and contributions to war fighting.

EL 42D3 Communicating for Effect. Senior military leaders must understand the information environment and how it can be exploited for military gain. They must also understand the statutory and policy limitations the government places on the exploitation of information, the communication channels it passes through, and the effects various public affairs actions—integrated into information operations—can generate on US citizens, allies, and adversaries. In addition, students focus on what measures must be taken to safeguard information and the communication channels it passes through and how the

evolving opportunities and challenges in the information environment affect military decision making. This course prepares current and future leaders to exploit the information environment with regard to military operations planning and execution and instructs them on how to use strategic communication in operations planning.

EL 42D4 Nuclear Weapons. Since their development, nuclear weapons have played a significant role in the national and military security strategies of the United States. This course explores the history of nuclear weapons and their role in deterrence. It discusses the nuclear enterprise and recent changes in the Air Force to reinvigorate this key capability. This course also explores regional nuclear issues and the threat of terrorists to use weapons of mass destruction. This course helps senior leaders to understand better the role of nuclear weapons in both historic and modern deterrence theory.

EL 42D5 Counterinsurgency (COIN) and Military Support to Security, Stability, Transition, and Reconstruction (SSTR). Given that the object of war is peace on favorable terms, long-term stability is essential to be successful in any military operation. This stability often requires COIN efforts to be woven together with SSTR efforts so that they operate concurrently and systematically, building upon each other's successes. This course explores current COIN and SSTR doctrine and both historic and current operations where they played a significant role. This course helps senior leaders to plan and prepare future operations that take into account the complexities of Phase IV operations.

EL 42D6 Sustainable Security. This course focuses on airpower strategies and provides tools to understand and evaluate airpower strategies. From its inception, airpower has been characterized as an asymmetric means of warfare. Coercion places the adversary in a position where it can choose to comply with what has been demanded or defy those demands. Airpower is a unique coercive weapon, and students explore these concepts from a historical viewpoint by first studying several early airpower strategists. The course then allows students to investi-

gate four strategies for coercing an adversary: punishment, risk, decapitation, and denial. Application of coercive airpower culminates with two case studies giving students the opportunity to evaluate the coercive strategies applied and their outcomes. Finally, the course concludes with a discussion on future challenges of using airpower to coerce nonstate actors in support of counterinsurgency operations.

Air Command and Staff College Nonresident IDE–Nonmaster’s Program

Internet Address

<http://www.au.af.mil/au/acsc/distance-learning.asp/>

Mission. *Prepare field-grade officers to develop, employ, and command air, space, and cyberspace power in joint, combined, and multinational operations.*

Established in 1948 the Air Command and Staff College (ACSC) nonresident intermediate developmental education program provides intermediate-level PME to officers unable to attend in residence. In 1969 the college expanded the scope of the program by implementing a seminar-delivery methodology to provide for the sharing of opinions, expertise, and experiences among the seminar members. Both the seminar and the correspondence programs achieved Phase I joint professional military education (JPME) accreditation in 1992 and were reaccredited in 2002, 2004, and 2007. In 1999 the distance learning programs were placed under the dean of distance learning (DL). The nonmaster’s program (NMP) provides PME to about 85 percent of all Air Force majors and majors-select.

As of 1 February 2010, the NMP supports more than 10,000 students: 41 percent US Air Force active duty; 9.5 percent ANG; 14 percent US AFRES; 18.5 percent Navy, Army, and Marine Corps; 14 percent DOD civilians; and 3 percent “other.”

Curriculum. The college's curriculum (Version 5.2) is designed to produce a more effective field-grade officer serving in operational-level command or staff positions. The courses emphasize applying air, space, and cyberspace power in joint campaign planning and the operational art of war. The course of study is an integrated process. It begins with lessons designed to enhance the students' leadership and command skills and concludes with an exercise that offers students an interactive, educational experience in planning, generating, and employing air and space forces in support of a joint force commander's mission. In between, students explore national security issues; strategy and war theory; air, space, and cyberspace power history and theory; expeditionary Air Force force-employment concepts; and the capabilities and limitations that the US Air Force and its sister services contribute to joint force commanders.

The curriculum is delivered via printed books, DVDs, CD-ROMs, and the Internet. Students receive an integrated multimedia curriculum that includes textbook readings, digitized multimedia offerings, and interactive applications. Students must achieve a minimum score of 70 out of 100 on each of seven examinations and complete three online exercises and a written requirement. Students may choose several methods to complete the program.

The specific delivery methods for the curriculum are as follows:

- **Nonmaster's Program Self-Study.** This self-paced method of study allows students to choose the time and place of study. The college offers a framework for completing this program within the 18 months allotted by providing a recommended schedule for students to follow. To enhance flexibility, however, students may enroll anytime and deviate from the recommended completion schedule as time permits. Because of the program's flexibility, this method is the most popular one for completing the NMP.
- **Base-level Seminar.** In this 10.5-month version of the NMP, students coordinate with their base education office to form the seminar and then meet weekly at participating home stations in a forum designed for the free exchange of ideas and opinions. Seminar participants share unique background experiences and technical expertise. The college de-

tails the framework for conducting the seminar program by providing a schedule for the seminars to follow. The seminars are composed of five to 18 members and may begin anytime colocated students elect to form a seminar. Although seminars typically start in August, to coincide with dependents' school schedules, they can start any time.

- **Air Reserve Component Seminar.** The Air Reserve Component Seminar (ARCS) is specifically focused on the unique needs of select AFRES and ANG students. It is a hybrid seminar-correspondence program, running from one summer to the next. Initially, students assemble in seminars to complete the first two courses of the seven-course curriculum. These seminars are faculty-facilitated, feature guest speakers, and allow students to benefit from shared experiences in a collaborative learning environment. At the end of the two-week period, students return to their homes and have one year to complete the next three courses on their own through correspondence. They reassemble the following summer to complete their final two courses in the enhanced seminar method previously described.

Courses taken in the nonresident program may not be used to satisfy course requirements of the ACSC resident program or the course requirements of the online master's program (OLMP).

Learning Outcomes. ACSC's nonmaster's program builds upon the knowledge and skills imparted through BDE and experience gained as a company grade officer, delivering a relevant educational experience globally and meeting unique demands of expeditionary Airmen. The NMP delivers field-grade officers (FGO) prepared to develop, employ, and command air, space, and cyberspace power in joint, multinational, and inter-agency operations. The NMP produces FGOs who

- comprehend operational and strategic command and staff leadership in a joint, whole-of-government, and multinational context;
- are well versed in joint and service perspectives and understand joint planning and operations within the context of operational art across the range of military operations;

- are well grounded in military history, theory, and doctrine across the range of military operations;
- comprehend the US national strategic decision-making process and know how the actors and systems translate policy into action through the use of the instruments of power; and
- comprehend regional expertise and cultural competence as war-fighting enablers.

Faculty. The college employs a blend of expert faculty exceptionally qualified to accomplish its mission and goals. Its unique mission requires a distinctive mix of faculty qualifications and credentials. Traditional civilian academics provide the depth and breadth of subject matter expertise to guarantee the academic rigor of the college's offerings while simultaneously ensuring adherence to validated pedagogical theory and practice. Military officers contribute critical military and operational perspectives, as well as unparalleled currency and expertise, to the subject matters addressed.

Duration

- Nonmaster's program: 18 months
- Base-level Seminar: 10.5 months

Eligibility. The programs are offered to US active duty, Reserve, and National Guard majors, majors-select, and their equivalents from all services. DOD civilian employees in the grade of GS-12 or above or in equivalent NSPS positions may also enroll. Civil Air Patrol officers serving in the grade of major or above may also enroll in the DL program. International applicants for the programs must be majors-select 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 enroll through the Foreign Military Sales training sponsorship program.

Reference AFI 36-2301, *Professional Military Education*, the ACSC public web site, <http://www.au.af.mil/au/acsc/distance-learning.asp>, and the Education and Training Course An-

nouncements web site at <https://etca.randolph.af.mil> for further information. ETCA course number: MACSC003.

Enrollment. Students will be enrolled in ACSC upon verification of identity in the AUSIS at <https://ausis.maxwell.af.mil>. They remain enrolled through completion, provided they stay in good standing.

Graduation Requirement. Students must maintain a grade of “B” or better to graduate.

Curriculum Summary

MACSC003 Curriculum Areas	Contact Hours
00030A The Challenges of Leadership and Command	27
00030B National Security Studies	27
00030C Strategy and War	27
00030D Air, Space, and Cyberspace Power	27
00030E Joint Forces	27
00030F Joint Planning	27
00030G Joint Air and Space Operations	27
Total	189

Course Descriptions

00030A The Challenges of Leadership and Command

27 Contact Hours

The Challenges of Leadership and Command course equips field-grade officers with the knowledge and tools to assist them in today’s dynamic environment. It builds upon leadership information introduced during previous Air Force PME experiences. Officers must challenge themselves to sharpen inherent skills while striving to become better leaders. The course further introduces students to the special leadership situation of command. Command is based on relationships and is a unique position that brings with it special responsibilities. The course explores these responsibilities and common resources available to individuals to help meet the challenges of command.

00030B National Security Studies 27 Contact Hours

The National Security Studies course demonstrates that military officers must understand today's complex and dynamic national and international security environment to operate effectively at all levels—including the operational level. Military officers must first realize how US policy makers prepare to respond to the security environment through the development of national-level strategies and plans. Only then can officers properly plan for the most effective use of the military instrument of power in synergy with the other instruments of power to protect US national interests.

00030C Strategy and War 27 Contact Hours

The Strategy and War course provides military officers with an understanding of how military strategy and the military instrument of power support the national security strategy and national objectives. Students develop a better understanding of the crucial relationship between levels of strategy and levels of war. The course examines key concepts associated with the use of military force—both the preferred American way of war and other types of warfare more prevalent in some cultures. Students also see how the DOD is addressing the evolving emphasis on security and stability operations. Military practitioners must be prepared for the difficult challenges they will face when attempting to apply operational art to achieve strategic goals in complex cultural contexts such as those found in Iraq.

**00030D Air, Space, and
Cyberspace Power 27 Contact Hours**

The Air, Space, and Cyberspace Power course is designed to help students understand the most effective methods for employing air and space power by surveying historical examples, leadership influences, and doctrine. The course describes the transformation of air, space, and cyberspace power from the end of World War I through Operation Iraqi Freedom, reveals how that transformation is reflected in current USAF doctrine, and explains how USAF air and space expeditionary force operations provide air and space power for use by combatant

commanders. The course introduces such basic Air Force doctrinal concepts as USAF distinctive capabilities and shows how the operational functions of air and space power help students grasp the unique capabilities and limitations of modern air and space power. This course equips students with the practical information they need to become effective advocates for air, space, and cyberspace power.

00030E Joint Forces

27 Contact Hours

The Joint Forces course prepares students for assignments in joint environments and provides a baseline of knowledge for further studies in joint operations. It explores the intent, organizing principles, and command relationships of joint organizations, while focusing on concepts central to effective joint operations—unity of command and unity of effort, integration, and interdependence. The course then reviews the influences that the individual services have on joint force operations. This is accomplished through a review of how the services present forces, capabilities and limitations of key forces, and service doctrine. Central to this effort is a review of both joint and service doctrine—the best way to conduct military affairs. The course is presented in three phases and provides an operational-level perspective of joint forces.

00030F Joint Planning

27 Contact Hours

The Joint Planning course provides students with an analysis and comprehension-level understanding of how combatant commanders support global security for US interests at home and abroad. The course identifies the national-level systems as the driving force behind the complex planning performed by combatant commanders and then explains doctrinal concepts, including non-US military integration, common terminology, and tools used in joint operation planning. Next, it distinguishes between the two planning processes used at the strategic and operational levels: the contingency and crisis-action planning processes. The course concludes with a hands-on exercise that reinforces key concepts by having the students apply their knowledge in a simulated joint force planning cell.

**00030G Joint Air and
Space Operations**

27 Contact Hours

The Joint Air and Space Operations course examines the people, processes, and products involved in planning, directing, and executing joint air and space operations in support of the joint force commander's operations plan. Using both joint and Air Force doctrines, the course addresses the roles and responsibilities of the JFACC and his or her war-fighting headquarters—the joint air operations center (JAOC). The course describes considerations for employing joint and multinational forces at the operational level of war. The course further introduces students to the fundamentals of space and information operations. Students will use the concepts learned in this course to plan and execute the final exercise of the curriculum, the Joint Air and Space Exercise (JAEX). JAEX requires that students develop a strategy to achieve stated objectives and then execute that strategy by developing air tasking orders (ATO).

Squadron Officer College Faculty Development

Internet Address
<http://soc.au.af.mil/>

Mission. *To educate and enrich Squadron Officer College (SOC) faculty to develop company grade officers as leaders of integrity ready to fly, fight, and win in air, space, and cyberspace.*

Curriculum. The faculty development program uses a curriculum mixed with readings, lectures, guided discussions, case studies, and experiential lessons to achieve its ends. Readings come from standard USAF educational doctrine, like AF Handbook 36-2236, *Guidebook for Air Force Instructors*, as well as cutting-edge work like Dr. Ken Bain's *What the Best College Teachers Do*. For instructional design we look at AF Manual 36-2235, Volume 10, *ISD Application to Education*, while also

paying attention to the lessons of Drs. Grant Wiggins and Jay McTighe's *Understanding By Design*: "Our end is to produce teachers who can educate company grade officers as well as curriculum developers who can produce a quality curriculum."

Learning Outcomes. SOC faculty development consists of two courses. Each course has specific learning outcomes.

MSOC001 Theories and Principles of Adult Education (TPAE)

- Comprehend educational foundations and their impact on lesson presentation.
- Comprehend how good communication skills impact lesson presentation.
- Apply the correct usage of each instructional method.
- Comprehend educational evaluation.
- Comprehend the principles of the total instructional design process.
- Apply principles of instructor expertise and professionalism.

MSOC002 Advanced Principles of Instructional Design (APID)

- Apply principles of the "adult learner" and educational foundations in lesson development.
- Comprehend how good communication skills impact lesson development.
- Analyze need and determine the correct usage of each instructional method.
- Apply principles of visual aids management in the development of instructional materials.
- Apply principles of educational evaluation.
- Analyze educational problems using the principles of instructional design process.

Faculty. The SOC Faculty Development Department consists of three full-time personnel but also has access to adjunct professors and instructors in the SOC faculty. The department chair holds a terminal degree in education, and the other personnel have expertise in instructional design and are experienced classroom instructors.

Duration. Each course is 10 academic days.

Eligibility. TPAE is open to newly assigned SOC faculty. To attend APID, candidates must have completed an SOS and/or ASBC flight commander tour.

Reference AFI 36-2301, *Professional Military Education*, and the Education and Training Course Announcements (ETCA) web site at <https://etca.randolph.af.mil> for additional information. ETCA course numbers: MSOC001 and MSOC002.

Completion Requirement. Students must maintain a grade of “B” or better to graduate from TPAE or APID.

Curriculum Summary

Course Number and Title	Contact Hours
MSOC001 Theories and Principles of Adult Education	80
MSOC002 Advanced Principles of Instructional Design	80
Total	160

Course Descriptions

MSOC001 Theories and Principles of Adult Education (TPAE)

80 Contact Hours

This 10-day course acquaints new SOC flight commander candidates with basic flight room educational concepts to execute the curriculum of ASBC and/or SOS. Emphasis is placed on instructional methodologies, educational theory, communication skills, and classroom management techniques. The course provides an overview/orientation of basic curriculum development concepts, including ISD, lesson design and execution, and student evaluation and assessment. This compre-

hensive, fast-paced, hands-on course requires extensive reading and moderate levels of research and writing. It culminates in a series of graded student practice-teaching sessions in which students employ guided discussion, case study, informal lecture, and experiential methodologies to teach the SOC curriculum.

**MSOC002 Advanced Principles
of Instructional Design (APID)**

80 Contact Hours

This 10-day course equips newly assigned SOC curriculum developers with information and experience necessary to design and develop curriculum for the USAF's only CGO professional military education (PME) institution. Emphasis is placed on the analysis, design, and development of curriculum through the knowledge of ISD principles. The course includes extensive discussion on evaluation principles as well as the cognitive, affective, and psychomotor domains of learning. Teaching methods include guided discussions, case studies, informal lectures, and experiential learning. This comprehensive, fast-paced, hands-on course requires extensive reading and moderate levels of research and writing. This course culminates with students completing and presenting a curriculum project requiring the application of instructional design theories and comprehension of the total ISD process.

Squadron Officer School Resident Program

Internet Address

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

Mission. *Educate, motivate, and mentor captains as current and future Air Force leaders.*

SOS is the second course in the Air Force officer PME system. The school traces its roots to the Air Corps Tactical School founded in 1946 at Maxwell Field, AL. SOS became an arm of

Air Command and Staff College in 1950 when the tactical school closed. Col Russell V. Ritchey, founder and first commandant, opened the Squadron Officer Course—the real beginning of SOS—at Maxwell AFB, AL, that same year. In 1959 SOS became a separate Air University (AU) school reporting directly to the AU commander. In 2000 SOS merged with the Air and Space Basic Course (ASBC) under the Squadron Officer College (SOC), whose mission focuses on professional development for company grade officers.

Curriculum. SOS builds upon knowledge and skills imparted through precommissioning and ASBC PME and professional experience to deliver to the Air Force CGOs who comprehend and embrace the service's core values and the ethics and principles of officership that are so distinct to the profession of arms and service in the US Air Force.

SOS emphasizes personal, team, and organizational leadership, equipping its students with theory, doctrine, and practical experiences that empower them to seek and capitalize on leadership opportunities through which they spur themselves, their subordinates, their peers, and their units to mission success and organizational excellence. Instruction is illustrated and reinforced through the measured use of military history examples as well as joint and service doctrine.

In support of the school's leadership emphasis, SOS students learn to comprehend and value the capabilities and limitations of the US armed forces and the manner in which joint forces are organized and led to achieve joint force commanders' mission objectives. SOS students are also alerted to the unique challenges inherent in today's international security environment and constantly seek opportunities to achieve success given the myriad constraints and threats that environment encompasses. SOS students can communicate effectively both formally and informally through both the spoken and written word, conveying their ideas and instructions logically in a manner that informs, motivates, and inspires subordinates and peers alike.

The 147-hour, graduate-level curriculum accomplishes the SOS mission by testing and evaluating students on the entire spectrum of the Full Range Leadership Model, as well as Pro-

fession of Arms, Warfare Studies, Effective Communication, and International Security Studies. During the course, students study six modules: Essential Skills; The CGO—Introspection and Self-Awareness; The CGO in the Work Environment—Organizational and Team Leadership; The CGO as a Member of the USAF—“The Family Business”; The CGO as a Component of the US Military—The Joint Perspective; and The CGO and Future Challenges—Strategic and Global Perspectives. Students thus learn about their personal leadership skills and demonstrate not only how they fit into the Air Force but also how their service supports joint, national, and international operations.

Learning Outcomes. The Air Force values CGOs who possess a thorough understanding of and embrace the values of the profession of arms, are well versed in the capabilities and force-presentation policies of our service, are well grounded in military history, theory, and doctrine; are capable informal and formal leaders; and can communicate effectively. SOS helps to fill the Air Force’s developmental requirements in each area of its curriculum.

- **Learning Area 1 – Profession of Arms Emphasis.** Synthesize the Air Force core values, ethics, and principles of officership distinctive to the profession of arms and service in the US Air Force.
- **Learning Area 2 – Warfare Studies Emphasis.** Comprehend the capabilities and limitations of the US armed forces and the manner in which joint forces are organized and led to achieve joint force commanders’ mission objectives.
- **Learning Area 3 – Leadership Studies Emphasis.** Apply personal, team, and organizational leadership theory, doctrine, and skills to achieve mission success and organizational excellence.
- **Learning Area 4 – International Security Studies Emphasis.** Analyze the unique challenges and opportunities inherent in today’s international security environment.

- **Learning Area 5 – Communication Studies Emphasis.**

Apply communication skills effectively to convey ideas and instructions logically to inform, persuade, motivate, and inspire as appropriate.

Faculty. All SOS classroom instructors are captains or majors who have completed the resident SOS course and MSOC001, Theories and Principles of Adult Education (upon arrival), or its equivalent. Additionally, each instructor undergoes a supervised instruction period.

Duration. The SOS program is delivered in 25 academic days.

Eligibility. Targets four- to seven-year captains, select civilians, and international officers. Captains with at least four but fewer 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 grades of GS-9–12, with at least four years of continuous civil service, are also eligible. In addition, a limited number of allied international officers are accepted into SOS classes at various times during the year.

Reference AFI 36-2301, *Professional Military Education*, and the Education and Training Course Announcements (ETCA) web site at <https://etca.randolph.af.mil> for additional information. ETCA course number: MSOS001.

Completion Requirements. Complete all requirements as outlined in the course syllabus.

Curriculum Summary

MSOS001 Curriculum Areas	Contact Hours
Profession of Arms Studies	21.55
Warfare Studies	6.10
Leadership Studies	37.50
International Security Studies	9.50
Communication Studies	27.15
Administration	5.25
Total	107.05

Course Descriptions

Profession of Arms Studies 21.55 Contact Hours

At the primary level of PME, officers build upon their understanding of moral and ethical development by applying key concepts of accountability and professionalism to the challenges and opportunities inherent in leadership. Officers will analyze case studies to grasp the unique but vital relationship that binds the US military in obedience to its civilian leadership and in defense of the civilian public. They will also integrate personal and professional values into a warrior ethos consistent with the highest standards of conduct expected of military officers.

Warfare Studies 6.10 Contact Hours

Emphasis at the primary level is placed on the application of the military as a national instrument of power. Officers should understand their service's roles, missions, distinctive capabilities, core competencies, and structures both in the context of history and the joint operations that they may be called on to support. Officers should also have a working knowledge of the capabilities of sister services to better support the joint war-fighting team.

Leadership Studies 37.50 Contact Hours

The primary leadership team for the Air Force is the flight team; therefore, the focus of Leadership Studies at the primary level of PME is the flight level. The primary focus is on the tactical level to provide tools officers need to build and lead small teams and serve as dynamic followers. The focus at the primary level is on the dynamics of the interaction between individual leadership skills and group interaction in building successful teams. Instruction is based on concepts and philosophies that officers can use to improve leadership skills, adjust leadership styles to the situation, accomplish assigned tasks, and employ followers' abilities effectively. There are opportunities for officers to apply the leadership skills and techniques they have learned.

International Security Studies**9.50 Contact Hours**

The primary level of PME emphasizes those aspects of national and international security affairs that provide the broad context within which junior officers and their superiors must operate. Special attention is paid to those national and international security topics that most affect an officer's ability to lead and follow, to communicate, and to understand what it really means to be an Airman in today's globalized environment.

Communication Studies**27.15 Contact Hours**

The Communication Studies course amplifies instruction received at the precommissioning and basic level and provides opportunities to apply the principles of effective communication and to receive feedback. Special attention is given to those listening, speaking, writing, and interpersonal communication skills instrumental in team building. Interpersonal communications emphasize maximizing the potential of the individual as a part of a team. Officers learn to create and deliver organized, well-reasoned, and well-supported arguments via the spoken and written word.

Administration**5.25 Contact Hours**

Administration focuses on the dissemination of critical and administrative information and feedback sessions with the faculty and evaluations of students' understanding of the curriculum.

Squadron Officer School Distance Learning Program

Course 00020*Internet Address*

http://www.au.af.mil/au/soc/course_20.html

Mission. *Educate, motivate, and mentor captains as current and future Air Force leaders.*

The Squadron Officer School (SOS) Distance Learning (DL) Program (Course 20) provides company grade officers (CGO) with leadership skills at appropriate points in their personal and professional development. The SOS nonresident curriculum is based on the institutional competency list (ICL) provided in Air Force Policy Directive (AFPD) 36-26, *Total Force Development*. The ICL clearly delineates those skills necessary for an officer's success. It constitutes a comprehensive set of abilities and knowledge that defines leadership competence. This course of study provides the necessary tools to execute and excel in the daily leadership and management challenges that characterize CGOs' duties.

The course helps experienced CGOs further develop the skills they need to excel in today's world of rapidly accelerating technology and limitless access to information while preparing them to adapt to unforeseeable challenges and future risks. Students are introduced to principles and applications of ethical leadership and are provided opportunities to explore the Air Force core values and discover and apply various decision-making models, including Air Force Smart Operations for the Twenty-First Century (AFSO 21). Additionally, they develop tools to create a positive environment for building and leading effective teams and coalitions and examining the stages that development teams encounter en route to mission success. The course is specifically designed for junior Air Force officers as they begin taking on increased responsibilities.

The course is offered online via the Blackboard® Learning Management System and features web-based instruction that facilitates rapid courseware delivery anywhere and at any time. The courseware contains multimedia and interactive exercises to stimulate critical thinking and achieve desired learning levels. Students achieve lesson objectives online and via self-study and then take electronic course exams at designated education offices or other sanctioned testing sites where they receive immediate feedback on their performance.

Curriculum. The SOS DL course presents content similar but not identical to the resident curriculum. Course 20 develops CGOs' skills aligned with the Air Force ICL subcompetencies of "ethical leadership," "develops and inspires oth-

ers,” “builds teams and coalitions,” and enhances “decision making.” It focuses on developing critical-thinking skills through the application of principles acquired from the readings and a variety of mediated vignettes and scenarios. The lessons include instruction, practice, and feedback in the thoughtful use of information to guide others, both individually and in groups, toward mission accomplishment.

Learning Outcomes.

- Comprehend ethics, core values, and leadership model influences on company grade officer development.
- Know the leadership process.
- Know the concept of accountability in the military.
- Comprehend the associations between professional and personal lives of leaders and subordinates.
- Know decision-making concepts in the USAF environment.
- Comprehend differences between various decision-making approaches used in the USAF environment.
- Comprehend differences between other military services and cultures during the decision-making process.
- Know how risk and uncertainty factors relate to the decision-making process.
- Comprehend how metrics are incorporated in the USAF decision-making process.
- Know leadership approaches to building effective teams.
- Comprehend issues influencing group and team effectiveness.
- Comprehend differences between values and cultures at the individual and institutional levels.

- Comprehend the importance of developing networks at the leadership level.

Faculty. The Squadron Officer School DL is developed, maintained, and supervised by doctorally qualified faculty members in association with officer curricularators and professional instructional designers.

Duration. Students must complete the entire program within 18 months from their enrollment dates.

Eligibility

- US Air Force active duty, Guard, or Reserve captains and captains-select
- Air Force federal civilian employees in the grades of GS-9, WG-10, WS-8, and above, who have completed one year of civil service employment and have a bachelor’s degree from a regionally accredited college or university
- Civil Air Patrol (CAP) officers selected for captain and above who have a bachelor’s degree from a regionally accredited college or university and meet minimum CAP criteria

Reference the Education Logistics and Communications (A4/6) catalog for more information at <http://www.au.af.mil/au/afiadl/main.htm>. Education and Training Course Announcement (ETCA) program number: 00020.

Completion Requirements. Complete all requirements as outlined in the course syllabus.

Curriculum Summary

PROGRAM 00020 Curriculum Areas	Contact Hours
00020A Ethical Leadership	42
00020B Decision Making	51
00020C Builds Teams and Coalitions	45
Total	138

Core Curriculum Area Descriptions

Ethical Leadership

42 Contact Hours

This unit examines personal and Air Force core values and develops the trust and commitment of others, personal accountability, and the ability to maintain checks and balances. It enables students to practice acting in accordance with the high standards of the Air Force and to recognize the positive effect of such behavior on coworkers.

Decision Making

51 Contact Hours

This unit focuses on using proven processes to make effective and timely decisions. It includes processing data/information from multiple streams and utilizing it to influence decisions, relying on analytic methods in all decision making, understanding interdependencies and interoperability across all associated forces, analyzing situations critically to anticipate second- and third-order effects, and establishing metrics to evaluate results and implement feedback.

Builds Teams and Coalitions

45 Contact Hours

This unit establishes alliances, assembles a team, fosters team cohesiveness, attends to the diverse interests of team members, and ultimately expands networks and alliances at all levels.

Squadron Officer College Leadership Development Program Professional Continuing Education

Internet Address

<http://www.au.af.mil/au/soc/curriculum.html#nonres>

Mission. *Develop company grade officers as leaders of integrity ready to fly, fight, and win in air, space, and cyberspace.*

The Squadron Officer College (SOC) Leadership Development Program (LDP) is a series of online courses that greatly expand officer opportunities for leadership development by providing graduate-level instruction that officers can complete at their own pace. These courses capture best practices from Air Force operations and the field of leadership as well as advances in online curriculum delivery. The courses help officers refine the skills needed to excel in today's world of rapidly accelerating technology and limitless access to information while preparing them to adapt to unforeseeable challenges and future risks.

Curriculum. The course content focuses primarily on selected officer competencies defined by the Air Force Institutional Competency List (ICL; AFDD 1-1, *Leadership and Force Development*, and AFD 36-26, *Total Force Development*). The courses are designed to promote leadership skill development across the force by presenting the processes and skills necessary for practical military leadership in a variety of environments and, when appropriate, to effect change.

The four self-paced courses are designed so that each can be completed within six months of enrollment. These courses are noncredit; completion of these courses does not award credit in any AU degree programs. The courses are classified as Air Force Professional Continuing Education (PCE) and are reflected as such in Air University records and in officers' Extension Course Institute (ECI) folders in the Military Personnel Data System (MilPDS), available from military personnel flights (MPF) or base education and training services (ETS).

Learning Outcomes

- **Officer Development**

- Comprehend the essential role that followership plays in mission accomplishment.
- Comprehend fundamental principles of self-assessment and self-development as they apply to leadership growth.

- Comprehend the need for clear, concise, and convincing verbal and written communication in the leadership development process.
 - Comprehend basic roles and norms of interpersonal communication: active listening, powerful conversations/discussion, feedback, and impact on others.
- **Expeditionary Leadership**
 - Comprehend the concept of warrior ethos.
 - Comprehend the concept of cross-cultural competency.
 - Analyze how expeditionary leadership employs the concepts of hardiness of spirit, honing skills, and military bearing for mission accomplishment.
 - Analyze the role of cross-cultural competence (3C) in expeditionary leadership.
- **Flight Commander**
 - Apply methods to develop and inspire others.
 - Apply methods to take care of others.
 - Comprehend the unique contributions that each individual brings to the unit to accomplish the mission.
- **Organizational Leadership**
 - Comprehend the evolution of organizational theory and application in the Air Force.
 - Analyze the concepts of organizational behavior and organizational communication within organizations.
 - Comprehend the impact of resource stewardship on mission accomplishment.
 - Analyze leadership skills and techniques for the continuous improvement of Air Force organizations.
 - Apply organizational change initiatives to leading change.

Faculty Credentials. The courses are developed and maintained by doctorally qualified faculty members in association with officer curricularators and professional instructional designers.

Duration. Self-paced with allowed time of no less than 15 days and no greater than six months per course.

Eligibility. USAF officers and civilians. There is no active-duty service commitment required.

Enrollment Requirements. Enroll online at <http://www.au.af.mil/au/soc/curriculum.html>.

Completion Requirements. Students must complete two or three proctored examinations (depending on the course) at base education offices/test control facilities.

Curriculum Summary

Leadership Development Program	Contact Hours
MLDP001 Officer Development	117
MLDP002 Expeditionary Leadership	99
MLDP003 Flight Commander	102
MLDP004 Organizational Leadership	96

Course Descriptions

MLDP001 Officer Development 117 Contact Hours

This course addresses followership, regarded as a critical element of leadership and officership. This is followed by an examination of skills related to effective spoken and written communication in the context of the twenty-first-century Air Force, where advanced technology and ubiquitous access to information present unforeseeable opportunities, challenges, and risks. Through this course, students develop broad perspectives of current issues and associated tools aimed at enhancing professional competence beyond individual specialties. Fur-

ther, Airmen increase their value to their units by understanding and being able to apply interoperability; develop skills necessary to lead, follow, and manage; and become better “Wingmen,” caring for peers and subordinates alike. (PDS Code L09)

MLDP002 Expeditionary Leadership 99 Contact Hours

This course provides an understanding of regional factors that affect national foreign policy and explores global, regional, and cultural issues associated with participating in joint and coalition operations. It stresses the importance of cultural awareness and intercultural competence when dealing with the peoples of regions likely to require US military assistance. The course also examines deployment-specific leadership issues focusing on warrior ethos, including mental and physical preparation, military bearing, and self-discipline. (PDS Code LI9)

MLDP003 Flight Commander 102 Contact Hours

This course develops officer skills in three leadership-related units aligned with the Air Force Institutional Competency List (ICL): Develops and Inspires Others, Takes Care of People, and Diversity. In addition, other ICL competencies are referenced throughout the course to support a holistic approach to students’ development of ICL skills. This course examines command from the perspective of officers in formal leadership billets. The course also explores building leaders, motivation, force development, mentoring, organizational design and decision making, power and authority, morality and ethics, leading change, organizational culture, and communication. It examines the roles, responsibilities, knowledge, skills, and attitudes expected of officers in leadership positions. Academic content and practical examples are integrated to leverage every officer’s education, training, and experience to equip them with new or enhanced skill sets. These include the ability to inspire, develop, and take care of diverse groups of individuals while leading them to mission success. (PDS Code L10)

**MLDP004 Organizational
Leadership**

96 Contact Hours

This course develops officers' skills in three leadership-related units aligned with the Air Force Institutional Competency List (ICL): Resource Stewardship, Change Management, and Continuous Improvement. The course addresses organizational and management skills necessary for an officer to support and lead change in complex institutional structures. The focus is on basic organizational theory and communications, organizational behavior, resource stewardship, strategies for continuous improvement, and change management/leading change. It enhances officers' ability to deal with complex communication patterns as well as human resource issues that may affect mission capabilities, while using appropriate methods to identify opportunities, implement viable solutions, and measure the impact of outcomes. Further, the lessons examine, inform, and analyze the academic models of leadership. (PDS Code L2I)

International Officer School

Resident Program

Internet Address

<http://www.au.af.mil/au/spatz/ios>

Mission. *Prepares international officers for resident PME; supports international students and their families; and executes Air University's International Affairs Program.*

The International Officer School (IOS) was established in 1954 as the Allied Officer Preparatory School. Since 1954, more than 10,800 international military students (IMS) from 143 countries have completed the program. The preparatory courses improve students' abilities to express ideas clearly (as speakers and writers) and to read and comprehend written and spoken materials

used in Air University (AU) classes. A program of planned classroom activities, field-studies trips, and a local community sponsorship program—Alabama Goodwill Ambassadors (AGA)—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 schools in which the students enroll.

The IOS Administration Division (DA) functions as the International Military Student Office and provides administrative support to international students attending any AU school. The Education Division (DE) plans, develops, and implements course curriculum and instruction.

Curriculum. The school's curriculum consists of preparatory courses that have three basic functions. First, they provide an academic orientation to follow-on PME school topics and methodologies. Second, they serve as periods of cross-cultural adjustment for the IMSs and their dependents. Third, they accomplish the administrative requirements and Field Studies Program objectives outlined in international military training management directives. Attendance at IOS is a prerequisite for IMSs enrolling at Squadron Officer School (SOS), Air Command and Staff College (ACSC), and Air War College (AWC).

Learning Outcomes. Learning outcomes expand the capacity of international officers to participate more effectively in professional military education (PME) and duty assignments. The three IOS preparatory courses provide IMSs with an

- appreciation of American society, institutions, and ideals;
- awareness of the mission and organization of US military forces and US military terminology;
- ability to write, speak, and understand American English;
- awareness of the organizational structure, curriculum content, and instructional methods employed in AU PME schools; and
- ability to participate in physical training activities.

Faculty. Qualifications for faculty are determined by relevant academic credentials, professional functional experience, teaching experience, and teaching abilities. Academic credentials normally include appropriate degrees. Professional experience normally includes depth and breadth of experience in the functional area assigned.

Duration. Each IOS preparatory course is delivered in seven weeks.

Eligibility. The secretary of the Air Force for international affairs (SAF/IA) invites countries to attend AU PME courses in conjunction with the Air Force Security Assistance Training (AFSAT) organization in coordination with regional combatant commanders. Global security cooperation offices must ensure each IMS is properly vetted in accordance with Defense Security Cooperation Agency (DSCA) and military department guidance. IMSs must also meet minimum English competency levels for their respective course of attendance.

The Squadron Officer School (SOS) and Air Command and Staff College (ACSC) preparatory courses require an English comprehension-level test score of 70, while the Air War College (AWC) preparatory course requires a test score of 80. Students must meet certain physical standards outlined in the Air Force Education and Training Course Announcements (ETCA).

Refer to the ETCA web site at <https://etca.randolph.af.mil> for additional information. ETCA course numbers: MIOS001 for the SOS Preparatory Course, MIOS002 for the ACSC Preparatory Course, and MIOS003 for the AWC Preparatory Course.

Graduation Requirement. Students must meet all academic requirements to graduate.

Curriculum Summary

MIOS001 SOS Preparatory Course	Contact Hours
Administration	17
Field Studies Program	92
Communications	81
Military Studies	11
Leadership	37
Total	238

Curriculum Summary

MIOS002 ACSC Preparatory Course	Contact Hours
Administration	18.50
Field Studies Program	97.50
Communications	94.00
Military Studies	19.50
Leadership	6.50
Total	236.00

Curriculum Summary

MIOS003 AWC Preparatory Course	Contact Hours
Administration	27
Field Studies Program	105
Communications	70
Military Studies	36
Leadership	2
Total	240

Course Descriptions

(Each course includes the following areas.)

Administration. During this course phase, IMSs in-process and receive tours and briefings about Maxwell AFB and the city of Montgomery. They receive orientation in various aspects of the individual IOS preparatory courses and programs. This includes welcome and graduation ceremonies, curriculum, and schedule briefings, and a tour of the Muir S. Fairchild Research Information Center. Students participate in formal and infor-

mal feedback sessions with instructors throughout the courses as needed.

Field Studies Program. The Field Studies Program is the largest curriculum area and allows students to gain a better understanding of US institutions, ideals, and culture. Some topics include the American way of life, US government institutions, education, and US news media. A significant portion of this program is devoted to democratic ideals, human rights, and related training to support Departments of State and Defense objectives for security assistance training. Field trips and tours are conducted in the Montgomery area, southeast region of the United States, and Washington, DC.

Communications. Communications skills development constitutes a significant part of the instruction at IOS. It includes English best practices instruction designed to increase the student's ability to speak and understand American English and communicate ideas both orally and in writing according to USAF standard.

In addition, writing and briefing instruction, with application exercises, is provided based on follow-on PME 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 students to the mission, organization, policies, concepts, and terminology of the US military.

Leadership. Students are introduced to various leadership theories, concepts, and models; instruction is geared at a level appropriate to the follow-on PME school. This area also introduces the physical fitness requirements of follow-on PME schools, with emphasis on leadership, followership, problem solving, and teambuilding, which is particularly important for students preparing to attend SOS.

Other Programs

IOS conducts several nonacademic programs to enhance the cultural experience and academic education of international military students and their dependents.

Alabama Goodwill Ambassadors. AGA is the official AU sponsorship program for IMSs and their families. It welcomes and acquaints them with aspects of American culture to which they may not otherwise gain exposure through their formal AU courses and activities.

International Family Loan Program. This program lends IMSs and their families (for a nominal fee) such essential household items as dishes and utensils. This service eliminates the need for students to purchase items they would discard before leaving AU.

International Family Orientation Program. This two-week family orientation program is conducted each summer for the dependents of the IMSs attending ACSC and AWC. It orientates students to American culture and local community services, activities, and institutions. 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 become heads of service, ministers of defense, heads of state, or other high-level officials within their own countries.

International Dependents English Course. This six-week course, conducted each fall, provides conversational English skills that adult IMS dependents need daily. While managed by IOS, the course is taught entirely by volunteers from Maxwell and the local community.

Officer Training School Academic Instructor Course

Internet Address

<http://www.au.af.mil/au/holmcenter/OTS/index.asp>

Mission. *To provide Officer Training School (OTS) instructors the didactic skills needed to develop future officers for the United States Air Force.*

AIS closed in October 2003. The school's closure moved the staff to different schools in Air University. Five faculty members moved to the Holm Center and created the Instructor Education and Evaluations Branch. The branch is now responsible for the OTS Academic Instructor Course (AIC). The OTS AIC maintains the AIC core curriculum: educational foundations, communication skills, instructional methods, evaluation, and instructional design. The curriculum continues to provide student-centered learning experiences that concentrate on applying basic principles of learning to specific learning situations, planning meaningful instruction, using sound teaching methods, communicating effectively, and evaluating the achievement of learning objectives. The lessons are interactive and carefully targeted to the student's needs through adjunct instructor support from the field and increased use of subject matter experts.

Curriculum. The curriculum identifies and measures variables related to such educational processes as content, alternative methods of instruction, instructional resources, and the degree to which stated objectives are achieved at the appropriate instructional level. The curriculum also develops the student's ability to effectively and efficiently address the organization's personnel requirements, unit support, and cadet support processes.

Learning Outcomes. As a graduate of the Holm Center's AIC, the student will be able to conduct the following:

- Plan instruction. The graduate must comprehend the domains of learning related to instructional design, the process of designing level-of-learning lessons, and the various methods of teaching. The graduate also must know the components of the Air Force instructional system design (ISD) model.
- Deliver instruction. The graduate must comprehend how to prepare an effective presentation, use questions effectively to promote learning, employ proxemics to enhance the learning environment, and incorporate reflective teaching techniques to improve teaching ability.
- Evaluate instruction. The graduate must comprehend the concept of educational evaluation; the principles and techniques of writing student-centered, multiple-choice, and essay test items as part of the ISD design phase; and the systematic construction and use of performance evaluation rating instruments.
- Demonstrate instructional competency. The graduate must apply instructional competency through teaching exercises.
- Address unit requirements. The graduate must comprehend the organization's personnel requirements, unit support, and cadet- or student-support processes.

Faculty. The Holm Center employs faculty in both teaching and nonteaching capacities. The faculty combines several years of teaching experience and advanced degrees. Faculty members are selected upon the basis of performance record, experience base, academic achievement, and teaching ability. In addition to numerous teaching responsibilities, the faculty presents at various workshops and is actively involved with professional academic associations throughout the education profession. Therefore, the courses establish a viable development and enrichment program for all faculties.

Duration. The OTS AIC is delivered in 40 academic days.

Eligibility. The course is primarily intended for military and civilian individuals who have been selected to teach at the Of-

ficer Training School's Basic Officer Training (BOT), Commissioned Officer Training (COT), Reserve Commissioned Officer Training (RCOT), or Academy of Military Science (AMS) courses.

Reference the Education and Training Course Announcements (ETCA) web site at <https://etca.randolph.af.mil> for additional information. ETCA course number: MOTS004.

Completion Requirement. Students must maintain a “satisfactory performance” evaluation or better to graduate.

Curriculum Summary

Course Number and Title	Contact Hours
MOTS004 OTS Academic Instructor Course	320

Course Description

MOTS004 OTS Academic Instructor Course

320 Contact Hours

This course prepares instructors to teach at OTS. This is a structured, comprehensive, and fast-paced course that requires extensive reading and writing by students to prepare personalized lesson plans. Major curricular areas focus on communication skills, teaching methodologies, cognitive lesson planning, evaluation methodology, and construction of basic instructional aids. This course is designed to maximize opportunities for learning and practicing basic instructor skills. The majority of the course is devoted to small-group activities. Students must plan and present teaching lessons that meet their individual schools' needs. They are encouraged to use their core lesson plans and subject matter to prepare the required lessons.

Officer Training School

Internet Address

<http://www.au.af.mil/au/holmcenter/OTS/index.asp>

Mission. *Produces leaders of character who possess a warrior mind-set and are prepared to lead Airmen. They also embody the Air Force core values of integrity first, service before self, and excellence in all they do.*

The Officer Training School (OTS) is part of the Jeanne M. Holm Center for Officer Accessions and Citizen Development (Holm Center). The Air Training Command activated the Officer Training School at Lackland AFB, TX, 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, Air Force Reserve Officer Training Corps (AFROTC), and OTS. On 25 September 1993, OTS relocated to Maxwell AFB, AL, 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 127,000 officers have entered the Air Force through OTS. Over the years OTS has functioned as a “flexible partner” to the other accessions sources to meet the Air Force’s 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 Commissioned Officer Training (COT) combined existing training programs for chaplains, judge advocates, and medical service officers. COT has trained more than 18,000 newly commissioned officers at the Maxwell-Gunter Annex. COT officially moved to Maxwell AFB in December 2002, and OTS became a centralized training campus.

OTS commissioning and training programs

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

OTS consists of three programs: BOT, COT, and the ANG AMS that relocated from McGhee-Tyson Air National Guard (ANG) Base, TN, in 2009. BOT leads to a line officer commission as a second lieutenant for active duty and Reserve personnel. COT provides initial officership training for Air Force judge advocates, chaplains, and medical officers. AMS commissions new second lieutenants heading in to service with the ANG.

OTS conducts training for BOT, COT/RCOT, and AMS at Maxwell AFB. The Warrior Air and Space Expeditionary Force (AEF) exercise for these programs is conducted at either the Blue Thunder training site/confidence course located at the north end of the runway at Maxwell AFB or the Vigilant Warrior AEF training site north of Montgomery.

The OTS program is continually assessed with survey data, and course content is reviewed to improve program effectiveness. The OTS complex consists of two academic buildings, four dormitories, a dining facility, fitness center, and parade field.

OTS makes every effort to furnish incoming officer candidates with information to facilitate their transition to commissioned officer status. The OTS web page gives prospective trainees access to current information on OTS. The home page also assists students with preparing mentally and physically for OTS.

Curriculum. The major areas of instruction include leadership studies, military training and application, the profession of arms, warfare 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 (athletic campaigns, one leadership reaction course, and the end-of-course AEF exercise).

Learning Outcomes. As graduates of the Holm Center's commissioning education program, students will be able to do the following:

- Comprehend the roles and responsibilities of an Air Force officer.
- Comprehend the Air Force human relations programs such as equal opportunity and treatment.
- Comprehend the principles and benefits of proper physical conditioning, nutrition, and lifetime wellness.
- Effectively apply leadership skills.
- Effectively apply followership skills.
- Comprehend the importance of adherence to Air Force core values.
- Effectively express ideas verbally in a military setting.
- Effectively apply ideas in writing using military writing formats.
- Know the role of air and space power in maintaining national security.
- Know the role of joint operations in US national security.
- Comprehend the principles of cross-cultural communications.

Faculty. Before assuming leadership of a flight, each flight commander must attend and be certified through the OTS Academic Instructor Course. The courses, Initial Qualification Training and Mission Qualification Training, can be found in the Education and Training Course Announcement.

Duration. OTS currently conducts seven BOT classes, six COT classes, two RCOT classes, and four AMS classes each year. The BOT program is 12–13 weeks long (61 training days); the COT program is four-and-one-half weeks long (23 training

days); the RCOT program is two weeks long (13 training days), plus the correspondence portion; and the AMS program is six weeks long (40 training days). In fiscal year (FY) 2010 BOT graduated 626 students, COT/RCOT graduated 1,420 students, and AMS graduated 329 officers. These numbers are expected to change to 2,300 in FY 2011.

Eligibility. Students attending BOT must have a bachelor's degree, be less than 30 years of age for rated personnel or 35 years of age for all others, and meet minimum physical requirements for becoming an officer. Competition for entry into this program is rigorous. The following tables summarize BOT, COT, RCOT, and AMS curricula.

Reference the Education and Training Course Announcements (ETCA) web site at <https://etca.randolph.af.mil> for additional information. ETCA course numbers: MOTS001, MOTS002, MOTS003, YAMS000.

Completion Requirement. Students must maintain a “satisfactory performance” evaluation or better to graduate.

Basic Officer Training Curriculum Summary

MOTS001 Instructional Areas	Contact Hours
Leadership Studies/Field Leadership	179.50
Communication Skills	20.00
Profession of Arms	29.00
Warfare Studies/International Studies	57.00
Military Training/Field Training	117.00
Admin/Processing/Testing/Orientation/Counseling	135.50
Physical Training/Air Force Combatives Program	55.00
Air Force Culture/Drill and Ceremonies	122.75
Total	715.75

Course Description

MOTS001 Basic Officer Training (24th Training Squadron) 715.75 Contact Hours

This course provides precommissioning training for selected applicants to meet Air Force requirements by career area. It includes communication skills, leadership studies, professional knowledge, warfare studies, and military application and training (practical field leadership, physical fitness, and drill and ceremonies). These basic military subjects are essential in developing selected college graduates to take their places as second lieutenants in the Air Force.

BOT is a challenging 61-training-day program that imparts to its active duty and Air Force Reserve graduates the importance of leadership, discipline, attention to detail, and dedication to service. It stresses commitment to the profession of arms and motivates graduates to adhere to the highest standards of integrity, service before self, and excellence in all they do. This challenging environment provides numerous tests for leadership skills through classroom and field-training exercises and operation of the officer trainee and student wing. The capstone event is a five-day, four-night AEF exercise.

Commissioned Officer Training Curriculum Summary

MOTS002 Instructional Area	Contact Hours
Leadership Studies	35.00
Communication Skills	9.00
Profession of Arms	18.00
Warfare Studies/International Security Studies	15.00
Drill and Ceremonies	16.50
Flight Commander Time	28.00
Physical Training	23.00
Air Force Culture	18.50
Assessments/Preparation	9.00
AEF/Combat Skills	47.00
Administration/In-Processing	47.50
Total	266.50

Course Description

MOTS002 Commissioned Officer Training (23rd Training Squadron) 266.50 Contact Hours

COT is an intense 23-day program. It provides the fundamentals of officership and the initial leadership training required for newly commissioned medical, chaplain, and judge advocate Air Force officers (active duty, ANG, and AFRES). It stresses commitment to the profession of arms and motivates graduates to live up to Air Force core values. The ranks of COT student range 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. Additionally, the Medical Readiness Indoctrination Course is incorporated into the AEF exercise for medical service officers.

This course provides training in basic military subjects essential in developing directly commissioned officers to serve in the US Air Force. It provides postcommissioning training for officers in the US Air Force medical services (Medical Corps, Dental Corps, Nurse Corps, Medical Service Corps, and Biomedical Science Corps), Judge Advocate Corps (legal), Chaplain Corps, AFRES officers selected to participate in the Air Force Health Professions Scholarship Program (HPSP), and those enrolled in the Uniformed Services University of the Health Sciences (USUHS). This training is also provided for those officers selected to serve in the AFRES and ANG. Training includes, but is not limited to, instruction in four major areas: profession of arms, warfare and international security studies, leadership studies, and communication skills. The profession of arms area includes dress and grooming; professional appearance; customs and courtesies; pay, leave, and allowances; and base services. Warfare and international security studies classes include Air Force heritage, terrorism/force protection, and US policy. Leadership studies classes include leadership and management theory and officership. Leadership instruction is reinforced with practical field-leadership exercises. Communication skills include basic military speaking principles and writing formats. Drill and ceremonies and physical fitness training are also included.

Reserve Commissioned Officer Training (In Residence)

MOTS003 Instructional Area	Contact Hours
Leadership Studies	31.00
Communication Skills	6.00
Profession of Arms	16.00
Warfare Studies	7.00
Drill and Ceremonies	3.50
Flight Commander Time	5.00
Physical Training	8.50
Air Force Culture	3.50
Assessments	2.00
AEF/Combat Skills	30.00
Administration/In-Processing	25.00
Total	137.50

Course Description

MOTS003 Reserve Commissioned Officer Training (In Residence) 137.50 Contact Hours

The Reserve Commissioned Officer Training (RCOT) course is an abbreviated course designed to train hard-to-recruit ANG and AFRES medical professionals. It combines distance learning correspondence work and a web-based pretest with a demanding 13-day in-residence course.

This course provides training in basic military subjects essential to developing medical officers in the United States AFRES and ANG. Training includes, but is not limited to, instruction in four major areas: profession of arms, warfare and international security studies, leadership studies, and communication skills. The profession of arms area includes dress and grooming; professional appearance; customs and courtesies; pay, leave, and allowances; and base services. Warfare and international security studies classes include Air Force heritage, terrorism/force protection, and US policy. Leadership studies classes include leadership and management theory and officer-ship. Leadership instruction is reinforced with practical field-

leadership exercises. Communication skills include basic military speaking principles and writing formats.

Academy of Military Science Curriculum Summary

YAMS000 Instructional Areas	Contact Hours
Leadership Studies	47.00
Communication Skills	18.00
Profession of Arms	20.00
Warfare Studies/International Security Studies	21.00
Military Training and Application/Drill/Culture	147.00
Admin/Processing/Testing/Orientation/Counseling	29.50
Physical Training	19.00
Total	301.50

Course Description

YAMS000 Academy of Military Science (ANG Readiness Center Detachment 12)

301.50 Contact Hours

The Academy of Military Science (AMS) provides precommissioning training for selected applicants to meet Air National Guard requirements by career area. It provides instruction in basic military subjects essential in developing selected college graduates to take their places as second lieutenants in the Air Force with both state and federal responsibilities. The course includes communication skills, leadership studies, professional knowledge, warfare studies, and military application and training (practical field leadership, physical fitness, and drill and ceremonies). Although operationally assigned to OTS, AMS is not an AU course; assignment to classes is managed by the ANG.

AMS is a challenging 40-training-day program that imparts to its ANG graduates the importance of leadership, discipline, attention to detail, and dedication to service. It stresses commitment to the profession of arms and motivates graduates to adhere to the highest standards of integrity, service before self, and excellence in all they do. Students are also provided education in ANG heritage and their role as “citizen Airmen,” as the majority of AMS students are traditional Guard members who

also have civilian careers. This challenging environment provides numerous tests for leadership skills through classroom and field training exercises and operation of the officer trainee and student wing. The capstone event is a three-day, two-night AEF exercise.

Civilian Acculturation and Leadership Training

Internet Address

<http://www.au.af.mil/au/holmcenter/CALT/index.asp>

Mission. *To introduce newly hired civilian employees (not prior Air Force) to the Air Force culture and way of life and prepare them for future leadership, managerial, and supervisory roles.*

The Civilian Acculturation and Leadership Training (CALT) curriculum introduces Air Force civilians to the Air Force culture and prepares them for future leadership in managerial and supervisory roles. Patterned after the Officer Training School (OTS) curriculum, the CALT provides a unique in-residence experience focused on AF culture, missions, and the significant role leaders play in the Air Force's overall success. The curriculum parallels the leadership modules taught at OTS and includes team-building exercises, some outdoor activities, simulation exercises, and some time for personal health and wellness. This leadership development program entails some outside reading and class projects.

Curriculum. The major areas of instruction include leadership studies, the profession of arms, military studies, and communications skills. CALT teaching methods include auditorium lectures, readings, flight-room classes (informal lecture, guided discussion, and case studies), and practical exercises to include numerous problem-solving activities and war gaming.

Learning Outcomes. The Holm Center's CALT program graduates will

- better understand the overall Air Force mission,

- better comprehend the roles and responsibilities of an Air Force leader,
- be able to apply leadership fundamentals and skills necessary to accomplish the mission at the tactical level, and
- be a motivated professional who willingly seeks additional levels of professional military education to further enhance their careers.

Faculty. The CALT faculty consists of military and civilian instructors. Civilian faculty members are carefully selected career employees serving in career-broadening assignments. All CALT faculty members attend instructor training before assuming classroom responsibilities and must complete an extensive faculty certification program where they must satisfactorily demonstrate their teaching skills and content mastery.

Duration. The CALT program is delivered in 10 academic days.

Eligibility. The CALT program accepts applications from Air Force civilians who have from two to five years of continuous federal service, have no prior military service, and hold a bachelor's degree. There are seven classes per year with 40 students in each class.

Reference the Education and Training Course Announcements (ETCA) web site at <https://etca.randolph.af.mil> for additional information. ETCA course number: MOTSO09.

Completion Requirements. Students must complete performance evaluation and objective written tests.

Curriculum Summary

Course MOTSO09 Instructional Areas	Contact Hours
Leadership Studies	39
Communication Skills	9
Profession of Arms	17
Military Studies	3
Processing/Admin/Orientation/Testing	8
Physical Training	4
Total	80

Air Force Reserve Officer Training Corps

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

Mission. *Develop quality leaders for the Air Force.*

The Air Force Reserve Officer Training Corps (AFROTC) is part of the Jeanne M. Holm Center for Officer Accessions and Citizen Development (Holm Center). AFROTC is the Air Force's largest and oldest commissioning program. Passage of the Morrill Act of 1862 and the National Defense Act of 1916 created the Reserve Officer Training Corps (ROTC) and Junior ROTC training at land-grant colleges and universities. The ROTC program underwent a major change with the ROTC Vitalization Act of 1964. This act established Junior ROTC programs at secondary schools and authorized two- and four-year scholarships with a focus on academics and leadership. In 1952 Air University assumed responsibility for Air Force ROTC with 188 units and 145,000 cadets.

AFROTC currently operates at 144 colleges and universities and has 1,052 cross-town agreements with other institutions. As of December 2010, cadet enrollment was nearly 16,000 college students. AFROTC's scholarship program includes about 5,600 cadets and a scholarship budget of \$68 million in fiscal year 2011.

Faculty. The teaching staff of AFROTC units includes experienced Air Force officers. Selection is determined by professional experience, academic background, and qualifications as instructors. Detachment commanders and AFROTC instructors are required to complete faculty development training at Maxwell AFB, AL, to enhance their teaching skills and learn more about their jobs before reporting for their teaching assignments.

Learning Outcomes. As a graduate of the Holm Center's commissioning education program, a new officer must be able to embrace the following:

- Show cultural awareness. The graduate must comprehend cultural awareness and demonstrate respect for social diversity, organizational dynamics, joint perspective, and global differences.
- Possess an expeditionary mind-set. The graduate must apply air expeditionary mind-set skills and knowledge and know that every Airman must be prepared to support military operations, whether deployed or at home station.
- Demonstrate qualities of a person of character. The graduate must demonstrate character, core values, and a high moral code; treat others with mutual respect; and demonstrate a strong sense of ethics.
- Demonstrate leadership appropriate for the twenty-first century. The graduate must apply leadership skills by exercising the leadership fundamentals and skills necessary to accomplish the mission and effect positive change at the tactical level.
- Array himself or herself as a motivated professional. The graduate must comprehend and exhibit a willingness to accept the foundation of knowledge. The graduate must also exhibit a commitment to mastering technical skills and embody a proactive, enthusiastic approach to everyday activities.
- Show a willingness to serve the nation. The graduate must comprehend the tenets and values contained in the US Constitution while understanding an officer's role and responsibilities. Graduates will voluntarily take the oath of office and accept a commission.
- Embody warrior ethos. The graduate must comprehend and exhibit the embodiment of the warrior spirit: tough mindedness, tireless motivation, an unceasing vigilance, a willingness to sacrifice one's life for the country, if necessary, and a commitment to be the world's premier air, space, and cyberspace force.

Curriculum. The primary curriculum areas taught in AFROTC include leadership studies, field leadership, profession of arms, warfare 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).

AFROTC offers two primary routes to an Air Force commission for college students: the four-year program and the two-year program. Students attend AFROTC 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 from one to 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 Maxwell Air Force Base to assess their potential as officers. POC cadets attend class three times a week and participate in a weekly leadership laboratory lasting two to three hours. Once enrolled in the POC, 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 AFROTC as freshmen or sophomores must complete an extended field-training unit. This five-week field training allows these cadets to complete GMC work during the extra week of field training. Two-year applicants are not committed to the AF until they return to school in the fall and decide to enlist through AFROTC.

Eligibility. The first two years of the AFROTC college program, the GMC, 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 POC, must be at least age 17. These contract cadets must meet AFROTC and Department of Defense eligibility standards ranging from physical fitness to US citizenship.

Commissioning Requirements. Students must maintain a “C-” or better grade in Aerospace Education (AS) and the Leadership Laboratory (LLAB) and must have a cumulative GPA of 2.0 from the university to commission in the US Air Force.

AFROTC Detachment Curriculum Summary

Course Number and Title	Contact Hours
Leadership Studies	65
Communication Skills	43
Profession of Arms	50
Warfare Studies	67
Admin/Testing	31
Leadership Laboratory (LLAB)	240
Field Training*	380
Total	876

*Standard Field Training 380 Hours; Extended Field Training 429.5 Hours

Course Descriptions

For more information regarding AFROTC courses, go to www.afrotc.com/overview/programs.php. Note that the Air University Registrar’s Office does not provide a transcript for this AFROTC program.

Air Force Reserve Officer Training Corps Instructor and Orientation Courses

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

Mission. *To provide ROTC instructors the teaching skills needed to develop future officers for the United States Air Force.*

In October 2003 five faculty members were assigned to the Jeanne M. Holm Center for Officer Accessions and Citizen Development (Holm Center). The branch is now responsible for the AFROTC Academic Instructor Course (AIC). The AFROTC AIC core curriculum includes educational foundations, communication skills, instructional methods, evaluation, and instructional design. The curriculum continues to provide student-centered learning experiences that concentrate on applying basic principles of learning to specific learning situations, planning meaningful instruction, using sound teaching methods, communicating effectively, and evaluating the achievement of learning objectives. The lessons are interactive and carefully targeted to the student's needs as a result of adjunct instructor support from the field and increased use of subject-matter experts.

Curriculum. The curriculum identifies and measures variables related to the educational process such as content, alternative methods of instruction, instructional resources, and the degree to which stated objectives are achieved at the appropriate instructional level. The curriculum also develops the student's ability to effectively and efficiently address the organization's personnel requirements, unit support, and cadet-support processes.

Learning Outcomes. As a graduate of the Holm Center's AIC, the student must be able to do the following:

- Plan instruction. The graduate must comprehend the domains of learning related to instructional design, the process of designing level-of-learning lessons, and the various methods of teaching and must know the components of the Air Force ISD model.
- Deliver instruction. The graduate must prepare effective presentations, use questions effectively to promote learning, employ proxemics to enhance the learning environment, and incorporate reflective teaching techniques to improve teaching ability.

- Evaluate instruction. The graduate must comprehend the concept of educational evaluation and principles and techniques of writing student-centered multiple-choice and essay test items as part of the ISD design phase and the systematic construction and use of performance evaluation rating instruments.
- Demonstrate instructional competency. The graduate must apply instructional competency through teaching exercises.
- Address unit requirements. The graduate must comprehend the organization's personnel requirements, unit support, and cadet or student-support processes.

Faculty. The Holm Center employs faculty in both teaching and nonteaching capacities. The faculty combine several years of teaching experience and advanced degrees. They are selected upon the basis of performance record, experience base, academic achievement, and teaching ability. In addition to resident instructors, some faculty are augmentees from various AFROTC units. Moreover, the faculty present at various workshops and are actively involved with professional academic associations throughout the education profession. Therefore, the courses establish a viable development and enrichment program for the faculty.

Duration. All three courses are 10 academic days in length.

Eligibility. Detachment commanders and classroom instructors are selected through the Air Force assignment system. Detachment commanders and some classroom instructors must be approved by the university with which they will serve.

Completion Requirement. Students must maintain a grade of "satisfactory performance" or better to graduate.

Curriculum Summary

Course Title	Contact Hours
MAFOATS005 AFROTC Detachment Commander Instructor and Orientation Course	80
MAFOATS002 AFROTC Assistant Professor of Aerospace Studies Instructor and Orientation Course	80
MAFOATS001 AFROTC NCO Orientation Course	80
Total	240

Course Descriptions

MAFOATS005 AFROTC Detachment Commander Instructor and Orientation Course

80 Contact Hours

A 10-day, mission-essential course hosted by the Holm Center Curriculum Directorate, this course provides newly assigned AFROTC detachment commanders with the skills to teach within the AFROTC academic environment as well as orients and prepares them for the myriad of 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 also receive AFROTC instruction in curriculum, professional relations, leadership, counseling, and legal issues and meet with subject-matter experts concerning several administrative and instructional issues.

Similarly, AFROTC instructors of aerospace studies complete the following courses.

MAFOATS002 AFROTC Assistant Professor of Aerospace Studies Instructor and Orientation Course

80 Contact Hours

A 10-day, mission-essential course hosted by the Holm Center Curriculum Directorate, this course prepares newly assigned AFROTC instructors to teach and supervise within the AFROTC academic environment and orients and prepares them for AFROTC detachment duties at geographically

separated units (GSU). Major areas are learning theory, teaching methods, critiquing of student writing, and speaking and evaluation. Methods usually taught include the informal lecture, guided discussion, experiential method, demonstration-performance, and case study. The course provides for maximum participation in learning. The majority of class time is devoted to small-group activity. Each student must plan and present teaching lessons. Students are urged to use AFROTC lesson material to prepare the required teaching lessons and test items. They also receive ROTC instruction in curriculum, professional relations, leadership, counseling, and legal issues and meet with subject-matter experts concerning instructional development.

Each AFROTC detachment has enlisted personnel assigned to assist with daily operations. These individuals are required to complete the following course.

**MAFOATS001 AFROTC
NCO Orientation Course**

80 Contact Hours

A 10-day, mission-essential course hosted by the Holm Center Curriculum Directorate, the course seeks to improve performance, increase productivity, and enhance mission accomplishment of new AFROTC cadre members. 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. This course covers the basic skills and knowledge associated with the AFROTC mission and structure, unit support, logistics support, cadet personnel and financial management programs, and various computer functions. The course also addresses various documentation processes, regulatory guidance and procedures, and other topics related to the AFROTC environment.

Air Force Junior Reserve Officer Training Corps Academic Instructor Course

Internet Address

<http://www.afoats.af.mil/AFJROTC>

Mission. *To provide AFJROTC instructors the instructor skills needed to develop citizens of character dedicated to serving their nation and community.*

Air University supports the Air Force Junior Reserve Officer Training Corps (AFJROTC), the Air Force's high school citizenship training program. The Holm Center at Maxwell AFB, AL, oversees 884 AFJROTC units on high school campuses worldwide. The program builds better citizens for America.

The Holm Center houses the AFJROTC headquarters. The two branches located within the center include Instructor Management and Operations. The Instructor Management 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. The Operations 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.

AFJROTC educates and trains high school cadets in citizenship; promotes community service; instills responsibility, character, and self-discipline; and provides instruction in air and space fundamentals.

AIS closed in October 2003. The school's closure sent the staff to different schools in Air University. Five faculty members moved to the Holm Center and created the Instructor Education and Evaluations Branch. The branch sponsors the AFJROTC Academic Instructor Course (AIC) and the Instructor Recertification course. The courses are more customized but maintain the core educational foundations, communication skills, instructional methods, evaluation, and instructional design. The curriculum continues to provide student-centered learning experiences that concentrate on applying basic principles of learning to specific learning situations, planning meaningful instruction, using sound teaching methods, communicating effectively, and evaluating the achievement of learning objectives. The lessons are more interactive and more "show and tell" as a result of adjunct instructor support from the field and increased use of subject-matter experts.

Curriculum. The AFJROTC Academic Instructor Course curriculum provides student-centered learning experiences that focus on applying basic principles of learning to specific learning situations, planning meaningful instruction, using sound teaching methods, communicating effectively, and evaluating the achievement of learning objectives.

The AFJROTC Instructor Recertification course curriculum is designed to provide in-service training and faculty development to AFJROTC instructors who have been teaching in private, public, and DOD dependent high schools for at least five years to maintain their teaching credentials and to receive updates on Air Force policy.

These courses are required as determined by AFJROTCI 36-2001, *Air Force Junior ROTC Operations*.

Learning Outcomes. Graduates of AIC must be able to do the following:

- Plan instruction. Graduates must comprehend the domains of learning and the process of planning and preparing coherent instructional activities and exercises targeted to the appropriate learning outcome as prescribed by the Air Force ISD model.

- Deliver instruction. Graduates must prepare effective presentations and employ effective questioning techniques to adapt instructional materials to diverse learning audiences.
- Evaluate instruction. The graduate must comprehend the professional responsibility of receptivity of feedback from colleagues as it relates to their professional development.
- Demonstrate instructional competency. The graduate must apply instructional competency using twenty-first-century learning methodologies through practical teaching exercises.
- Address unit requirements. The graduate must comprehend the professional responsibilities of the organization's personnel requirements, unit support, and cadet- or student-support processes.

Faculty. The Holm Center employs faculty in both teaching and nonteaching capacities. The faculty combines several years of teaching experience and advanced degrees. They are selected because of their performance record, experience base, academic achievement, and teaching ability. In addition to in-residence instruction, some faculty members are role models from the unit. Moreover, the faculty are present at various workshops and are actively involved with professional academic associations throughout the education profession. Therefore, the courses establish a viable development and enrichment program for the entire faculty.

Duration. The AIC is delivered in 10 academic days; the Instructor Recertification course is delivered in 4.5 academic days.

Eligibility. This course is open to retired USAF officers and non-commissioned officers who occupy or have been selected as aerospace science instructors and assistant aerospace science instructors for the AFJROTC program. Student selection is conducted by HQ AFJROTC.

Reference the Education and Training Course Announcements (ETCA) web site at <https://etca.randolph.af.mil> for ad-

ditional information. ETCA course numbers are listed in the curriculum summary table below.

Graduation Requirement. Students must successfully complete the courses in residence.

Curriculum Summary

Course Number and Title	Contact Hours
MAFJROTC003 AFJROTC Academic Instructor Course	80
MAFJROTC008 AFJROTC Instructor Recertification	32
Total	112

Course Description

MAFJROTC003 AFJROTC

Academic Instructor Course

80 Contact Hours

This course prepares newly assigned AFJROTC faculty to teach in private, public, and DOD dependent high schools worldwide. It is a rigorous, comprehensive, and fast-paced course that requires extensive reading and preparation and moderate research. Major curricular areas include learning theory, learner-centered instructional activities, setting instructional outcomes through lesson planning, and preparation. Teaching methodologies include formal and informal lecture, guided discussion, teaching interview, group activities, and demonstration performance. The course is organized for maximum participation in learning. A majority of class time is devoted to seminar activities. Students plan and present teaching lessons, develop test items, and participate in specialized labs to meet AFJROTC requirements. Students must effectively plan and present teaching lessons. They are urged to use AFJROTC lesson plans to prepare the required teaching lessons. Students also receive AFJROTC instruction in curriculum, professional relations, leadership, counseling, twenty-first-century learning standards, classroom performance systems, creative teaching strategies, and diverse learning styles. They are introduced to secondary school challenges and concerns. This required course is directed by AFJROTC Instruction (AFJROTCI) 36-2001, *Air Force Junior ROTC Operations*.

**MAFJROTC008 AFJROTC
Instructor Recertification**

32 Contact Hours

This course provides in-service training to AFJROTC instructors who have been teaching in private, public, and DOD dependent high schools for at least five years to maintain their teaching credentials and to receive updates on Air Force policy. Major curricular areas include learning theory, communication skills, teaching methods, and other secondary education challenges and concerns. Students also receive AFJROTC instruction and guidance on curriculum, a classroom performance system, professional development, operations, instructor management, financial management, individual concerns, wings, and the Cadet Inventory Management System. The course provides for maximum participation in learning and sharing of best practices through presentations, computer lab time, and small group cross-feed sessions. This required course is directed by AFJROTCI 36-2001, *Air Force Junior ROTC Operations*.

**Ira C. Eaker Center
Academic Instructor Course**

Internet Address

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

Mission. *Produce newly assigned faculty to effectively plan, develop, manage, and conduct instruction within the Eaker Center.*

Faculty. Academic Instructor Course (AIC) faculty must possess a bachelor's degree and three or more years' experience in civilian or military educational administration, psychology, testing, instruction, or a related discipline.

Learning Outcomes.

- Demonstrates an ability to plan and develop lesson objectives, including evaluation instruments.

- Demonstrates an ability to clearly communicate to achieve instructional objectives and manage educational processes.
- Shows and proves competence in using essential teaching skills that apply to most instructional situations and that evaluate the achievement of learning outcomes.

Curriculum. Prepares faculty to instruct, plan, develop, and manage academic instruction. The curriculum requires extensive reading, writing, and moderate research. Several instructional methods are taught.

Duration. The Eaker Center AIC is delivered in 10 academic days.

Eligibility. Reference the Education and Training Course Announcements (ETCA) web site at <https://etca.randolph.af.mil> for additional information. ETCA course number: MCPD001.

Completion Requirement. Students must master concepts and techniques of instruction and course management processes to enhance learning.

Curriculum Summary

Course Number and Title	Contact Hours
MCPD001 Eaker Center Academic Instructor Course	80

Course Description

**MCPD001 Eaker Center
Academic Instructor Course** **80 Contact Hours**

This course prepares individuals to instruct and generally manage instruction. It requires extensive reading and writing and moderate research. Several instructional methods are conducted.

Commanders' Professional Development School

Internet Address

<http://www.au.af.mil/au/ecpd/cpds>

Mission. *Prepare Air Force members for duty as wing and group commanders, directors, and emergency operations center directors and to conduct tailored courses to help attendees deal with critical leadership challenges.*

The seven courses conducted by the Commanders' Professional Development School (CPDS) include the USAF Wing Commanders' Seminar, the Mission Support Group Commanders' Course, the Maintenance Group Commanders' Course, the Medical Group Commanders' Course, the Operations Group Commanders' Course, the Senior Materiel Leaders' Course, and the Incident Management Course.

Curriculum. Prepare AF members for duty as wing and group commanders, directors, and emergency operations center directors. The school helps attendees deal with critical leadership and management challenges. The Wing Commanders' Seminar convenes five times each year; the Group Commanders' courses, five times; and the Air Force Incident Management Course, 15 times a year at Maxwell AFB and 15 times each year at other selected locations.

Learning Outcomes.

- Prepare updates on critical issues affecting AF members, their people, their mission, and their individual roles and responsibilities.
- Summarize pertinent information on leadership and ethical considerations in the decision-making process.
- Give examples of practical skills that may be used to enhance the immediate effectiveness of new commanders.

Faculty. CPDS faculty members must possess a bachelor's degree (in any discipline) and three or more years' experience in relevant functional command assignment.

Duration. The Wing Commanders' Seminar is one-week long, and the Group Commanders' courses last two weeks.

Eligibility. The Air Force Colonels Group determines attendance at the Wing Commanders' Seminar and the Group Commanders' courses. Attendance at the Air Force Incident Management Course is mandatory for USAF personnel designated as emergency operations center (EOC) directors 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.

Reference the Education and Training Course Announcements (ETCA) web site at <https://etca.randolph.af.mil> for additional information. ETCA course numbers are listed in the curriculum summary table below.

Completion Requirement. Students must comprehend the major concepts and processes to deal with leadership, management, and command issues.

Curriculum Summary

Course Number and Title	Contact Hours
MLMDC800 USAF Wing Commanders' Seminar	47.50
MLMDC 810 Mission Support Group Commanders' Course	66.00
MLMDC871 Maintenance Group Commanders' Course	68.50
MLMDC872 Medical Group Commanders' Course*	79.50
MLMDC875 Operations Group Commanders' Course	54.50
MLMDC874 Materiel Leaders' Course**	68.50
MLMDC813 Incident Management Course	32.00

*The Office of the Surgeon General, US Air Force, designates that the educational activity entitled Medical Group Commanders' Course is awarded 33.25 contact hours of American Medical Association Physician's Recognition Award (AMA PRA) Category 1 credits. This course has received the AMA PRA Activity Approval Code #9050, which states that "this activity has been jointly planned and implemented in accordance with the essential areas and ancillary policies of the Accreditation Council for Continuing Medical Education (ACCME) by the Office of the Surgeon General, US Air Forces, and the Ira C. Eaker Center for Professional Development. The Office of the Surgeon General, US Air Force, is accredited by the ACCME to provide continuing medical education for physicians and takes responsibility for the content, quality, and scientific integrity of this program." This continuing nursing education activity was approved by the Nurse Utilization and Education Branch, Medical Services Officer Management Division, HQ AFPC, an accredited approver for the American Nurses Credentialing Center's Commission on Accreditation. The source is Activity Approval Code #8-008, and the number of contact hours is 35.1.

**Secretary of the Air Force (SAF/AQXD) awards 40 continuous learning points towards ongoing acquisition professional development for the educational activity entitled Senior Materiel Leaders' Course.

Course Descriptions

For CPDS course descriptions and other information, visit the course web site at the Air Force Portal, Organizational A-Z Index: select "I" and the Ira C. Eaker Center for Professional Development, choose Eaker Center Schools, and select the Commanders' Professional Development School.

Air Force Human Resource Management School

Internet Address

<http://www.au.af.mil/au/ecpd/hr>

Mission. *Provide world-class professional continuing education to Air Force and sister-service active duty, civilian, reservist, and guard personnel for the development and competence of Air Force and Force Support capabilities.*

The Air Force Human Resource Management School (AFHRMS) was established at Maxwell AFB, AL, in 1965 as the Air Force Professional Personnel Management School. In July 1977 the AFHRMS absorbed the former Civilian Personnel School, located at the former Gunter AFB. The Civilian Personnel School, originally established in 1948 at Kelly AFB, TX, was moved to Gunter in 1957. The AFHRMS became one of only two training facilities devoted to teaching personnel management philosophies, policies, practices, 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 major commands (MAJCOM). In 1988 the school expanded the curriculum to address professional continuing education (PCE) requirements in the Air Force Family Matters Program. In 1993, recognizing the broad range of human resource activities represented in its curriculum, the school adopted the name *Air Force Human Resource Management School*.

In 2007 the Manpower/Personnel and Services officer career fields merged to form the Force Support career field. In 2009 the AFHRMS further expanded its portfolio when it consolidated services PCE courses previously conducted at the Air Force Institute of Technology's Civil Engineering and Services School. These additional courses were moved to the AFHRMS in concert with organizational and functional changes within the Headquarters Air Force Directorate on

Manpower, Personnel, and Services. The consolidation of all Force Support PCE into one school provided a seamless continuum of education for Force Support professionals. In 2010 the AFHRMS was renamed the Force Support Professional Development School (FSPDS).

Curriculum. Provides continuing education for the development and competence of Force Support professionals in the Total Force, to include our joint partners. The courses are conducted depending on demand and funding, with some courses available completely online. In-residence courses are conducted in a professional, seminar-based forum allowing for scenario-based exercises, cross-talk from peers, and information-sharing from subject-matter experts in the field.

Learning Outcomes. To access AFHRMS learning outcomes and other information, visit the web site at the Air Force Portal. From the main AF Portal at the base-org-functional areas tab, select Org A-Z Listing, select "I" for Ira C. Eaker Center for Professional Development, scroll down, and click on the school link. Go to Eaker Center Schools, and select the AF Human Resource Management School. Here are some of the learning outcomes from a few of our courses:

- Effectively leads, plans, and manages a force support squadron.
- Deals with emerging issues, advises installation leadership, and responds effectively to an increasingly challenging expeditionary environment.
- Effectively leads flights providing sustainment, force development, community, education, and family services.
- Challenges and motivates squadron and flight members.
- Contributes as a key advisor to wing, group, and squadron commanders.
- Leads and manages military, civilian, and nonappropriated-fund personnel to include force development concepts and practice.

- Summarizes the tools to operate and successfully contribute to organizational effectiveness.
- Values distinctive contributions of human resource leaders and managers.

Faculty. The AFHRMS faculty must possess three or more years' experience in civilian or military force support, services, manpower, or personnel positions.

Duration. In-residence courses vary in length from two to 21 days of classroom instruction.

Eligibility. Requirements for participants vary for each course each year, depending on demand. Students can locate the course requirements on the Air Force Portal. From the main AF Portal page at the base-org-functional areas tab, select Org A-Z Listing, select "I" for the Ira C. Eaker Center, choose Eaker Center Schools, and select the AF Human Resource Management School.

Reference the Education and Training Course Announcements (ETCA) web site at <https://etca.randolph.af.mil> for additional information. ETCA course numbers are listed in the curriculum summary tables below.

Resident Curriculum Summary

Course Number and Title	Contact Hours
MAFHRMS110 Employee-Management Relations Course	28
MAFHRMS112 Advanced Employee-Management Relations Course	33
MAFHRMS117 Resource Management Course	38
MAFHRMS118 Equal Opportunity Director's Course	36
MAFHRMS119 Labor-Management Relations Course	76
MAFHRMS126 Basic Mediation Course	32
MAFHRMS127 Advanced Mediation Course	40
MAFHRMS140 Air Force Sexual Assault Response Coordinator Course	40
MAFHRMS405 Manpower Staff Officer Course	36
MAFHRMS408 Airman and Family Readiness Basic Course	40
MFSS200 Protocol Fundamental Course	38

Course Number and Title	Contact Hours
MFSS250 Mortuary Officer Course	68
MFSS255 Mortuary Technician Course	109
MFSS275 Force Support Squadron Contingency Course	36
MFSS276 Force Support Squadron Contingency Course, Equal Opportunity Course	16
MFSS277 Force Support Squadron Contingency Course, Sexual Assault Response Coordinator	24
MFSS278 Force Support Squadron Contingency Course, Airman and Family Readiness	16
MFSS305 Force Support Squadron Community Services Flight Leadership Course	76
MFSS306 Force Support Squadron Force Development Flight Leadership Course	76
MFSS307 Force Support Squadron Airman and Family Services Flight Leadership Course	76
MFSS308 Force Support Squadron Sustainment Services Flight Leadership Course	76
MFSS309 Force Support Squadron Manpower and Personnel Flight Leadership Course	76
MFSS375 Force Support Squadron Operations Office Course	36
MFSS400 Force Support Squadron Leadership Course	76
Total	1,198

Nonresident Curriculum Summary Web-Based/Blended Courses

AFHRMS began in-house distance learning in 1995 with the release of the Civilian Personnel Management Course (CPMC). All nonresident courses before 1995 were computer-based training (CBT) on CD-ROM. Since that time the school has evolved and has established a Future Learning Division dedicated to blended learning. With the HQ AETC white paper, "On Learning: The Future of Air Force Education and Training," AFHRMS is fulfilling this future educational vision today with its near-continuous update of content, cutting-edge educational technology, knowledge management, continuous learning capability, and course designs that incorporate the principles found in precision learning. By incorporating these key principles, the AFHRMS remains current, relevant, and academically credible.

Course Title	Contact Hours
OC200W Civilian Personnel Management Course	24
OC230W Employee-Management Relations Course	40
OC300W USAF Supervisor's Course	44
MAFHRMS108 Basic Civilian Training Force Development Specialist Course	40
MFSS175 Force Support Squadron Familiarization Course	8
MAFHRMS416 Military Personnel Management Course	16

Course Descriptions

To access AFHRMS course descriptions and other information, visit the web site at the Air Force Portal. From the main AF Portal page at the base-org-functional areas tab, select Organizational A-Z Listing, select "I" for Ira C. Eaker Center for Professional Development, scroll down, and click on the school link. Go to Eaker Center Schools and select the AF Human Resource Management School.

Defense Financial Management and Comptroller School

Internet Address

<http://www.au.af.mil/au/ecpd/dfmcs>

Mission. *Provide world-class executive financial management education for Department of Defense personnel by delivering advanced course work in a joint learning environment.*

In 1966 the assistant secretary of the Air Force for financial management (FM) established a joint service task group to study financial management education in the DOD. (The group issued its report, the *Management Education Department of Defense Study*, in March 1967.) In 1968 the Professional Military Comptroller Course (PMCC) was developed in response to the *Management Education Department of Defense Study*. In 1973 financial managers from the Army, Navy, and other DOD agencies began to participate in the PMCC, and the Army and Navy

began to assign highly qualified officers to the faculty. A reserve forces comptroller course (RFCC) was added to meet the needs of DOD reserve force comptrollers. In 1977 the DOD Professional Military Comptroller School (PMCS) was stood up to teach both PMCC and RFCC.

The Professional Military Comptroller School continued to provide the PMCC and RFCC from 1977 to 2005. In 2005, following a review of emerging financial manager education needs, the PMCC was redesigned, refocused, and renamed the Defense Financial Management Course (DFMC). The school was simultaneously renamed the Defense Financial Management and Comptroller School (DFM&CS). In 2006 the Defense Decision Support Course (DDSC) was created to provide improved decision support in the DOD by focusing on concepts related to understanding decision support and the transformational roles of financial management personnel.

Curriculum. Provide quality joint professional continuing education to DOD financial management personnel. The DFMC is held four or five times each year, and the DDSC is held 10 times each year. Four DDSC courses are conducted at Maxwell AFB, AL, while the other six are performed at the home station of the unit requesting the course. The RFCC is normally held once each year (RFCC is currently in a nonactive status).

Learning Outcomes.

- Demonstrates the ability to advise senior leaders by using enhanced strategic decision support techniques.
- Applies new techniques and concepts to improve personal leadership and interpersonal skills.
- Explains the impact of organizational relationships on the DOD mission.
- Appreciates the diverse financial management disciplines within the DOD. Illustrates contingency operation concepts and their impact on financial management.

Faculty. DFMC faculty must possess a master's degree in finance, accounting, or a related academic field and three or more years in financial management or a similar area.

Duration. The DFMC lasts 20 academic days; the DDSC is five academic days; and the RFCC continues for 10 academic days.

Eligibility. The target grades for the DFMC students are O-4 and above, GS-12 and above, and E-8 and above. Air Force O-3s in the Financial Management Leadership Program and GS-11s are currently authorized to attend by exception only. Selectees for this course should possess a broad knowledge of the DOD FM environment, a strategic perspective, above-average critical/creative thinking, and excellent oral and written communication skills.

Selectees for the RFCC are funded by their respective commands. Attendance for DFMC courses 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. Noncomptroller personnel application packets must include a statement, endorsed by the major command/agency comptroller, highlighting the benefits of attendance.

Reference the Education and Training Course Announcements (ETCA) web site at <https://etca.randolph.af.mil> for additional information. ETCA course numbers are listed in the curriculum summary table below.

Completion Requirement. Participants must complete testing, writing, speaking, and seminar assignments that will demonstrate comprehension and the ability to apply them professionally.

Curriculum Summary

Course Number and Title	Contact Hours
MLMDC503 Defense Financial Management Course	160
MLMDC504 Defense Decision Support Course	35
MLMDC502 Reserve Forces Comptroller Course	80

Course Descriptions

To access Defense Financial Management and Comptroller School course descriptions and other information, visit the course web site at the Air Force Portal, Organizational A-Z Index: select "I" and the Ira C. Eaker Center for Professional Development, choose Eaker Center Schools, and select the DOD Financial Management and Comptroller School.

USAF Chaplain Corps College

Internet Address

<http://www.usafhc.af.mil>

Mission. *Provide education, training, and resources that promote professional excellence and enhance the free exercise of religion for the USAF family.*

On 1 July 1953 the US Air Force established the Chaplains' Course at Lackland AFB, TX, and placed it under the officer basic military course. The Chaplains' Course became part of the officer military schools (OMS) in June 1955. The USAF Chaplain School was established in June 1960 based on an Air Force authorization; however, it remained under the OMSs.

From 1958 to 1965 judge advocates also reported to the Chaplain School for training. In February 1965 the Chaplain School became a separate unit and was placed directly under the commandant, Lackland Military Training Center. The USAF Chaplain School was established at Maxwell AFB, AL and assigned to Headquarters Air University on 20 May 1966. The USAF Chaplain Service Institute was activated under the Ira C. Eaker

Center for Professional Development on 31 October 1992. Technical training for chaplain assistants was transferred to Maxwell AFB, in September 1993 from Keesler AFB, MS, under the Air Force Year of Training initiatives. In 2009 the newly named Air Force Chaplain Corps College (AFCCC) moved to Fort Jackson, SC, in accordance with the base realignment and closure process and collocated with the Army and Navy chaplain schools.

The Chaplain Corps has a rich legacy of supplying resources in support of the ministry through the USAF Chaplain Service Resource Board that was formed in July 1959. In October 2003 the Resource Board was realigned as part of the Office of the USAF Chief of Chaplains, assisting in the plans and programs function as an action office for Air Staff. Then, as a part of the AFCCC relocation to Fort Jackson, the USAF Chaplain Service Resource Board was realigned with the college as a division, and it continues to provide robust resources in support of the Chaplain Corps.

Curriculum. The curriculum provides the highest quality professional continuing education (PCE), technical training, and resources to provide spiritual care and advice to leadership. The AFCCC conducts two basic chaplain courses, three intermediate chaplain courses, three wing chaplain courses, and three chaplain assistant apprentice courses each year. It generally offers four PCE courses each year covering topics of interest to the Chaplain Corps.

Learning Outcomes.

- Performs duties and responsibilities commensurate with the roles of chaplains and chaplain assistants.
- Demonstrates how chaplains/chaplain assistants provide for the free exercise of religion.
- Explains Expeditionary Air Force requirements and how to provide for ministry in the readiness environment.
- Leverages teamwork to accomplish the USAF Chaplain Corps College mission.

Faculty. AFCCC faculty members must possess a master's degree in divinity or comparable field and be endorsed by their ecclesiastical body.

Duration. Courses vary in length from 10 to 30 days.

Eligibility. The prerequisites for the Basic Chaplain Course and Chaplain Assistant Apprentice Course are selection for duty as a chaplain or chaplain assistant. Chaplains must complete Commissioned Officer Training before attending the Basic Chaplain Course. Other courses are pulse-point and just-in-time training to meet the needs of the Chaplain Corps.

Reference the Education and Training Course Announcements (ETCA) web site at <https://etca.randolph.af.mil> for additional information. ETCA course numbers are listed in the curriculum summary table below.

Completion Requirement. Students evidence mastery of chaplain concepts and processes utilized in the accomplishment of ministry within the USAF.

Curriculum Summary

Course Number and Title	Contact Hours
MAFCSI117 Chaplain Candidate Course	80.00
MAFCSI101 Basic Chaplain Course	240.00
MAFCSI114 Intermediate Chaplain Course	80.00
MAFCSI115 Wing Chaplain Course	80.00
M3ALR5R031 OC3A Chaplain Assistant Apprentice Course	238.50
MAFCSI129 Senior Chaplain Course	40.00

Course Descriptions

For AFCCC course descriptions and other information, visit the course web site at the Air Force Portal, Organizational A-Z Index: select "I" and the Ira C. Eaker Center for Professional Development, choose Eaker Center Schools, and select the USAF Chaplain Corps College.

National Security Space Institute

Internet Address

<https://www2.peterson.af.mil/nssi/CESET/nssi/index.htm>

Mission. *The mission of the Academic Center of Excellence is to provide responsive space professional continuing education.*

The National Security Space Institute (NSSI) located in Colorado Springs, CO, plays a vital role in the Space Professional Development Program (SPDP). The elements of this program are formalized through a three-level certification process to create and manage a knowledgeable community of credentialed space professionals (CSP) to meet the nation's space needs and national security objectives. The cornerstone of SPDP is the space education continuum—Undergraduate Space Training, Space 200, and Space 300. The NSSI executes the Space 200 and Space 300 courses that are required in this program for levels two and three certification, respectively.

Curriculum. Students learn about space system acquisition, capabilities, and employment at the operational and strategic levels. Space 200 is offered approximately 17 times a year; Space 300 is held approximately 12 times a year.

Learning Outcomes. Upon completion of the space professional continuing education curriculum (Space 200 and Space 300), students will master the following:

- Apply DOD space acquisition policies and space mission design principles to participate in the delivery of space capabilities to a diverse community of users.
- Analyze the space acquisition environment to develop an understanding of its impact on the delivery of space capabilities and national security.
- Analyze the impact of the space mission areas in support of joint and coalition forces across the range of military operations.

- Analyze the impact of competing space and counterspace capabilities on joint and coalition forces.
- Analyze the space-related policy and strategy environment to ascertain its influence on US national security.
- Synthesize approaches to effectively advocate for space capabilities and to effectively employ space capabilities in support of national leadership and joint/coalition forces.

Faculty. The NSSI faculty is made up of carefully selected civilians and military personnel. It is highly desired that faculty possess a graduate degree and five or more years' experience in space-related operational duties.

Duration. Space 200 is 18 class days and Space 300 is 15 class days.

Eligibility. The Space Professional Management Office, located at Headquarters Air Force Space Command, generates the list of eligible candidates for Space 200 and Space 300. A Space 200 student must possess SPDP Certification level 1 and have a minimum of 24 months' space experience. Space 200 targets space professionals with eight–11 years of service. A Space 300 student must possess SPDP certification level 2 and have a minimum of 72 months' space experience. Space 300 targets space professionals with 13–18 years of service.

Completion Requirement. Students must be able to critically analyze the space acquisition environment and space power at the operational and strategic levels and be able to articulate approaches to effectively employ space capabilities in support of national leadership and joint/coalition forces.

Curriculum Summary

Course Number and Title	Contact Hours
MSpace200 Space 200	108
MSpace300 Space 300	84

Course Descriptions

Space 200. Space 200 is the NSSI's mid-career course for space professional education. It develops space professionals who think critically about the application of space power. The course investigates two major areas: systems development and space power. In each area students actively participate in exercises challenging them to determine what to do given the dynamics and uncertainty of the national security environment.

Space 300. Space 300 is the NSSI's capstone course for space professional education. It develops space professionals who understand national policy considerations and strategic thought within an international geopolitical environment. Students will be able to critically address space acquisition, capabilities, and power at the operational and strategic levels across the range of military operations as well as space power's strategic contributions to national security.

Joint Flag Officer War-Fighting Course

Internet Address

<http://www.au.af.mil/au/lemay/main.htm>

Mission. *The course prepares two-star general officers of the four services for theater-level combat leadership. It is tailored to provide future theater combatant, service component, and JTF commanders with a broad perspective of the strategic and operational levels of war.*

The LeMay Center hosts the Joint Flag Officer War-Fighting Course (JFOWC) on behalf of the four services. The chiefs of staff of the four branches of the US armed forces own and control the course. They delegate course development and implementation to their executive agents: commandant, Army War

College; president, Naval War College; president, Marine Corps University; and commander, Air University.

Curriculum. The course prepares two-star general officers of the four services for theater-level combat leadership. It is tailored to provide future theater combatant commanders and service component and JTF commanders with a broad perspective of the strategic and operational levels of war. Instruction for the course comes from senior national-level civilian and military representatives; flag officers serving as combatant commanders; and retired, battle-tested officers. Retired war-fighting generals draw from their combatant and component commander experience to lead a campaign-planning exercise focused in various parts of the world across the continuum of conflict.

Through the study of war fighting, military doctrine, and the application of unified, joint, and combined combat forces, the attendees will be better prepared to respond to crises. JFOWC is a two-week course that is offered twice a year. Each class is limited to 19 general/flag officers and senior executive civilians who represent the military services.

Learning Outcomes. As directed by Chairman, Joint Chiefs of Staff Instruction (CJCSI) 1800-01D, *Officer Professional Military Education Policy*, Appendix E to Enclosure L.

Faculty. Instruction for the course comes from senior national-level civilians and military representatives; flag officers serving as combatant commanders; and retired, battle-tested officers.

Duration. The JFOWC is delivered in 10 academic days.

Eligibility. Per CJSCI 1800-01D, Appendix E to Enclosure M, and a memorandum of understanding (MOU) between the four executive agents, attendees will normally consist of 18 general/flag officers in the rank of major general/rear admiral-upper half or brigadier general (promotable)/rear admiral-lower half (promotable) at least a year after their attendance at capstone.

Reference the Education and Training Course Announcements (ETCA) web site at <https://etca.randolph.af.mil> for additional information. ETCA course number: MAAFNJ007.

Completion Requirement. Students must successfully complete all pass/fail evaluations and exercises.

Curriculum Summary

MAAFNJ007 Learning* Areas	Contact Hours
National Security Strategy	8.50
National Planning Systems and Processes	10.00
National Defense Strategy	11.50
National Military Strategy and Organization	8.00
Theater Strategy and Campaigning	27.75
The Role of Strategic Communication in Twenty-First Century Warfare	7.00
Strategic Leader Development	12.25
Total	85.00

*CSJCI 1800-01C uses the term *learning area* vice *curriculum area*.

Learning Area Descriptions

National Security Strategy

8.5 Contact Hours

- Role of Congress in military affairs and how Congress views the military
- Role of military leaders in developing national political objectives
- Four elements of national power and how the elements are used during a crisis
- Relationship between the strategic and military end states and how they differ and influence stability operations and redeployment

**National Planning
Systems and Processes** **10 Contact Hours**

- Role of joint doctrine as it applies to operations planning, mobilization, deployment, employment, sustainment, and redeployment
- Effect of time, coordination, policy, politics, doctrine, and national power on the planning process
- Joint strategy development and operational planning process

National Defense Strategy **11.50 Contact Hours**

- How the military operationalizes the national defense strategy to address strategic challenges by setting priorities among competing capabilities
- How the military dissuades potential adversaries from adopting threatening capabilities, methods, and ambitions, particularly by sustaining and developing US key military advantages

**National Military Strategy
and Organization** **8 Contact Hours**

- The combatant commander's perspective and the role of subordinate commanders in developing, deploying, employing, and sustaining military forces
- Roles, relationships, and functions of the president, secretary of defense, chairman of the Joint Chiefs of Staff, Joint Chiefs of Staff combatant commanders, secretaries of the military departments, and the service chiefs as related to the national military strategy

Theater Strategy and Campaigning **27.75 Contact Hours**

- Role of the unified commander in developing theater plans, policies, and strategy
- Complexities of interagency coordination and support in campaign planning and execution of military operations

- Challenges and opportunities that may accrue from the combatant commander's regional focus and an ambassador's country focus
- Multinational campaign plan for a geographic combatant commander in support of national and coalition objectives

**The Role of Strategic Communication
in Twenty-First Century Warfare**

7 Contact Hours

- Describes how theater commanders, component commanders, or JTF commanders access information operations resources and develop responsive information operations plans
- Comprehends the impact of national agencies that support the theater commander's requirements for information operations on national security issues
- Evaluates how the joint operational planning and execution system is integrated into both theater and operational information operations campaign planning and execution to support theater and national strategic sustainment and war-fighting efforts
- Comprehends the importance of strategic communication in a multinational environment and the impact it has in shaping the information environment
- Evaluates how public diplomacy and public affairs are integrated in theater and operational information operations planning and execution to support theater and national strategic sustainment and war-fighting efforts

Strategic Leader Development

12.25 Contact Hours

- Challenges of command at the three- and four-star levels
- Leadership challenges in a coalition environment
- Leadership challenges in working with and understanding the cultures of other members of the interagency

Joint Force Air Component Commander Course

Internet Address

<http://www.au.af.mil/au/lemay/main.htm>

Mission. *The Joint Force Air Component Commander (JFACC) Course is a senior officer-level PCE course designed to prepare one-, two-, and three-star officers of the four services for theater-level combat leadership. It is tailored to provide future functional component commanders with a broad perspective of the operational and strategic levels of war.*

The LeMay Center hosts the JFACC course on behalf of the four services. The chiefs of staff of the four branches of the US armed forces own and control the course. They delegate course development and implementation to their executive agents: commandant, Army War College; president, Naval War College; president, Marine Corps University; and commander, Air University.

Curriculum. The course prepares one-, two-, and three-star general officers of all four services for component command leadership. Attendees study war fighting, military doctrine, and application of unified, joint, and combined combat forces so they will be better prepared to respond to crises as functional component commanders.

The course is conducted annually during December at Maxwell AFB, AL. When practical, students travel to a major exercise, such as Blue Flag, for the final two days. If a major exercise is unavailable, students may visit an air and space operations center (AOC). The course is limited to 18 active duty (includes Reserve and National Guard) one-, two-, and three-star general officer attendees; one-star general officer selects are permitted by exception. The desired attendee mix is nine US Air Force, four US Navy, three US Marine, and two US Army flag officers.

Learning Outcomes. As directed by Chairman, Joint Chiefs of Staff Instruction (CJCSI) 1800-01D, *Officer Professional Military Education Policy*, Appendix L to Enclosure L.

Faculty. Instruction for the course comes from senior national-level civilians and military representatives, flag officers serving as combatant commanders, and retired, battle-tested officers.

Duration. The JFACC is delivered in seven academic days.

Eligibility. Per CJSCI 1800-01D, Appendix L to Enclosure L, attendees should be at least a one-star flag officer (one-star selects may attend on a case-by-case basis). Since these courses build on knowledge from the National Defense University's (NDU) Capstone Course, attendees should complete this congressionally mandated course before attending a component commander course.

Reference the Education and Training Course Announcements (ETCA) web site at <https://etca.randolph.af.mil> for additional information. ETCA course number: MCADRE004.

Completion Requirement. Students must successfully complete all pass/fail evaluations and exercises.

Curriculum Summary

MCADRE004 Learning Areas	Contact Hours
National Security Strategy	7.25
National Planning Systems and Processes	10.00
National Military Strategy and Organization	9.25
Theater Strategy and Campaigning	17.25
Information Operations	4.25
The Role of Strategic Communication in Twenty-First-Century Warfare	5.00
Strategic Leader Development	7.00
Total	60.00

Learning Area Descriptions

National Security Strategy 7.25 Contact Hours

- Relationship between political and military objectives and how the relationship may enhance or inhibit the combatant commander in reaching his or her theater military objectives

National Planning Systems and Processes 10 Contact Hours

- Joint and service doctrine applicable to the planning and execution of operations in support of theater-level plans and operations
- How time, coordination, policy, politics, doctrine, and national power affect the planning process
- Joint strategy development and operational planning processes

National Military Strategy and Organization 9.25 Contact Hours

- Combatant commander's perspective and the role of subordinate commanders in developing, deploying, employing, and sustaining military forces
- Roles and functions of the component commander to include relationships with and perspectives of the combatant commander, combined/joint force commanders (C/JFC), and component commanders (both functional and service)

Theater Strategy and Campaigning 17.25 Contact Hours

- Role of the unified commander in developing theater plans, policies, and strategy
- Theater-level strategy development and the development of military objectives, end states, and joint concepts of operations
- Theater component strategy that supports the C/JFC campaign plan

- Roles of joint doctrine as they apply to operations planning, mobilization, deployment, employment, assessment, sustainment, and redeployment
- Issues related to component functioning (i.e., air defense, airspace coordination, theater missile defense, fire support coordination, targeting, rules of engagement, and joint fires)
- Key components, systems, and processes used to plan, direct, coordinate, control, and assess combined/joint air, land, maritime, and space effects-based operations

Information Operations

4.25 Contact Hours

- How theater commanders, component commanders, or JTF commanders access information operations resources and develop responsive information operations plans
- Historical or ongoing information operations
- Requirements necessary to collect, collate, and disseminate intelligence information
- Strategic communication in a multinational environment and the impact it has in shaping the information environment

The Role of Strategic Communication in Twenty-First Century Warfare

5 Contact Hours

- Role of joint experimentation, joint exercises, research and development, and emerging organizational concepts with respect to transforming the US military
- Nature of warfare in the information age, to include advanced planning and analysis capabilities

Strategic Leader Development

7 Contact Hours

- Unique challenges of operational command at the three-star level
- Complexities associated with leadership in a coalition environment at the task force, component, and combatant commander levels

- Complexities associated with leadership in an interagency environment at the task force, component, and combatant commander levels

Combined Force Air Component Commander Course

Internet Address

<http://www.au.af.mil/au/lemay/main.htm>

Mission. *The Combined Force Air Component Commander (CFACC) Course is a senior officer-level PCE course designed to prepare one-, two-, and three-star general officers of the four services for theater-level combat leadership. It is tailored to provide future functional component commanders with a broad perspective of the operational and strategic levels of war.*

The LeMay Center hosts the CFACC course on behalf of the four services. The chiefs of staff of all four branches of the US armed forces own and control the course. They delegate course development and implementation to their executive agents: commandant, Army War College; president, Naval War College; president, Marine Corps University; and commander, Air University.

Curriculum. The course prepares one-, two-, and three-star general officers of the four services for component command leadership. Attendees study war fighting, military doctrine, and application of unified, joint, and combined combat forces to be better prepared to respond to crises as functional component commanders.

It is conducted annually during the summer. The course is held at Maxwell AFB, AL. When practical, students travel to a major exercise, such as Blue Flag, for the final two days. If a major exercise is unavailable, students may visit an air and space operations center (AOC). The course is limited to 18 active duty (includes Reserve and National Guard) one-, two-, and three-star attendees; one-star selects are permitted by ex-

ception. The desired attendee mix is five USAF, two US Navy, two US Marine, one US Army, and eight allied flag officers.

Learning Outcomes. As directed by Chairman, Joint Chiefs of Staff Instruction (CJCSI) 1800-01D, *Officer Professional Military Education Policy*, Appendix L to Enclosure L.

Faculty. Instruction for the course comes from senior national-level civilians and military representatives, flag officers serving as combatant commanders, and retired, battle-tested officers.

Duration. The CFACC is delivered in seven academic days.

Eligibility. Per CJSCI 1800-01D, Appendix L to Enclosure L, attendees should be at least a one-star flag officer (one-star selects may attend on a case-by-case basis). Since these courses build on knowledge from the National Defense University's (NDU) Capstone Course, attendees should complete this congressionally mandated course before attending a component commander course.

Reference the Education and Training Course Announcements (ETCA) web site at <https://etca.randolph.af.mil> for additional information. ETCA course number: MCADRE007.

Graduation Requirement. Students must successfully complete all pass/fail evaluations and exercises.

Curriculum Summary

MCADRE007 Learning Area	Contact Hours
National Security Strategy	7.25
National Planning Systems and Processes	10.00
National Military Strategy and Organization	9.25
Theater Strategy and Campaigning	17.25
Information Operations	4.25
The Role of Strategic Communication in Twenty-First Century Warfare	5.00
Strategic Leader Development	7.00
Total	60.00

Learning Area Descriptions

National Security Strategy 7.25 Contact Hours

- Relationship between political and military objectives and how that nexus may enhance or inhibit the combatant commander in reaching theater military objectives

National Planning Systems and Processes 10 Contact Hours

- Joint and service doctrine applicable to the planning and execution of operations in support of theater-level plans and operations
- How time, coordination, policy, politics, doctrine, and national power affect the planning process
- Joint strategy development and operational planning processes

National Military Strategy and Organization 9.25 Contact Hours

- Combatant commander's perspective and the role of subordinate commanders developing, deploying, employing, and sustaining military forces
- Roles and functions of the component commander to include relationships with and perspectives of the combatant commander, combined/joint force commanders (C/JFC), and component commanders (both functional and service)

Theater Strategy and Campaigning 17.25 Contact Hours

- Role of the unified commander in developing theater plans, policies, and strategy
- Theater-level strategy development and the development of military objectives, end states, and a joint concept of operations
- Theater component strategy that supports the C/JFC campaign plan

- Roles of joint doctrine as they apply to operations planning, mobilization, deployment, employment, assessment, sustainment, and redeployment
- Issues related to component functioning (i.e., air defense, airspace coordination, theater-missile defense, fire support coordination, targeting, rules of engagement, joint fires, etc.)
- Key components, systems, and processes used to plan, direct, coordinate, control, and assess combined/joint air, land, maritime, and space effects-based operations

Information Operations

4.25 Contact Hours

- How theater, component, or joint task force (JTF) commanders access information operations resources and develop responsive information operations plans
- Historical or ongoing information operations
- Requirements necessary to collect, collate, and disseminate intelligence information
- Strategic communication in a multinational environment and the impact it has in shaping the information environment

The Role of Strategic Communication in Twenty-First Century Warfare

5 Contact Hours

- Role of joint experimentation, joint exercises, research and development, and emerging organizational concepts with respect to transforming the US military
- Nature of warfare in the information age, to include advanced planning and analysis capabilities

Strategic Leader Development

7 Contact Hours

- Unique challenges of operational command at the three-star level
- Complexities associated with leadership in a coalition environment at the task force, component, and combatant commander levels

- Complexities associated with leadership in an interagency environment at the task force, component, and combatant commander levels

Senior Joint Information Operations Applications Course

Internet Address

<http://www.au.af.mil/au/lemay/main.htm>

Mission. *The course prepares selected general/flag officers and senior executive civilians of all services and the DOD to develop information operations into a war-fighting core military competency that will enable combatant commanders to target adversary decision making while protecting US interests. The course also includes interagency attendees.*

The LeMay Center hosts the Senior Joint Information Operations Applications Course (SJIOAC) on behalf of the four services. The chiefs of staff of the four branches of the US armed forces own and control the course. They delegate course development and implementation to their executive agents: commandant, Army War College; president, Naval War College; president, Marine Corps University; and commander, Air University.

Curriculum. This course prepares selected general/flag officers and senior executive civilians of the four services and the DOD to develop information operations into a war-fighting core military competency that will enable combatant commanders to target adversary decision making while protecting US prerogatives. The course also includes interagency attendees. The course is tailored to provide senior leaders with a broad perspective of information operations at the joint theater (operational) and national (strategic) levels of war.

Attendees study war fighting and doctrine as they relate to information operations concepts and principles. Course objec-

tives provide a common framework for understanding and valuing information operations and the necessary law, policies, and procedures that allow planning and integration of information operations into the joint fight; reviewing joint and service doctrine applicable to the planning and execution of information operations; analyzing the means to effectively communicate US government capabilities and intentions as an important method of combating the plans of US adversaries; examining the current and potential role of interagency and nongovernment organizations; demonstrating the integration of information operations into contingency and crisis plans; evaluating the outcomes and lessons; describing information operations tools, illustrating outcomes of their employment, and explaining lessons from their employment; and illustrating the impact the media has upon operations. Attendance is limited to 18 US flag officers in the grade of brigadier general or major general and equivalent members of the Senior Executive Service (SES).

Learning Outcomes. As agreed upon by the four services.

Faculty. Instruction for the course comes from senior national-level civilians and military representatives, flag officers serving as combatant commanders, and retired, battle-tested officers.

Duration. The SJIOAC is delivered in four- and-one-half academic days.

Eligibility. Attendees will normally consist of 18 general/flag officers in the rank of major general/rear admiral-upper half, brigadier general/rear admiral-lower half, or members of the SES (or similarly ranked civilians). One-star selects may attend on a case-by-case basis.

Reference the Education and Training Course Announcements (ETCA) web site at <https://etca.randolph.af.mil> for additional information. ETCA course number: MCADRE006.

Completion Requirement. Students must successfully complete all pass/fail evaluations and exercises.

Curriculum Summary

MCADRE006 Learning Area	Contact Hours
The Role of Information and Technology in Twenty-First Century Warfare	3.50
Joint Doctrine for Information Operations	5.00
Information Operations Core Capabilities	5.00
Strategic Communication	2.50
Media Relations	5.00
Public Diplomacy	2.50
Legal and Policy Implications of Information Operations	2.00
Cyber Warfare	7.00
Coalition Perspective	1.25
US Strategic Command Perspective	2.75
Combatant Command Perspective	3.50
Total	40.00

Learning Area Descriptions

The Role of Information and Technology in Twenty-First Century Warfare 3.50 Contact Hours

- Role of joint experimentation, joint exercises, research and development, and emerging organizational concepts with respect to transforming the US military
- The nature of warfare in the information age
- How theater commanders, component commanders, or JTF commanders access information operations resources and develop responsive information operations plans
- Historical or ongoing information operations
- The requirements necessary to collect, collate, and disseminate intelligence information
- The importance of strategic communication in a multinational environment and the impact it has in shaping the information environment

Joint Doctrine for Information Operations

5 Contact Hours

- The approach to information operations outlined in Joint Publication (JP) 3-13, *Joint Doctrine for Information Operations*
- The implications of the joint doctrine for military involvement in interagency and multinational affairs
- The implications of the multinational and nongeographic aspects of information operations
- Service doctrines for information operations and divergences from joint doctrine
- Selected non-US approaches to information operations and their implications for US national security

Information Operations Core Capabilities

5 Contact Hours

- What constitutes psychological operations (PSYOP), its limits and constraints, and how it is integrated into the planning process?
- The relationship between PSYOP and public affairs and the connection of PSYOP force support to public diplomacy, the challenges and factors that must be accounted for during planning and execution, and examples of when each did or did not work well in concert
- Planning factors for a military deception (MILDEC)
- Specific examples of MILDEC and their predicted outcomes and actual results
- Implications of the multinational and “nongeographic” aspects of electronic warfare (EW)
- Current and future EW threats (illustrate the threats with specific examples and experiences)
- Computer network operations effectiveness of US adversaries and the current means in countering them (including nonstate actors)

- Threats commanders face before and during operations and, specifically, the “platforms” US forces use to mitigate and negate the threat
- How information assurance enables other war-fighting domains

Strategic Communication

2.5 Contact Hours

- The DOD perspective regarding strategic communication
- The near-instantaneous global nature of information and its implications for a multinational environment
- The importance of strategic communication and the coordination, synchronization, and delivery of strategic effects
- How public diplomacy and public affairs are integrated into theater and operational information operations planning and execution to support theater and national strategic sustainment and war-fighting efforts
- How theater, component, or JTF commanders must optimally leverage their public affairs resources and develop a strategic response
- Specific examples of strategic communication employment: evaluate effectiveness at the strategic, operational, and tactical levels

Media Relations

5 Contact Hours

- Causes of the adversarial relationship that often exists between the press and the military
- The dynamics of strategic communications to numerous audiences (American public, coalition partners, adversaries, and neutrals)
- The impact of various technologies that provide live broadcasts from the battlefield to American living rooms
- Media issues experienced with recent or ongoing operations

- Fundamental conflicts of tactical, operational, and strategic security concerns with the media's view of the public's right to know

Public Diplomacy

2.5 Contact Hours

- Past and current challenges in disseminating coherent messages (How do you ensure that the various organisms of the US government maintain a consistent message and overcome policy and procedural differences?)
- Issues of military support to public diplomacy (You must comprehend the challenges of working in an interagency environment and the "corporate culture" differences that exist and must be overcome to develop national synergy.)
- How public diplomacy and public affairs are integrated into theater and operational information operations planning and execution to support theater and national strategic sustainment and war-fighting efforts
- Recent public diplomacy efforts, their effectiveness, lessons learned, and efficacy
- The relationship between political and military objectives and how the relationship may enhance or inhibit the combatant commander or CFC in obtaining theater objectives

Legal and Policy Implications

of Information Operations

2 Contact Hours

- Key provisions in standing rules of engagement, policy, statutes, international law, and constitutional law that shape operations
- Case studies in which the employment of information operations assets was affected by legal or policy factors
- Means by which military commanders can prepare to handle legal implications of using information warfare assets

Cyber Warfare

7 Contact Hours

- Attributes and emerging concepts of the future combined/joint force, and how this force incorporates, organizes, plans, prepares, and conducts operations (in cyberspace)
- Advocacy, funding, planning, programming, and budgeting for cyber assets
- National organization (national resources, interagency, the DOD, US Strategic Command, etc.)
- Mutual deterrence strategy in cyber warfare

Coalition Perspective

1.25 Contact Hours

- The complexities associated with leadership in a coalition environment
- Command and control (C2) challenges facing the joint/combined force component commander, including the personalities of external principals (Combined Forces Command, other component commanders, and international), transitions, and commander's critical information requirements
- Key national authority and rules of engagement issues which could impact the joint/combined component force, including national policies and prerogatives, information sharing, and titles
- Complexities associated with leadership in a coalition environment
- Force structure, major players, and interoperability issues of allied partners
- Allied information operations concept of operations and how their commands obtain information operations capabilities within an area of responsibility (AOR)

**US Strategic Command
(STRATCOM) Perspective**

2.75 Contact Hours

- US STRATCOM Unified Command Plan mission
- Current issues with synchronization and integration of the DOD information operations and the impact on the war fighter
- Current competency constructs and how they may require change to meet domestic threats
- Global and/or transregional nature of the future of US net-centric world
- Processes for providing reach-back capability to combatant commanders

Combatant Command Perspective

3.50 Contact Hours

- Views on the war-fighting value of information operations
- Examples of how information operations strategies are developed both in contingency and crisis planning and the factors commanders must consider in developing courses of action
- Examples of information operations asset employment and an evaluation of their effectiveness at the strategic, operational, and tactical levels
- Experiential challenges for the employment of information operations

Contingency Wartime Planning Course

Internet Address

<http://www.au.af.mil/au/lemay/main.asp>

Mission. *Support the combatant commanders with quality Air Force planners by providing the best foundation of knowledge in joint and Air Force contingency planning.*

The LeMay Center hosts the Contingency Wartime Planning Course (CWPC) that educates Airmen in the art and science of contingency war planning. Up to 700 students complete 10 programmed courses each year.

Curriculum. The course provides a comprehensive macro view of the contingency and crisis action planning processes from both joint and Air Force perspectives. Supporting topics include unit readiness assessment, mobilization, expeditionary site planning, and command relationships. Students must successfully pass two progress checks to complete the course.

Learning Outcomes

- Know how the services and other functional areas contribute to contingency planning
- Comprehend the chain of command, authorities, planning structure, and planning community responsibilities that guide and support joint and Air Force planning
- Comprehend the five major joint/DOD systems and two Air Force systems that support contingency planning
- Comprehend the Air Force and joint planning process
- Demonstrate joint and AF planning skills through various applications

Faculty. The course is taught by a diverse group of instructors with a wide range of planning experience in logistics, engineering, personnel, or operational specialties.

Duration. The CWPC is delivered in nine academic days.

Eligibility. CWPC quotas are allocated to each MAJCOM and are available by contacting the respective MAJCOM training manager. AU-funded quotas are not available for ANG, AFRC, and sister-service personnel. Unit-funded quotas are built into each class for these personnel. CWPC is available for Airmen in grades E-5 through O-5.

Reference the Education and Training Course Announcements (ETCA) web site at <https://etca.randolph.af.mil> for additional information. ETCA course number: MCADRE002.

Completion Requirement. Students must maintain a grade of “B” or better to graduate.

Curriculum Summary

MC MCADRE002 Curriculum Area	Contact Hours
IP 1000 Orientation	9.00
IP 2000 Foundation for Planning	8.00
IP 3000 Systems	5.00
IP 4000 Planning	14.00
IP 7000 Exercises	24.00
Total	60.00

Course Descriptions

IP 1000 Orientation

9 Contact Hours

This course presents an overview of the Contingency War-time Planning Course, including course objectives, curriculum, methodology, and faculty introduction. It also provides an overview of legal considerations in planning and information operation integration into the air campaign.

IP 2000 Foundation for Planning

8 Contact Hours

This course provides an overview of key topics that form the foundation of planning and demonstrates how they support and are used in contingency planning. An overview of topics includes

national security strategy, command relationships, AF doctrine, mobilization, functional area managers, status of resource and training system (SORTS), Air Expeditionary Force (AEF) reporting tool (ART), and designed operational capability (DOC) statements.

IP 3000 Systems

5 Contact Hours

The Systems Course introduces key planning-related systems, including the Joint Strategic Planning System, Deliberate Crisis Action Planning Execution System (DCAPES), War and Mobilization Plan, Joint Operation Planning and Execution System (JOPES), and the Planning, Programming, Budgeting Execution System (PPBES). It describes how those systems are used in the contingency and crisis action planning process.

IP 4000 Planning

14 Contact Hours

The course provides an overview of the Joint Strategic Capabilities Plan (JSCP), Time-Phased Force and Deployment Data (TPFDD) development, JOPES programs, and support and transportation planning. It describes prepositioned war reserve materiel (WRM) assets and how those assets relate to support planning and the structure of a force package and how the manpower and equipment force packaging system works. The course also describes the base-level deployment planning process and base support and expeditionary site planning. It explores the concepts of crisis action planning and campaign planning.

IP 7000 Exercises

24 Contact Hours

The Exercises course demonstrates knowledge and comprehension through a series of 10 major exercises and homework assignments. These exercises reinforce an understanding of such topics as TPFDDs, TPFDD letters of instruction, force planning for aviation and support forces, status of resource and training system (SORTS), AEF reporting tools, Expeditionary Site Planning, and AEF posturing and coding. The course con-

cludes with a comprehensive crisis action planning exercise that involves the facets of contingency planning.

Joint Air Operations Planning Course

Internet Address

<http://www.au.af.mil/au/lemay/main.htm>

Mission. *Support the combatant commanders with planners educated in the fundamental concepts, principles, and doctrine required to develop and execute the air portion of a joint/combined campaign plan.*

The LeMay Center hosts the Joint Air Operations Planning Course (JAOPC) in the art and science of air operations planning.

Curriculum. The course provides students with an in-depth understanding of the Joint Operation Planning Process for Air (JOPPA) at the operational level of war. Participants gain insight into the fundamental concepts, principles, and doctrine required to develop a joint/combined air operations plan.

Learning Outcome. The course develops an effective joint/combined air operations planner.

Faculty. The course is taught by highly experienced instructors with a wide range of planning experience in operational specialties.

Duration. The JAOPC is delivered in nine academic days.

Eligibility. JAOPC quotas are allocated to each MAJCOM and are available by contacting the respective MAJCOM training manager. AU-funded quotas are not available for ANG, AFRC, and sister-service personnel. Unit-funded quotas are built into

Information Operations Fundamentals Application Course

Internet Address

<http://www.au.af.mil/au/lemay/main.htm>

Mission. *Supports the combatant commanders by providing students a broad understanding of information operations (IO).*

The LeMay Center hosts the Information Operations Fundamentals Application Course (IOFAC) that educates students on the fundamental principles of information operations.

Curriculum. The course provides a broad understanding of information operations doctrine and insight into how information operations are applied across the full spectrum of conflict from peace to war. Supporting topics help students to gain a better understanding of how current and emerging technologies, tactics, and techniques are designed to affect our decision-making capabilities as well as those of our adversaries.

Learning Outcome. This course helps students to develop an awareness of the application of information operations across the spectrum of conflict.

Faculty. The course is taught by highly experienced instructors with a wide range of IO experience in intelligence, communications, and operational specialties.

Duration. The IOFAC is delivered in four academic days.

Eligibility. IOFAC quotas are allocated to each MAJCOM and are available by contacting the respective MAJCOM training manager. AU-funded quotas are not available for ANG, AFRC, and sister-service personnel. Unit-funded quotas are built into each class for these personnel. IOFAC is available for Airmen in the grades of E-5 through O-5 and civilian equivalents.

Reference the Education and Training Course Announcements (ETCA) web site at <https://etca.randolph.af.mil> for additional information. ETCA course number: MCADRE005.

Completion Requirement. Students must maintain a grade of “B” or better to graduate.

Curriculum Summary

MCADRE005 Curriculum Area	Contact Hours
Block I Major Components of Information Operations	14
Block II Environmental Factors of Information Operations	6
Block III Applications of Information Operations	11
Total	31

Course Descriptions

Block I Major Components of Information Operations **14 Contact Hours**

Block I defines information operations using AFDD 3-13, *Information Operations*, and additional sources. It also provides students with an understanding of the components of IO and shows how they fit in US Air Force doctrine.

Block II Environmental Factors of Information Operations **6 Contact Hours**

Block II presents environmental factors that can influence and affect the conduction of information operations and distills how these elements can be applied across the entire military spectrum.

Block III Applications of Information Operations **11 Contact Hours**

Block III presents instruction on current information operations applications and provides students the opportunity to demonstrate what they have learned through practical exercises.

Air Force Senior Executive War-Fighter Perspective Seminar

Internet Address

<http://www.au.af.mil/au/lemay/main.htm>

Mission. *The Air Force Senior Executive War-Fighter Perspective Seminar (AFSEWPS) gives senior AF civilian leaders a perspective on how the AF fights at the operational level of war, how the AF contributes to the joint fight, and how civilians can contribute to the AF and joint mission.*

LeMay Center hosts the AFSEWPS on behalf of Headquarters Air Force (HAF)/A1. The course is conducted twice annually and limited to 18 flag officer-level civilians.

Faculty. Instruction for the course comes from experts on war fighting, doctrine, and retired, battle-tested flag officers.

Learning Outcomes. As directed by HAF/AQ.

Curriculum. The course prepares young SES members (and other flag-officer-level civilians) to serve at the senior level with an understanding of how the Air Force plans, deploys, employs, and sustains its forces. Attendees study war fighting, military doctrine, and application of unified, joint, and combined combat forces so they will be better prepared to support the future fight.

Duration. The course is four and one-half academic days.

Eligibility. Senior Executive Service (SES) members.

Graduation Requirement. Students must successfully complete all pass/fail evaluations and exercises.

Curriculum Summary

Learning Area	Contact Hours
National Military Strategy, Guidance, and Command Structures	3.75
National Planning Systems and Processes	5.00
Theater Strategy and Campaigning	15.00
The Role of Technology in Twenty-First Century	5.00
Senior Executive Roles	6.25
Total	35.00

Learning Area Descriptions

National Military Strategy, Guidance, and Command Structures

3.75 Contact Hours

- The relationship between political and military objectives and how the relationship affects military operations
- How subordinate commanders develop, deploy, employ, and sustain forces
- The roles and functions of the component commander (both functional and service)
- How the USAF deploys and presents forces

National Planning Systems and Processes

5 Contact Hours

- Joint and service doctrine applicable to the planning and execution of operations in support of theater-level plans and operations
- How time, coordination, policy, politics, and doctrine affect the planning process

Theater Strategy and Campaigning **15 Contact Hours**

- The role of the unified commander in developing theater plans, policies, and strategy
- How the joint air estimate process (JAEP) supports the combined force commander's campaign plan
- The steps in the JAEP
- JAEP in a scenario
- Importance of planning and executing as a joint/combined force

**The Role of Technology
in the Twenty-First Century** **5 Contact Hours**

- The requirements necessary to collect, collate, and disseminate intelligence information
- The nature of warfare in the information age, and the role of airpower in the joint fight

Senior Executive Roles **6.25 Contact Hours**

- The preeminence of jointness over service agendas
- The importance of AF senior leaders understanding and advocating the USAF perspective on key DOD/joint issues
- The role of the senior executives as key leaders in the USAF
- The contribution of senior executives to the DOD

Cyberspace Operations Executive Course

Internet Address

<http://www.au.af.mil/au/lemay/main.htm>

Mission. *The Cyberspace Operations Executive Course (COEC) is designed to provide attendees with an understanding of the global network, its vulnerabilities, threat activity, and ongoing efforts to protect and operate within it.*

The LeMay Center hosts COEC for the Air Force chief of staff.

Faculty. Instruction for the course comes from senior national-level civilians, military representatives, and flag officers serving in cyberspace billets in various organizations.

Learning Outcome. As agreed upon by the chief of staff of the Air Force (CSAF).

Curriculum. The course was developed in direct response to the emergence of cyberspace as a war-fighting domain and the need to bring senior officers up to a baseline understanding of cyberspace and cyber operational capabilities. The desired effect is to broaden senior AF leaders' knowledge on cyber issues as they shape cyber-related doctrine, organization, training, materiel, leadership, personnel, and facilities (DOTMLPF). The course is offered twice annually with up to 15 students per class. The course is guided by a senior advisor and is delivered by guest experts from organizations outside Air University. Course material is developed and executed through a course director assigned to the LeMay Center/WEF.

Duration. The course is one and one-half academic days.

Eligibility. Attendees will normally consist of 15 general/flag officers in the rank of lieutenant general/general and Tier III Senior Executive Service (SES) members.

Graduation Requirement. Students must successfully complete all pass/fail evaluations and exercises.

Curriculum Summary

MCOEC001 Learning Area	Contact Hours
Nature and Characteristics of Cyberspace	3
Capabilities and Functions	3
Integration and Interrelationships	2
Employment of Cyberpower	3
Law, Policy, and Ethics	2
Total	13

Learning Area Descriptions

Nature and Characteristics of Cyberspace

3 Contact Hours

- Comprehend the complexities of defining cyberspace in reference to a military domain of operations
- Analyze the current discourse on cyberspace and key components of developing common cyber terminology
- Value the need to create cyberpower doctrine

Capabilities and Functions

3 Contact Hours

- Comprehend the range of capabilities the Department of Defense (DOD) has in the cyberspace domain, including offensive, defensive, and support capabilities
- Analyze the synergistic application of cyber and noncyber capabilities in other domains
- Articulate the manner in which DOD cyberspace functions can be executed to achieve effects in support of national security objectives

Integration and Interrelationships

2 Contact Hours

- Analyze the effects of current national cyber security policy on the DOD and military strategies

- Understand the direction in which the DOD is proceeding in integrating cyberspace as a war-fighting domain and why
- Value the complexities of integrating cyberspace operations between services, governmental agencies, and the private sector, including offensive, defensive and support operations

Employment of Cyberpower

3 Contact Hours

- Comprehend the development of cyberpower as a war-fighting domain
- Value the role cyberspace offensive, defensive, and support capabilities have played in recent operations

Law, Policy, and Ethics

2 Contact Hours

- Value the myriad issues associated with developing cyber offensive and defensive capabilities

Senior Leader Airpower Doctrine Seminar

Internet Address

<http://www.au.af.mil/au/lemay/main.htm>

Mission. *The Senior Leader Airpower Doctrine Seminar (SLADS) is designed to prepare USAF senior leaders to better articulate AF doctrine to a joint/combined audience while attending a joint professional military course.*

The LeMay Center executes SLADS on behalf of the Air Force chief of staff.

Faculty. Instruction for the course comes from senior doctrine developers assigned to the LeMay Center. In addition to assigned personnel, the course uses senior leaders, functional area experts, and AF senior advisors who furnish additional expertise.

Learning Outcome. To understand the present state of doctrine and the current doctrinal issues.

Curriculum. The course was developed to provide a forum for the examination and evaluation of select doctrine topics and issues. SLADS is a CSAF-directed course offered the day before CAPSTONE (first level of general and flag officer PME), the Joint Force Air Component Commander Course, the Combined Force Air Component Commander Course, the Joint Flag Officer War-Fighting Course, and the Senior Joint Information Operations Applications Course. The course is guided by a senior advisor and delivered by guest experts from organizations inside and outside Air University. Course material is developed and executed through a course director assigned to LeMay Center/WEF.

Duration. The course length ranges from four to eight hours dependent on which JPME course is being supported.

Eligibility. Attendees will normally consist of six to 12 general officers.

Graduation Requirement. Students must actively participate in all course briefing blocks and discussions.

Curriculum Summary

MSLADS001 Learning Area	Contact Hours
Recent Doctrine Development	1
Senior Advisor Perspective	1
Select Doctrinal Issues	2
Command Relationships	2
Lessons Learned	2
Total	8

Learning Area Descriptions

Recent Doctrine Development **1 Contact Hour**

- Evaluate recent doctrine development addressing current service, joint, multinational, and interagency issues

Senior Advisor Perspective **1 Contact Hour**

- Evaluate senior advisor perspectives on service, joint, multinational, and interagency issues facing senior leaders

Select Doctrinal Issues **2 Contact Hours**

- Evaluate select AF and joint war-fighting doctrinal issues

Command Relationships **2 Contact Hours**

- Examine the command relationships and organizational structures relevant to the JPME class

Lessons Learned **2 Contact Hours**

- Examine recent AF and joint lessons learned relevant to the upcoming JPME class

ACADEMIC SUPPORT

Several organizations at Maxwell AFB, AL, provide academic and historical support for the AU resident and distance learning programs. These organizations enable the university to extend essential mission support to a wide range of Air Force units and commands, including Headquarters Air Force and the DOD.

Air University Registrar

Internet Address

<http://www.au.af.mil/au/registrar.asp>

The Air University Registrar oversees three branches: Registrar Services, Registrar Support, and Technology Support. Through the Registrar Services branch, the registrar provides a 30-year archival data trail for Air University (AU) schools, produces transcripts for graduates of those schools, and serves as the admissions officer for Air War College (AWC), Air Command and Staff College (ACSC), School of Advanced Air and Space Studies (SAASS), and the USAF Test Pilot School (USAF TPS) master's and doctoral degree programs. Registrar Services enrolls distance education students and processes admissions for the AU degree programs. This branch also produces course completion certificates, diplomas, and transcripts. Registrar Support manages course requirements, allocations, schedules, and program changes. This branch also supports the Air Force Education Requirements board through data tracking and analysis for Air Force advanced academic degree programs and professional continuing education requirements. Registrar Support is also the "hub" for providing historical and current data on student admissions and enrollments. Technology Support provides assistance for the Air University Registrar Education Program Management system and functions as the single input source for updating Air Force officer records with PME graduate data and developmental education credits. This branch also supports promotion boards by screening eligible lists to provide PME graduate and developmental education credits.

Directorate of Education Logistics and Communications

Internet Address

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

Mission. *To develop, deliver, and manage distance learning for US air and cyberspace forces.*

Air University (AU), through its Directorate of Education Logistics and Communication (A4/6), provides educational oversight, administrative services, and academic support for career-related specialties and selected technical programs delivered at a distance. The A4/6 directorate is responsible for the instructional development, management, delivery, and evaluation of Air Force Career Development Courses (CDC), specialized courses, and select PME courses. It also produces and distributes study materials for the Air Force Weighted Airman Promotion System (WAPS) and provides administrative support services for Air University's nonresident PME and professional continuing education (PCE) courses.

Each year this directorate administers approximately 400 active courses that include e-CDCs and other media, 90,000 WAPS packages, and 185,000 examinations, while serving more than 135,000 students. The traditional paper-based CDCs are developed using state-of-the-art publishing software, and examinations are printed using print-on-demand technology.

A growing number of courses incorporate a blend of text and multimedia via CD-ROM. Airmen in select career fields are provided the option to complete their CDCs through AU's online web site (a derivative web site of AETC's Advanced Distributed Learning System) that provides course access from work or home computers. Electronic exams, developed by A4/6 instructional specialists, are available at remote test control facilities, enabling students to have instant access to feedback and test scores. Student support is accomplished via the electronic E-Campus Support Center, providing technical, course, and student-support services through electronic incident submissions and frequently asked questions. A4/6 personnel fa-

cilitate the printing of the program, mailroom operations, and warehouse contract for AU; maintain a database of registered students (shared with the AU Registrar/Student Services); track student progress; administer surveys; and provide analytical reports on student performance and satisfaction to the schools and functional communities.

Instructional systems specialists and advisors are available to teach subject-matter experts and support organizations in the field, utilizing various media to develop sound instructional strategies. A4/6 produces handbooks and guides for course authors, preparing agencies, base education offices, test-control facilities, and field units.

Curriculum. A description of A4/6's 400 distance learning courses is available in the A4/6 catalog at <http://www.au.af.mil/au/afiadl/>. The web site also provides information about enrollment, counseling, testing procedures, test-control facilities, methods for obtaining assistance with student inquiries, and links to distance learning resources and guides.

Air Force Research Institute

Internet Address
<http://afri.au.af.mil/>

Mission. *Conduct independent research, outreach, and engagement to enhance national security and assure the effectiveness of the United States Air Force.*

The Air Force Research Institute (AFRI) was officially activated as an independent, unique organization at Air University (AU) on 19 May 2008. However, AFRI integrates several units with long histories of excellence at AU, including the Air Research Institute, the Air University Press (AU Press), the Air Force Fellows, and the *Air and Space Power Journal*. AFRI supplements the idea-generating capacity of AU and the US Air Force and supports air, space, and cyberspace research inquiries from the chief of staff and other top-level decision makers

throughout the Air Force and the Department of Defense (DOD). AFRI products also enhance long-term studies of external agencies, support student research, and address specialized research projects directed by the Air Staff and the DOD to enhance national security and to provide relevant research for the Air Force. AFRI promotes advanced thinking and strategy regarding airpower through publications, conferences, and forums that address current issues vital to the Air Force and also captures lessons from history. AFRI's publication products and much of AU's unclassified graduate-level research are available for review either electronically or in print. AFRI comprises three divisions: Research, Outreach, and Engagement.

The Research Division is comprised of experienced airpower analysts and researchers conducting independent operational- and strategic-level research on topics of vital interest to the Air Force and the DOD. This research involves the enduring elements of air, space, and cyberspace and their effect on the US military and national security across the full spectrum of military interests. The Research Division generates and publishes books, original studies, research pamphlets, monographs, and papers on topics of interest to Air Force leaders and those related to current and future air, space, and cyber operations.

The Outreach Division extends the university's reach nationally and internationally through publications and professional discourse that provide forums for airpower education and debate. The *Air and Space Power Journal (ASPJ)*, the professional journal of the US Air Force since 1947, has grown to include six language editions with content in each edition tailored for the audience served. *ASPJ* is distributed in print and electronically to over 150 countries. Beginning in 2012 *ASPJ* is expanding its traditional focus on operational art to include strategic perspectives. This critical examination of and debate about warfare, strategy, national and international security, and defense policy will bring greater diversity to the journal's contents and increase its value to the Air University's education mission and to the Air Force at large. AU Press editors support publication of these journals as well as selected manuscripts on air, space, and cyberspace, which are published as books and papers and in electronic media.

The Engagement Division extends the reach of AFRI to inform Airmen and build relationships through conferences and workshops, print publications, and online publishing. These efforts include collaboration to establish and develop partnerships with other government and academic communities including universities, think tanks, and international allies. The division's goal is to expand the understanding and development of concepts, issues, and topics of interest to Air Force leaders and policy makers. The Engagement Division manages online publishing for AFRI and AU Press through 10 web sites serving the AU Press Bookstore, the *Air and Space Power Journal* including English and foreign language editions, upcoming conferences, and the Air Force Fellows program. Additional components of the Engagement Division include the print and multimedia functions of AU Press and the Air University Publication Review Board, which assists the press in acquiring manuscripts by providing advice on the academic and research value of potential manuscripts. The Engagement Division also supports Air University research efforts through the annual AU Call for Topics, the AU Research Information Management System database, and publication of the annual *AU Research Bulletin*. Descriptions and electronic versions of all AFRI and AU Press publications, including books, journals, papers, and pamphlets, are available at <http://aupress.maxwell.af.mil>.

Air Force Enlisted Heritage Research Institute

Internet Address

<http://AFEHRI.maxwell.af.mil>

Mission. *Supports the Barnes Center for Enlisted Education by educating and motivating enlisted leaders on our enlisted heritage and history.*

The Air Force Enlisted Heritage Research Institute (AFEHRI) was established 23 May 1997 as a component of the Barnes Center. It is comprised of a director, a curator, a noncommis-

sioned officer in charge of the research and the heritage center, and a client support administrator. The AFEHRI provides curriculum and student support to all facets of enlisted professional military education (EPME) and Airman Leadership Schools. It also provides secondary student support to the USAF First Sergeant Academy and USAF Historian Development Course. The institute captures, preserves, and archives enlisted history and heritage and assists in developing the *Air Force Professional Development Guide*.

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 heritage center 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 Historical Research Agency

Internet Address

<http://www.afhra.af.mil>

The Air Force Historical Research Agency (AFHRA) is the primary repository for Air Force historical documents. Established in Washington, DC, during World War II, the agency's collection moved to Maxwell AFB, AL in 1949 to support Air University

(AU) and is located adjacent to the Muir S. Fairchild Research Information Center (MSFRIC). The AFHRA is a field operating agency functioning under the policy guidance of the Air Force historian at Headquarters Air Force.

AFHRA's current holdings exceed 700,000 documents and 100 million pages and represent the world's largest and most valuable organized collection of historical documents on US military aviation. Subjects range from the use of balloons in the Civil War through air force activities in World War II, Korea, Southeast Asia, the air war over Serbia, and Operations Desert Storm, Noble Eagle, Enduring Freedom, and Iraqi Freedom. The majority of documents consist of USAF organizational histories from every echelon of the service from major command to squadron level. Except for the classified or restricted documents comprising approximately 25 percent of the holdings, the collection is open to the public. Finding aids include an electronic database and bibliographies for identifying and locating individual documents on specific topics of interest to the researcher.

To complement the unit histories, the agency houses several special collections, with some dating back to the early 1900s. These collections include historical monographs and studies; almost 2,500 oral history interviews; end-of-tour reports of notable overseas commanders; course materials of the Air Corps Tactical School from the 1930s; and working papers of key Army Air Force staff offices, the British Air Ministry, and the Luftwaffe during World War II. An extensive two-million-page Persian Gulf War collection and electronic database of nearly 85 gigabytes of information on the air war over Serbia have been added to the agency's holdings in the past decade. The Gulf War holdings include chronologies, working papers, message traffic, oral history transcripts, unit histories, and contingency reports.

The agency also holds the personal paper collections of more than 500 Air Force civilian and military figures, including John L. Brown, George C. Kenney, Curtis E. Lemay, John D. Ryan, and Thomas D. White.

AFHRA receives historical reports and information from Operations Noble Eagle, Enduring Freedom, and Iraqi Freedom, and other Air Force operations. Its historical collection is read-

ily available to AU students, faculty, and staff. In addition, agency staff members provide research and advisory services to assist AU students in preparing papers and theses.

Beyond its support to AU, the AFHRA staff answers requests for historical information from Congress, the Joint Chiefs of Staff, the Air Staff, the MAJCOMs, and the general public. Other key functions include drafting and updating the official lineage and honors histories and emblems of the Air Force organizations, writing and publishing historical reference works, conducting the Air Force's oral history program, maintaining records showing the status of aircraft, and updating and preserving the official lists of aerial victory credits earned during each war.

The AFHRA staff routinely takes part in training new Air Force historians and conducting biennial archival and oral history training courses for professional members of the Air Force history and museums program. The agency also deploys individual mobilization augmentees to conduct interviews and capture documentation relating to Air Force operations.

Muir S. Fairchild Research Information Center

Internet Address
<http://aulibrary.au.af.mil>

The Muir S. Fairchild Research Information Center (MSFRIC), founded in 1946 as the AU Library, is the premier library in DOD. It houses well-balanced collections especially strong in the fields of war fighting, aeronautics, Air Force and DOD operations, military sciences, international relations, education, culture and language, leadership, and management. MSFRIC improves Air Force education by providing access to the world of information through quality library services.

The center holds more than 2.6 million items, including 513,000 military documents, 504,000 monographs and bound

periodical volumes, 386,000 maps and charts, and 150,000 military regulations and manuals.

The MSFRIC sits at the center of Chennault Circle, Maxwell AFB, AL. On 19 January 2007 Air University Library was redesignated the Muir S. Fairchild Research Information Center. The library building, Fairchild Library, is named for the founder and first commander of AU, Gen Muir Stephen "Santy" Fairchild. The Fairchild Research Information Center also operates the Henry "Red" Erwin Library at Maxwell-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 center's holdings and information. Special subject bibliographies and curriculum support pages are published throughout the year and posted concurrently on the library's web page. Published since 1949, the *Air University Library Index to Military Periodicals* is searchable online, accessed through the center's web site.

Electronic information technologies are critical to the delivery of library resources and services. A third-generation integrated library system automates ordering, cataloging, 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. Many MSFRIC tools are now available through the Air Force Portal, including links to reference librarians, bringing the personal touch of library service to the entire Air Force community.

The MSFRIC is a member of the Association of Southeastern Research Libraries (ASERL), the Military Education Research Library Network (MERLN), the Network of Alabama Academic Libraries (NAAL), and Lyrasis.

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ACRONYMS AND ABBREVIATIONS

A4/6	Directorate of Education Logistics and Communication
AB	Artium Baccalaureatus; Air Base
ABD	all but dissertation
ACCME	Accreditation Council for Continuing Medical Education
ACE	American Council on Education
ACSC	Air Command and Staff College
ACT	accelerated combat timeline
ACTS	Air Corps Tactical School
AEF	air and space expeditionary force
AETC	Air Education and Training Command
AF	Air Force
AFB	Air Force Base
AFCCC	Air Force Chaplain Corps College
AFDC	Air Force Doctrine Center
AFDD	Air Force Doctrine Document
AFEHRI	Air Force Enlisted Heritage Research Institute
AFEWT	Air Force Educational War-Gaming Toolset
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
AFJROTC	Air Force Junior Reserve Officer Training Corps
AFJROTCI	Air Force Junior Reserve Officer Training Corps Instruction
AFMS	Air Force Medical Service
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 Reserve

AFRI	Air Force Research Institute
AFRICOM	Africa Command
AFROTC	Air Force Reserve Officer Training Corps
AFSAT	Air Force Security Assistance Training
AFSEWPS	Air Force Senior Executive War-Fighter Perspective Seminar
AFSNCOA	Air Force Senior Noncommissioned Officer Academy
AFSO 21	Air Force Smart Operations for the Twenty-First Century
AFWI	Air Force War-Gaming Institute
AGA	Alabama Goodwill Ambassadors
AIC	Academic Instructor Course
AICE	Association of International Credential Evaluators
ALS	Airman Leadership School
AMA PRA	American Medical Association Physician's Recognition Award
AMS	Academy of Military Science
ANG	Air National Guard
AOC	air and space operations center
AOR	area of responsibility
APID	Advanced Principles of Instructional Design
ARCS	Air Reserve Component Seminar
ARPS	Aerospace Research Pilot School
AS	Aerospace Education
ASB	Air Sea Battle
ASBC	Air and Space Basic Course
ASI	Avionics Systems Integrations
ATO	air tasking order
AU	Air University
AUI	Air University Instruction
AUSIS	Air University Student Information System
AWC	Air War College
AWP	Air Web Planner
BA	bachelor of arts
BBA	bachelor of business administration
BDE	basic development education
BEAST	Basic Expeditionary Airman Skills Training
BOT	Basic Officer Training

BS	bachelor of science
BT	Blue Thunder
C2	command and control
C/JAOC	combined/joint air operations center
C/JFACC	combined/joint force air component commander
C/JFC	combined/joint forces command or commander
CADRE	College of Aerospace Doctrine, Research and Education
CALT	Civilian Acculturation and Leadership Training
CAOC	combined air operations center
CAP	Civil Air Patrol
CAP-USAF	Civil Air Patrol-United States Air Force
CAPSTONE	first level of general and flag officer professional military education
cBT	computer-based testing
CCAF	Community College of the Air Force
CDC	career development course
CEO	chief executive officer
CFACC	combined forces air component commander
CFAST	Collaborative Force Analysis, Sustainment, and Transportation
CFC	Combined Forces Command
CFP	check flight phase
CFT	career field team
CGO	company grade officer
CGSC	Army Command and General Staff College
CIA	Central Intelligence Agency
CJCSI	Chairman, Joint Chiefs of Staff Instruction
CLC	Chief Master Sergeant Leadership Course
CMSgt	chief master sergeant
CNW	College of Naval Warfare
COA	course of action
COEC	Cyberspace Operations Executive Course
COIN	counterinsurgency
CONUS	continental United States
COT	Commissioned Officer Training
CPDS	Commanders' Professional Development School
CPI	Continuous Process Improvement
CPMC	Civilian Personnel Management Course
CSAF	chief of staff of the Air Force

CSAT	Center for Strategy and Technology
CSO	combat systems officers
CSP	credentialed space professional
CWG	Capstone War Game
CWPC	Contingency Wartime Planning Course
DA	administration division
DDS	doctrine development service; service doctrine development
DDSC	Defense Decision Support Course
DE	education division
DEW	Department Of Joint Warfare Studies
DFMC	Defense Financial Management Course
DFM&CS	Defense Financial Management & Comptroller School
DL	distance learning
DLI	Defense Language Institute
DLS	Distinguished Lecture Series
DOD	Department of Defense
DOE	design of experiments
DOTMLPF	doctrine, organization, training, materiel, leadership, personnel, and facilities
DSCA	Defense Security Cooperation Agency
DSN	Defense Switching Network
EAD	extended active duty
ECI	Extension Course Institute
ECPD	Eaker College for Professional Development
EHRI	Enlisted Heritage Research Institute (Air Force)
EL	electives
ELFP	Executive Leadership Feedback Program
EOC	emergency operations center
EPME	enlisted professional military education
EPMEIC	Enlisted Professional Military Education Instructor Course
ESL	English as a Second Language
ETCA	Education and Training Course Announcements
ETS	Education and Training Services
EW	electronic warfare
EX	exercise
FERPA	Federal Family Educational Rights and Privacy Act

FGO	field-grade officer
FM	financial management
FS	Foundations of Strategy
FSA	First Sergeant Academy
FTE	flight-test engineering
FTN	flight-test navigator
FTT	flight-test techniques
GC	Global Challenge
GDP	Guidance for Development of the Force
GMC	General Military Course
GOE	Gathering of Eagles
GPA	grade point average
GPS	global positioning system
GS	global security; General Schedule
GSP	Global Security Program; Grand Strategy Program
HAF	Headquarters Air Force
HCI	Holm Center Instruction
HPSP	Health Professions Scholarship Program
HQ	headquarters
HQE	highly qualified expert
iBT	internet-based testing
ICL	institutional competency list
ID	intelligence department
IDE	intermediate developmental education
IDI	Intercultural Development Inventory
IF	International Fellow
IFAST	Integration Facility for Avionics System Testing
ILE/ILE EX	Intermediate-Level Education/Exercise
IMA	individual mobilization augmentee
IMS	international military student
IN	Directorate of Intelligence
IO	information operations; international organizations
IOFAC	Information Operations Fundamentals Applications Course
IOP	instruments of power
IOS	International Officer School
IR	International Relations
ISAF	International Security Assistance Force

ISD	Instructional Systems Design
ISR	intelligence, surveillance, and reconnaissance
JAEP	joint air estimate process
JAEX	joint air and space exercise
JAGWAR	Judge Advocate General War Game
JAOC	joint air operations center
JAOP	joint air operations plan
JAOPC	Joint Air Operations Planning Course
JASOC	Judge Advocate Staff Officer's Course
JFACC	joint force air component commander
JFC	joint force commander
JFOWC	Joint Flag Officer War-Fighting Course
JIPSE	Joint Intermediate Planning Staff Exercise
JLASS	joint land, aerospace, and sea simulation
JMO	joint military operation
JOPEX	joint operations planning and execution system
JOPPA	joint operation planning process for air
JP	joint planning; Joint Publication
JPEX	Joint Planning Exercise
JPME	joint professional military education
JSCSC	Joint Services Command and Staff College (United Kingdom)
JSL	joint strategic leadership
JTF	joint task force
JWAR	joint war game
LA	Learning Areas
LD	leadership
LDP	Leadership Development Program
LDS	leadership development simulation
LLAB	Leadership Laboratory
MA	master of arts
MAAS	master of airpower art and science (SAASS)
MAJCOM	major command
MAWS	Maritime Advanced War-Fighting School
MBA	master of business administration
MERLN	Military Education Research Library Network
MILDEC	military deception
MilPDS	Military Personnel Data System

MMOAS	master of military operational art and science (ACSC)
MPA	master of public administration
MPF	Military Personnel Flight
MS	master of science
MSFTE	master of science in flight test engineering
MSS	master of strategic studies (AWC)
MOU	memorandum of understanding
MSFRIC	Muir S. Fairchild Research Information Center
NAAL	Network of Alabama Academic Libraries
NACES	National Association of Credentials Evaluation Services
NATO	National Atlantic Treaty Organization
NCACS	North Central Association of Colleges and Schools
NCO	noncommissioned officer
NCOA	Noncommissioned Officer Academy
NDU	National Defense University
NGO	nongovernmental organizations
NMP	nonmaster's program
NRO	National Reconnaissance Office
NSDM	National Security and Decision Making
NSF	National Security Forum
NSPS	National Security Personnel System
NSSI	National Security Space Institute
OEF	Operation Enduring Freedom
OLMP	Online Master's Program
OMS	officer military schools
OSD	Office of the Secretary of Defense
OTS	Officer Training School
PACOM	Pacific Command
pBT	paper-based testing
PCE	professional continuing education
PhD	doctor of philosophy
PMCC	Professional Military Comptroller Course
PMCS	Professional Military Comptroller School
PME	professional military education
POC	Professional Officer Course
POLAD	political advisor
PSP	professional studies paper

PSYOP	psychological operations
PT	practice teaching
RCOT	Reserve Commissioned Officer Training
RCS	regional and cultural studies
RDT&E	research, development, test, and evaluation
READI	Readiness for Education at a Distance Indicator
RES	research
RFCC	Reserve Forces Comptroller Course
RPA	remotely piloted aircraft
RPA-P	remotely piloted aircraft pilots
SAAS	School of Advanced Airpower Studies
SAASS	School of Advanced Air and Space Studies
SACS/COC	Southern Association of Colleges and Schools, Commission of Colleges
SAF	secretary of the Air Force
SAF/IA	secretary of the Air Force for international affairs
SAMS	School of Advanced Military Studies
SAW	School of Advanced War Fighting
SC	Solo Challenge
SCI	sensitive compartmented information
SES	Senior Executive Service
SIMWAR	simulated warfare
SIWAC	Senior Information Warfare Applications Course
SJIOAC	Senior Joint Information Operations Applications Course
SLADS	Senior Leader Airpower Doctrine Seminar
SNCOA	AF Senior Noncommissioned Officer Academy
SOC	Squadron Officer College
SOCOM	US Special Operations Command
SOD	special operations division
SOF	special operations forces
SORTS	status of resource and training system
SOS	Squadron Officer School
SPDP	Space Professional Development Program
SSO	Special Security Office
SSTR	security, stability, transition, and reconstruction

T&E	test and evaluation
TAFCS	total active federal commission service
TCW	Theater Campaign Warfare
TEC	training and education center
TECOM	Marine Education Training Command
TFCSD	total federal commissioned service to date
TMP	test management project
TOEFL	Test of English as a Foreign Language
TPAE	Theories and Principles of Adult Education
TPFDD	time-phased force and deployment data
TPS	Test Pilot School
UAS	unmanned aircraft system
UAV	unmanned aerial vehicle
<i>UCMJ</i>	<i>Uniform Code of Military Justice</i>
UK	United Kingdom
UN	United Nations
US	United States
USAF	United States Air Force
USAFTPS	United States Air Force Test Pilot School
<i>USC</i>	<i>United States Code</i>
USCENTCOM	US Central Command
USSTRATCOM	US Strategic Command
USUHS	Uniformed Services University of the Health Sciences
VISTA	variable-stability in-flight simulator test aircraft
VSS	Variable Stability System
WA	War-Fighting Applications Directorate
WAPS	Weighted Airman Promotion System
WAR	war fighting
WE	War-Fighting Education
WESTPAC	Western Pacific
WG	war game
WMD	weapons of mass destruction
WRM	war reserve materiel
XNBP	Exercise in National Budget Priorities

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