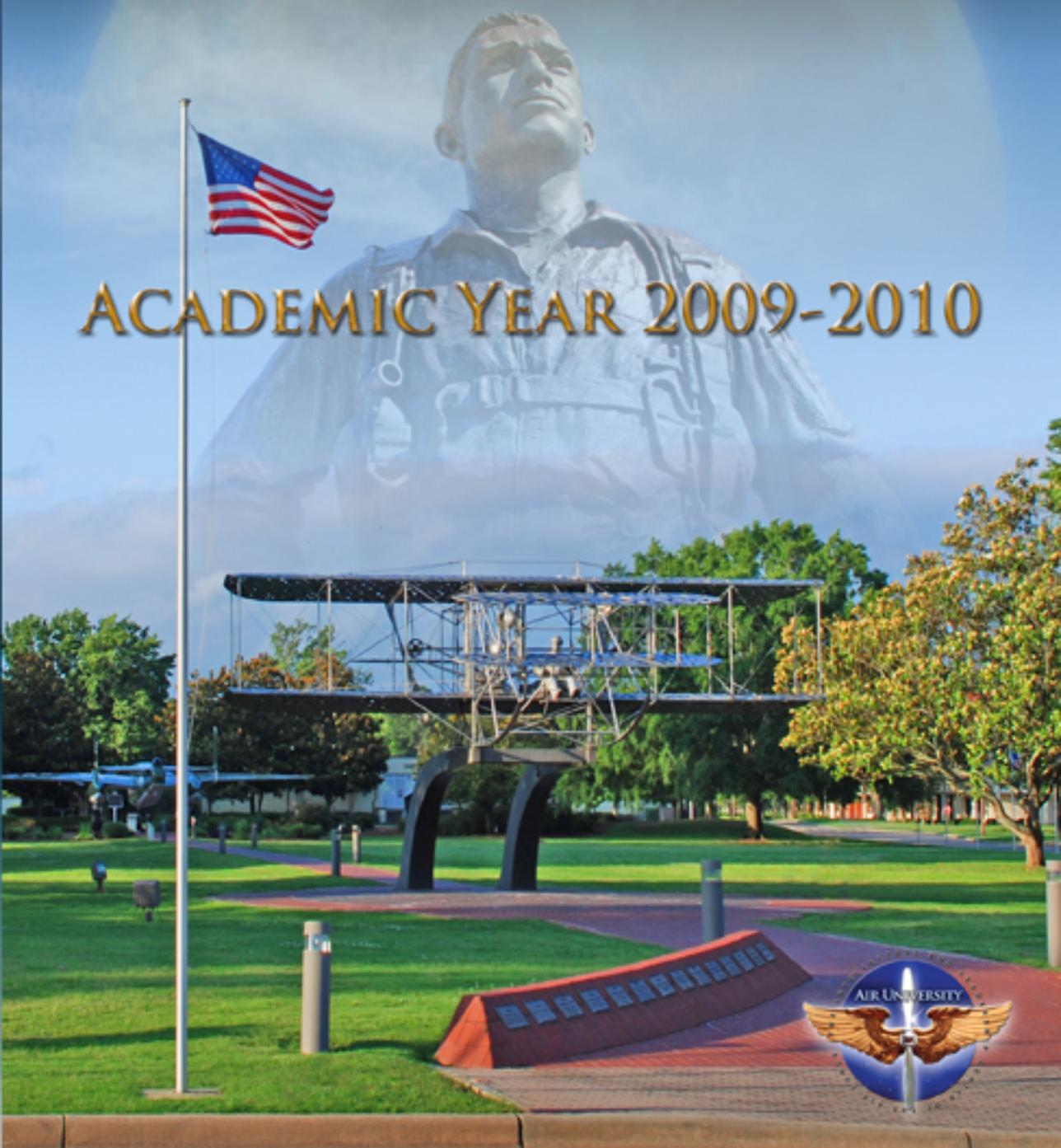


AU-10
AIR UNIVERSITY
CATALOG

ACADEMIC YEAR 2009-2010



Air University Catalog

***Academic Year
2009-2010***



October 2009

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 will normally 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.maxwell.af.mil/au/index.asp>).

Air University, Maxwell Air Force Base (AFB), 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 and enlisted and civilian personnel throughout their careers. Air University is accredited by the Commission of 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.

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INTRODUCTION TO AIR UNIVERSITY

KEY STAFF

Lt Gen Allen G. Peck	Commander
Maj Gen Stephen J. Miller	Vice-Commander
Dr. Bruce T. Murphy	Chief Academic Officer
Dr. John A. Shaud, Gen, USAF (Ret.)	Air Force Research Institute Director
Maj Gen Stephen J. Miller	Curtis E. LeMay Center for Doctrine Development and Education Commander
Maj Gen Maurice Forsyth	Carl A. Spaatz Center for Officer Education Commander
Maj Gen Teresa A. H. Djuric	Jeanne M. Holm Center for Officer Accessions and Citizen Development Commander
Col Barry S. Mines	Air Force Institute of Technology Commandant
Col Charles W. Johnson	Thomas N. Barnes Center for Enlisted Education Commander
Col James P. Galloway III	Ira C. Eaker College for Professional Development Commander
Col Terry M. Luallen	Test Pilot School Commandant

Col Kristin D. Beasley

42d Air Base Wing
Commander

Lt Col Timothy W. Albrecht

Community College of the
Air Force Commandant

AIR UNIVERSITY ADVISORY BODIES

Command Board of Advisors

The purpose of the Air University (AU) Command Board of Advisors is to provide the commander of AU feedback from the customer perspective of the major commands. 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 Air Force Base or the Department of Defense at the Pentagon.

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

Members

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

Advisors

Air Force Deputy Chief of Staff, Personnel
Vice-Commander, United States Air Force Academy (see above)



Air University Board of Visitors

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

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 recommendations to the Air University commander. This report is then presented to the chief of staff, United States Air Force, and to the secretary of the Air Force.

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

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

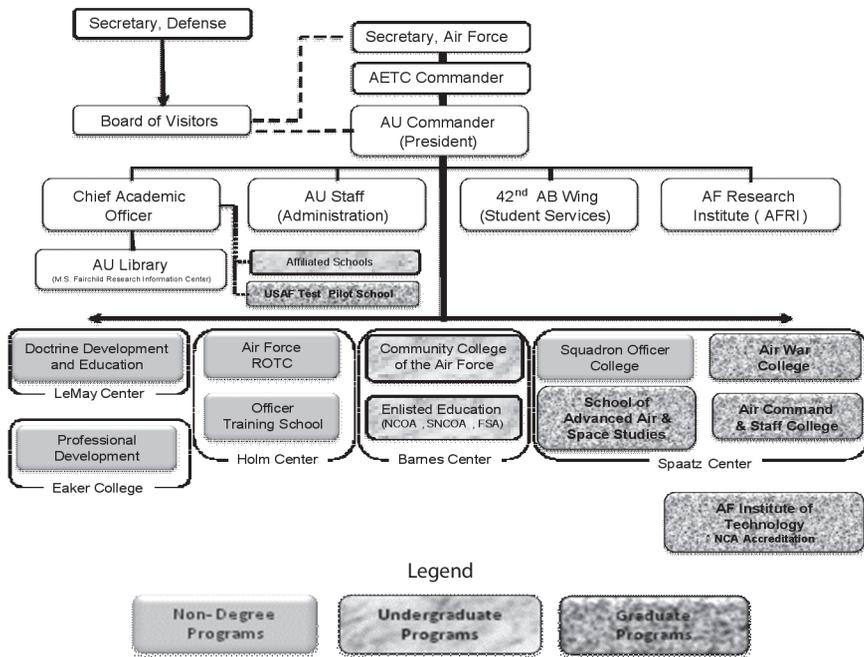
Dr. E. Jan Kehoe, Past Chair
Former President/CEO
Community College Leadership
Development Initiatives Foundation
San Diego, CA

<p>Dr. Susan Aldridge President, University of Maryland—University College Adelphi, MD</p>	<p>Dr. Kyle T. Alfriend Professor of Aerospace Engineering Texas A&M University College Station, TX</p>
<p>Dr. (Col) James R. Anderson, USAF (Ret.) Chancellor, Central Texas College Killeen, TX</p>	<p>Mr. Norman Augustine Former Chairman and CEO, Lockheed Martin Corporation Bethesda, MD</p>
<p>Reverend Edward Beauchamp President, University of Portland Portland, OR</p>	<p>Mrs. Mary Boies Attorney-at-Law, Boies & McInnis, LLP Armonk, NY</p>
<p>Gen Charles Boyd, USAF (Ret.) President and CEO Business Executives for National Security Washington, DC</p>	<p>Dr. David Carter Chancellor, Connecticut State University System Hartford, CT</p>
<p>Mr. Mel Chaskin President and CEO Vanguard Research, Inc., Arlington, VA</p>	<p>ADM Vern Clark, US Navy (USN) (Ret.) Former Chief of Naval Operations Goodyear, AZ</p>

<p>Dr. (Maj Gen) Stephen P. Condon, USAF (Ret.) Vice President, Strategy and Executive, Consulting Service Shipley Associates Dayton, OH</p>	<p>Amb. Gary J. Cooper Maj Gen, USMC (Ret.) and Chair CNB Bankcorp Mobile, AL</p>
<p>Dr. Don Daniel Former CEO, University of Tennessee Space Institute Tullahoma, TN</p>	<p>Mr. Henry Fong Managing Director Gulfstream Financial Partners Englewood, CO</p>
<p>Dr. Stephen Fritz President, Midland Lutheran College Fremont, NE</p>	<p>Gen Patrick K. Gamble, USAF (Ret.) President and CEO, Alaska Railroad Corporation Anchorage, AK</p>
<p>Dr. Mildred Garcia President, California State University —Dominguez Hills Carson, CA</p>	<p>Dr. Muriel Howard President, Buffalo State College Buffalo, NY</p>
<p>Dr. Benjamin Lambeth Senior Research, RAND Corporation Santa Monica, CA</p>	<p>Dr. Joe A. Lee Former President, Alabama State University Montgomery, AL</p>

Dr. (Lt Col) John Luke, USAFR (Ret.) CEO, Luke International Consulting Oxon Hill, MD	CMSgt Karl W. Meyers, USAF (Ret.) Realtor, Realty Executives, Simmonds Group San Antonio, TX
Dr. Ann Millner President, Weber State University Ogden, UT	CMSAF Gerald R. Murray (Ret.) Senior Manager, F22 Sustainment Lockheed Martin Corporation Marietta, GA
VADM Daniel T. Oliver, USN (Ret.) President, Naval Post Graduate School Monterey, CA	Dr. (Maj Gen) Richard Paul, USAF (Ret.) Former Vice President Strategic Development & Analysis Boeing Company, Seattle, WA
Dr. (Brig Gen) Roger C. Poole, USA (Ret.) Professor of Finance Emeritus, The Citadel Charleston, SC	Dr. (Maj Gen) Ronald Segal, USAF (Ret.) Woodward Professor of Systems Engineering and Vice President for Energy, Environment, and Applied Research Colorado State University Fort Collins, CO
Dr. Eugene H. Spafford Professor of Computer Science Executive Director of CERIAS Purdue University Bloomington, IN	

AIR UNIVERSITY ACADEMIC UNITS





GENERAL INFORMATION

Internet Address

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

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

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 make a difference one student at a time . . . one faculty member at a time . . . one idea at a time.*

Air University provides the full spectrum of Air Force education, from pre-commissioning to the highest levels of professional military education, including degree-granting and professional continuing education for officers, enlisted and civilian personnel throughout their careers. The university's PME programs educate Airmen on the capabilities of air and space power and 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 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 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. Today, AU's 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 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 Accession and Training Schools (the Holm Center), Thomas N. Barnes Center for Enlisted Education (the Barnes Center), Ira C. Eaker College for Professional Development, 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 (USAF) Test Pilot School (TPS) at Edwards AFB, California.

Accreditation and Degree-granting Authority

Air University is accredited by the Commission of Colleges of the Southern Association of Colleges and Schools (SACS) (1866 Southern Lane, Decatur, Georgia, 30033-4097, telephone

number 404-679-4501) to award associate and master's degrees. Air University achieved regional accreditation in June 2004, effective at the beginning of the 2004 calendar year. Currently a part of Air University's regional accreditation, both the Community College of the Air Force (CCAF) and the School of Advanced Air and Space Studies (SAASS) were separately accredited by SACS earlier—CCAF in 1980 and SAASS in 1998.

Since AU is a federal entity, authorization to grant degrees must be approved by Congress as opposed to state-level approval for civilian institutions. 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 School of Advanced Air and Space Studies. In October 1999 the AU commander received congressional 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).

On 21 January 2009 the president of the Commission on Colleges of the SACS approved the master's degree in Flight Test Engineering to those students enrolled in the program in April 2007. This degree is awarded to students who graduated in USAF TPS classes 06B and 07A.

Policies

Privacy Act. Air University (AU) utilizes the guidelines of the Privacy Act of 1974 to protect the confidentiality and integrity of student records. The Department of Education, Family Policy Compliance Office, views AU as a Department of Defense (DOD) Section 6 school and is solely funded by the DOD under 10 USC, Section 2164. As a federal military education institution, AU must adhere to established federal and services policies and guidelines on records. Since the accreditation of Air University by the Commission of Colleges of the Southern Association of Colleges and Schools, student records are maintained in electronic media. The security and confidentiality of student records is key to the academic integrity of Air University. Air University 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 abides by an uncompromising adherence to a code of ethics, morality, conduct, scholarship, and other values related to academic activity. (See Air University Instruction [AUI] 36-2309, *Academic Integrity*.)

Admission and Enrollment. AU schools and educational programs are offered to members of the US armed forces (primarily Air Force personnel) 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 the Air Force Institute of Technology where non-DOD, US citizens may enroll in academic programs provided they meet the admissions standards. As part of the United States' military assistance programs, officers from other countries may attend several Air University schools and 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 and fail (no pass) 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 (no pass) 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. Transfer credit is not accepted in Air University's master's degree programs at Maxwell for two reasons. First, only resident students selected by an Air Force Personnel Center board or by their respective organizations can attend.

Second, all academic credits for degrees offered must be earned in residence.

Assigning Credit. The degree-granting graduate schools (AWC, ACSC, SAASS, and TPS) follow sound practices for determining the amount and level of credit awarded for courses. Credit is normally awarded by assigning one semester hour to each 15 hours of classroom time. For some programs such as the School of Advanced Air and Space Studies and the Air Command and Staff College 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 permanent removal of any enrolled Air University student from a course or school before its completion. Disenrollment may be, but does not have to be, accompanied by expulsion, which is the student's physical removal from AU schools as well as disenrollment from academic credit programs. (See AUI 36-2315, *Student Disenrollment Procedures*.)

Academic Credit. The American Council on Education (ACE) recommends graduate-level credit for completion of some AU programs. Several colleges and universities accept graduate 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 ensure the authenticity of each document. Fraudulent documents are given to the AU registrar for appropriate action to include disenrollment and/or legal action. The 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 education record to a third party. A student must submit a release letter (with an original signature) to the college's registrar. The student must state what information may be provided and to whom the information may be released. The 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>. Complete the form, sign, and e-mail it to student.services@maxwell.af.mil (electronic signature accepted), fax to Defense Switched Network (DSN) 493-8127 or Comm 334-953-8127, or mail to Air University Registrar, 60 Shumacher Ave., Maxwell AFB, AL 36112-6337. The transcripts will be mailed to the addresses listed on the form 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.

1. Air University schools/centers must inform their 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, staff, and students in their respective instructional programs. Immediate dissemination of this policy is critical. Use of electronic methods of distribution, especially for currently enrolled distance learning students, is highly encouraged.
2. 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.

3. 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 instructor if an appeal is forthcoming.
 - 2) Course director. If the appeal is not resolved at this level, the student informs the course director of that the process will be elevated.
 - 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) Air University 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) Air University 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 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) Air University vice-commander. If the appeal is not resolved at this level, the student informs the vice-commander of his/her intention to elevate the appeal to the. . .
 - 6) Air University 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) 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 his/her intention to elevate the appeal to the. . .
 - 3) Appropriate 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/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 his/her intention to elevate the appeal to the. . .
- 6) Air University 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, 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 EDUCATION CENTERS AND SCHOOLS

In 2008 four academic centers were established to maximize resources due to Air Force downsizing. The four centers include the Spaatz Center, the LeMay Center, the Holm Center, and the Barnes Center. These centers combined common administrative duties that were managed by each school.

The Ira C. Eaker College for Professional Development encompasses professional continuing education and technical training courses.



Carl A. Spaatz Center for Officer Education

Internet Address

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

Mission. *The Spaatz Center for Officer Education directs, integrates, synchronizes, and supports professional military education in each college, thereby producing joint, coalition, interagency, and civilian leaders who efficiently and effectively articulate, advocate, and employ air, space, and cyberspace power in a joint and multinational environment to the commensurate level of their experience. 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, 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 AWC, ACSC, SAASS, Squadron Officer College (including Squadron Officer School and the Air and Space Basic Course), International Officer School (IOS), Air Force and Air University academic research centers, and the Education Support Squadron (which includes the Air Force Fellows Program).

The academic centers and colleges located within the Spaatz Center provide a focused capability that meets both the requirements of Air University and an external sponsoring agency. Centers create focused research, professional military and continuing education, and curriculum and research support on a subject of particular educational importance. They also leverage the academic expertise of resident faculty and students in support of Air Force or DOD research objectives. Centers enhance the prestige of AU through their research and outreach programs within the larger military and academic communities.

Currently, the following centers support this mission: Air Force Culture and Language Center (to include the Air Force Negotiation Center of Excellence and the Behavioral Influences Analysis Center), Air Force Counterproliferation Center, Air Force Public Affairs Center of Excellence, Air University Center for Strategy and Technology, Air War College National Space Studies Center, and the Air War College Cyberspace and Information Operations Study Center.

The Air Force Culture and Language Center is a new institution designed to enhance cross-cultural 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, two additional centers focus on niches 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 Behavioral Influences Analysis Center provides support to professional military and continuing education, operational-level war fighters, and policy makers to enable understanding, holistic planning, and exploitation of the perceptual and behavioral dimensions of the human terrain of any military or military-supported mission.

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 opponents, international nonproliferation diplomacy, nonproliferation and arms control treaty regimes, counterterrorist activities, and deterrence of conflicts. The center organizes and conducts the annual Air Force Counterproliferation 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. Finally, the staff members at

the center serve as advisors and advocates in the development of strategic communication doctrine.

The 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 within and outside the United States. The center is responsible for the development and execution of the annual Blue Horizons Study. This study provides a 20–25-year strategic and technological estimate to aid Air Force planning.

The National Space Studies Center supports the integration of space-related education across the PME continuum and conducts focused national security space studies and research in which faculty members and students link strategic-, operational-, and tactical-integrated space operations. This research is conducted in the context of the USAF mission of providing integrated air, near-space, and space superiority to the joint force commander to improve future joint war-fighter capabilities.

The Cyberspace and Information Operations Study Center contributes to USAF and DOD understanding and application of information operations in twenty-first century operational environments through its academic programs in which faculty and students address operational and strategic issues. The center supports curriculum development across PME programs and an annual group research effort focused on cyberspace and information operations topics of interest to the Air Force.

Curtis E. LeMay Center for Doctrine Development and Education

Internet Address

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

Mission. *As the principle Air Force organization responsible for doctrine expertise, the LeMay Center develops, advocates, assesses, and revises Air Force, joint, and multinational doctrine and ensures doctrinal concepts are integrated into Air Force tactics, techniques, and procedures; education; and war gaming to enhance war fighting.*

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 air-power for World War II were formulated. Whereas such ACTS instructors as Generals Harold L. George, Haywood S. Hansell, Jr.; Claire L. Chennault; and George C. Kenney shaped doctrine and strategy in World War II, the center's staff is committed to providing the Air Staff and the major commands (MAJCOM) with original thought and applications of air and space power in the modern world. Placing AFDC and CADRE into the LeMay Center unites doctrine development with education, concept development, and evaluation. It also gives the Air Force, AETC, and AU a central repository for the development of Air Force doctrine, concepts, and strategy.

The LeMay Center combines doctrine development, doctrine 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 PCE and for PME war gaming. It also serves as the executive agent to the chief of staff of the Air Force (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 provided by the LeMay Center. The center provides

- air, space, and cyberspace 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 Course (JFACC), the Combined Force Air Component Commander Course (CFACC), the Senior Information Warfare Applications Course (SIWAC), the Senior Executive Service (SES) seminar, the Joint Air Operations Planning Course (JAOPC), the Contingency War-time 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;
- provide 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

InternetAddress

<https://afkm.wpafb.af.mil/lemay-education>

The Warfighting Education Directorate conducts eight PCE courses to develop the judgment and skills required to employ

air and space power 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 Joint Flag Officer Warfighting Course, JFACC course, CFACC course, and Senior Joint Information Operations Applications course. 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 directorate also 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.

Doctrine Development Directorate

Internet Address

<https://wwwmil.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 forums; 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 the 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 (DDS) 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. DDS 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; 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 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, the NATO Joint Unmanned Aerial Vehicles Panel, and the 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 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.

Warfighting Applications Directorate

Internet Address

<https://wwwmil.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 war fighting 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, Alabama. 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 two divisions: Operations and Technology.

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

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 divi-

sion houses the specialists who acquire, operate, develop, and maintain the WA suite of models. Together, the suite of wargaming models is called the Air Force Educational Wargaming Toolset (AFEWT).

AFEWT includes the following tools:

1. SIM WAR 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 SIM WAR XXI model.
3. Accelerated Combat Timeline (ACT) is an operational level graphical user interface to the SIM WAR 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 SIM WAR 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 multipurpose 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 SIM WAR 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, AFWI plans, develops, and conducts approximately 21 war games (including three international war games conducted via foreign military sales) and exercises for over 5,625 participants. AFWI 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.

Blue Thunder III. The Blue Thunder III (BTIII) war game is not currently used, but it is available upon request. BTIII reinforces air and space doctrine, providing students with a practical application of air and space power. The war game emphasizes the complexities of air and space warfare through simulated AOC operations. BTIII is a flight-versus-flight simulation of a three-day symmetrical air war. Each side has the opportunity to execute the roles of a coalition-led combined air operations center (CAOC) CAOC. Students explore the tenets of air and space power and practice the Air Force distinctive capabilities as they are guided through the ATO production cycle. SIMWAR XXI is the software used to adjudicate the student plans. BTIII focuses on replicating employment of air and space power and forces at the operational and tactical levels of war. BTIII provides students an understanding of the basic core operations conducted in an AOC as described in Joint Publication (JP) 3-30, *Command and Control for Joint Air Operations* and AFI 13-1, *AOC Operational Procedures–Aerospace Operations Center*.

Granite Sentry. Operation Granite Sentry is Squadron Officer School’s (SOS) Command and Leadership exercise using AFWI-developed interface and software tools similar to those used in an operational AOC. The war game reinforces the enduring leadership competencies as presented in AFDD 1-1 and as taught throughout SOS. Specifically, the war game reinforces the concepts of group problem solving, organization, communication, team building, situational leadership, and followership. It has an ancillary benefit for the students to be exposed to the planning and employment of air and space operations. The war game is divided into three identifiable phases. Phase 1 is the prep phase. It occurs during weeks one through three of the curriculum. The students are expected to review materials,

organize their flights, and delegate responsibilities in preparation for executions. Phase 2, the first execution period, challenges the students' leadership and decision-making capabilities in an AOC combat operations floor environment that includes an ATO fly-out. Phase 3 transitions the students to wing-level leadership positions. With a scenario similar to a wing operational readiness inspection, students assume leadership roles commensurate with an installation control center and emergency operations center. The simulation is computer assisted using the Wargamers Interactive Support System Online and Web-Forces. Phases 2 and 3 are completed in one academic day with each phase lasting approximately four hours. It is manually adjudicated and controlled by the individual SOS flight commander. Each SOS flight of 12–14 students makes up an independent game and receives an individual score based on decisions made during the simulation.

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, 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 processes 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.

Capstone War Game. Capstone War Game (CWG) is the culminating event for ACSC's Department of Joint Warfare Studies' course structure. The primary purpose of the CWG 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 JAOC 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. CWG will continue where JAEX left off. Students will be divided according to division and fill out all the major divisions of the C/JAOC and relevant coalition components. They will then work within the joint air tasking cycle to produce desired effects based on the operational goals established in the joint operation planning process and the JAOP. A corps of adjudicators will augment instructors to produce results of students' inputs. Students will then make adjustments for the next day's ATO input.

Intermediate Level Education Exercise. The Intermediate Level Joint Exercise (ILE EX) is an elective at ACSC that focuses on collaborative planning at the joint task force 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 pro-

cesses that occur within the joint task force (JTF) and C/JAOC and between the air component and other functional components during planning of air and space operations. ILE EX demonstrates what air and space power, forces, and concepts bring to the fight at the operational level of war. It emphasizes the complexities of warfare through simulated 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, Command and General Staff College (US Army), College of Naval Warfare (CNW), and Training and Education Command (US Army) are invited to participate in this joint exercise annually as part of their joint intermediate level PME program. The exercise takes place during the spring semester. A communications exercise/test is conducted before the start of the exercise with the goal of allowing the JTF and component staffs to get organized, increase all participants understanding of the scenario, and ensure all collaborative tools and communication equipment is functional. Exercise execution spans 4.5 days, with an additional half-day for after action reviews. A joint after action review takes place via video teleconference. JTF-level daily execution occurs throughout the exercise.

Theater Campaign Warfare. Theater Campaign Warfare is the capstone war game for the SAASS. Students from the School of Advanced Military Studies (SAMS) at Fort Leavenworth, Kansas; the Naval Operational Planning Course at Newport, Rhode Island; and the School of Advanced War Fighting (SAW) at Quantico, Virginia, all augment the war game. This war game helps to develop greater cross-service appreciation of theater operational issues. The game is a seminar-based educational war game that is designed to provide students an opportunity for synthesis through the application of concepts about the nature and employment of military forces they have developed during the academic year. 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 theater, strategic, and operational issues. The game consists of two separate worlds, each with three independent seminars, and includes planning, execution, and analysis

phases that last for four days. Game moves facilitate educational objectives by covering periods varying from a few days to several weeks.

Solo Challenge. Solo Challenge (SC) is the capstone war game of the AWC academic year and includes the themes of leadership, doctrine, strategy, political/military affairs, joint/combined warfare, air and space power, and technology. It provides AWC students with the opportunity to demonstrate their ability to translate national-level decisions into strategic and operational-level action. This war game forces participants to manage ongoing global crises and a homeland security scenario, while they are confronted with projected limits on force structure and overseas basing. This war game is conducted at the unclassified level. SC consists of one-day student spin-up, three days of crisis action planning, one day of execution, and one day of evaluation/wrap-up. The war game is divided into three separate and independent worlds. Each world contains nine student cells: NSC, Policy Committee, Joint Staff, Africa Command (AFRICOM), Special Operations Command, US Central Command (CENTCOM), Pacific Command (PACOM), US Northern Command, and operating forces.

Joint Land, Aerospace, and Sea Simulation. Joint Land, Aerospace, and Sea Simulation (JLASS), 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. JLASS is a multilateral, dynamic, computer-assisted, seminar-based strategic and operational war game conducted at the field army, task force, and tactical air force levels and above. Service school participants divide into Red and Blue teams that assume the role of combined command and subordinate staffs. 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 AOR Red team staff.

Red teams for PACOM and 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. Their mission is to promote the policies and objectives of their assigned teams. 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 AFWI 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 AFWI and used by the Australian Command and Staff College. The simulation models the first days of war between two opposing alliances. Australian Command and Staff College 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 prewar 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 requirements 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 moves by entering land unit orders for maneuver, reinforcement, and fire. Students also have the opportunity to task certain space-based reconnaissance assets. After players finish their moves at the end of the day, the SIM WAR 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 SIM WAR XXI series developed by the AFWI 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 seven simultaneous and independent games. The game covers one day of prewar maneuvering followed by four days of computer-adjudicated warfare. The remainder of the week is similar to the Pegasus-Australia game; however, throughout the week actual British media representatives conduct live radio and television interviews with key participants as an enhancement to the war game. Pegasus-UK is typically conducted in the fall.

Pegasus–Netherlands. Pegasus-Netherlands is a computer-adjudicated, theater-level war game of the SIM WAR XXI series developed by the AFWI for the Netherlands Defense College Joint Advanced Staff Course. This is a two week event 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 (teams) 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 prewar maneuvering followed by two days of computer-adjudicated warfare. The students and staff participate in this war game at AFWI in the summer.

Futures 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 to test alternative force structure 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. XNBP stimulates participants to actively test their understanding of budgetary and economic relationships in a realistic and enjoyable environment. It reinforces the relationships between foreign and domestic policy decisions and how allocation of scarce resources to support those decisions affects the state of the nation. 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://wwwmil.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. The Intelligence Directorate develops ISR curriculum guidance for AU schools, centers, and educational organizations. IN is the Air University ISR curriculum chair responsible for overseeing intelligence and ISR language in key guidance documents and ensuring the appropriate issues are taught at all levels of AU. 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 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. 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 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's Warfighting Education courses;
- 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, Alabama.

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, 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 in June 2008. The Holm Center is named after the first female Air Force officer to achieve general officer rank. Three distinct organizations make up the Holm Center: AFROTC, OTS, and the Air Force Junior Reserve Officer Training Corps (AFJROTC). AFROTC, located at 144 host universities and more than 900 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 on Maxwell AFB, is the Air Force's flexible officer-commissioning program and capable of increasing its enrollment rapidly to meet changing Air Force officer-accession requirements. Currently, OTS Basic Officer Training (BOT) produces approximately 500 new Air Force officers per year, and OTS Commissioned Officer Training (COT) trains about 1,300 newly commissioned officers for active duty, Air Force Reserve (AFRES), and Air National Guard (ANG) assignments. AFROTC and OTS together produce approximately 80 percent of the current Air Force requirement for newly commissioned officers. The Holm Center also directs the Air Force's high school citizenship training program, the AFJROTC. The AFJROTC program, located at 879 high schools worldwide, is a citizenship-development program with a current enrollment of about 102,000 cadets.

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 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 75 percent of Air Force line officers 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://cepme.au.af.mil>

Mission. *Provide the continuum of education necessary to inspire and develop enlisted leaders with the moral framework of integrity, service, and excellence.*

The Thomas N. Barnes Center for Enlisted Education (formerly the College for Enlisted Professional Military 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 Barnes Center provides oversight and direction for eight enlisted academic program areas. Educational programs organized under the Barnes Center for Enlisted Education are affiliated through CCAF, which is accredited through Air University by the Commission on Colleges of SACS to award the associate degree.

The Community College of the Air Force 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 degrees.

Enlisted professional military education (EPME) programs are managed through the center's dean of Academic Affairs. Academic Affairs, formerly the Educational Programs Cadre, is responsible for the development and standardization of four resident EPME programs and three distance learning (DL) 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 55,000 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 67 ALS programs worldwide. ALS is also available via 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.

In addition to the above EPME programs, the Barnes Center 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 and includes US Army Aeronautical Division, Army Air Service, Army Air Corps, and Army Air Forces in the development of airpower to defend the United States.

Ira C. Eaker College 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 College for Professional Development (ECPD) to honor General Eaker's significant contributions to the advancement of aviation, the Air Force, and the continuing professional development of its members.

The ECPD umbrella spans four schools: Commanders Professional Development School, Air Force Human Resource Management School, Defense Financial Management and Comptroller School, and the USAF Chaplain Service Institute.



AIR UNIVERSITY GRADUATE PROGRAMS

This section includes the Air University requirements for admission to its degree programs. The graduate degree programs offered by Air University include the AWC, ACSC, ACSC Online Master's Program (OLMP), SAASS, USAF TPS, and AFIT.



AIR UNIVERSITY DEGREE PROGRAM

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

- be selected to attend the program;
- provide proof of academic credentials; and
- provide an acceptable score on the Test of English as a Foreign Language (TOEFL) for international students only. (See TOEFL information below.)

Selection. See AFI 36-2301, *Professional Military Education*, for selection processes and eligibility criteria.

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 without action on their part.
- Sister-service and civilian students must have their official transcripts mailed to the AU registrar. Transcripts must be received by the AU registrar no later than 1 September and addressed as follows:

AU Registrar
ATTN: Resident Degree Programs
60 Shumacher Avenue
Maxwell AFB, AL 36112-6337

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

International Students.

- Official Academic Documents.
 - International students interested in pursuing an AU degree must submit a transcript of a US bachelor's or bachelor equivalent degree. These students must submit academic documents to an independent foreign credentials evaluation service to determine if their education is equivalent to a US

four-year bachelor's degree. The credentialing agency must be a member of the National Association of Credentials Evaluation Services (NACES) or the Association of International Credential Evaluators.

- Applications for foreign credential agencies are available from the AU registrar's office.
- An official copy of the evaluation result must be mailed to the AU registrar's office.
- The student must honor the costs of this service.
- Portfolio.
 - International students who do not have a US bachelor's degree or equivalent may submit a portfolio to be considered for admission to an AU degree program. Information regarding the portfolio process can be obtained from the AU registrar's office.
 - Students must also submit English language proficiency test result with the portfolio, if applicable. (See TOEFL information below.)
- Diploma.
 - 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.

Test of English as a Foreign Language (TOEFL).

- 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 three years are not required to take the TOEFL.
- International students from countries where the official language is not English must achieve an acceptable score

on the TOEFL to be admitted to the master's degree program.

- International students who have taken the TOEFL within the past two years and have met the AU minimum acceptable score or higher, are not required to take the TOEFL. Student must provide an official copy of the TOEFL score to the AU registrar for admission.
- When taking the TOEFL, an individual must indicate Air University Institution Code 9069 for the official score to be sent to the AU registrar.
- The minimum acceptable score for admission to the AU degree programs is as follow:
 - 83 for the Internet-based test,
 - 220 for the computer-based test, or
 - 560 for the paper-based test.
- The student must incur the cost of this test.

AIR WAR COLLEGE

Master of Strategic Studies and Diploma Program

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 forces issues.*

The War Department established the Air War College (AWC) in 1946 at Maxwell Field, Alabama, and the college has operated continuously since then except for a six-month period during the Korean conflict. To accomplish the AWC mission, students must demonstrate mastery of dual challenges—academic enhancement and professional development. To meet these challenges, the college instills 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 and multinational war fighting.

AWC is comprised of a command section, two academic directorates (Academic Affairs and Distance Learning), and one support directorate (Student Operations). The Academic Affairs Directorate program is developed and delivered through three departments—the Department of Leadership and Strategy, the Department of Warfighting, and the Department of International Security Studies. The Distance Learning Directorate curriculum is based on the resident curriculum and covers all of the topics.

Faculty. The 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 pedagogical theory and practice. Military officers contribute unparalleled currency and expertise in the operations topics critical to the colleges' success.

Learning Outcomes.

- Develop critical thinkers who analyze complex political-military situations and articulate strategic thought from a joint perspective.
- Develop graduates who are ready to lead in a joint strategic environment who thoroughly comprehend the profession of arms, with particular emphasis on Air Force competencies of air, space, and cyberspace.

- Produce strategic leaders who develop and execute national military strategy that employs armed force, in concert with other instruments of national power, to achieve the goals of the national security strategy.

Curriculum.

- Degree program. The AWC resident program class membership includes officers from each US military service, civilian employees of federal government agencies, and officers from the international community of nations. All US students are enrolled in the AWC senior-level PME program and the AU master of strategic studies degree program; therefore, they must meet admission requirements for the master of strategic studies degree. The AWC PME program includes joint professional military education (JPME) as defined for senior-level colleges in the Chairman of the Joint Chiefs of Staff Instruction (CJCSI) 1800.01B, Officer Professional Military Education Policy.
- Diploma Program. Students 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 courses and elective courses, Solo Challenge War Game, National Security Forum, and the Commandant's Leadership Series lectures. 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.

Duration. The resident program consists of 10 months of graduate-level study.

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, AFRES and 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.

Admission Requirements. Detailed information regarding AU admission requirements is located at the beginning of this section of this catalog.

- Degree Program. Sister-service and civilian students must 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 must have that institution forward it to the AU Registrar's Office.
- Diploma Program. Students who do not meet the admission requirements for the degree program are 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 degree program after admission. Once admitted in the diploma program, students will not be considered for the degree program.
- International Fellows. Selected individuals must present appropriate academic documents and meet the AU score standards for the Test of English as a Foreign Language (TOEFL).

Graduation Requirements. Students fully admitted to the degree program must complete the following 35 semester-hour AWC resident program. Students 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 and demonstrate fully satisfactory participation in other scheduled AWC programs to include the Solo Challenge War Game, National Security Forum and Commandant's Leadership Series.

Curriculum Summary

Course Title	Semester Hours
EL 6000 Electives (two required)	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 Warfighting	7
RCS 6600 Regional and Cultural Studies	4
GS 6700 Global Security	3
SC 6800 Solo Challenge War Game (Pass/Fail)	3
Total	37

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.

Course Descriptions

The AWC resident curriculum includes 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 associate dean of academic programs and the Departments of Leadership and Strategy, Warfighting, and International Security Studies.

RES 6100 Research

5 Semester Hours

For the successful completion of the Research course, students select a topic from lists compiled from military agencies and work with advisors to research and document results, recommendations, and insights. The product of that research,

the professional studies paper (PSP), must not exceed 5,000 words or approximately 20 pages. Air University places some papers on the Internet via the AU Web site and provides copies to the Muir S. Fairchild Research Information Center and the Air Force Academy Library. Additionally, the papers are forwarded to the requesting agency or office that sponsors the research. 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. The Research course has the following objectives:

- provide a venue for students and faculty to address issues of relevance and importance to military organizations;
- assist students to conduct thoughtful, logical, and critical research and analysis;
- share the results of student research, writing, and analysis with key decision makers; and
- assist students, if they desire, in submitting papers for publication in Air Force, sister service, and other professional journals and periodicals.

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 class is designed to introduce and develop 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 of study 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, students will better understand the leader’s role as a change agent for their organization and the expanding challenges of leading at the strategic level. Resi-

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

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 and 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 domestic security environments. The course assesses the role and impact of the interagency process and intelligence as well as Congress, interest groups, the media, and public opinion in policy development and execution. The course synthesizes context and processes by analyzing threat and risk assessment and force development. To enhance the practical elements of the curriculum, the course includes several instructional periods that incorporate State Department members in the seminar environment. Resident diploma pass/fail grade status for this course will be coded as “-P” after the course number.

FS 6400 Foundations of Strategy

5 Semester Hours

The Foundations of Strategy course is designed to develop senior leaders who can think incisively about strategy and develop and implement it 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 that 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 it also gives attention to the impact of airpower on national and military strategy. The course uses seminar discussions, readings, lectures, case studies, practical exercises, and student-written products (and briefings) to facilitate the evaluation of various themes such as the challenges of strategy development, strategy implementation

and strategy 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 challenges 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 Warfighting

7 Semester Hours

The Department of Warfighting develops senior leaders who plan, deploy, employ, and control US and multinational forces throughout the range of military operations with an emphasis on air, space, and cyberspace forces as they contribute to joint, multinational, and interagency operations. The war-fighting curriculum is composed of two closely related subcourses. In the first course, Joint Forces, students 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 information operations are integrated to support the national military and national security strategies and how information operations support achieving desired effects across the spectrum of national security threats. In the second course, Joint Planning, students analyze 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 efficacy 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.

RCS 6600 Regional and Cultural Studies

4 Semester Hours

The Regional and Cultural Studies (RCS) course is an integral part of the curriculum, preparing senior leaders to investigate, analyze, and evaluate a geographic area from a combatant commander's perspective in support of international and national security policies. To meet the challenges of the air and space expeditionary force (AEF), the RCS course provides students the opportunity to evaluate an area of the world where a unified combatant commander must implement the national military strategy in support of US security policy. The RCS course allows 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, religious, cultural, and academic leaders. Logistic and administrative preparation and travel planning for the regional field research is 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 examines the roles of nations in addressing key issues that shape 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. The course assesses the relationship between efforts to democratize status, economic 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 on international security. The GS course follows and is symbiotic with the Regional and Cultural Studies program. It

capitalizes upon student experience from field study. Resident diploma pass/fail grade status for this course will be coded as “-P” after the course number.

Electives Program. Students admitted to the degree program must complete two electives. The electives program has two major objectives:

- enhance and complement the core curriculum by providing students with opportunities to achieve greater depth and breadth of understanding in issues of special interest, and
- provide the AWC curriculum with the flexibility to adapt quickly to changes in the international and domestic security environments.

EL 6122 Directed Study

2 Semester Hours

Students interested in intensive work on a particular topic can develop, with the help of a faculty member, a resource proposal and a 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. Not available as an audit status course.

Leadership and Strategy Electives

EL 6441 Command and Conscience

2 Semester Hours

In a prudent and practical manner, this course examines several 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? the US Constitution? or 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. As such, this course inquires

into the nature of military integrity. Command and Conscience is offered to US students only.

**EL 6442 Right, Wrong, and In-Between:
Ethics and Senior Leaders** **2 Semester Hours**

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

**EL 6444 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 will dissect Larrabee’s biographies and look at James Stokesbury’s *Short History of World War II* to provide reference points and target sets. Resident-diploma students receive audit status for this course.

EL 6445 Legally Leading the Fight **2 Semester Hours**

This seminar analyzes the evolving responsibilities of commanders as the US military continues to prosecute the war on terrorism and carries out its missions in a developing political and legal landscape. The course focuses on the role of group and wing commanders in the interface of operations and law to support national security. Resident-diploma students receive audit status for this course.

EL 6447 Leading Change **2 Semester Hours**

Senior leaders in the twenty-first century may be expected to manage significant change—both for themselves and their organizations. In fact, the entire concept of transformation is about change. Yet, however attractively it is packaged, individuals tend to fear change, and organizations tend to resist it, making management of change one of the most difficult leadership competencies. This course examines what goes on within the culture of organizations to accept or resist change.

Using recent scholarship and case studies, the course examines examples of successful change, allowing students to develop the intellectual tools necessary for the mediation of change. Resident-diploma students receive audit status for this course.

EL 6448 Genocide and Intervention 2 Semester Hours

This course investigates whether and how the United States might have used its instruments of power to respond before, during, and after outbreaks of genocide. It uses case studies that focus on the holocaust, Cambodia, Rwanda, and Yugoslavia to analyze why genocide occurred, how the United States responded, and whether military force can prevent genocide. Resident-diploma students receive audit status for this course.

**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 prerogatives. It analyzes the logic of Chinese threat perception in the light of calculation or miscalculation of consequences, with particular attention given to conditions in Taiwan. Resident-diploma students receive audit status for this course.

**EL 6455 Group Research: Blue Horizons
(Classified, US Personnel) 4 Semester Hours**

This study, led by the Center for Strategy and Technology, examines the current rate of technological change and assesses the implications for air and space power employment in the future international security environment. The study's participants will be organized into four research teams. Individual and group white papers and an executive summary of the entire report will be produced. The Air Force chief of staff is the external sponsor for this study.

EL 6460 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 considered as 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. 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.

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. Explanations 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 6463 Coalition Warfare: Dealing with Complexity and Uncertainty

2 Semester Hours

Increasingly, one hears the lament that, in times of conflict, coalitions cause as many or more problems as they solve. However, the history of coalitions and of warfare suggests otherwise. This course challenges the notion that coalitions form the weaker entities for organizing and conducting warfare. History shows that coalition warfare, when properly conceived and conducted, is the more powerful, flexible, and resilient form of warfare. Yet coalition warfare does bring with it numerous challenges and potential pitfalls of which the military professional must be aware. Resident-diploma students receive audit status for this course.

EL 6464 Bombing to Win**2 Semester Hours**

This course addresses the intellectual foundations of airpower strategy, focusing upon how the threat or use of airpower 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 airpower 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 6465 Surprise and Deception
in Modern War****2 Semester Hours**

This course examines the nature of surprise and deception, their significance and limitations, and their impact on modern war. The lessons address deception doctrine, new technologies and operating concepts, and specific cases where surprise and deception may have impacted the outcome of campaigns or wars. Resident-diploma students receive audit status for this course.

**EL 6470 The “New Mercenaries:” The Causes and
Consequences of Military Privatization****2 Semester Hours**

This course examines the phenomenon of privatization in Western militaries, with particular emphasis on the US armed forces. It begins by analyzing the political, economic, and technological factors that have led military organizations to outsource an increasing range of functions, from mail delivery to combat operations. Students will then consider the costs and benefits of privatization through a series of case studies that highlight the military, political, economic, and ethical issues involved. Resident-diploma students receive audit status for this course.

**EL 6472 Communicating for Effect: Winning in
the Information 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 the United States places on the exploitation of information and the communications channels 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 the communications channels it passes through; and how the evolving opportunities and challenges in the information environment affect military decision making. This elective provides a broad-brushed approach to how military information operations contribute to the exploitation of the information environment in the successful mitigation of information operations. This approach explains how the unique capabilities of joint public affairs operations contribute to achieving effects to ensure successful joint force operations. Resident-diploma status will receive audit status for this course.

War Fighting Electives

EL 6540 Air Mobility and the Defense Transportation System

2 Semester Hours

This elective provides students with a better understanding of the current and evolving capabilities of mobility and the critical role it plays and will play during peace, war, and operations other than war. During the course, class members draw from historical references, student case study presentations, classroom discussions, 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 is designed to provide students with a comprehensive introduction into naval expeditionary warfare. It covers current US Navy and Marine Corps strategy and doctrine, emphasizing force planning, forces and capabilities, and military

operations. Students will receive comprehensive briefings on US Navy and Marine Corps operations in support of joint strategy, will participate in panel discussions and case studies, and will take 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 designed as 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 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 designed for non-Army students who want a greater understanding about the US Army. The Army is thoroughly explored, with a strong emphasis on how history and heritage influence current force and doctrine. Students will gain a comprehensive awareness of Army culture and develop an appreciation for what the Army can provide to a regional combatant commander or joint task force commander. This course builds a solid foundation of knowledge about the Army, including the force structure and capabilities, doctrine, terminologies, and idiosyncrasies. Students evaluate Army doctrine relative to their own service and the joint community. The goal is to ensure students understand what it looks, feels, and smells like to be a soldier. Class culminates with a three-day practical exercise/map exercise to validate classroom instruction. Resident-diploma students receive audit status for this course.

**EL 6544 Intelligence, Surveillance, and
Reconnaissance Support to the War
Fighter (Classified, US Personnel) 2 Semester Hours**

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

**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. 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 Future Total Force Issues 2 Semester Hours

From the initial vantage point of a historical review of the ANG and AFRES, students engage in discussions surrounding the compelling issues affecting the total force today and through the next decade. Some suggest that the United States 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 Air Reserve components. 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 Requirements for Cyberspace (Classified, US Personnel) 2 Semester Hours

This course explores the concept of ISR and cyberspace as a domain, starting with doctrine, definitions, and threats. It covers legal challenges based on laws and directives and includes sister-service perspectives on cyberspace.

EL 6550 Combating Weapons of Mass Destruction in the DOD (Classified, US Personnel) 2 Semester Hours

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

EL 6552 Strategy, Technology, and War 2 Semester Hours

Military innovation requires technology and 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 part considers future technologies, particularly those related to the genetics, nanotechnology, and robotics revolution, using recent works by Ray Kurzweil, Joel Garreau, and J. Storrs Hall. Resident-diploma students receive audit status for this course.

EL 6553 The Origin and Influence of the National Reconnaissance Office 2 Semester Hours

The origin of the National Reconnaissance Office (NRO) is grounded in our nation's need for strategic reconnaissance. This elective presents many of the key issues and challenges the NRO and the Air Force faced and integrated them into a framework for viewing the overall role of air, space, and cyberspace power. By

gaining a better understanding of these innovations, the United States can better understand how to improve combat effectiveness and how to win the wars of the future. Resident-diploma students receive audit status for this course.

**EL 6554 Space Operations
(Classified, US Personnel)**

2 Semester Hours

This course focuses on military applications of space systems to include capabilities, limitations, dependencies, vulnerabilities, policies, law, and doctrine. The course provides an understanding of current space systems and how space supports the war fighter. It also discusses current space issues in several areas to provide an understanding of the issues facing senior leaders in applying space power. The readings cover background information on space characteristics, limitations, organizations, missions, functions, and contributions to war fighting.

EL 6558 Terrorism

2 Semester Hours

Terrorism is one of the oldest military tactics and forms of warfare. Historical evidence dates it to 5,000 BC. The root word for *terrorism* appears in ancient Greek, Roman, and Sanskrit languages. In more modern times, however, terrorism has become the most frequent form of conflict. This course examines why terrorism has re-erupted; the implications for political, economic, military, cultural, and religious institutions; the increasing lethality of terrorist acts; and the prospects for resort to nuclear, biological, radiological, and chemical weapons. This course addresses the capabilities and limitations of governmental authorities and what the future may hold for deterring terrorism. Resident-diploma students receive audit status for this course.

**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. Currently, the United States must learn how to adjust when individuals and small groups inflict this type of misery. Given this asymmetric threat, homeland security and defense have become a top national priority. It is essential to have a strategy to protect and defend our nation. The al-Qaeda attacks on the World Trade Center and the Pentagon on 11 September, the subsequent anthrax attacks, the thwarted 2006 airline mishaps, and the ongoing war on terrorism all highlight the need to secure and defend the American homeland.

EL 6581 Medical Support to Joint Operations

2 Semester Hours

This elective examines the challenges and capabilities of the Air Force Medical Service (AFMS) in support of military operations. The course emphasizes medical readiness, expeditionary medical support, and medical operations during deployments. Medics have participated in multiple humanitarian relief operations and are integral to responding to chemical and biological attacks. With today's higher deployment rates, AFMS must be prepared to cover the entire spectrum of military operations. Resident-diploma students receive audit status for this course.

EL 6582 Nonlethal Weapons: Support to 21st Century Warfare and Homeland Defense

2 Semester Hours

This course describes and analyzes the efforts and the issues that underlie nonlethal weapons. It addresses the use of these weapons, defines capabilities that could be made available to our armed forces, analyzes their incorporation into US military doctrine and strategy, and examines the medical, legal, and public awareness issues involved in their development and use. Resident-diploma students receive audit status for this course.

EL 6588 Strategy and Information Warfare

2 Semester Hours

This seminar considers when, where, why, and how information warfare is conducted. It examines early views of information warfare, theories of information war (reflexive control and the

observe, orient, decide, act, loop process), the tools of information war, the information war battlespace (hacker war, industrial espionage, and terrorist use of cyberspace), Chinese theories of information war, and the development of an information war campaign. Resident-diploma students receive audit status for this course.

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 on the operational and strategic levels of warfare. Selected students from the senior level war colleges participate in the war game. AWC contributes two teams to the effort. The Blue Team plays the role of USCENTCOM'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 distributive phase, students collaborate and plan with war college counterparts using the CFAST web-based tool. The actual war game will bring students together at Maxwell's AFWI 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 made through the JCLASS course director only.

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

The AU National Space Center examines a different space-related topic each year. Past topics include "The Impact on the US Economy if Space Superiority Is Lost." Each student writes a PSP on a focused area that derives from the year's overarching topic.

EL 6596 Group Research: Cyberspace and Information Operations (Classified, US Personnel)

2 Semester Hours

This seminar—led by the Cyberspace and Information Operations Study Center—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 examines the political, economic, cultural, and demographic implications of globalization. It views the phenomenon from both Western and non-Western perspectives to bring out the main arguments for and against globalization. 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? What can I do to become a better decision maker? This course explores how psychologists answer these questions and examines how information overload, organizational culture, personality, propensity for risk-taking, and stress influence decision making. Resident-diploma students receive audit status for this course.

EL 6747 Cultures of Violence

2 Semester Hours

This elective addresses issues relating to societies in which violence appears to be endemic. Using examples from such diverse environments as El Salvador, Jamaica, Yemen, East Africa, and West Africa, it studies how groups such as the cattle raiders of Karimojong and the gangster warriors of Liberia and Sierra Leone turn into chronically violent entities. The

course also analyzes the impact of weaponization on these groups, with particular emphasis on how light weapons proliferation helped to encourage the creation of Kalashnikov cultures. Resident-diploma students receive audit status for this course.

EL 6750 Negotiation Theory and Application

2 Semester Hours

This course allows students to develop skills required to successfully negotiate conflict resolution, treaties between countries, budgets between services, and memoranda of understanding (MOU) between agencies. It considers cross-cultural factors, time constraints, negotiation styles and strategies, and profiling of involved parties. Topics to be covered include logical analysis, group problem solving, conflict management, and methods of persuasion. This course emphasizes negotiation skills and theory and assumes that students have little knowledge of this subject. Resident-diploma students receive audit status for this course.

EL 6752 Cultural Perspectives in Negotiations

2 Semester Hours

This course allows student to gain the skills required to successfully negotiate conflict resolution, treaties between countries, budgets between services, and MOUs between agencies. The course examines cross-cultural factors, time constraints, negotiation styles and strategies, and the profiling of involved parties. It covers such topics as logical analysis, group problem solving, conflict management, and methods of persuasion. This course assumes students have basic knowledge in this topic. Resident-diploma students receive audit status for this course.

EL 6754 CIA Roles, Missions, and Military Support (Classified, US Personnel)

2 Semester Hours

Intelligence—accurate and timely information about unfolding world events and international concerns or threats—is crucial to successfully conduct US foreign policy. In the post-Cold

War period, the United States may exercise even greater influence in international affairs than it did previously. Yet the dynamics of international relations are more complex, and the perception of threats to US interests may be less obvious. While US policy makers continue to rely on intelligence to make judgments and decisions, the role of intelligence—with its need for secrecy and occasionally extralegal activities—presents many dilemmas for a democratic society.

EL 6756 Conduct of Diplomacy **2 Semester Hours**

This course deals with diplomacy as an instrument of power. It examines the diplomatic processes and procedures by which nations communicate and conduct their affairs, programs, and issues comprising modern diplomacy. These include economic and military assistance, intelligence collection, public diplomacy, human rights, political change, and economic pressure. Resident-diploma students receive audit status for this course.

EL 6758 International Rivals: Leaders and Strategic Cultures in Potential Adversary States (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. It addresses the political-psychological profiles of the leaders of Iran, Syria, China, Russia, North Korea, and such terrorist organizations as 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 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

The North Atlantic Treaty Organization (NATO), spearheaded by the USAF, stopped Serbian forces from ethnically cleansing 1.8 million Kosovo Albanians. Could such international organizations as NATO or the United Nations (UN) have stopped the genocidal killing of 800,000 Rwandans in 1994? This course allows students to examine the role of international organizations, particularly as guarantors of peace and security and come to understand what they can and cannot do. US armed forces have acted often within the framework of international organizations (within NATO in Kosovo and Bosnia and the UN in Macedonia and Haiti) or with the endorsement of international organizations (the UN in Operation Desert Storm). Thus, a strategic military thinker must be cognizant of international organizations and their functions. The course starts with the UN and recent cases of peacekeeping, moves to regional organizations (including NATO and the European Union), and deals with nongovernment organizations and their role in conflict prevention and resolution. Resident-diploma students receive audit status for this course.

**EL 6784 Latin American Security
Issues**

2 Semester Hours

Latin America includes a host of nations with unique characteristics. At the same time, the region has collectively undergone developmental experiences that provide a rich basis for comparison and consideration. Latin America's record of development has generated several challenging circumstances that precipitate public insecurity, political unease, and the search for meaningful solutions to the problems of poverty and inequality. This course examines the major political and economic drivers that shape Latin America's strategic security environment and govern the region's prospects for security. It also examines several recent key conflicts and the measures taken by regional and external actors to respond. The course concludes with a consideration of the region's energy future and potential impacts for

development and security. Resident-diploma students receive audit status for this course.

Additional Programs

SC 6800 Solo Challenge War Game

3 Semester Hours

AWC conducts this six-day, unclassified capstone war game (set 10 years in the future) at the strategic and operational levels with full play by the students and faculty. As a summative application of the knowledge, skills, and attributes gained during the academic year, the SC 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 (COA), 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 SC 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 JPME 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. To this end, SC supports the following objectives:

- Distinguish the uniqueness of strategic-level leadership and apply competencies required by strategic leaders.
- Evaluate the national security challenges and opportunities in a future operating environment.
- Apply elements of national power in designing effects-based plans.

- Apply national security and national military strategies in developing plans to achieve desired effects across the full range of military operations.
- Evaluate the role of air, space, and cyberspace power in joint, unified, interagency, intergovernmental, and multinational operations.
- Synthesize theater strategies, estimates, and campaign plans to employ military power in a joint, unified, interagency, intergovernmental, and multinational environment.
- Synthesize critical elements, enablers, and processes that define the strategic environment in peace and war.

NSF 6810 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. As 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 NSF offers a candid exchange of views on national security matters among the 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 the United States, 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.

CLS 6820 Commandant's Leadership Series. The commandant and dean of Academic Affairs invite 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 their expertise on current issues. The speakers integrate leadership themes or issues with which senior leaders should be familiar.

Student preparation includes critical listening, questioning the speaker, and seminar discussions. The Department of Leadership and Strategy administers this core course curriculum.

Language Programs. The English as a Second Language (EL 1710) course is taught by the International Officer School for selected international officers only and provides intensive work in the English language. Language familiarization classes taught by the Defense Language Institute provide familiarization with the languages taught. Enhanced familiarization courses are offered once the prerequisite basic course is completed. Because these language courses are optional and not graduate level, they do not factor toward the master's degree or AWC graduation requirements. These noncredit, nongraded courses are German Language Familiarization (EL 1720/1721), Swahili Language Familiarization (EL 1730/1731), Arabic Language Familiarization (EL 1740/1741), French Language Familiarization (EL 1750/1751), Mandarin Chinese Language Familiarization (EL 1760/1761), Spanish Language Familiarization (EL 1770/1771), Russian Language Familiarization (EL 1780/1781), and Persian Farsi Language Familiarization (EL 1790/1791).

AIR COMMAND AND STAFF COLLEGE

Master of Military Operational Art and Science Degree

Internet Address

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

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

Air Command and Staff College, 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 mili-

tary 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 10-month curriculum still focuses on expanding understanding of air, space, and cyberspace power and on the growth of mid-career 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 Programs (DL)—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 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.

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.

Learning Outcomes. The ACSC program produces field grade officers who conduct the following:

- lead joint forces to accomplish unit objectives at the operational level, as commander or staff member;
- develop and articulate plans to meet operational objectives that leverage understanding of history, national military strategy, joint force capabilities and doctrine, instruments of power, and international cultural factors, with particular emphasis on the role of air, space, and cyberspace power;
- employ armed force in joint and coalition environments to achieve commander objectives; and,
- exemplify Air Force core values and warrior ethos.

Curriculum. The ACSC curriculum is designed to produce a more effective field grade officer serving in operational-level command or staff positions. The more successful field grade officers possess and demonstrate abilities in several diverse areas, including academic, personal, professional, interpersonal, and others. ACSC fosters these abilities to encourage the development of higher-order thinking by challenging students to think critically

and exercise a combination of analytical and practical tools required as leaders charged with the nation's defense. ACSC 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.

Duration. The resident program consists of 10 months of graduate-level study. As the center for US Air Force Intermediate Developmental Education (IDE) and as a joint-accredited institution for providing the first phase of JPME, 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), 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.

Admission Requirements. To be admitted to the master of military operational art and science degree program, selected individuals must (1) present proof of academic capability either by holding a qualifying undergraduate degree (US bachelor's

degree or its equivalent), or (2) meet academic credentials admission requirements through the portfolio admission process, and (3) 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 award of the master's degree.

Curriculum Summary

Course 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	6
GE 5510 Gathering of Eagles	Noncredit
Total	33

Note: All courses must be taken in residence at ACSC. Courses taken in the 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, 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 the action of military leaders in establishing and maintaining an effective leadership environment. The course also educates and inspires students to reach their full leadership potential through the study of 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.

LC 5510 The Practice of Command

3 Semester Hours

The Practice of Command course allows 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 their service, mission, people, and themselves.

NS 5510 International Security Studies 3 Semester Hours

The International Security Studies course provides a foundation for understanding the international security environment, its implication 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 they 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, and counterinsurgency.

AP 5510 Air, Space, and Cyberspace Power Studies 3 Semester Hours

The Air, Space, and Cyberspace Power Studies (AP) 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 (JF) 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 organization 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 (JP) 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, 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 (JA) 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 joint force air component commander (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 (CS) 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

6 Semester Hours

The Research/Electives program complements ACSC's core curriculum, providing an opportunity for students to investigate topics of particular interest to the Air Force in a rigorous fashion under the direction and guidance of a subject-matter expert. This program allows students 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.

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.

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 40-501, *The 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.

AIR COMMAND AND STAFF COLLEGE ONLINE MASTER'S PROGRAM

Master of Military Operational Art and Science Degree

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, combined, and multinational operations.*

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 program is currently open to Air Force active duty, guard, reserve, and selected civil service employees. More than 1,000 students are currently enrolled.

The OLMP expands on the existing foundation of the ACSC nondegree program to provide an educational opportunity for a much broader audience while adhering to the same Joint Professional Military Education (JPME) Phase I, USAF Intermediate Developmental Education (IDE), and educational standards that have been trademarks of the resident program for years. Graduates of the OLMP achieve the same learning outcomes and earn the same master of military operational art and science degree and JPME Phase I/IDE credit that their counterparts earn in the year-long resident course conducted at Maxwell Air Force Base.

Although the learning outcomes are the same, the educational approach is different because the program is online. Asynchronous online discussions replace the seminar discussions that are a hallmark of the resident course. Like the resident program, however, exercises, individual written assignments, and a few group presentations serve to assess the degree to which learning objectives have been met. Students are guided by cre-

deniated instructors, hand-picked for their academic expertise and/or operational experience.

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. Another commonality of the two programs is the instructor quality. operational experience.

Learning Outcomes. The ACSC program produces field grade officers who engage in the following pursuits:

- lead joint forces to accomplish unit objectives at the operational level as commander or staff member;
- develop and articulate plans to meet operational objectives that leverage understanding of history, national military strategy, joint force capabilities and doctrine, instruments of power, and international cultural factors, with particular emphasis on the role of space and cyberspace power and airpower;
- employ armed force in joint and coalition environments to achieve commander objectives; and
- exemplify Air Force core values and warrior ethos.

Curriculum. The ACSC curriculum is designed to produce a more effective field grade officer serving in operational-level command or staff positions. The more successful field grade officers are those who possess and demonstrate abilities in several diverse areas, including academic, personal, professional, interpersonal, and others. The ACSC 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. ACSC courses place special emphasis on applying air, space, and cyberspace power in joint campaign planning and the operational art of war.

The OLMP is comprised of 11 eight-week courses totaling 33 semester hours. It is separate from ACSC's traditional DL nondegree program; it is not an addendum to it. The 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 may 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 14 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 expenses.

Students who work steadily should complete their master's degree in two years; however, students have up to five years to meet degree requirements. Student deployments, unique duty schedules, and/or job/personal demands while enrolled can be easily managed given the scheduling approach adopted. 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.

Upon successful completion of the program, students earn an accredited master's degree in military operational art and science, JPME Phase I completion credit, and US Air Force IDE credit. (The program was reviewed by a joint staff accreditation team and received initial JPME certification in 2007.) 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.

Duration. 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 nearly two years, the program’s rigor requires a significant time commitment to meet Eligibility that goal.

Eligibility.

- **Military:** Eligible personnel include O-4-selects and O-4s on active duty, nonextended active duty, AFR, or ANG. Individuals with either a master’s degree or who have completed IDE—to include ACSC—may apply. However, individuals who have completed **both** a master’s degree **and** IDE may not apply.
- **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.

Admission Requirements. Student enrollment information can be accessed through the Air University Portal. Before applying for the OLMP, 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.

Graduation Requirements. Students fully admitted must complete the 33-semester hour OLMP 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

Course Title	Semester Hours
OC5510 Orientation Course	Noncredit
LW5510 Leadership and Warfare	3
LC5510 The Practice of Command	3
NS5510 International Security Studies	3
WS5510 Warfare Studies	3
AP5510 Air, Space, and Cyberspace Power Studies	3
JF5510 Joint Forces	3
JP5510 Joint Planning	3
JA5510 Joint Air and Space Operations	3
CS5510 Regional/Cultural Studies	3
RE5610-5611 Research/Electives I and II	6
Total	33

Course Descriptions

The Air Command and Staff College OLMP consists of the following 12 courses (11 credit-hour courses and one noncredit orientation course).

OC 5510 Orientation Course

Noncredit

The Orientation Course provides an overview of the entire on-line 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.

LC 5510 The 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.

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.

**AP 5510 Air, Space, and Cyberspace
Power Studies**

3 Semester Hours

The Air, Space, and Cyberspace Power Studies (AP) 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 (JF) 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 (JP) course introduces students to the complexities and requirements of joint planning. Through the course, students will 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 (JA) 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.

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 5610-5611 Research
Electives I and II**

6 Semester Hours

The Research Elective I (RE 5610) 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 Elective II.

The Research Elective II (RE 5611) 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 Elective I (RE 5610) is a prerequisite for this course.

SCHOOL OF ADVANCED AIR AND SPACE STUDIES

Master of Airpower Art and Science
and Certificate Program

Internet Address

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

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

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

Faculty. SAASS faculty hold a doctorate degree or its 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.

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

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

Curriculum. The SAASS curriculum is an intensive 50-week program. The primary instructional forum is the graduate colloquium that facilitates maximum interaction between students and the expert faculty. Class size is limited to 45 AF officers, five joint-service officers from the Army, Navy, and Marine Corps; two 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 does not exceed 60 students. SAASS creates warrior-scholars

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

Duration. SAASS is a 50-week program.

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 2.75 or higher on a 4.0 point scale. 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 TOEFL within three years after admission. Nonnative English speakers must have attended an English-speaking resident intermediate developmental education program, preferably Air Command and Staff College. Those attending ACSC must attend the International Officers School prep course. Those entering without having attended ACSC must have attended an English-speaking intermediate program in residence but will have to 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 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 from 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 and receive a grade of "B" or higher.

To graduate with a certificate, a student must

- achieve a weighted grade point average of 2.5 or higher for all letter-graded courses;
- achieve a pass grade in all courses graded pass/fail;
- prepare a thesis based on research from original source materials 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.

Curriculum Summary (Not listed in order of presentation)

Course Title	Semester Hours
SAASS 600 Foundations of Military Theory	3
SAASS 601 Foundations of Strategy	4
SAASS 627 History of Airpower I	4
SAASS 628 History of Airpower II	4
SAASS 632 Coercion and National Security	3
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 Cyberpower	3
SAASS 670 Contemporary Defense Policy	3
SAASS 690 Thesis	7
SAASS 699 Comprehensive Examination	3
Total	46

Course Descriptions

SAASS 600 Foundations of Military Theory

3 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

4 Semester Hours

This tools MMOAS course provides a background and understanding of decision-making theories and strategy. These tools allow the student to 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 airpower 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 air power. Theories of Giulio Douhet, Hugh Trenchard, Billy Mitchell, Alexander P. de Seversky, and 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. For this year the staff ride explores airpower in France and the Netherlands, and the sequence breaks with the end of World War II.

SAASS 628 History of Airpower II

4 Semester Hours

This course analyzes the development of airpower 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 Coercion and National Security

3 Semester Hours

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

SAASS 643 Strategy and Campaign Planning

3 Semester Hours

This course examines both the substance and process of 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. Joint war game includes participants from other advanced study groups—Army, Navy, and Marine Corps. Course includes a one-week field trip to Hurlburt Field, Florida, where a seminar with Air Force senior mentors clarifies 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 receive 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 the mind and patterns of inquiry that invite 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 DOD.

SAASS 667 Information and Cyberpower

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

7 Semester Hours

Students develop and present to the faculty their research proposal. Once their proposal is approved, students, with the advice and assistance of a faculty research advisor, prepare a 50- to 80-page thesis based on primary sources. In writing their theses, 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 examination begins with the student presenting a briefing of his or her thesis. The relationship between the thesis and course material is often a prominent feature of the examination.

UNITED STATES AIR FORCE TEST PILOT SCHOOL

Master of Science in Flight Test Engineering

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, California. 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, the systems phase was added, and 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, or 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. Short courses were added to the TPS curriculum in 2000. These courses range in subject from unmanned aerial vehicles to TMP normally have a time range of weeks instead of a year.

There are 2,468 graduates of the TPS; some 109+ general officers and 62 of the current 272 National Aeronautics Space Administration astronauts are graduates of TPS. There have been 75 civilian graduates, 39 female graduates including astronaut Eileen Collins, and 310 international graduates from 24 different countries around the world.

On 21 January 2009 the president of SACS approved the award of master degree in flight test engineering to those students enrolled in the program from April 2007 onward. This is for those students who graduated in USAF Test Pilot School classes 06B and 07A.

Faculty. TPS faculty members hold a master's degree, a doctorate, 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.

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 new 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 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, test accomplishments and deficiencies, and their mission impact.
- Integrated test teaming. The graduate will have an understanding of the acquisition life cycle and where test and evaluation (T&E) fits into the process; an understanding how to apply governing regulations, directives, and requirements processes for developing a test program; and, how to build an integrated, multidisciplinary test team of development and operational personnel from military, civilian, and contractor personnel.

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 library. 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 are accessible through the Portal.

Duration. Two classes each year; 48 weeks each.

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

Course	Time in Service	Education	Experience	Physical Qualifications
Pilot	≤ 10 yrs	BS in Engr, Math or Physics (GPA > 2.5)	750 flying hrs or instructor pilot major weapons systems (MWS) 12 months AC in MWS	Annual Flying Class II
Navigator	≤ 10 yrs	BS in Engr, Math or Physics (GPA > 2.5)	500 flying hrs or intelligence (MWS)	Annual Flying Class I
Engineer	≤ 8 yrs	BS in Engr, Math or Physics (GPA > 2.8)	≥ 2 yr experience in 13XX, 14NX, 21AX, 21CX, 21LX, 21MX, 3SX, 61SX, 62EX, 63AX: career fields (civ: ≥ 2 yrs in T & E)	Annual Flying Class II

Admission Requirements. Admission into the USAF TPS is extremely competitive. In addition to Air Force personnel, civilian, Navy, Marine Corps, and allied nation personnel are encour-

aged to apply for these programs. Refer to AFI 99-107, *Test Pilot School*, for application details.

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	4
TM 5446 Test Planning and Reporting	9
TM 5449 Test Management Project and Comprehensive Exams	3
QE 5459 Single-Look Qualitative Evaluation Program	3
Total	50

Graduation Requirements. The USAF TPS curriculum is designed to grant a master of science in flight test engineering at the end of a 48 week course. Students are required to take all of the 13 offered courses to graduate. This is a total of 50 credit hours for the 48 week course. Each of the four phases is broken down into three or four main lecture courses. Along with these courses there are allocated laboratories or simulator work and flights. To graduate from the USAF TPS, a student must be in good standing and satisfactorily complete all academic tests, oral and written reports, 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 and in good standing.

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, high and low lift over drag ratio.

PF 5417 Performance Data Standardization 3 Semester Hours

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

PF 5418 Performance Optimization 3 Semester Hours

This course examines takeoff, landing, and energy. These examinations will include the equations needed for normal flight and departure from flight. The flight-test techniques in this course consist of takeoff and landing, C-12 level accelerated/turn, level accelerated/saw tooth climb, turn performance, and performance final check ride.

FG 5426 Unaugmented Airplane Motion 4 Semester Hours

This course examines the unaugmented equations of motion, trim, and stability. It provides a basic overview of the flying-qualities flight testing. The flight-test techniques for this course include C-12 long-stab/man-flt (LS/MF) demonstration (demo), LJ-24 VSS introduction and long demo, C-12 lat dir demo, LJ-24 VSS lat/dir demo, and T-38 dynamics demo.

FQ 5427 Flight Control Systems Testing 4 Semester Hours

This course consists of introduction of 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 examines the origins and history of flight control systems. The flight-test techniques for this course consist of variable-stability in-flight simulator test aircraft (VISTA) HQ demonstration. The lab test techniques for this course consist of 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) test to demonstrate 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 HQ 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 Qualities 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. This course previews the types of flying accomplished during a typical test program. The flight-test techniques for this course consist of F-16 limited cycle oscillation, ME flying qualities demonstration, KC-135 ground school, glider flying qualities demonstration, C-12 first flight check ride, F-16 HQ 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 unmanned aircraft systems (UAS) lectures. This course 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 avionics systems integration lab, integration facility for avionics system testing (IFAST) and ASI IFAST lab. Also, within this course is the F-15E system ground school.

SY 5437 Airborne Sensors 3 Semester Hours

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

SY 5438 Weapons and Integrated System Evaluations 4 Semester Hours

This course consists of the electronic warfare lecture, the weapons delivery testing lecture, 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 EC testing LTT/FTT, F-16 weapons delivery demo, and the F-16D systems evaluations check ride.

TM 5446 Test Planning and Reporting 9 Semester Hours

This course consists of the test management phase introduction, probability and statistics (PS), test conduct, intermediate

test and evaluation, the test management course (TMC), unit safety officer training, TMC mod 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 TPS reports program, initial flight reports, technical report formatting, and the DOE project.

TM 5449 Test Management Project & Comprehensive Exams

3 Semester Hours

TMPs are customer-funded flight-test projects that are performed by teams of four to six students with guidance from the TPS staff. The customer provides the research concept or the part that is to be flight-tested. The customer funds specialized support of major aircraft modifications. USAF TPS provides the test aircraft, which are normally Air Force Flight Test Center assets. TPS also funds minor aircraft modifications and the cost for flight hours of testing and evaluations. The TPS students take the flight-test data, 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.

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

Comprehensive Oral Test. The 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 student with a possible test scenario. The student 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, TPS students must graduate with a broad range of knowledge of flying and testing aircraft. There-

fore, throughout the 48 weeks of the course, several types of aircraft are brought to the school for the students to fly and test.

Additional Programs

Field Trip. The students visit other bases to perform qualitative evaluations on the F-15D Eagle, F-15E Strike Eagle, SH-60 Seahawk, F/A-18 Hornet, and other aircraft not available at Edwards AFB. They also 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 TPS (Boscombe Down, United Kingdom), École du Personnel Navigant d'Essais et de Réception (French test pilot school), Italy, Brazil, India, Germany, Spain, and Sweden.

AIR FORCE INSTITUTE OF TECHNOLOGY

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

Mission. *Deliver rigorous, relevant, and respected technical education, research, and consultation to the Air Force and the rest of the Department of Defense (DOD).*

The Air Force Institute of Technology (AFIT) traces its roots to the early days of powered flight when it was apparent that the progress of military aviation depended upon special education in this new science. In 1919 the Air School of Application was established at McCook Field in Dayton, Ohio, the home of Orville and Wilbur Wright. When Congress authorized creation of the Air Corps in 1926, the school was renamed the Air Corps Engineering School and moved to Wright Field in 1927. Shortly after the bombing of Pearl Harbor, the school suspended classes, but it reopened as the Army Air Forces Engineering School in 1944 to conduct a series of accelerated courses to meet emergency requirements.

After World War II, in 1946 the Army Air Force Institute of Technology was established as part of the Air Materiel Com-

mand. The institute was composed of two colleges: Engineering and Maintenance, and Logistics and Procurement. These colleges were later redesignated the College of Engineering Sciences and the College of Industrial Administration. When the Air Force became a separate service in 1947, the institute was renamed the Air Force Institute of Technology. In that same year, the Air Installations Special Staff School was established as a part of the institute, which became the Air Installation Engineering School in 1950. In 1951 the two AFIT colleges were combined into the resident college.

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

In 1954 the 83d Congress authorized the commander of Air University to confer degrees upon students in the AFIT resident college. The college was later divided into the School of Engineering, the School of Logistics, and the School of Business. The first undergraduate engineering degrees were granted in 1956, and the first graduate degrees in business in 1958. The School of Business programs were transferred to civilian universities in 1960. In 1962 the School of Logistics was established to teach graduate and professional continuing education courses in the areas of acquisition and logistics. That same year the Air Installation Engineering School became the Civil Engineering Center. In 1963 the School of Logistics was redesignated the School of Systems and Logistics. In 1969 the Civil Engineering Center was redesignated the Civil Engineering School. On 1 October 1999 AFIT's two graduate schools were combined to become the Graduate School of Engineering and Management.

During the past 90 years, AFIT has granted over 16,500 degrees, more than 16,000 master's degrees, and nearly 500 doctoral degrees. More than 270,000 DOD personnel—including 30 US astronauts—have attended AFIT courses.

Accreditation. AFIT is separately accredited by the Higher Learning Commission of the North Central Association of Colleges and Schools (NCACS) and maintains its own offi-

cial catalog. The information about AFIT contained in AU's catalog serves the informational needs of Air Force and DOD members. AFIT is accredited by the Higher Learning Commission and is a member of the NCACS. 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.

Schools within AFIT. AFIT provides graduate education programs through the Graduate School of Engineering and Management (<http://www.afit.edu/en>). The School of Systems and Logistics (<http://www.afit.edu/lis>) and the Civil Engineering and Services School (<http://www.afit.edu/cess>) provide PCE short courses to assist Air Force and DOD military and civilian members with proficiency in technical and support tasks.

AFIT supports the Air Force and national defense by providing degree-granting graduate education and PCE, research, and consulting services that are responsive to Air Force and DOD needs and requirements. Graduate-level work—available to selected officers, noncommissioned officers, DOD and non-DOD civilians, and international officers—produces experts in engineering, scientific, and managerial disciplines to develop solutions to complex national defense problems and develops individuals with a broader perspective necessary for understanding the role of technology in national defense. PCE courses support Air Force and DOD needs for immediately applicable knowledge and help prevent scientific and technical obsolescence.

Detailed information about AFIT, its component schools, directorates, research, and consultation services—as well as the official catalogs for AFIT's three schools—is available online at <http://www.afit.edu>.

AIR UNIVERSITY UNDERGRADUATE PROGRAMS

This section describes the Air University undergraduate degree programs. The CCAF awards undergraduate credit for these courses toward an associate in applied science degree. These programs are designed as professional military education courses which focus on the profession of arms, warfare, leadership, international security, and communication.



Community College of the Air Force

Associate in Applied Science Degree

Internet Addresses

Public site: <http://www.au.af.mil/au/ccaf/>

Nonpublic site: <https://ccaf.maxwell.af.mil/>

Air Force Virtual Education Center: <https://my.af.mil/afvecprod/>

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

The 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 USAF enlisted personnel.

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

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

With more than 322,000 registered students, the college is the largest multi-campus community college in the world. Its affiliated schools are located in 38 states and nine foreign locations. Nearly 5,800 CCAF faculty members provide quality instruction for the professional development of enlisted personnel. The college has awarded more than 334,000 associate in applied science degrees to enlisted members of the active duty

Air Force, ANG, AFRES, and enlisted members of the Army, Navy, Marine Corps, and Coast Guard teaching in CCAF affiliated schools.

Degree Program. CCAF awards an associate in applied science degree in five areas: Aircraft and Missile Maintenance, Allied Health, Electronics and Telecommunications, Logistics and Resources, and Public and Support Services.

The detailed listing and description of each CCAF degree program is available in the separate CCAF *General Catalog*, published every three years. The detailed listing and description of individual CCAF courses comprising degree programs are available at each of the 100 affiliated schools specifically teaching those courses. Similarly, the listing of CCAF's more than 4,900 qualified instructors and 800 student instructors is available at each school where instructors teach or in a central database located in the CCAF administrative center.

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

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

What is often perceived as nontraditional about the college is its form of organization and administration. Air Force schools provide instruction at numerous locations because of the geographic mobility of the students as they pursue their Air Force

occupations. Accordingly, each of these separate education and training organizations, called affiliated schools, is a component of a worldwide educational system.

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

The education and training sections administer the College-Level Examination Program, Defense Activity for Nontraditional Education Support Subject Standardized Tests, and Excelsior College Examinations. They also conduct formal graduations worldwide at least once each year, usually during April or October.

CCAF Transcript Requests. 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 can only order their own transcripts.

Enlisted Professional Military Education (PME) Instructor Course

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

Mission. *As the gateway to enlisted professional military education, the Instructor Course empowers graduates to develop future enlisted leaders equipped for 21st century tactical, operational, and strategic levels of military engagement needed to develop, employ and support air, space, and cyberspace at all levels.*

The Enlisted Professional Military Education Instructor Course (EPMEIC) was established after the stand down of Air University's Academic Instructor School. 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 instructors with student-centered learning experiences through a supervised practice of carefully defined methods of instruction. The course is required to satisfy the requirements set by SACS for accrediting instructors who teach in CCAF-affiliated courses.

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

Learning Outcome. Develop unrivaled EPME instructors skilled in interactive teaching methodologies and with a broad understanding of educational activities as described in the Air Force instructional systems development process.

Curriculum. The EPMEIC is CCAF-affiliated and consists of 160 hours 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, 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 levels of learning objectives, develop rating scales, and test items. Students must write well and present lessons using interactive methods and master-selected academic content areas. The methods include informal lecture, guided discussion, case study, experiential teaching interview, and demonstration-performance. Students develop the critical thinking skills involved in teaching inter-

active lessons and the dynamics of learning styles and classroom management.

Duration. Four weeks; 20 instructional days.

Eligibility. Air Force personnel selected through an application process to teach enlisted PME schools.

Curriculum Summary

Instructional Areas	Contact Hours
Administrative	6
Educational Foundations	26
Communication Skills	6
Methods	79
Evaluation	18
Instructional Design	17
EPME Specific	8
Total	160

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

26 Contact Hours

Students learn the principles of teaching adults. Adult learning techniques are introduced. Since adult learners exhibit a wide range of learning styles, the exploration of learning styles, personality types, and cognitive process 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

6 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

79 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 experience the impact 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 so 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

17 Contact Hours

The instructional design block is mandated by HQ air force and covers the instructional system development (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 teach-

ing illustrate the dynamics of this systems model. Students must learn the ISD process and practice it through various interactive, experiential activities.

EPME Specific

8 Contact Hours

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

Airman Leadership School (ALS) Resident Program

Internet Address

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

Mission. *Prepare senior Airmen for increased responsibilities as professional, war-fighting personnel, 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 enlisted EPME to the 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.

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

Learning Outcomes.

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

Resident Program Curriculum. This CCAF-affiliated course consists of 192 hours in residence classes accredited through the 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 satisfactorily 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 66 active duty Air Force bases worldwide and one ANG base located in the United States. More than 350 ALS faculty 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.

Duration. The ALS program consists 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 to attend. Students are selected based on the eligibility criteria outlined in the Education and Training Course Announcements (ETCA) and Air Force Instruction 36-2301, *Professional Military Education*. The local Military Personnel Flight works directly with the ALS commandant to ensure eligible students are selected.

Curriculum Summary

Instructional Areas	Contact Hours
Profession of Arms	38.5
Warfare Studies	11.0
Leadership Studies	81.0
International Security Studies	6.5
Communication Studies	51.0
Core Area Total	188.0
Collateral Curriculum	4.0
Total	192.0

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 distinc-

tive 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 tactics 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 are integrated.

Communication Studies

51 Contact Hours

This course helps students to develop an understanding and ability to apply principles of effective communication (speaking, listening, writing, research, nonverbal communications, negotiations, 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.

ALS PME Distance Learning

Internet Address

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

Mission. *Prepare 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. 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.

Duration. The ALS DL program 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. As a general rule, students are senior Airmen with 48 months in service. They are eligible to enroll if they meet the criteria outlined on the AU Education and Logistics (A4/6) Web site (<http://www.au.af.mil/au/afiadl/main.htm>).
- Air National Guard personnel. As a general rule, students are senior Airmen with 48 months time in service or staff sergeants who were promoted under the EPME Air Force promotion deferment policy. Students are eligible to enroll if they meet the criteria outlined on the AU Education and Logistics (A4/6) Web site (<http://www.au.af.mil/au/afiadl/main.htm>).
- Active duty Air Force personnel are not eligible to enroll in the ALS DL program.

Curriculum Summary

Instructional Areas	Contact Hours
Volume 1 Profession of Arms	30.0
Volume 2 Leadership Studies	57.0
Volume 3 Communication Studies	27.0
Core Area Total	114.0

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 prepare 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 enlisted force structure, 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 necessary 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://cepme.au.af.mil/>

Mission. *Prepare 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.*

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, Keesler (Mississippi), Kirtland (New Mexico), Lackland (Texas), Peterson (Colorado), and Tyndall (Florida) Air Force bases. The CMSgt Paul H. Lankford Enlisted PME Center's noncommissioned officer academy at McGhee-Tyson ANG Base is located near Knoxville, Tennessee, 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, Alaska; Kadena AB, Okinawa, Japan; and Hickam AFB, Hawaii. US Air Forces, Europe, has one academy at Kapaun Air Station, Germany. NCOA is currently available as a resident program and a non-resident distributed learning program.

Faculty. The NCOA faculty is required to have an associate's degree (or be 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, faculty must complete a 180-hour internship at their respective school.

Learning Outcomes.

- Prepare NCOs to lead and manage units;
- Prepare to effectively communicate rank-appropriate tasks; and
- Model professional military attributes.

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

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.

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

Eligibility. Students are technical sergeants and technical sergeants-select with six months of retainability upon completion of the NCOA. Students must complete the NCOA before they assume the grade of master sergeant. They are selected based on the eligibility criteria outlined in the ETCA and AFI 36-2301, *Professional Military Education*. Local military personnel flights manage this process for each base. Quotas are distributed by AETC and managed by each MAJCOM annually.

Curriculum Summary

Instructional Areas	Contact Hours
Profession of Arms	26
Warfare Studies	16
Leadership Studies	84
International Security Studies	10
Communication Studies	61
Collateral Curriculum	26
Total	223

Instructional Area Descriptions

Profession of Arms

26 Contact Hours

The Profession of Arms course 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

16 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

84 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 lesson 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 nonverbal communication).

Collateral Curriculum**26 Contact Hours**

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

NCO PME Distance Learning

Internet Address

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

Mission. *Prepare 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 NCOA DL course was activated in May 1964 and has undergone several revisions. The NCOA 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. The NCOA DL program is a voluntary, three-volume, paper-based, self-study course administered by AU. A single, closed-book, end-of-course examination covering all three volumes of material in the NCOA 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 NCOA DL program results in college credit from the CCAF.

Learning Outcomes.

- Prepare NCOs to lead and manage units;

- Prepare them to effectively communicate rank-appropriate tasks; and
- Model professional military attributes.

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.

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 AU Directorate of Education Logistics and Communications (A4/6) catalog (<http://www.au.af.mil/au/afiadl/main.htm>).

Eligibility. The course is available to AFRES, ANG, any military component personnel in the grades E-5 and E-6 with a seven-skill level in their primary Air Force Specialty Code (AFSC) and to nonmilitary technician civil service members in the grade of GS-5 or equivalent Wage Grade, Wage Leader, and Wage Supervisor. ANG personnel promoted to master sergeant under the EPME Air Force promotion deferment policy are also eligible to enroll in the course. Active duty personnel are not eligible to enroll in the course. For further eligibility requirements, go to the AU Directorate of Education Logistics and Communications (A4/6) Web site (<http://www.au.af.mil/au/afiadl/main.htm>).

Curriculum Summary

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 area addresses subject matter that uniquely characterizes and separates uniformed service from the society we serve. The lesson thoroughly addresses 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 area 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 volume consists of basic communication, writing, and speaking skills. It is designed to help technical sergeants become effective communicators in both spoken and written communication.

AF Senior Noncommissioned Officer Academy Resident Program

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

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 Air Force established the Air Force Senior NCO Academy (AFSNCOA) in 1972 to fill a void in the professional military education for Air Force senior NCOs. In January 1973 the academy began its first class with 120 senior NCOs and a curriculum divided into two major areas: military environment and military

management. The academy has an annual enrollment of over 1,800 senior NCOs, chief petty officers, sergeants major, and international senior NCOs. The academy offers instruction in three major areas.

In 2003 the secretary and chief of staff of the Air Force approved the testing of an initiative designed to improve interaction between officers and enlisted members in the PME environment. The initiative called for students attending the Air and Space Basic Course (ASBC) and AFSNCOA 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.

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

Learning Outcomes.

- Prepare senior NCOs to lead the enlisted force;
- Prepare senior NCOs to effectively communicate rank-appropriate tasks; and
- Model and develop professional military attributes.

Curriculum. This CCAF-affiliated course consists of 264 hours in residence classes that are accredited through the SACS. Each student earns 10 hours of undergraduate credit 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-14 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.

Duration. The AFSNCOA conducts five, 33-day resident classes each year with 300 to 450 students in each class.

Eligibility. Air Force, selected AFRES, and ANG senior NCOs attend the academy in residence. Selected Army, Navy, Coast Guard, and international military personnel also attend on a limited basis. Active duty Air Force personnel must have at least one-year retainability following graduation, and this course must be completed before they can be promoted to chief master sergeant. 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 services standards. Complete eligibility and selection criteria can be found in Air Force Instruction (AFI) 36-2301, *Professional Military Education*, and online at the Air Force Education and Training Course Announcements Web site, <http://etca.randolph.af.mil>.

Curriculum Summary

Instructional Areas	Contact Hours
Profession of Arms	61.5
Warfare Studies	16.0
Leadership Studies	94.0
International Security Studies	7.5
Communication Studies	60.0
Core Area Total	239.0
Collateral Curriculum	25.0
Total	264.0

Instructional Area Descriptions

Profession of Arms

61.5 Contact Hours

This course offers 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. 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.

Warfare Studies

16 Contact Hours

This course provides a study of the military as an 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 tactics, along with the domains of land, sea, air, space, and cyberspace supporting national security objectives.

Leadership Studies

94 Contact Hours

This study enables students to develop and inspire the human dimension from individual to organizational levels. 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

7.5 Contact Hours

This study helps to develop 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 maintaining global vigilance. Emphasis is placed on non-military instruments of power and how they affect global, regional, and national security conditions. The course integrates global, regional, and cultural awareness.

Communication Studies

60 Contact Hours

This study develops an understanding of and an ability to apply principles of effective communication (speaking, listening, writing, research, nonverbal communications, negotiations, 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.

Senior NCO PME Distance Learning

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 SNCOA DL course was activated in October 1973 and has undergone several revisions. The SNCO PME distance learning program prepares SNCOs for positions of greater responsibility. The DL program 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 DL program is a mandatory 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 careers. Students must review the catalog frequently during their enrollment to comply with any changes in administrative policies. There is no single end of course examination for the SNCO DL program. Students are evaluated following each subcourse through summative examinations at a designated/

authorized test control facility located on almost every military base.

Learning Outcomes.

- Prepare senior NCOs to lead the enlisted force;
- Prepare senior NCOs to effectively communicate rank-appropriate tasks; and
- Model and develop professional military attributes.

Curriculum. SNCO DL courses are CCAF-affiliated courses delivered via CD-ROM (Course 12) or the world-wide web (Course 14). SNCO DL consists of 61 hours accredited through the SACS. Students earn four hours of undergraduate credit upon completion of the course. As of 31 December 2008, Course 12, the CD-ROM version, is not available for new enrollments; however, support is available for students still enrolled.

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

Eligibility.

- Active duty Air Force personnel. As a general rule active duty personnel in the grade of master sergeant, or master sergeant-select, or above are eligible for courses 12 and 14.
- Air Force Reserve personnel. As a general rule, students are technical sergeant/master sergeant (or master sergeant promoted to senior master sergeant under the EPME Air Force promotion deferment policy) with at least one year since completion of NCOA, resident or DL. Students are eligible to enroll if they meet criteria outlined on the AU Directorate of Education Logistics and Communications (A4/6) Web site (<http://www.au.af.mil/au/afiadl/main.htm>).
- Air National Guard personnel. As a general rule, students are a technical sergeant (no minimum time in service required) or master sergeant promoted to senior master

sergeant under the ANG EPME deferment policy. Students are eligible to enroll if they meet the criteria outlined on the AU Directorate of Education Logistics and Communications Directorate (A4/6) Web site (<http://www.au.af.mil/au/afiadl/main.htm>).

Curriculum Summary

Instructional Areas	Contact Hours
Profession of Arms	13.0
Communication Skills	15.0
Behavior Analysis	9.0
Human Resource Development	9.0
Organizational Management	15.0
Core Area Total	61.0

Instructional Area Descriptions

Profession of Arms

13 Contact Hours

Students must be able to explain to subordinates how unit-level duties fit in 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 Reserve Forces. Such subjects as strategy and foreign policy are discussed. Students also hear perspectives of a former AF chief of staff, a former POW, 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, in 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 styles to subordinates experience and needs. These lessons allow students to explore the different theories of motivation and how to motivate workers to do their best work.

Organizational Management

15 Contact Hours

The lessons in this area provide students with a broad view of organizational design and structure. They 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 an operational perspective in their role as senior enlisted leaders.*

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

Faculty. The AFSNCOA competitively selects faculty members to facilitate this course. These hand-picked facilitators are either

current members of the AFSNCOA faculty or past faculty serving elsewhere on the faculty/staff of the Barnes Center for Enlisted Education. Faculty are required to have an associate's degree (or be within one year of completion), must have completed the EPME Instructor Course as well as required internship requirements at the AFSNCOA, and must hold the grade of chief master sergeant.

Learning Outcomes. Provide chief master sergeants an operational level perspective of the Air Force and its mission.

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.

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

Eligibility. Active duty chief master sergeant-selects with at least six months' retainability may attend. Chiefs selected for promotion are not required to complete CLC before pin-on, and with few exceptions, they will attend within the year selected. 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.

Curriculum Summary

Instructional Areas	Contact Hours
The Developing CMSgt	14.50
The Expeditionary CMSgt	17.25
Senior Enlisted Leader/Manager	28.25
Core Area Total	60.00
Collateral Curriculum	9.50
Total	69.50

Instructional Area Description

The Developing CMSgt

14.50 Contact Hours

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

The Expeditionary CMSgt

17.25 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

28.25 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 that are assigned to the chief master sergeant.

USAF First Sergeant Academy

Internet Addresses

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

Community of Practice

<https://afkm.wpafb.af.mil/ASPs/CoP/OpenCoP.asp?Filter=OO-ED-AF-41>

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 predecessor 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 in October 1973 and was renamed the USAF First Sergeant Academy in 1982. The academy remained at Keesler until July 1993, when it was moved to Maxwell AFB under the authority of order G-65 and aligned with the Ira C. Eaker College for Professional Development. In January 2006 the academy became “Total Force,” training men and women from active duty, Air National Guard, and Air Force Reserve Command side-by-side in the class rooms. In July 2008 the academy was realigned under the Thomas N. Barnes Center for Enlisted Education. In addition to the primary 120-hour First Sergeant Academy program offered separately by the active, guard, and reserve, first sergeant seminars are also offered to additional duty first sergeants by all Air Force components (40 hours).

Faculty. All personnel selected as FSA faculty must carry the first sergeant AFSC. The FSA faculty is required to have an associate’s degree (or be within one year of completion) and must complete the Eaker College Academic Instructor Course (AIC) after arrival. Within the first year of teaching, the faculty must complete a 180-hour internship at the FSA.

Learning Outcomes.

- Prepare first sergeants to lead, advise, and mentor the enlisted force,
- Provide tools for first sergeants to advise and assist commanders with all matters affecting health, welfare, morale, well-being, and discipline of the enlisted force, and
- Encourage cross-talk and networking to reduce or eliminate barriers between each of the three components.

Curriculum. This CCAF-affiliated course consists of 120 hours in residence classes 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, 5 credits; USAF First Sergeant Additional Duty, 2 credits; USAF First Sergeant Academy ANG, 5; USAF First Sergeant Academy ANG Add Duty, 2; USAF AFRC First Sergeant Academy, 5; USAF AFRC First Sergeant Academy Add Duty, 1. 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, 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. Web-based instruction provides continuation training on demand using such technologies as interactive training and digitized role playing. The school's Web site provides a one-stop service for first sergeants to access critical reference material used on daily and information for continuity purposes. Scenario-based learning

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

Duration. The USAF FSA course is 15 academic days and enrolls up to 44 students per class. The FSA's ANG and AFRES courses are also 15 academic days and can enroll up to 25 ANG and 19 AFRES students per class. All courses have eight offerings 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.

Curriculum Summary

Instructional Areas	Contact Hours
School Administration	10
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	120

Instructional Area Descriptions

School Administration

10 Contact Hours

Students accomplish the administrative details incidental to the USAF First Sergeant Academy, including in processing and review course curriculum.

Physical Training **10 Contact Hours**

Students participate in physical training programs.

Testing **3 Contact Hours**

Students are evaluated as to their level of understanding with end-of-course test, and instructors conduct a 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**

Students learn to comprehend the scope and responsibilities of a first sergeant.

Human Resource Preventive Intervention **17 Contact Hours**

Students are taught to comprehend and value how preventive intervention impacts the unit.

Quality Force Management **14 Contact Hours**

Students must learn quality force management policies, practices, and procedures as tools for corrective actions.

Military Justice **14 Contact Hours**

Students must learn the contents of *Manual for Courts-Martial* and comprehend the applications of its principles.

Deployment Issues **14 Contact Hours**

This section covers the first sergeant's role and responsibilities in a deployment process and how to apply the information in a deployment scenario.

AIR UNIVERSITY NON-DEGREE PROGRAMS

Air University's PME schools prepare junior, mid-career, and senior commissioned officers and selected civilians for progressively more responsible positions through the Air Force and DOD. All colleges, schools, and programs operate within the framework of the Air Force continuum of education, a coordinated and integrated educational system that links curricula across Air University so that each college, school, and program builds on the education provided at the previous level. This continuum includes five core areas: the profession of arms, military studies, international security studies, communication studies, and leadership and management studies. PME for officers includes AWC, ACSC, and SOC. This section also addresses officer accession and training schools and professional continuing education.

AIR WAR COLLEGE DISTANCE LEARNING

Internet Address

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

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 Forces issues.*

Many military officers and federal government employees do not have the opportunity to attend senior developmental education in residence. 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, unique family needs, or for those who may or may not have the option of participating in a student-led seminar. Most students complete this self-paced program in about 20 months or less.

Unlike the resident program, AWC DL students do not receive a master's degree 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 amount of credits they accept towards completion of their degree programs.

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

Learning Outcomes.

- Critical thinkers able to analyze complex political-military situations and articulate strategic thought from a joint perspective;
- Graduates ready to lead in a joint strategic environment that thoroughly comprehend the profession of arms, with particular emphasis on Air Force competencies of air, space, and cyberspace; and
- Strategic leaders who can develop and execute national military strategy that employs armed force, in concert with other instruments of national power, to achieve the goals of national security strategy.

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 12 months. Most students complete the elective within three 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. Air Force senior leaders want PME graduates to be better writers. To meet this need, AWC implemented a widely used commercial writing assessment tool to provide objective feedback on writing. This tool enables the student to identify strengths and weaknesses to improve writing skills before the first essay exam. The Air University Student Information System (AUSIS) record will reflect when to take the assessment. The AWC DL program does not currently offer JPME credit.

Duration. Most students complete the program within 20 months. 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. O-5-selects and above. active duty, AFRES, or ANG; sister-service active duty, Guard, and Reserve; and Civil Air Patrol.
- Civilian. Federal civil service employees in the grade of GS-14/15, NSPS employees in pay band 3/4, and 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). Refer to AFI 36-2301, 27 July 2002, paragraphs 3.7.2 through 3.7.6, for guidance.

Enrollment. Military personnel should enroll in AWC via the 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.

Graduation Requirements. Students must earn at least a satisfactory grade to graduate.

Curriculum Summary (17th Edition)

Course Title	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 Elective (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 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 JSL. Additionally, students must complete one elective before enrolling in the first core course.

FS 42A Foundations of Strategy

99 Contact Hours

The Foundations of Strategy course develops senior leaders who can ethically develop and evaluate strategy in the pursuit of national interests. This foundation is laid by examining various theorists' concepts and how they have applied to conflicts throughout history and to today's military operations. The course pays special attention to strategy development for

the venues of air, space, and cyberspace—to the impact of air power on national and military strategy—and concludes with a look at the challenges of information-age warfare. This course serves as the foundation for further study in 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, the 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 GS 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, population growth, etc.). 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. The course assesses the relationship between efforts to democratize states, economic 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 JMO 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 assesses 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, war-fighting environment. The course is based on two key assumptions: first, students are already successful leaders, but the challenges they will face will be significantly different from those they faced in the past; and second, students can significantly improve their competence in areas vital to success as strategic leaders. The course 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 leading 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 dynamics in a realistic setting and how those may impact operations and senior-level decision making.

Electives Program

60 Contact Hours

All students must complete one elective before enrolling in the first core course. The Electives Program has two major objectives:

- Enhance and complement the core curriculum by providing opportunities to achieve greater depth and breadth of understanding in issues of special interest.
- Provide the AWC curriculum with the flexibility to adapt quickly to changes in the international and domestic security environments.

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 and an understanding of 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 and the communication channels it passes through and what effects various public affairs actions, integrated into information operations, can generate on US citizens, allies, and adversaries. In addition, they will 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/future leaders to exploit the information environment with regard to military operations planning and execution and to use strategic communication in operations planning.

EL 42D4 Medical Support to Joint Operations. This elective provides a close look at how DOD is postured to provide a fit force for deployment, prevent disease and nonbattle injuries during deployment, force package medics for employment in the field, and ensure medics are ready to care for the wounded beginning at the point of injury and en route back to CONUS. Additionally, the course covers how medics provide unique capabilities to build foreign relations, support special operations, and respond to natural disasters, pandemics, and chemical, biological, and radiological events. The main focus will be on the Air Force Medical Service, but some discussion will compare other service medical capabilities. This elective is designed for students who would like to understand the details of how healthcare fits into operational planning at the combatant command level.

EL 42D5 Nonlethal Weapons. The challenge in today's complicated security environment is for US forces to impose control and order on hostile forces with a minimum of casualties to themselves, the belligerents, and/or the surrounding civilian population. This course describes and analyzes these efforts and the issues that underlie nonlethal weapons. It address the past use of nonlethal concepts and technologies; defines the capabilities that could be made available to US armed forces; examines the medical, legal, and public awareness issues involved in their development and use; and analyzes their incorporation into current US military doctrine and strategy.

EL 42D6 Homeland Security and Defense. This course examines threats to and vulnerabilities of the US homeland, the actors, organizations, plans, policies, programs and resources required to secure and defend the United States. During the Cold-War era, only nation-states could create mass casualty and society-destroying events. Today, such nonstate actors as individuals and small groups can inflict this type of misery. Given this asymmetric threat, brought to light by the events of

11 September 2001 and the 9/11 Commission Report, homeland security and defense have become a top national priority. In 2009, years after 9/11 the United States still faces such threats; the question is if, when, and how such an event will occur—and how prepared is the United States is to respond.

EL 42D7 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 the role of nuclear weapons in both historic and modern deterrence theory.

EL 42D8 Counterinsurgency and Military Support to Security, Stability, Transition, and Reconstruction. Given that the object of war is peace on favorable terms, long term stability is essential to being able to declare success 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 42D9 Human and Environmental Security. Long causal chains exist in most conflicts. Often it is the condition of the environment and the level of human security within states that can spark a conflict. Human and environmental security, if adequately addressed, can bring about broader forms of peace. This course provides a foundation of understanding for human and environmental security and how they combine to provide an important guarantor of security for human life, economic viability, stable development, active diplomacy, and prosperity. This elective takes a proximate and empirical look at how these

issues affect conflict and impact a nation's ability to rebuild after a conflict.

AIR COMMAND AND STAFF COLLEGE DISTANCE LEARNING

Nonresident IDE–Non-Master'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 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 JPME accreditation in 1992 and were reaccredited in 2002, 2004, and 2007. In 1999 the nonresident program was placed under the dean of DL. The DL IDE program provides PME to about 85 percent of all Air Force majors and majors-select. In 2004 the program expanded further to support the CSAF's IDE initiative. The IDE initiative specifically tailors individual officers' development to the needs of the Air Force.

The DL staff continually explores new and better ways to meet the PME demand for mid-career officers stationed throughout the world. By capitalizing on technological advances and Internet connectivity, the DL course is narrowing the gap between resident and DL education and is clearly identifying the college as a pacesetter in AU and the educational community.

As of 1 March 2009, the college's DL program supports 9,000 students: 35.1 percent US Air Force active duty; 25.2 percent

ANG and US AFRES; 21.3 percent Navy, Army, and Marine Corps; 16.0 percent DOD civilians; and 2.4 percent “other.”

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 unparalleled currency and expertise in the operations topics so critical to the college’s success.

Learning Outcomes. The college’s program produces field grade officers who conduct the following:

- lead joint forces to accomplish unit objectives at the operational level, as commander or staff member;
- develop and articulate plans to meet operational objectives that leverage understanding of history, national military strategy, joint force capabilities and doctrine, instruments of power, and international cultural factors, with particular emphasis on the role of air, space, and cyberspace power;
- employ armed force in joint and coalition environments to achieve commander objectives; and
- exemplify Air Force core values and warrior ethos.

Curriculum. The college’s curriculum produces a more effective field grade officer serving in operational-level command or staff positions. The more successful field grade officers are those who possess and demonstrate abilities in such diverse areas as academic, personal, professional, and interpersonal. The program fosters these abilities and encourages the development of higher-order thinking by challenging students to think critically and exercise a combination of analytical and practical tools required as leaders charged with the nation’s defense. Courses at the college 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 on each of seven examinations and complete three online exercises and a written requirement. Students may choose several methods to complete the program. The same personnel record entry (distance learning) is made for both forms of enrollment upon successful completion of the IDE program. The college also maintains its IDE courseware on its Web site, <http://www.au.af.mil/au/acsc/distance-learning.asp>. Any student enrolled in the college's IDE program may access the courseware electronically via the Internet. The Web site contains a library with lesson plans, digitized multimedia files, readings, and interactive computer exercises.

Courses taken in the nonresident program may not be used to satisfy course requirements of the DL program nor may they be used to satisfy course requirements in the OLMP.

The specific delivery methods for the curriculum are as follows:

- Non-master's DL Program (self-study). This self-paced method of study affords students the opportunity 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 throughout the year and deviate from the recommended completion schedule as personal and professional time permit. Because of its flexibility, this method is the most popular one for completing the DL IDE program.

- **Base-level Seminar.** In this 10.5-month version of the IDE program, students coordinate with the base education office to form the seminar 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 provides 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 co-located students elect to form a seminar. Although seminars typically start in August, to coincide with dependents' school schedules, they can start any time throughout the year.

Duration.

- Non-Master's DL Program: 18 months.
- Base-level Seminar: 10.5-months.

Eligibility. The ACSC DL 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-11 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 DL ACSC 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: <https://ausis.maxwell.af.mil>, and the Education and

Training Course Announcements Web site at <https://etca.randolph.af.mil> for further information.

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.

Curriculum Summary

The ACSC version 5.1 DL IDE program is organized into seven curriculum blocks.

Course Title	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. Leadership is not a position, it is a relationship. Therefore, it does not matter whether an officer inherently possesses the abilities of a great leader. 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. Like leadership, command is based on relationships. It is also 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 policymakers 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 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, reveal how that transformation is reflected in current USAF doctrine, and explain 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 the operational functions of air and space power and helps students grasp the unique capabilities and limitations of modern air and space power. Taken as a whole, 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 defines the term *joint* and prepares students for duties as joint staff officers. To plan and conduct military campaigns as joint staff officers, student must thoroughly understand the capabilities and limitations of US military forces and their service doctrine. Based on this knowledge, they can explore joint doctrine and learn how joint forces are organized and employed with the specific intent of achieving synergy and unity of effort. This course is presented in two phases and provides an operational-level point of view 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 summarizes 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 (JA) 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 doctrine, the course addresses the roles and responsibilities of the JFACC and his or her war-fighting headquarters—the JAOC. The course describes considerations for employing joint and multinational forces at the operational level of war. JA further introduces students to the fundamentals of space and information operations. Students will use the concepts learned in the JA 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 ATOs.

Other ACSC Nonresident Offerings

Air Reserve Component Seminar. The Air Reserve Component Seminar (ARCS) is specifically focused on the unique needs of select AFRES and ANG students. The ARCS 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.

Commanders Connection. Commanders Connection, the professional forum for Air Force squadron commanders, is a student-led ACSC project focused on meeting the training and education needs of today's Air Force leaders. As part of the college's in residence research seminar program—administered by ACSC DL—the Commanders Connection, uses a Web-based community of practice to connect tactical unit leaders worldwide in a collaborative environment dedicated to sharing information and ideas to advance the practice of command. Fifteen resident students serve as researchers and facilitators for the community, answering questions from the field and developing

best practices for use across the entire Air Force. Commanders Connection has produced multiple guides on leadership and is now a core component of the many MAJCOM's squadron-commander training programs.

SQUADRON OFFICER COLLEGE

Internet Address

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

Mission. *Develop twenty-first century Airmen who can advocate what air, space, and cyberspace power brings to the fight, value team achievement over individual success, and value their role in the profession of arms.*

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

SOC provides support to these two programs through its senior staff and two support divisions: the Academic Affairs Directorate and Directorate of Mission Support. The dean of Academic Affairs develops and maintains the curriculum for both ASBC and SOS; manages the day-to-day classroom schedules, evaluation procedures, and course surveys; executes advanced technology, war games, and DL programs; and is responsible for initial and advanced faculty development. The Directorate of Mission Support oversees the student registration process, works on student personnel issues, and ensures maintenance of facilities, including extensive field leadership facilities, equipment, and the infrastructure supporting SOC's physical fitness and military leadership obstacle courses.

SQUADRON OFFICER COLLEGE FACULTY DEVELOPMENT

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

Mission. *To prepare Squadron Officer College personnel to operate in their various educational environments by providing them with education and professional skills so that they can develop twenty-first century airmen.*

Faculty. The SOC faculty consists of four persons: a department chair with advanced academic degree; a civilian deputy chair with masters degree (AFSC 1750); and two military course directors. To teach SOC faculty development courses, the nominee should be recognized for teaching excellence. In addition, the instructor must complete both faculty development courses. The Education and Training Department chair is an advanced academic degree position, selected by a SOC doctor of philosophy advisory panel. The desired degree is the doctor of philosophy in educational psychology.

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

MSOC001 Theories and Principles of Adult Education

- 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.

MSOC002 Advanced Principles of Instructional Design

- 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.
- Comprehend effective use of instructional media.
- Apply principles of educational evaluation.
- Analyze educational problems using principles of instructional design process.

Curriculum. SOC provides initial faculty development instruction to the faculty through its Theories and Principles of Adult Education course. The faculty include personnel who design, develop, or implement SOC curriculum or who supervise those involved in such activities. Thus, the faculty include flight commanders, squadron commanders, faculty development and training personnel, and curriculum-development personnel. Following initial faculty development experience, SOC’s two schools teach school- or lesson-specific execution requirements. Instructors selected to work in the Academic Affairs Directorate also participate in the Advanced Principles of Instructional Design course to prepare them for curriculum-development responsibilities. This course focuses on applying the Air Force ISD model to ASBC and SOS lesson research, development, and implementation.

The college has significantly upgraded its faculty by adding six doctoral staff positions. These highly qualified individuals are constructing graduate-level DL courses linked to the Air Force’s Institutional Competency List but also assist in curriculum development and execution of lessons taught in both the ASBC and SOS resident courses.

Eligibility. The candidate must have completed a flight commander tour in either ASBC or SOS. Candidates must have a master's degree. A degree in adult education is desired.

Curriculum Summary

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

Course Descriptions

MSOC001 Theories and Principles of Adult Education.

This 10-day course prepares newly assigned faculty to instruct at either of the two schools reporting directly to SOC: ASBC or SOS. It is a structured, comprehensive, and fast-paced course requiring extensive reading and levels of research and writing by students to prepare personalized lesson plans. Major curriculum areas focus on learning theory, communication skills, teaching methods, and evaluations. The course is designed to inspire maximum participation in learning. The majority of the class time is devoted to small-group activity. Students are required to use SOC-specific lesson plans to prepare evaluated teaching sessions for the class. Teaching methods covered in this course include informal lecture, guided discussion, case study, and experiential learning activities.

MSOC002 Advanced Principles of Instructional Design.

This 10-day course equips newly assigned curriculum-development personnel with the education and professional skills required to create instructional materials specifically for the two schools reporting directly to SOC: ASBC and SOS. It is a structured, comprehensive, and fast-paced course requiring extensive reading and moderate levels of research and writing. The course focuses on ISD, the three most widely used domains of learning (cognitive, affective, and psychomotor) and the evaluation process. The course is designed to provide maximum participation in learning. This course culminates with the student completing a final project requiring application of instructional

design theories and comprehension of the ISD process from start to finish. Teaching methods employed include informal lecture, guided discussion, case study, and experiential learning.

SQUADRON OFFICER SCHOOL

Internet Address

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

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

Squadron Officer School (SOS) is an AU institution designed to teach USAF company grade officers the skills of command leadership. SOS is anchored in the specific requirements of the profession of arms. It is specifically designed to teach the essence of military leadership; air, space, and cyberspace doctrine; international security issues; and communication skills. Students are not only exposed to these concepts, they are required to apply these lessons in several complex experiential learning exercises that involve fatigue and frustration while building team esprit. Physical fitness, team problem solving, and proper military decorum are critical aspects of the school's offerings.

Three dynamic activities are incorporated into the program to enhance student development and teamwork. The Combat Leadership Exercise (CLX), the Warrior Challenge, and the Leadership Development Simulation (LDS) have fundamentally altered the learning experience at SOS. The CLX experience provides students with the opportunity to use leadership skills during the fog of war in various time-pressured, team-oriented environments. Warrior Challenge is the capstone physical fitness and problem-solving event that requires a three-mile individual run followed by a 2.5-mile flight run with specific problem-solving events dispersed during the second half of this event. LDS consists of three modules in which students learn to comprehend characteristics of various organizational structures and then apply their knowledge in a simulation that allows them to use their leadership skills to achieve mission goals.

Over the years, Medal of Honor recipients, astronauts, and senior military commanders—from the United States and from various countries worldwide—have graduated from this prestigious institution. SOS remains the Air Force’s premier military leadership school.

Faculty. All SOS faculty are captains or majors who have completed the in residence SOS course and MSOC001 (upon arrival) or equivalent. Additionally, each instructor undergoes a supervised instruction period.

Learning Outcomes. Students value their unique role as Air Force officers by

- broadening commitment to the concept of officership, core values, and the unique role of the Air Force officer in the profession of arms;
- valuing the distinctive capabilities of air, space, and cyberspace power as guided by Air Force doctrine and apply those principles to current and future war-fighting scenarios;
- strengthening leadership and followership skills by building effective, cohesive teams that can adapt successfully to accomplish challenging goals; and
- applying sound problem-solving, management, and communication practices to operate successfully in an expeditionary war-fighting environment.

Curriculum. SOS presents USAF history, doctrine, and employment concepts to the students throughout the course. The students improve their knowledge of the Air Force and its mission through readings, seminar discussions, and lectures presented by air, space, and cyberspace power experts.

The SOS curriculum first introduces and then reinforces course content in the important areas of team-building, leadership, and followership. Students study the theory and then apply what they have learned in individual and team exercises to approximate the stresses of battlefield scenarios. This

approach to learning helps officers improve professionally while inculcating a warrior-leader ethos.

Duration. Each class lasts five weeks or 25 training days.

Eligibility. 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 or NSPS equivalent grades with at least four years of continuous civil service are eligible. See the Education and Training Course Announcements (ETCA) for additional information at <https://etca.randolph.af.mil>.

Curriculum Summary

MSOS001 Squadron Officer School Curriculum Area	Contact Hours
Profession of Arms	12.00
Leadership/Management	85.20
Military Studies	6.00
Communication Studies	14.25
International Studies	8.20
Total Instruction	125.65
Administration and Testing	36.33
Physical Fitness	30.00
Total	191.98

Course Descriptions

Profession of Arms

12 Contact Hours

Officership principles are threaded throughout the SOS curriculum and have been structured to provide students with a broad understanding of the specific functions of air, space, and cyberspace power and how these functions support joint and coalition warfare. Students also learn about officership, what it means to be an Airman, and delve into moral and ethical development and accountability.

Leadership/Management**85.20 Contact Hours**

The course is based on the enduring leadership competencies found in AFDD 1-1, Leadership and Force Development. Students are provided the necessary tools to build and lead small teams in addition to serving as dynamic followers. Instruction is focused on concepts and philosophies officers can use to improve leadership skills through application-based scenarios designed to teach company grade officers how leadership, followership, and team building are combined to achieve mission success.

Military Studies**6 Contact Hours**

Rather than study history, SOS uses historical examples to illuminate points in its officership/leadership teachings. Students study the theory, doctrine, objective, and strategy (TDOS) cycle, employing it as a powerful analytical tool for studying military operations. Students discuss ways in which contextual and operational elements influence the TDOS cycle. This curriculum focuses on lessons learned from past conflicts to better comprehend how lesson learned from past operations are employed to improve effectiveness of operations today.

Communication Studies**14.25 Contact Hours**

SOS equips its students with opportunities to improve their communication skills. Writing and briefing assignments are specifically designed to enhance both communication techniques and teamwork. Although emphasized in this course, effective communication is inherent in all aspects of SOS curriculum and is crucial to a student's success.

International Studies**8.20 Contact Hours**

Due to today's complex security environment, military professionals can find themselves in situations where their actions can take on international importance. Consequently, these professionals must be more aware of culture, world affairs, and the role played in their nation's national security strategy than any other time in the nation's past. Graduates leave SOS with

a deep understanding of the significant role that Airmen play in joint and coalition warfare and international and national security affairs.

SQUADRON OFFICER SCHOOL DISTANCE LEARNING PROGRAM

Internet Address

<http://www.au.af.mil/au/soc/cgolp/index.htm>

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

The DL SOS course (Course 20) provides CGOs with leadership skills at appropriate points in their personal and professional development. SOS' nonresident curriculum is based on Air Force Policy Directive 36-26's institutional competency list (ICL), which delineates those skills necessary for an officer's success. The ICL 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 the CGO's 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 21st Century* (AFSO 21). Additionally, they develop tools to create a positive environment for building and leading effective teams and coalitions, examining the stages that development teams encounter en route to mission success. The course is tailor-made for junior Air Force officers preparing to take 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.

Faculty. Course 20 is a self-study course; students must complete the course within 18 months of their enrollment date.

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.
- Discern 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.
- Understand issues influencing group and team effectiveness.

- Discern differences between values and cultures at the individual and institutional levels.
- Comprehend the importance of developing networks at the leadership level.

Curriculum. The SOS DL course presents similar, but not parallel, content to the resident curriculum. Course 20 develops CGOs’ skills aligned with the Air Force ICL subcompetencies of “Ethical Leadership,” “Develops and Inspires Others,” “Builds Teams and Coalitions,” and “Decision Making.” It focuses on developing critical-thinking skills through the application of principles acquired in the readings to a series of practical assignments to be done on the job. The lessons include instruction, practice, and feedback in the thoughtful use of information to guide others, both individually and in groups, toward mission accomplishment.

Duration. The student must complete the entire program within 18 months from their enrollment date.

Eligibility. US armed forces officers selected for the grade of captain (0–3) or above are eligible for enrollment into the SOS Distance Learning Course. Additionally, officers of the Civil Air Patrol selected for captain and above and federal civilian employees in the grades of GS-9, WG-10, WL-9, and WS-8 (or NSPS equivalent) and above are eligible. Under normal circumstances, students must complete the entire program within 18 months. See the Squadron Officer College Advanced Distributed Learning Web site (<http://www.au.af.mil/au/soc/cgolp/index.htm>) for a detailed course description and enrollment information.

Curriculum Summary

Core Curriculum Areas	Contact Hours
Ethical Leadership	42
Decision Making	51
Builds Teams and Coalitions	45
Total	138

Core Curriculum Area Descriptions

Ethical Leadership. This unit examines personal core values and those of the Air Force and develops the trust and commitment of others, personal accountability, and 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 co-workers.

Decision Making. This unit focuses on using proven processes to make effective and timely decisions. This use 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. This unit establishes alliances, assembles a team, fosters cohesiveness of a team, attends to the diverse interests of team members, and ultimately expands networks and alliances at all levels.

AIR AND SPACE BASIC COURSE

Internet Address

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

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

The ASBC was developed as a CSAF initiative to provide a common-bonding experience and means to “learn the family business” for all newly commissioned second lieutenants and select DOD civilians with a focus on the profession of arms. It begins with a week of expeditionary skills training at an out-

door training facility in field conditions where students focus on combat-skills training events. This week and the last week of ASBC serve as the officer counterpart to the enlisted Common Battlefield Airmen Training. During these field sessions, students also receive classroom instruction on key USAF weapon systems and descriptions of how these weapons are employed in combat. Outdoor activities also put great emphasis on the importance of physical fitness for today's officers. Additionally, the program includes a three-day combined operations period with the AFSNOA.

Other lessons include "combatives" training, self-aid buddy care training; chemical, biological, radiological, nuclear, and explosives training; survival, evasion, resistance, and escape B+ level training; weapons qualification; introduction to war theory; historical airpower principles; strategic concepts; and the basics of air, space, and cyberspace doctrine. This integrated curriculum includes a focus on hands-on leadership skills, improved communication abilities, and a better appreciation of both officer and enlisted force development issues. The last week of ASBC offers a crucible event spent at an offsite, mock-deployed location in a tent city where students must demonstrate the expeditionary skills learned throughout the course.

During the entire ASBC program, students must act as military teams, using what they have learned in the ASBC curriculum to solve complex problems. Students work as a combat team in a simulated air, space, and cyberspace operational center and develop an appreciation for Air Force systems and capabilities. Through these efforts, ASBC provides the fundamental concepts and motivation for lieutenants to begin learning and inculcating the skills, values, and ethos of professional Airmen. Graduates gain a broad understanding of a variety of USAF specialties and their contributions to mission success, a firm foundation in doctrine, and an appreciation for USAF capabilities. Additionally, graduates return to their duty stations having completed a significant portion of their deployment readiness training "full-up rounds" ready to support their units' important operational missions.

Learning Outcomes.

- Embrace the profession of arms by applying the Air Force core values with the heart, mind, and body of an air, space, and cyberspace warrior.
- Value the expeditionary air, space, and cyberspace force as a team, and the role of Air Force officers in leading within this team.
- Comprehend air, space, and cyberspace operations as the primary means for effectively employing air, space, and cyberspace power as a part of the joint war-fighting team.
- Comprehend Air Force history, doctrine, and distinctive capabilities as the foundation for effectively employing air, space, and cyberspace power.

Curriculum. The ASBC curriculum consists of two interconnected methods of study. The first method is linear. In this method, each lesson is built upon the preceding one and addresses the achievement of the designated cognitive educational goal. The second method is nonlinear; it strives to create the affective changes to motivate students to consider themselves as Air Force officers first, ahead of individual specialties, commissioning sources, or any other consideration.

Duration. Each class lasts six weeks or 30 training days.

Eligibility. Newly commissioned officers and DOD civilians GS-7 or NSPS Pay Band 2 or above who have completed a baccalaureate degree are eligible to attend ASBC.

Curriculum Summary

Curriculum Area	Contact Hours
Profession of Arms	92.00
Leadership/Management	23.10
Military Studies	13.70
Communication Studies	6.30
International Studies	4.50
Combined Operations	21.00
Total Instruction	160.60
Administration and Testing	12.00
Physical Fitness	21.35
Total	193.95

Course Descriptions

Profession of Arms

92 Contact Hours

This course considers the military as a profession and the characteristics separating the uniformed service from the society it serves. The course focuses on distinctive knowledge, exclusive group coherence, career structure, and the Airmen's role in society. It addresses core values, roles and responsibilities, discipline, morals and ethics, dress standards, oath of office, customs and courtesies, accountability, and security awareness. The Profession of Arms lessons include all expeditionary skills training and readiness education.

Leadership/Management

23.10 Contact Hours

ASBC includes a distinct focus on leadership growth. The leadership phase sets the stage for this growth by introducing the lieutenants to the principles of AFDD 1-1, *Leadership and Force Development*, which is the USAF's leadership doctrine document. The lessons address the doctrinal competencies most applicable to CGO leadership development and follow up with a dynamic look at "Assess Self," a personal leadership competency emphasized in AFDD 1-1.

Military Studies**13.70 Contact Hours**

This course emphasizes studies of doctrine and lessons learned from Operation Desert Storm through current operations.

Communication Studies**6.30 Contact Hours**

The communication course focuses specifically on interpersonal communications. It defines how interpersonal communication between team members flows, provides a basic understanding of concepts and practices that enhance communications, and describes how communications affect performance, both positively and negatively.

International Studies**4.50 Contact Hours**

This portion of the curriculum provides a base from which CGOs can make educated decisions in today's complex international security environment. Students will be exposed to pressing geopolitical issues and develop cultural awareness.

Combined Operations**21 Contact Hours**

The Combined Operations portion of the curriculum is executed as part of the Profession of Arms and Leadership/Management courses. During this phase of the program, SNCOs participate side by side with ASBC students on Icarus and Project-X, two challenging field activities. These invaluable opportunities for mentorship provide students with unique insights into the NCO corps.

Administration and Testing**12 Contact Hours**

Administration and Testing focuses on the dissemination of critical administrative information and the academic testing and evaluation of students' understanding of taught curriculum material.

Physical Fitness**21.35 Contact Hours**

Physical Fitness at ASBC consists of various outdoor physical activities and field exercises designed to instill a greater appreciation for maintaining good physical fitness and the importance of ensuring personnel are physically mission-ready in expeditionary environments. Several activities, such as Team

Challenges, require not only physical ability, but also employment of problem-solving and team-building skills.

INTERNATIONAL OFFICER SCHOOL

Internet Address

<http://www.au.af.mil/au/cpd/ios/ios.htm>

Mission. *Prepare international officers for in residence PME; support international students attending AU courses; and manage Air University's International Affairs program.*

The International Officer School (IOS) was established in 1954 as the Allied Officer Preparatory School. Since then, more than 10,000 international military students from 136 countries have completed the program. The preparatory courses improve students' abilities to express ideas clearly (in both speaking and writing) 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 civilian sponsorship program (called Alabama Goodwill Ambassadors [AGA]) introduces students to the political, military, and socio-economic aspects of American culture. This orientation enables students to adjust more readily to the USAF and civilian communities. Academic requirements for each course are geared specifically to the PME school in which the students enroll.

The IOS Administration Division functions as the International Student Military Office and provides administrative support to international students attending any AU school. The Education Division plans, develops, and implements course curriculum and instruction.

Faculty. Qualifications for faculty are determined based on the relevance of individual academic credentials, professional functional experience, desire to teach, and teaching abilities. Academic credentials normally include an appropriate degree. Professional experience normally includes depth and breadth of experience in the functional area assigned.

Learning Outcomes. Expand the capacity of international officers to participate more effectively in military education and duty assignments. The three IOS preparatory courses develop an

- appreciation of American society, institutions, and ideals;
- awareness of the mission and organization of US military forces and US military terminology;
- ability to speak and understand American English;
- awareness of the organizational structure, curriculum content, and instructional methods employed in AU schools; and
- ability to participate in physical training activities.

Curriculum. The school's curriculum consists of preparatory courses that have three basic functions. First, they provide curriculum orientation to follow-on school topics and methodologies. Second, they serve as periods of cultural adjustment for international officers and their families. Third, they accomplish the administrative requirements and Field Studies Program objectives outlined in international military training management directives. Attendance at IOS is a prerequisite for international officers attending SOS, ACSC, and AWC.

IOS/SOS and IOS/ACSC require an English comprehension-level test score of 70, while IOS/AWC requires a test score of 80. Students must meet certain physical standards outlined in the Air Force Education and Training Course Announcements (ETCA).

Duration. IOS/SOS, IOS/ACSC, IOS/AWC preparatory courses are six weeks in length.

Eligibility. Secretary of the Air Force for International Affairs (SAF/IA) extends invitations to countries to attend AU PME courses in conjunction with the Air Force Security and Training (AFSAT) Squadron and in coordination with regional combatant commanders. Global security cooperation offices must ensure

each international military student (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.

MIOS001 Squadron Officer School Curriculum Summary

Course Title	Contact Hours
Administration	17
Field Studies Program	75
Communications	80
Military Studies	7
Leadership	31
Total	210

MIOS002 Air Command and Staff College Curriculum Summary

Course Title	Contact Hours
Administration	18.50
Field Studies Program	64.75
Communications	84.00
Military Studies	24.00
Leadership	10.00
Total	201.25

MIOS003 Air War College Curriculum Summary

Course Title	Contact Hours
Administration	25.50
Field Studies Program	71.00
Communications	47.75
Military Studies	41.00
Leadership	7.00
Total	192.25

Course Descriptions

(Each course includes these five phases.)

Administration. During this course phase, international officers 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 courses. 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, structured feedback conferences with instructors; informal conferences take place throughout the courses as needed.

Field Studies Program. The Field Studies Program allows students to gain a better understanding of US institutions, ideals, and culture. Some of the topics include the American way of life, education in the United States, US government institutions, and the US news media. A significant portion of this program is devoted to human rights and related training in keeping with State and Defense departments objectives for security assistance training. Field trips and tours are conducted in the Montgomery area, southeast region, and Washington, DC.

Communications. Communications 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.

In addition, basic writing and briefing instruction, with application exercises, is provided based on the PME follow-on school's communication techniques. This area also includes computer instruction with hands-on training in applications appropriate to the specific follow-on PME school.

Military Studies. The Military Studies area introduces students to the mission, organization, policies, concepts, and terminology of the US military.

Leadership. Students are introduced to various leadership theories, concepts, and models. Again, instruction is geared at a level appropriate to the follow-on PME school. This area

also introduces physical training requirements of the follow-on PME school, with emphasis on field leadership and team building, particularly important areas for students preparing to attend SOS.

Other Programs

IOS conducts several nonacademic programs to enhance the cultural experience and academic education of international officers and their families.

Alabama Goodwill Ambassadors. AGA is the official AU sponsorship program for international students and their families. This program helps to welcome international students and their families. It also acquaints them with aspects of American culture that they may not otherwise gain exposure through their formal AU courses and activities.

International Family Loan Program. This program lends international students and their families (for a nominal fee) such essential household items as dishes and utensils. This service eliminates the need for students to purchase items they would discard before leaving AU.

International Family Orientation Program. This two-week family orientation course is conducted each summer for spouses and dependents of the international officers who will attend ACSC and AWC. The course orientates students to American culture and to the Montgomery public school system. When possible, it provides basic English language instruction. 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 spouses and adult children of international officer

students need in their daily activities. The course is taught entirely by volunteers from Maxwell and the local community.

OFFICER TRAINING SCHOOL

Internet Address

<http://www.au.af.mil/au/holmcenter/OTS/index.asp>

Mission. *Produce leaders of character, who possess a warrior mind-set, are prepared to lead Airmen, and who embody the Air Force core values of integrity first, service before self, and excellence in all we do.*

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

Throughout its history, OTS has adapted to a challenging training environment. After graduating 12 women and 78 men in its first class, OTS successfully commissioned more than 500 second lieutenants its first year. By 1964 more than 10,000 individuals had graduated, and to date more than 107,000 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 Air Force’s changing manning requirements. Additionally, the school began to train commissioned medical students, chaplains, judge advocates in 1981, and medical service officers in 1991. In 1996 the Commissioned Officer Training School combined existing training programs for chaplains, judge advocates, and medical service officers and has trained more than 14,000 newly commissioned officers at the Maxwell-Gunter Annex. Commissioned Officer Training (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 two programs: Basic Officer Training (BOT) and COT. BOT leads to a line officer commission as a second lieutenant. COT provides initial officership training for Air Force judge advocates, chaplains, and medical officers.

OTS conducts training for BOT and COT/ Reserve Commissioned Officer Training (RCOT) at Maxwell AFB. The AEF exercise for these programs is conducted at the Blue Thunder training site and confidence course located at the north end of the runway at Maxwell AFB. The Vigilant Warrior AEF training site north of Montgomery is a newer site. The AEF exercise is also conducted as part of a joint training exercise with Special Operations Command at varying locations depending upon the exercise scenario.

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, and fitness center.

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

Faculty. Before assuming leadership of a flight, each flight commander must attend and be certified through the OTS Academic Instructor Course.

Learning Outcomes. As a graduate of the Holm Center's commissioning education program, the new officer will:

- be culturally aware. 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 characteristics of a leader of character. The graduate must demonstrate character, core values, and a high moral code and treat others with mutual respect while demonstrating a strong sense of ethics.
- demonstrate leadership in the twenty-first century. The graduate will apply leadership skills by demonstrating the leadership fundamentals and skills necessary to accomplish the mission and effect positive change at the tactical level.
- be a motivated professional. The graduate must comprehend and exhibit a willingness to accept the foundation of knowledge and a commitment to mastering technical skills and a proactive, enthusiastic approach to everyday activities.
- be willing 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 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, unceasing vigilance, 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 major areas of instruction include leadership studies, military training and application, profession of arms, military studies/international security studies, and communications skills. OTS teaching methods include auditorium lectures, readings, flight-room classes (informal lecture, guided discussion, and case studies), and practical exercises (athletic campaigns, one Leadership Reaction Course, and the end-of-course AEF exercise).

Duration. OTS currently conducts seven BOT classes, six COT classes, and two RCOT classes each year. The BOT program is 12 weeks long (60 training days); the COT program is four and one-half weeks long (23 training days); and the RCOT program is two weeks long (13 training days), plus the correspondence portion. In fiscal year (FY) 2008 BOT graduated 510 students, and COT graduated 1,221 students. In FY 09 these numbers are expected to increase to about 2,000.

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

Basic Officer Training Curriculum Summary

Course MOTS001 Instructional Areas	Academic Hours
Leadership Studies	111.00
Communication Skills	28.50
Profession of Arms	74.00
Military Studies	82.25
Military Training and Application	137.25
Admin/Processing/Testing/Orientation	193.25
Physical Training	60.00
Total	686.25

Course Description

MOTS001 Basic Officer Training (24th Training Squadron).

This course provides precommissioning training for selected applicants to meet Air Force requirements by career area. Basic military subjects essential in developing selected college graduates to take their places as second lieutenants in the Air Force. It includes communication skills, leadership studies, professional knowledge, defense studies, and military application and training (practical field leadership, physical fitness, and drill and ceremonies).

BOT is a challenging 60 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 four-day, three-night AEF exercise.

Commissioned Officer Training Curriculum Summary

Course MOTS002 Instructional Area	Academic Hours
Leadership Studies	30.00
Communication Skills	7.00
Profession of Arms	26.50
Military Studies	12.00
Drill and Ceremonies	12.50
Admin/Testing	31.25
Physical Training	10.00
Leadership Development	9.00
Assessments	12.75
AEF/Combat Skills	46.00
Total	197.00

Course Description

MOTS002 Commissioned Officer Training (23d Training Squadron). COT stood up in 1996 and offers 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. COT students' rank ranges from second lieutenant to lieutenant colonel depending on the newly commissioned officers' professional qualifications. A three-day, two-night AEF exercise is the capstone event for COT as well. Additionally, the Medical Readiness Indoctrination Course is incorporated into the AEF exercise for medical service officers.

The RCOT course was instituted in 1999. This abbreviated two-week course was designed to train hard-to-recruit ANG and AFRES medical professionals. It combines DL correspondence work and a Web-based pretest with a demanding 17-day in-residence course.

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); and Chaplain Corps and also trains AFRES officers selected to participate in the Air Force Health Professions Scholarship Program and those enrolled in the Uniformed Services University of the Health Sciences. 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, military 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. Military and international security studies classes include Air Force heritage, terrorism/force protection, and US policy. Leader-

ship 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 Portion)

MOTS003 Instructional Area	Academic Hours
Leadership Studies	23.00
Communication Skills	5.00
Profession of Arms	20.00
Military Studies	5.00
Military Training and Application	17.00
Admin/Testing	33.75
AEF Exercise	23.25
Total	127.00

Course Description

MOTS003 Reserve Commissioned Officer Training (In Residence Portion). 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, military 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. Military 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.

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 instructor skills needed to develop future officers for the United States Air Force.*

Description. The Academic Instructor School closed October 2003. The school's closure disseminated 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 AIC. The OTS AIC maintains the AIC core curriculum educational foundations, communication skills, instructional methods, evaluation, and instructional design. The curriculum continues to provide the students with 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.

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 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.

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, the various methods of teaching, and know the components of the Air Force 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, 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 a 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.

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.

Duration. Two weeks or 14 academic days.

Eligibility. The course is primarily intended for military and civilian individuals who have been selected to teach at either the Officer Training School's BOT course or the COT course.

Curriculum Summary

Course Title	Contact Hours
MAFOATS004 OTS Academic Instructor Course	80

Course Description

MAFOATS004 OTS Academic Instructor Course. Prepares instructors to teach at OTS. 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.

AIR FORCE RESERVE OFFICER TRAINING CORPS

Internet Address

<http://www.AFROTC.com>

Mission. *Develop quality leaders for the Air Force.*

AFROTC currently operates at 144 colleges and universities and has 984 cross-town agreements with other institutions. As of April 2009 cadet enrollment included nearly 12,000 college students. AFROTC's scholarship program includes nearly 5,200 cadets and a scholarship budget of \$59 million in FY 09.

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 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, the new officer must be able to embrace the following:

- be culturally aware. 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 characteristics of a leader of character. The graduate must demonstrate character, core values, and a high moral code and treat others with mutual respect while demonstrating a strong sense of ethics.
- demonstrate leadership in the twenty-first century. The graduate must apply leadership skills by demonstrating the leadership fundamentals and skills necessary to accomplish the mission and effect positive change at the tactical level.
- be a motivated professional. The graduate must comprehend and exhibit a willingness to accept the foundation of knowledge and a commitment to mastering technical skills and a proactive, enthusiastic approach to everyday activities.
- be willing 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. The graduate voluntarily takes the oath of office and accepts a commission.

- embody warrior ethos. The graduate must comprehend and exhibit the embodiment of the warrior spirit: tough mindedness, tireless motivation, unceasing vigilance, willingness to sacrifice one's life for the country, if necessary, and a commitment to be a part of the world's premier air, space, and cyberspace force.

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

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 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 AFB to assess their potential as officers. 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 AFRES assigned to the Obligated Reserve Section. This selection entitles them to a monthly nontaxable subsistence allowance.

Cadets not enrolled in AFROTC as freshmen or sophomores attend a five-week summer field-training unit. These two-year applicants must complete an extended field-training unit. This five-week field training allows extra time for these cadets to gain the leadership skills GMC cadets acquire in leadership laboratory during the first two years of ROTC.

Students entering the two-year AFROTC program also complete entry-level classroom work during this field training. Two-year applicants are not committed to the Air Force until they return to school in the fall and make a decision to enlist through AFROTC.

Eligibility. The first two years of the AFROTC college program, the GMC, are open to students who are at least 14 years old. Second-year scholarship cadets and 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 DOD eligibility standards ranging from physical fitness to US citizenship.

AFROTC Detachment Curriculum Summary

Instructional Area	Contact Hours
Leadership Studies	65.0
Communication Skills	43.0
Profession of Arms	50.0
Military Studies	67.0
Admin/Testing	31.0
Leadership Laboratory	240.0
Field Training *	380.0
Total	876.0

*The standard field training course is 380 hours; the extended field training course is 429.5 hours.

Course Descriptions

For more information regarding AFROTC courses, go to www.afrotc.com/overview/programs.php.

AIR FORCE RESERVE OFFICER TRAINING CORPS INSTRUCTOR AND ORIENTATION COURSES

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

Mission. *To provide AFROTC instructors the teaching skills needed to develop future officers for the United States Air Force.*

When the Academic Instructor School (AIS) closed in October 2003, the resident instructors were dispersed 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 AFROTC AIC. The AFROTC AIC maintains the AIC core curriculum: educational foundations, communication skills, instructional methods, evaluation, and instructional design. The curriculum continues to provide the students with 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.

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 upon the basis of performance record, experience base, academic achievement, and teaching ability. In addition to resident instructors, some members of the 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 entire faculty.

Learning Outcomes. As a graduate of the Holm Center's AIC, the student must 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, the various methods of teaching, and know the components of the Air Force ISD model.
- deliver instruction. The graduate must comprehend how to 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, 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 a 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.

Curriculum. The curriculum identifies and measures such variables related to the educational process as content, alternative methods of instruction, instructional resources, and the degree to which stated objectives are achieved at the appropriate instruc-

tional 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.

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.

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

Course Descriptions

MAFOATS005 AFROTC Detachment Commander Instructor and Orientation Course. A 10-day, mission-essential course hosted by the Holm Center Curriculum Directorate (the Holm Center/CR). This course provides newly assigned AFROTC detachment commanders with the skills needed 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, AFTOTC instructors of Aerospace Studies must complete the following course.

MAFOATS002 AFROTC Assistant Professor of Aerospace Studies Instructor and Orientation Course. A 10-day, mission-essential course hosted by the Holm Center/CR, Maxwell AFB. 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. Major areas are learning theory, teaching methods, critiquing of student writing, speaking, and evaluating. 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 AFROTC 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 must complete the following course.

MAFOATS001 AFROTC NCO Orientation Course. A 10-day, mission-essential course hosted by the Holm Center/CR. 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 AFJROTC, the Air Force's high school citizenship training program. The Holm Center at Maxwell AFB oversees 869 AFJROTC units on high school campuses around the world. 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.

The AIS closed in October 2003. The school's closure disseminated 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 courses. The courses are more customized but maintain the core educational foundations, communication skills, instructional methods, evaluation, and instructional design. The curriculum continues to provide the students with 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.

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 are role models from the unit. 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 entire faculty.

Learning Outcomes. The graduate of AIC 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. They must know the components of the Air Force ISD model.
- deliver instruction. The graduate must comprehend how to 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, 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.

Curriculum. The AFJROTC 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 dependents high schools, for at least five years, to maintain their currency of teaching credentials and to provide updates on Air Force policy. Major curricular areas include learning theory, communication skills, teaching methods, and other current secondary education challenges and concerns. Students also receive AFJROTC instruction and guidance on curriculum, professional development, operations, instructor management, financial management, individual concerns, cyber campus, and the Cadet Inventory Management System. The course provides for maximum participation in learning and sharing of the best teaching practices through presentations, computer lab time, and small group cross-feed sessions. This is a required course as determined by the Air Force Officer

Accession and Training School Instruction (AFOATSI) 36-2004, *AFJROTC Instructor Management*, publication.

Eligibility. The course is open to retired USAF officers and noncommissioned 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.

Curriculum Summary

Course Title	Contact Hours
MAFOATS003 AFJROTC Academic Instructor Course	80
MAFOATS008 AFJROTC Instructor Recertification	32

Course Descriptions

MAFOATS003 AFJROTC Academic Instructor Course. This 10-day 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, preparation, and moderate research. Major curricular areas include learning theory, communication skills, teaching methods, lesson planning, and evaluation. Teaching methodologies include formal and informal lecture, guided discussion, teaching interview, 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, and legal issues and meet with subject-matter experts concerning instructional levels. They are introduced to secondary school challenges and concerns.

MAFOATS008 AFJROTC Instructor Recertification. This 4.5 day 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 currency of teaching credentials and provides 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, professional development, operations, instructor management, financial management, individual concerns, cyber campus, 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 AFOATSI 36-2004, *AFJROTC Instructor Management* publication.

IRA C. EAKER COLLEGE ACADEMIC INSTRUCTOR COURSE

Internet Address

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

Mission. *Produce newly assigned faculty to effectively plan, development, manage, and conduct instruction within the Eaker College.*

Faculty. AIS faculty must possess a bachelor’s degree and three or more years experience in civilian or military educational administration, psychology, testing, instruction, or related discipline.

Learning Outcomes.

- Demonstrate an ability to plan and develop lesson objectives including evaluation instruments.
- Demonstrate an ability to clearly communicate to achieve instructional objectives.

- Show and prove competence in using essential teaching skills that apply to most instructional situations and evaluate the achievement of learning outcomes.

Curriculum. Prepares faculty to instruct, plan, develop, and manage academic instruction within the Eaker College. It requires extensive reading, writing, and moderate research. Several instructional methods are taught.

Duration. The course length is 10 academic days.

Eligibility. The Eaker College faculty plan, develop, manage, and/or instruct students who attend this course.

Curriculum Summary

Course Title	Contact Hours
MCPD001 Eaker College Academic Instructor Course	80

Course Description

MCPD001 Eaker College Academic Instructor Course

80 Contact Hours

This course prepares faculty to instruct and generally manage instruction at the Eaker College. It requires extensive reading, 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 and directors and emergency operations center directors who develop, schedule, and conduct tailored courses to help attendees deal with critical leadership and management challenges.*

The seven courses conducted by the Commanders' Professional Development School (CPDS) include the USAF Wing Commanders' Seminar, the USAF Mission Support Group Commanders' Course, the USAF Maintenance Group Commanders' Course, the USAF Medical Group Commanders' Course, the USAF Operations Group Commanders' Course, the USAF Systems and Sustainment Group Commanders' Course, and the USAF Incident Management Course.

Faculty. CPDS faculty members must possess a bachelor's degree (any discipline) and three or more years experience in relevant functional command assignment.

Learning Outcomes.

- Illustrate updates on critical issues affecting themselves, 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 their immediate effectiveness as new commanders.

Curriculum. Prepare AF members for duty as wing and group commanders and directors and emergency operations center directors. The school is intended to help attendees deal with critical leadership and management challenges. The Wing Commanders' Seminar convenes five times each year. The Group Commanders' courses convene five times each year. The Air Force Incident Management Course is offered 15 times a year at Maxwell AFB, and 15 times each year at other selected locations.

Duration. The Wing Commanders' Seminar is one week in duration. The Group Commanders' courses are two weeks in duration.

Eligibility. The Air Force Colonels Group determines attendance at the Wing Commanders' Seminar and the Group Com-

manders' 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.

Curriculum Summary

Course Title	Contact Hours
MLMDC800 USAF Wing Commanders' Seminar	42.00
MLMDC 810 USAF Mission Support Group Commanders' Course	71.50
MLMDC871 USAF Maintenance Group Commanders' Course	70.00
MLMDC872 USAF Medical Group Commanders' Course*	*68.25
MLMDC873 USAF Operations Group Commanders' Course	51.00
MLMDC874 USAF Systems and Sustainment Group Commanders' Course**	**68.50
MLMDC813 USAF Incident Management Course	32.00

*The Office of the Surgeon General, US Air Force, designates 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 College 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.

**SAF/AQXD awards 40 continuous learning points towards ongoing acquisition professional development for the educational activity entitled USAF Systems and Sustainment Group Commanders' Course.

Course Descriptions

For CPDS course descriptions and other information, refer to the Web site at Air Force Portal, Organizational A-Z Index, select "I" and the Ira C. Eaker College, select ECPD Schools, and then select the Commander's School.

AIR FORCE HUMAN RESOURCE MANAGEMENT SCHOOL

Internet Address

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

Mission. *Provide world-class continuing education for the development and competence of Air Force personnel.*

The Air Force Human Resource Management School (AFHRMS) was established at Maxwell AFB in 1965 as the Air Force Professional Personnel Management School. In July 1977 the AFHRMS absorbed the former Civilian Personnel School, located at then Gunter AFB. The Civilian Personnel School, originally established in 1948 at Kelly AFB, Texas, was moved to Gunter in 1957. The AFHRMS is 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 MAJCOMS. In 1988 the school expanded the curriculum to address 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 its current name.

Faculty. The AFHRMS faculty must possess three or more years experience in civilian or military human resource positions.

Curriculum. Provides world-class continuing education for the development and competence of AF personnel in the human

resource management field. Courses are conducted one to five times each year, depending on demand.

Learning Outcomes.

- Summarize the tools to operate and successfully contribute to organizational effectiveness;
- Explain force development as a concept and practice;
- Give examples of professional and personal development; and
- Value distinctive contributions of human resource leaders and managers.

Duration. Courses vary in length from four to 14 days.

Eligibility. Requirements for participants vary for each course each year, depending on demand. Students can locate the course requirements on the Air Force Portal by selecting from the Web site AF Organizations, “I” for the Ira C. Eaker College, and ECPD schools.

Resident Curriculum Summary

Course Title	Contact Hours
MAFHRMS112 Advanced Employee-Management Relations Course	33
MAFHRMS127 Advanced Mediation Course	40
MAFHRMS140 Air Force Sexual Assault Response Coordinator Course	40
MAFHRMS408 Airman and Family Readiness Basic Course	40
MAFHRMS126 Basic Mediation Course	32
MAFHRMS121 Civilian Personnel Advisors Course	28
MAFHRMS110 Employee-Management Relations Course	28
MAFHRMS118 Equal Opportunity Directors Course	36
MAFHRMS411 Force Support Squadron Flight Chiefs Course	72
MAFHRMS412 Force Support Squadron Leadership Course	72
MAFHRMS119 Labor-Management Relations Course	68
MAFHRMS405 Manpower Staff Officer Course	109
MAFHRMS117 Resource Management Course	36

With the HQ AETC's 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, managing knowledge, and enabling continuous learning; and designing courses that incorporate the principles found in precision learning. By incorporating these key principles, the AFHRMS remains current, relevant, and academically credible.

Nonresident Curriculum Summary Web-Based/Blended Courses

Course Title	Contact Hours
Affirmative Employment Course (Basic)	3
Civilian Personnel Advisors Course	28
MAFHRMS121 Civilian Personnel Management Course	16
MAFHRMS110 Employee-Management Relations Course	40
Force Support Squadron Familiarization Course	8
MAFHRMS119 Labor-Management Relations Course	40
Military Personnel Management Course	16
MAFHRMS104 Position Classification	3
USAF Supervisor's Course	40

Course Descriptions

To access AFHRMS course descriptions and other information, visit the Web site at the Air Force Portal, Organizational A-Z Index, select "I" and the Ira C. Eaker College, select ECPD schools, and then 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 quality joint professional continuing education to DOD financial management personnel.*

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. (This group issued its report, called 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 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 Comptrollers. Then, in 1977 the PMCC became the DOD Professional Military Comptroller School.

The Professional Military Comptroller School continued to provide the PMCC 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 and Comptroller Course (DFMC). The school was simultaneously renamed the Defense Financial Management and Comptroller School. 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.

Faculty. DFMC faculty must possess a master's degree in finance, accounting, or related academic field and three or more years in financial management or similar experience.

Learning Outcomes.

- Demonstrate the ability to advise senior leaders by using enhanced strategic decision support techniques;
- Apply new techniques and concepts to improve personal leadership and interpersonal skills;
- Explain the impact of organizational relationships on the DOD mission;

- Appreciate the diverse financial management disciplines within DOD; and
- Illustrate contingency operation concepts and their impact on financial management.

Curriculum. Provide quality joint professional continuing education to DOD financial management personnel. The DFMC is held five times each year; the DDSC is held four times each year; the RFCC is normally held once each year; and the RFCC is currently in a nonactive status.

Duration. The DFMC is 20 class days in length; the duration of the DDSC is five class days; and, the RFCC is 10 class days in length.

Eligibility. The target grades for the DFMCs are O-4 and above; GS-12 (NSPS equivalent) 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. The target audience for the DDSC is O-4 and above; GS-13 (NSPS equivalent) and above; and E-8 and above. Students selected for this course should already possess a broad knowledge of the DOD FM environment, a strategic perspective, above average critical/creative thinking, and oral and written communication skills.

Students for the RFCC are selected and funded by their respective commands. Attendance is authorized for personnel outside the comptroller career area when the training requirement is assessed against positions and responsibilities in resource and associated fund management. Noncomptroller personnel application packets must include a statement, endorsed by the major command/agency comptroller, highlighting the benefits of attendance.

Curriculum Summary

Course Title	Contact Hours
Defense Financial Management Course (DFMC)	160
Defense Decision Support Course (DDSC)	35
Reserve Forces Comptroller Course (RFCC)	80

Course Descriptions

To access Defense Financial Management and Comptroller School course descriptions and other information, visit the Web site at the Air Force Portal, Organizational A-Z Index, select "I" and the Ira C. Eaker College, select ECPD schools, and then select the DOD Comptroller School.

USAF CHAPLAIN SERVICE INSTITUTE

Internet Address

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

Mission. *Educate and equip Air Force Chaplain Service Institute personnel to provide excellent spiritual care.*

On 1 July 1953 the US Air Force Chaplains' course was established at Lackland AFB, Texas, and placed under the Officer Basic Military course. The chaplains' course became part of the Officer Military Schools (OMS) in June 1955. Based on an Air Force authorization, the USAF Chaplain School was established in June 1960; however, it remained under OMS. From 1958 to 1965, judge advocates also reported to the Chaplain School for training. The Chaplain School became a separate unit and was placed directly under the commandant, Lackland Military Training Center, in February 1965. On 20 May 1966 the USAF Chaplain School was established at Maxwell AFB, Alabama, and assigned to Headquarters Air University.

The Chaplain Service Institute has a rich legacy of supplying resources in support of the ministry. The USAF Chaplain Service Resource Board was formed in July 1959. The USAF Chaplain Service Institute (CSI) was activated under the Ira C. Eaker Center for Professional Development on 31 October 1992. Technical training for chaplain assistants was transferred to Maxwell in September 1993 from Keesler AFB, Mississippi, under the *Air Force Year of Training* initiatives. 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. The USAF Chaplain

Service Resource Board remains collocated with the Chaplain Service Institute at Maxwell AFB, Alabama.

Faculty. CSI faculty members must possess a master's degree in divinity or equivalent field and be endorsed by their ecclesiastical body.

Learning Outcomes.

- Perform duties and responsibilities commensurate with the roles of chaplains and chaplain assistants;
- Demonstrate how chaplains/chaplain assistants provide for the free exercise of religion;
- Explain Expeditionary Air Force requirements and how to provide for ministry in the readiness environment; and
- Leverage teamwork to accomplish the Chaplain Service mission.

Curriculum. The curriculum provides the highest quality professional continuing education, technical training, and resources to enhance the free exercise of religion in the US Air Force. CSI conducts two basic chaplain courses, three intermediate chaplain courses, three wing chaplain courses, and three chaplain assistant apprentice courses each year. CSI generally offers four professional continuing education courses each year.

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 also 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 service.

Curriculum Summary

Course Title	Contact Hours
Basic Chaplain Course	240.00
Intermediate Chaplain Course	80.00
Wing Chaplain Course	80.00
Chaplain Candidate Course	80.00
Professional Continuing Education Courses	24.00
Chaplain Assistant Apprentice Course	238.50
Chaplain Assistant Craftsman Course	107.00

Course Descriptions

For CSI 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 College, select ECPD schools, and then select the Chaplain Service Institute.

NATIONAL SECURITY SPACE INSTITUTE

Internet Addresses

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

<https://www2.peterson.af.mil/nssi>

Mission. *The Academic Center of Excellence, providing responsive space professional continuing education.*

In October 2009 the National Security Space Institute (NSSI) was aligned under the Ira Eaker College for Professional Development, Maxwell AFB. However, it will continue to operate in Colorado Springs, Colorado. The Institute 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—Space 100, 200, and 300. The NSSI executes the Space 200

and 300 courses that are required in this program for levels 2 and 3 certification, respectively.

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 of experience in space-related operational duties.

Learning Outcomes. Upon completion of the Space Professional Continuing Education curriculum (Space 200 and 300), students will be able to do the following:

- provide expertise on and advocate for national-level, agency, DOD, and service space-related policy, strategy, doctrine, operations, acquisition, and international and domestic law, enabling senior military and government leaders to make informed decisions;
- critically analyze key operational and acquisition events in a space system's lifetime and their respective interactions with the operator, user, and acquirer, enabling senior military and government leaders to make informed decisions supporting national security objectives;
- provide space operations and acquisition expertise at the strategic and operational levels, enabling the best integrated space support to the war fighter; and
- participate in crisis action planning and joint operations using knowledge of national-level and DOD guidance, functional concepts, law, policy, joint doctrine, and Joint Operations Planning and Execution System (JOPES), enabling the best integrated space support to the war fighter.

Curriculum. Students learn about DOD, civil, commercial, foreign, and national space systems. The focus is on space strategy, strategic space power employment, and space system acquisitions. Space 200 is held 17 times a year; Space 300 is held 13 times a year.

Duration. Space 200 is 18 class days in length; Space 300 is 15 class days in duration.

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. Space 200 student must possess SPDP Certification Level-1 and have a minimum of 24 months space experience. Space 200 targets space professionals with 8–11 years of service. 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.

Curriculum Summary

Course Title	Contact Hours
Space 200	144
Space 300	120

Course Descriptions

Space 200. This course is a critical element of the Air Force's SPDP. The course prepares students for intermediate-level leadership roles within the military space community and is required to earn SPDP Level 2. The course focuses on space applications and employment in operational and tactical theaters; refreshes and provides greater depth on concepts taught in Space 100; provides an understanding of the design, development, and acquisition of space systems; and explores space asset capabilities, limitations and vulnerabilities, and associated application and employment in joint military operations.

Space 300. Space 300 is the NSSI's capstone course for space professional education. This course is designed to reinforce concepts from Space 200 while preparing students for leadership roles with the knowledge and understanding to address issues from a strategic perspective. It also provides a comprehensive background on national security space asset employment and

integration into joint military operations. It is a thinker's course, using guided discussion techniques to arm tomorrow's space leaders with the knowledge necessary to solve space problems bearing on national security.

JOINT FLAG OFFICER WARFIGHTING COURSE

Internet Address

<https://afkm.wpafb.af.mil/lemay-jfowc>

Mission. *The course prepares two-star officers of the four services for theater-level combat leadership. It is tailored to provide future theater combatant commanders, service component, and joint task force 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.

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.

Learning Outcomes. As directed by CJCSI 1800-01C, Annex E, Appendix M.

Curriculum. The course prepares two-star officers of the four services for theater-level combat leadership. It is tailored to provide future theater combatant commanders, service component and joint task force (JTF) commanders with a broad perspective of the strategic and operational levels of war. Instruction for the course comes from senior national-civilian and military representatives, flag officers serving as

combatant commanders, and retired, battle-tested officers. Retired 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 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.

Duration. The course is 10 academic days in length.

Eligibility. Per CJSCI 1800-01C, Annex E, Appendix M, and MOU between the four executive agents (2006), 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.

Curriculum Summary

MAAFNJ007 Curriculum (Learning*) Area	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 the 21st 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

8.50 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 situation
- 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

- Combatant commander's perspective and the role of subordinate commanders developing, deploying, employing, and sustaining military forces
- Roles, relationships, and functions of the president, secretary of defense, CJCS, Joint Chief of Staff, combatant commanders, and 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 21st Century Warfare

7 Contact Hours

- Describe how theater commanders, component commanders, or JTF commanders access information operations resources and develop responsive information operations plans
- Comprehend the impact of national agencies that support the theater commander's requirements for information operations on national security issues

- Evaluate 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
- Comprehend the importance of strategic communication in a multinational environment and the impact it has in shaping the information environment
- Evaluate 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

<https://afkm.wpafb.af.mil/lemay-cjfac>

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 Joint Force Air Component Commander (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.

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.

Learning Outcomes. As directed by CJCSI 1800-01C, Annex E, Appendix L.

Curriculum. The course prepares one-, two-, and three-star officers of all 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 the December period. The course is held at Maxwell AFB and, when practical, it travels to a major exercise, such as Blue Flag, for the final two days. If a major exercise is unavailable, the course attempts to 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 exception. The desired attendee mix is nine US Air Force, four US Navy, three US Marine, and two US Army flag officers.

Duration. The course is seven days in length.

Eligibility. Per CJCSI 1800-01C, Annex E, and Appendix 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.

Curriculum Summary

MCADRE004 Curriculum (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 Technology in 21st Century Warfare	5.00
Strategic Leader Development	7.00
Total	60.00

* CSJCI 1800-01C uses the term *Learning Area* vice *Curriculum Area*.

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 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 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 Technology in 21st 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

<https://afkm.wpafb.af.mil/lemay-cjface>

Mission. *The Combined Force Air Component Commander (CFACC) 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 CCFACC 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.

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.

Learning Outcomes. As directed by CJCSI 1800-01C, Annex E, Appendix L.

Curriculum. The course prepares one-, two-, and three-star 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.

The course is conducted annually during the summer. The course is held at Maxwell AFB and, when practical, it travels to a major exercise, such as Blue Flag, for the final two days. If a major exercise is unavailable, the course attempts to 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 exception. The desired attendee mix is five USAF, two US Navy, two US Marine, one US Army, and eight allied flag officers.

Duration. The course is seven days in length.

Eligibility. Per CJSCI 1800-01C, Annex E, and Appendix 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 NDU's CAPSTONE course, attendees should complete this congressionally mandated course before attending a component commander course.

Curriculum Summary

MCADRE007 Curriculum (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 Technology in 21st Century Warfare	5.00
Strategic Leader Development	7.00
Total	60.00

* CSJCI 1800-01C uses the term *Learning Area* vice *Curriculum Area*.

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 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

- 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 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 Technology in 21st 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

<https://afkm.wpafb.af.mil/lemay-sjioac>

Mission. *The course prepares selected general/flag officers and senior executive civilians of all services and 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.

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.

Learning Outcomes. As agreed upon by the four services.

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 combat-

ant commanders to target adversary decision making while protecting US prerogatives. The course also includes inter-agency attendees. The course is tailored to provide senior leaders with a broad perspective of information operations at the joint theater (operational) and national (strategic) level of war.

Attendees study war fighting and doctrine as they relate to information operations concepts and principles. Course objectives 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; to review joint and service doctrine applicable to the planning and execution of information operations; to analyze the means to effectively communicate US government capabilities and intentions as an important method of combating the plans of US adversaries; to examine the current and potential role of the inter-agency and nongovernment organizations; to demonstrate the integration of information operations into contingency and crisis plans and evaluate the outcomes and lessons; to describe information operations tools, illustrate outcomes of their employment, and explain lessons from their employment; and to illustrate 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) members.

Duration. The course is 4.5 academic days in length.

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

Curriculum Summary

MCADRE006 Curriculum (Learning*) Area	Contact Hours
The Role of Information and Technology in 21st 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 & Policy Implications of Information Operations	2.00
Cyberwarfare	7.00
Coalition Perspective	1.25
US STRATCOM Perspective	2.75
Combatant Command Perspective	3.50
Total	40.00

*CSJCI 1800-01C uses the term *Learning Area* vice *Curriculum Area*. Although SJOAC is not yet included in CSJCI 1800-01, the four services agreed on these learning areas to be included in the instruction.

Learning Area Descriptions

The Role of Information and Technology in 21st 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 JP 3-13
- 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 analyze 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 forces support to public diplomacy. What are the challenges and factors that must be accounted for during planning and execution? and recount 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 and the “platforms” US forces use to mitigate and negate the threat
- How information assurance enables other war-fighting domains

Strategic Communication

2.50 Contact Hours

- DOD perspective regarding strategic communication
- The near-instantaneous global nature of information and the implication in a multinational environment
- The importance of strategic communication and the importance of 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 commanders, component commanders, or JTF commanders must optimally leverage their public affairs resources and develop a strategic response
- Specific examples of strategic communication employment: evaluate the 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 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.
- This course show 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.
- It also identifies recent public diplomacy efforts and gives an assessment of effectiveness, lessons learned, and its efficacy.

- The course also indentifies 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

Cyberwarfare

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, DOD, US Strategic Command [STRATCOM], etc.)
- Mutual deterrence strategy in cyber warfare.

Coalition Perspective

1.25 Contact Hours

- The complexities associated with leadership in a coalition environment
- C2 challenges facing the joint/combined force component commander, including the personalities of

external principals (CFC, 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 AOR

US Strategic Command Perspective 2.75 Contact Hours

- STRATCOM Unified Command Plan mission
- Current issues with synchronization and integration of DOD information operations and the impact on the war fighter
- Current competency constructs and how they may require change in order 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 considerations commanders must consider in COA development
- Examples of information operations asset employment and an evaluate their effectiveness at the strategic, operational, and tactical levels
- Experiential challenges for the employment of information operations

AIR FORCE SENIOR EXECUTIVE WARFIGHTER PERSPECTIVE SEMINAR

Internet Address

<https://afkm.wpafb.af.mil/lemay-sewps>

Mission. *The Air Force Senior Executive Warfighter 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.*

The LeMay Center hosts the Air Force Senior Executive Warfighter Perspective Seminar (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 US service 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 4.5 days in length.

Eligibility. SES members.

Curriculum Summary

Curriculum (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 21st Century	5.00
Senior Executive Roles	6.25
Total	35.00

*CSJCI 1800-01C uses the term *Learning Area* vice *Curriculum Area*. Since LeMay/WEF follows the format in its four joint courses, this approach was followed for AFSEWPS.

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 21st Century

5 Contact Hours

- The requirements necessary to collect, collate, and disseminate intelligence information
- The nature of warfare in the information age, the role of air, space, and cyberspace 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

CONTINGENCY WARTIME PLANNING COURSE

Internet Address

<https://afkm.wpafb.af.mil/lemay-cwpc>

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 grades E-5 through O-5 in the art and science of contingency war planning. Nearly 700 students complete 10 programmed courses each year.

Faculty. The course is instructed by a diverse group of instructors with a wide-range of planning experience in logistics, engineering, personnel, or operational specialties.

Learning Outcomes.

- Know how the services and other functional areas contribute to contingency planning
- Comprehend the chain of command, the authorities, structure, and 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 joint planning process (contingency and crisis-action planning) and AF planning at the base level
- Demonstrate joint and AF planning skills through various application exercises

Curriculum. The course provides a macro view of the contingency and crisis-action planning processes from both joint and USAF perspectives. Other topics include unit readiness assessment, mobilization, expeditionary site planning, and command relationships. Students must successfully pass two progress checks to complete the course.

Duration. This course is 10 academic days in length.

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.

Curriculum Summary

MCADRE 002 Curriculum Area	Contact Hours
IP 1000 Orientation	8.0
IP 2000 Foundation for Planning	8.0
IP 3000 Systems	4.5
IP 4000 Planning	12.5
IP 7000 Exercises	24.0
Total	57.0

Course Descriptions

IP 1000 Orientation

8 Contact Hours

Presents an overview of the Contingency Wartime Planning Course, including course objectives, curriculum, methodology, and faculty introduction. 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

Provides an overview of key topics that form the foundation of planning and demonstrates how they support and are used in contingency planning. Overview of topics include national security strategy, command relationships, AF doctrine, mobilization, functional area managers, status of resource and training system (SORTS), and designed operational capability statements.

IP 3000 Systems

4.5 Contact Hours

Introduces key planning-related systems, including the joint strategic planning system, deliberate crisis action planning execution system, war and mobilization plan, joint operation planning and execution system (JOPES), and the planning programming and execution system. Describes how those systems are used in the contingency and crisis action planning process.

IP 4000 Planning

12.5 Contact Hours

Provides an overview of the joint strategic capabilities plan, time-phased force and deployment data (TPFDD) development, JOPES programs, and support and transportation planning. Describes prepositioned war reserve materiel (WRM) assets and how those assets relate to support planning, the structure of a force package, and how the manpower and equipment force packaging system works. Describes the base-level deployment-planning process, and base support and expeditionary site planning. Explores the concepts of crisis-action planning and campaign planning.

IP 7000 Exercises

24 Contact Hours

Students demonstrate knowledge and comprehension through a series of 10 major exercises. These exercises reinforce understanding of such topics as TPFDDs, TPFDD letters of instruction, force planning for aviation and support forces,

SORTS, and AEF reporting tools, expeditionary site planning and AEF posturing and coding. The course concludes with a comprehensive crisis-action planning exercise that involves the facets of contingency planning.

JOINT AIR OPERATIONS PLANNING COURSE

Internet Address

<https://afkm.wpafb.af.mil/lemay-jaop>

Mission. *Prepare students to serve on the staff of a joint forces air component commander (JFACC) and to educate students 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). Classes are offered eight times each year with an enrollment of 30 to 40 students per class. Attendees are normally captains through colonels.

Faculty. A diverse group of experienced personnel with planning experience in the operational community instruct the course.

Learning Outcome. Develop an effective joint/combined air operations planner.

Curriculum. Participants gain in-depth familiarity with the fundamental concepts, principles, and doctrine required to develop a joint or combined air operations plan. Students focus on the joint air estimate process at the operational level of war.

Duration. The course is 10 academic days in length.

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 each class for these personnel.

Curriculum Summary

MCADRE 003 Curriculum Area	Contact Hours
Block I Basic JAOP Concepts	15.0
Block II JAOP Case Studies	5.0
Block III Joint Air Estimate Process Development	36.0
Total	56.0

Course Descriptions

Block I Basic JAOP Concepts **15 Contact Hours**

Block I defines the basic concept related to the joint air operations planning process. It includes intelligence, logistics, weaponeering, and an effect-based approach to operations.

Block II JAOP Case Studies **5 Contact Hours**

Block II presents various case studies relative to the joint air operational process followed by student discussion.

Block III Joint Air Estimate Process Development **36 Contact Hours**

Block III presents the joint air estimate process, which involves stepping through the six phases related to the process. This block provides students the opportunity to demonstrate what they have learned by using the practical exercises.

INFORMATION OPERATIONS FUNDAMENTALS APPLICATION COURSE

Internet Address

<https://afkm.wpafb.af.mil/lemay-iofac>

Mission. *Support the combatant commanders by providing students a broad understanding of information operations.*

The LeMay Center hosts the Information Operations Fundamentals Application Course (IOFAC) that educates students on the fundamental principles of information operations in accordance with AFDD 2-5, *Information Operations*. Classes are offered eight times each year with an enrollment of 30 to 40 students for each class.

Faculty. The course is taught by personnel experienced in the information operations realm, including intelligence, communications, and operational specialties.

Learning Outcome. This course helps students to develop an awareness of the application of information operations across the spectrum of conflict.

Curriculum. The course provides students with 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. The course is taught at the college level through lectures, seminars, practical exercises, readings, and computer-based lessons to help students gain a better understanding of how current and emerging technologies affect decision making.

Students must complete the following for the entire five-day course

- A 33-question multiple-choice survey, conducted at the beginning and end of the course;
- Successful assimilation of course material measured by the difference between the two surveys;
- A post-survey review of the second survey, with question/answer and discussion to ensure 100 percent comprehension of the material presented; and
- Application of material learned during six seminar sessions that consist of videos, guided discussions, and two major exercises:
- Network Defense and Information Operations Exercise. Assessment consists of instructor oversight, guided

discussion, question/answer, demonstration, and performance is scored via computer modeling with expected group rating of 90 percent, and

- Information operations exercise success measured through correct presentation of material and responses to faculty questions.

Duration. The course is five academic days in length.

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.

Curriculum Summary

MCADRE 005 Curriculum Area	Contact Hours
Block I Major Components of Information Operations	10.0
Block II Environmental Factors of Information Operations	10.0
Block III Applications of Information Operations	15.0
Total	35.0

Course Descriptions

Block I Major Components of Information Operations

10 Contact Hours

Block I defines information operations using AFDD 2-5 as its primary reference. It also provides the student 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

10 Contact Hours

Block II presents environmental factors that can influence and affect the conduction of information operations, and distill

how these elements can be applied across the entire military spectrum.

**Block III Applications of Information
Operations**

15 Contact Hours

Block III presents instruction on current information operations applications and provides students the opportunity to demonstrate what they have learned by using practical exercises.



DIRECTORATE OF EDUCATION LOGISTICS AND COMMUNICATION

Internet Address

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

Mission. *To develop, deliver, and manage distance learning for US air and cyberspace forces.*

Air University, 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, 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 AU's nonresident PME and PCE courses. The A4/6 is a comprehensive DL organization accredited by the Distance Education and Training Council since 1975.

The Air Force extension course program dates to the beginning of the Air Force itself. AU has served the DL needs of the Air Force since 1947. The program became one of AU's professional specialized schools in 1950 and was named the Extension Course Institute (ECI). ECI provided voluntary, non-resident study courses for Air Force active duty and reserve forces. For many years ECI was the largest correspondence school in the United States. In 2000 ECI became part of the Air Force Institute for Advanced Distributed Learning (AFIADL). In 2008 AFIADL merged with Air University Information Technology and became the Directorate of Education Logistics and Communication (A4/6) to ensure AU schools were supported with the right information and communication services to meet learning objectives. Each year this directorate administers approximately 350 courses, 90,000 WAPS packages, and 200,000 examinations, while serving more than 170,000 students.

The traditional paper-based DL courses 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, and some are available on the Air University Online site. 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. All A4/6 personnel facilitate 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. The 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 350 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 DL resources and guides.

Air University Television

Air University Television (AUTV) is AU's dedicated television facility, the Air Force's southeastern regional television production center, and one of five Air Force DL uplink (broadcast) sites. From a full-service, \$3 million physical plant, AUTV provides video production and editing, DVD, and CD-ROM production, cable and LAN distribution, Video-on-demand and live streaming for audio/video internet distribution, satellite uplink and

downlink services, and television engineering consultation to support AU's professional military and continuing education courses locally and Air Force-wide.

As a part of the Air Technology Network, AUTV provides satellite uplink and downlink services. Courses are transmitted from the broadcast studio to downlink sites throughout DOD and the federal government. Downlink signals are distributed through Air University Cable Network (AUCN) using both a copper RF network and live streaming via the base network. AUTV also provides digitized video clips for inclusion in interactive courseware.

Production personnel produce broadcast quality videotape programs for a wide range of applications, from short video supplements to faculty lesson plans, to full-length programs for widespread distribution. Video programming to support daily classroom needs is aired over the AUCN. The AUCN signal is received in AU classrooms on Maxwell AFB and Maxwell-Gunter Annex. Presentations in each school's main auditorium are distributed live or recorded for delayed playback and entry into the video archive.

Engineering personnel provide the technical services required to maintain and repair the more than 1,400 pieces of video equipment in the AUTV facility and its subsystems throughout the Maxwell-Gunter community. AUTV engineers provide the technical expertise required to maintain and repair multimedia auditoriums and classrooms throughout Maxwell-Gunter academic institutions. AUTV engineers also provide consultations to customers planning new requirements or modifications of existing multimedia presentation systems.

ACADEMIC SUPPORT

Several organizations at Maxwell AFB provide academic and historical support for the AU resident and DL 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 Force Research Institute

Internet Address

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

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) officially activated as an independent, unique organization at AU on 19 May 2008. AFRI supplements AU's and the Air Force's idea-generating capacity and supports air, space, and cyberspace research inquiries from the chief of staff to other top-level decision makers throughout the DOD and other facets of the defense industry.

AFRI enhances long-term studies, supports student research, and conducts specialized research projects for the Air Staff and the DOD to enhance national security and to provide relevant research for the United States Air Force. AFRI also partners with defense industries for specialized research projects. Much of AU's unclassified graduate-level research is available for review. AFRI comprises four divisions.

The Research Division conducts independent operational- and strategic-level research of interest to the Air Force. 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. This is accomplished through annual research requests from the chief of staff of the Air Force and research topics generated from other Air Force and DOD senior leaders concerning some of the most pressing issues facing the US military. In addition, the staff continues research into its areas of special concentration on topics of importance to the Air Force. The Research Division generates and publishes books, original studies, research pamphlets, monographs, and papers on topics of interest to AF leaders and those related to current and future air, space, and cyber operations.

The Outreach Division develops and publishes several products in print and electronic formats. The publications include

Strategic Studies Quarterly, an Air Force-sponsored strategic forum for military, government, and academic professionals. *Strategic Studies Quarterly* publishes articles of interest to USAF and national leaders through the critical examination of and debate about warfare, strategy, national and international security, and defense policy. The *Air & Space Power Journal*, the professional journal of the United States Air Force, has appeared since 1947 and has grown to include six language editions; it also appears in electronic-only *Chronicles Online Journal* forums for exchanging ideas about operational level air, space, and cyber power matters. *The Wright Stuff* is a bi-weekly discussion forum intended to generate thoughtful discussion and debate regarding aspects of national security by highlighting scholarly thought from across the Air Force and beyond.

The Outreach Division also supports Air University research efforts through the annual AU Call for Topics and the AU Research Information System database. The Outreach Division also publishes the annual *AU Research Bulletin*.

The Engagement Division extends the reach of AFRI by identifying, developing, and sustaining relationships with other government and academic communities, including universities and think tanks. This effort can also include collaboration with international partners. One path to that end is through hosting, co-hosting, and participating in conferences with various partners to promote the expansion and development of concepts, issues, and topics of interest to Air Force leaders and policymakers.

The Air University Press Division serves as the professional publishing arm of AU. Press publications promote creative thought on, and appreciation for, the value of air-, space-, and cyberpower. The Air University Publication Review Board assists the press in acquiring manuscripts and advising on the academic and research value of potential manuscripts. The press is a leading not-for-profit publisher on air-, space-, and cyberpower doctrine and national security. Information on press publications is available through the *Air University Press Publications* catalog—in hard copy and electronically at <http://aupress.au.af.mil> and on the Air Force Portal.

Air Force Enlisted Heritage Research Institute

Internet Address

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

Mission. *Support 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, noncommissioned officer in charge of the research and the heritage center, client support administrator, and a curator. The AFEHRI provides curriculum and student support to all facets of EPME and Airman Leadership Schools. It also provides secondary student support to the USAF First Sergeant Academy and USAF Historian Development Course. It 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.maxwell.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 in 1949 to support AU and is located adjacent to the Muir S. Fairchild Research Information Center. 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 70 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, Operation Desert Storm, the air war over Serbia, and Operations 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.

Complementing the unit histories, the agency houses several special collections, with some dating back to the early 1900s. These collections include historical monographs and studies; more than 2,000 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 2-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.

The agency receives historical reports and information from Operations Noble Eagle, Enduring Freedom, Iraqi Freedom, and other Air Force operations. Its historical collection is readily available to AU students, faculty, and staff. In addition, agency staff members provide research and advisory services for AU students to assist them 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.

AFHRA staff members routinely take 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.

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 its Registrar Services Branch, the registrar provides a 30-year archival data trail for AU schools, produces transcripts for graduates of those schools, and serves as admissions officer

for AWC, ACSC, SAASS, and the USAF TPS master's degree programs. Registrar Services enrolls distance education students and produces their completion certificates and diplomas. The Registrar Support Branch 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 the "hub" for providing historical and current data on student admissions and enrollments. The Technology Branch provides support 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 graduate records to provide PME graduate and developmental education data.

Muir S. Fairchild Research Information Center

Internet Address

<http://au.af.mil/au/aul/lane.htm>

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, 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 509,000 military documents, 496,000 monographs and bound periodical volumes, 431,000 maps and charts, and 150,000 military regulations and manuals.

MSFRIC sits at the center of Chennault Circle, Maxwell AFB. On 19 January 2007 Air University Library was redesignated the Muir S. Fairchild Research Information Center. The library

building, Fairchild Library, is named after 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 contemporaneously on the library’s Web page. Published since 1949, the *Air University Library Index to Military Periodicals* is searchable in the online catalog, accessed through the center’s Web site.

Electronic information technologies are critical to the delivery of library resources and services. A third-generation integrated library system automates identifying, locating, and circulating library-owned materials. A robust Web site provides Internet access to the Special Bibliography Series, other PME curriculum-support materials, map and image sites, full-text journals, e-books, newspapers, online databases, and links to key Web sites. 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.

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ACRONYMS AND ABBREVIATIONS

A4/6	Directorate of Education Logistics and Communication
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
AFDC	Air Force Doctrine Center
AFDD	Air Force Doctrine Document
AFEHRI	Air Force Enlisted Heritage Research Institute
AFEWT	Air Force Educational Wargaming 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
AFMS	Air Force Medical Service
AFOATS	Air Force Officer Accession and Training Schools
AFPC	Air Force Personnel Center
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
AFSC	Air Force Specialty Code
AFSNCOA	Air Force Senior Noncommissioned Officer Academy
AFWI	Air Force Wargaming Institute

AGA	Alabama Goodwill Ambassadors
AIC	Academic Instructor Course
ALS	Airman Leadership School
ANG	Air National Guard
AOC	air operations center
AOR	area of responsibility
AP	Air, Space, and Cyberspace Power Studies
ARCS	Air Reserve Component Seminar
ARPS	Aerospace Research Pilot School
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
AUTV	Air University Television
AWC	Air War College
AWP	air web planner
BOT	Basic Officer Training
BT	Blue Thunder
C/JAOC	combined/joint air operations center
C/JFACC	combined/joint force air component commander
C/JFC	combined/joint force commanders
CADRE	College of Aerospace Doctrine, Research and Education
CAPSTONE	crowning achievement, culmination or finishing touch
CCAF	Community College of the Air Force
CENTCOM	US Central Command
CFACC	combined forces air component commander
CFC	combined forces command
CFP	check flight phase
CGO	company grade officer

CJCSI	Chairman, Joint Chiefs of Staff Instruction
CLC	Chief Master Sergeant Leadership Course
CLX	Combat Leadership Exercise
COA	courses of action
COIN	counterinsurgency
CONUS	continental United States
COT	Commissioned Officer Training
CSAF	chief of staff of the Air Force
CSI	Chaplain Service Institute
CWG	Capstone War Game
CWPC	Contingency Wartime Planning Course
DDS	service doctrine development
DDSC	Defense Decision Support Course
DFMC	Defense Financial Management Course
DFM&CS	Defense Financial Management & Comptroller School
DL	distance learning
DOD	Department of Defense
DOE	design of experiments
DSN	Defense Switched Network
ECI	Extension Course Institute
ECPD	Ira C. Eaker College for Professional Development
EHRI	Air Force Enlisted Heritage Research Institute
EPME	enlisted professional military education
EPMEIC	Enlisted Professional Military Education Instructor Course
ETCA	Education and Training Course Announcements
EW	electronic warfare
FM	financial management
FS	Foundations of Strategy
FTN	flight-test navigator
FTT	flight-test techniques
GMC	General Military Course

GOE	Gathering of Eagles
GPA	grade point average
GS	global security
HQ AETC	Headquarters Air Education and Training Command
ICL	institutional competency list
ID	intelligence department
IDE	Intermediate Developmental Education
IFAST	Integration Facility for Avionics System Testing
ILE/ILE EX	Intermediate Level Education/Exercise
IMS	international military student
IN	Directorate of Intelligence
IOFAC	Information Operations Fundamentals Applications Course
IOP	instruments of power
IOS	International Officer School
ISD	Instructional Systems Development
ISR	intelligence, surveillance, and reconnaissance
JAEX	Joint Air and Space Exercise
JAOC	joint air operations center
JAOP	joint air operations plan
JAOPC	Joint Air Operations Planning Course
JF	joint forces
JFACC	joint force air component commander
JFC	joint force commander
JFOWC	Joint Flag Officer Warfighting Course
JLASS	Joint Land, Aerospace, and Sea Simulation
JMO	joint military operation
JOPES	Joint Operations Planning and Execution System
JP	joint planning
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
LC	Leadership and Command
LDS	Leadership Development Simulation
MAJCOM	major command
MEDOD	management education Department of Defense
MILDEC	military deception
MOU	memorandum of understanding
MSFRIC	Muir S. Fairchild Research Information Center
NATO	National Atlantic Treaty Organization
NCACS	North Central Association of Colleges and Schools
NCO	noncommissioned officer
NCOA	Noncommissioned Officer Academy
NDU	National Defense University
NetD	network defense
NRO	National Reconnaissance Office
NS	International Security Studies
NSC	National Security Council
NSDM	National Security and Decision Making
NSF	National Security Forum
NSPS	National Security Personnel System
OLMP	Online Master's Program
OMS	officer military schools
OPFOR	operating force
OTS	Officer Training School
PACOM	Pacific Command
PCE	professional continuing education
PMCC	Professional Military Comptroller Course
PME	professional military education
POC	Professional Officer Course

PS	Probability and Statistics
PSP	professional studies paper
PSYOP	psychological operations
PT	practice teaching
RCOT	Reserve Commissioned Officer Training
RCS	Regional and Cultural Studies
RE	research/electives
RFCC	Reserve Forces Comptroller Course
SAAS	School of Advanced Airpower Studies
SAASS	School of Advanced Air and Space Studies
SACS	Southern Association of Colleges and Schools
SAW	School of Advanced Warfighting
SC	Solo Challenge
SCI	sensitive compartmented information
SES	Senior Executive Services
SIMWAR	simulated warfare
SIWAC	Senior Information Warfare Applications Course
SJIOCAC	Senior Joint Information Operations Applications Course
SNCOA	AF Senior Noncommissioned Officer Academy
SOC	Squadron Officer College
SOCOM	US Special Operations Command
SOF	special operations forces
SORTS	Status of Resource Training System
SOS	Squadron Officer School
SPDP	Space Professional Development Program
SSO	Special Security Office
SSTR	security, stability, transition, and reconstruction
STRATCOM	US Strategic Command
TDOS	theory, doctrine, objective, and strategy

TMC	Test Management Course
TMP	test management project
TOEFL	Test of English as a Foreign Language
TPFDD	time-phased force & deployment data
TPS	Test Pilot School
<i>UCMJ</i>	<i>Uniform Code of Military Justice</i>
UK	United Kingdom
US	United States
USAF	United States Air Force
USC	United States Code
VISTA	variable-stability in-flight simulator test aircraft
WA	Warfighting Applications Directorate
WAPS	Weighted Airmen Promotion System
WE	Warfighting Education
XNBP	Exercise in National Budget Priorities



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