Air University Board of Visitors
15-16 November 2022

Convene Public Meeting and
Federal Register Announcement

- Dr. Shawn P. O’Mailia
Call to Order
Welcome and Introductions

- Dr. Judith L. Bonner, Chair

Air University Opening Remarks and Charge to AU BoV

- Lt Gen Andrea D. Tullos
  Commander & President
Air University Heritage

**Air Corps Tactical School (ACTS)**
- Est. 1920 at Langley Field, VA
- Moved to Maxwell Field, AL in 1931
- Developed strategic bombing doctrine
- From 1931-1941: ACTS produced 1,091 graduates
- AU est. 1946 to carry on ACTS traditions

“…this system of schools must take into account an entire new world of war fighting … it is mandatory that the Army Air Forces school system be brought up to the highest standards of modern education…”

- General Muir S. Fairchild

**Vision**
The intellectual & leadership-development center of the Air & Space Forces

**Mission**
Educate & develop Air, Space & Cyberspace warrior leaders in support of National Defense Strategy
Air University

Strategic/National Guidance and Linkages

AU Strategic Priorities

**People:** Attract, Develop, Assign & Professionally Advance Faculty, Staff & Students

**Production:** Assess, Educate, Train and Deliver Leaders the DAF Needs

**Curriculum/Scholarship:** Be Agile, Relevant & Responsive to National Defense & DAF priorities

**Infrastructure:** Update & Modernize the Physical & Virtual Workspace

**Quality of Life:** Make AU a preferred destination for faculty, staff, students & families

Air University Locations

For exact locations, check out the Wings GSU Locator [https://holmcenter.com/locator]
Air University Locations

Accessions Locations

AFROTC: 145 Colleges & Universities
JROTC: 870 High Schools

For exact locations, check out the Wings GSU Locator
[https://holmcenter.com/locator]
AU Personnel
Total: ~4,200

AU Faculty
1,496
- Civilian: 420
- Officer: 835
- Enlisted: 241

70% military – 30% civilian

FY22 Graduate Data

Degree
- Non-Degree: 60,512
- Accessions: 2,233
- Accessions: 2,160

Non-Degree
- Associates: 12,450
- Masters: 626
- Doctorate: 18

Accessions
- Off. Training School (OTS): 2,233
- AFROTC: 2,160

Total Graduates: 111,375

The Intellectual and Leadership-Development Center of the Air and Space Forces
### AU Missions

<table>
<thead>
<tr>
<th>Professional Military Education</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Airman Leadership School</strong></td>
</tr>
<tr>
<td>Supervisory Skills</td>
</tr>
<tr>
<td>68 Schools</td>
</tr>
<tr>
<td>~19,000 In-residence</td>
</tr>
<tr>
<td>~5,400 DL grads</td>
</tr>
</tbody>
</table>

30,000+ Enlisted actively enrolled

13,000+ Officers actively enrolled

PME is 28% of the AU mission

31,286 Graduates (FY22)
### Professional Continuing Education

**Supports Functional Requirements**

- Civil Engineer
- Chaplain
- Finance
- Logistics

**Supports Stakeholder Requirements**

- PCE is 33% of the AU mission
- 232 In-resident / 136 DL courses
- Graduates: 37,472 (FY22)

<table>
<thead>
<tr>
<th>Field</th>
<th>In-resident</th>
<th>DL Courses</th>
</tr>
</thead>
<tbody>
<tr>
<td>Nuclear</td>
<td>203</td>
<td>124</td>
</tr>
<tr>
<td>Cyber</td>
<td>124</td>
<td>25</td>
</tr>
<tr>
<td>Logistics</td>
<td>12</td>
<td>4</td>
</tr>
</tbody>
</table>

### Leader Development

**23% of the AU mission**

- 24 In-resident / 8 DL courses
- Graduates: 25,432 (FY22)

- First Sgt Academy
- O-6/SEL PCT
- LDC
- Civ Dev School

- 3x Planning & Staff Courses
- 4x Senior Officer Courses

The Intellectual and Leadership-Development Center of the Air and Space Forces
Degree Programs

- Associates Degree Programs
  - Community College of the Air Force
  - Civilian Associate Degree Program

- Masters Degree Programs
  - Resident Officer Professional Military Education
  - Online Masters Program
  - Air Force Institute of Technology
  - Blue Horizons
  - School of Advanced Air & Space Studies

- PhD Degree Programs
  - School of Advanced Air & Space Studies
  - Air Force Institute of Technology

12% of the AU mission

The Intellectual and Leadership-Development Center of the Air and Space Forces

International Partners

Mission: Prepare & support international military students & families for AU programs; partner with international leaders through engagement & outreach

Prepares International Officers to:
- Perform academically in the U.S. PME environment
- Understand U.S., its people, political systems, institutions, & way of life
- Understand U.S. Military missions, organizations, & terminology

238 International Military Students from 87 Partners in 2022
463 total international family members

SECDEF directed 50% increase in International PME attendance by 2027

The Intellectual and Leadership-Development Center of the Air and Space Forces
Doctrine, Lessons Learned, and Wargaming

**Doctrine**
- Codified proven best practices
- Respond quicker & think about larger contextual issues
- Tiered-levels: Service, Joint, Multi-Service, & Allied

**Lessons Learned**
- Capitalize on experiences
- Gather observations & validate
- Insight feeds: doctrine, policy, training, education, budgeting
- Feed into the Joint process

**Wargaming**
- 125 annual events
- 4,800 participants annually
- Independent Networks & VTC
- 25 configurable rooms
- Classified facilities

The Intellectual and Leadership-Development Center of the Air and Space Forces

Accessions & Citizen Development

**Air University produces:**
- 78% of all Active-Duty Line Officers
- 100% of all Air National Guard, Reserve, & Active-Duty Non-Line Officers

**4% of the AU mission** (OTS & AFROTC FY22 grads)
- OTS: 2,160 grads / AFROTC: 2,233 grads

"We Build Leaders"

**AF Junior Reserve Officer Training Corps**
- Citizenship & Character Development
- Concurrent with high school path
- 86K+ participants at 870 locations
- 60% of cadets are minorities, 42% female
- Flight Academy & Leadership Scholarship

**AF Reserve Officers Training Corps**
- 145 Detachments in 47 states
- 1,200 total universities & colleges
- 47 states, DC, & Puerto Rico
- Officer training concurrent w/college
- Field Training here at Maxwell AFB

**Officer Training School**
- Post college-graduate program
- 1 program: Active Duty, Guard, Reserve
- 8.5-week Course w/ 5-week offramp
- Line & Non-Line (medical, lawyer, chaplain) classes all start together
Scholarship, Research, and Outreach

Research Task Forces
- Intelligence, Surveillance & Reconnaissance
- Resilience
- iRTF (Innovation)
- Russia Strategic Initiative
- Innovations in Learning Science (AR/VR)
- Cyber (a version at AWC only)
- ACTS 2.0 Ideas and Weapons (AFRL)

AFIT Centers
- Space Research & Assurance
- Cyberspace Research
- Autonomy & Navigation Technology
- Operational Analysis
- Directed Energy
- Technical Intelligence Studies & Research
- Scientific Test & Analysis Techniques

Great Power Competition  ➔  Strategic Competition  ➔  Integrated Deterrence

AU/CC: The curriculum in every school, college, and center within Air University will be agile, relevant, and responsive to our Nation’s priorities. Graduates will also leave with an understanding of emerging concepts/systems such as ACE, JADO, and ABMS.

The Intellectual and Leadership-Development Center of the Air and Space Forces
The Intellectual and Leadership-Development Center of the Air and Space Forces

Focus on China & Russia

- Addresses ever-shifting dynamics of the global political and military landscapes
- Most significant overhaul of Professional Military Education since the Cold War
- SECDEF directed 50% of OPME focus
- VCSAF directed 60% overall; 40% China

Initiatives

- Strategic Competition
- Space Warfighting Education
- Innovation
Chinese Aerospace Studies Institute

**Research**
- Native language sourced research
- Topic-focused articles
- Organizational mapping
- Research portal and database

**Educate**
- China-focused instruction across enlisted/officer PME
- PME electives
- Expert speakers

**Enable**
- Supports DAF and joint doctrine development
- Supports PACAF & INDOPACOM plans development & reviews

**Engage**
- Congressional testimony
- Maintains relationships with regional Allies & partners
- Establishes relationships with Chinese government & aerospace leaders

**Experts**
- All Mandarin Chinese-capable staff
- 2 PhDs on staff
- Able to support across all classification levels
- CASI Associates program for outside experts

Website: [https://www.airuniversity.af.edu/CASI/Article-Display/Article/1611279/china-aerospace-studies-institute-casi-mission/](https://www.airuniversity.af.edu/CASI/Article-Display/Article/1611279/china-aerospace-studies-institute-casi-mission/)

Watch all available CASI videos on their YouTube website: [https://www.youtube.com/channel/UCT9AMtRIkHlUzpMXKSB0nEA](https://www.youtube.com/channel/UCT9AMtRIkHlUzpMXKSB0nEA)

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**Space Warfighting Education**

Delivers institutional developmental education, develops USSF officer accessions & executes advanced education programs in order to prepare USSF forces and designated joint and allied partners to prevail in a CDO, all-domain environment

- Activated U.S. Space Force Delta 13
- OPME:
  - ACSC: Schriever Space Scholars x4
  - AWC: West Space Seminar
  - AY24: In source selection for civilian partnership with IDE/SDE
- EPME:
  - Vosler NCOA transferred
  - USSF SNCOA stood up at Vosler
  - PCE: NSSI transferred; added O-5 PCT
  - O-6 PCT transferred
  - USSF will continue to participate as a joint Service; and host joint Services
AUiX and MGMWERX

Connects AU faculty, staff & students with partners in DoD, academia & industry... identifying opportunities for collaboration & for developing new capabilities, strategies & technologies.

Facilitates and accelerates collaboration with mission partners, & conducts experimentation with emerging technologies, to solve real-world Air Force problems.

The Intellectual and Leadership-Development Center of the Air and Space Forces

Innovator Workshops:
3-day TDY outreach to equip Spark Cells and participants with innovation mindset, methodology, and common lexicon.

So Far:
- Nellis
- Hurlburt
- Grand Forks
- Robins
- Edwards
- MacDill

Scheduled:
- Wright-Patterson
- Ramstein
- Spangdahlem
- Little Rock

Who’s next?

Certified Professional Innovator (CPI): 3x Cohorts (~40) / year complete 90-day program:
- MBA-level academics (UMich Cert)
- World-class innovation coaching
- Immersive team projects

Cohort 8 application (Sep 22):
Projectmercury.us *210+ Certified Innovators & 50 coaches to date

Arctic Fire: “How do we leverage the unique shared challenges in the arctic to forge unconventional international partnerships?”

Pacific Prime: “How can we deliver high priority logistics items in a contested environment with a low risk of attrition?”

Project Arborist: “How do we build and cultivate micro-lateral exchanges to help America become the Partner of Preference?”

Project Mercury

DAF’s premier innovation education partnership, building Innovation Readiness and Accelerating Change using a Competing-Values-Framework curriculum.

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Who’s next?

The Intellectual and Leadership-Development Center of the Air and Space Forces

The Intellectual and Leadership-Development Center of the Air and Space Forces
The Way Ahead:
Technology and Innovation

Invest Today to Develop Leaders to Counter
Tomorrow's National Security Threats

- Modernize Historical District
- Project Future Growth
- Evolve Accession & Education Delivery

**Phase I**
- Eaker/ IOS/ Fitness/ Parking

**Phase II**
- Co-locate officer-enlisted PME/ Fitness

**Phase III**
- Heritage Park-Air Park/ Green Walking Areas/ Roadways/ Fitness

**Phase IV**
- E-School/ Visitor Center-Enlisted Heritage/ Conference Center/ Lodging/ ACSC+
Joint Warfighting

• Develop Joint All-Domain Operations (JADO) doctrine & establish a collaborative community
  • Run iterative & Capstone TTX/Wargames for AU schools
  • Execute recurring Title X & CCMD Wargames annually
  • 19 Nov 2021: AFDP 3-99, DAF Role in JADO published
    • 1st USAF/USSF multi-service signed doctrine publication
  • July 2022: 1st revision, Agile Combat Employment (ACE) Doctrine Note

• Promote JADO Scholarship & Publication
• Create Forums for leading JADO thinkers
  • Spring JADO Symposium (21-22 Apr 2022)
  • ACE Doctrine Symposium (1-3 Feb 2022)

AUiX and MGMWERX

Facilitates and accelerates collaboration with mission partners, & conducts experimentation with emerging technologies, to solve real-world Air Force problems.
Valuing Faculty Duty

Officer Instructors
- Officer Instructor & Recruiter Special Duty Board (OIR&RD)
- Senior Rater nominate at least 15% via MY VECTOR (Mar-Apr)
- ROTC Detachment Commanders
- Exempt from deployment
- 2-year assignment (ROTC Det/CC remains 3 years)
- DT provide follow-on assignment preference

Enlisted Instructors
- Developmental Special Duty (DSD) Process
- 2 Cycles: Feb-Apr; Aug-Oct
- ALS, NCOA, SNCOA, CLA, EPMEIC

AU Fellows program
- 2-year IDE option:
  - ACSC then teach at ACSC, SOS, OTS
- 2-year SDE option:
  - LDC instructor then AWC

AFIT: Graduate School of Engineering & Management

14 Ph.D. and 25 M.S. Degree Programs
- Aeronautical Engineering * M.S., Ph.D.
- Applied Mathematics M.S., Ph.D.
- Applied Physics M.S., Ph.D.
- Astronautical Engineering * M.S., Ph.D.
- Computer Engineering * M.S., Ph.D.
- Computer Science M.S., Ph.D.
- Electrical Engineering * M.S., Ph.D.
- Logistics (online) Ph.D.
- Materials Science M.S., Ph.D.
- Nuclear Engineering * M.S., Ph.D.
- Operations Research M.S., Ph.D.
- Optical Science/Engineering M.S., Ph.D.
- Space Systems # M.S., Ph.D.
- Systems Engineering * M.S., Ph.D.
- Acquisition & Program Management M.S.
- Applied Systems Engineering M.S.
- Atmospheric Science M.S.
- Cost Analysis M.S.
- Cyber Operations @ M.S.
- Data Science M.S.
- Engineering Management * M.S.
- Environmental Engineering & Science * M.S.
- Industrial Hygiene * M.S.
- Logistics Supply Chain Management M.S.
- Operations Management M.S.
- Scientific & Technical Intelligence M.S.

15 Graduate Certificates:
- Automation
- Cost Capability Analysis
- Countering Weapons of Mass Destruction
- Data Analytics
- Human Systems Integration
- Low Observable Materials Engineering
- Low Observables Radio Frequency Engineering
- Modeling, Simulation, & Analysis
- Nuclear Weapons Effects, Policy, & Proliferation
- Nuclear Weapons Technologies
- Operations Research
- Space Systems
- Space Vehicle Design
- Systems Engineering
- Test & Evaluation

* ABET-accredited master's degree programs.
@ Ph.D. in Computer Science or Comp Engineering allows students to specialize in Cyber Operations or Information Assurance.
# A Ph.D. is available allowing students to pursue additional specializations (i.e., Astronautical Engineering, Materials Science, etc.)
AFIT: Education with Industry

81 students this year
(Officer, Enlisted, Civilians)

Amazon • Anduril • Apple • Ball Aerospace • Blue Origin • Bluestaq • Boeing • Catalyst Campus • Coca-Cola • Dayton Development Coalition • Decode • DCVC • Deloitte • Delta • FedEx • Google • Intel • IS4S • Janicki • Lockheed Martin • Loews • Microsoft • Molson Coors • Morgan Stanley • Northrop Grumman • Palo Alto Networks • Qualcomm • Rackspace • Sandia • SpaceX • Tesla • ULA • Univ. of Dayton • UPS • USAA • VMware • 8VC

Air War College

Center for Strategic Deterrence Studies
Enhances national security community’s discussions involving nuclear, biological, & chemical weapons through education, research products, and weekly News & Analysis publication.

Leads the Deterrence Research Task Force:
• Executes two-term (60-hour) elective on strategic deterrence including two field trips
• Publishes student research addressing questions by Global Strike Command & HAF/A10 leadership

Air Force Culture and Language Center
• Language Enabled Airman Program (or LEAP)
• General Officer Pre-deployment Acculturation Course (GOPAC)
• AU Language, Regional Expertise, & Culture Symposium (LREC)

Free Courses and Videos on the AFCLC APP:
• Developing Cultural Competence (DCC) Course
• Introduction to Chinese & Russian Culture courses
• Launch of an Integrated Deterrence Video Library

Air Force Negotiation Center
• Negotiation
• Conflict
• Dispute

Programs and Services:
• Course delivery for PME & PCE
• Mediation & Facilitation Training
• Conflict Management & Dispute Resolution

The Intellectual and Leadership-Development Center of the Air and Space Forces
Ira C. Eaker Center for Leadership Development

- Renamed to Eaker Center for Leadership Development in 2020
- 7 schools, 220 faculty, 70+ courses, & 30K+ graduates annually

Defense Financial Management & Comptroller School

Courses Include:
- Defense Financial Mgt Course (DFMC)
- Defense Decision Support Course (DDSC)
- Department of the Air Force Professional Financial Management Course (PFMC)

Force Support Professional Development School

Provides Installation Support Development:
- Sexual Assault Response Coordinators
- SAPR Victim Advocates
- Master Resilience Trainers

Air Force Chaplain Corps College

Priorities:
- Development Spiritual-Fitness Model
- Advisement to Command Teams
- Making HC PCE content accessible online for HC personnel world-wide 24/7/365

The Intellectual and Leadership-Development Center of the Air and Space Forces

Air Force Institute of Technology

- 32,180 PCE students
- 260+ PCE Courses & Seminars

School of Systems and Logistics

- Approximately 120 non-credit courses, delivered in-resident, on-site, online
- 3 Departments & 1 Cross-Function Team:
  - Systems Acquisition Mgt, Logistics Mgt, Systems & Software Engineering Mgt, and a Data Team
- Annual Enrollment: ~20,000

Civil Engineer School

- Approximately 80 non-credit courses, delivered in-resident, on-site, online
- 2 Departments:
  - Engineering Management
  - Technical Applications
- Annual Enrollment: ~8,400

School of Strategic Force Studies

- 3 Departments and Locations:
  - Nuclear Studies:
    - Nuclear College at Kirtland AFB
  - Cyber Studies (Wright-Patterson AFB)
- Annual Enrollment: ~2,600

The Intellectual and Leadership-Development Center of the Air and Space Forces
Civilian Leadership Development School

Priorities:

- Civilian Associate Degree Program
- Professional Continuing Education
- Supervisor/Manager Development
- Performance Management Coaching Skills
- Pre-Supervisory & Leadership Development
- New Employee Orientation
- Civilian Community Outreach
- Leaders and Supervisors We Need website
- Leadership workshops & webinars
- Civilian Force Development research
- Majority of courses delivered via DL

Apply through the annual Civilian Developmental Education Call Process via MyVector (Jan - Mar)

Helps students develop as future DAF civilian leaders.

USAF First Sergeant Academy

First Sergeant Academy (FSA) graduates:

- Provide commanders with a mission-ready force by advising on all matters affecting unit readiness, health, morale, discipline, welfare, quality of life, legal, & quality force indicators
- Lead the unit effort in developing, nurturing & cultivating a professional culture grounded in the Air Force Core Values
- Facilitate and execute commander’s intent by ensuring Airmen's understanding & compliance with unit policies, goals, & objectives
- Prepare the unit’s enlisted force to best execute all assigned tasks through effective written & oral communication

587 graduates (FY22)
Commanders’ Professional Development School

1,994 graduates (FY22)

Courses Include:
- Wing Commanders’ Seminar
- Wing Commander Spouses’ Seminar
- Maintenance Group Commanders’ Course
- Medical Group Commanders’ Course
- Mission Support Group Commanders’ Course
- Operations Group Commanders’ Course
- Senior Material Leader Course
- Emergency Operations Center Director Course
- Senior Leader Mission Generation Course
- Wing Executive-level Response Course
- Leader Development Course (est. Oct 18)
  • 823 graduates (FY22)

The Intellectual and Leadership-Development Center of the Air and Space Forces

SECAF/CSAF/CMSAF “Squadron Revitalization Implementation Plan”
(1 June 2018)

“Wing Commanders will establish Flight commander/leader courses focused on key skills needed to succeed in this first essential level of leadership. AETC will offer course content options, but Wing Commanders will have ownership of the curriculum.”

www.airuniversity.af.edu/eschool/FlightCCEdge/

The Intellectual and Leadership-Development Center of the Air and Space Forces
Warfighting Education

Intermediate Courses:

1,580 graduates (FY22)
- Contingency Wartime Planning Course
- Joint Air Operations Planning Course
- Joint Task Force Staff Basic Course

Senior Officer Courses:

114 graduates (FY22)
- Combined Force Air Component Commanders Course
- Cyberspace Operations Executive Course
- Joint Flag Officer Warfighting Course
- Senior Joint Information Operations Applications Course

ACSC AY22 vs. ACSC Next

ACSC Next still...
- Meets HHQ requirements and guidance
- Develops critical thinking and comm skills
- Focuses on stakeholder needs

ACSC Next provides...
- A more operational/warfighting focus
- Better prepared grads for command / staff
- Better warrior leaders to stakeholders

ACSC Next leverages...
- Problem solving
- Integration
- Experiential learning
- JAOP/JPPA/JP 5.0/CW/JC/Wargame
- Leadership++
Looking Forward to AWC Next

Puts the Air & War back in the Air War College

Significant Fall Changes:
1. NEW: Intro to Strategic Studies course: Strategic thinking/logical fallacies, China & Russia, Design process, etc.
2. FS- future focused using Thucydides & WWII EUR wargame
3. NEW: Leadership IPs integrated with FS case studies
4. NEW: Great Power Studies course examines instruments of power, national obj, strategy, & decision making of USA, RUSSIA & CHINA. Ends with Assassin’s Mace wargame.
5. Electives focused on Integrated Deterrence — students choose between 2 Elective Courses, RTF, or Strategic Paper

Significant Spring Changes:
1. RSS starts with 6-8 IPs examining the world through Geographic Combatant Command priorities (common), then examines ID in the region & field study countries (unique). Students in RSS region of next assmt (if avail).
2. Global Campaigning - 3 Assassin’s Mace wargaming IPs (red v blue, with students swapping perspectives)
3. RSS field locations selected based on GPC importance (red v blue, with students swapping perspectives)
4. Students participate in classified wargame during Global Challenge Exercise in coordination with LeMay Center

Goals Accomplished:
- Puts the Air & War back in the Air War College
- Infused coverage of Strat Competition especially with the Pacing Threat
- Adds 4 Wargaming events w/ reacting red force (both TS and Unclass wargames)
- Improves communication skills w/multiple short reps
- Focuses International Security on Geographic Combatant Cmd issues
- Prioritizes curriculum on needs of the warfighter not faculty focus or stovepipes
- Accelerating Change to Win the Future!

NCOA Next Framework

The Intellectual and Leadership-Development Center of the Air and Space Forces
Education: Versatile Delivery

**Virtual In-Residence – Remote:**
A program or course deliberately designed to use one or more technologies to deliver all coursework required for completion/graduation to students who are separated from the source of instruction. The coursework may be committed almost entirely to an instructional environment that is virtual.

**Virtual In-Residence – Local:**
An in-residence program or course executed virtually to replicate the in-resident experience as much as possible when full-time students on orders to the school's campus cannot participate in face-to-face instructional events.

ARC Presence Throughout AU

- 55 full-time & 72 part-time military positions
- 10% of total in-resident students annually
- 70% of enrollments in distance learning programs
AFIT Subcommittee
Report and Discussion

Lt Gen (Dr) Robert J. Elder, Jr. (USAF, Ret)
Chair, AFIT Subcommittee

Subcommittee Members

- Lt Gen Robert J. Elder, Jr., USAF (Ret); D. Engr
- Dr. Steven J. Berberich
- Dr. Patricia L. Gruber
- Mr. Billy L.B. Starkey, J.D.
- Dr. Michele G. Wheatly
Subcommittee Meeting Key Topics

- AFIT Overview and Updates
- Recruitment, Assignment, and Enrollment of AFIT Graduate and PCE Students
- AFIT Research and Research Facilities
- Planning for AFIT’s Future
- AFIT Support of Digital Transformation
- AFIT Support of Cyber Education
- AFIT Support of Nuclear Modernization

Key Recommendations, Requests, Observations, and Commendations (1)

- Diversity, Inclusion, Equity, and Accessibility
- Contractor Participation in graduate and PCE Programs
- AFIT Implementation of the AU/CC Campaign Plan
- Data Migration Issues
- Strategic Planning Process
- AFIT-NPS Relationships
- AFIT Relationship with SAF/AQ
- AVOLVE Education Platform
Key Recommendations, Requests, Observations, and Commendations (2)

- Digital and Systems Engineering Programs
- Air Force Cyber Training Center of Excellence
- Nuclear Education
- Operations Research Certificate Program
- Sponsored Programs Management
- Distance Learning Programs
- AF Operational Imperatives Support
- Commissioning Program Graduates Awaiting Pilot Training

Discussion

- Vote to Approve 1-2 Nov 22 AFIT Subcommittee Report
Adjourn for Group Photo and Lunch

Holm Center Brief and Facilitated Discussion – AFROTC Next

- Brig Gen Houston R. Cantwell, USAF
  Commander, Holm Center
Jeanne M. Holm Center

Officer Accessions & Citizen Development
“We Build Leaders”

Overall Accessions Process
(Active Duty / Line Officers Only)

2163 Officers
459 Officers
975 Officers

The Intellectual and Leadership Development Center of the Air and Space Forces
AFRS - Where We Are

AMERICA’S AIR FORCE AND SPACE FORCE BEGIN HERE

AFRS Organization

- 3,000+ Personnel
- 3 Groups
- 32 Squadrons
  - 28 RegAF
  - 4 AFRes
- 54 States/Territories
- 4 Foreign Countries
  - UK
  - Germany
  - Italy
  - Japan
- 950 Recruiting Offices
  - 800 RegAF
  - 107 AFRes
  - 44 ANG

Officer Training School

- 8-Week Course—Active Duty, ANG, AFRES
  - Classroom Instruction, PT, Drill & Ceremony, Leadership Reaction Course, Sim-city
- 5-Week Course & 2-Week Course (ARC) – Doctors & Dentists
  - Subtract CATM, Vigilant Warrior, expeditionary ops

- 7 annual classes, FY23 total PGL: 2700 graduates
  - Non-rated: 3-6 month delay from contract
  - Rated: 6-12 month delay from contract
AFROTC - Where We Are

**AFROTC Organization**
- 900 Personnel
- 1 HQs
- 145 Detachments
- 1,060 X-town Univ’s
- 47 States/Puerto Rico

Locations promote diversity – geographic, education, race, ethnicity & gender

**AFROTC**

- 3-4 Year Program
  - Cadet-led Leadership Laboratory
  - 2-week summer Field Training
  - Multiple professional development training (PDT) opportunities
  - Emphasis on rated career fields & STEM degrees
  - Approx 10,000 cadets
    - 4,000 upperclass / 6,000 underclass (mostly non-contracted)

- Scholarships
  - 4/3/2-year options
  - Attracts & retains cadet talent
Reimagining Accessions

• Identifying Seams
  • ROTC
    • Not available at every university/college
    • Crosstown agreements inconvenient
    • Cumbersome 3-4 year program
  • OTS
    • Up to one year delay between contract & OTS start
    • Very few slots available annually to civilians <200
    • Not responsive to attrition fight

• Super-Detachments – Commanded by O-6
  • Hub and Spoke Operation
    • Large in-residence host detachment – traditional AFROTC
    • Associations w/ non-ROTC schools to offer virtual ROTC classes
      • Identify in-person touchpoints across the 2-4 year program
      • 2-4 week top-off commissioning event
  • Summer Internships - Acquisitions, Logistics, CE Redhorse
    • Includes cadets and civilians (AF and civil service focus)
  • Regional recruiting for OTS and AFROTC
O-6 Commanded AFROTC Detachments

Det 009: Yale University
Det 020: University of Arizona
Det 028: Embry-Riddle Aeronautical Univ (AZ)
Det 075: San Diego State University
Det 090: Colorado State University
Det 105: University of Colorado - Boulder
Det 145: Florida State University
Det 157: Embry-Riddle Aeronautical Univ
Det 158: University of South Florida
Det 159: University of Central Florida
Det 220: Purdue University
Det 225: University of Notre Dame
Det 330: University of Maryland
Det 645: Ohio State University
Det 675: University of Oklahoma
Det 695: University of Portland
Det 720: Penn State University
Det 765: The Citadel
Det 770: Clemson University
Det 805: Texas A&M University
Det 825: University of Texas - Austin
Det 855: Brigham Young University
Det 867: Norwich University
Det 880: Virginia Tech
Det 890: Virginia Military Institute
Det 910: University of Virginia
Det 915: University of Washington

Break (AU Personnel Depart)
Report of the Provost & Chief Academic Officer

Academic Year 2023

Dr. Mark J. Conversino, AU/CAO
16 November 2022

Department of Defense Moves to Outcomes-Based Military Education (OBME)
The Intellectual and Leadership Development Center of the Air and Space Forces

DoD Instruction 1322.35, Volume 1
MILITARY EDUCATION: PROGRAM MANAGEMENT AND ADMINISTRATION

Purpose: This instruction is composed of several volumes, each containing its own purpose. In accordance with the authority in DoD Directive 5124.02 and requirements in DoD Directive 5100.07, Titles 5 and 10, United States Code, and Public Law 115-232.

- This instruction:
  - Establishes policy, assigns responsibilities, and provides procedures for organizing, managing, and implementing military education (ME) programs.
  - Provides a standardized professional ME lexicon to promote a more uniform understanding of the ME enterprise.

- This volume:
  - Provides guidance requiring DoD Components with ME programs and ME institutions (MEIs) to incorporate outcomes-based ME (OBME) in their personnel and talent management policies and requirements.
  - Provides procedures for data collection and reporting requirements for all ME programs, delineating which programmatic information will be documented by annual program reviews.

Extends well beyond “just” PME to ALL military education programs across the DoD, from pre-commissioning and initial-entry programs until separation/retirement

This instruction levies annual institutional reports from all MEIs via service channels: JPME-accredited institutions report to CJCS, all others to Deputy Assistant Secretary of Defense for Force Education and Training

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Air University
Commander’s Mission
Analysis and Review
(CMAR)

The Intellectual and Leadership Development Center of the Air and Space Forces

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Strategic Competition in AU Curricula

Academic Year 2023

The Intellectual and Leadership Development Center of the Air and Space Forces

Background

- National, DoD and CSAF focus on strategic competition, and more specifically, on China’s rising assertiveness, drove a similar shift in the focus of professional military education (PME) across the DAF and DoD.

- Air University (AU) began a comprehensive overhaul in summer 2020 of all PME programs to address this change in focus; full execution in 2021-22

- AU programs continue to adapt/adjust during execution and while also forward as additional guidance and requirements emerge, IOT remain agile and relevant to the needs of the service and the nation’s defense.
2021: “China, in particular, has rapidly become more assertive. It is the only competitor potentially capable of (mounting) a sustained challenge to a stable and open international system. Russia remains determined to enhance its global influence and play a disruptive role on the world stage.”

The curriculum in every school and center at Air University will be agile, relevant, and responsive to our nation’s priorities and focused on developing and educating practitioners skilled in the art and science of Joint Warfighting from the Airmen’s perspective.
Air War College AY 23

- Putting Air & War back in the Air War College
- Infused coverage of Strat Competition especially with the Pacing Threat
- Adds 4 Wargaming events w/ reacting red force (both TS and Unclass wargames)
- Improves communication skills w/multiple short reps
- Focuses International Security on Geographic Combatant Cmd issues
- Prioritizes curriculum on needs of the warfighter not faculty focus or stovepipes
- Accelerating Change to Win the Future!

The Intellectual and Leadership Development Center of the Air and Space Forces

Air Command and Staff College AY 23

- "The Airpower School"
  Developing airpower leaders who solve problems at the operational level of war

83 of 137 lessons focus on Strategic Competition & Integrated Deterrence: 55 on China & 28 on Russia, North Korea, & Iran

The Intellectual and Leadership Development Center of the Air and Space Forces
The Nature of Modern Warfare:
- Emphasize Cyberspace, Space, and Information
- Uses of competition continuum and Whole-of-Government solutions

Information Warfare Fundamentals:
- Defining IO
- Detail adversary uses of IO
- Discuss why adversary use of IO are effective; discuss ways to prevent falling prey

Russian & Chinese PME:
- Russia and China armed forces development (with focus on CGO-equivalent)
- Discuss similarities and differences to United States

---

Outcome: All EPME programs center on four major outcome areas: Mission; Culture; Leadership; Problem-Solving.

Strategic Competition (SC) & China-related content in all levels of EPME across all outcome areas
- Airmen Leadership School/NCO Academy: Feb 21 began teaching competition-focused content
  - Content developed for maximum agility; topics include Near-Peer Threats/Arctic/SC in Space
  - Student-researched projects with performance assessments
  - Mission Lab deliverables focused on SC
- AF Senior NCOA: “Mission Outcome Lab” includes “The Kill Chain” high tech warfare topics to bolster SC content; Oct 2022, a new curriculum module will be introduced that is focused on Integrated Deterrence and Strategic Competition along with an enhanced Capstone event culminating in a wargame
- Chief’s Leadership Academy (CLA) Strategic Leader Course (SLC) will significantly increase SC acumen for CMSgts vectored for strategic-level positions
- SECRET-level briefings and discussions next step in CLA/AFSNCOA
Distance Learning: Global College of PME

- Wide range of topics at appropriate level: primary/intermediate/senior PME
- Chinese operational concepts, capabilities, and hybrid warfare; Chinese C2 of overseas operations
- JADO in a great power conflict and deterrence across all domains
- Chinese activities in regions around the world, inc. influence ops
- AWC and ACSC DL, examine China’s strategic calculus behind its rise to global power; AWC-DL’s capstone exercise features a series of China-centric scenarios
- AWC-DL includes lessons focused on each RCC, inc. NORTHCOM/Arctic
- ACSC-DL examines China’s strategic approach to regional hegemony and their operational A2AD capabilities
- Every DL program focuses content through lesson-level prompts and assesses student learning through written exams and other deliverables

The Intellectual and Leadership Development Center of the Air and Space Forces

Mitigation Measures:
- AU is examining expanded non-res PME options—distributed F2F seminars; blended/hybrid PME programs
- All service PME institutions and NDU received same SecDef guidance on competition/China
- AU’s distance learning programs shifted focus as well; AF Fellowships under CSASF-directed review
- Other tools: China Aerospace Studies Institute; AF Culture and Language Center; AU faculty provide speaker support; sponsored research
Questions/Discussion

Break
Col Craig M. Ramsey
Commander, Global College of PME

Overview

• Introduction & Overview
• Programs & Academics
• Operations Support
• Questions
CC’s Thoughts...

- Exceptional faculty
  ...collaboratively engaging through
- Quality processes and systems
  ...to produce
- Innovative online curriculum and learning
  ...that enables
- Meaningful student experiences
  ...to develop Airmen to meet the needs of our Air Force and nation

Enhance the value proposition...value to our faculty, students, Air Force & nation

Global College of PME

- **Mission:** Provide distance learning programs to develop and educate military professionals
- **Vision:** The premiere distance learning college for developmental education in the DoD
- **Priorities:**
  1. Attract and retain a diverse faculty to professionally develop and educate students in an online environment
  2. Produce better leaders across the breadth of development programs
  3. Deliver relevant, engaging content to stimulate learning for students at all levels
  4. Leverage partnerships to develop and implement best practices in online learning

Develop and Educate Online
**Manpower**

- **GCPME members (assigned)**
  - 75 (Officers-25, Enlisted-8, Civilians-42)-79% manned

- **GCPME members (authorized)**
  - Officers-34 (74%)
  - Enlisted-10 (80%)
  - Civilians-51 (82%)
  - Total-95

- **Contract Support**
  - Arizona State University provides technical backbone for content delivery and learning tools
  - C2 Technologies provides 200+ contract instructors
  - APV contract augments curriculum design team
The Global College Environment

Officer PME
- Elective Course Local Requirement Preparation
- Officer Orientation: May 2022

Enlisted PME
- 7 Programs
- 104 Courses

STUDENTS

LEARNING

INSTRUCTORS

FACULTY & STAFF

10-15,000 Active Students
5-7,000 Graduates/year (anticipated)

10-12,000 Active Students
5-7,000 Graduates/year

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FACULTY & STAFF
Distinctives of online education require a faculty team with specific skill sets
• Topical expertise & operational experience
• Learning / methodology experts
• Technical experts
• Assessments experts

Faculty and Staff

Student Ops / Services
DLC
Academic Operations
("Curriculum")

DO
Operations & Support

DLD
Design & Development

Leadership & Profession of Arms
Strategy & Security Studies
Joint, Airpower, & Warfare Studies
Research & Publication
Learning Architects / Instructional Designers
Contractors

Enlisted PME

Institutional Effectiveness

INSTRUCTORS
Global Online Instructor Cadre

- Contracted for flexibility
- Geographically dispersed
- Hand-picked every week / month / term based on student demand
- Instructor credentials / course alignment approved by GCPME

- 216 active instructors
  - 87 with terminal degrees
  - 151 have commanded
    - NAF/AOC/Wing/Group/Center/Company/Battalion/Regiment
    - 12 former Wing CCs, 5 NAF CC/CVs, various Center Commandants
  - 29 Sister Service
  - 87 w/ Joint Qualified Officer credentials
  - 87 taught resident PME
  - 7 GOs, 98 O-6s (Active Duty/Guard/Reserve/retired/sister service)

- Recruitment and training complete for EPME Capstone facilitators

STUDENTS

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### FY22 Statistics

<table>
<thead>
<tr>
<th>Program</th>
<th>FY2022 New Enrollments</th>
<th>FY2022 Course Completions</th>
<th>FY2022 Grads</th>
<th>Total Current Students</th>
<th>Active Students Sep-Dec</th>
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*Programs started Summer of 2022

Over 11K total graduates since we transitioned to ASU (first grads May '20)

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### Program Weighting & Demographics

**OPME Student Demographics**

- USAF/Res: 14%
- USAF/ANG: 15%
- USAF/AD: 42%
- Other: 1%

**EPME Student Demographics**

- USAF/Res: 41%
- USAF/AD: 12%
- Other: 6%

*EPME USAF/AD are ANG/Res members on AD status*
Data Ops for AU and ASU

AF mil/gov Systems (MiPDS)

Verify eligibility
Update PME/degree completion

AUSIS

Transfers eligible students info (no PII)
Updates course & program completion info, (no PII)

Arizona State University

Users (students)

Admissions, Graduation, Certificates

Student Services

Tyranny of Numbers
• 26K (building to 33K) Global Students
• 7-member GCPME Student Services/Help Desk team

Two-fold benefit
• ASU reliability results in less tickets
• ASU interface decreases ticket resolution time
  • Measured in minutes not days
  • Median time to resolution – 45 minutes
1. Immediate SA on student and issue
2. Easy access to implement solution
3. 24/7 coverage

<table>
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<th>Annual Active Student Load</th>
<th>Annual Course Completions</th>
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<td><strong>33,391</strong></td>
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Conclusion

• Introduction & Overview
• Programs & Academics
• Operations Support
• Questions

Questions / Discussion
Break

Enhancing Military Education Through Wargaming

Maj Gen William Holt
LeMay Center/CC & AU/CV
Overview

- What is Wargaming?
- How Wargaming Enhances Military Education
- AU Wargaming Initiatives

Wargaming Myths

What a Wargame is not:

What a Wargame is:
What is a Wargame?

- Wargame: a unique interactive research model using *purposefully selected game participants* to generate data that does not already exist in response to *purposefully developed scenarios* for analysts to use in developing insights or options in response to a sponsor’s problem.
  
  – LeMay’s Air Force Wargaming Institute

- A warfare model or simulation whose operation does not involve the activities of actual military forces, and whose sequence of events affects and is, in turn, affected by the decisions made by players representing the opposing sides... *a wargame is an exercise in human interaction... its forte is the exploration of the role and potential effects of human decisions*
  
  – Peter Perla

- A method of testing and evaluating human decisions

Wargame Purposes

- Technology Application
- Strategy Evaluation
- COA Assessment

**Educational Objectives**

Understand Key Decisions – Perspective & Meaningful Analysis – Relevant Assessment
The Structure of a Game

“A Wargame”

- Sponsor Conversation
- Game Design
- Game Development
- Game Execution (Data Generation)
- Report Writing
- Report to the Sponsor

Writing and Analytical Effort and Support

The roof

The supporting pillars
All equally important

The foundation

How Wargaming Enhances Military Education

- Leverages the kinesthetic learning style
- Wargames are how we operationalize education
  - Shows the consequences of the planners’ or students’ decisions
  - Bridges theory and a dynamic real world
USSTRATCOM: POWER Nuclear Deterrence Wargame

USAFE & PACAF: ACE Wargames
- Air Force Science & Technology Wargame
- Air Force Futures Wargame
- Global Mobility Wargame
- 16th Air Force Cyber Wargame

- Deterrence and Escalation Game and Review (DEGRE)
- Future Studies Program (FSP)
- Air War College Capstone
- Air Command and Staff College Capstone
- Assassins Mace: Iterative Wargame

- Kingfish ACE
- Project IKARUS
Conclusion

- Wargames are used to meet sponsor objectives for the stated problem set
- Wargaming operationalizes education, provides consequences of decisions, and uses the kinesthetic learning style

Wrap-up and Closing Remarks
Break

Working Lunch and Draft Report