

2025

Year in Review



UNITED STATES AIR FORCE • SCHOOL OF AEROSPACE MEDICINE





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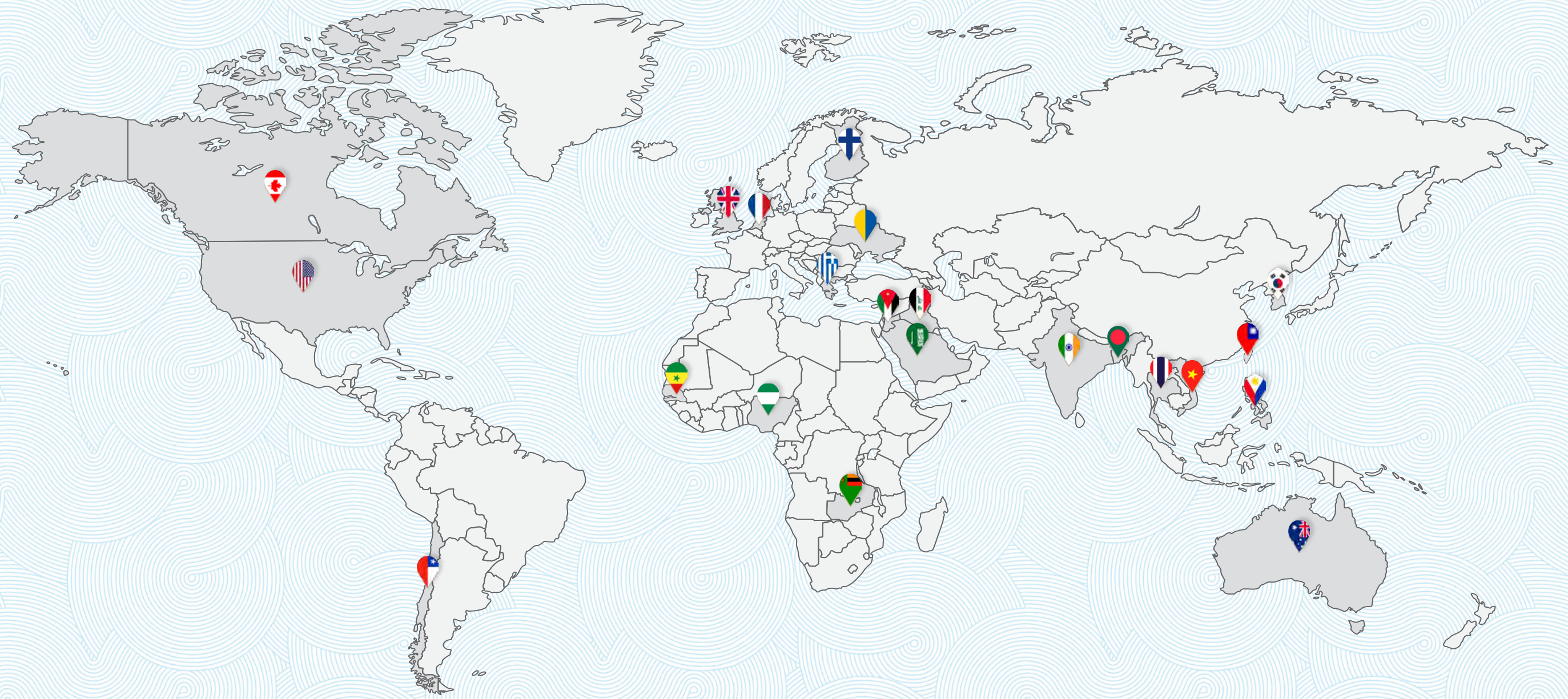
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USAFSAM'S GLOBAL REACH



CENTERS FOR SUSTAINMENT OF TRAUMA AND READINESS SKILLS (C-STARs)

-  1 Baltimore, MD
- 2 Cincinnati, OH
- 3 Dayton, OH
- 4 Omaha, NE
- 5 St. Louis, MO
- 6 Las Vegas, NV

COUNTRIES OF USAFSAM'S STUDENTS

-  Australia- AE
-  Chile- AAMIMO
-  India- AAMIMO
-  Korea (Seoul)- AE
-  Philippines- AMP Int
-  United Kingdom
-  Bangladesh- AAMIMO
-  Finland- AMP Int
-  Iraq- AAMIMO, AE
-  Netherlands- AMP Int
-  Saudi Arabia-AE
-  Thailand- AE
-  Canada- RAM
-  Greece- AE
-  Jordan- AMP Int
-  Nigeria-AE
-  Senegal- AAMIMO
-  Taiwan- AAMIMO, AE
-  Ukraine- AMP Int
-  Vietnam- AMP Int
-  Zambia- AMP Int

LETTER FROM THE COMMANDER



RICHARD O. SPEAKMAN

Colonel, USAF, MC, CFS
Commander

Esteemed members of the United States Air Force School of Aerospace Medicine (USAFSAM), our partners, and stakeholders, welcome and thank you for taking a moment to review the 2025 End of Year Report. The collective efforts of our Airmen and civilian partners advanced our mission and set new standards for excellence in aerospace medicine and operational support. The pages that follow describe how we enhanced training, sharpened readiness, and pioneered new capabilities.

As an overview, the Office of the Dean collaborated with the Occupational and Environmental Health Department's foundational effort to rebuild the Bioenvironmental Engineering Officer course into a modern, competency-based curriculum. And the Instructor Utilization & Training Workshop initiated a complete redesign of our education and training portal, transforming it into a more robust and user-friendly platform that directly benefits our warfighters.

The Aerospace and Operational Medicine Department led data-driven initiatives like the Analysis of Waiver Risk Evidence (AWARE) to enhance evidence-based operational risk assessments associated with medical waivers. The Operational Support Team Program Office provided data-driven insights to merge with and create True North+, the Air Force's largest Integrated Operational Support program. The Occupational and Environmental Health Department advanced radiological and nuclear response capabilities in key national exercises and collaborated with our Public Health and Preventive Medicine Department to launch a new Operational Preventive Medicine (OPM) course. Furthermore, the Public Health team expanded their biosurveillance capabilities and was first in the Department of War to develop a rapid measles assay, culminating in our Epidemiology Lab's designation as a main lab in the Defense Health Agency Reference Laboratory Network.

The En Route Care Training Department was instrumental in major exercises like Talisman Sabre, Ultimate Caduceus, and Mobility Guardian, evaluating Critical Care Air Transport Teams (CCATT) across 158 flight hours. During BOLDQUEST 2025, we achieved a new milestone in unprecedented two-way medical data transfer across coalition networks, enabling rapid patient handoffs and real-time medical coordination. Additionally, the new Manpower and Equipment Force Packaging (MEFPAK) registration process streamlined a key administrative function, accelerating our response capabilities.

Each success, from the laboratory to the flight line, reinforces USAFSAM's role as a global leader in aerospace and operational medicine. Thank you for your service and relentless pursuit of excellence, service, and integrity. Your work is vital to ensuring the health and dominance of our Air and Space Forces.

ABOUT USAFSAM



The earliest work of United States Air Force School of Aerospace Medicine (USAFSAM), then called the Medical Research Laboratory was to investigate the high mortality rates associated with aircraft accidents, which were largely attributed to human error (approximately 90%). Primary objectives at the laboratory were to examine factors affecting pilot efficiency, conduct experiments to determine the physiological effects of high-altitude flight, and develop methods for delivering oxygen to pilots at elevated altitudes. Additionally, the laboratory served as a medical board for all matters related to pilot health. The term "Flight Surgeon" was also coined to denote physicians specializing in the health and well-being of aviators.

Following several relocations and name changes, the school ultimately moved to Brooks Field, San Antonio, Texas in 1959. In 1963, it was officially dedicated as the Aerospace Medical Center by President John F. Kennedy, who delivered his iconic "Cap Over the Wall" speech. The school underwent another relocation in 2011, transitioning to its current site at Wright-Patterson Air Force Base, Ohio.

Today, USAFSAM is a globally recognized center of excellence for aerospace medical education, consultation, research, and aircrew health assessments. The institution promotes readiness and protects force and community health through the application of a range of expertise and tools, including environmental and health surveillance, laboratory analysis, risk assessment, process re-engineering, and collaborative problem-solving. Annually, approximately 5k students participate in USAFSAM's educational programs. Notably, the school is also home to the world's largest aeromedical library, serving as a premier resource for aerospace medical professionals and researchers.

VISION
Globally recognized experts for aerospace and operational medicine.

MISSION
To ensure ready Airmen, ready Guardians, and ready Medics in any environment.



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Deputy



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Senior Enlisted Leader



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OFFICE OF THE DEAN



VISION

To be leaders in world class education and training for the Aerospace and Operational Medicine Enterprise (AOME).

MISSION

To optimize Airman performance through education and training.

The Office of the Dean (ED) leads the daily academic operations of USAFSAM, including quality assurance, education and training, and policies and procedures. This department is responsible for managing the academic lifecycle of over 5k students and 250 instructors annually, including faculty development, program evaluation, and a range of student services such as registration. ED also prioritizes creating a supportive academic environment, provides academic counseling, and convenes the Academic Review Board.

The Office of the Dean develops and executes a comprehensive \$9M budget and \$13M TDY-to-school budget. By forecasting and managing these resources effectively, ED ensures that USAFSAM's academic programs and initiatives are well-resourced and align with the institution's strategic objectives and functional customers across the Department of the Air Force (DAF).



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MAJOR ACCOMPLISHMENTS

The Office of the Dean has spearheaded a series of high-impact initiatives, resulting in significant advancements in training, resource availability, and operational efficiency.

A pivotal achievement was the strategic enhancement of the Bioenvironmental Engineering Officer course, which was transitioned from a proficiency-based to a competency-based curriculum. The Bioenvironmental Engineering community rebuilt the entire 43E developmental framework by defining and integrating core competencies essential for on-the-job success. This was achieved through the identification and integration of the 43E occupational competencies, leveraging the Air Force's foundational competencies to provide all Airmen with transparent and unbiased pathways for professional development.

In a commitment to pedagogical and andragogical excellence, the Office convened its first ever Utilization and Training workshop (U&TW) for its instructor development. This initiative was focused on optimizing instructor development pathways at USAFSAM and modernizing approaches to fit today's Airmen regardless of teaching environment. Furthermore, in a significant technological advancement, the school's online education and training portal was redesigned, transforming the existing platform into a more robust, interactive, and intuitive user experience for all personnel.

To streamline a critical administrative function for En Route Care, USAFSAM's registration process was updated to formally integrate MEFPK participation. This enhanced system ensures the timely and accurate generation of documentation, reduces processing times, and expedites deployment orders for critical courses in En Route Care pipelines such as Critical Care Air Transport (CCAT), Ground Surgical Team (GST), and Center for Sustainment of Trauma and Readiness Skills (C-STARS).

Finally, through the "Hunters Archives Stories" project, the Franzello Aeromedical Library demonstrated its commitment to preserving and disseminating valuable historical and operational data, bridging historical context with contemporary operations. The series covered a range of topics, from the history of Aeromedical Nursing and Occupational and Environmental Health to USAFSAM leadership, culminating with a presentation by guest speaker POW Capt. Robinson, which attracted an audience of over 300 individuals base-wide.



USAFSAM personnel and contractors participate in the U&TW.



Brig Gen. Robert Bogart, Commander of the 711th Human Performance Wing, greets Retired USAF Capt William Robinson, former-POW and Vietnam Veteran.



Ms. Stephanie Diesher teaches during the Analyze, Design, Develop, Implement, and Evaluate (ADDIE) course.

STUDENTS

99% Graduation Rate
5.1k Graduates
6.3k Credit Hours Awarded
21.9k Student Meals Served

COURSES

43 Online Courses
519 Face-to-Face Courses
562 Courses In Profile
18.2k Instructional Hours Reported
25.2k Instructional Videos Viewed

REGISTRAR

79% Course Fill Rate
570 Class Iterations
6.5k Class Reservations
5.2k Student Enrollments

FACULTY

13 Instructor Candidates
24 Master Instructors
74 Faculty Appointments
270 USAFSAM Instructors

LIBRARY

39 Online Databases Managed
54 Literature Searches
2.4k Interlibrary Loans
31.7k Library Visitors

QUALITY ASSURANCE

50 Courses Evaluated
94% Average Course Rating
275 Instructor Evaluations Completed
3.7k Tests Administered
3.6k End of Course Survey Responses

EN ROUTE CARE TRAINING



VISION

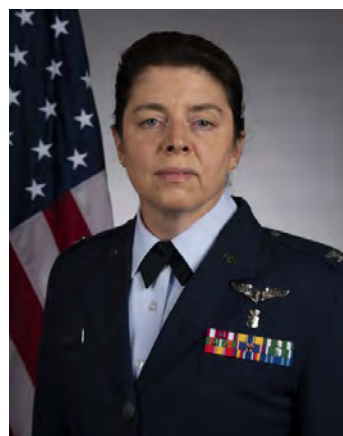
To be the Center of Excellence for En Route Care Education and Training.

MISSION

To educate and train Total Force medical personnel responsible for delivering basic and advanced en route care capabilities within the aeromedical evacuation system using the most advanced modalities and realistic mission environments possible, and to provide potent training venues to fulfill clinical currency and readiness skills requirements.

The En Route Care Training Department (ET) provides initial, advanced and continuing en route care and currency education and training for Total Force nurses, physicians, medical technicians and respiratory therapists, as well as DoW and international military medical personnel involved in delivering capabilities for the aeromedical evacuation system to ensure safe and optimal outcomes during patient movement.

ET employs various high-tech, high-fidelity patient manikin simulators and maintains static KC-135, C-17, four C-130's, partial 767 aircraft fuselage, and UH-60 Black Hawk trainers to provide enhanced multi-modal learning in more realistic care delivery environments. Plans are underway to add a 767-2C to the trainer fleet. Concentrating on currency training, staff assigned to the department's six Centers for Sustainment of Trauma and Readiness Skills (C-STARS) locations are significantly involved in both en route and trauma care research.



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MAJOR ACCOMPLISHMENTS

During BOLDQUEST 2025, the 711 HPW led an initiative with over 30 coalition nations to advance medical interoperability. A nine-member ET team evaluated the full spectrum of casualty care, from point of injury to Role 3, which included USAF Ground Surgical Team (GST) simulations and seven C-130J Aeromedical Evacuation/Critical Care Air Transport Team (AE/CCATT) missions totaling 34.4 flight hours with 39 simulated patients. The team's most significant impact was achieving unprecedented two-way medical data transfer across coalition networks. This breakthrough enabled rapid digital patient handoffs, minimized aircraft ground time, and supported real-time air-to-ground medical coordination. Furthermore, this capability provided syndromic surveillance and early warning of Chemical, Biological, Radiological, Nuclear, and Explosives (CBRNE) threats to ;Intelligence, Surveillance, and Reconnaissance (ISR) assets, directly increasing force readiness and protection.

The ET department also drove readiness in Exercises Talisman Sabre 25, Ultimate Caduceus 25, and Mobility Guardian 25. Nineteen department members collaborated with the Joint Force, over 19 multinational partners, and various federal and civilian entities to evaluate nine En Route Critical Care Teams. This work spanned 34 missions across C-17A, C-130, C-5, and A400 airframes, accumulating over 158.5 flight hours. To improve future operational effectiveness, the team collected 78 CCATT Operational Care Transition (OCT) Exercise Design assessments and 83 digital feedback surveys from the training audience. This data directly impacts CCATT proficiency by refining training against 17 mission-essential tasks, ultimately enhancing the life-saving capabilities of critical care teams."



Medics performing Tactical Combat Casualty Care (TCCC) during Storm Flag exercise



Maj Daniel Silver, GST Instructor, performs a digital patient handoff to Maj Henry Chouinard, AE Course Instructor, using the BATDOK device during BOLDQUEST Exercise.

ET BY THE NUMBERS

13 divisions
9 teaching divisions
6 GSUs
104 courses
1,6k students

ETII- CCATT INITIAL

13 courses
207 students

ETIG- GROUND SURGICAL TEAM

12 courses
156 students

ET DAYTON

7 courses
43 students

ET BALTIMORE

15 courses
258 students

ET CINCINNATI

18 courses
298 students

ET ST. LOUIS

13 courses
196 students

ET LAS VEGAS

12 courses
147 students

ET OMAHA

6 courses
55 students

BALTIMORE, MARYLAND

As the longest standing military and civilian partnership in the DoW, coming to life November 2001, the C-STARS Baltimore/Shock Trauma relationship has led to some of the most significant innovations in casualty care including Tactical Combat Casualty Care (TCCC), Resuscitative Endovascular Balloon Occlusion of the Aorta (REBOA), and Extracorporeal Membrane Oxygenation (ECMO). They hold 16 courses a year teaching physicians, nurses, medical technicians, and respiratory therapists. In FY25, 264 students trained at the site with over 8,000 attending the course over the last 25 years. Students and cadre have the opportunity to partner with the R. Adams Cowley Shock Trauma Center, University of Maryland Medical Center, Baltimore VA Medical Center, and the Johns Hopkins Hospital Burn Center.



CINCINNATI, OHIO

The University of Cincinnati Medical Center is home to the Air Force’s only validation platform for Critical Care Air Transport Team (CCATT) physicians, nurses, and respiratory care practitioners, C-STARS Cincinnati. This platform enhances and maintains the standard of care for critical patients that need to be transported to a higher level of care. CCATT Advanced meets Comprehensive Medical Readiness Program (CMRP) Category III Unit Type Code (UTC) requirements and enables global en route critical care (ERCC) for eight Combatant Commands fostering interoperability across the joint force. This team works closely with the University of Cincinnati Health, John’s Hopkins University Applied Physics Lab, and recently added, Cincinnati Children’s Hospital Medical Center. In FY25, CSTARs Cincinnati taught 289 students and 18 courses.



LAS VEGAS, NEVADA

C-STARS Las Vegas is another clinical currency site for providers, nurses, medical technicians, surgical technicians, and respiratory therapists. This training is conducted at the University Medical Center in Las Vegas giving students the opportunity to obtain hands-on training focused on resuscitation, damage control surgery, and intensive care. In FY25, 177 students were trained across 14 courses.



OMAHA, NEBRASKA

Partnering with the University of Nebraska Medical Center/Nebraska Medicine, the Omaha C-STARS site teaches medical personnel to respond to highly hazardous communicable diseases. The inaugural course, Principals of Biocontainment Care, covers recognition, diagnosis, and management of highly hazardous communicable diseases. The students are taught infection prevention, communication, and skills training all through simulation. In FY25, this site taught 55 students and has 6 courses.

ST. LOUIS, MISSOURI

C-STARS St. Louis houses a collaborative program between the Air Force and St. Louis University to provide hands-on trauma training to prepare medical professionals in the Air Force to care for military members. The site’s goal is to produce “ready medics.” The curriculum provides sustainment training for surgeons, anaesthesiologists, physicians, nurses, technicians, and respiratory therapists. In FY25, 243 students were taught across 15 courses.



DAYTON, OHIO

In partnership with Kettering Health Network, the Enlisted Critical Care Course (ECCC) at C-STARS Dayton provides life support training, trauma training, and Intensive Care Unit (ICU) skills to 47 students and supporting 7 courses. This course provides the foundational skills for the 4N career field to obtain the Special Experience Identifier (SEI) that contains 487 requirements in support of the Air and Space global wartime mission of caring for critically ill patients.



AEROSPACE AND OPERATIONAL MEDICINE



VISION

World leaders in Aerospace and Operational Medicine.

MISSION

Deliver expertise in education, consultation, and special program development/execution across the Air Force Aerospace and Operational Medicine Enterprise (AOME)

The Aerospace and Operational Medicine Department (FE) maximizes warfighter safety and performance by providing direct support to the Aerospace and Operational Medicine Enterprise (AOME) through education, training, consultation, and responsive studies and analysis. FE generates, disseminates, and applies AOME knowledge to support medics and warfighters across the USAF, and leverages knowledge and capability from the DoW, U.S. Government, civilian, and international partners to enhance the support it provides to the USAF.

FE provides initial, advanced, and graduate education and training in aerospace medicine managing four Air Force Specialty Code programs. The department develops and executes integrated operational support and aerospace operational clinical support. They host and train international military students in initial and advanced aerospace medicine, physiology, and other courses within USAFSAM.

Furthermore, they conduct aeromedical evaluations for initial flight qualifications and aeromedical consultations for return to flying duties. The team is consulted on a wide range of aerospace and operational problems and manages the studies and analysis research program to advance knowledge across the areas of aerospace and operational medicine education and consultation.



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MAJOR ACCOMPLISHMENTS

The Aerospace and Operational Medicine Department has had a landmark year, marked by exceptional achievements across all divisions that directly enhance warfighter readiness and shape the future of aerospace medicine.

The FES division is pioneering the future of the field. FES experts led panel discussions at the 2025 Aerospace Medical Association conference showcasing original research and aeromedical clinical experiences.

The OST Program Office was instrumental in providing data-driven insights leading to the creation of True North+, which will become the Air Force's largest Integrated Operational Support program.

Other FES accomplishments include the development of a 'BioChip' device for rapid and accurate identification of blood-borne sepsis pathogens and fatigue phenotype analysis to assess intervention efficacy. The department also conducted a series of consultations to improve flight surgeon manning by exploring options to improve recruitment, retention, duties, and assignments processes.

The data-driven Analysis of Wavier Risk Evidence (AWARE) initiative is providing innovative solutions to complex operational challenges like providing insights into pre-accession medical conditions and their impact on readiness, deployability, and retention. This work is essential for optimizing training investments and improving overall force effectiveness.

Through a combination of clinical excellence, dedicated training, and cutting-edge research, the FE department continues to set the standard and advance the practice of aerospace medicine for our warfighters and airmen.



US Air Force personnel monitor the controls of the altitude chamber during the Aerospace Medicine Primary (AMP) course



Students during the Aircraft Mishap Investigation and Prevention (AMIP) course at Wright-Patterson Air Force Base



Students walk in mission oriented protective posture gear during the Aerospace Medicine Primary (AMP) 3 course.

FEB

Performed 190 Help Desk Consults
68 Operational Medicines Change Requests Evaluated
159k+ hits on Base Operational Medicine Cell (BOMC) Website

FEC

8.4k Total Branch Reviews
2.2k Total Cases
95% Return to Flight Status Rate

FEE

6 Residency in Aerospace Medicine (RAM) graduates
185 Flight and Operational Medical Technician (FOMT) graduates
International Training Branch provided training to 29 students from 11 countries
130 Aerospace Medicine Primary (AMP) graduates

FES

82 Studies
5 Journal Articles (Peer Reviewed)
4 Conference Presentations

DEFENSE INSTITUTE FOR MEDICAL OPERATIONS

MAJOR ACCOMPLISHMENTS



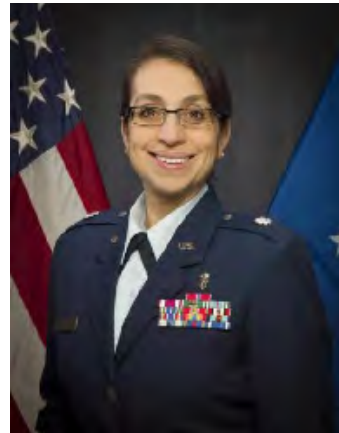
VISION

To be the premier provider of security cooperation focused health education and training that builds strong, resilient, international partnerships.

MISSION

To achieve security cooperation through health education and training in the global environment.

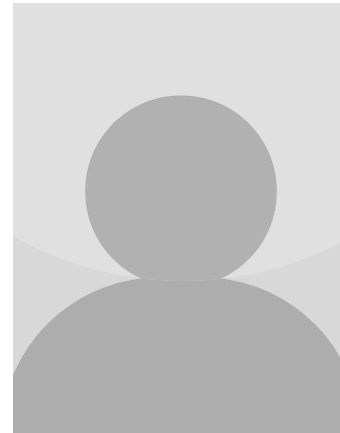
Defense Institute for Medical Operations (DIMO) is an International Military Education and Training (IMET) school providing security cooperation and assistance training to partner nations. Its purpose is to provide a jointly executed capability that permits and builds strong, resilient, comprehensive international partnerships through health education and training. DIMO utilizes subject matter experts from across the DoW and U.S. Government to develop curriculum and teach courses in support of embassy country plans and combatant command lines of effort to achieve U.S. security cooperation and partnership building objectives.



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Deputy Director



ANTHONY D. VAZQUEZ
SSgt, USAF
NCOIC, Operations

In a remarkable display of global cooperation and strategic foresight, the unit spearheaded a series of impactful initiatives that enhanced international partner capabilities and interoperability. A pivotal achievement was the planning and execution of a multiphase Tactical Combat Casualty Care (TCCC) course in El Salvador. This comprehensive training of 81 military students and instructor candidates resulted in the nation's first National Association of Emergency Medical Technicians (NAEMT)-certified TCCC Training Center, a move that substantially bolstered joint capabilities within the SOUTHCOM area of responsibility.

The department's influence extended across multiple continents, with key leader engagements in Rwanda, Pakistan, and Chile. These crucial interactions paved the way for several training missions, elevating the interoperability of military units within multiple Combatant Commands. In a significant contribution to regional security, DIMO drove Department of State and NORTHCOM goals by guiding 45 students from Mexico's Secretariat of National Defense in disaster planning ahead of the 2026 World Cup, optimizing readiness and reinforcing critical alliances.

Further showcasing their expertise, the department collaborated with 28 Jordanian Royal Medical Services personnel to deliver specialized training in chemical, biological, radiological, and nuclear (CBRN), Nurse Leadership, and Healthcare Administration to 134 military medical professionals, setting the foundation for a Level 1 Trauma Center. The department also hosted a comprehensive Disaster Planning course for 21 students from 15 nations, featuring 59 education sessions that fostered international collaboration and culminated in a capstone response plan aligned with global standards.



Jordan, CBRN Management and Incident Response Mobile Training Team, Oct 2025



Zambia, Mass Casualty Incident Response (MCIR) Mobile Training Team, Nov 2025



El Salvador, Tactical Combat Casualty Care Combat Life Saver (TCCC-CLS), Jul 2025

DIMO BY THE NUMBERS
10 Partner Nations certified

15 In-country courses executed

538 International military students trained

6 COCOM span and LOE advancement

OCCUPATIONAL AND ENVIRONMENTAL HEALTH



VISION

Be the DoW leaders of expertise for the Occupational and Environmental Health enterprise, continually adapting and progressing our processes, policies and personnel to meet the ever changing needs of the United States Air Force.

MISSION

To optimize Airman availability, health, and performance, enabling the modern warfighter to execute the mission regardless of the hazards presented by the environment and/or the mission.

The Occupational and Environmental Health Department (OE) implements its mission and vision through a collaborative, interdependent model, prioritizing support for the human weapon system. The department's primary capabilities are rooted in formal education and training, as well as subject matter expert consultation, which serve as foundational pillars. The synergistic interaction between these pillars enables the development of additional capabilities, including skills enhancement and verification, data management, and knowledge sharing. A crucial aspect of these efforts is the establishment of strategic partnerships with key stakeholders, including DoW Occupational and Environmental Health colleagues, the Air Force Medical Readiness Agency, and Major Commands (MAJCOMs). This proactive, integrated approach facilitates the delivery of world-class OE health products and skills to all echelons of the Air Force enterprise, ultimately enhancing the readiness and performance of Air Force personnel.



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MAJOR ACCOMPLISHMENTS

OE significantly advanced its radiological and nuclear response capabilities through world-class training, critical consultative support, and successful integration in national-level exercises.

The USAFSAM/OEA Radioanalytical Laboratory reinforced its position as a premier institution by completing an intensive in-house training with Eichrom Technologies. This specialized event focused on advanced sample preparation and measurement techniques for quantifying isotopes of Americium, Plutonium, and Uranium. This training solidifies the laboratory's elite capability to detect and quantify radionuclides across diverse sample types, including water, soil, and bioassays.

In a crucial support role, OE Consultation Division (OEC) provided expert consultative guidance to Incirlik AB, addressing a critical gap in decontamination procedures for Military Working Dogs (MWDs) exposed to radiological hazards. By assisting in the development of a standard operating procedure based on ALARA (As Low As Reasonably Achievable) principles, OEC helped eliminate uncertainty and enhance the safety of military assets.

The Air Force Radiation Assessment Team (AFRAT) demonstrated its strategic importance in two major exercises. During the Department of Energy's Cobalt Magnet 25, AFRAT collaborated with the National Nuclear Security Agency, strengthening the DoW's role within the Federal Radiological Monitoring and Assessment Center (FRMAC) and improving interagency cooperation.

At Guardian Response 2025, a field training exercise designed to validate chemical, biological, radiological, and nuclear (CBRN) response missions, AFRAT seamlessly integrated with the Defense CBRN Response Force, executing nine missions and providing radiological risk assessments to 1.1k soldiers in response to a simulated nuclear detonation. These accomplishments underscore the team's readiness and ability to operate effectively in a joint environment.



MWDs, especially those deployed, are at just as much risk as we are to CBRN agents.



AFRAT operating advanced Gamma Spectroscopy Device in the Field



Members of the AFRAT conduct radiological contamination surveys at night.

OE BY THE NUMBERS

9 AF specialties supported
52 CSTEP Courses
25 Class offerings
1.9k CCAF credits awarded

OE CONSULTATIONS

120 Laser
15 Drinking Water
3 Housing Concerns
25 Housing-Mold

PUBLIC HEALTH AND PREVENTIVE MEDICINE



VISION

Recognized experts in public health and clinical/surveillance laboratory testing, supporting the DoW and AFMS' drive to ensure medically fit forces, provide expeditionary medics, and deliver Trusted Care to all we serve.

MISSION

Promoting global health through education, training, consultation, research, epidemiological field support, and diagnostic laboratory testing.

The Public Health and Preventive Medicine Department is responsible for educating current and future USAF Public Health professionals, including personnel across 13 Air Force Specialty Codes, by providing up-to-date, comprehensive training and consultation to base-level public health program managers. The department also serves as a key consultant in public health and preventive medicine, offering data-driven studies and analyses to bases, MAJCOMs, and higher headquarters. As Air Force Subject Matter Experts, the department specializes in areas such as Epidemiology, Food Protection, Medical Entomology, and Hearing Conservation, offering expertise to support base-level program execution and contributing to the development of Air Force and DoW policy.

Additionally, it operates as the sole public health testing and reference laboratory for the Air Force, with limited testing support for the Army and Navy, and provides services to 1k DoW medical treatment sites that serve a patient population of 9.5 million beneficiaries. The department supports public health and preventive medicine efforts through advanced research in molecular biology, microbiology, microbiome, and human genomics, offering analyses, technology evaluation, and consultation to assist with outbreak identification, surveillance, precision medicine, and medical modernization.



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MAJOR ACCOMPLISHMENTS

Throughout 2025, the Public Health and Preventive Medicine Department worked to safeguard global health and force readiness through new training, advanced health surveillance, and rapid epidemiological response. A key achievement was launching the Operational Preventive Medicine (OPM) course to prepare specialists for future conflicts. The inaugural class is scheduled for November 2025, with plans to train 180 more students in Fiscal Year 2026.

The department significantly advanced biosurveillance capabilities. Wastewater surveillance programs were established for early pathogen detection, while the global respiratory pathogen program coordinated with over 100 sites to provide vital data to the Centers for Disease Control and Prevention (CDC) and World Health Organization (WHO). Responding to the concerning reemergence of measles, the Epi Lab launched a new real-time reverse transcriptase polymerase chain reaction (rRT-PCR) assay. This provides a highly accurate and rapid diagnostic tool to detect the measles virus RNA, a critical capability for quickly isolating cases, preventing contagion, and protecting the force from this highly infectious disease.

A major strategic development was the designation of the Epidemiology Laboratory as the main lab in the Defense Health Agency (DHA) Reference Laboratory Network. This centralizes testing and recaptures significant costs previously outsourced to commercial labs, improving efficiency while building in-house expertise.

The Epidemiology Consult Service provided critical field support. An investigation into a respiratory illness outbreak at the United States Air Force Academy led to recommendations projected to reduce lost training days by 20%, while another team assisted with a tuberculosis case in Alaska, helping prevent further spread.



Collection of wastewater from Wright-Patterson Air Force Base site by members of Applied Technology and Genomics Division.



Students in the Public Health Apprentice course from USAFSAM interact with farm animals in a tour of Young's Jersey Dairy, Yellow Springs, Ohio on April 25, 2025.



Lt Col Kelly is assessing a basic cadet for the Jacks Valley respiratory illness consultation.

PHA

175 Graduates
1.5k Tests Administered
3.9k PC/PTs Administered
2k CCAF credit hours Awarded
1.4k Hours of Instruction

PHO

36 Graduates
10 Tests Administered
48 PC/PTs Administered
592 Hours of Instruction

PHMW

11 Graduates
40 Hours of Instruction

CPM

50 Graduates
100 PC/PTs Administered
50 CCAF credit hours Awarded
120 Hours of Instruction

HCC/HCR

169 Graduates
169 Tests Administered
676 PC/PTs Administered
111 CCAF credit hours Awarded
316 Hours of Instruction

DEC

81 Graduates
81 Primary Care Physician / Preventive Medicine Physician (PC/PTs) Administered
162 CCAF credit hours Awarded
216 Hours of Instruction

PRINCIPLES OF EPI

32 Graduates
Self-paced Hours of Instruction

2025 COURSE CATALOG

Advanced Aerospace Medicine for International Medical Officers (AAMIMO) Course
Advanced Clinical Concepts in Aeromedical Evacuation (ACCAE) Symposium
Aeromedical Evacuation Initial Qualification (AEIQ) Course
Aerospace and Operational Medicine Executive Development (AOMED) Symposium
Aerospace Medicine Primary (AMP) 201 Course
Aerospace Medicine Primary (AMP) 202 Course
Aerospace Medicine Primary (AMP) 301 Course
Aircraft Mishap Investigation & Prevention (AMIP) Workshop
Air Force Operational Medicine 101 (AFOM) Course
Air Force Operational Medicine 102 (AFOM) Course
Air Force Radiation Assessment Team (AFRAT) Basic Workshop
Analysis, Design, Development, Implementation and Evaluations (ADDIE) Course
Basic Instructor Course (BIC)
Basic Leadership Airman Skills Training (BLAST) Course
Bioenvironmental Engineering Apprentice (BEA) Course
Bioenvironmental Engineering Occupational Health Measurement (BEOHM) Course
Bioenvironmental Engineering Officer (BEO) Course
Bioenvironmental Engineering Officer Advanced (BEOA) Course
Bioenvironmental Engineering Radiation Skills (BERS) Course
Bioenvironmental Engineering Readiness Deployment Skills (BERDS) Course
Contingency Preventive Medicine (CPM) Course
Critical Care Air Transport (CCAT) Initial Course
C-STARS Baltimore

2025 COURSE CATALOG

C-STARS Cincinnati CCAT Advanced
C-STARS Dayton Enlisted Critical Care Course (ECCC)
C-STARS Las Vegas
C-STARS Omaha Principles of Biocontainment Care (PBC) Infectious Disease Course
C-STARS St. Louis
Effective Online Instruction (EOI) Course
Flight and Operational Medical Technician (FOMT) Course
Force Health Management Workshop (FHMW)
Ground Surgical Team (GST) Training - Austere Phase 1
Hazardous Air Pollutants on Site (HAPSITE) Workshop
Health Promotion Workshop (HPW)
Hearing Conservation Certification (HCC) Course
Hearing Conservation Recertification (HCR) Course
Integrated Operational Support (IOS) Mental Health Workshop
Integrated Operations Support (IOS) Musculoskeletal Workshop
Military Audiology Workshop (MAW)
Occupational Medicine Symposium (OMS)
Operational Entomology Course (OEC)
Personnel Reliability Assurance Program (PRAP) Course
Public Health Apprentice (PHA) Course
Public Health Officer (PHO) Course
Refractive Surgery Workshop & Operational Eye Care (RSW)
Top Knife for Remotely Piloted Aircraft & Intelligence, Surveillance & Reconnaissance Operations Symposium (TKOS)



The United States Air Force School of Aerospace Medicine (USAFSAM) is an internationally renowned center for aerospace medical learning, consultation, aerospace medical investigations and aircrew health assessments. We promote readiness and protect force and community health by using a range of tools and expertise including environmental and health surveillance, laboratory and risk analysis, process re-engineering, consultation and technological innovation to maximize operational health capabilities and to solve problems through ingenuity and partnerships. We train approximately 5,000 students each year.



The 711th Human Performance Wing (711 HPW) leads the development, integration, and delivery of Airman and Guardian-centric research, education, and consultation enabling the Air Force to achieve responsive and effective global vigilance, global reach, and global power now and in the future. Established under the Air Force Research Laboratory, the 711 HPW is comprised of the Human Effectiveness Directorate and USAFSAM.



The Air Force Research Laboratory (AFRL) is the primary scientific research and development center for the Department of the Air Force. AFRL plays an integral role in leading the discovery, development, and integration of affordable war-fighting technologies for our air, space, and cyberspace force. With a workforce of more than 12,500 across nine technology areas and 40 other operations across the globe, AFRL provides a diverse portfolio of science and technology ranging from fundamental to advanced research and technology development. For more information, visit: www.afresearchlab.com.

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