

The First Command

General Donald G. Cook Commander Air Education Training Command

General Donald G. Cook is commander, Air Education and Training Command, Randolph Air Force Base, TX. As commander, he is responsible for the recruiting, training and education of Air Force people. His command includes the Air Force Recruiting Service, two numbered air forces and Air University. Air Education and Training Command consists of 13 bases, more than 66,000 active-duty members and 15,000 civilians.

The general entered the Air Force in 1969 through the ROTC program at Michigan State University. He completed undergraduate pilot training at Williams Air Force Base, AZ. The general has commanded a flying training wing, two space wings and the 20th Air Force. He has served as legislative liaison in the Senate Liaison Office, on the staff of the House Armed Services Committee and as director for Expeditionary Aerospace Force Implementation at U.S. Air Force headquarters. Prior to assuming his current position, the general was assigned to Air Combat Command as vice commander. He is a command pilot and has flown more than 3,300 hours in the B-52D/G/H, T-37B and T-38A.

Jordan Fuhr, MT2 Editor, interviewed General Cook.

Q: How would you characterize the mission of the Air Education and Training Command?

A: We recruit, train and educate professional, expeditionary minded airmen to sustain our Air Force's combat capability. As "The First Command," we are the first to touch the lives of everyone entering the Air Force beginning with the recruiting office. Our recruiters will bring in more than 23,500 highly qualified new enlisted members and more than 2,100 officers in the next year. Where the recruiting process ends, our initial training program begins.

We conduct military training for our newest members through three programs: basic military training for new enlisted members, Air Force Reserve Officer Training Corps and Officer Training School for new officers and officer candidates. With these three programs, almost 46,000 people entered the active duty Air Force, Air National Guard and Air Force Reserve in 2003.

Our most comprehensive mission is technical training. Our 2nd Air Force, at Keesler AFB, MS, conducts initial skills training and advanced technical training for more than 250 enlisted and officer Air Force career areas. It also manages more than 2,500 active training courses providing in-residence training to 227,000 active-duty, Guard, Reserve and international students annually.

Flying training is our most visible mission. The 19th Air Force, headquartered at Randolph AFB, Texas, is responsible for the complete training of more than 19,000 aircrew members each year.



Air University (AU) conducts the education portion of our mission. AU encompasses both enlisted and officer professional military education, professional continuing education and graduate education. Education is a career-long investment that touches the life of every Air Force member.

Accomplishing these key missions enables us to reach our true vision—integrating innovation and technology to produce airmen ready for combat.

Q: What are some of the major challenges facing AETC?

A: One of our major challenges as trainers and educators is analyzing and applying the lessons learned from our airmen in the field, then turning those lessons back into the training pipeline. For example, as airmen began taking on a greater role in convoy operations, we applied real-world lessons learned from the AOR to develop tactics, techniques, and procedures to create the Basic Combat Convoy Course. Also, the Basic Military Training (BMT) Triennial Review will occur this fall. A major consideration of the review is whether basic trainees need additional combat skills training and whether BMT needs to be lengthened. We're working with the Air Expeditionary Force Center and the Air Force Occupational Measurement Squadron

to determine what field skills are common across career fields and therefore might be appropriate to BMT.

Other efforts such as the Battlefield Airmen initiative and critical combat skills training are also addressing the way we train our airmen. While these efforts are in various stages of conceptualization and development, together they comprise an overarching effort to enhance combat readiness training that reflects the realities of our Expeditionary Air Force.

Like all other commands, we also face the challenge of managing our deployments while sustaining our in-garrison mission. We currently have over 1,200 AETC airmen deployed in support of AEF taskings. I just returned from visiting airmen in Afghanistan, Pakistan, Kyrgyzstan and Uzbekistan. Everywhere I went I met motivated, dedicated people doing an absolutely fabulous job. From medics, who offer aid to the Iraqis, to security forces protecting our coalition forces and CE troops reconstructing schools and hospitals—AETC airmen are proudly supporting deployment taskings while continuing our mission of recruiting, training, and educating.

Technology to learning is another challenge. Particularly in today's expeditionary environment, we must ensure our airmen and civilians remain on the cutting edge of technology and training development. There is a continued need to explore and expand alternative methods of education such as Advanced Distributed Learning to support both people assigned to bases in the United States and those assigned overseas. AETC is meeting this challenge by harnessing advanced technologies and modernizing our training and

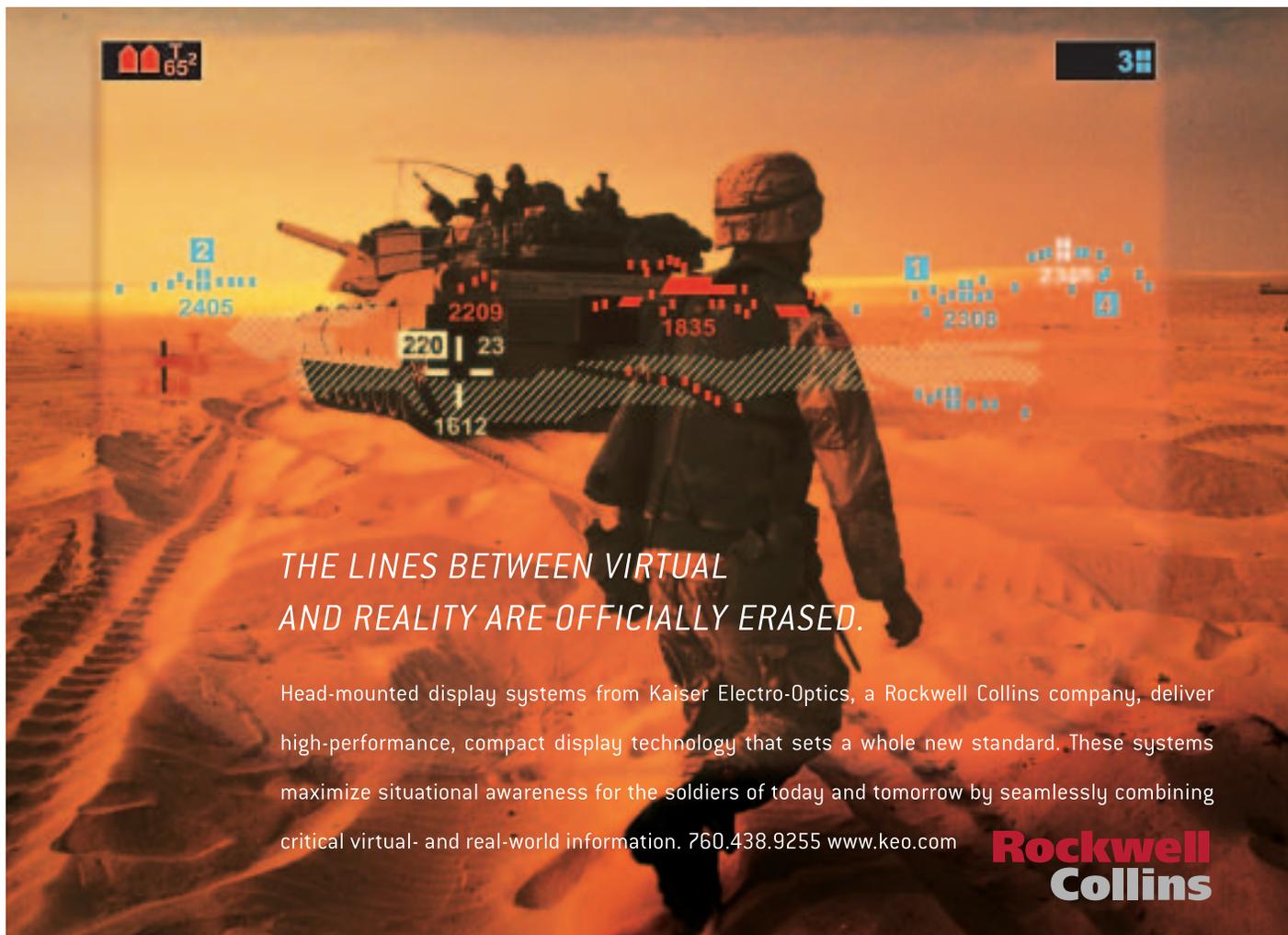
education programs.

The Air Force Institute for Advanced Distributed Learning (AFIADL) Integrated Learning Center (ILC) has created a network-centric learning system delivering courseware to personnel worldwide. Currently AFIADL hosts 32 courses with more than 50,000 students registered in the ILC.

Finally, there's the challenge of modernization of our training systems. Like all other systems, training systems must be modernized and upgraded as part of their life cycle management. A good example is our two 23-year old Boom Operator Part Task Trainers. Both have been refurbished in 2003 for maintainability, but these devices are no longer optimum for teaching contact procedures for air-to-air refueling. Our solution is the Boom Operator Weapon Systems Trainer. This will improve air refueling training quality with much more high-fidelity simulation technology. Another example is our Propulsion Modernization Program, which will improve the performance and reliability of our T-38s. The challenge of these programs is balancing the time required to modernize the systems without impacting the training pipeline.

Q: As the Defense Department moves ahead with its Training Transformation Initiative, where does AETC fit into the picture?

A: The Training Transformation Initiative is designed to provide dynamic, capabilities-based training for the Department of Defense in support of national security requirements. The department will invest



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about \$1.9 billion over the next five years to implement the initiative. Secretary [Donald] Rumsfeld stated, "We must transform not only the capabilities at our disposal, but also the way we think, the way we train, the way we exercise, and the way we fight." AETC plays a central role in each of those actions as the Air Force's "First Command."

There are three capabilities that form the foundation for Training Transformation: Joint Knowledge Development and Distribution Capability, Joint National Training Capability, and Joint Assessment and Enabling Capability. Through these three capabilities, combatant commanders – the ultimate focal points for joint operations – will receive better prepared forces that are aligned with their needs.

AETC is an integral member of the "T2" team, representing the Air Force at the Joint Knowledge Development and Distribution Capability group, which develops and distributes joint knowledge via a dynamic, global-knowledge network that provides immediate access to joint education and training resources. AETC is a voting member of the distribution subgroup.

Q: Will the JNTC and JAEC benefit your command, and if so, how?

A: The persistent JNTC network goal is focused on joint training, experimentation, testing, education and mission rehearsal. Although the Training Transformation focuses on operational forces training, the entire training community will benefit from updated technology standards, improved networking, just-in-time training capabilities, a wider training products consumer base, and a more responsive and agile curriculum. Our command focuses on developing the individual Airman's skill sets and his or her ability to plug into a joint environment earlier and faster than required historically.

The live, virtual, and constructive training environment outlined in JNTC is a type of training "utility" any of the services can tap into for the right type of training at the right time. With this utility, we may be able to compress learning cycles, grow experience faster, reduce wear-and-tear on actual platforms, and expose the service member to ambiguous and stressful situations safely.

We work to leverage technology and processes developed from the Training Transformation to make AETC schools as responsive and agile as joint commanders need.

Q: How have Operations Iraqi and Enduring Freedom affected AETC?

A: This is one of our major focus areas. As a result, the entire Air Force has become more aware of the resources AETC can send to the fight while maintaining our primary mission of education and training. The number of personnel our command deploys has increased almost 300 percent since 9/11. Our requirement to provide just-in-time training to airmen needing special qualifications has also greatly increased. AETC utilizes these deployment and training experiences to continually reevaluate our training programs and ensure relevancy to the operational Air Force.

For example, Kirtland AFB's special operations school has supported OIF and OEF by providing both experienced aircrew and just-in-time training on special qualifications, especially the MH-53 Pave Low. AETC has incorporated additional training on the MH-53 to mitigate risky environmental conditions for helicopters such as high terrain elevation and blowing dust. We are upgrading our simulators to more capably present these environments so aircrews

get experience and proficiency without risking their lives or aircraft.

Additionally, AETC has responded to new requirements for direct support to the Army, primarily in the form of convoy support, by developing an intensive three-week Basic Combat Convoy Course at Lackland AFB, TX, to prepare airmen to support Army with ground combat skills needed to face insurgents and terrorists in Iraq. The feedback we have received from deployed commanders has been extremely positive.

Q: With most troops deployed in support of the global war on terrorism, do you see an increasing need for Distributed Mission Training and Advanced Distance Learning?

A: To provide operational commanders fit, fully trained airmen ready to fight the global war on terrorism and prepared to take on any challenge when called, we are using Distributed Mission Training (DMT) and Advanced Distance Learning (ADL) technologies to leverage the quality, relevance and amount of training we can provide to support the warfighter.

Using ADL as an example, two years ago we conducted a study to identify advanced technical training courses that could be converted to ADL. As a result of this study, 18 advanced technical training courses covering a wide range of specialties, to include accounting, air traffic control, aircraft maintenance, medical and security forces, were converted for online delivery. 7,800 students have enrolled in the last 12 months, reducing days away from station by 101,400.

In addition to identifying and converting courses to ADL, we're fielding an Electronic Training Record (ETR) that can be used by an entire career field to more easily track and report training requirements and qualifications. This ETR will be integrated into the command's ADL system and provide one-stop shopping and tracking of on-line training.

As additional courses and features are added, we'll provide more flexible and responsive training, but this does not in any way reduce the critical role of the schoolhouse. The classroom must be tightly integrated for ADL and DMT to capitalize on powerful technologies that move us closer to our goal of an Integrated Learning Environment. We have a long way to go in realizing the future value and capability of the existing DMT and distributed mission operations system.

Q: When the Air Force acquires the Joint Strike Fighter and the F/A-22, will there be a paradigm shift in the way flight training is accomplished?

A: The capabilities of the Joint Strike Fighter and the F/A-22 are revolutionary. However, the method of training pilots in the use of these capabilities and leap-ahead technologies will continue to be more evolutionary.

The USAF pilot training program consists of undergraduate and graduate components. Undergraduate pilot training (UPT) is accomplished with trainer aircraft utilizing phases for changes in aircraft type and training objectives. The graduate component utilizes aircraft similar to the ones the pilot will fly operationally. As technology improves with weapons systems such as the F/A-22 and F-35, we must ensure we stay abreast of the skills required to master these technologies.

I recently approved a study to determine what the USAF flying training system should look like in 2020. The results of our Flying

Training 2020 study will heavily influence future decisions on possible replacements for the T-38 and T-1 advanced jet trainers. To assist us in this decision, I've asked the RAND Corp. to conduct a study that will identify skill sets required for future USAF aircraft, including the F/A-22 and F-35. It will further determine what skills should be developed in UPT, and assess the suitability of current UPT aircraft to provide those skills.

New technologies such as the F/A-22 and F-35 will provide fighter pilots near-total situational awareness and vastly improved weapons employment. The increase in information at pilots' fingertips will require them to be a systems manager more than in the past. However, basic, fundamental fighter pilot skills are still required. These new aircraft represent a leap in capabilities and skill sets required, and our training systems and tools also advance to keep pace; but the methods for training aircrews are still very viable and successful.

In recognizing the evolution of the navigator and electronic warfare officer aircrew position, we are redesigning training to produce an aviator who meets the emerging needs of the Air Force. This aviator will be known as a Combat Systems Officer (CSO). The CSO position encompasses advanced navigation systems, electronic warfare, weapons employment and the ability to operate complex systems.

Q: That being said, where does AETC stand in terms of its technology capabilities in getting the job done?

A: AETC partners with the other military services, academia, and industries to find mutually acceptable solutions to training challenges. We advocate advances in science and technology to increase student comprehension, decrease attrition rates and more efficiently use instructor time.

Under AETC's Education and Training Technology Application Program, the command conducts studies to evaluate innovative technologies and how they might enhance Air Force training and education. AETC is currently working on several promising technologies. Examples include:

- Electronic books. This technology replaces paper media and saves reproduction, warehousing and distribution costs.
- Automated Marksman Scoring System. This proof-of-concept test at Lackland AFB, TX, is expected to reduce training and scoring time, and increase student qualifications.
- Intercontinental Ballistic Missile command-and-control PC-based simulator. This system will enable students to independently familiarize themselves with C2 procedures in the classroom before using the actual simulator and potentially reduce the number of required training days.
- Air and Space Basic Course simulation software. This multi-player application helps students understand the complex spatial relationships of air and space power. The interactive application will provide curriculum developers the ability to construct and run scenarios of historical, present-day or hypothetical air conflict involving flights, squadrons, bases and wings of a modern air force.
- F-15E Safe-for-Maintenance Interactive Courseware. This software demonstrates the ability of virtual reality technology to replace traditional hardware-based technology.
- Power Browser project. This software, integrated with existing

Smart Board technology, will enable instructors to electronically display large schematic diagrams vice spreading them out on the floor.

- Boom Operator Weapon Systems Trainer. This trainer will improve the quality of air-to-air refueling training with a high fidelity simulator. It will allow some training to be transferred from the aircraft to the simulator, reducing the demand for training sorties.

In the area of long-range research and development, AETC is teaming with the Air Force Research Laboratory to develop an interactive and fully immersive virtual simulation environment. The concept originated with the need to reduce lifecycle sustainment costs while minimizing equipment and concurrency issues.

Q: How important is the recruiting aspect of your mission?

A: Recruiting is the bedrock to ensuring we have high-quality men and women with the right skills, at the right time, in the right numbers to sustain our Air Force's combat capability. Our recruiters are selected from among the best in their career fields, and I'm very proud of the work they accomplish. We're committed to providing a steady flow of quality enlisted and officer accessions from a cross-section of America. This is essential to maintaining a force with the proper distribution of skills to meet national and Air Force objectives in the global war on terrorism.

While we continue to conduct successful enlisted and line officer recruiting, we continue to struggle with recruiting physicians, dentists and nurses. Fierce competition for a relatively small pool of health profession candidates, who have the potential for huge earnings in the civilian sector, makes this our biggest recruiting challenge.

By continuing to focus on changing Air Force priorities such as end-strength and stressed career-field issues, recruiters will meet the Air Force Recruiting Service vision of integrating world-class people, customer service, technology and innovation to recruit tomorrow's air and space leaders.

Q: How is AETC ensuring its recruits receive the most up-to-date education?

A: AETC is dedicated to providing our airmen up-to-date technical training to amply prepare them for work in the field and continuing professional education throughout their careers.

First, we have formal procedures for routinely re-validating our course content and delivery methods. We regularly conduct formal course reviews through such venues as Utilization and Training Workshops, Training Planning Team meetings and other forums. At these events we gather training pipeline managers, career field managers and subject matter experts from all levels to scrub courses for redundancies, efficiencies, and outdated material. At these forums we also introduce new material deemed necessary by the career field and the Air Force to ensure our courses meet dynamic training needs.

Second, we seek inputs from the field. We receive formal responses through established schoolhouse surveys, such as the Graduate Assessment Survey and Field Evaluation Questionnaires, which solicit feedback from supervisors, and airmen about how well training prepared the Airman for the assignment. The Air Force

Occupational Measurement Squadron at Randolph AFB, TX, also collects career field specific information about airmen task performance and the time spent on specific tasks. This data is used to help shape course content.

Last, and perhaps most importantly, we conduct field visits. Anytime I or members of my staff are in the field, we solicit input on how to improve training. The Basic Combat Convoy Course is again a good example of AETC responding quickly to a wartime need based on feedback from the field.

It's important to note that Air Force training and education does not stop at military technical training. AETC ensures officers, enlisted and civilian personnel receive the most up-to-date education available through a continuum of colleges, schools and academies at Air University.

The Community College of the Air Force awards job-related associate in applied science degrees and other academic credentials that enhance mission readiness, contribute to recruiting, assist in retention and supports the career transitions of Air Force enlisted members. Since the college first opened in 1972, CCAF has awarded over 253,000 associate degrees in areas such as aircraft maintenance, electronics and telecommunications, allied health, logistics, and support services.

Also, the Air Force Institute of Technology's Center for Systems Engineering at Wright-Patterson AFB provides opportunities for training, a certificate or a master's degree in systems engineering. They provide a substantial technical foundation in systems analysis and design, architecture, modeling, and management. The program culminates with an individual or group design typical of a defense system project. Students apply technical expertise, exercise system design skills, and solve realistic defense system problems.

Air University's continuum of education includes professional military education, professional continuing education and academic education programs. Air University commanders go to great lengths to employ highly educated and experienced military and civilian staff and faculty who are dedicated to the development and delivery of curriculum that keeps our Air Force number one. Focusing on history, research, doctrine, technology and current world events, Air University molds tomorrow's planners and leaders who will be equipped to develop and manage our nation's national security issues and to lead in the war against terrorism.

Air University's high standards and intellectual integrity recently earned five-year accreditation by the Southern Association of Colleges and Schools. About 175,000 students graduate from Air University programs annually.

Q: What other success stories can you share?

A: Recently, AETC has seen many successes. In March we bedded down the first C-130J at Little Rock AFB and stood up its fully operational Flying Training Unit ahead of schedule. We eagerly await the arrival of AETC's next two C-130J's in June 2005.

Working with Air Mobility Command, our Mobility Pilot Development Program qualifies UPT graduates in both left- and right-seat duties, instead of just co-pilot duties. Ultimately, the program gives our customers a better-prepared graduate with a need for fewer return trips for upgrade training. This provides more flexibility to gaining units, and allows them to spend more time performing their mission of flying large aircraft around the world.

Another success is the T-38 avionics upgrade, which transitioned

us from an archaic analog environment to a new digital cockpit. It improved the fidelity of this advanced trainer aircraft and will ensure its relevance through 2020. Also, the T-38 Propulsion Modernization Program includes internal engine modernization and airframe modifications to improve engine reliability, decrease maintenance man-hours and increase aircraft performance.

In technical training, our Classroom 2005 initiative allows students to "virtually" experience a host of aircraft system information and maintenance scenarios. Students view images on the interactive whiteboards and interact with the system with a remote mouse, touch screen, or by using colored electronic "pens." The component pictures, video clips, and flash animated schematics greatly enhance student comprehension of the technical orders and help provide a deeper understanding of system operation and troubleshooting procedures.

Similarly, the Briefing Room Interactive (BRI) will enable instructor pilots to use graphics, videos, and 3-D animations to enhance sortie mission brief and de-brief procedures and improve the quality and level of pilot training. BRI was tested and delivered to Moody AFB in 2002 and is now being developed for Pilot Instructor Training Squadrons. We hope to have it in Specialized Undergraduate Pilot Training units soon.

We've also experienced technological success stories in mission areas other than flying training. Our ICBM training program at Vandenberg AFB will experience its first upgrade in years. The Operational Procedures Emulation for Academic Training will give our Minuteman ICBM training a much-needed facelift by providing a Web-based, crew-procedures emulator for students to practice complex procedures in the classroom. This upgrade will increase the quality of ICBM training, keeping our training equipment and methodologies evolving with our more technologically advanced students.

Finally, we're excited about the employment of the Distributed Common Ground System at Goodfellow AFB. My staff and the 17th Training Group have been fully engaged to work the support issues for the equipment and communications to make this happen. We also have a DCGS Training Planning Team with reps from all the MAJCOMs, and we've developed draft course training standards for various intelligence specialties that will be trained on this system. Our initial vision is "DCGS 101" accomplished both in residence and via Advanced Distributed Learning (ADL) with tracks developed for AFSC-specific training.

Q: Any final thoughts?

A: I would just like to reiterate that we are accomplishing these missions and successes while participating robustly in the global war on terrorism. Our professionals at Goodfellow AFB, Texas, translated, interpreted and exploited captured Iraqi documents. Our special operations instructors at Kirtland AFB, NM, flew demanding missions in Iraq and Afghanistan. The command also supplied 26 percent of all Air Force medical personnel deployed in support of OEF and OIF, including the critical care air transport teams from Wilford Hall Medical Center, TX. Armed with a flying intensive care unit, this team ensured the sick and injured received initial stabilization much sooner than with past medical response. In addition to contributing to the fight against terror, these deployments allow our instructors to take real-world experiences back to the classroom and keep our training relevant.