



# Getting Our Partners Airborne

## Training Air Advisors and Their Impact In-Theater

Maj Gen Michael A. Keltz, USAF



Most Americans would be surprised to learn that US Air Force (USAF) members fly Russian-made Mi-17 transport helicopters and that a few have even flown Mi-35 gunships. USAF aircrew and maintenance personnel will also soon fly and maintain the Embraer / Sierra Nevada A-29 Super Tucano light attack aircraft and a special-mission variant of the Pilatus PC-12—and will continue to do so for years to come. The origins of these programs can be traced to 2007, when the Department of Defense (DOD) developed a plan to build airpower capabilities in the Iraqi and Afghan air forces. For Afghanistan, the concept of operations proposed the acquisition of 149

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rotary- and fixed-wing aircraft for training and a variety of operational missions. This proposal identified the need for an initial contingent of 600 USAF personnel—a number that would increase with growing demand in Afghanistan—to train and advise Iraqi and Afghan partners. Accordingly, the directive called for a capability to train USAF personnel in the air-advising mission prior to deployment. Although Air Force Special Operations Command had been providing this type of training for special operations forces (SOF), no such training existed for these conventional General Purpose Forces (GPF) Airmen. Existing ground-centric, predeployment training centers and SOF aviation-related training venues were at capacity. Consequently, in March 2007, the chief of staff of the Air Force directed Air Education and Training Command (AETC) to establish a permanent AETC-led predeployment training detachment, the Air Advisor Academy (AAA), to prepare air advisors to serve in this capacity.<sup>1</sup>



Photo courtesy of Lt Col Scott Voskovitch, USAF

The Iraqi Air Force flies the C-208B as a flying training platform. Modified versions perform special missions. (From "AC-208 Combat Caravan Light Attack Aircraft, Iraq," [airforce-technology.com](http://www.airforce-technology.com/projects/ac-208-combat-caravan/), <http://www.airforce-technology.com/projects/ac-208-combat-caravan/>.)



## Air Advisor Academy

Since the inception of the AAA in 2007, this AETC schoolhouse has educated and trained more than 4,300 students. Now fully operational at Joint Base McGuire-Dix-Lakehurst in New Jersey, the AAA has the capacity to train up to 1,500 students per year, producing 1,227 graduates in 2013. The school provides education and training in three areas: (1) air-advising core skills; (2) language, region, and culture; and (3) advanced force-protection skills, referred to as “fieldcraft.” AETC offers eight different AAA training courses for Airmen deploying to permissive, uncertain, and hostile environments in any region across the globe; furthermore, it can tailor these courses in accordance with particular customer requirements. Airmen preparing to serve as aircrew and maintenance air advisors in Iraq and Afghanistan must complete a five-week hostile-environment course.

Even though this article discusses aircrew and maintenance air advisors, it is important to note that the AAA trains Airmen who will advise foreign partners in nearly every USAF career field. In fact, roughly 75 percent of Airmen who serve as air advisors come from the many other USAF career fields. Similarly, this article focuses on Iraq and Afghanistan, but the school trains Airmen preparing for air-advising activities in every geographic combatant command (GCC). Indeed, AAA education and training are on the rise as the demand for air advisors grows across each GCC. Gen Mark A. Welsh, the USAF chief of staff, explained in a June 2013 interview that “there are lots of other combatant commands that want the things that we offer who haven’t gotten them for a while.” General Welsh cited “partnership-building capability engagements,” among other USAF capabilities, as a requirement across the GCCs that “is not going away; it’s just going to shift.”<sup>2</sup> Current unconstrained calculations for the next five years indicate that the number of Airmen who need training to perform air-advising and other security-cooperation activities in countries other than Iraq and Afghanistan could meet or even exceed the school’s current capacity.<sup>3</sup>



Projections indicate that the demand for air advisors in Afghanistan will remain long after the planned termination of US and coalition combat operations at the end of 2014. In its July 2013 *Report on Progress toward Security and Stability in Afghanistan* to Congress, the DOD assessed that Afghan National Security Forces (ANSF) will “need continued assistance and combat support through the end of the ISAF [International Security Assistance Force] mandate in December 2014; beyond then it will still require substantial training, advising and assistance—including financial support—to address ongoing shortcomings.” The latter include “more complex and technologically advanced capabilities that will be fielded, such as . . . air support.” More specifically, the DOD found that “ANSF components responsible for these more complex tasks, particularly air operations, will not be capable of fully independent operations by December 2014,” citing long-term challenges in more sophisticated aviation career fields.<sup>4</sup> In a news conference on 30 July 2013 aligned with the release of this report, Dr. Peter Lavoy, acting assistant secretary of defense for Asian and Pacific security affairs, elaborated on this assessment: “We envision that it will take a period of time before they can adequately fully have sovereign ownership of all those skill sets, including well beyond the 2014 date.”<sup>5</sup> In the June 2013 interview, General Welsh voiced a similar view, asserting that the Afghan Air Force (AAF) lacks “people who are trained to maintain an air force over time” and offered that the USAF “can help them with that. But it’s going to be a few more years before they’re there, in our estimation.”<sup>6</sup> Accordingly, Kristina Wong projected in a June 2013 *Washington Times* article that most of the 940 coalition advisors currently building the AAF will remain through 2017 and that a smaller number could continue advising Afghans until 2024.<sup>7</sup>

## Training for Aircrew and Maintenance Air Advisors

In addition to AAA courses, aircrew and maintenance air advisors must have specific training in the partner nation (PN) aircraft they will operate and maintain. Once trained, aircrew personnel receive formal



flight evaluations to gain certification in the operation of these platforms. When the PN aircraft is also flown in the USAF, the major command (MAJCOM) responsible for the training typically manages this portion of air-advising training. In the case of non-USAF aircraft, such as the Mi-17, the aircrew and maintenance training is managed by AETC Headquarters' Special Missions Division (HQ AETC/A3Q) in the Directorate of Intelligence, Operations, and Nuclear Integration at Joint Base San Antonio–Randolph in San Antonio, Texas. To execute these responsibilities, the division works with the theater—US Central Command in the case of Iraq and Afghanistan—to establish and validate the associated training requirements. HQ AETC/A3Q then establishes the USAF program that will support this requirement, develops a DOD or contracted training solution, initiates the contracting process when applicable, and—once the contract is awarded—oversees execution of the contracted training. Additionally, the division develops the syllabus that will guide the training, schedules individuals for training, and manages the associated student pipeline. HQ AETC/A3Q also manages standardization/evaluation programs for each of these non-USAF aircraft. Individuals assigned to the division conduct flight evaluations to certify aircrew members in the operation of these aircraft. Bringing these responsibilities full circle, HQ AETC/A3Q performs assessments of the air-advising programs in-theater and uses feedback from these visits to make necessary changes to air-advising education and training.

Furthermore, AETC's Special Missions Division supplies MAJCOM-level management and oversight of GPF air-advising education and training conducted at the AAA. Centrally managing these programs from a single office makes perfect sense because each is inextricably linked to both the air-advising mission and each other. Since AETC is the lead MAJCOM for air-advising education and training, non-USAF aircrew and maintenance training, flying training, technical training, and expeditionary skills training, it's also logical that the AAA and associated aircrew/maintenance training fall under that command. Since the inception of this air-advising aircrew and maintenance training



program in 2007, AETC—with HQ AETC/A3Q in the lead—has managed the training of a total of 846 aircrew and maintenance professionals in 12 aircraft types at a rate of roughly 150 trainees per year. The program has had a substantial impact in Iraq and Afghanistan and is poised to do even more across the globe in the years ahead.



Photo courtesy MSgt Jay Simmons, USAF

An Afghan Air Force Mi-35 gunship awaits tasking at Kabul International Airport, Afghanistan, on 13 February 2010. Two USAF pilots served as air advisors in Afghan Mi-35s during 2010 and 2011.

## Rotary-Wing Air-Advising Programs

After the Soviet-Afghan war in the 1980s, the Soviet Union left the Soviet-backed Afghan government with a fleet of over 400 military aircraft, including a large number of Soviet-made helicopters. Years of



fighting within Afghanistan during the 1990s and the US response to the terrorist attacks of 11 September 2001 left the AAF in shambles. By 2007 the Afghan military had only 20 aircraft in its inventory, mostly Mi-17s and Mi-35s.<sup>8</sup> As a direct result of US security assistance and US-led air-advising programs in Afghanistan, the AAF now consists of approximately 100 aircraft. The fleet includes 48 Mi-17s, six Mi-35 attack helicopters, 26 Cessna 208B (C-208B) Grand Caravan fixed-wing trainers/airlifters, six Cessna 182 (C-182) fixed-wing trainers, and six MD-530 rotary-wing trainers.<sup>9</sup> Two USAF pilots served as Mi-35 air advisors in 2010 and 2011, helping the AAF further develop this preexisting capability.<sup>10</sup> The AAF had 6,277 personnel in March 2013, and—as C-130Hs, A-29s, PC-12s, and more Mi-17s are added to the fold—projections indicate it will have 140 aircraft and 8,000 personnel by 2016.<sup>11</sup> According to the DOD's *Report on Progress*, "The Afghan Air Force faces a number of challenges—particularly recruiting and training personnel to operate and maintain the fleet—and is not expected to be fully mission capable until at least 2018."<sup>12</sup> To meet this objective, the USAF must have a sustained and fully funded air-advising program during this time frame.

USAF air advisors train, advise, and assist Afghan counterparts in Mi-17 operations and maintenance; moreover, the advisors' duties include combat missions with Afghan crews. Prior to deploying, these USAF crew members and maintainers attend AETC's Mi-17 training courses for aircrew and maintenance air advisors. Concord XXI Inc. provides a two-week Mi-17 simulator training course in Daleville, Alabama, during which pilots and flight engineers complete 40 hours of academics and 10 simulator hours, and the flight engineers undergo an evaluation in the simulator. After finishing the course, pilots attend six weeks of Mi-17 flying training in Destin, Florida, conducted by Vertol Systems Company Inc. This course consists of 40 hours of ground academics, 35 hours of flight training, and two formal flight evaluations. Flight engineers attend a four-week course in Destin that includes 25 flying hours. USAF maintenance personnel preparing to deploy as air advisors attend a three-week US Army Mi-17 maintenance course at



Fort Rucker, Alabama, that emphasizes general aircraft familiarization and involves 40 hours of academics and 80 hours of hands-on training. Typically, as many as 25 USAF pilots, six flight engineers, and 48 maintenance personnel are trained each year to perform air-advising duties in the Mi-17. Twelve pilots, 17 flight engineers, and 30 maintainers completed training in 2013.

An Mi-17 search and rescue, humanitarian assistance, and disaster-relief mission conducted on 28–29 July 2010 in northeastern Afghanistan demonstrates one impact not often considered in conjunction with air advising. Massive flooding led local Afghan government authorities to request assistance from Brig Gen Muhammed Barat, the AAF's Kabul Air Wing commander, in the early morning of 28 July 2010.<sup>13</sup> Lt Col Greg Roberts, a career USAF rescue helicopter pilot, was serving at the time as General Barat's air advisor and commander of the USAF air-advising squadron in Kabul.<sup>14</sup> General Barat and Lieutenant Colonel Roberts immediately assembled a team of AAF crew members and USAF air advisors to respond to a humanitarian disaster unfolding in one of the most high-threat, insurgent-laden regions of Afghanistan. In just two AAF Mi-17 helicopters, this team rescued an astonishing 2,080 Afghans over the next two days—the largest two-ship helicopter rescue in USAF history.<sup>15</sup> Arming Afghans with the capacity to conduct humanitarian missions of this type across their country will drastically increase the legitimacy of the ANSF and the Afghan government as a whole. Ultimately, helicopter missions saving Afghans will have a far more powerful effect on the hearts and minds of the Afghan people—and the efficacy of the Taliban, for that matter—than any other effect of direct air combat. If a handful of Afghans and air advisors with two Mi-17s can have such an impact in two days, then one can only imagine what a fully trained and operational AAF will be able to do.<sup>16</sup>



An Afghan Air Force officer who flew on board the Mi-17s rescues a child during the daring two-day operation. (From Lt Col Gregory A. Roberts, "Flight Lead Narrative for Afghan Rescue 705 Flight Operations, 28–29 Jul 2010," 438th Air Expeditionary Wing, 6 August 2010, with updates 24 January 2011 and 1 March 2011.)

As the AAF builds on such experiences, the DOD's *Report on Progress* observed that "the AAF is increasingly capable of carrying out a range of operations" and cited examples of its growing effect.<sup>17</sup> From 15 to 18 November 2012, AAF Mi-17s supported Afghan border police who were providing supplies to local villages in a contested area of southern Afghanistan—"possibly the first time these villages had seen GIROA [Government of the Islamic Republic of Afghanistan] forces, let alone AAF helicopters, delivering humanitarian aid."<sup>18</sup> In fact, AAF Mi-17 operations have advanced to the point where Afghan crews routinely conduct resupply, casualty evacuation (CASEVAC), and passenger-transport missions across the country without US or coalition air advisors on board.<sup>19</sup> In partnership with coalition and Afghan ground forces, Mi-17s now conduct more sophisticated air-assault operations as well.<sup>20</sup> The same report, however, projected that "the 86 Mi-17 helicopters pro-



grammed for the post-2014 AAF fleet will meet only minimal operational requirements.”<sup>21</sup> USAF air advisors will necessarily continue to assist and advise their Afghan counterparts as the AAF develops its fleet of Mi-17s and builds on this progress.

## Fixed-Wing Air-Advising Programs

### *C-172 and T-6*

Beyond the Mi-17 program in Afghanistan, AETC-trained USAF air advisors also offered years of assistance to the Iraqi Air Force (IqAF) in the development of a fixed-wing pilot-training program. At its inception, this program consisted of six months of primary flight training in the C-172 and six months of advanced flight training in the C-208B. USAF air advisors served as instructors in both aircraft. The Beechcraft T-6 Texan II is now used for primary flight training in Iraq, and USAF air advisors advise the IqAF on T-6 maintenance practices. USAF air advisors train and advise foreign counterparts to enable the PN air forces they represent to perform, over time, their roles and responsibilities independent of US assistance. This approach is now mature in Iraq, and if the United States stays the course, the air-advising model can prove successful in Afghanistan as well.

### *C-182 and C-208B*

As in Iraq, pilot training in the AAF consists of two phases: the first in the C-182 and the second in the C-208B. USAF active-duty and contracted air advisors instruct in both aircraft. HQ AETC/A3Q is charged with training the active-duty air advisors involved in these and other non-USAF aircraft programs. The Air Force Security Assistance Training Squadron, assigned to the Headquarters AETC International Affairs Directorate at Joint Base San Antonio–Randolph, manages USAF contracts that deploy civilian instructors who support some of these same programs. To prepare USAF air advisors en route to Afghanistan, the



Spartan College of Aeronautics and Technology in Tulsa, Oklahoma, provides C-182 and C-208B aircrew and maintenance training. Spartan previously offered the C-172 training as well. The 15-day C-182 air-advisor pilot course consists of approximately 10 hours of ground academics, 10 hours of flight training, and a flight evaluation. The C-208B pilot course lasts 20 days, with 10 hours of ground academics, 12 hours of cockpit procedural training, 20 hours of flight training, and a flight evaluation. Roughly half of the 15-day familiarization training for the maintenance air advisors consists of hands-on experience.

The training that USAF air advisors provide in the various Afghan airframes has begun to bear fruit. Three AAF classes have completed their pilot training in Afghanistan and, on 23 June 2013, the fourth class began the C-208B phase of training.<sup>22</sup> On 20 May 2013, an Afghan C-208B crew flew a badly wounded Afghan soldier from Kandahar to a hospital in Kabul. A USAF air advisor participated in the operation, but this mission marked only the second time that AAF personnel had planned and led a real-world CASEVAC mission.<sup>23</sup> In fact, the AAF has recently reached the point where it has begun flying operational missions without the assistance of air advisors. On 25 June 2013, two Afghan lieutenants trained by USAF air advisors completed the first all-Afghan C-208B operational flight, airlifting 16 passengers—including four local governors.<sup>24</sup>



Members of the Afghan Air Force's Security Forces Quick Reaction Force of the Kabul Air Wing unload from an Mi-17 and practice insertion procedures during an exercise on 27 March 2013. (From Capt Anastasia Wasem, "Afghan Air Force Conducts Multi-Aircraft, Multi-Capability Exercise," US Air Forces Central Command, 1 April 2013, <http://www.afcent.af.mil/news/story.asp?id=123342416>.)

Additionally, Afghan forces have begun conducting exercises involving both fixed- and rotary-wing missions. On 27 March 2013, the AAF conducted its first combined training exercise, flying Afghan Mi-35s and Mi-17s in an air-assault capacity and C-208Bs in a CASEVAC role.<sup>25</sup> The Mi-17s inserted and extracted Afghan troops, Mi-35s cleared landing sites and flew armed overwatch, and C-208Bs transported patients. USAF air advisors trained, advised, and assisted the AAF in developing these operational capabilities. These exercises and other ongoing training efforts have stimulated progress on the battlefield. In support of a major Afghan National Army operation in northeastern Afghanistan in the spring of 2013, Mi-17s and C-208Bs flew CASEVAC and battlefield circulation missions.<sup>26</sup> In fact, the AAF increased its CASEVAC mis-



sions by 34 percent from February to June 2013.<sup>27</sup> Such air operations allow the Afghans to take the lead, reducing the ANSF's dependence on US and coalition forces. As a result of the air-advising effort, the United States has in turn begun reducing a commensurate portion of direct air support to Afghan ground forces. In a very real and measurable way, then, air advising allows US military forces in Afghanistan to implement the Obama administration's plan to transition combat operations to Afghan forces by the end of 2014.<sup>28</sup>



Three Afghan Air Force pilots receive recognition after completing aircraft commander upgrade training. Following a year of flying with USAF air advisors, two of these pilots flew the first all-Afghan C-208B mission on 25 June 2013. (From "Major Milestone Achieved As AAF Aircraft Commanders Are Certified and Fly First All Afghan C-208 Mission at Shindand AB," *NATO Training Mission Afghanistan Storyboard*, 838th Air Expeditionary Advisory Group, 25 June 2013.)



## Aircraft on the Horizon

Even though projections call for the end of US combat operations in less than a year, the air-advising mission will remain necessary for years to come. Three new Afghan aircraft programs that will need an enduring air-advisor mission in Afghanistan—and will ultimately allow the AAF to stand on its own—include the C-130H, the light air support (LAS) A-29 Super Tucano, and the PC-12. The ANSF is currently dependent on US and coalition capabilities such as medium air-lift; special-missions support; intelligence, surveillance, and reconnaissance (ISR); and fixed-wing weapons employment. The development of Afghan-appropriate capabilities in each of these areas is critical. The C-130H, A-29, and PC-12 have been selected to perform these roles, thus prompting the need for USAF air advisors and associated preparatory training in all three airframes. HQ AETC/A3Q will play a key role in the development, implementation, and management of USAF A-29 and PC-12 training programs and will assist in preparing C-130H air advisors.

### *C-130H*

To meet a pressing requirement for a medium-airlift capability, Ashton B. Carter, the US deputy secretary of defense, directed the USAF in January 2013 to provide the AAF with four C-130Hs and associated training.<sup>29</sup> The first two aircraft arrived on 9 October 2013, and delivery of the last two is scheduled for November 2014.<sup>30</sup> The first group of Afghan C-130H pilots began training in the United States in May 2013.<sup>31</sup> Assisting the AAF in fully developing this new program will require a USAF air-advising mission in Afghanistan after 2014. According to the DOD's *Report on Progress*, the new C-130Hs “provide an initial capability to do inter-theater lift that will take several years to mature.”<sup>32</sup> USAF aircrews/maintainers with prior C-130H experience will comprise the bulk of initial air advisors, and the USAF's Air Mobility Command will likely provide any necessary training for the aircrew and maintenance personnel. On 14 August 2013, the first group of 31



USAF maintainers preparing to assist the AAF with the new C-130H program completed the necessary predeployment training at the AAA.

## A-29

Brazilian Embraer Defense and Security, in cooperation with the US-based Sierra Nevada Corporation, was selected on 27 February 2013 to supply the AAF with 20 A-29 Super Tucanos, training for AAF aircrew and maintenance personnel, and associated logistical support.<sup>33</sup> Sierra Nevada will also train USAF air advisors who will in turn train and advise the AAF. This air-advisor training is scheduled to begin in the fall of 2014. The first A-29s should be available in September 2014, and at that point, plans call for delivering two aircraft per month.<sup>34</sup> The USAF intends to deploy air advisors to Afghanistan to assist Afghan counterparts as they build the organizations and infrastructure required to support this more sophisticated weapons system. The DOD reported that the new A-29 LAS program will “provide the AAF with the capability to conduct air interdiction, armed reconnaissance, air-to-ground support, combat search and rescue, border patrol, and aerial escort missions.”<sup>35</sup> To train the AAF to perform these missions adequately, officials project an incremental training approach that includes US aircrew and maintenance air advisors for years to come. In fact, “the full employment of CAS [close air support] capability is not expected until sometime post-2018.”<sup>36</sup>

Although this new USAF A-29 LAS program focuses on Afghanistan, it brings with it some extraordinary opportunities elsewhere. Over the past 70 years, the Inter-American Air Forces Academy (IAAFA), located at Joint Base San Antonio–Lackland, has played a central role in USAF security cooperation and engagement efforts across the Western Hemisphere. This AETC organization has trained more than 45,000 Latin Americans in a variety of mission areas, including aircraft operations and maintenance.<sup>37</sup> Meanwhile, the Brazilian-built Super Tucano is rapidly becoming the light attack weapons system of choice across much of Latin America.<sup>38</sup> As the region’s air forces transition to the Su-



per Tucano, it will become increasingly important for IAAFA instructors to gain knowledge and expertise in the operation and maintenance of this airframe—and initial steps have been taken toward that end. During a June 2013 visit to the IAAFA, representatives from Embraer and Sierra Nevada delivered A-29 technical manuals. The IAAFA plans to use these materials to incorporate A-29 checklists and procedures into six of its maintenance courses.<sup>39</sup>

The A-29 air-advising mission allows the IAAFA to further improve this effort. As A-29 aircrew and maintenance air advisors to the AAF, USAF personnel will acquire substantial knowledge of A-29 operations and maintenance. Further, they will gain unique combat-related A-29 experience that will greatly assist the IAAFA and its faculty as the academy continues to engage a region moving decidedly toward the Super Tucano. This tie between Afghanistan and the IAAFA mission is instructive insofar as it demonstrates quite poignantly that air advising and security cooperation are more widely applicable beyond the borders of Iraq and Afghanistan. It also shows the critical role that AETC organizations—such as the Air Force Security Assistance Training Squadron; HQ AETC/A3Q; the AAA; and, potentially, the IAAFA—play in institutionalizing the knowledge and experience acquired in Iraq and Afghanistan for use in other countries and GCCs around the world.

During current military operations in Afghanistan, US and other coalition aircraft flying close air support missions receive targeting information and clearance to expend munitions from US and coalition joint terminal attack controllers (JTAC). Prior to deployment to Afghanistan, US controllers complete a rigorous program that often includes training with actual aircraft that will conduct combat operations in that country. It is also quite valuable for the aircrews flying these aircraft to train with the same JTACs who will direct air-to-ground operations in-theater. The aircraft and aircrews, however, have multiple other pre-deployment training requirements; consequently, aircraft availability for JTAC training is often problematic. Because plans call for A-29 air-advising training to take place in the United States, the pilots of these



aircraft may be available for JTAC training. If availability and contractual agreements allow, this training would prove mutually beneficial for pilots and JTACs alike as A-29s take flight in Afghanistan. Over time, A-29s will begin combat operations in Afghanistan, and the training that JTACs and air advisors receive stateside could be put to good use downrange.

### ***KA-350/AC-208B/PC-12***

In years past, HQ AETC/A3Q managed two air-advising aircrew and maintenance programs supporting the IqAF that demonstrate the capacity for air-advising efforts to reach their desired end state. A military variant of the Hawker Beechcraft King Air 350 light transport aircraft, the KA-350ER-ISR was introduced into the IqAF in July 2008 to serve in an aerial reconnaissance role.<sup>40</sup> Hawker Beechcraft offered KA-350 maintenance-familiarization training in Wichita, Kansas, to support this IqAF advising mission. Pilots received KA-350 simulator training in Orlando, Florida, and then flew US Navy T-44s with a compatible avionics suite at Naval Air Station Kingsville in Corpus Christi, Texas. Similar to the MC-12W Liberty flown by the USAF in Afghanistan, the modified KA-350 gives the IqAF the ISR capabilities necessary to detect and deter insurgent activity.<sup>41</sup> USAF air advisors launched the KA-350 program and, after it matured, transitioned operations and maintenance to full control of the IqAF.



Photo courtesy Sgt Brandon Bollick, USA

An Iraqi Air Force AC-208B Combat Caravan fires a Hellfire missile on 8 November 2010 and scores a direct hit on an Aziziyah Training Range target south of Baghdad. (From MSgt Mike Edwards, "Iraqi Airmen Demonstrate Operational Capabilities in Hellfire Exercise," *Inside Af.Mil*, 2 December 2010, <http://www.af.mil/news/story.asp?id=123233035>.)

The same occurred with a special-missions variant of the C-208B. Three of these aircraft, modified to serve in an ISR capacity, were delivered to the IqAF in 2007. The following year, Alliant Techsystems Inc., a defense company in Fort Worth, Texas, began modifying three C-208Bs to carry and employ the AGM-114M/K Hellfire missile.<sup>42</sup> Alliant delivered the first of these aircraft in December 2008 and the last in November 2009. An IqAF AC-208B aircrew first fired a Hellfire missile on a bombing range near Al Asad Air Base on 4 November 2009. The following year, on 8 November, Iraqis fired a second missile in conjunction with the first Iraqi-run live-fire missile-training exercise since the time preceding Operation Iraqi Freedom in 2003.<sup>43</sup> USAF air advisors played an active role in advancing IqAF capabilities to this point. The



third live employment, on 23 March 2011, further validated the USAF's air-advising mission. An Iraqi special operations forward air controller directed this AC-208B launch, which occurred as part of an increasingly sophisticated scenario.<sup>44</sup> Adding this aircraft to the inventory—and training its crews and maintainers—has enabled the IqAF to better conduct counterinsurgency operations.

These two programs might be considered predecessors of the PC-12 program now on the rise in Afghanistan. An Afghan Special Mission Wing (SMW), established in July 2012, provides air support to the Afghan special forces' counterterrorism and counternarcotics mission.<sup>45</sup> Up to this point, those special forces and the new SMW, together with 30 aging Mi-17s and 180 personnel, have relied heavily on US support to the special operations mission.<sup>46</sup> To enable transition to Afghan air support of special missions, the DOD recently awarded two contracts for a total of 48 new SMW aircraft. Sierra Nevada will supply 18 specially modified PC-12s, and Russian-based Rosoboronexport will deliver 30 new Mi-17s that will replace the existing fleet.<sup>47</sup>

Training and advising Afghan special operations aircrews and maintainers will take time. The new wing plans to have 188 pilots to fly its projected fleet of 48 aircraft; it had 42 pilots as of January 2013. Only seven of them were fully qualified to fly with night vision goggles. The SMW includes a total of 32 crew chiefs / flight engineers but needs 143. Of the 385 Afghan maintenance personnel required, the wing had only 86.<sup>48</sup> Working in conjunction with the theater, HQ AETC/A3Q is developing a plan to help the Afghans fill these personnel shortfalls by training and advising the SMW's aircrew and maintenance force. In addition to the Mi-17 program already discussed, the first USAF aircrew preparing to serve as PC-12 air advisors graduated from training in November and December of 2013. Once again, HQ AETC/A3Q will be responsible for training the active-duty air advisors, and Air Force Security Assistance Training will manage the contracted PC-12 instructors.



## Conclusion / The Way Ahead

Multiple, tangible benefits accrue to these air-advising aircrew and maintenance programs in Iraq and Afghanistan. First, USAF air advisors played an important role in enabling an orderly departure from Iraq at the end of 2011 and will remain central to the Obama administration's plan to transition military operations to Afghan control. Simply stated, a viable air force for Afghanistan depends upon the continued support of USAF air advisors. Without an adequate airpower capability, Afghan ground forces either will not have the capacity to maintain security or will require dedicated US and coalition air support beyond 2014—neither of which seems a practical option at present.

More specifically, without AAA and HQ AETC/A3Q support, the Afghan C-130H, A-29, and PC-12 programs will never get off the ground. Nicole Finch and Lt Col Peter Garretson observed that US engagement strategy “cannot consist simply of selling or giving a partner nation equipment and then leaving. The goal of improving a partner nation's aviation enterprise starts long before any equipment is procured or delivered and continues after any equipment is fielded.”<sup>49</sup> Accordingly, cutting short the air-advising mission in Afghanistan would likely leave Afghans with new aircraft they cannot adequately operate and maintain. Additionally, the current Mi-17, C-182, and C-208B programs—which are gaining momentum and beginning to show some measurable results—will likely stall without continued and consistent support from USAF air advisors. Similarly, AAF and SMW missions such as pilot training, mobility, CASEVAC, light attack, and air support for special missions would falter. Continuing the USAF air-advising mission, then, offers the only reasonable USAF method by which Afghan forces can reduce current dependence on US and coalition capabilities and ultimately assume control in each of these areas.

The benefit of air advising is not isolated to Iraq and Afghanistan. With AETC in the lead, the USAF has institutionalized GPF air-advising training for aircrew and maintenance personnel and is now poised to apply that model elsewhere. As previously noted, robust air-advising



experience and knowledge of A-29 Super Tucano combat operations and maintenance in Afghanistan will posture the service to train and advise PNs at the IAAFA, across Latin America, and wherever these aircraft may be flown. As budgets decrease and sequestration takes full effect, this low-cost alternative to persistent US military presence abroad allows us to further our national security interests around the world and continue to assist our partners, like Afghanistan, with a substantially reduced financial burden and US military footprint. In sum, USAF air advising will allow us to transition responsibility over time to the AAF as we build the airpower capacity of other PNs around the globe. ✪

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## Notes

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10. "The AAF will retire its Mi-35 fleet in 2016. Currently, only two of six Mi-35s with remaining service life are available at any time due to a shortage of spare parts. The AAF is currently conducting autonomous patrols with the Mi-35 in the Kabul area and training crews to perform armed overwatch/escort and air to ground operations." Department of Defense, *Report on Progress*, 76.

11. Ibid.; and Wong, "High Expectations."

12. Department of Defense, *Report on Progress*, 75.

13. Marion with Roberts, "Other Face of Airpower," 23.

14. Lieutenant Colonel Roberts currently serves as deputy division chief of the HQ AETC/A2/3/10's Standardization/Evaluation Division. In this capacity, he works with HQ AETC/A3Q to conduct Mi-17 flight evaluations in support of the USAF's air-advising aircrew training mission.

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35. Department of Defense, *Report on Progress*, 76.
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### **Maj Gen Michael A. Keltz, USAF**

Major General Keltz (USAFA; MS, Troy State University; MSS, Air War College) is the director of intelligence, operations, and nuclear integration, Headquarters Air Education and Training Command, Joint Base San Antonio–Randolph, Texas. He is responsible for developing policies and programming resources for Air Force technical and aircrew training programs, which include air advising and associated aircrew and maintenance education and training. General Keltz has flown combat and contingency operations on AC-130H, MC-130E, MC-130H, and AC-130U gunships and Combat Talons in Grenada, El Salvador, Panama, and Sierra Leone and in Operations Desert Storm and Provide Comfort. During Operations Enduring Freedom and Iraqi Freedom, he was the air component commander for several classified joint task forces in Iraq and Afghanistan. General Keltz has commanded a special operations squadron, a special mission group in Iraq and Afghanistan, the 386th Air Expeditionary Wing in Southwest Asia, and the 607th Air and Space Operations Center at Osan Air Base, South Korea. The general is a command pilot with more than 4,000 hours, including over 300 combat and contingency sorties in AC-130, C-130E, and MC-130 aircraft.

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