

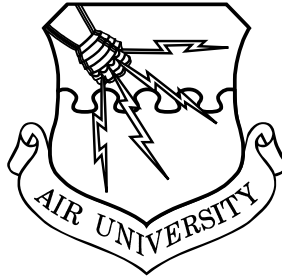
ADAPT or FAIL

The USAF's Role in Reconstituting
the Iraqi Air Force, 2004–2007

GEORGE W. CULLY, JD



AIR UNIVERSITY
AIR FORCE RESEARCH INSTITUTE



Adapt or Fail

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Reconstituting the Iraqi Air Force, 2004–2007**

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Foreword

It was an extremely hot and humid day at Arlington National Cemetery on 11 August 2005. I didn't really notice the weather since all of my attention was focused on the group burial ceremony taking place. As an advisor to the Iraqi Air Force (IqAF), I was escorting their chief of staff and the family of the Iraqi pilot who was killed a few months earlier—on Memorial Day. As neatly folded American and Iraqi flags were presented to the family members, I knew this was a historic event. Not only was this the first time an Iraqi citizen had been interred at Arlington Cemetery, it was also one of the first tangible signs of the United States Air Force (USAF) stepping up to support the new IqAF. During this trip, many senior USAF leaders met with Maj Gen Kamal Abdul-Sattar Barzanjy, the IqAF commander, to discuss ways they could better support him. Reflecting back, the team of advisors faced a lot of challenges during that year, but this event and the Memorial Day crash were key turning points.

Memorial Day 2005 provides several excellent examples of the challenges the USAF faced in standing up the new IqAF. I was at Taji AB and had just returned from a trip to Amman, Jordan, the previous day. While in Jordan, we concluded that the UH-1 helicopters being overhauled for the Iraqis were not suitable for combat operations in the high-temperature environment of Iraq. We could potentially scrap all 16 helicopters. We had also inspected a C-130 that was being considered as an addition to the Iraqi inventory. Unfortunately, the aircraft, a 1959-era B-model, was in pieces and collecting dust in the corner of a hangar. It would have been expensive to bring it back to flight-worthy status.

The purpose of the trip to Taji was for the Coalition Military Assistance Training Team (CMATT) commanding general (CG) to clarify the reporting chain for my team of advisors at Taji. The team leader had not been effectively coordinating with his Army and Air Force special operations team members and on several occasions had bypassed the CMATT chain of command. The situation had finally gotten to the point that it required general officer intervention. After the CG set everyone straight, he explained that the team's top priority was *not* setting up an operational Iraqi air force. Instead, the top priority was to simply help the Iraqis set up processes and procedures. This came as quite a surprise.

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It was the next event that completely changed the course of our efforts. Just before boarding an HH-60 helicopter to return to Baghdad, I received a call from another member of the CMATT air cell. One of the Iraqi Comp Air 7 light reconnaissance aircraft had gone down during a mission; there were no survivors. As soon as our helicopter landed at Phoenix Base, I had to pass the bad news to the CG. The crash was caused by mechanical issues, and a team of experts from the Air Force Flight Test Center later deemed the Comp Air 7 fleet to be unsuitable for flight.

Since the inception of the CMATT air cell (affectionately known as “four lieutenant colonels in a closet,” due to the tiny office we shared in a former Iraqi elementary school), the team faced obstacles and challenges. As far back as 2003, during the Coalition Provisional Authority’s reign, there were conflicting discussions on whether the coalition intended to help rebuild the Iraqi air force and what type of aircraft should be in their inventory. The air cell, created about eight months after Pres. George W. Bush declared an end to major combat operations, was initially composed of a few Airmen deploying on three-month rotations. The deployment length slowly increased over time, ultimately reaching one year.

When I volunteered for the deployment, the request contained no special requirements or prerequisites for filling the position. An e-mail had gone to our base to provide a body; I was the only person to volunteer. Expecting to go through extensive training before my deployment, I was shocked to discover I was not required to go through any training on Iraqi culture and customs, Arabic language, survival skills, combat skills, or convoy operations. Fortunately, I’ve always been interested in language and culture, so I read several books before deploying and immersed myself in the language and customs during my daily interactions with Iraqis. In addition to the lack of training, I discovered my assigned responsibilities would greatly exceed my current skills and experience as a logistician and program management officer. My duties included a variety of tasks—pilot training, air traffic control, flight medicine, combat mission analysis, manpower analysis, organizational planning, foreign military sales, and national defense strategy planning.

Upon arriving in Iraq, I quickly discovered the formation of the IqAF was a low priority for the coalition; historical record keeping on

the subject was even lower in priority. Realizing the historical significance of the task, I set out to collect as many documents as possible, in hopes they would someday be useful to a professional historian. My collection included decision briefings presented to the IqAF chief of staff, e-mails, aircraft accident reports, diplomatic communications regarding the gifting of aircraft to Iraq, internal memos documenting challenges, and daily situational reports. Some of these documents were likely the only copy available. When I got the call from the author, I was excited to hand over this collection to someone willing to take on the daunting task of researching, analyzing, and documenting the events.

“But the most curious neglect of all is the failure of the USAF, the world’s greatest air force, to effectively tutor and support the fledgling Iraqi Air Force until the former was shocked and embarrassed into doing so.” This powerful statement, from this book’s conclusion, sets the stage for the challenges the coalition initially faced in standing up the new IqAF. George Cully’s *Adapt or Fail*, clearly the authoritative source on this subject, is a must-have addition to any history buff’s library. It is an exceptional reference that chronicles the events of the past, while also providing an in-depth analysis of the actions and decisions made by the team of advisors that ultimately helped Iraq form their new air force. Mr. Cully, a long-time historian and former member of the Air Force Historical Research Agency, has written and contributed to numerous books and articles on airpower history. He has spent the last several years researching and writing about topics related to the new Iraqi Air Force. It is sad to admit, but the unfortunate accident that led to the deaths of one Iraqi and four American Airmen was a pivotal event that finally nudged the US Air Force to step up and take a leadership role in forming this new air force. This accident, described in chapter 5, highlights the potential consequences if we don’t do a better job next time. While it was a solemn honor to escort the Iraqi family and dignitaries to Arlington National Cemetery, it is an honor I don’t wish upon anyone. In light of the recent turmoil in Iraq, the United States could potentially provide similar assistance again. Commanders, military strategists, government leaders, and academics should be encouraged to read this book, as we strategize our support to Iraq, Jordan, and other countries fighting the Islamic State of Iraq and the Levant (ISIL) terror

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network. It is important that the readers understand the sacrifices made by Maj Brian Downs, Capt Ali Husam Abass, Capt Jeremy Fresques, Capt Derek Argel, and SSgt Casey Crate—and ensure we don't make the same mistakes again.

A handwritten signature in black ink, appearing to read 'C Westgate III', with a long horizontal flourish extending to the right.

Charles J. Westgate III

Former advisor to the Iraqi Air Force

February 2015

About the Author

George Cully is a retired USAF officer and an independent research professional. His post-retirement research efforts have assisted historians and biographers, veterans benefit claimants, aircraft restorers, and aircraft crash site archaeologists. Before retiring from federal civil service in late 2010, he served as the director of Air University's Office of History at Maxwell AFB, Alabama. He joined the USAF History and Museums Program in 1984 and held positions at multiple levels, including the USAF headquarters, Air Force Materiel Command headquarters, the Air Force Research Laboratory, and the Air Force Historical Research Agency. Cully retired from active duty in 1991, after serving 12 years in the USAF and 10 years in the US Navy. He received a juris doctorate from the University of Virginia's School of Law in 1979.

Cully coauthored the *Handbook for Researching Missing-in-Action Cases, 1941–1960* (1994), *Active Air Force Wings as of 1 October 1995* (1998), and *USAF Active Flying, Space, and Missile Squadrons as of 1 October 1995* (1998). He has also published in *Air Force Magazine*, *Air Power Journal* (now *Air and Space Power Journal*), and *Air Power History*.

Abstract

Prior to its involvement with the Iraqi air force in 2004, the US Air Force (USAF) was relatively inexperienced in helping to create an air force for a partner nation. Usually the partner nation would already have an air force and the requisite infrastructure—only needing better airplanes, more training, or additional spare parts for the equipment already on hand. None of those conditions were present in Iraq when the Coalition Military Assistance Training Team (CMATT) was tasked to create an air corps for what the Coalition Provisional Authority called the New Iraqi Army. Nor were the handful of USAF personnel assigned to the CMATT air cell (CMATT-A) given any special preparations or high-level support and oversight after that task had morphed into the creation of a full-fledged Iraqi air force—and all that must accompany such an undertaking—in 2005.

The resulting ad hoc nature of CMATT-A's operations combined with other factors to produce an untenable situation for the USAF, USAF Reserve, and other Department of Defense component advisors involved. Unfortunately, that increasingly serious situation did not garner the attention of the USAF's senior leadership until such neglect was found to be a contributing factor in an aircraft accident that took the lives of five dedicated Airmen—four USAF members and an Iraqi Air Force officer—on 30 May 2005.

This study summarizes the events that led up to that accident and the consequences that followed, including the decision to replace CMATT-A with a larger, better-resourced organization led by a USAF general officer, the recognition of the need to deploy significantly greater numbers of suitably trained USAF instructor/advisor Airmen to Iraq, and the concerted action to assist the Iraqi Air Force in obtaining more capable aircraft. These improvements took the better part of two years' analyses, preparations, investment, and adjustments. This study summarizes the essentials of that complex sequence of events. It is a story about accomplishing a demanding, unheralded mission under harrowing conditions in a foreign land.

Acknowledgments

This study was originally written to satisfy a much narrower requirement in 2008. Tom Manning, then the Air Education and Training Command (AETC) command historian, wanted to host a set of “what we are doing” presentations during that year’s semiannual AETC historian conference. In preparation for the event, he encouraged various AETC historians to produce papers to deliver at the conference. The topic list included AETC’s activities in Iraq; I was then the chief historian for Air University (AU), so I was in a good position to address that particular issue. AU was deeply involved in crafting the training syllabi adopted by the Iraqi Air Force officer schoolhouse in 2006. Thus, without Tom Manning’s nudge, this study would most likely never have happened.

If it’s probable that it takes a village to properly raise a child, then it’s almost certain that accurate historical narratives cannot be written unless relevant records are available. In this instance, I benefitted from a series of improbable coincidences. The first was the result of Col Charles Westgate’s assignment to the CMATT-A cell in 2005. Colonel Westgate, an operator with the heart of a historian, went out of his way to collect records and assemble a detailed chronology of CMATT-A’s development and activities from its inception through the end of his tour. Later, and again entirely by chance, Colonel Westgate and I crossed paths. Upon learning that I was writing a study on the efforts to resurrect the Iraqi air force, he was most generous in sharing the unique cache of materials that he had collected and preserved.

Yet another beneficial coincidence came about as the result of a deployment by Dr. Silvano Wueschner, one of the staff historians assigned to the AU history directorate. While he was in theater in early 2010, Dr. Wueschner discovered a drawer full of abandoned files that shed considerable light on the planning and preparations made in late 2006 and 2007 regarding the USAF’s support for the Iraqi Air Force. Knowing that I would be interested, Dr. Wueschner brought the files back with him when he returned to our office that spring.

I also need to acknowledge the support and encouragement received from my boss, Col Ben Hulsey, AU director of staff. It was with his permission (and temporary duty money) that I was able to interview participants and gather documents at Wright-Patterson AFB, Ohio; Randolph AFB, Texas; and Hurlburt Field, Florida. He also

ACKNOWLEDGMENT

gave permission for me to focus exclusively on the writing during that last two-week sprint to finish the manuscript in August 2010. I also need to sincerely thank the many participants who spoke about their time in Iraq or their support of those who deployed; they are too numerous to name here.

Although Tom Manning instigated this project, it was Dave Byrd who motivated me to significantly expand its scope. Then assigned to the Air Force History Support Office, Byrd worked to persuade various Air Force historians to contribute to an ambitious, multivolume work intended to describe the USAF's quasi-combat operations conducted without respite since the end of the Persian Gulf War in 1991. The working title of the project was *Airmen at War*; in a chance conversation with Byrd in early 2010, I learned that there were still several topics that lacked for authors. One was the USAF's role in reconstituting the Iraqi air force. I'm still not sure whether it was Dave's persuasiveness or simply my own vanity that led me to volunteer, but I am truly grateful for the opportunity. Dave Byrd liked the resulting manuscript enough to nominate it for the Robert F. Futrell Award, a USAF-level prize given annually to recognize excellence in Air Force historical publications. Thanks, at least in part to Dave's advocacy, my study was a Futrell Award recipient in 2011.

Of course, I would be far more than remiss if I didn't acknowledge the single most important influence in my life over the last 25 years—my wife. She's the one who is kind enough to bring me something when I'm so absorbed in writing that I forget to eat, the one who is wise enough to tell me when it's time to quit for the night, and the one who is honest enough to tell me when the words aren't working. I owe her everything.

Chapter 1

Introduction

The US Air Force (USAF) has not had much recent experience in helping a partner nation create an air arm from nothing. Historically, much of the USAF's participation in the Department of Defense (DOD) foreign military sales (FMS) program—the activity responsible for such matters—had been structured around the presumption that the partner nation would already have an air force and the requisite infrastructure. It just needed better airplanes, more training, or additional spare parts for the equipment already on hand.

Ordinarily, that framework has satisfied the needs of both the United States and its foreign partners. The United States benefits by having friendly nations and potential allies equipped with capable air forces, and American suppliers profit from the work generated by FMS. Moreover, FMS has helped partner nations by validating their needs within the strictures of US technology and arms export laws, by matching partners with qualified American suppliers, and by facilitating the partners' payments for their purchases. In addition, depending upon the circumstances and guidance from the US Department of State, the DOD's military assistance program (MAP) can also further US foreign policy goals by funding some (or most) of a partner's military needs through MAP grants. Both programs have been successful on many occasions in the past.¹

But what happens when no fully functioning national government is able to coordinate the establishment of an air force, or when the nascent partner nation acquires some airplanes without first having a realistic, well-financed roadmap for its operation and sustainment? What if the requisite infrastructure has been severely crippled and a raging insurgency hampers every effort to repair it? What is to be done when partner-nation volunteers risk their lives and their families' safety by stepping forward for training, only to discover that, for lack of money and planning, there are no airplanes to fly? And what is the likely result if other priorities, a lack of suitable doctrine and training structures, constant turnover due to short-term deployments, and command inattentiveness combine in a ground-centric environment dominated by the US Army?

The aforementioned conditions faced the handful of USAF advisors deployed to help the Iraqi government reconstitute its air force beginning in January 2004. It was only after a tragic mishap in May 2005 that took the lives of five exceptionally dedicated Airmen—four Americans and an Iraqi—that the USAF’s senior leaders began paying serious attention to a mission they had accepted without serious, visible deliberation some 17 months earlier. Even with that essential reengagement, it still took the better part of two more years’ analyses, preparations, and adjustments to begin to set things right.

This study summarizes the essentials of that complex sequence of events. Although it includes many elements of a cautionary tale, this is a story about the ingenuity, flexibility, and perseverance of the USAF Airman-advisors who deployed to Iraq and the Iraqi patriots they trained, mentored, and befriended. It is a story about accomplishing a demanding, unheralded mission under harrowing conditions in a foreign land. This is a story that should be preserved, if only to remind future USAF Airmen of some of the extraordinary challenges their predecessors received, accepted, and overcame.

Notes

Notes will appear in full form only in their first iteration. Thereafter, they will appear in shortened form. For full details, see the appropriate entry in the bibliography.

1. Defense Security Cooperation Agency (DSCA), “Introduction to Security Cooperation Management,” in *The Management of Security Cooperation* (Wright-Patterson AFB, OH: DSCA, 2010), <http://www.disam.dscamilitary.com/Research/Presentations/2%20introduc.ppt>.

Chapter 2

A Brief History of the Iraqi Air Force, 1931–2003

The British government established the Royal Iraqi Air Force (RIqAF) on 22 April 1931, the last year of its direct control of Iraq under a 1920 League of Nations mandate.¹ The RIqAF, consisting initially of just five pilots and 32 ground crew, was equipped with modest numbers of British-built aircraft in the 1930s, and it continued to follow Royal Air Force (RAF) practices for decades thereafter. In fact, Great Britain continued to be Iraq's principle source of military aviation training and combat aircraft procurement until the late 1950s.²

Iraq's rulers generally followed British advice prior to World War II, but rising Iraqi nationalist and anticolonialist sentiments led to a pro-fascist coup d'état in April 1941. This resulted in a month-long Anglo-Iraqi War in May, during which the RIqAF flew its first combat sorties. However, even with aviation contingents provided by fascist Italy and Nazi Germany, the Iraqi insurgents were soon overwhelmed.³ The coup leaders fled the country, and British forces occupied Iraq for the next six years.⁴

Iraq regained its sovereignty in January 1948, and RIqAF pilots flew bombing missions in the first Arab-Israeli War later that same year.⁵ A pro-communist revolution toppled Iraq's monarchy on 14 July 1958, but Iraq continued to maintain an air arm. The renamed Iraqi Air Force (IqAF) bombed Israeli targets during the Six-Day War in 1967 and again in the Yom Kippur War of October 1973.⁶

Soviet air doctrine heavily influenced the IqAF in the 1970s, and the Air Force was largely outfitted with Russian-built combat aircraft when the Iran-Iraq War began in 1980.⁷ Its effectiveness was limited for much of that eight-year conflict—even though Iraq also bought over 130 French-built Dassault Mirage fighters between 1977 and 1990.⁸ When Iraq invaded Kuwait in August 1990, the IqAF could boast of having over 1,000 aircraft, but expensive equipment notwithstanding, the IqAF failed as a fighting force during the Persian Gulf War of 1990–91.⁹ Indeed, the coalition's onslaught during Operation Desert Storm (17 January–28 February 1991) caused many Iraqi airmen to seek asylum in Iran. At least 146 aircraft, valued at \$2.5 billion, were interned there. Iran later declared the aircraft to be state

property in partial reparation for the losses it had suffered during the Iran–Iraq War.¹⁰

In the decade following the Persian Gulf War, the IqAF mainly stayed within the boundaries defined by two coalition-imposed “no-fly” zones, but its remaining fighters occasionally tried to lure coalition aircraft within range of Iraqi ground defenses.¹¹ During the run-up to the 2003 Iraq War, Iraqi president Saddam Hussein ordered his air force to conserve its remaining 300 aircraft by avoiding combat, and there were no aerial engagements reported during that conflict.¹² Those planes not destroyed on the ground by coalition air power between the opening of hostilities on 20 March and the cessation of combat operations on 1 May 2003 were found dismantled and stored or hidden quite literally *in* the desert.¹³ Initially, there were suggestions that some of those aircraft might be refurbished and returned to service in an air force to be fielded by a rehabilitated Iraq, but political and economic realities quickly overwhelmed any such possibility.¹⁴ On 23 May the newly installed Coalition Provisional Authority officially disbanded the IqAF, along with the other branches of Iraq’s armed forces.¹⁵

Notes

1. Iraq has traditionally celebrated 22 April as “Air Force Day” in commemoration of the event. Lorie Jewell, “Iraqi Air Force Celebrates 74 Years,” *Advisor* 2, no. 7 (12 February 2005): 6.

2. The Iraqi government moved away from the West and toward the Soviet Union following the communist-backed revolution that abolished Iraq’s monarchy on 14 July 1958, but the IqAF continued to take delivery of British-built Hawker Hunter jet fighters as late as May 1967. See Ahmad Sadik and Tom Cooper, *Iraqi Fighters, 1953–2003: Camouflage & Markings* (Houston, TX: Harpia Publishing, 2008); Tom Cooper and David Nicolle, *Arab MiGs*, vol. 1, *MiG-15s and MiG-17s, 1955–1967* (Houston, TX: Harpia Publishing, 2009), 96–99; and Cooper and Nicolle, *Arab MiGs*, vol. 2, *Supersonic Fighters: 1956–1967* (Houston, TX: Harpia Publishing, 2011).

3. For fascist Italy’s efforts to provide the Iraqis with military aircraft, especially in the period immediately preceding World War II, see Giancarlo Garelo, “Italian Wings over Iraq (1937–1941),” *Small Air Forces Observer* 32, no. 4 (April 2009): 114–17; and Garelo, “Italian Wings over Iraq (1937–1941),” *Small Air Forces Observer* 33, no. 1 (July 2009): 21–23.

4. AVM A. G. Dudgeon, RAF, *The War That Never Was* (Shrewsbury, England: Airlife, 1991); and Kevin Lyman, *Iraq 1941: The Battles for Basra, Habbaniya, Fallujah and Baghdad* (Oxford, England: Osprey Press, 2006).

5. Shlomo Aloni, *Arab-Israeli Air Wars, 1947–1982* (Oxford, England: Osprey Press, 2001), 9.

6. Ibid., 51; David Nicolle and Tom Cooper, *Arab MiG-19 and MiG-21 Units in Combat* (Oxford, England: Osprey Press, 2004): 21 and 65–70; and Tom Cooper, David Nicolle, and Patricia Salti, *Arab MiGs*, vol. 3, *The June 1967 War* (Houston, TX: Harpia Publishing, 2012); Tom Cooper and David Nicolle, et al., *Arab MiGs*, vol. 5, *October 1973 War, Part 1* (Houston, TX: Harpia Publishing, 2014); and Tom Cooper and David Nicolle, et al., *Arab MiGs*, vol. 6, *October 1973 War, Part 2* (Houston, TX: Harpia Publishing, 2015).

7. Beginning in the late 1960s, the Indian air force also dispatched significant numbers of flight instructors to Iraq; IqAF pilots trained in India as well. See Nicolle and Cooper, *Arab MiG-19 and MiG-21 Units*, 78. For general coverage of the Iran–Iraq air war, see Maj Ronald E. Berquist, *The Role of Airpower in the Iran–Iraq War* (Maxwell AFB, AL: Air University Press, December 1988; Tom Cooper and Farzad Bishop, *Iran–Iraq War in the Air* (Atglen, PA: Schiffer Publishing, 2003); Bishop and Cooper, *Iranian F-4 Phantom II Units in Combat* (Oxford, England: Osprey Publishing, 2003); and Cooper and Bishop, *Iranian F-14 Tomcat Units in Combat* (Oxford, England: Osprey Publishing, 2004).

8. Sadik and Cooper, *Iraqi Fighters*, chap. 9.

9. Rene Francillon, “Mirage at War: Iraqi and Kuwaiti Mirage F1s,” *World Air Power Journal* 4 (Winter 1990–91): 22–25; and Sadik and Cooper, *Iraqi Fighters*, chap. 9. For a detailed account of the IqAF’s performance at the outset of the Persian Gulf War, see Ahmad Sadik and Tom Cooper, “The First Night: Iraqi Air Force in Combat—17 January 1991,” *International Air Power Review* 26 (Winter 2009): 114–29. More generally, see Eliot A. Cohen, *Gulf War Airpower Survey*, 6 vols (Washington, DC: Government Printing Office, 1993); Stan Morse, ed., *Gulf War Debrief* (London: Aerospace Publishing, 1991); Richard Hallion, *Storm over Iraq: Air Power and the Gulf War* (Washington, DC: Smithsonian Institution Press, 1992); and Christopher Chant, *Air War in the Gulf 1991* (Oxford, England: Osprey Publishing, 2001).

10. The total encompassed both military aircraft and civil jet transports, including some airliners taken from Kuwait as war booty. See “Iraq to Iran: Minders Keepers,” *Time*, 8 April 1991, <http://www.time.com/time/magazine/article/0,9171,972677,00.html>; “Iran Hoards Iraqi Aircraft,” *Flight International*, 24–30 April 1991, 9; and Babek Taghvaei, “Race to Iran!” *AirForces Monthly*, June 2010, 44–47.

11. Steve Davies, *F-15C/E Eagle Units of Operation Iraqi Freedom* (Oxford, England: Osprey Publishing, 2004): 12–21; Steve Davies and Doug Dildy, *F-16 Fighting Falcon Units of Operation Iraqi Freedom* (Oxford, England: Osprey Publishing, 2004): 13–16; “Operation Southern Watch,” Air Force Historical Support Division, 18 September 2012, <http://www.afhso.af.mil/topics/factsheets/factsheet.asp?id=19816>; and Terry Boyd, “Operation Northern Watch: Mission Complete,” *Stars & Stripes* (European Edition), 31 March 2003, <http://www.stripes.com/article.asp?section=104&article=13614&archive=true>.

12. Dr Daniel L. Haulman, “What Happened to the Iraqi Air Force?” Air Force Historical Research Agency, 3 November 2009, <http://www.au.af.mil/au/aunews/archive/2010/0516/0516Articles/Haulman30514.pdf>.

13. Between late June and late July 2003, USAF engineers excavated over 30 IqAF jet aircraft that had been intentionally buried at Al-Taqaddum Air Base west of Baghdad, including some Mach 3–capable MiG-25R Foxbat reconnaissance planes. Their concealment, and the fact that US forces had been operating in the immediate

vicinity for several months before learning of their presence, became a point of argument in the ongoing search for hidden caches of Iraqi weapons of mass destruction (WMD). During a 5 August press conference, US Secretary of Defense Donald Rumsfeld said this discovery bolstered the Bush administration's expectation that stockpiles of Iraqi WMD would eventually be found. Kathleen T. Rhem, "American Forces Pull Hidden MiG Fighters Out of Iraqi Desert," *American Forces Press Service*, 6 August 2003, accessed 28 December 2009, http://www.defenselink.mil/news/Aug2003/n08062003_200308063.html; and Charles R. Smith, "Iraqi 'Mach 3' MiG Buried in Sand," *Newsmax.com*, 6 August 2003, accessed 28 December 2009, <http://archive.newsmax.com/archives/articles/203/8/6/105528.shtml>. One of the recovered Foxbats was later acquired by the National Museum of the USAF. Bill Reinke, "Soviet MiG-25 Being Restored at Wright-Pat," *Dayton Daily News*, 30 November 2006, accessed 1 January 2010, <http://projects.daytondailynews.com/cache/galleries/News/Local/113006mig/>.

14. Don Woolford, "Iraqi MiG Cache to Become New Nation's Air Force," *Australian Associated Press Financial News Wire*, 22 April 2003; and Robert Burns, "U.S. Joint Chiefs Chairman Says Rebuilding an Iraqi Military Will Start with Dismantling Special Security Organs," *Associated Press Worldstream*, 10 May 2003.

15. L. Paul Bremer, "Coalition Provisional Authority Order No. 2: Creation of a New Iraqi Army," Sec. 1, 18 August 2003, http://www.iraqcoalition.org/regulations/20030818_CPAORD_22_Creation_of_a_New_Iraqi_Army.pdf.

Chapter 3

The Rebirth of the Iraqi Air Force

Chartered to oversee a transitional period pending the formal return of sovereignty to the Iraqi people, the Coalition Provisional Authority (CPA) re-created the national institutions deemed essential to that purpose, including a defense force called the New Iraqi Army (NIA).¹ In mid-June 2003, the CPA activated the Coalition Military Assistance Training Team (CMATT) to oversee the mobilization of the NIA. CMATT, led by Maj Gen Paul D. Eaton, US Army, was initially staffed with just five officers on short-term loan from US Central Command (USCENTCOM). Neither the CPA nor USCENTCOM provided any special preparation for their role, and General Eaton had only just been informed of his assignment in early May.² When he arrived in Baghdad, the new CMATT commander found that his organizational assets consisted of little more than “a 24-page PowerPoint briefing and a budget of \$173 million.”³

The CPA directed CMATT to mobilize and equip an NIA force—to be fielded by September 2006—consisting of about 40,000 soldiers grouped in three divisions (27 battalions) of light or motorized infantry. The CPA’s policy was that Iraq should not be rearmed to the point that it would present a credible military threat to its neighbors, and the NIA was to be structured and outfitted accordingly. Denying the ability to project national power by air was an essential corollary to that intent. Walter Slocombe, then the senior CPA advisor for security and defense, emphasized at a 23 June 2003 press conference that the NIA “would operate without an air force.”⁴

In spite of all the difficulties it faced, CMATT already had about 1,000 Iraqi soldiers training at Kirkuk when CPA administrator L. Paul Bremer III signed Order Number 22 on 7 August 2003.⁵ This directive formally established the NIA as “the first step toward the creation of the national defense force of the new Iraq.” It remained a matter of interpretation as to whether the language of Order Number 22 also resurrected the IqAF, if only on paper. The order made no specific mention of an air arm, but it did define the NIA to include “all components of the national armed forces of Iraq.”⁶

The New Iraqi Army Air Corps

While CPA Order Number 22 may have implied the potential for an Iraqi air force, CMATT's initial mobilization and training budget included no funds for aviation. But the situation was changing. On 5 September 2003, with Iraq beginning to descend into chaos, US Secretary of Defense Donald Rumsfeld approved General Eaton's proposal to compress the NIA mobilization schedule by 24 months.⁷ Now, all three NIA divisions would have to be equipped, trained, and fielded by September 2004. The accelerated mobilization plan, which General Eaton called Phase II, was budgeted at just over \$2.2 billion and included significant allocations for military equipment and infrastructure construction. Phase II also acknowledged the need for an NIA air element to conduct troop and logistics movements and casualty evacuation.⁸

General Eaton assigned the job of structuring the NIA's air element to his CMATT future plans officer, Lt Col John M. Pioli, US Marine Corps. The NIA released funding for the air arm but "with the proviso that the air component fell under the aegis of the army and thus became an army air corps" rather than an independent air force.⁹

Over the next few months, Colonel Pioli's preliminary planning efforts focused on generating very modest rotary-winged and light transport capabilities for the New Iraqi Army Air Corps (NIAAC). At the time, his vision was for a small, ground support-oriented force that could be equipped and made operational before the end of 2004. This goal seemed plausible because there were thought to be large numbers of former IqAF aircrew both qualified and willing to meet the need. Offers were soon made to bring some of those aircrew back on active duty.

Regardless of the Iraqi airmen's readiness to serve, CPA policy still excluded an offensive air capability, and the NIAAC's early recruiting efforts remained at least nominally fitted to that position. In an interview published on 24 March, Colonel Pioli said that there would be no near-term openings for former IqAF fighter pilots, even though during the Saddam era they were reputed to have been the IqAF's best-trained airmen. "We are not bringing the jet guys back," explained Colonel Pioli, "while there are already qualified Iraqi transport pilots still willing and able to fly."¹⁰

Finding a Training Site

A sufficient supply of volunteers raised the next obvious question: where to train them? Egypt, Hungary, or perhaps even Iraq were all possibilities, but given Jordan's willingness to host NIA officer training, it only made sense to ask if CMATT's "Jordan Training Initiative" might be extended to the NIAAC. An accomplished military helicopter pilot, Jordan's King Abdullah II readily agreed to invite the Iraqi airmen to his country. Better yet, the king offered to provide them with 12 Bell UH-1 Huey helicopters (soon increased to 16) and two Lockheed C-130B Hercules transports.¹¹ This was a chivalrous offer, to be sure, but all of the aircraft needed refurbishment and equipment upgrades. In response, the CPA agreed to pay for the work and to use a favored Jordanian contractor or, in the case of the Huey helicopters, Royal Jordanian Air Force (RJAF) technicians.¹² Delivery of the first C-130B was promised by 1 August; all of the Hueys were to be handed over by 1 September.¹³

As to the training program, the principals agreed that while RJAF instructors would do the actual teaching, CMATT would retain control of the NIAAC's training formats and course syllabi. For its part, CMATT would fund the overall training effort, including fuel costs, until the Iraqis could assume responsibility in mid-2005. CMATT also agreed to reimburse the RJAF for any training-related aircraft parts expended in the first six months. This arrangement offered some special advantages from General Eaton's perspective. Beyond the early acquisition of mission-appropriate, US-built airplanes at a reasonable cost, it meant that the NIAAC airmen could become type qualified far more quickly thanks to experienced instructors who spoke the same language and shared the same cultural perspectives.¹⁴

But there was another, more subtle advantage in the bargain. General Eaton's experience working with the Jordanians in the fall of 2003 had convinced him that the Western democracies' military leadership philosophy influenced Jordan to a greater degree than it did for many of Jordan's more authoritarian neighbors. He expected that influence to be embedded within the Jordanians' teaching methods, and this expectation nested easily with the CPA's overall goal of encouraging the Iraqis to replace Saddam-era totalitarianism with democratic attitudes, principles, and practices.¹⁵ General Eaton's views were echoed by Col Kim Smith, the British army officer assigned to CMATT as chief liaison officer in early 2004. "It was no accident," said Colonel

Smith, “that the training of both the air and the land component was taking place in Jordan. . . . The Jordanians represented the ethos that was sought for the Iraqis.”¹⁶

In January 2004 the NIAAC’s first 14 pilots entered UH-1 helicopter transition training in Amman, Jordan. They were accompanied by 18 aircrew (including five pilots) programmed for C-130B training, along with 28 UH-1 maintenance technicians and 31 C-130B maintainers. An additional 29 ground support trainees reported in mid-March. This second cohort included logistics supervisors, weather forecasters, air traffic controllers, life support technicians, clerks, and equipment operators. Of greater long-term import, the Jordanians also hosted six NIA staff colonels who were expected to become the NIAAC’s initial senior leadership cadre.¹⁷

While the rotary-wing and transport training programs appeared to be on track in Jordan, the growing insurgent threat pushed the CPA to accept the need for broader NIACC capabilities. During a 21 January press briefing, General Eaton acknowledged that CMATT was “also investigating the use of reconnaissance aircraft in order to effectively monitor the miles of Iraqi border, and infrastructure such as pipelines and electrical transmission facilities.”¹⁸

As to the future, General Eaton suggested that the NIA might eventually grow to become a force of eight to 12 divisions “backed up by attack helicopter aircraft, lift aircraft, and the wherewithal to secure the air above—air defense artillery and the interceptor aircraft that you need to defend the skies.” But he admitted that was only “a soldier’s theoretical construct,” and even with a large-scale deferral of other important Iraqi social needs and “prodigious contributions from donor nations,” it would still be at least three to five years before such a force could be built.¹⁹

CMATT Forms an Air Cell

Long-term expectations notwithstanding, CMATT faced a short-term need to orchestrate the process of acquiring, integrating, and sustaining the aircraft the NIAAC expected to receive later in the year. In January 2004 the CMATT commander addressed that need by forming an internal air cell, commonly referred to as CMATT-A.²⁰ Given the modest number of Iraqi airmen and aircraft involved, the CMATT-A staff remained quite small throughout its existence. Until its replacement in November 2005, the cell’s entire complement consisted

of just four officer positions and (after January 2005) an Iraqi civilian contractor—leading CMATT-A's incumbents to wryly refer to their office as “four [lieutenant] colonels in a closet.”²¹

In view of Britain's important role in the coalition (and perhaps reflecting its Royal Air Force's [RAF] long tradition of training and advising IqAF officers), the CMATT-A leadership position was “earmarked” for an RAF officer—occasionally a group captain (equivalent to a USAF colonel) but generally a wing commander (comparable to a USAF lieutenant colonel). The remaining three positions—also posited at the level of lieutenant colonel—were allocated along functional lines: one for helicopters and maintenance issues, one for C-130 transport matters, and one for reconnaissance/surveillance aircraft requirements. In 2004 these positions were generally filled by USAF or Air Force Reserve officers assigned on a 90-day rotational basis, but occasionally by US Marine Corps officers and, in one instance late in the year, by a major in the Italian air force.²²

From Air Corps to Air Force

From its inception in May 2003, the CPA had always operated with the understanding that it was only a caretaker, and that its most important goal was to return sovereignty to the Iraqis as soon as practicable.²³ By March 2004, with the publicly announced time for that transfer only a few months away, it was imperative that Iraq begin addressing its self-defense needs in a truly independent manner. On 21 March CPA administrator Bremer signed Order Number 67, establishing a new Iraqi Ministry of Defense (IqMoD) and initiating the process through which the ministry would take control of Iraq's security forces. The order renamed the NIA as the Iraqi armed forces, and section 2 of the order expressly stated that those armed forces included an Iraqi air force. By that action, the IqAF regained its independence as an institutional coequal—at least in theory—with the Iraqi army.²⁴

Four weeks later, in a news release issued on 17 April, the CPA and Iraqi defense ministry officials jointly announced that the IqAF already had over 100 airmen undergoing instruction in Jordan and that recruiting stations were open in Baghdad and Mosul. They anticipated that Iraq's air force would be nearly 500 strong by October. They also expected a squadron of six UH-1H Huey helicopters to be

operational at Taji Air Base (AB) by July, a squadron of light reconnaissance aircraft positioned at Basrah “later this summer,” and the two ex-RJAF Hercules turboprop transports to be operational in October.

Since most of the initial pilot trainees were former IqAF members, they were presumed to need only some “difference” instruction to obtain currency in their new equipment. The news release also mentioned that the officers would be schooled in “the philosophy of a democratically-controlled military,” but it did not elaborate on what that education might include. As to the coalition’s role, the release explained that “mentoring teams from appropriate specialist areas will assist the [IqAF] in the establishment of the squadrons and bases. In particular they will develop safety procedures and standard operating procedures as well as aiding the interface with coalition forces.”²⁵

The IqAF Gets Its First Commander and Its First Airmen

During the joint CPA–IqMoD press conference held on 17 April 2004, Iraqi defense ministry spokesmen announced that “the Air Force will be commanded by a Major General (yet to be appointed), who will . . . act as the Chief of the Defense Staff’s senior air advisor.”²⁶ Soon thereafter, the defense ministry named Kamal Abdul-Sattar Barzanjy to serve in that position. An Iraqi Kurd born in Baghdad in 1944, General Barzanjy became an IqAF jet fighter pilot after finishing undergraduate studies at the Iraqi Air Force College in 1968. In 1983 he earned a master of military science degree after attending the Iraqi Military Staff College. General Barzanjy also graduated from Iraq’s National Defense College in 1986. Decorated for heroism during the Iran–Iraq War, he retired from active duty in 1995 as an IqAF staff major general with over 3,200 flying hours recorded in his official logbooks. After leaving active duty, General Barzanjy lived as a private citizen until being asked to accept this new post.²⁷

On 27 May the IqAF held graduation exercises in Amman, Jordan, for its first 14 rated airmen—all former regime officer pilots—as they completed UH-1H helicopter flight training. The first 28 UH-1H maintainers finished their studies on 9 May, and 19 more logistics supervisors and ground support personnel graduated on 31 May. They joined the 10 operations support airmen who had finished in April. Eighteen C-130 aircrew and 31 Hercules maintenance technicians were scheduled to complete their studies by 15 July, and follow-on classes of about the same size would begin training shortly thereafter.²⁸

The CMATT-supervised UH-1H syllabus had been structured in two phases for this initial class. The initial three-week phase assessed the students' overall aviation skills—a necessary step, given that most of them had logged very few flying hours since the end of the Gulf War in 1991.²⁹ The 16-week second phase—a ground school and instruction in basic flying, basic instruments, and advanced instrument flying—transitioned the students into the Huey helicopter. The graduates were scheduled to return to Iraq on 18 June, where they were to “assist the coalition with the recruitment, design and development of the new Iraqi air force as they await aircraft assignments.”³⁰ And therein lay the next hurdle: the new graduates were ready to fly, but what were they to use for aircraft?

Early Aircraft Acquisition Problems

In his seminal work, *Ideas and Weapons*, noted airpower historian I. B. Holley explored the relationship between military doctrine and aircraft procurement. His thesis was that careful analysis and thoughtful estimation based upon sound doctrinal principles were essential predicates in the acquisition process. Put more simply, Holley showed that if you don't *plan* wisely—if you don't first think thoroughly about what you intend, and therefore what you need—then you won't *buy* wisely.³¹

Given the many challenges facing the Iraqi interim government (IIG) and its coalition partners, it should come as no surprise that, with one noteworthy exception, there was little or no focused, high-level attention given to the IqAF's mission, structure, and equipage requirements in 2004. The desperate need to forge a working polity while trying to suppress its mortal enemies left little time for the IIG to consider the needs of an air force that offered no real short-term military value. The sole exception—three ex-USAF C-130E transports delivered just before the first national elections held in early 2005—came about because of intense interest by officials at the very highest levels in both Baghdad and Washington, DC. In most other respects, the Iraqi air force's acquisition processes in 2004 and early 2005 presented a textbook case for learning how *not* to equip an air arm.

Aerial Surveillance Platform Issues

On 19 April 2004, just two days after announcing the new service's expansive intentions, the CPA formally invited potential vendors to submit their proposals for the aircraft needed to equip the proposed

reconnaissance squadron. The requirement for what the CPA called an aerial surveillance platform (ASP) envisioned eight lightweight, two-seat aircraft outfitted with infrared/electro-optical sensor suites.³² The solicitation—or request for proposals—also included aircrew training and maintenance support requirements, along with an option to buy eight additional aircraft if the initial delivery proved successful. That said, bidders were given only three weeks to reply. Moreover, they had to deliver their first article within 30 days of contract award, and all eight aircraft had to be in Iraqi hands within six months.³³

Much of this urgency was driven by the need to regain control over Iraq's 3,800-mile border and to protect its oil production and delivery infrastructure against increasing levels of violence. There was also an implicit acknowledgment that the CPA's mandate and money were both running out, and that denouement came about even sooner than expected. The transition had been announced for the last day of June, but in a surprise move Iraqi prime minister Ayad Allawi's interim government took charge two days early, resulting in the CPA's dissolution on 28 June.³⁴ Thereafter, funding for the Iraqi air force would have to be negotiated among multiple branches and agencies of the US government.³⁵

The winner of the surveillance aircraft competition, Seabird Aviation Jordan, delivered its first two SB7L-360 Seeker light observation aircraft (IqAF Serials YI-101 and 102) on 29 July 2004.³⁶ Both began flying with newly activated Squadron 70 at Basrah in September, but they soon proved to be less than fully suitable for the mission. The Seeker lacked crew protection from ground fire, and it was underpowered, which made it a marginal performer even in favorable conditions. Moreover, its piston engine required high-octane aviation gasoline, a comparatively expensive fuel that was difficult to find in Iraq. Although the two planes continued to fly intermittently thereafter, the rest of the order was cancelled.³⁷

Given the inadequacies of the Seeker, the Iraqi government asked the US Army for help in finding an appropriate replacement.³⁸ On 28 September, the Army's Aviation and Missile Command awarded Transatlantic Traders, Inc., a \$5.818 million firm, fixed-price contract for eight SAMA CH2000-MTSA light surveillance aircraft and supporting services.³⁹ Based upon the two-seat Alarus general aviation trainer designed by a US-based firm called Aircraft Manufacturing and Design but produced by Jordan Aerospace Industries in Amman, Jordan, the first two examples (IqAF serials YI-103 and 104) were to

have been delivered to Squadron 70 at the end of October 2004. As it turned out, fuel supply and engine problems delayed their turnover until mid-January 2005.⁴⁰ The contract called for a delivery rate of two airplanes per month. Instead, the Iraqis received four airplanes in August 2005, and the last two were not received until September 2006.⁴¹

Unfortunately, these aircraft also proved to be unsatisfactory as intelligence, surveillance, and reconnaissance (ISR) platforms. Like the Seeker, the CH2000 lacked cockpit armor, and its piston engine also burned scarce high-octane aviation gasoline. Moreover, the CH2000 was essentially ineffective in ambient temperatures above 104 degrees Fahrenheit (40 degrees Celsius)—a common circumstance during Iraqi summers—and it was prone to cracks in its engine exhaust system, which introduced unacceptable levels of carbon monoxide into the cockpit.⁴²

As an alternative to the Seeker and the CH2000, the Iraqi air force also accepted seven single-engine, six-passenger Comp Air 7SLX light transports as a gift from the United Arab Emirates (UAE). Designed by AeroComp, Inc., of Merritt Island, Florida, as a propeller-driven, gas turbine-powered kit airplane marketed to hobbyist builders, these particular 7SLX aircraft were modified during their assembly in the UAE.⁴³ When delivered, they included revisions to the nose gear and fuel systems, reduced engine intake baffling, and a belly-mounted, forward looking infrared (FLIR) turret and panel display. The Iraqis expected that up to four of the Comp Airs could be outfitted for ISR missions using the electro-optical sensor balls already in hand; the remainder were to serve as utility and liaison aircraft until more FLIR equipment could be acquired.

The first four Comp Airs arrived at Basrah in mid-November 2004, and the remaining three were delivered in the second week of December.⁴⁴ All seven aircraft were assigned to Squadron 3 when it was activated in early January 2005. Soon thereafter, the unit moved to Kirkuk.⁴⁵

From the beginning, the Comp Airs displayed evidence of their nonstandardized construction features and undocumented performance characteristics. On 25 January 2005 a Squadron 3 aircraft had to make a forced landing on a highway about 28 miles southeast of Kirkuk because its fuel-supply system had been improperly wired during assembly in the UAE.⁴⁶ On 10 May while returning from Baghdad International Airport (BIAP) to Kirkuk, a Comp Air call-signed “Tiger 71” suffered an engine flameout due to fuel starvation and was forced to make an emergency landing on a dirt road about 18

miles northeast of the airfield. The incident was attributed to an incorrectly installed shut-off fuel valve; the aircrew had become accustomed to following the words “open” and “closed” handwritten with a felt pen on the plane’s cockpit wall, but they were misled in part because the handles were installed differently on each aircraft.⁴⁷ Just 20 days later, a Squadron 3 Comp Air was lost with all five men aboard—four of them USAF Airmen—in a crash near Jalulah, about 80 miles northeast of Baghdad. Subsequent investigations suggested that the undocumented (and uncertified) modifications made during that airplane’s construction may have contributed to the mishap. A second Comp Air mishap on 29 January 2006 involved an abrupt loss of control immediately after takeoff at Kirkuk. The Iraqi pilot was able to put the aircraft back down on the runway, but it was damaged beyond economical repair and had to be written off. Fortunately, that incident did not involve any fatalities or serious injuries, but it confirmed previous concerns regarding the airplane’s unforgiving nature under certain flying conditions.⁴⁸

Helicopter Issues

Usable rotary-winged aircraft proved to be just as difficult to acquire and deploy as suitable fixed-wing aircraft—but for different reasons. The process of fielding Jordan’s October 2003 offer of 16 Bell Huey helicopters, for example, proved to be both lengthy and expensive. In May 2004 the CPA had expected to pay the Jordanians about \$700,000 for each of the UH-1H helicopters to be taken out of storage, refurbished, and outfitted with improved avionics. With six months’ spare parts and maintenance support, the total cost of the project was then estimated at about \$16 million.⁴⁹ Before spending any money, however, it seemed prudent to assess the condition of the aircraft, especially given that by June CMATT-A was already having doubts about the suitability of using a single-engine version of the Huey in Iraq’s harsh summer environment.⁵⁰

On 4 August 2004 Aeronautical Radio, Incorporated (ARINC), based in Annapolis, Maryland, received a \$5.9 million “Phase I” contract to evaluate the 16 gift UH-1H helicopters (along with the two C-130Bs), then in Jordanian storage. If the aircraft were found to be worth refurbishing, then ARINC would be given an additional \$12.9 million to renovate them using a Jordanian subcontractor (Phase II) and another \$16.1 million to support the helicopters after their delivery

to Squadron 2 at Taji AB (Phase III). In all, this was slightly more than double what the CPA's cost estimate had been just a few months earlier.⁵¹

ARINC and its Jordanian partner began to examine some of the mothballed UH-1Hs in late September, and by mid-December they had made sufficient progress for ARINC to be awarded both follow-on phases of the contract.⁵² The first two refurbished UH-1Hs (IqAF serials YI-201 and YI-202) were delivered to Taji AB on 4 February 2005; the second pair (IqAF serials YI-203 and YI-204) were turned over to CMATT-A at BIAP on 26 February. At that point, the expectation was that the first eight refurbished Hueys would be allocated to Squadron 2, which was set for formal activation at Taji on 22 April, the IqAF's 74th birthday.⁵³ The remaining eight UH-1Hs would be issued to a second battlefield mobility helicopter unit as they arrived from Jordan over the second half of 2005 and the first quarter of 2006. That unit, to be designated as Squadron 4, would also be based at Taji AB beginning in late summer.⁵⁴ At least, that was the expectation.

In the meantime, the Iraqis were exploring other alternatives. In September 2004, they persuaded UAE officials to donate five Bell Model 206B Jet Ranger helicopters, and delivery was initially promised for November. After some delay, the five aircraft moved to Iraq in two shipments, arriving in late March and early April of 2005. The intent was that they should be used as training aircraft for the IqAF's helicopter aircrews.⁵⁵ The five Jet Rangers were assigned to Squadron 12, which was activated in April at Taji AB. Unfortunately, the UAE's gift did not include any provision for the helicopters' sustainment, and their serviceability rates quickly began to decline. By mid-2005, all but one of Squadron 12's aircraft were inoperable.

The Iraqis also pursued opportunities in the former Warsaw Pact. In December 2004 the Iraqi defense ministry used an intermediary to negotiate two contracts with Bumar, a Polish state arms conglomerate, for the delivery of 20 new Polish-built PZL W-3 Sokol helicopters and 34 Russian-built Mil Mi-17 helicopters (10 new aircraft and 24 used aircraft to be refurbished by Bumar's Russian subcontractor).⁵⁶ The Polish manufacturer's failure to produce airframes quickly enough and the poor quality of the reworked Mi-17s combined to force Bumar's renegotiation of both agreements in early 2005.⁵⁷

The Transports Get Priority

While the availability—or more accurately, the unavailability—of ISR aircraft and helicopters was a matter of concern, it was Iraq's lack of a large, tactical airlifter that raised the defense ministry's acquisition problems to the level of national politics. When Allawi took office in June 2004, his authority came with a short-term time constraint—his government was publicly committed to holding nationwide elections no later than 30 January 2005. The prime minister's official duties required that he and other senior officials be in near-constant motion around the country. The security situation was such that movement by air was the preferred means of travel to all but the nearest of destinations.

In late 2004 the Iraqis finally abandoned hope that Jordan's previous promise of two C-130B transports would bear fruit. This came after much delay, and perhaps only then because the defense ministry had realized just how much their refurbishment would cost and that there might very well be cheaper alternatives. On 1 November the director general of the defense minister's office, Ayad Raouf, put an end to the matter in a letter to the Iraqi Joint Headquarters. His instructions were definitive, if a little blunt. "The minister approved to exclude these two Aircrafts [sic] in the Iraqi army," Raouf wrote, "because they are old and useless."⁵⁸

This left the prime minister in something of a quandary. The coalition certainly had lots of airplanes, but the problem with borrowing one of them was not logistical. It was psychological and therefore political. Allawi's chief task and greatest challenge was to forge a unified nation, and moving about his country in an airplane bearing the flag of a foreign occupier would surely put the wrong foot forward. To be his own man, Allawi needed his own airplane.⁵⁹

Notes

1. In its most preliminary planning stage, the NIA had been called the New Iraqi Corps. When USCENTCOM staffers began using the resulting acronym as a shorthand reference word, they soon learned that "NIC" sounds very much like an Arabic expletive, and they adopted NIA instead. Thomas Ricks, *Fiasco: The American Military Adventure in Iraq* (New York: Penguin Press, 2006), 155.

2. General Eaton was commander of the US Army's Infantry Center and School at Fort Benning, Georgia, when he was advised of his new assignment on 9 May. The transfer was very much unanticipated. In an interview published after his retirement

in early 2006, General Eaton was reported to have said, “I was very surprised to receive a mission so vital to our exit strategy so late. I would have expected this to have been done well before troops crossed the line of departure. That was my first reaction: We’re a little late here.” Thom Shanker, “General Faults U.S. on Iraqi Military,” *New York Times*, 10 February 2006, accessed 16 April 2010, <http://www.nytimes.com/2006/02/10/world/Americas/10iht-army.html>.

3. Dr. Donald P. Wright, Col Timothy R. Reese, and the Contemporary Operations Study Team, *On Point II: Transition to the New Campaign; The United States Army in Operation IRAQI FREEDOM, May 2003–January 2005* (Fort Leavenworth, KS: Combat Studies Institute Press, 2008): 433.

4. Patrick E. Tyler, “U.S.–British Project: To Build a Postwar Iraqi Armed Force of 40,000 Soldiers in 3 Years,” *New York Times*, 24 June, 2003, <http://www.nytimes.com/2003/06/24/world/after-war-new-army-us-british-project-build-postwar-iraqi-armed-force-40000.html>.

5. Wright, Reese, and the Contemporary Operations Study Team, *On Point II*, 435. See also Maj Timothy Childress, “Improving US Air Force Performance in Irregular Conflict: Reestablishing a USAF Special Air Warfare Center (master’s thesis, School of Advanced Air and Space Studies, June 2007), chap. 3; and *Senate Democratic Policy Committee Hearing, “An Oversight Hearing on the Planning and Conduct of the War in Iraq,” Paul D. Eaton, Major General, US Army, Retired*, 109th Cong., 2nd sess., 25 September 2006, <http://dpc.senate.gov/hearings/hearing38/eaton.pdf>.

6. L. Paul Bremer, “Coalition Provisional Authority Order Number 22: Creation of a New Iraqi Army,” sec. 1, 18 August 2003, http://www.iraqcoalition.org/regulations/20030818_CPAORD_22_Creation_of_a_New_Iraqi_Army.pdf.

7. In September 2006 General Eaton testified before a Senate democratic policy committee:

I briefed this plan, essentially a second phase in my operation based upon a requirement to adapt, to [Secretary of Defense] Rumsfeld on September 5, 2003, and got his approval to proceed with an accelerated adapted plan that would produce an army of 27 battalions and associated command and control, from national to squad [level] in the first year, and start the Navy and Air Force, with a budget of \$2.2 billion. . . . At one point, the Secretary stuck his finger at me and said, ‘Just don’t make this look like the American Army.’ [I] Still don’t know what that meant. He also stated that we were to be his last priority, behind [Iraq’s] Police, Border troops, Iraqi National Guard, or Iraqi Civil Defense Corps and Facilities Protection Service.

Eaton, “An Oversight Hearing.”

8. Wright, Reese, and the Contemporary Operations Study Team, *On Point II*, 441–42.

9. Robin Hughes, “Air Corps Evolves from Jordan to Back Army in Iraq,” *Jane’s Defense Weekly*, 24 March 2004, 14–15.

10. *Ibid.* Note, however, that former IqAF jet fighter pilots *were* being recruited for service soon thereafter. In an interview conducted in 2007, Maj Keith Belmeur, a USAF officer who had been assigned to CMATT in 2004, said, “of the initial eight pilots I trained, one was a new recruit, one was a former airlift pilot (IL-76), and the

rest were former fighter pilots.” Childress, “Improving US Air Force Performance,” 37, note 1.

11. The gift offer came wrapped in a tangle of legal issues, since all 18 aircraft had previously been provided to Jordan under a Foreign Military Sales (FMS) agreement. This meant that the Department of State would have to approve the gift, as federal law required that department to oversee FMS transfers under the Arms Export Control Act (including advance congressional notification in certain cases). The Department of State initially balked because of questions about the CPA’s authority to legally bind future Iraqi government decisions regarding potential out-year transfers to other nations. It took until mid-February to resolve the issue in favor of the gift. Lincoln P. Bloomfield, Department of State (DoS)/PM, to John Bolton, DoS/T, memorandum, subject: Third Party Transfer of FMS-Origin Aircraft—Jordan to the Coalition Provisional Authority, ca. 17 February 2004.

12. Bremer’s letter bore a contracting officer’s cautionary addendum noting that the agreement was “subject to the availability of funds.” Col Kathryn Sommerkamp, CPA/JA, to Lt Col John E. Lindsey, CMATT/C-9, e-mail, subject: Planes from Jordan, 25 February 2004; Maj Gen Paul D. Eaton to Maj Gen HRH Faisal al-Hussein, RJAF/CC, letter, subject: Acknowledgement of Jordanian Offer, 5 May 2004; CPA/OGC to CPA administrator, memorandum, subject: Acceptance of Offer of Aircraft from the Hashemite Kingdom of Jordan, 28 May 2004; and L. Paul Bremer to Lt Gen Khalid Elsarayreh, Royal Jordanian Air Force, letter, subject: Formal Acceptance, 11 July 2004. (From records provided by Col Charles Westgate, CMATT-A, 2004–2005, hereafter cited as Westgate files.)

13. Hughes, “Air Corps Evolves.”

14. *ibid.*, 15.

15. Wright, Reese, and the Contemporary Operations Study Team, *On Point II*, 436–37.

16. Hughes, “Air Corps Evolves.” To some degree, the Jordanians’ acceptance of a Western military leadership philosophy—and their willingness to support the CPA’s “Jordan Training Initiative”—was a consequence of the Western education and military service of King Abdullah II (1962–) and the long-term Western influence upon Jordanian society during the reign of his father, King Hussein (1935–99). King Abdullah studied in British preparatory schools and private US secondary schools before attending the Royal Military Academy at Sandhurst. After his commissioning in 1981, then-Prince Abdulla accepted command appointments in various British armored units at the platoon, company, and battalion levels. In the process, he attended command and staff courses in the United States and the United Kingdom, rose to the rank of lieutenant colonel, and became qualified as a helicopter pilot and helicopter antitank tactics instructor. As a major general in the Royal Jordanian Army, he commanded Jordan’s Special Forces Command prior to assuming the throne upon the death of King Hussein. “His Majesty King Abdullah II, King of the Hashemite Kingdom of Jordan,” biography, n.d., accessed 12 April 2010, http://www.kingabdullah.jo/main.php?main_page=0&lang_hmka1=1.

17. Hughes, “Air Corps Evolves”; and Col Charles Westgate, “Chronology,” ca. August 2005.

18. “Coalition Provision Authority Briefing with Major General Paul Eaton, Commander, Coalition Military Assistance and Training Team, Re: Rebuilding Iraqi

Forces,” press release, 21 January 2004, 3, accessed 5 March 2010, http://www.cpa-iraq.org/transcripts/Jan21_Eaton.html.

19. Ibid., 5.

20. Maj John S. Pesapane, “Istikbarat: Rebuilding Intelligence Capabilities of the Iraqi Air Force” (research report, Air Command and Staff College, April 2007), 2; and Col Charles Westgate, discussion with the author, 20 May 2010.

21. Westgate, “Chronology.”

22. Ibid., air cell staff tab (2004–6). Tour lengths were increased from four to six months in mid-2005.

23. Wright, Reese, and the Contemporary Operations Study Team, *On Point II*, 25–27.

24. L. Paul Bremer, “Coalition Provisional Authority Order Number 67: Ministry of Defense,” sec. 2, 21 March 2004, http://www.iraqcoalition.org/regulations/20030818_CPAORD_22_Creation_of_a_New_Iraqi_Army.pdf.

25. “Development of the Iraqi Air Force,” press release, 17 April 2004, accessed 8 April 2008, http://www.iraqcoalition.org/pressreleases/20040417_air_force.html. See also, “New Iraqi Air Force Being Formed,” *AirForces Monthly*, June 2004, 16.

26. “Development of the Iraqi Air Force.”

27. Biography [Maj Gen Kamal Abdul-Sattar Barzanjy], Headquarters Coalition Air Force Transition Team (CAFTT), n.d.; and Col Michael Byrne, briefing, subject: Iraqi Air Force Development Update, ca. February 2006, slide 31. [General Stephen Hoog in-brief folder] The precise date of General Barzanjy’s appointment remains elusive. Two Air Force Historical Research Agency staffers deployed to Iraq at the time both remember it as “late April.”

28. Westgate, “Chronology,” miscellaneous tab.

29. A British aviation magazine reported that “their skills had been considerably eroded due to the lack of flying time in the 12 years since the first Gulf War. Most [of the students] averaged only 32 hours per year during that period, whereas many pilots in the West expect to clock up a similar number of hours in a month.” See “New Iraqi Air Force Being Formed,” 16.

30. Del McMullen, “Iraqi Chopper Pilots Graduate,” press release, 26 May 2004.

31. Irving B. Holley, *Ideas and Weapons* (New Haven, CT: Yale University Press, 1953).

32. The ASP procurement process was convoluted. On 7 March 2004 the US Army Aviation and Missile Command issued a presolicitation announcement for an open competition to procure eight new, fixed wing aircraft, along with associated pilot upgrade training and maintenance support for one year (Federal Business Opportunity [FBO] announcement W914NS-04-R-0129). This drew a flurry of inquiries and clarification requests, resulting in an interim cancellation of the requirement on 25 March (FBO #0852, 27 March 2004). A “Combined Synopsis/Solicitation View” (FBO announcement W58RGZ04R0547) was formally published on 19 April, only to be modified four times; the third change was released on 29 April (FBO #0887, 1 May 2004) and the fourth on 6 May (FBO #0895, 9 May 2004). These were followed by another cancellation issued on 8 June (FBO #0927, 10 June 2004) because “all proposals received in response to this solicitation were technically unacceptable.” Notwithstanding that conclusion, on 15 June a CPA official announced the purchase of two Seabird Aviation Jordan SB7L-360 Seeker aircraft. Seabird Aviation Jordan was reported to be a joint venture between Seabird Aviation Australia and a Jordanian

entity called the King Abdulah II Design and Development Bureau. “Iraqi Air Force to Get Seabird Seekers,” *AirForces Monthly*, August 2004, 19.

33. Dave Allport, “After Saddam,” *AirForces Monthly*, February 2008, 52–57.

34. L. Paul Bremer, “Coalition Provisional Authority Order Number 100: Transition of Laws, Regulations, Orders, and Directives Issued by the Coalition Provisional Authority,” 28 June 2004. As to the circumstances of the accelerated date change, see Dexter Filkins, “Extent of Government’s Control Unclear as It Formally Steps In,” *New York Times*, 28 June 2004, accessed 16 April 2008, <http://www.nytimes.com/2004/06/28/international/28CND-IRAQ.html>.

35. After its dissolution, the responsibilities previously held by the CPA were redistributed among elements of the US Departments of State and Defense; this included the creation of new offices under both departments. See National Security Presidential Directive 36, “United States Government Operations in Iraq,” 11 May 2004.

36. Unsuccessful bidders included the Raytheon Company, Schweizer Aircraft Corporation, and Cessna Aircraft Company. See “More on New Iraqi Air Force Surveillance Aircraft Plans,” *AirForces Monthly*, July 2004, 15. The Seeker contract was reportedly valued at \$2.3 million and included aircrew training, maintenance, and support. See “Iraqi Air Force to Get Seabird Seekers”; Allport, “After Saddam”; “Airborne Surveillance Isn’t Just a Military Role,” *AMEinfo*, accessed 14 April 2010, <http://www.ameinfo.com/53684.html>; and “Iraqi Air Force to Get First New Aircraft,” *Jordan Times*, 29 July 2004, accessed 14 April 2010, <http://www.jordanembassyus.org/07292004003.htm>. For additional background on the Seeker aircraft, see “Seabird Seeker Surveillance Aircraft Bids for Iraqi Order,” *International Defense Review*, 19 May 2004.

37. The two aircraft were finally grounded in late 2007. Allport, “After Saddam”; “Iraqi Air Force,” accessed 17 April 2008, <http://www.milavia.net/airforces/iraq/IqAF.htm>; and Headquarters IqAF, “Iraqi Air Force Capability Requirement and Development Plan,” report (Baghdad: HQ IqAF, 20 July 2005), 11. [English translation provided by 9AF/HO].

38. Ron Laurenzo, “Army Awaits New Proposals for Iraq Scout Planes,” *Defense Daily*, 7 July 2004, accessed on 10 April 2010, <http://www.defencedaily.com/articles/dt/2004/dt07070403.htm>.

39. Office of the Assistant Secretary of Defense, Department of Defense, “Contracts” (press release, 1 October 2004), accessed 1 January 2010, <http://www.defense.gov/utility/printitem.aspx?print=http://www.defense.gov/contracts/contract.aspx?contractid=2859>.

40. Mahmoud Al Abed, “Jordan Aerospace Industries Wins Iraqi Tender for 16 Surveillance Aircraft,” *Jordan Times*, 30 September 2004, accessed 14 April 2010, <http://www.jordanembassyus.org/09302004003.htm>; and “Iraqi Air Force to Receive Eight Additional Aircraft,” Headquarters USCENTCOM press release, 14 October 2004. For manufacturer’s performance data, see Aircraft Manufacturing & Development Corporation, “SAMA CH2000–Military Tactical Surveillance Aircraft (SAMA CH2000–MTSA),” accessed 4 January 2010. <http://www.newplane.com/amd/amd/sama/sama.html>.

41. Maj Jeremy Brown, “CH2000 Aircraft History with the Coalition Air Force Transition Team,” bullet background paper, 25 March 2007; and Westgate, “Chronology.” [CAFTT files; General Allardice briefing book]. See also “SAMA CH2000.”

42. RAF Grp Capt M. W. Leaming, memorandum, subject: Brief for BGen Eidsaune and BGen Peck for Meeting with Head IqAF on 17 July 2005: IqAF—Unresolved Aircraft Issues, 15 July 2005. For manufacturer's corrective action regarding exhaust leaks, see Aircraft Manufacturing & Development Service Bulletin March 2006, Rev. #0, accessed 4 January 2010, http://www.newplane.com/Service_Letters_Bulletines/Service%20Bulletin%20March%202006.pdf.

43. Norm Goyer, "AeroComp's Climb to the Top," *Private Pilot Magazine*, February 2001, 44–53, <http://www.aerocompinc.com/press/reviews/privatepilot/feb2001/index.htm>.

44. Westgate, "Chronology."

45. *Ibid.*; and TSgt Andrew Hughan, "Iraqi Air Force Provides Watchful Eyes for Elections," *Advisor* 2, no. 5 (29 January 2005): 5. AeroComp, Inc. continues to offer the Comp Air 7SLX to kit builders; the manufacturer's website references problems resulting from the airframe modifications made in the UAE prior to delivery to the IqAF. See the company's web site at <http://www.aerocompinc.com>.

46. CMATT-A, "Informal Report on Forced Landing by Iraqi Air Force Comp Air Aircraft, 25 Jan 05," Report (Baghdad: CMATT-A Headquarters, n.d.). [CAFTT files]

47. CMATT-A, "Report on Forced Landing by Tiger 71 Iraqi Air Force Comp Air Aircraft, 10 May 2005," Report (Baghdad: CMATT-A Headquarters, n.d.). [Westgate files]

48. See chap. 5, this work; BBP, Maj Gary Lyles, CAFTT, "Comp Air History with the Coalition Air Force Transition Team (CAFTT)," February 3, 2007. [General Allardice briefing book]

49. CPA, memorandum for record, subject: Project Description—C130/UH1-H [sic] Acquisition for the Iraqi Air Force, ca. 12 May 2004. [Westgate files]

50. Westgate, "Chronology."

51. "Contracts." Refer to Contract DAAB07-03-D-B006; and Westgate, "Chronology." Phase I also included the cost of assessing the condition of the two C130Bs then in storage in Jordan. Phase III "deliverables" included specialized tools, ground handling and ground support equipment, initial spare parts stocks, and technical assistance. Tommy Hixon, "Phase Two/Three Funding," briefing, 26 November 2004.

52. RAF Grp Capt Neal Jagger to Hon. Edward W. Gnehm, US Ambassador to Jordan, letter, subject: ARINC Support Request, 14 September 2004. [Westgate files] The "Chronology" gives the ARINC Phase II/III award date as 14 December 2004. This was Amendment 1 to the basic contract. Three additional amendments, apparently administrative in nature, were authorized in January 2005. On 15 February, the completion date of Phase I was extended to 3 February 2006. [Westgate, "Chronology."]

53. Jewell, "Iraqi Air Force Celebrates," 6.

54. Capt Tim Jeffers, "Hueys' Touch Down at Taji Military Training Base," *Advisor* 2, no. 6 (5 February 2005): 3. [The delivery date of the second pair of UH-1Hs is from the Westgate Chronology, citing DD 1149s and a memo from ARINC to CMATT.]

55. Westgate, "Chronology."

56. The \$167.04 million contract was signed on 23 December 2004. It called for delivery within 18 months of four Sokols outfitted to carry casualties, four Sokols to be equipped as very important persons (VIP) transports, and the remainder to be armed for "near air support." Headquarters IqMoD, letter, subject: A Contract of Supplying *Sokol* Helicopters, 23 December 2004.

57. The negotiation of these contracts and the details of their subsequent revision became a matter of contention. The agreement for the 34 Mi-17s included a payment of \$113 million for the 24 used aircraft. Eight of the 10 new Mi-17 aircraft were delivered in two batches in February 2006, albeit without the mission-specific equipment required by the original contract. They were accepted, but the IqMoD refused the last two of the 10 new aircraft for lack of suitable engines, and those two were later replaced. The 24 used Mi-17s were rejected after the IqMoD learned that Bumar's subcontractor was attempting to rehabilitate 27-year-old airframes that had been in long-term storage. The Iraqi defense minister, Saadoun al-Dulaimi, was quoted in early 2006 as saying, "our technicians went to Russia to inspect them, and they were shown to be junk." Simon Ostrovsky, "Iraq Air Force Needs More Than New Coat of Paint," *Agence France-Presse*, 25 April 2006, accessed 31 December 2009, <http://aimpoints.hq.af.mil/display.cfm>. A smaller replacement shipment was agreed upon thereafter. See RAF Grp Capt J. Q. Hallwood, CAFTT/DD, memorandum, subject: The IqAF Mi17 Procurement (Version 3), 15 March 2006; and James Glanz, "Rebuilding Iraq's Air Force a Challenge for U.S. Trainers," *New York Times*, 5 February 2007, accessed 10 January 2010, <http://www.nytimes.com/2007/02/05/world/africa/05iht-airforce.4474337.html>.

58. Ayad Raouf, Iraqi Ministry of Defense, to Joint Headquarters, letter, subject: Subject/Aircraft C-130-B, 1 November 2004. [English translation, Westgate files] Of the two C-130B airframes, one was reported to have accumulated around 12,000 flying hours prior to being put in long-term storage, and the other had flown about 9,000 hours. Neal McFeeters, Aeronautical Radio, Inc., to RAF Wing Cdr Stephen Shell, CMATT-A, letter, subject: The Way Ahead, 27 October 2004. [Westgate files]

59. Col John M. McCain, "Genesis of the New Iraqi Air Force: Security Assistance in Action," *DISAM Journal*, Fall 2005, 25–26, <http://www.disam.dsca.mil/pubs/Archives/Journal28-1.pdf>.

Chapter 4

The Introduction of USAF Advisory Support Teams

In mid-October 2004 the Iraqi government asked the United States for a small number of aircraft to use as executive transports; for multiple reasons, the four-engine Lockheed C-130 Hercules was the Iraqis' preferred choice. This request posed considerable difficulty for the DOD. Not only was the proposed delivery timeline extraordinarily short (given that the election was just over three months away), but also the IqAF had only limited experience in operating or maintaining transport aircraft of that complexity—ordinarily a prerequisite for equipment transfers made via the FMS case process. Nonetheless, a multiagency action group, assembled under the aegis of the Office of the Deputy Undersecretary of the Air Force for International Affairs, negotiated a series of creative solutions. The Air Force identified three older, but still serviceable, C-130Es that could be transferred to Iraq under the DOD's Excess Defense Articles program.¹

As it turned out, legally reassigning the C-130s' ownership to the IqAF was the least difficult aspect of the transfer. Nor was it especially problematic to teach a small number of Iraqi aircrew to fly them. The RJAF was equipped with C-130Hs and was willing to provide the necessary instruction—as it had been doing for most of the modest number of Iraqi aircrew, technicians, and ground support personnel returned to active service since early 2004. Accordingly, four four-man Iraqi aircrews received C-130 familiarization training from Arabic-speaking instructors at the RJAF base at Amman, Jordan.²

The Hercules' maintenance and logistics requirements had no such ready solution. In the long term, Iraq could use the normal FMS case process to purchase C-130 spare parts and support equipment from US suppliers through DOD channels. For the short term, the transfer team turned to the Multi-National Security Transition Command–Iraq (MNSTC–I), since its mission was to “organize, train, equip, and mentor Iraqi security forces.”³ MNSTC–I had an initial budget of \$5.8 billion for that purpose. Inasmuch as the transfer involved security forces training, MNSTC–I agreed to provide \$45 million for the C-130s' support, and this would carry the program's

logistics costs until the Iraqi defense ministry could take on that responsibility in late 2005.⁴

USCENTCOM's Air Force component (USCENTAF) also provided a key element for the transfer's success by agreeing to colocate Iraq's C-130 unit—to be designated as Squadron 23—with the USAF's 777th Expeditionary Airlift Squadron (EAS) and 777th Expeditionary Aircraft Maintenance Squadron (EAMS). At the time, both USAF units were stationed at Ali AB, Iraq, near Talil.

Early Efforts

This effort was not the first instructional support provided to Iraq by USAF and US Air Force Reserve (USAFR) personnel. In June 2004 CMATT-A had requested 90-day assignments of what it called “squadron mentors” for the three Iraqi units expected to be operational in the second half of that year: four aircrew and a flight line maintenance noncommissioned officer (NCO) for the C-130 unit; a pilot, sensor operator, and flight line maintenance NCO for the ISR squadron; and a pilot, crewman, and flight line maintenance NCO for the battlefield mobility helicopter unit. The C-130 mentorship requirement became moot when the Jordanians' C-130B offer fell through. The ISR requirement began to be filled in late summer 2004, but the helicopter requirement continued to languish.⁵

Generally speaking, the very small USAF contingent assigned as advisors in fall and early winter 2004, including the members of CMATT-A, had not received any specialized preparation for their tours in Iraq. They certainly had not been trained in what the USAF called foreign internal defense (FID) advisor duties.⁶ That specialty was the purview of the Air Force Special Operations Command's (AFSOC) 6th Special Operations Squadron (SOS), and it was not until December that CMATT-A staffers began to ask for that unit's assistance.⁷ Even then, CMATT-A expected that the 6th SOS's FID specialists would only be assigned to Iraqi squadrons as small advisory support teams (AST), and not to the IqAF headquarters, where they might have been more effective in the short term.⁸

Aircraft deliveries in 2004—or, more accurately, delays in aircraft deliveries in 2004—played an obvious role in the IqAF's modest results. But so did the new service's indecisiveness in providing funding and facilitating aircraft sustainment arrangements in 2005, particularly

as to the helicopters based at Taji. A small stream of Iraqi aircrew and maintenance technicians had been graduating from Huey training courses in Jordan since spring 2004, but they had nothing to fly or repair. When the 6th SOS's first two rotary wing-qualified ASTs arrived at Taji AB on 22 February 2005, the initial pair of Aeronautical Radio, Incorporated (ARINC)-refurbished UH-1Hs had been there for only three weeks. Although ARINC delivered two more Hueys a week later, there were still no provisions for spare parts or other essential supplies. In the meantime, the rehabilitation of the other 12 UH-1Hs in Jordan stalled while General Barzanjy and his superiors pondered whether to field something else instead.⁹

The C-130 ASTs Deploy

The C-130 requirement was different; it involved hands-on training using current USAF equipment and involved far larger numbers of USAF Airmen. Perhaps more to the point, it was initiated (and monitored thereafter) at the highest levels in both Baghdad and Washington, DC.

USCENTAF selected the 777th EAS to serve as sponsor for the effort because that squadron was outfitted with the same approximate vintage of C-130Es as those being provided to the Iraqis. Moreover, the squadron's experienced aircrew could provide backup to the C-130 AST flight instructors and loadmasters who would be assigned to the IqAF's new transport unit. As the 777th EAS's principal support organization, the 777th EAMS could offer the Iraqis access to its spare parts stocks and specialized support equipment inventories. However, its chief value would be providing knowledgeable advice to Squadron 23's technicians. The point was to show the Iraqis that the Americans had confidence in the C-130E—even though many still-serving USAF Hercules transports had been built as much as four decades earlier—precisely *because* those aircraft had been properly maintained.¹⁰

Providing Iraq with three transport aircraft and their related materiel needs was important, but such did not address the equally critical need to “missionize” the aircrew flying those planes into or through high-threat areas and training the maintenance specialists and ground support staff needed to keep them in safe operating condition. Since Iraq had no prior experience with this particular aircraft,

it would be necessary to not only provide a group of USAF advisors who could fly the C-130s to support near-term Iraqi airlift requirements but also to advise and mentor the Iraqis until they became self-sufficient enough to train their own countrymen.

After reviewing the projected mission requirements and conferring with authorities within the USAF's C-130 community, the transfer team identified 35 skill positions deemed essential to form an adequate AST for that aircraft type. Volunteers were solicited from qualified instructor aircrew and maintainers in Air Mobility Command (AMC) and Air Education and Training Command (AETC). Rigorous standards and experience were essential; overall, the selectees averaged more than 16 years of service.¹¹ This ensured a high level of practical expertise but did not mean selectees were qualified to advise foreign airmen. In particular, the C-130 AST members lacked Arabic language skills, and the short-notice nature of their assignment only left time for them to attend a three-day Middle East orientation course taught by the USAF Special Operations School, located at Hurlburt Field, Florida. The course provided a brief review of Iraqi history (including the origins and differences between Shiite and Sunni Muslims), Arabic naming conventions, and an introduction to Iraqi cultural norms and sensitivities.¹²

The Activation of Squadron 23

The C-130 ASTs and the Squadron 23 airmen conducted a formal turnover ceremony at Ali AB on 14 January 2005.¹³ The three refurbished Hercules aircraft (IqAF serials YI-301 through 303) bore a fresh coat of standard USAF gray camouflage paint but with the markings changed to reflect Iraqi ownership. Iraqi prime minister Allawi was most appreciative of the gesture. In a 16 January letter that began with the words "Dear George" (in hand-written English), the Iraqi leader expressed his delight to the president of the United States:

I was taken aback this morning as I looked at a few pictures that made be [*sic*] quite proud. The pictures where [*sic*] of an Iraqi Air Force base, with Iraqi Air Force personnel standing around the first 3 Iraqi Air Force C-130 planes with the Iraqi Air Force logo on the side and the Iraqi flag on the tail of the aircrafts [*sic*].

These pictures reminded me of our previous phone conversation where you had promised me you would send me a few aircrafts [*sic*]. You have fulfilled your promise and for that I am sincerely grateful. I only hope that this is the

start of an ongoing process of strengthening the Iraqi Air Force, and making the people of Iraq proud that they have an Air Force that can protect their skies and defend their country.¹⁴

On 12 February, two days after their first AST-monitored training flight, an all-Iraqi crew flew Allawi from Baghdad to an airport near Kirkuk and back. That event was an important milestone—and not just to the IqAF aircrew or the accompanying AST advisors who monitored their performance. A media report quoted AST instructor pilot Maj Mike Frame as saying “the crews are much better than we expected. They just need some time to get acquainted with the new plane and new flying procedures.” As to the Iraqi officer designated to fly Allawi on that first official executive flight—unidentified at his own request for security reasons—Major Frame said that “they were randomly picked. . . . He’s their best pilot, though.”¹⁵ Major Frame also described the closeness that had developed between the C-130 AST instructors and their Iraqi students. “Their tent was right next to ours,” he recalled. “They’re like us, and it was pretty rewarding when my student began to show me pictures of his son. . . . That’s when you know he’s a friend.”¹⁶

IqAF Headquarters Relocation and Operations Integration

Although the IqAF became operational in early October 2004, its size and structure continued to limit its effectiveness. Only in April 2005 were there enough qualified senior staff officers to man an administrative defense ministry-level headquarters and a subordinate operations headquarters. At that point, both headquarters were still located in the defense ministry compound in Baghdad, where a new Iraqi armed forces joint operations center was set to open in mid-May.¹⁷ Be that as it may, the operations headquarters staff needed better access to its four subordinate bases, and that meant movement by air. In late April, CMATT-A recommended that the operational headquarters move to New al-Muthana AB (NAMAB), collocated on the outskirts of Baghdad with the BIAP. General Barzanjy agreed, and he ordered the transfer to be accomplished by the end of July.¹⁸

Shifting the operational headquarters to an active airfield would help, but that still left a critical operating issue unaddressed. How were Iraqi and coalition air operations to be coordinated or at least

conducted to not result in false alerts, conflicted airspace, or worse? That need was underscored in the last week of January by two unrelated but revealing events.

On 24 January a Squadron 3 Comp Air was forced to make an emergency landing on a highway about 28 miles southeast of Kirkuk. No one was injured, and the aircraft was undamaged. However, because IqAF flights were not included in the coalition's daily air tasking order (ATO), the incident investigators found (among other things) that it would have been difficult for coalition forces to mount a timely, coordinated combat search and rescue (CSAR) effort. Even if a rescue was possible, the downed aircrew did not have the CSAR communication plans and the radio code words needed to talk to any would-be rescuers. Fortunately, the AST pilot (a US naval aviator) contacted Kirkuk Center by radio, and an escorted tanker truck was dispatched to refuel the airplane. All involved were safely recovered, but that story could have had a much sadder ending.¹⁹

Three days later, during an inspection visit to Basrah, USCENTAF commander Lt Gen Walter "Buck" Buchanan learned that the AST assigned to Squadron 70 was advising the Iraqi airmen to always "fly lower than 3,000 feet to avoid reporting into controlled airspace."²⁰ While the resulting "invisibility" gave them greater freedom of action for their ISR and training efforts, it also prevented them from supporting any coalition air operations, no matter how beneficial that participation might have been. Whether or not this information resulted in the USCENTAF commander's personal intervention is unclear, but on 31 January a combined air operations center (CAOC) planner sent an advisory note to the combined force air component commander (CFACC) and the CAOC director informing them that "all [IqAF] aircraft training, administrative flights, and tasked missions will be reflected in the ATO." That inclusion became effective the next day.²¹

While it was an important step forward, being included in the ATO was not the same as being included in coalition air operations planning, let alone performing missions in response to ATO-published taskings. As a CAOC analyst wrote in mid-February, "the [IqAF] is part of a sovereign government and they can fly where they wish."²² It was important that the coalition be aware of Iraqi flights, but becoming a full partner in coalition air operations would take considerably more preparation, negotiation, and coordination.

IqAF Personnel Recruiting and Retention Challenges

As of July 2005, the Iraqi air force consisted of about 400 IqAF personnel, but its leadership expected to reach an authorized strength of 449 by year's end and to expand to 1,146 by December 2006.²³ Nonetheless, there were significant hurdles to overcome. Because of the insurgency, recruiting was difficult, and it was especially hard to find volunteers with the skills and abilities needed to supervise, operate, and maintain a modern air force. Virtually all of the fixed-wing officer aircrew who stepped forward to join the IqAF had learned to fly prior to the Persian Gulf War of 1990–91, and most had flown very little thereafter. They were well-educated, and many were experienced pilots, but they were no longer young men—almost all were in their mid-to-late 40s. Ground crew recruits, while younger, were generally less well-educated—in fact, many were illiterate—and finding candidates with the technical expertise and leadership skills needed to serve as warrant officers or senior NCOs was a special challenge.²⁴

The language barrier was especially daunting. During an interview conducted in July 2005, MSgt Tommy Lee, an AST flight engineer of the 314th Airlift Wing, said, “One time I had to explain in six different ways why the instrument panel wasn’t lit up. . . . It took me 30 minutes to explain what it would have taken less than 30 seconds to explain to a U.S. Airman.”²⁵ Although many Iraqi officers spoke some English, very few enlisted recruits spoke any English at all; so attempting to train them at US facilities would be unprofitable. Instead, reliable Iraqi interpreters had to be hired, which entailed further problems and delays. The interpreters’ work was supplemented with English language course instructors provided by contractors and the DOD’s Defense Language Institute, but even so, the language barrier created substantial, hard-to-resolve delays in the students’ training schedules.²⁶

Working conditions were also a factor in the new air force’s retention, training, and operational efforts. Even if equipment and maintenance materials were on hand—which often they were not—electrical power supplies were intermittent, and insurgent attacks could come at any moment. Insurgent reprisals and threats of reprisals were all too common, and even the most routine ways of doing business were challenges in Iraq. For example, the simple act of getting paid involved a laborious, time-consuming, multistep process for Iraqi airmen. There was no functioning banking system, at least not in the Western sense; so all pay transactions had to be conducted in cash.

This meant that a team of trusted officers had to travel to central Baghdad, sign for large quantities of Iraqi currency, and then return safely to base to distribute the money to the waiting recipients. Once the airmen had been paid, they had to carry the precious currency to their families. Depending upon the circumstances, doing so might take the airmen off base for a few hours, a day or two, or perhaps a week or more. It was a hard way to run an air force.²⁷

Progress at Ali and Kirkuk

As spring 2005 turned into summer, the Iraqi transport crews continued to gain experience with their C-130s. Squadron 23 made the new air force's first C-130 flight outside of Iraqi airspace during the first week of February when, under AST mentorship, a five-man crew flew from Ali AB to Amman, Jordan.²⁸ On 1 April a Squadron 23 crew transported 51 Iraqi soldiers back to Iraq from an Emirati training site. This sortie established an administrative milestone of sorts because, in addition to flying the mission on their own, the crew was able to complete all the clearance forms, customs declarations, transit route applications, and other paperwork needed to travel through international airspace and land in a foreign country.²⁹

In July Squadron 23 airmen conducted Operation Iraqi Power, the first operational airlift mission flown since the fall of the Hussein regime. This effort, mounted at the request of the ministry of electricity, was needed to protect Iraqi government power generation stations and distribution networks. The squadron had to palletize and move 2,700 assault rifles and a million rounds of ammunition from Baghdad to Basrah. After five days' preparation, the squadron delivered the shipment in five "chalks" without incident.³⁰ The operation also chalked up some other firsts, including the first time Iraqi loadmasters prepared airlift cargo without significant AST assistance and the first time that NAMAB was used to stage an operational IqAF mission. This was a significant event, as NAMAB had already been proposed as Squadron 23's new operating location once its facilities were in better repair and stocked with sufficient supplies and support equipment. Operation Iraqi Power would be the first in a series of familiarization movements designed to introduce the squadron and the base to one another over the next six months.³¹

C-130 flight training reached a significant milestone that same month with the graduation of the first six “mission qualified” C-130E aircrew at Ali AB on 12 July. All graduates were members of the initial cadre of 19 students sent to Jordan for flight training in October 2004; they had then attended the USAF Basic C-130E Conversion Course at Little Rock AFB, Arkansas, in January 2005. Before receiving their qualification certificates, the students had returned to Ali AB in February and undergone an intensive regimen of ground and flight training, English language training, and aircraft systems academics.³²

Things were also looking up at Kirkuk. On 10 April the Comp Air-equipped ISR unit, Squadron 3, was declared operational after its first six pilots and eight maintenance engineers graduated in a ceremony held at the base. Over the previous three months, the pilots had completed a 23-flight basic training syllabus under the tutelage of the two AST pilots (one USAF and one US Navy) assigned to the squadron. Two of the new graduates would make an additional 22 flights to become qualified as aircraft commanders.³³

Problems at Basrah and Taji

In a way, the successes of Squadron 23 only served to highlight the less satisfactory situations in Basrah and Taji, the home stations for, respectively, Squadron 70’s four ISR aircraft and the IqAF’s rotary-wing operations. Although the ISR effort continued to make some advances—including Squadron 3’s becoming operational at Kirkuk in April—it remained a halting process. On 17 January Squadron 70 augmented its two-plane Seeker force at Basrah with the addition of the first two SAMA CH2000s.³⁴ The new aircraft were soon engaged in familiarization and training missions, some of which included “real-world” incident surveillance and reporting.³⁵ Unfortunately, both CH2000s experienced engine exhaust leaks as early as mid-February. Combined with other shortcomings, this forced a reevaluation of the SAMA contract. In mid-April CMATT-A abandoned the follow-on purchase option for a second block of eight CH2000s and gave serious consideration to canceling any further acceptances. In July, after weighing the options, CMATT-A decided to continue with the original eight-unit agreement. Four of the remaining six deliverables were turned over to Squadron 70 during the first week of August—more than half a year after their originally programmed delivery dates.³⁶

Basrah's problem was a lack of airplanes, but Taji lacked spare parts. Four of the 16 Jordanian-donated UH-1Hs had been delivered in February, but that transfer did not include any maintenance support. Instead, the Hueys' maintenance needs were to be met by the sustainment contract signed with ARINC in December 2004. Unfortunately, ARINC's initial UH-1H restoration and support work proved to be less than satisfactory, resulting in a complaint to ARINC's corporate offices from Lt Gen David Petraeus, US Army, the MNSTC-I commander. This appeared to have the desired effect, at least as to the quality of the remaining refurbishments. ARINC's third UH-1H delivery (IqAF serials YI-205 and 206) arrived at Taji in late May, and the two new helicopters' workmanship was much improved. Nonetheless, the Hueys' sustainment situation still languished, and the Iraqis' reluctance to buy more UH-1Hs did not help matters. The problem was that IqAF commander General Barzanjy preferred something else, even if he was not entirely sure what that alternative should be.³⁷

CMATT-A—mindful of the need to get something into the air sooner rather than later—believed that the Iraqis should make use of what was available, rather than wait for something better. Even so, CMATT-A's position would require more near-term sustainment funding, or at least better use of the money already allocated. On 21 May the CMATT-A director pleaded his case to General Petraeus. A \$9.5 million "earmark" had been set aside to buy new ISR aircraft. Instead, would MNSTC-I reprogram that sum for maintaining and improving the aircraft already on hand? General Petraeus agreed, and the money was reallocated: \$4.5 million for the Bell 206 JetRangers of Squadron 12, \$3 million for Squadron 3's Comp Airs, \$1 million for the UH-1Hs of Squadron 2, and \$1 million for Squadron 70's Seekers.³⁸

It would take time for that reallocation to be translated into contract specifications, for the contracts to be negotiated and awarded, for parts to be located or made and supplies delivered, and for operations to then resume. In the meantime, the sustained lack of attention and support was taking its toll, both on the morale of the ASTs and on the resolve of the Iraqi airmen who risked their lives and the safety of their families daily to carry out their mission.

The mix of ASTs and the working command and control situation made the situation at Taji somewhat complicated. The two ASTs assigned to advise Squadron 12 and its JetRanger operators, for example, were members of the Arizona National Guard. Because of its past

experience with UH-1Hs, the 6th SOS provided the five ASTs (two pilots, two NCO flight crewmen, and a maintainer) assigned to Squadron 2 and to Squadron 4—the latter a second Huey unit that had been activated at Taji earlier in the year but not yet equipped. Ordinarily, the 6th SOS would have deployed its ASTs in integrated teams, which would remain under the squadron's direct control no matter the assignment. That was not the case in Iraq, however. There the ASTs operated individually and under the direct control of CMATT-A—which is to say, under the operational control of the US Army.³⁹

By late May the situation at Taji was fast approaching unacceptable. Squadron 12's five JetRangers remained in sound condition overall, but the spares situation had reduced their operability rate to, at best, about 60 percent—and that was unsustainable. The lack of logistical support had effectively grounded Squadron 2's UH-1Hs, and its junior officers were so disgusted with the situation that they attempted—unsuccessfully—to resign en masse.⁴⁰ These circumstances placed a strain upon the working relationship between the American advisors and their Iraqi hosts, but cultural differences and the ASTs' living conditions probably played a role as well.⁴¹ Inevitably, the blue-suited ASTs lodged complaints with multiple recipients via back-channel means, and word of the complaints soon reached Brig Gen James Schwitters, US Army, the CMATT commander.⁴² On 30 May he traveled to Taji to review the situation firsthand and to remind CMATT-A's grousing Airmen-advisors of the sacrosanct nature of the chain of command; they answered to him regardless of what color uniform they wore.⁴³

Unfortunately, there were no immediate means available to correct the situation at Taji; that would not change until either more UH-1Hs were delivered and made sustainable or the Iraqis made a concerted effort to field something else. Given the inability to conduct flight operations, the 6th SOS decided there was no point in keeping scarce, Huey-qualified ASTs in place. On 27 June it withdrew its advisors from Taji.⁴⁴

The mission failure at Taji should have come as no surprise, if only because it happened in slow motion and in full view. Its immediate cause was a lack of spares, but that shortage was only the latest in a lengthy series of neglects. In a detailed end-of-tour analysis submitted in late June, departing 6th SOS advisor Maj William Denehan pulled no punches. He wrote, "*IqAF 2nd Squadron is currently non-functional. . . .*

Aircraft acquisition was poorly managed, unplanned, and unsupported . . . [and] overall IqAF development has been severely neglected and poorly managed” [emphasis in the original].⁴⁵ His blunt conclusions were shared—and voiced—by others in Iraq, including the CMATT-A advisor and coordinator for rotary-wing aircraft, Lt Col Charles Westgate, USAF. But it seemed as if no one above them was listening—not in Baghdad, not in the theater of operations, and certainly not in the Pentagon.⁴⁶

Notes

1. McCain, “New Iraqi Air Force,” 25–26. The aircraft involved were ex-USAF serial numbers 62-1839, 63-7826, and 63-7848. The transaction was valued at \$11,807,052, of which \$10,448,881 was for the aircraft. The remainder included mission-support equipment and spare parts.

2. A fifth crew was sent to Little Rock AFB, Arkansas, for similar training; each crew consisted of a pilot, navigator, flight engineer, and loadmaster. Lori Jewell, “Iraqi Pilots Fly Prime Minister,” *Advisor 2*, no. 7 (12 February 2005): 6.

3. MNSTC-I was subordinated to Multi-National Force-Iraq (MNF-I), which had replaced the previous coalition command organization, Combined Joint Task Force 7, on 15 May 2004. MNSTC-I, established the following month, was initially commanded by then-lieutenant general David H. Petraeus. In September 2005 he returned to the United States and was replaced by Army lieutenant general Martin E. Dempsey. General Petraeus returned to Iraq to take command of MNF-I on 10 February 2007, following the selection of the previous MNF-I commander, Gen George W. Casey, Jr., to become the US Army chief of staff. Wright, Reese, and the Contemporary Operations Study Team, *On Point II*, 42; Larry George, “MNSTC-I Commander Nominated for Leavenworth Command,” *Advisor 2*, no. 31 (30 July 2005): 9; and Fred W. Baker III, “Bush Says Baghdad Security Plan on Track,” *Advisor 4*, no. 7 (17 February 2007): 2 and 7.

4. Michael Bauer, *Training the Iraqi Air Force: Lessons from a U.S. C-130 Advisory Mission*, Policy Focus 73 (Washington, DC: Washington Institute for Near East Policy, August 2007): 4–5. Follow-on support for the C-130s was managed by the Air Force Security Assistance Center, an Air Force Materiel Command-controlled organization sited at Wright-Patterson AFB, Ohio. Donald R. Pugh, director, Case Ops, letter, subject: United States of America Letter of Offer and Acceptance, [case] Y7-D-AAA, 13 January 2005.

5. Westgate, “Chronology,” miscellaneous tab.

6. For an in-depth discussion of FID, see Maj Thomas D. McCarthy, “National Security for the 21st Century: The Air Force and Foreign Internal Defense” (master’s thesis, School of Advanced Air and Space Studies [SAASS], June 2004). For a case study comparison of USAF efforts to build national air forces, including those in South Vietnam, El Salvador, and Iraq, see Maj Patrick Daley, “Exporting Airpower: The Challenges of Building Partner Nation Air Capacity for Irregular War” (master’s thesis, SAASS, June 2008).

7. The 6th SOS is home-based at Hurlburt Field, Florida; its mission is to “assess, train, advise and assist foreign aviation forces in airpower employment, sustainment and force integration. Squadron advisors help friendly and allied forces employ and sustain their own airpower resources and, when necessary, integrate those resources into joint and combined (multinational) operations.” “6th Special Operations Squadron,” fact sheet, accessed 19 June 2010, http://www2.hurlburt.af.mil/library/factsheets/factsheet_print.asp?fsID=3496&page=1.

8. Childress, “Improving US Air Force Performance,” 45–46.

9. Westgate, “Chronology.”

10. Bauer, *Training the Iraqi Air Force*, 8; and McCain, “New Iraqi Air Force,” 25–26.

11. All C-130 AST volunteers were asked to serve a six-month tour of duty; an exception was made for the AST flight commander and the AST maintenance officer, who both served one-year tours for improved continuity. AMC provided 25 of the C-130 AST members; AETC provided the remaining 10. Bauer, *Training the Iraqi Air Force*, 5–6.

12. *Ibid.*, 7.

13. Capt Tim Jeffers, “Iraqi Air Force Takes Off with Aircraft Delivery.” *Advisor* 2, no. 3 (15 January 2005): 6. Its political ramifications aside, the event also underscored some of the deep cultural differences between the typical American Airman and Iraqi counterpart. During the ceremony, the Iraqis produced a live goat, slit its throat, and collected its still-warm blood in a large bowl. To the Americans’ astonishment, the Iraqis dipped their hands into the bowl and then proceeded to mark the sides of their new aircraft with bloody handprints as a sign of personal ownership. Bruce Rolfsen, “Iraqi Air Force Squadron Reactivated,” *Air Force Times*, 17 January 2005; Col John M. McCain AU/DS, discussion with the author, March 2008; and Dwyer Stringer, AFSAT/XE, discussion with the author, 22 August 2009.

14. Prime Minister Ayad Allawi, to Pres. George W. Bush, letter, 16 January 2005. Copy provided by Dwyer Stringer, AFSAT/XE.

15. Jewell, “Iraqi Pilots Fly,” 6. The IqAF crew flew most of the mission, but the student pilot was the only Iraqi airman aboard who spoke a useful amount of English. The rugged terrain and low clouds combined to make the flight increasingly hazardous. Major Frame made the approach and landed the aircraft at Sulaymaniyah on a runway still under construction, in threatening weather, and without the support of ground-based approach aids. At the time, he had only been in theater for two weeks. The airmanship shown by Major Frame and his USAF crew resulted in their receiving the National Aeronautic Association’s 2005 Mackay Trophy for “the most meritorious flight of the year conducted by a member or members of the United States Air Force.” George C. Larson, “Iraq Air Force One,” *Air & Space Magazine*, July 2006, 80.

16. Maj Michael Frame, interview with the author, 15 September 2009. For additional contemporary observations by USAF AST instructors and IqAF 23 Squadron students, see TSgt Melissa Phillips, “Airmen to Teach C-130 Ops to Iraqis,” *Advisor* 2, no. 30 (23 July 2005): 7.

17. Lori Jewell, “Joint Operations Center to Track Iraqi Forces,” *Advisor* 2, no. 18 (30 April 2005): 7.

18. Westgate, “Chronology.”

19. CMATT-A, “Informal Report on Forced Landing.”

20. Childress, “Improving US Air Force Performance,” 46–47.

21. Maj Jaime Santos, CAOC Combat Plans Division, Guidance and Targeting [Team]/MAAP, memorandum, subject: Item of Interest, 31 January 2005. [CAFTT files]

22. William Pontes, Combined Air Operations Center (CAOC), memorandum, subject: Iraqi Air Force (IqAF) Information and Thoughts, ca. 13 February 2005, 1. [CAFTT files] [n.b. The memo is unsigned and undated; the source information was taken from the document properties embedded in the electronic file.]

23. Martin Matishak, “U.S., Coalition Partners Work to Stand Up Iraqi Air Force,” *Inside the Air Force*, 29 July 2005, 3–4; and Headquarters IqAF, “Capability Requirement and Development Plan,” 9.

24. Bauer, *Training the Iraqi Air Force*, 11–15.

25. Phillips, “C-130 Ops to Iraqis,” 7.

26. Bauer, *Training the Iraqi Air Force*, 11–15; Sgt David Foley, “U.S. Air Force Trains Iraqi C-130 Pilots,” *Advisor 2*, no. 18 (30 April 2005): 6; and Phillips, “C-130 Ops to Iraqis,” 7. Beginning in January 2005, the Defense Language Institute’s English Language Center began to deploy modest numbers of civilian employees to Iraq to instruct IqAF members. See “English Language Training-Iraq,” *Foundations* 3, no. 1 (June 2007).

27. Childress, “Improving US Air Force Performance,” 47.

28. Jewell, “Iraqi Pilots Fly,” 6.

29. “Iraqi Air Force Begins C-130 Training,” *Middle East Newsline* [reprinted in USAF AIM Points], 7 March 2005, accessed 15 January 2010, <http://aimpoints.hq.af.mil/display.cfm?id=1644&printer=yes>; and “Milestone Iraqi Air Force Flight Takes Off,” *Advisor 2*, no. 14 (2 April 2005): 10.

30. The term “chalk” is used by the airlift community to describe one aircraft’s assigned load in terms of a number of passengers and their equipment or in bulk cargo weight. It originated in World War II, when US Army Air Forces’ loadmasters designated the number of paratroopers to be taken aboard their transport by having the soldiers stand within marks made with chalk on the airfield tarmac. See US Army Field Manual 101-5-1, *Operational Terms and Graphics*, 30 September 1997, chap. 1, C.

31. TSgt Brian Davidson, “New Iraqi Airmen Stage First Operational Airlift Mission,” *Advisor 2*, no. 29 (16 July 2005): 8; and Westgate, “Chronology.”

32. Lt Col Herb Phillips, “First Qualified Iraqi C-130 Aircrew Graduates,” *Advisor 2*, no. 30 (23 July 2005): 6; and “Iraqi Air Force Assumes Control of Its C-130 Operations,” *Air Force Print News*, 20 October 2009, accessed 15 January 2010, http://www.littlerock.af.mil/news/story_print.asp?id=123173563.

33. Lorie Jewell, “Graduation Puts Iraqi Air Force Squadron into Operation,” *Advisor 2*, no. 16 (16 April 2005): 4.

34. CH2000 Aircraft Delivered to Basrah,” *Advisor 2*, no. 4 (22 January 2005): 6.

35. Untitled Note [Oil Pipeline Fire Reported], *Advisor 2*, no. 12 (19 March 2005): 10.

36. CMATT-A had considered terminating the contract “for the convenience of the government,” but USCENCOM contracting officers advised that option would cost more than simply proceeding “as is” with the remaining six deliveries. Given the performance limitations of the CH2000, the consensus at the time was that they might be used as flight training aircraft, rather than ISR platforms. Westgate, “Chronology.”

37. *Ibid.*

38. *Ibid.*

39. Westgate, discussion with the author, 20 May 2010.

40. Maj William F. Denehan, "Recommendations for Iraqi Air Force (IqAF) Rotary-Wing Aviation Program," report (Baghdad: 6th Special Operations Squadron, ca. June 2005). [n.b. This report exists in at least two versions. The later available version, marked "Not Releasable Outside Coalition Channels," is in the Westgate Collection. An earlier, slightly different version, marked "FOUO/NOFORN" [for official use only/not releasable to foreigner nationals] is in the CAFTT files. Neither bears the author's name, but Colonel Westgate confirmed that Major Denehan was the author of both versions; he had asked Major Denehan to write the report.]

41. Childress, "Improving US Air Force Performance," 48.

42. General Schwitters replaced Maj Gen Paul Eaton as CMATT commander in June 2004. He was replaced in turn by Brig Gen Daniel P. Bolger in June 2005. In December 2006 the Army's Combat Studies Institute conducted a post-tour interview with General Schwitters, during which he expressly acknowledged the sacrifices made by "our great soldiers, Marines, Seabees and corpsmen." Whether his failure to mention the Airmen assigned to his command was intentional or simply an oversight is unknown. Combat Studies Institute, "Interview with BG James Schwitters," Ft. Leavenworth, KS: CSI, 13 December 2006, 7, http://cgsc.cdmhost.com/cdm4/item_viewer.php?CISOROOT=/p4013coll13&CISOPTR=338&CISOBX=1&REC=9.

43. Westgate, "Chronology."

44. Ibid.

45. Denehan, "Recommendations for Iraqi Air Force," 1.

46. In his SAASS thesis, Maj Tim Childress named three participant sources to support his conclusion that "although there had been an official [US]CENTAF representative team at CMATT's higher headquarters, MNF-I, this group never provided significant assistance to CMATT's Air Cell until [the mishap of May 30]" Childress, "Improving US Air Force Performance," 45-46.

Chapter 5

The Mishap of 30 May 2005

With apologies to Thomas Kuhn, let us suppose that in addition to paradigm shifts, there are great flashes of shared insight in which, after a period of significant neglect, the previously enshrined value of a time-proven way of doing things is abruptly and forcefully reaffirmed and restored in all of its authority.¹ If the term “retrodigim shift” seems too contrived, then instead call such an impulse an urgent, overwhelming desire to remake things as they were supposed to be.² That realization, or something very much like it, describes the USAF’s reaction to a fatal aircraft accident that occurred in Iraq on 30 May 2005.

The Accident

With the limited exception of the C-130Es assigned to Squadron 23, the Iraqis’ aircraft fleet continued to present significant difficulties in terms of performance, reliability, and operational readiness in early summer 2005.³ Nonetheless, the airmen of the IqAF’s two ISR units and their AST advisors went aloft as often as they could to patrol Iraq’s borders and oil pipeline systems. During those missions they trained and reported pipeline ruptures and oil fires, identified likely cross-border smugglers, and watched for suspected insurgent activities—and sometimes confirmed them by receiving enemy ground fire. In such cases, there was no choice but to evade and withdraw, since their aircraft were unarmed and unarmored.

But never mind the hazards of wartime flying. With its lift-killing high temperatures and horizon-obscuring clouds of fine, abrasive dust whirled up by the slightest breeze, the operating environment in Iraq was already harsh enough. That there could be consequences for operating ill-maintained or unsuitable airplanes in such circumstances was underscored by the deaths of Maj William Brian Downs, his IqAF Squadron 3 copilot, Capt Ali Hussam Abass Alrubaeye, and three USAF special operations personnel on 30 May 2005. Their Comp Air 7SLX crashed at about 10:30 a.m. local time, while conducting an aerial survey of potential landing sites in Diyala province, about 50 miles northeast of Baqubah.⁴

The aircraft had departed from Kirkuk an hour earlier; Iraqi witnesses said it was either conducting a very low-altitude pass over a road or attempting to land on the road when the crash occurred. Trees obscured the actual impact, but the witnesses reported seeing a fireball shortly after the aircraft disappeared from view. Iraqi security guards from a nearby refinery arrived at the scene within minutes of the crash. The wreckage was already ablaze, and they attempted to put out the fire with hand extinguishers, but the intensity of the flames forced them to retreat. A US Army ground unit received notice of the crash by radio at 12:05 p.m. Its vehicles arrived at about 12:30 p.m., and two more unsuccessful attempts were made to extinguish the fire, which finally burned itself out. An Army Special Forces team took charge of the site that afternoon, and recovery operations began immediately. The remains of all five Airmen were first taken to Balad AB and then flown to the Air Force Mortuary Affairs Operations Center at Dover AFB, Delaware. Those remains that could be specifically identified were later returned to the five families for interment.⁵

Major Downs, age 40, was assigned to the 6th SOS and stationed at Hurlburt Field, Florida. The Winchester, Virginia, native had served in the 6th in the late 1990s but left the service to fly for an airline. The terror attacks of September 2001 compelled him to return to active duty, and in early 2002 he rejoined the squadron. Thereafter, he completed deployments in seven countries before going to Iraq. At the time of the crash, he had been an IqAF advisor for just under four months.⁶ A keen advocate of counterinsurgency (COIN) aviation and FID operations, Major Downs had recently published an article in a USAF professional journal arguing the merits of specialized COIN aircraft.⁷

The other three USAF members were Capt Jeremy Fresques, age 26, of Clarkdale, Arizona; Capt Derek Argel, age 28, of Lompoc, California; and Staff Sgt Casey Crate, age 26, of Spanway, Washington. All were assigned to the 23rd Special Tactics Squadron, also based at Hurlburt Field.⁸

On 11 August the individually unidentifiable remains of the five Airmen were laid to rest as a group in a solemn ceremony held at Arlington National Cemetery. USAF Chief of Staff (CSAF) Gen John P. Jumper, Iraqi air force chief of staff General Barzanjy, the USCENTCOM vice commander, and the commander of AFSOC attended. General Barzanjy presented an Iraqi flag to Captain Abass's

father, a retired Iraqi army brigadier general. Captain Abbas was the first Iraqi citizen to be buried at Arlington National Cemetery.⁹

The Investigation

A thorough analysis of the accident was essential, and General Barzanjy asked USCENTAF commander General Buchanan for assistance. The request posed something of a conundrum. General Barzanjy had promised that any release of information by Iraq regarding the accident and its possible causes would be “determined in accordance with United States rules and regulations.”¹⁰ Nonetheless, the aircraft was not US government property, so any sensitive information gathered by USAF accident investigators would not be entitled to all of the protections that it might otherwise receive under US law—a situation tending to discourage a full and frank discussion by those most knowledgeable of the circumstances.¹¹ In the end, because the four Airmen had been assigned to AFSOC units, AFSOC commander Lt Gen Michael W. Wooley obtained the consent of General Barzanjy and USCENTCOM to treat the mishap investigation as a matter to be undertaken “under the inherent authority of a commander to investigate matters or incidents under his or her jurisdiction or command.”¹²

Conducted by a team of 11 specialists (including two Iraqi air force representatives) and led by Brig Gen Clay T. McCutchan, USAFR, the investigation opened at Hurlburt Field, Florida, on 5 July 2005.¹³ General McCutchan’s team subsequently conducted on-site inquiries in Iraq, took the testimony of more than a dozen witnesses, and had technical analyses conducted by multiple subject-matter experts. General McCutchan submitted the report to General Wooley on 30 August. Because its purpose was expressly limited to determining the facts surrounding the loss, the report offered no opinion as to the cause of the accident.¹⁴

Contributing Factors

In mid-November, the USAF released a brief statement regarding some of AFSOC’s findings: there was no evidence of hostile action, and no mechanical failures or major systems malfunctions appeared to have been involved.¹⁵ What was left unsaid was that the Comp Air

7SLX aircraft flown by Major Downs and his crew had not been properly flight-tested after being modified during its assembly in the UAE. Those alterations may have led to the airplane's penchant for abruptly departing controlled flight in power-on stall conditions, especially when fully loaded—a deadly hazard at low altitude.¹⁶ In fact, the accident investigators learned that the aircraft had taken off weighing 510 pounds more than its published maximum gross weight.¹⁷

The accident investigation also revealed problems beyond the performance of the airplane and its destruction. These problems raised doubts about the command-and-control arrangements between CMATT-A and its ASTs in the field, for example, and how mission priorities were being set by the 6th SOS Airmen embedded with Squadron 3. The clear implication was that mission goals (and risks) might not have been fully and objectively assessed in every instance.

Unfamiliar manning arrangements may have also played a role. Upon receiving a request for forces (RFF), the 6th SOS normally deployed advisors in two segments. The first segment, called an Operational Aviation Detachment (OAD)-Alpha, typically consisted of 13 advisors. The second supporting segment was called an OAD-Bravo; it usually called for a five-member command-and-control element. These figures were nominal: both teams could be tailored to support the RFF as required.

In this case, the RFF had been limited to a mix of three fixed-wing and five rotary-wing pilots and maintenance personnel, who were parceled out to fill AST requirements at Basrah, Kirkuk, and Taji. One was also tapped to serve as a combat aviation advisor to the CMATT commander.¹⁸ This meant that the deployed advisors were left to their own devices to a much greater extent than the 6th SOS's standard operating procedures typically allowed. The CMATT-A director, Wing Commander Peter Allen, RAF, acknowledged as much when the mishap investigators interviewed him in July:

There is no tasking function from CMATT air cell, in terms of sorties and what they do at the squadron. . . . In the ideal world, the Iraqi air headquarters would task their squadrons. There is nothing in place at the moment, so actually the tasking at the squadron is found almost at the squadron level. . . . They would probably work for the Ministry of Oil at the local level, oil protection battalions, they were looking to them.¹⁹

Although Wing Commander Allen found “nothing wrong with that intrinsically,” the resulting lack of higher headquarters oversight and direction was a surely contributing factor.

Major Downs's eagerness to "grapple with the mission" may have also played a role. Those who worked with him saw that intensity very clearly, and they admired him for it. His USAF roommate at Kirkuk described Major Downs as a "warrior who worked overtime coming up with plans and ideas for defeating the enemy."²⁰ A close friend and former 6th SOS commander later said that "Brian was not in the Air Force to get promoted. He was in the Air Force to *fly*."²¹ Such men will push themselves and their aircraft in ways that a more cautious man will not. But cautious men do not aspire to be warriors.

In the end, there is no way to know exactly what happened that day. The only certainty of it is that five good men were dead and that one of Iraq's few operable ISR aircraft had been destroyed. But more to the point, because of those losses, senior USAF leaders were made—at long last—to take a critical look at CMATT-A and its mission.

A Catalytic Event

The loss on 30 May was a tragic but valuable event—a tragedy in that it took the lives of five exceptionally dedicated Airmen, but valuable in that it brought close, high-level attention to a mission that had thus far been ill-focused, underfunded, and overlooked. On the fifth anniversary of the crash, Lt Gen-select Robert Kane, then commander of the USAF advisory mission in Iraq, spoke of its catalytic effect at a Baghdad remembrance ceremony. Because of that accident, said General Kane, "significant changes were made to our efforts here in Iraq—changes that strengthened our commitment to the mission of rebuilding the Iraqi air force, and to ensure that we do this as safely as possible."²²

Notes

1. Thomas S. Kuhn, *Structure of Scientific Revolutions* (Chicago: University of Chicago Press, 1962).

2. "Retrodigm shifts" occur more often than paradigm shifts. Three months to the day after this accident in Iraq, for example, there was an intense, immediate need to conduct search and rescue (SAR), reconnaissance, and reconstitution missions in and around New Orleans, Louisiana, and the other affected areas of the US Gulf Coast after Hurricane Katrina made landfall on the night of 29 August. The "area of responsibility" encompassed over 800 square miles of devastation. Within 72 hours,

flying units assigned to five USAF major commands, the Air National Guard, the US Navy, and the US Coast Guard were each separately conducting SAR and humanitarian relief operations within the same airspace. In many cases, the operators were flying within visual range of one another, but they did so without the benefit of a CAOC or equivalent Joint Coordination Center to deconflict air traffic at the few local airports still operable, to prevent duplication of effort during SAR operations, or even to determine which aircraft were going where and doing what. Such was the urgency of the moment that routinely used procedures were simply ignored in the face of overwhelming humanitarian priorities. Finally, seven days after the storm had passed—and after some near-collisions had occurred at overburdened airfields—the USAF vice chief of staff sent out an urgent “get back to doctrine!” directive reminding the participants to make use of well-established but temporarily neglected means for coordinating such operations. Patti Wilson and George Cully, “USAF Action in the Aftermath of Hurricane Katrina,” unpublished study (Washington, DC: Air Force History Support Office, May 2006).

3. In April 2005 the IqMoD signed a \$109 million C-130E FMS contract to provide two years’ follow-on support, but its continued inability to fund that agreement had flight safety implications. All three aircraft were due for isochronal inspections, and one of the C-130s had to be returned to the United States in June for repair of a cracked structural member. The IqMoD could not process the necessary paperwork in time; that aircraft was temporarily repainted in US markings to meet its scheduled transit date without violating international law. The inspections for the other two aircraft were deferred until October in order to give the IqMoD more time to cover the costs of its contractual commitment. Westgate, “Chronology.”

4. “Five Airmen Killed in Iraqi Crash,” *Maxwell-Gunter Dispatch* [Maxwell AFB, Alabama], 3 June 2005; “4 Americans, 1 Iraqi Killed in Plane Crash,” *Baltimore Sun*, 31 May 2005; and Lorie Jewell, “Pilots Hailed as Heroes Who Died for a Free Iraq,” *Advisor 2*, no. 23 (4 June 2005): 6–7.

5. AFSOC, “USAF Accident Investigation Report, Comp Air 7SL, Aircraft Number 2245,” report (Hurlburt AFB, FL: AFSOC, n.d.), 4–6. [Hereafter cited as AFSOC Accident Report.]

6. Jewell, “Pilots Hailed as Heroes,” 6–7.

7. Maj William Bryan Downs, “Unconventional Airpower,” *Air and Space Power Journal* 19, no. 1 (Spring 2005): 20–25.

8. “DOD Identifies Air Force Casualties,” DOD news release 543-05, 1 June 2005. In August 2005 the Argel family successfully challenged an activist group called Veterans for Peace over the unauthorized use of Captain Argel’s name in an antiwar memorial. Nora K. Wallace, “Capt. Argel Marker to Be Removed,” *News Press* [Santa Barbara, California], 18 August 2005, accessed 17 May 2010, <http://news.newspress.com/topsports/081805argel.htm?now=85761&tref=1>.

9. SSgt C. Todd Lopez, “Five Brothers in Fight for Freedom Buried Together,” *Advisor 2*, no. 33 (13 August 2005): 3–4.

10. Maj Gen Kamal Abid Al-Sattar Barzanjy, IqAF/CC, to Lt Gen Walter E. Buchanan, USCENAF/CC, letter, subject: Request for Assistance, n.d. [Westgate files]

11. For statutory protections provided to USAF accident investigation reportage, see 10 *US Code* sec. 2254(d), *Treatment of Reports of Aircraft Accident Investigation*;

and Air Force Instruction (AFI) 91-204, *Safety Investigations and Reports: Use of Information in Civil Proceedings*, chap. 2.

12. AFSOC Accident Report, 4–6. Although command-directed, the investigation was structured under the provisions of AFI 51-503, *Aerospace Accident Investigations*, 16 July 2004.

13. At the time, General McCutchan was the senior individual mobilization augmentee assigned to the commandant of the Air War College, Maxwell AFB, Alabama. See “Major General Clay T. McCutchan,” biography, accessed 27 January 2010, <http://www.af.mil/AboutUs/Biographies/Display/tabid/225/Article/108186/major-general-clay-t-mccutchan.aspx>.

14. This report was “separate and apart from the previous safety investigation, which was conducted pursuant to AFI 91-204.” Reports generated under that instruction (which provide opinions as to causality) are exempt from release under the *Freedom of Information Act* as provided in 5 *US Code*, sec. 552, *Public Information: Agency Rules, Opinions, Orders, Records, and Proceedings*.

15. “Accident Report Out on Iraqi Comp Air 7SL,” *Air Force Print News*, 14 November 2005, accessed 12 January 2010, <http://www.af.mil/News/ArticleDisplay/tabid/223/Article/132777/accident-report-out-on-iraqi-comp-air-7sl.aspx>.

16. Lt Col Mark Stucky and Maj Vincent Sei, “Iraqi Test Acceleration—the Saga of the Comp Air 7SLX,” report (Edwards AFB, CA: USAF TPS, n.d.) [AFFTC/HO files]

17. AFSOC Accident Report, 4.

18. *Ibid.*, 2.

19. *Ibid.*, V-3.1.

20. Jewell, “Pilots Hailed as Heroes,” 7.

21. Eric Huppert (former 6 SOS/CC), interview with the author, 18 August 2009.

22. Van Williams, “Building the Iraqi Air Force: Learning from Tragedy.” *Advisor* 6, no. 7 (July 2009): 6.

Chapter 6

Moment of Truth

The Iraqi Air Force Asks for Expanded USAF Participation in Its Training and Procurement Efforts

The accumulating challenges involved in recruiting and training new airmen, activating units and bases, identifying and acquiring suitable equipment, and operating that equipment safely and effectively—all while trying to contribute to Iraq’s COIN efforts—combined to persuade General Barzanjy to ask for greater assistance from the IqMoD and the coalition.¹ On 29 June he conferred with USCENTAF commander General Buchanan after officiating at a USAF change of command ceremony at Balad AB. The Iraqi air commander cataloged the problems he faced, among them the need for additional transport aircraft, the failings plaguing his ISR platforms, and the difficulties encountered in obtaining reliable helicopters. Although the missions flown by his C-130 squadron had been included in the coalition’s ATO since March, General Barzanjy wanted his airmen to tackle more of the coalition’s airborne requirements (especially COIN missions), and he praised the successful partnering of Squadron 23 and its USAF AST mentors. Might that be a model for further cooperation? Although General Buchanan could not promise any immediate financial support, he empathized with General Barzanjy’s needs and aspirations. As a possible solution General Buchanan suggested convening a coalition air conference “to discuss the organization, structure, logistics support and budget of the IqAF.”²

The USCENTAF commander’s proposal was most welcome, but what General Barzanjy envisioned required generous resourcing that could only be had with the support of the USAF’s senior-most commander. Armed with a capability and requirements study generated in mid-July, Barzanjy traveled to Washington, DC, to meet with his American counterpart, General Jumper, on 11 August.³ The solemn interment ceremony at Arlington National Cemetery for the Iraqi airman and the four US Airmen lost on 30 May fostered their meeting.⁴

General Barzanjy’s request was understandable. The situation in Iraq was dire, and without the expertise and wherewithal of the USAF, it would be impossible for his airmen to help fight the insurgency that was tearing their nation apart. Iraqi ground forces had

expanded from their originally envisioned strength of three divisions to 10, General Barzanjy said, but his air force still could not field even the minimal strength originally envisioned by the CPA. Could the CSAF assist in a substantive way?⁵

General Jumper suggested that the two air forces should devise a joint plan based upon clearly articulated short- and long-term requirements. General Barzanjy readily agreed and offered to meet with General Buchanan either in Baghdad or Qatar to set up a planning conference. However, without a fully qualified headquarters staff, General Barzanjy admitted that he would have to be “the main IqAF participant at the planning conference.”⁶ Soon thereafter General Jumper directed General Buchanan to “assume [the] lead role in assisting the development of an effective, independent Iraqi Air Force.”⁷

USCENTAF Takes the Lead

The first step in solving a problem is to gauge its dimensions. On 25 August 2005 General Buchanan convened a working group comprised of the Air Force stakeholders deemed essential in dealing with the problem.⁸ The teleconference attendees—soon known as the “board of directors”—included general officers representing the four major USAF commands then working most directly with the Iraqi air force, two key senior civilian officials in the Air Force secretariat, and the Multi-National Force–Iraq (MNF–I) Air Component Coordination Element (ACCE) director, Brig Gen David W. Eidsaune, USAF.⁹ After reviewing the current situation and examining General Barzanjy’s near-term requirement projections, the working group agreed upon a four-phased approach.¹⁰

The first phase entailed a mission analysis couched at the strategic level. The second phase involved the development of an institutional concept of operations (CONOPS) for the IqAF. Phase three called for a four-team, on-site assessment of the IqAF’s capabilities and limitations, including the status and suitability of its facilities, equipment, and logistics arrangements. The team’s findings would be used to fine-tune the CONOPS’s assumptions and expectations. In particular, phase three included an Air Force Flight Test Center (AFFTC)-conducted evaluation of the Comp Air 7SLX’s airworthiness—a test to determine its usefulness as an ISR platform to be sure, but also reflecting the USAF’s obligation to learn what role the airplane’s characteristics

and performance may have played in the tragedy of 30 May. The fourth phase, and potentially most contentious, would be to secure a “buy in” from General Barzanji and his superiors for the CONOPS as revised in light of the assessment’s findings and recommendations.¹¹

The IqAF Mission Analysis

The Mission Analysis Working Group was comprised of 16 officers and civilians representing 15 USAF agencies; it met from 29 August through 1 September. After analyzing the mission list contained in the 20 July Capability Requirement and Development Plan, the working group used a checklist-like approach called DOTMLPF (doctrine, organization, training, materiel, leadership and education, personnel, and facilities) to identify two strategic motivators for energizing development, along with four interrelated critical requirements for developing the new Iraqi air force.¹² The two strategic motivators were interrelated, and the group summarized them accordingly:

- Iraq’s COIN strategy could not be realized until the IqAF had the capacity and capability to operate and integrate with the other components of their security strategy.
- The US desire to transition security responsibilities from coalition to Iraqi institutions would be limited until the IqAF had the capacity and capability to conduct operations effectively.¹³

The working group defined its four critical requirements as “essential to any and all IqAF developmental efforts; without due attention to them, those efforts will fail.” The first requirement was command and control and doctrine, including the corpus of regulations and the subordinate administrative processes needed to “enable a clear understanding of policy, change of command, responsibility, accountability and authority.” The second requirement was product support and sustainment—those sequential “cradle to grave” logistical measures that must accompany every system from design to disposition. The third requirement, training, was predicated upon drawing in and retaining sufficient recruits with the requisite education and motivation to become competent airmen. The fourth requirement was resourcing. Without an adequate, stable funding stream, the working group recognized that the Iraqi airmen could not “plan, field and sustain an effective force.”¹⁴

In its discussions, the working group also considered what it called “major factors” in developing a viable IqAF. The group noted that “in the short term, effectiveness is more important than efficiency” and that using off-the-shelf systems would facilitate the IqAF’s effectiveness. The service’s existing body of trained and experienced people was its most valuable resource, but “delegation of authority and . . . decentralized execution are not native to current Iraqi culture,” implying that those individuals might not be allowed to maximize their potential within the existing cultural construct. Nonetheless, in spite of the challenges, the working group recommended that USCENTAF should establish a task force “with the mission of facilitating the development of an independent Iraqi Air Force.”¹⁵

A CONOPS for the IqAF

The CONOPS development conference attendees met in USCENTAF headquarters at Shaw AFB, South Carolina, on 12–16 September 2005. Their goal was to complete a first draft of the primary source CONOPS for IqAF development. That document would describe the guiding architecture for USCENTAF’s support, along with a proposed roadmap for the IqAF’s employment and expansion. It would also identify a standing USAF organizational structure—led by USCENTAF’s board of directors overseeing various approval boards and working groups—and a process to ensure near-term CONOP implementation. Sustaining current capabilities was also critical, and the CONOPS developers were expected to develop a set of realistic courses of action (COA), along with a schedule of significant milestones for accomplishing those COAs approved by the board of directors.¹⁶

The CONOPS writers chose a two-tracked approach. One track involved the identification of cost-effective, near-term actions designed to ensure the viability of the air force’s existing capabilities, including its ability to conduct airlift and reconnaissance missions, however limited those capabilities might be. The second track called for laying the foundations needed to support the IqAF’s mid- and long-term improvement and expansion. The COAs included replacing the ASTs with larger, better-prepared military transition teams (MiTT) and tying them more closely to a restructured CMATT–A or directly to the MNF–I ACCE but operating under the direct supervision of a USAF general officer.¹⁷

The IqAF Capabilities Assessment

Although the mission analysis and CONOPS were essential institutional underpinnings, they could serve only insofar as they were rooted in facts on the ground. The third phase provided that validation by sending handpicked USAF officers and civilians to Iraq, where they evaluated the Iraqis' capabilities and needs, along with the requirements (and challenges) of CMATT-A and its embedded ASTs.

Conducted from 3–19 October, the assessment effort consisted of 28 people divided into four teams under the overall command of Brig Gen Frank J. Padilla, USAFR, then the senior individual mobilization augmentee (IMA) assigned to AFSOC.¹⁸ His teams visited the IqAF's air operations headquarters and all five of its operating bases; these reviews included command-and-control arrangements, training programs, and logistics support and spare parts availability. Team members from the AFFTC also assessed the suitability and airworthiness of the IqAF's three reconnaissance aircraft types, including the Comp Air 7SLX.¹⁹

The capabilities assessment reported some critical findings and recommendations. Operationally, the assessors found that the ASTs were "generally not manned or trained for success," and General Padilla recommended that all six ASTs be restructured as MiTTs. Modeled in part upon the US Army's transition training apparatus adopted for Iraq in early 2005, the USAF's MiTTs would require additional manpower, better predeployment preparation, and longer tours to maximize team effectiveness.²⁰ They would also need a more influential and accountable chain of command. CMATT-A's four-member office was not adequately staffed for that role, nor was it led by a USAF officer of sufficient rank to champion the advisors' needs in such a soldier-dominated environment.²¹

The capabilities assessment rated the existing IqAF's ISR aircraft as marginal at best, mainly because the CPA had procured those airplanes without any realistic consideration of the IqAF's operational needs or sustainment capabilities.²² In particular, the AFFTC team members declared Squadron 3's Comp Air 7SLX airplanes to be "barely adequate for the mission." They recommended that until corrective action could be taken, those aircraft should not be flown at night, in poor weather, or in near-stall conditions.²³ In response, USCENAF asked Air Force Materiel Command (AFMC) to develop a plan to "modify, repair and flight test all six [Comp Airs] and return them to safe operations no later than 1 April 2006."²⁴

There were other issues as well. A lack of reliable communications plagued all of the ASTs, especially as to e-mail and Internet access. Those needs had to be met through whatever facilities and bandwidth that coalition ground forces could spare. The supply chain was ill-funded, and thus ill-provisioned, and Iraqi squadron commanders had to seek approval from the IqMoD for even the most minor expenditure. Not everything was broken, however. On-site English language training was valued, and all agreed that it should be expanded. The strong partnership between Squadron 23 and the 777th EAS received especially good marks, and the IqAf had been promised \$24 million for C-130 spares acquisition in January 2006. That said, the overall recruiting effort continued to lag, and the security situation was making retention difficult. Significant changes had to be made, and the board of directors collectively agreed that it was time to put things right.²⁵

The Creation of CAFTT

General Padilla's assessment had clearly established the need to replace CMATT-A with a larger, more-capable organization, and General Buchanan concurred. In October USCENTAF made a persuasive case to the MNSTC-I commander, Lt Gen Martin E. Dempsey, US Army, for restructuring and enlarging CMATT-A.²⁶ General Dempsey approved CMATT-A's replacement with an expanded organization called the Coalition Air Force Transition Team (CAFTT), which activated in the second half of November.

CAFTT was to be structured in full accord with General Padilla's proposal.²⁷ This action paved the way for a critically needed increment of air-minded expertise and manpower within the MNSTC-I staff. Equally important—from operational and doctrinal perspectives—it put a sufficiently senior USAF officer in the best possible position to assist the IqAF in becoming a capable, independent service within the Iraqi defense establishment.²⁸

Given General Padilla's key role in CAFTT's creation, it seemed only logical that he should become its first commander. He could not hold the position for long, however, as he was a reservist serving on a limited term of active duty. General Padilla returned to AFSOC to resume his IMA responsibilities in February 2006. General Eidsaune, the MNF-I ACCE director, took charge of CAFTT's operations upon General Padilla's departure. Two months later, General Eidsaune left

Iraq to take command of the Air Force Security Assistance Center. His replacement, Brig Gen Stephen L. Hoog, USAF, was also “dual-hatted” as the commander of both ACCE and CAFTT.²⁹

Notes

1. RAF Grp Capt M. W. Leaming, memorandum, subject: [Iraqi] Air Force Command Agenda. [Translation with rephrasing of a briefing delivered by General Barzanjy to the Iraqi Defense Council in May 2005.] [Westgate files]

2. RAF Grp Capt M. W. Leaming to Brig Gen William E. Eidsaune, memorandum, subject: Record of Meeting between LTG Buchanan and MG Kamal—29 June 2005, 29 June 2005. See also Leaming, memorandum, subject: Brief for BGen Eidsaune and BGen Peck. [CAFTT files]

3. Headquarters IqAF, “Iraqi Air Force Capability Requirement and Development Plan” (Baghdad: HQ IqAF, 20 July 2005), 11. General Jumper had been chief of staff since 6 September 2001. “General John P. Jumper,” biography, accessed 5 January 2010, <http://www.af.mil/AboutUs/Biographies/Display/tabid/225/Article/104697/general-john-p-jumper.aspx>. His successor, Gen T. Michael Moseley, was appointed on 2 September 2005. “General T. Michael Moseley,” biography, accessed 5 January 2010, <http://www.af.mil/AboutUs/Biographies/Display/tabid/225/Article/104651/general-t-michael-moseley.aspx>. General Buchanan was USCENTAF commander from August 2003 until his retirement in April 2006. “Lieutenant General Walter E. Buchanan III,” biography, accessed 5 January 2010, <http://www.af.mil/AboutUs/Biographies/Display/tabid/225/Article/107609/lieutenant-general-walter-e-buchanan-iii.aspx>. General Buchanan’s replacement was Lt Gen Gary L. North. “General Gary L. North,” biography, accessed 5 January 2010, <http://www.af.mil/AboutUs/Biographies/Display/tabid/225/Article/104909/general-gary-l-north.aspx>.

4. Associated Press, “Iraqi Pilot Buried with 4 U.S. Airmen at Arlington,” *Los Angeles Times*, 12 August, 2005, accessed 28 March 2010, <http://articles.latimes.com/2005/aug/12/nation/na-arlington12>; and Lopez, “Five Brothers in Fight,” 3–4.

5. RAF Grp Capt M. W. Leaming, memorandum, subject: Office Call—Kamal/Jumper—11 August 2005, n.d.; and Col Michael Byrne, briefing, subject: Stand-Up of the Iraqi Air Force, ca. November 2005.

6. Leaming, memorandum, subject: Office Call.

7. Message, COMCENTAF to Headquarters AF/AXO et al., “CENTAF Iraqi Air Force (IqAF) Site Assessment Support Request,” 23 September 2005.

8. For USCENTOM’s preparations see Lt Gen Walter E. Buchanan, briefing, subject: New Iraqi Air Force, 25 August 2005 VTC (predecision working paper version 3.5), n.d. (Info used is not FOUO.) [CAFTT files].

9. The MAJCOMs involved included AETC, ACC, AFMC, and AFSOC. Air Force Secretariat participation included representatives from the offices of the Deputy Undersecretary of the Air Force for International Affairs, the Deputy Undersecretary of the Air Force for Installations and Logistics, and the Air Warfare Center. General Eidsaune held the MNF–I ACCE director’s position from April 2005 until April 2006. “Major General David W. Eidsaune,” biography, <http://www.af.mil/AboutUs/Biographies/Display/tabid/225/Article/104844/major-general-david-w-eidsaune>

.aspx. His predecessor was then-Brig Gen Robert P. Steel, who had held the position since its creation in April 2004. “Major General Robert P. Steel,” biography, accessed 10 May 2010, <http://www.af.mil/AboutUs/Biographies/Display/tabid/225/Article/104671/major-general-robert-p-steel.aspx>.

10. Headquarters IqAF, “Iraqi Air Force Capability,” 11; and message, COM-CENTAF to Headquarters AF/AXO.

11. Ibid.

12. Headquarters IqAF, “Iraqi Air Force Capability,” 11.

13. Lt Col Jeffrey Henry, “Building the New Iraqi Air Force: Mission Analysis Working Group Executive Summary,” point paper, 1 September 2005. (Info extracted is not FOUO.)

14. Ibid., 2. See also “Iraqi Air Force Development: Mission Analysis Working Group (Version 1.0),” working paper, n.d. [CENTAF files] (Info extracted is not FOUO.)

15. Henry, “Building the New Iraqi Air Force,” 2.

16. CENTAF/DOOC, briefing, subject: Iraqi Air Force CONOPS Development Conference, ca. 9 September 2005. See also Kathi R. Jones, 9AF/HO, notes, subject: Preconference Meeting, 9 September 2005.

17. Byrne, briefing, subject: Stand-Up of the Iraqi Air Force.

18. “Major General Frank J. Padilla,” biography, <http://www.af.mil/AboutUs/Biographies/Display/tabid/225/Article/108194/major-general-frank-j-padilla.aspx>. Team members were provided by AFSOC, USCENTAF, AFMC, and US Air Forces in Europe.

19. Byrne, briefing, subject: Stand-Up of the Iraqi Air Force. One of the AFFTC pilots, Lt Col Mark “Forger” Stucky, came under ground fire from Iraqi insurgents while test-flying a Comp Air 7SLX. For this and related accomplishments made during the deployment, he received AFMC’s Lieutenant General Bobby Bond Memorial Aviator Award for 2005. A1C Julius Delos Reyes, “Testing Airworthiness ‘Under Line of Fire’ Earns Accolade,” *Desert News* [Edwards AFB, California], 26 May 2006.

20. The US Army had transitioned its ASTs to MiTTs in February and March 2005 as a part of MNF–I commander Lt Gen George W. Casey, Jr.’s efforts to improve security transition training for the Iraqi Army. Wright, Reese, and the Contemporary Operations Study Team, *On Point II*, 126; and Mark Reardon, Army Center of Military History, to the author, e-mail, subject: Historical Information on CMATT-A and the Activation of CAFTT, 22 January 2010. For IqAF AST data as of October 2005 and projected MiTT requirements, see Headquarters USCENTAF, briefing, subject: IqAF Advisory Support Team Assessment. [CAFTT files]

21. Byrne, briefing, subject: Stand-Up of the Iraqi Air Force. (Info extracted is not FOUO); and Headquarters USCENTAF, briefing, subject: IqAF Advisory Support Team Assessment, 3–19 October 2005.

22. AFFTC Flight Test Assessment Team, briefing, subject: SAMA CH-2000, October 2005; and AFFTC Flight Test Team, briefing, subject: Seabird Seeker, October 2005.

23. Brig Gen Frank Padilla, briefing, subject: Comp Air 7SL Decision Brief to Lt Gen Buchanan, 20 October 2005. (Info extracted is not FOUO.) [CAFTT files] See also Stucky and Sei, “Iraqi Test Acceleration”; Lt Col Mark Stucky, USAF Test Pilot School (TPS)/ED, briefing, subject: Comp Air Briefing, 17 October 2005; Lt Col James L. Wertz, 412 OG/CD, to Lt Col Mark P. Stuckey, USAF TPS/ED, et al., e-mail, subject: “Re: Iraqi Test Accel Reports,” 17 October 2005; and CMSgt William A. Ludwig,

“Operation Iraqi Freedom Trip Report, 3 October 2005–19 October 2005,” report, ca. 7 November 2005. [AFFTC/HO files]

24. AFMC was responsible for almost all of the USAF’s equipment requirements—determination, acquisition, evaluation, and sustainment. As an AFMC subordinate, AFFTC conducted flight tests and evaluations of aircraft proposed for USAF service. Col Mark A. Atkinson, AFMC/A4, to AFMC/CC, “AFMC Course of Action to Support Re-establishment of Iraqi Air Force (IQAF) Comp Air 7SLX (CA-7) Aircraft,” staff summary sheet, December 2005.

25. Byrne, briefing, subject: IqAF Assessment Outbrief, ca. 15 October 2005.

26. General Dempsey had replaced then-Lt Gen David H. Petraeus as commander of MNSTC-I in September 2005; in June 2007 General Dempsey left that position to become deputy commander under USCENTCOM’s Adm William J. Fallon, who had been appointed three months earlier following the retirement of Gen John Abizaid, US Army. General Dempsey’s relief, Lt Gen James M. Dubik, US Army, commanded MNSTC-I until being replaced by Lt Gen Frank Helmick, US Army, in early July 2008. See http://en.wikipedia.org/wiki/Multi-National_Security_Transition_Command_Iraq; and “Helmick Takes the Helm at MNSTC-I and NTM-I,” MNSTC-I press release, 3 July 2008.

27. Announcement of the action was initially limited to internal notice via a Fragmentary Order issued by USCENTAF. Wesley W. Long, 9AF/AFCENT/A3T, discussion with the author, 18 March 2010.

28. Bauer, *Training the Iraqi Air Force*, 8–9.

29. General Hoog led CAFTT until March 2007, when he was replaced by Brig Gen Robert R. Allardice, USAF. See “Brigadier General Stephen L. Hoog, USAF” biography, accessed 21 April 2008, <http://www.af.mil/AboutUs/Biographies/Display/tabid/225/Article/105063/lieutenant-general-stephen-l-hoog.aspx>.

Chapter 7

With a Little Help from Its Friends

The Iraqi Air Force Begins to Reshape Its Future

The Iraqi air force was still struggling to increase its size and presence at the end of 2005. In July the DOD reported that there were over 100 airmen in IqAF service; by mid-October that number had risen to “more than 200 trained and equipped personnel,” and the prospects were good that it would double again within a few months.¹

More to the point, the increasing operations tempo showed that the new air force was determined to “get into the fight,” albeit within the limits of its resources. For example, in September Squadron 23’s three C-130s moved more than 330 Iraqi special police commandos from Irbil to Tal Afar in support of COIN operations in Ninewa province.² The squadron also “filled a critical role” by flying 23 airlift sorties between 1 and 9 October in support of Operation Iron Fist, a US Marine Corps-led COIN action in western Anbar province.³ Squadron 23 successfully completed a series of exercises called “Independent Action” in mid-October, mid-November, and again in mid-December.⁴ These exercises were designed to measure the unit’s ability to operate independently of its supporting USAF units—the 777th EAS and 777th EAMS—at Ali AB. As a result, the squadron received authorization to conduct its first operational mission flown entirely without AST assistance; that early December sortie was a source of considerable pride to everyone involved. “Seeing your students go out, taking the steps on their own for the first time—it’s like seeing your kids or somebody in your family do great things,” said TSgt John Furber, a Squadron 23 AST advisor.⁵

The exercises also proved the ability of NAMAB to host flying operations, even though many of the base’s facilities were still under construction.⁶ NAMAB, collocated with the BIAP, was set to become the home of Squadron 23 early in 2006. The move had been planned for months—the shift to be done in increments—and was seen as much more than simply providing a less-vulnerable location. Transferring to NAMAB would also significantly improve the quality of life for the airmen assigned to Squadron 23, as it meant that they could be housed in better quarters. More important, for many it meant

additional time spent with their families living in the metropolitan Baghdad area.⁷

The performance of the IqAF's airlifters was encouraging, but the progress of its rotary-winged aircraft units continued to disappoint. Since May 2005, Squadron 12 only had one of its five Bell 206B JetRanger helicopters available for training. Although the US Army Security Assistance Command had opened an FMS case for a \$1 million logistics support agreement in July, it would take time for that process to deliver anything.⁸ By October the JetRangers were completely grounded for lack of spare parts. Only after a concerted effort by CAFTT and MNSTC-I's security assistance office did Squadron 12 receive enough spares to resume training on 11 December—and even then with just two aircraft. The Squadron 12 commander flew solo for the first time soon thereafter. He and another Squadron 12 pilot were the first Iraqi airmen to become flight-qualified in the Bell 206B; both soon received additional specialized training to qualify as flight instructors.⁹

The six Jordanian-gifted UH-1H helicopters in service with Squadron 2 had also been grounded for months because of multiple maintenance problems. In July, after lengthy discussions, General Barzanji decided to accept CMATT-A's proposal to upgrade all of the UH-1Hs (including the 10 unrefurbished machines still in Jordan) to meet Huey II specifications.¹⁰ The improvements were significant. The Huey II program included a reinforced airframe, a newer engine providing about 30 percent more power, new rotor blades and tail booms, new wiring, and upgraded avionics. Given the extent of the conversion effort—and the fact that it would cost about \$3.5 million per aircraft—the IqAF commander was willing to proceed—but only on the condition that the work was not to be done in Jordan. He preferred that a US-based contractor take on the project, even though this would add significant transportation costs to the bill.¹¹

With this in mind, in August ARINC submitted cost proposals for the conversion work; the estimates included the use of a subcontractor, US Helicopter, Inc., of Dothan, Alabama. Completion of the project was expected to require about a year. It took several months to determine how the effort would be paid for, and in the end CAFTT and MNSTC-I decided to split the cost. In early December CAFTT announced that all 16 UH-1Hs (including the 10 unrefurbished machines in Jordan) would be shipped to the United States for reconstruction early the next year.¹²

The performance of all three ISR aircraft types remained problematic at best. The two Seekers and six Comp Airs were of limited use, but they would continue to contribute as and where they could. In the meantime, all six CH2000s remained grounded for the reasons identified in the capability assessment. It would take time and money to correct all of the three aircraft types' faults.¹³

In sum, General Barzanjy and his new CAFTT support team agreed that his air force could not satisfactorily perform its existing mission, let alone expand upon the requirement. Although more Iraqi airmen were being recruited and trained, their service would be without purpose unless they had suitable aircraft in sufficient quantity. The Iraqi air force was prepared to purchase those aircraft—especially ISR-capable platforms and light transports—but it needed honest, reliable advice on what kind, how many, and when to buy them.

The Comparative Aircraft Study

With the results of the mission analysis, CONOPS, and capability assessment in hand, General Buchanan was better prepared to respond to the Iraqis' desire for additional aircraft. One of the more important conclusions emerging was that, at least in the short term, the Iraqi air force should give priority to supporting COIN air operations. Given that there were multiple COIN operations-capable aircraft on the market, the USAF could assist by recommending which aircraft types (and quantities) might be best suited to Iraq's circumstances. This suggested a comparative evaluation as the next step.

In late October, General Buchanan directed the formation of a Comparative Aircraft Working Group (CAWG), and its members convened in AFSOC headquarters at Hurlburt Field, Florida, from 6 November through 6 December 2005. Comprised of 15 subject-matter experts working under the direction of General McCutchan, the CAWG was to conduct a "strategy-to-task evaluation" of the Iraqis' COIN-related, air operations capability gaps and identify the aircraft (by type and quantity) best suited to fill those gaps.¹⁴ Using a time horizon of five years, the CAWG undertook four tasks:

- to validate (and expand, if necessary) the existing IqAF mission requirements,

- to establish key performance parameters for aerial platforms conducting COIN air operations in Iraq,
- to establish cost and availability of the aerial platforms best suited for COIN air operations in Iraq, and
- to recommend procurement options that would meet the IqAF's needs.¹⁵

While conducting its mission, task, and platform analyses, the working group also reviewed open-source, market research materials. This parallel effort was used to develop three requests for information—regarding COIN/ISR, rotary winged, and light, fixed-wing transports—to be published on the US government's Federal Business Operations website in mid-November.¹⁶ The resulting vendor inputs were combined with additional market research and interviews to develop a comparative model for evaluating the vendors' submissions, including an analysis of overall capability versus estimated costs for each solution.

Overall, the working group concluded that an Iraqi air force optimized for COIN air operations would consist of 164 turbine-powered aircraft, with the highest priority given to acquiring 50 light transports commonly configured so that they could be adapted for ISR, command and control, VIP transport, or utility airlift missions. The proposal also included eight dedicated ISR aircraft, 45 battlefield mobility helicopters, 24 light-attack aircraft, and three additional C-130 Hercules transports. Depending upon the specific aircraft and equipment choices involved, the total cost projections ranged from \$466 million to \$2.58 billion.¹⁷

General McCutchan presented the working group's report to USCENTAF in mid-December. After describing the analysis process and cost-benefit comparisons for each of the platform categories, he moved on to the aircraft procurement strategy. That involved the issuance of requests for proposals, followed by source selection—a painstaking process, but necessary to buy the best platforms at the best price. General McCutchan posed two options for funding: an expenditure-intensive two-year plan and a more leanly resourced five-year plan—with the latter keeping its near-term focus on the ISR, command and control, VIP and utility transport, and battlefield mobility missions. General McCutchan concluded that regardless of

the choice, it was critical that training and doctrinal development stay apace with the increase in aircraft strength.¹⁸

The ASTs Are Replaced with MiTTs

As important as it might be for the IqAF to acquire more capable aircraft, that investment would be wasted unless its airmen were properly trained. This put a spotlight on the ASTs. The capability assessment acknowledged that the ASTs had deployed without adequate training for their specialized work and had been left thereafter to struggle without adequate support. It was undeniable that both factors had played a role in the ASTs' mixed results. What was needed were MiTT members who would be trained appropriately (including cultural instruction and weapons proficiency), committed to serving a tour of sufficient length (preferably 365 days), and deployed as a unit.¹⁹

The situation demanded high-level intervention. When General Buchanan established CAFTT, he also took functional control of the manning process used to populate its subordinate instructor positions.²⁰ But improving the quality and capabilities of the USAF personnel tapped to become advisors would take time, and there was training to be accomplished. When the capability assessment teams visited Iraq in September, the five ASTs had a combined total of 68 people (along with an additional 30 maintenance augmentees assigned to Ali AB to support Squadron 23's C-130s). The assessors recommended that the teams' overall authorized strength be increased to a total of 91 advisors (all serving on 365-day tours), along with an additional 20 C-130 maintenance augmentees.²¹ That increase was not likely to occur until at least late summer 2006. If the training effort was to become more effective in the near term, it would need a prompt infusion of manpower, preferably with experienced Airmen already in theater and willing to serve the extra time involved. Various sources were tapped for a temporary "fix," including the flying and maintenance units of the 332nd Air Expeditionary Wing, then headquartered at Balad AB.

The Board of Directors Considers the Way Ahead

On 5 January 2006 General Buchanan presented the senior USAF leaders responsible for reconstituting Iraq's air force—the board of

directors—with the results of USCENTAF's efforts over the previous four months. The capability assessment, the creation of CAFTT, and the results of the Comparative Aircraft Study had all produced information not available to the CONOPS writers. The study needed significant revision before it could be presented to General Barzanjy and his superiors. The rotary-wing programs were badly broken, but there were corrections in progress: the Huey II conversions and JetRanger sustainment cases had both been funded, and Iraq had negotiated the purchase of 10 new Russian-built Mil Mi-17 helicopters through Bumar. That said, General Buchanan's two principal concerns were Iraq's continued lack of truly capable ISR aircraft and the situation facing the USAF advisors embedded with IqAF units.²²

The ISR Equipment Problem

USCENTAF would stand by the ISR airplanes that the Iraqis already had—but with reservations, and preferably only as long as it took to buy something better. For the time being, the two Seekers would continue to fly. The CH2000s remained on the ground, but the manufacturer was correcting their faults, and they were expected to resume flying within a few months.²³

The Comp Airs continued to present nothing but hard choices. In early December, General Buchanan had asked AFMC for disposition recommendations. At the direction of AFMC commander Gen Bruce Carlson, an AFMC Integrated Product Team (IPT) evaluated four possible COAs. Each called for the modification, repair, and flight testing of the six remaining aircraft but with different schedules and cost estimates:

- COA 1 moved one aircraft to Edwards AFB, California. The parts fabricated for its modifications would be used as patterns to build repair kits, which AFMC technicians could then install on the other five aircraft still at Kirkuk AB. This alternative was estimated to require 143 days and would cost \$1.41 million.
- COA 2 moved all six aircraft to Edwards AFB, where they would be rebuilt and then returned to Iraq. This option would require 134 days and \$1.87 million.

- COA 3 moved three Comp Airs to Edwards AFB for reconstruction; the remainder would be rebuilt in Iraq. This COA required 123 days and had a price tag of \$1.99 million.
- COA 4 called for the technicians to make the necessary corrections to all six aircraft at Kirkuk AB. This option would take 157 days at a cost \$1.98 million.²⁴

While the reconstruction and flight-test costs were relatively modest for all four options, the IPT acknowledged that moving any or all of the Comp Airs to and from Iraq—along with the requisite technician teams, equipment, and repair parts—would be “very expensive.” In fact, the IPT determined that each load carried by a C-17 jet transport—the customary mode for such movements—would cost \$314,000. This meant that if USCENTAF were to select COA 3, for example, the airlift bill alone could constitute as much as two-thirds of that option’s budget.²⁵

Although not yet formally notified of AFMC’s final position at the time of the briefing, USCENTAF advised the board of directors that the “most likely COA” would be to transport three of the six Comp Airs to the United States for testing and repairs. That said, General Buchanan was quick to acknowledge that “airlift is a critical factor.”²⁶

The MiTT Training Options

In regard to the MiTTs, General Buchanan told the board of directors that his “top concern [was] training our own transition teams so that they have all the tools they need to achieve the mission.”²⁷ CAFTT had wheedled some temporary assistance for its hard-pressed instructors, but the situation called for a long-term solution, which meant devising a durable training plan. USCENTAF presented the board of directors with three options:

- Leverage existing organizations to supply the MiTTs’ needs. For example, AETC might provide additional MiTT-oriented instruction by enlarging its course catalog, or AFSOC could expand the training schedule currently offered by its 6th SOS and Air Force Special Operations School (AFSOS).
- Review the plans for existing organizational change proposals to see if they could be shaped along similar lines, for example, by

realigning security assistance under the Special Warfare Center concept or encouraging AFSOC to increase its combat aviation advisory capability.

- Establish an entirely new organization, for example, the proposed Coalition Air Training Center (CATC) that was being offered in some quarters as the best means of ensuring effective MiTT development and deployment on a permanent, worldwide basis. If authorized, CATC would become the USAF's "one-stop shop" for training MiTT members, harvesting the deployers' lessons learned, coordinating with security assistance organizations, and offering specialized instruction to coalition and host nation partners.²⁸

The Situation in the First Half of 2006

While the board of directors was pondering the Air Force's options as presented by USCENTAF in early January, the IqAF reexamined its own present and future needs. At that point, it had nearly 500 airmen. In a mid-February report to the Congress, the DOD noted that the coalition had trained "nearly seventy personnel, including twenty-five pilots, forty-one aircraft maintenance engineers, and three administrators."²⁹ The latest IqAF service plan, released in draft form on 14 January 2006, continued to identify pilot recruitment as the "most critical priority." That need was driven in turn by the air force's accompanying operational priority—to develop its existing forces so that it could make "an independent and viable contribution" to the nation's defense.³⁰

The service plan openly acknowledged some significant failings. There was still no doctrinal development underway, for example. Nor could the air force conduct basic military training for newly recruited airmen. The supply chain was admittedly "slow, lacks resources and is unable to forecast future requirements," although the Iraqis saw that challenge to be "understandable and not insurmountable. The structure exists and the chain is not broken, it is just slow to achieve its aims." That it succeeded was largely due to the level of support being provided by coalition-funded FMS sustainment contracts.³¹

The service plan predicted that some elements of the logistics situation should begin to show real—if not necessarily immediate—

improvement in the following months; that improvement did indeed occur. At Taji, helicopter pilots, flying the five Bell JetRangers of Squadron 12, were produced, albeit at a modest pace.³² As agreed in the previous quarter, AMC C-17 transports airlifted 16 UH-1H helicopters to the United States for reconstruction as improved Huey IIs; those airframes arrived in two shipments flown on 29 January and 1 February 2006. The movement involved nonstandard loads of six machines per flight (as opposed to a customary load of four), and that procedure required consent from both AMC's operations directorate and AFMC's Air Transportability Test Load Agency. Their approval avoided a third flight, resulting in a net savings of \$400,000. However, even with this expedited delivery, the reconstruction process would still require eight to nine months per airframe. Assuming no unexpected delays, those helicopters could not be returned to Taji and made mission ready again until early 2007.³³

In the meantime, the Iraqis began to look elsewhere. On 17 February they took delivery of eight new Russian-built Mil Mi-17 battlefield mobility helicopters from Bumar; two more were to follow several months later. After the aircraft received some modifications at NAMAB, all 10 would be assigned to Taji. Better yet, the contract included 12 months' maintenance and instruction by Polish and Russian technicians. Although the helicopters and their aircrews would not be fully mission capable for almost a year, this marked a major milestone for the IqAF because the Mi-17 was its first air weapon system to be successfully procured and funded without direct coalition involvement. A variety of factors favored that choice; they were best summarized by saying that the Mi-17 was "simple, capable, and had been flown by Iraq in the past."³⁴

The airmen of Squadron 23 were also gaining steadily in experience with their three C-130s. On 20 January they completed their first mission in which they transported supplies other than their own. The squadron handled every respect of the transit from Baghdad to Basrah. The mission, called a "validation flight," included flight planning, filing flight clearances, loading cargo, and flying the aircraft.³⁵ In early February the squadron ferried the interior minister and his staff to an Arab League-sponsored conference in Tunisia, marking the first time since the war's end that an all-Iraqi air force crew planned and flew an operational mission to a destination outside of Iraq.³⁶ Several weeks later, a Squadron 23 crew transported five Iraqi children to Turkey for eye surgery—the air force's first cross-border

humanitarian mission.³⁷ On 7 March the squadron joined in the celebrations marking the official opening of NAMAB. Although much of the base's infrastructure was still under construction—a project budgeted at \$40 million—there had been sufficient progress for the squadron to complete its move from Ali Base early in the new year.³⁸

Evaluating the ISR Platform Problem

Notwithstanding the IqAF's modest progress in other spheres, the disappointing performance of its ISR aircraft still restricted its ability to patrol Iraq's borders and oil production infrastructure, thus visibly supporting Iraqi army and coalition units on the ground.

In early January General Buchanan had told the board of directors that he expected AFMC would recommend shipping three Comp Air aircraft back to the United States for evaluation and reconstruction, followed by upgrades in Iraq for the remaining airplanes. In his 11 January reply, General Carlson recommended that only one Comp Air should make the journey and that the others could be modified in theater thereafter. He, too, was mindful of the significant airlift expense. The AFMC commander also took pains to address the equally important need to sustain the rebuilt aircraft *after* they had been returned to service:

The courses of action we outline assume a commitment for CENTAF-fenced funding and a follow-on sustainment support package through a formal Foreign Military Sales (FMS) case. Even with our best efforts to modify and repair the aircraft without an FMS sustainment package, we estimate the aircraft will be unsafe to fly again within two to six months.³⁹

On 27 January 2006 AFMC headquarters advised AFFTC that USCENTAF was making arrangements to airlift one of Squadron 3's Comp Airs to Edwards AFB for reconstruction and flight test.⁴⁰ Two days later, the seriousness of the ISR situation was further underscored by the loss of a second Comp Air (IqAF Ser. YI-123) at Kirkuk AB. The Iraqi pilot and his two passengers suffered only minor injuries during the mishap—apparently caused by a loss of control at low level—but the aircraft was damaged beyond economical repair. Under the circumstances, there was no choice but to ground the remaining Comp Airs pending the results of the evaluation in California.⁴¹

Even as steps were being taken to identify, prepare, and move a representative Comp Air to the United States, General Buchanan

wrote to General Carlson to express his gratitude for the support that AFMC had provided thus far:

Please accept my sincere thanks for the outstanding support we received regarding our ongoing efforts to revitalize the Iraqi Air Force. Your test team . . . made history with their first-ever test and evaluation flights of aircraft within an active combat zone. We owe you and them a round of applause for the critical role they played in providing us the data necessary to move forward.⁴²

In early February AMC airlifted the exemplar aircraft (IqAF Ser. YI-121) to California, where it was immediately handed over to a 20-member team of AFMC master craftsmen led by Lt Col Michael Pelletier, deputy commander of AFFTC's 412th Maintenance Group. The first order of business was to completely dismantle the Comp Air and carefully examine its components. The UAE-installed modifications were set aside, and the aircraft was rebuilt to its original kit design specifications using replacement parts or new component assemblies where needed. That effort included fabricating a new pair of wings, replacing the engine and propeller, and installing a prototype air conditioning system.⁴³

One of the biggest challenges facing the technicians was the lack of construction and modification documentation. "What we're doing is figuring out what procedures need to be in place," said TSgt Rick Fujimoto, a team participant, "[and then] involving engineers who look at the proposed procedures and approve them." Since the Comp Air was designed to be built by hobbyist builders, it incorporated construction materials not ordinarily encountered by USAF technicians, testing their ingenuity. "The best person for this job would probably be a surfboard builder," Sergeant Fujimoto explained. "But I've got four sheet metal guys who, with a four-day crash course [in fiberglass repair] and the ability to draw upon their varied experience . . . came together, and there's nothing they can't do."⁴⁴

The Comp Air Flight Test

The exemplar aircraft made its first postreconstruction flight on 25 April, and it immediately entered an accelerated test program. Budgeted at just over \$207,000 (including an uncertainty factor of 30 percent), the syllabus test plan called for roughly 40 hours of airborne evaluation staged over the course of a month.⁴⁵

Between 25 April and 26 May the Comp Air made 23 flights, accumulating over 45 hours of test activity. The goals of the test were to determine the aircraft's forward and aft center-of-gravity flying qualities—

including stalls, trim characteristics, engine torque and power effects, and static and dynamic stability—and to quantify its recommended performance parameters, including best climb speed and best glide speed.

The airplane, as modified by the AFMC technical team, had satisfactory flying qualities “to perform the day, visual [flight conditions], oil pipeline patrol and utility transport mission.”⁴⁶ The potential for abrupt, high (60–90 degree) bank angle excursions in power-on stall conditions remained essentially unchanged, but the AFMC-added stall warning system helped reduce that risk to a tolerable level. Directional stability was low but acceptable. The Comp Air’s throttle responses were still marginal, and the team noted that this was likely to complicate landings at night or under instrument flight conditions—something the examiners continued to recommend against until additional flight tests could be made to evaluate the aircraft in such conditions.

The test report also added an important caveat. Because all of the Iraqi Comp Airs had been hand-built, “potential differences between the aircraft may result in varying flying qualities.” Moreover, the test team noted that “no systems engineering review, or air worthiness certification has been accomplished” for those aircraft, nor had their suitability—something quite different from airworthiness—been evaluated with regard to “the intended pipeline surveillance and light utility mission.” If the Iraqis expected to continue using the Comp Air fleet in the long term—to mean anything more than two years—then those studies needed to be done.⁴⁷

The Repair Team Deploys

On 9 June 2006 AFMC deployed a 16-member technical team to Kirkuk AB; their charge was to use the results of the Edwards AFB test program to reconstruct the other four Comp Air airplanes still in service with Squadron 3. When the team arrived, the Iraqi squadron was undergoing a rigorous schedule of academics. “There [had been] no hierarchy. . . . We were able to set up the squadron to mirror the structure of a squadron in the USAF, and to assign section and duty chiefs who are given authority to make decisions,” said Capt Anthony Brim, a CAFTT advisor recently assigned to the squadron.⁴⁸

The team’s highly skilled technicians completely disassembled all four aircraft and rebuilt them using the insights gained (and parts fabricated) while working with the exemplar airplane at Edwards AFB. The lack of commonality among the aircraft proved to be their

greatest challenge. Although the Comp Airs had been assembled from manufacturer-provided kit materials, the team quickly appreciated that no two airframes were exactly alike.⁴⁹ “If we found something on one aircraft, we wouldn’t find it on any of the others . . . [or] you’d have the same parts, but they would be in different places on each aircraft,” said team commander Colonel Pelletier. Nonetheless, the team members completed their work in remarkable time. The reconstruction schedule had projected a temporary duty requirement of about 130 days, and they finished the job in only 41.⁵⁰

What made their accomplishment even more praiseworthy was that insurgent attacks frequently interrupted the team’s efforts. Nor did their tight work schedule allow them much rest. In early July one member summarized a night’s events:

We went to Alarm Yellow last night (Thursday) around 2100, then Alarm Red at 2300. After coming out of Red and going into Alarm Black for a while, we went back to Alarm Yellow at 0030, just as we were getting ready to go to work . . . (We usually work 0100–1000 to stay out of the heat of the day). . . All base personnel were directed to remain in quarters until 0600 Friday morning. . . . We essentially lost a night’s work. . . . Yesterday during his flight [a team test pilot] said he saw a gun battle going on beneath him.⁵¹

Spooling up the MiTTs

In early January 2006 General Buchanan asked the board of directors for assistance in putting the IqAF training mission on a surer footing. He believed that one of CAFTT’s highest priorities should be the earliest possible deployment of qualified advisor/instructors. Soon, USCENTAF staffers began coordinating with AFSOC and the USAF Special Operations School (USAFSOS) to develop a “surge” training curriculum for MiTT members scheduled to deploy to CAFTT-controlled advisor assignments later that summer.

Designed to parallel the US Army’s 45-day MiTT training in many respects (and thereby satisfying USCENTCOM’s predeployment training requirements), the Aviation MiTT academic course was to be conducted by USAFSOS faculty at Hurlburt Field, Florida. The course combined elements from the Middle Eastern Orientation course, the Contemporary Insurgents Warfare course, and the Dynamics of International Terrorism course. The Defense Language Institute also provided Arabic language instructors. The resulting

syllabus consisted of 30 days' instruction, emphasizing three major areas of study:

- Mission training, including MNSTC-I/CAFTT command and control, Iraqi air force organization, coalition air/ground and combat aviation advisory operations, COIN theory, the security assistance process, and MiTT lessons learned;
- Cultural training, including Arabic language and Iraqi culture familiarization, with the latter offering the Iraqis' view of Iraq, the United States, and its coalition partners;
- Combat skills, including DOD force protection (Level I), AK-47 weapon familiarization, level-C hostage survival skills, forward operating base operations and convoy procedures, and “shoot and move” skills.⁵²

Since the course was developed outside USAFSOS' normal scheduling process, there could only be one offering for the 83 students programmed to attend. Other means would have to be found to present the material—or a refinement of it—to future MiTT members. Opening ceremonies for the class were set for 19 July, and the course would end with a “Hell Week” survival, evasion, resistance, and escape exercise. The graduation ceremony was set for 19 August.⁵³

General Hoog Delivers a Situation Report

By mid-2006 an effective Iraqi air force was becoming more plausible. That said, no one expected that Iraqi airmen would supplant coalition Airmen any time soon, even if coalition ground forces began to withdraw in the near term. In a press interview given in late June 2006, the CAFTT commander summarized the new air force's circumstances and prospects. “The overall goal right now in 2006 and 2007 is to transition capability,” General Hoog said.⁵⁴ At that point, the IqAF had 749 people assigned, of which 155 were pilots. The rest were working as aircraft maintainers, air traffic controllers, logistics staffers, and air base security troops.

CAFTT had also grown from just four Airmen to nearly 100. Headquartered adjacent to the Iraqi Ministry of Defense's facilities at Phoenix Base in Baghdad's International Zone, it supported MiTTs at IqAF headquarters and the four IqAF bases sited at Kirkuk, Basrah,

Taji, and NAMAB.⁵⁵ By all expectations, CAFTT would be in Iraq for some time, perhaps even after coalition ground forces began to withdraw. As General Hoog observed, “I don’t see the air presence leading the reduction. I see it lagging the reduction of the ground forces, a certain amount of time, months, years or so, so that it all consolidates in a well thought-out, carefully orchestrated manner.”⁵⁶

Progress in the Second Half of 2006

The fatal mishap that took place near Kirkuk on 30 May 2005 galvanized the USAF into action. However, even though a fierce impetus for improvement had been brought to bear, it took the greater part of another year for the USAF to generate potential courses of action, identify the most promising alternatives, abandon dead ends, and find the wherewithal to pursue the most urgently needed corrections. It was only in the second half of 2006 that the first real results began to appear, especially in the procurement of more suitable aircraft and in the improved training provided to the MiTTs deploying to Iraq.

For its part, the IqAF also achieved some important advances, most notably by becoming an acknowledged operational arm of the IqMoD in early September. Now, the IqAF no longer simply took orders from the coalition, as had been the case since January 2004.

Procuring a Suitable ISR Platform

By the end of June 2006, the AFMC repair team had finished rebuilding two of the four Comp Airs in Iraq. In spite of their “herculean efforts” to make the aircraft more airworthy, incidents continued to occur, including an instance in which a Comp Air fell into an upright spin during power-on stall testing.⁵⁷ Although the pilot was able to regain control and return to base, “subsequent investigations, citing manufacturing concerns, drove the Edwards test team to declare the Comp Air platform unsuitable for flight.” On 10 August General Barzanji and General Hoog jointly agreed to permanently ground Squadron 3’s Comp Air fleet. The five aircraft were dismantled, and all but \$166,911 of the \$1.95 million that had been set aside to modify and sustain them for two years was returned to the Iraqis.⁵⁸

It was unfortunate that so much time and effort had been spent in trying to return the remaining five Comp Airs to service. When all

was said and done, however, the aircraft remained inadequate in both numbers and performance, and there was no way to make them any more suitable than when the Iraqis had first accepted them in late 2004. Countering the mounting insurgency demanded an ISR platform with better performance and endurance, more load-carrying capacity, greater reliability, and vastly improved sustainability.

The Advanced ISR Platform Program

The grounding of the Comp Airs left the Iraqis with only the Squadron 70's two Seekers and six CH2000s for the ISR mission. Fortunately, the CH2000 contractor had corrected many of that airplane's faults, and the last two CH2000s (of a total buy of eight) were scheduled for delivery in September. In the meantime, IqAF headquarters instructed Squadron 70 to transfer four of its aircraft from Basrah to Squadron 3 so that surveillance operations could continue at Kirkuk.⁵⁹

That mid-summer realignment was only a stop-gap measure, as neither aircraft type could make much more than a nominal contribution to the Iraqis' needs. Fortunately, corrective action was already underway. In May and June various aerospace contractors, including US-based Raytheon and UK-based Britten-Norman Aviation, presented proposals intended to meet the Iraqi's ISR requirement. Raytheon offered a specialized version of its twin-engine Beechcraft King Air 350ER (extended range), a very successful executive and light transport aircraft.⁶⁰

In August a team of Air Force Security Assistance Center (AFSAC) acquisition experts and the Iraqi and CAFTT staffs evaluated the offerings, and the Raytheon entry won. Funded entirely by the Iraqis and code-named Peace Dragon by AFMC, the six-airplane, \$143 million sole-source award used an FMS case vehicle called an undefinitized contract to expedite processing.⁶¹ The delivery schedule called for the first aircraft (a light transport/training aircraft) to arrive in Iraq in November 2007 and the five ISR platforms to follow between December 2007 and February 2008. The contract included pilot and mission systems operator training, maintenance training (for the aircraft and its ISR systems), up to nine ground stations to receive ISR data, on-board defensive systems, and 12 months' maintenance and spares.⁶²

On 27 September, as required by the Arms Control Export Act, the Defense Security Cooperation Agency (DSCA) formally notified Congress of a possible sale of military equipment to the government

of Iraq (GOI). The posting announced that the Iraqis might ask to buy up to 24 ISR-capable King Air 350ERs and as many as 24 more King Air 350ERs (or, alternatively, Polish-built PZL M-18 Skytrucks) to be used as light transports, along with an equal number of counter-measure equipment sets and global positioning system navigation devices. Although the GOI had no immediate intent (or funds) to buy that much equipment, the total potential value of the sale was set at \$900 million.⁶³

Following congressional approval, the FMS letter of offer and acceptance (LO&A) was prepared for delivery and signed by an official in the Air Force Secretariat's International Affairs Directorate (SAF/IA) on 30 November 2006. The letter was then countersigned by a member of the Iraqi embassy staff—meaning that Baghdad had accepted the agreement's terms and deposited full payment in a US government account—on 29 December 2006.⁶⁴

The Interim ISR Platform Program

Although the purchase of the King Airs promised a significantly improved ISR capability, it would be nearly a year and a half before those aircraft could be on the ramp and mission ready. The Iraqis needed something sooner, even if that meant buying an additional number of aircraft that were smaller, more modestly equipped, and had less endurance than the King Air 350ER.

In August 2006 General Barzanji asked for CAFTT's assistance in obtaining an interim ISR platform. He wanted something like the Cessna C208 Caravan, a US-built, single turboprop-engine aircraft widely used as a light transport.⁶⁵ Could General Hoog do anything to expedite the purchase of a small number of C208s for the ISR unit at Kirkuk? General Hoog answered with a personal promise to see those aircraft delivered before he left Iraq in mid-2007.⁶⁶ Under ordinary circumstances, it would have been virtually impossible for him to make good on such a guarantee, but in this instance he had an ace up his sleeve. General Hoog knew someone at "Big Safari."

This AFMC-controlled organization—officially designated as the 645th Aeronautical Systems Group but more commonly known by its long-time project name, "Big Safari"—was the USAF's equivalent of the famed Lockheed Skunk Works, a secretive corporate facility that specialized in designing and building small numbers of exotic, high-performance military aircraft and other highly classified "black

world” systems.⁶⁷ The Skunk Works’ unofficial motto was “be quick, be quiet, be on time,” and Big Safari had mirrored that approach in its own work since its inception in 1952.⁶⁸ Big Safari’s long record of success in working closely with defense contractors to modify USAF aircraft and other systems for special, urgent projects meant that it had also developed considerable expertise in crafting unusual requirement contracts that employed specialized, highly streamlined acquisition procedures. Those capabilities made it possible for Big Safari’s contracting officers to obtain goods and services within time schedules that were simply unimaginable in the larger, more bureaucratic world of government procurement. It was that capability that General Hoog called upon to make good on his promise to General Barzanjy.⁶⁹

The 645th Aeronautical Systems Group received General Hoog’s request on 31 August and certain sorts of classified contractual magic occurred immediately thereafter. AFSAC’s 555th International Group completed its portion of the LO&A on 27 November. The \$26 million award included the purchase of three Cessna C208 aircraft (at a cost of \$2.165 million each), their conversion to ISR platforms (at a cost of \$4.85 million each), four ground stations to process the resulting ISR data via downlink, the installation of aircraft defensive systems, and a year’s maintenance and spares.⁷⁰ This process was called a *pseudo case*, meaning that DOD funds were being used to pay for the purchase due to its “urgent and compelling need.”⁷¹

The contract was awarded to Alliant Technology Systems on 1 December, and like the King Air agreement, it was left undefinitized in order to accelerate the work. The first Caravan arrived at the contractor’s facility in Fort Worth, Texas, on 8 December, and modifications began immediately. The other two aircraft followed in short order. Thanks to the expertise of Big Safari’s contracting officers and the skills of Alliant’s engineers and technicians, the departing CAFTT commander was able to keep his word. The first C208 arrived in Iraq on 30 March 2007—just seven months after General Hoog’s request.⁷²

Rotary-Wing Program Status

The situation at Taji continued to be something of a curate’s egg: it was good but only in parts. The sustainment funding for Squadron 12’s five JetRangers ran out at the end of fiscal year (FY) 2006. That was especially disappointing because about \$325,000 of the \$2.6 mil-

lion provided by the US Army's Security Assistance Command was wasted when a shipment of parts was mistakenly delivered to a salvage yard. Another \$675,000 went unspent because the contractor could not get all the required parts on order—and thus obligate the money—before the fiscal year closed out on 30 September. A new FY 2007 FMS agreement allowed the squadron to resume pilot training in October, and five Iraqi airmen soloed over the next six months.⁷³

The 16 UH-1Hs were being rebuilt to Huey II standards in Alabama, and delivery of the first five was expected early in the new year. In the meantime, five MiTT pilots were receiving initial and functional check flight qualification training; they would serve as the initial advisor cadre for Squadron 2 when it received its rebuilt aircraft.⁷⁴

The 10 Mi-17 helicopters, delivered in February and March by the Polish arms conglomerate Bumar, took a year being prepared for operational use, including the installation of defensive systems. Only at the very end of the year were any of them turned over to Squadron 4.⁷⁵ Nine were to be used for battlefield mobility and medical evacuation, and the tenth was outfitted as a VIP transport. To help support Squadron 4, USCENTAF agreed to fund Mi-17 familiarization training in the Ukraine for four MiTT pilots, along with three flight engineers and three crew chiefs. They left in September and returned to Iraq in December, even as the first Mi-17s were about to enter squadron service at Taji.⁷⁶

In the meantime, the Iraqis were preparing to expand their helicopter fleet in a significant way. On 19 September the DSCA notified Congress of Iraq's desire to make an arms purchase amounting to as much as \$500 million if all the options were exercised. Those options included 20 additional Mi-17 troop transport helicopters, along with logistics services for the rotary-winged aircraft already in Iraqi possession.⁷⁷ The Iraqis bought an additional 18 Mi-17s; two of the new helicopters would be added to Squadron 4's VIP branch. The rest would join the 10 already programmed for battlefield mobility and medical services. Deliveries were expected to begin in the second half of 2007.⁷⁸

Iraq Assumes Operational Control of Its Air Force

Of course, all developments came within the evolution of the IqAF as an independent service making an increasingly effective contribu-

tion to Iraqi sovereignty and security. By general agreement, in 2006 the air force was at least a year or more behind the army in terms of organizational development and operational readiness, but that was probably appropriate, given the overwhelming need for “boots on the ground” in the numbers required to conduct an effective counter-insurgency campaign.⁷⁹

The Iraqi army’s ability to impose control over an increasing number of provinces encouraged the coalition to begin turning responsibility for the military situation over to the GOI. The first handoff, at a 7 September ceremony in Baghdad, included control of the Iraqi army’s Eighth Division, along with the Iraqi navy and air force. Further turnovers were anticipated, as six of 10 Iraqi army divisions were reported to be “in the lead in [their] areas of operation.” Prime Minister Nouri al-Maliki was effusive, noting that it was “a great and happy day in the history of the Iraqis.” The MNF–I commander, Gen George F. Casey, US Army, was more circumspect. “Today is an important milestone,” he said in remarks delivered during the official ceremony, “but we still have a way to go.”⁸⁰

Within its own sphere, the IqAF was also gaining a greater degree of self-governance. In September its maintainers at NAMAB took charge of all first-line maintenance for Squadron 23’s C-130s, assuming the authority to determine if the aircraft were safe, reliable, and mission ready. “They’ve gone from a point where everyone was working only in a classroom environment . . . to taking overall responsibility for the launch, recovery and servicing of the aircraft—they do all of the daily executions,” a CAFTT maintenance team chief proudly observed.⁸¹

Squadron 3 aircrews began performing ISR missions over Baghdad during the Islamic holy month of Ramadan, which began on 25 September and ended in late October. This meant deploying elements of the squadron from Kirkuk to NAMAB. The move required Squadron 3 to coordinate its support requirements with host base maintainers, the first time an Iraqi squadron had performed this fundamental maneuver. The ISR flights made during the deployment also marked the first time the IqAF provided direct support to ground forces operating in Baghdad itself.⁸²

Establishing an Iraqi-Controllable Airspace

The IqAF now operated under the direct control of Iraqi joint military headquarters, but this did not mean that Iraq's airspace necessarily came under its own surveillance. Put simply, the Iraqis still had no direct means of knowing what was flying over their own territory. The Iraqi civil aviation authority (ICAA) had the authority over commercial air travel clearance procedures, but coalition air traffic controllers still directed aircraft operating in Iraqi skies.⁸³ In the northern third of Iraq, for example, that function was ably performed by the 506th Expeditionary Operations Support Squadron's combined en route radar approach (CERAP) air traffic control facility, sited at Kirkuk AB and call-signed "King Pin."⁸⁴

In his 5 July 2006 status update, General Hoog noted that MNSTC-I had been ordered to develop an airspace transition plan for Iraq. This plan would need to contain "dual use" features so that "we don't give away [the] authority CFACC needs to conduct [the] strategic overwatch mission."⁸⁵ At that point, the expectation was that the IqAF would pursue an FMS request for US-made, export-permissible air traffic control radars and that CAFTT would seek to "team with Balad [AB] and CERAP for [a] fused IqAF and ICAA radar picture."⁸⁶ CAFTT was willing to consider a transfer of the Kirkuk-based CERAP to the Iraqis once the equipment issue had been resolved.

In late August, Iraqi officials asked to purchase a national airspace system (NAS) and the air traffic management equipment needed to support it via FMS. Unfortunately, the net price came to \$54 million—a sum the Iraqis were not prepared to pay. Moreover, some of the requested equipment was technically subject to US Arms Export Control Act restrictions. After considerable negotiation, the Iraqi government reached an agreement that deleted the restricted items from its "shopping list." The addition of some communications installations at Taji somewhat offset that cost saving, resulting in an aggregate price of just over \$28 million. AFSAC produced a LO&A for the purchase on 20 November 2006, and an Iraqi representative countersigned it on 24 December.⁸⁷

CAFTT anticipated that some of the export-restricted items (for example, long-range radars and command-and-control systems) could be obtained later by pseudo case transfers. That would take time and additional funding.⁸⁸ When all was said and done, the NAS's

essential equipment deliveries were not expected to arrive at Kirkuk until sometime in early 2008.⁸⁹

The “Board of Directors” Gets an Update

On 2 October 2006 USCENTAF commander Lt Gen Gary L. North presented a status report to the board of directors. This briefing provided an update on the progress made since the report delivered in early January by General North’s predecessor, General Buchanan.⁹⁰

General North summarized the existing situation—the IqAF had 748 officers and enlisted men on active duty.⁹¹ CAFTT had 122 personnel in theater, of which 103 were apportioned among the four Iraqi air bases. Of the remainder, 10 were assigned to IqAF headquarters as command advisors, and nine comprised the CAFTT staff. As to the Iraqis’ equipment, the Comp Airs were gone but the 10 remaining ISR aircraft were performing reasonably well, given their limited capabilities. There were 15 helicopters assigned; 10 were still being readied for operational work, and the other five were training aircraft. In summary, the procurement process was maturing, and more aircraft were on the way.

The 30-day MiTT course had been very successful, but it needed to be “normalized” into a permanent offering. In the meantime, the course’s 105 graduates were already deployed, and some were getting additional specialized training for the Iraqi aircraft they would fly. The briefing slides spoke of “building an Objective Force capable of conducting air operations across the entire spectrum of the COIN fight,” but General North was more succinct: “Get them off top dead center and into the fight.”⁹²

In the meantime, something had to be done about recruitment and training, especially as to pilots. The existing requirement already exceeded the available inventory, and if the Iraqi air force was to expand as projected, it would have to train between 450 and 650 pilots over the next five years. The Iraqis had no flight school, although planning and preparations were already in progress for a flying training center at Taji.⁹³ The military academies’ curricula could adjust to provide for new officers, but the IqAF needed to establish better ways of recruiting and then training enlisted airmen.

For CAFTT to help the Iraqis meet these goals, it needed more manpower, longer deployment tours, or some mixture of both.

Experience had repeatedly shown that the constant turnover associated with four-month tours was hamstringing advisor performance, especially in the CMATT-A/CAFTT headquarters, where continuity was particularly important for program oversight and control. General North proposed that the Airmen-advisors assigned to CAFTT headquarters should deploy for a year, and that the advisors providing direct support to Iraqi units should serve up to six months in theater.⁹⁴

Naturally, all of this would cost a lot of money, and it was vital to establish secure funding lines for the next five years. At MNSTC-I's direction, CAFTT had developed two budget options.⁹⁵ The more expensive option, set at \$600 million, assumed that the IqAF would achieve all the capability goals set forth in its latest service plan by the end of 2012.⁹⁶ The lesser option, set at \$350 million, anticipated that the Iraqis would satisfy their ISR and battlefield mobility requirements in full, but pilot production would be lowered and efforts to develop an air defense capability would be deferred until after 2014. CAFTT expected that its share of MNSTC-I's FY 2007 supplemental budget request would come to \$430 million, of which \$115 million could be for used for sustainment, \$170 million for buying new aircraft (including \$120 million for COIN airplanes), and \$30 million for training and operations.⁹⁷

General North was optimistic about the coming year. The Flight Training Center was close to approval, and technical training was expected to start in April 2007. Iraqi personnel numbers were up, and the aircraft fleet was about to undergo both a substantial expansion and a qualitative improvement. In short, General North said that "calendar year 2007 [is] shaping up to be the year of the Air Force in Iraq."⁹⁸

As welcome as CAFTT's projections were, the ability of the IqAF to take its place as an effective service required more than simply acquiring additional people and planes. To be successful, it needed an organizational structure that could bring those elements to bear in full coordination with Iraq's other armed forces. The air force also needed a more efficient system of logistics and supply so that its COIN operations could be sustained and extended. Most of all, the Iraqi air force needed smoothly functioning accessions, indoctrination, training, and technical education programs to make effective officers, NCOs, and enlisted airmen out of the volunteers joining its ranks. In short, it needed a reliable, well-structured education and training establishment.

Notes

1. DOD, "Report to Congress: Measuring Stability and Security in Iraq," report, July 2005, 17, <https://www.defenselink.mil/news/Jul2005/d20050721secstab.pdf>; and DOD, "Measuring Stability and Security in Iraq," report, 17 February 2006, 36, http://www.defenselink.mil/home/features/Iraq_Reports/docs/2006-02-Report.pdf.

2. The Iraqi soldiers were assigned to the IqA's 2nd Division. "Iraqi Air Force Gives Army a Lift," *Advisor 2*, no. 36 (3 September 2005): 9.

3. Lt Col Herb Phillips, "IAF Supports Combat Operations," *Advisor 2*, no. 44 (15 October 2005): 7.

4. Phillips, "Exercise Begins Iraqi Air Force Squadron's Move," *Advisor 2*, no. 51 (17 December 2005): 4; and Phillips, "Iraqi Air Force Squadron Wraps up Second Exercise," *Advisor 2*, no. 49 (19 November 2005): 5.

5. TSgt Paul Dean, "Iraqi Air Force Squadron Flies First Solo Mission," *Advisor 2*, no. 51 (3 December 2005): 3; and Phillips, "Exercises Test Air Force Squadron's Independence," *Advisor 2*, no. 51 (17 December 2005): 6.

6. NAMAB was used as an operational staging area for the first time since the Iraq War's end on 16 June 2005, when Squadron 23 transshipped five chalks of cargo from Baghdad to Basrah for the Iraqi Ministry of Electricity as a part of "Operation Iraqi Power." This mission also marked the first time the squadron's aerial port specialists had prepared a cargo mission largely without assistance from their US advisors. TSgt Brian Davidson, "New Iraqi Airmen Stage First Operational Airlift Mission," *Advisor 2*, no. 29 (16 July 2005): 8.

7. Phillips, "Iraqi Air Force Squadron Wraps up," 5.

8. The sustainment case was Y9-B-AAO; a \$300,000 parallel case (Y9-B-AAQ) was opened at the same time for a site survey of both rotary-winged programs at Taji. Westgate, "Chronology."

9. Lt Col John Bukowinski, "Iraqi Air Force Squadron Resumes Helicopter Training," *Advisor 2*, no. 50 (10 December 2005): 7. See also SrA Mark Woodbury, "Helicopter Pilots Make Iraqi Air Force History," *Advisor 3*, no. 2 (14 January 2006): 6; and DOD, "Measuring Stability and Security," 45.

10. Jeff Schogol, "U.S. to Upgrade Helicopters for Iraqi Forces," *Stars and Stripes* (Mideast ed.), 3 December 2005; Bukowinski, "Donated Helicopters Headed for U.S. for Upgrades," *Advisor 2*, no. 50 (10 December 2005): 5; "US Helicopter Plays Role in Development of Iraqi Air Force," *Air Force News*, 24 July 2006; and Claudia Parsons, "Iraqi Air Force Shows Off Rebuilt Huey Helicopters," *Reuters*, 3 March 3, 2007, accessed 28 January 2010, <http://www.reuters.com/article/idUSPAR347933>.

11. Westgate, "Chronology."

12. Bukowinski, "Donated Helicopters Headed to U.S.," 5; "Update," *Flug Revue*, 6 May 2006, accessed 31 December 2009, <http://www.flug-revue.rotor.com/FRNews1/FRNews06/FR060507.htm#News7>; and "US Helicopter Plays Role in Development of Iraqi Air Force."

13. Padilla, briefing. [Info used is not FOUO.]

14. General McCutchan had led the accident investigation team tasked to examine the fatal crash of an IqAF Comp Air on 30 May 2005. Brig Gen Clay McCutchan, "CENTAF Comparative Aircraft Study, [version 4.0]," report, ca. 10 December 2005. (Info extracted is not FOUO.)

15. Headquarters USCENTAF, “Comparative Aircraft Study for Iraq Air Force Counter Insurgency Operations,” report (MacDill AFB, FL: HQ US Central Command, 10 December 2005), i. (Info extracted is not sensitive but unclassified [SBU]-NOFORN/FOUO.)

16. *Ibid.*, annex 2. The website is <http://www.fedbizops.gov>.

17. *Ibid.*, 38–40.

18. McCutchan, “CENTAF Comparative Aircraft Study” (Info extracted is not FOUO.)

19. The contemporary USAF practice of deploying unit leaders for up to a year while only deploying more junior Airmen for 90–120 days (as compared to the US Army’s imposition of one-year tours for everyone) had been a source of continued criticism for several years and would remain a cause for complaint in 2006. See, for example, Douglas E. Lee, “Stabilizing Critical Infrastructure Tour Lengths,” *CADRE Quick-Look 04-10* (Maxwell AFB, AL: College of Aerospace Doctrine, Research and Education, 2004); Lisa Burgess, “Air Force Seeks Volunteers for Iraq Duty,” *Stars and Stripes* (Pacific ed.), 10 March 2005; and Jim Garamone, “Pace Says Differing Tour Lengths Affect Deployment Morale,” *American Forces Press Service*, 5 October 2006.

20. Col Michael Byrne to Lt Col Jack R. Rickman and Kathi Jones, e-mail, subject: IqAF Assessment Outbrief to Lt Gen Buchanan, 1 November 2005. (Body appears to be extracted from an e-mail from Lt Col Wes Long, 609 COS/DOS, to “all concerned,” ca. late October 2005.) [9AF/HO files]

21. Headquarters USCENTAF, briefing, subject: IqAF Advisory Support Team Assessment, slide 22; and Byrne, briefing, subject: Stand-Up of the Iraqi Air Force. AST strength figures varied in 2005 but tended to show a significant deficit in the rate of filled (versus authorized) positions. In mid-summer, the five ASTs were reported to have an aggregate total of 117 officer and NCO billets, but they actually had only a total of 50 people in place. See Brig Gen David Eidsaune, briefing, subject: Iraqi Air Force Transition Team Concept of Operations, ca. June 2005.

22. Buchanan, briefing. (Info extracted is not FOUO.)

23. *Ibid.*, slides 7 and 17. (Info extracted is not FOUO.)

24. “AFMC Proposal and Recommendations to Modify, Repair and Flight Test Iraqi Air Force Comp Air SA-7 Aircraft,” report (Wright-Patterson AFB, OH: Headquarters AFMC, 19 December 2005).

25. *Ibid.*

26. Buchanan, briefing, slide 16. (Info extracted is not FOUO.)

27. *Ibid.*, slide 19. (Info extracted is not FOUO.)

28. *Ibid.*, slides 19–25. (Info extracted is not FOUO.) Among the unanswered questions regarding the CATC proposal was “to which USAF deity should CATC pray?” The problem was that under existing doctrine and practice, USCENTAF, AFSOC, AETC, and ACC all had colorable claims to owning at least a part of the CATC’s putative mission. For a more detailed description of the CATC proposal, see USCENTAF, briefing, subject: Coalition Air Training Center Concept, ca. January 2006.

29. DOD, “Measuring Stability and Security,” 45–46.

30. Headquarters IqAF, “Draft Service Plan,” plan (Baghdad: HQ IqAF, 14 January 2006), 1-1. [IqAF Service Plan folder, CAFTT files.]

31. *Ibid.*, A1-1 and A1-3. For example, the Ministry of Defense had entered into a \$108.9 million FMS sustainment contract for its three C-130s in April 2005 but failed to fund that agreement until late December. As a result, the contract was executed

in January 2006 but only for \$88 million, meaning that the coalition had been forced to carry the C-130s' expenses in the interim, including the return of one C-130 to the United States for repairs. Letter of Agreement, Case IQ-D-QAC, 11 April 2005; Ron Oswalt, AFSAT/DOM, to Ken Smith, AETC/IAO, e-mail, subject: Re: Iraq C-130 Urgent Issue, 28 February 2007; and Jeff Scohy, 555 IMATS/IARB, discussion with the author, 22 July 2009.

32. DOD, "Measuring Stability and Security," 45. See also Woodbury, "Helicopter Pilot is Role Model to Iraqi, Coalition Airmen," *Advisor* 3, no. 7 (25 February 2006): 7.

33. Bukowski, "Iraqi Hueys Bound for the United States for IqModifications." *Advisor* 3, no. 4 (4 February 2006): 8.

34. Capt Russ Cook, "Iraqi Air Force Gets Mi-17 'Hip' Helicopters," *Advisor* 3, no. 7 (25 February 2006): 6. See also Hallwood, memorandum. [CAFTT files] There were reportedly over 900 Iraqi pilots and technicians who had become familiar with the Mi-17 when it served in the IqAF during the Saddam era, and it was believed that reintroducing the type into the new IqAF would be an inducement to their rejoining the service. Allport, "After Saddam," 55.

35. JO2 John J. Pistone, "Iraqi Air Force Completes First 'Validation Flight,'" *Advisor* 3, no. 2 (28 January 2006): 9.

36. Woodbury, "Iraq Air Force Completes First All-Iraqi Aircrew Mission," *Advisor* 3, no. 5 (11 February 2006): 6.

37. "Iraqi Children Get Medical Help," *Advisor* 3, no. 9 (11 March 2006): 3.

38. Spc Rick Czepka, "Iraqi Air Force Stands up New Al Muthana Air Base," *Air Force Information Service*, 7 March 7, 2006; and Pistone, "Iraqi Air Force Opens First Air Base," *Advisor* 3, no. 9 (11 March 2006): 4.

39. General Carlson took a more direct position in a handwritten annotation added to the letter. "By far the best course of action," he wrote, "would be to scrap these aircraft and get something a little more suitable." Gen Bruce Carlson, AFMC/CC, to Lt Gen William Buchanan, USCENTAF/CC, memorandum, Iraqi Air Force (IQAF) Comp-Air 7SLX (CA-7) Courses of Action, 11 January 2006. [Long community of practice (CoP)]

40. AFMC/A4 to AFFTC/CC et al, e-mail, subject: Tasking to Design, Modify and Repair Six Iraqi Air Force (IqAF) Comp-Air 7SLX (CA-7) Aircraft, 27 January 2006.

41. Byrne, briefing, subject: Iraqi Air Force Development Update, slide 33; SSgt Kristina Barrett, "Iraqi Pilots Get Help from Airmen," *Advisor* 3, no. 17 (6 May 2006): 7; and Maj Gary Lyles, "Comp Air Aircraft History with the Coalition Air Force Transition Team (CAFTT)," background bullet paper (BBP), 3 February 2007 [CAFTT files, Brig Gen Allardice briefing book].

42. Buchanan to Carlson, memorandum, subject: Letter of Appreciation, 2 February 2006. [Long CoP] General Buchanan's comment regarding the "first-ever test and evaluation flights . . . within a combat zone" was an oblique reference to the frequent insurgent attacks made on Kirkuk AB while the AFFTC test team was conducting its work there in October. See Ludwig, "Operation Iraqi Freedom Trip Report" [AFFTC files]

43. SSgt Stacy Fowler, "Mission Accomplished for Airmen on Iraqi Comp Air Team," *Desert Wings* [Edwards AFB, California], 25 August 2006.

44. SrA Francesca Carrano, "AF Test Team Launches 'Overhauled' Iraqi Aircraft," *Air Force Print News*, 27 April 2006.

45. *Ibid.*; 1st Lt Michael McGee, 412 Training Wing/DR et al, to Col Mark A. Atkinson, AFMC/A4, memorandum, subject: AFFTC Statement of Capability (SOC)

for the Iraqi Air Force Comp Air 7SL Project, Job Order Number (JON) A06CA700, 24 March 2006; and Headquarters AFTTC, “Limited Flight Evaluation of a Modified Iraqi Air Force Comp Air 7SL,” test plan, April 2006.

46. Fred Webster, “Limited Flight Evaluation of an Iraqi Air Force Modified Comp Air 7SLX (PRR-06-12),” report (Edwards AFB, CA: USAF Flight Test Center, June 2006), draft 3, slide 10 (unclassified/sensitive information [U/SINFO], info extracted is not U/SINFO).

47. Ibid.

48. Barrett, “Iraqi Pilots Get Help,” 7.

49. The lack of standardized construction and its attendant quality assurances may have been contributing factors in two IqAF Comp Air incidents that resulted in forced landings—both, fortunately, without adverse consequences. On 24 January 2005 a US Navy AST pilot assigned to Squadron 3 had to land on a paved highway about 28 miles southeast of Kirkuk because of engine power loss due to fuel starvation. Although not proven, miswiring of the fuel pumps during the original construction was suspected as the cause; an examination of the other Comp Air aircraft found no similar faults. On 10 May 2005 a USAF AST pilot and his IqAF copilot were forced down on a dirt road about 18 miles south of Kirkuk. Again, the immediate cause was fuel starvation. A subsequent investigation showed that the fuel shutoff valves were not installed in a uniform way throughout the Comp Air fleet. Pilots were left to rely upon “open-closed” indicator markings handwritten on each cockpit wall. CMATT-A, “Informal Report on Forced Landing”; and CMATT-A, “Report on Forced Landing.” [Westgate files]

50. Fowler, “Mission Accomplished.”

51. Maj Gen Curtis M. Bedke, AFFTC/CC, to AFFTC/all, memorandum, subject: What I’m Thinking—Calm in the Eye of the Storm, 10 July 2006.

52. Message, 131347Z JUL 06, Headquarters USCENTAF to AFSOC/CC, “CENTAF Aviation Military Transition Team (MiTT) Academic Course Support Request,” 13 July 2006.

53. AFSOC, “AFSOC/USAFSOS Iraqi FID Program, 19 July–19 August 2006,” schedule, 27 June 2006.

54. Martin Matishak, “What Should Fly in the Iraqi Air Force?” *Inside the Air Force*, 24 June 2006, accessed 12 April 2008, <http://www.military.com/features/0,15240,102607,00.html>.

55. Headquarters CAFTT, briefing, subject: Coalition Air Force Training Team (CAFTT) Organization Charts, 20 April 2006; and Headquarters CAFTT, “Coalition Air Force Transition Team,” brochure, ca. September 2007.

56. Matishak, “What Should Fly?” 1.

57. Lt Gen Gary North, briefing, subject: Coalition Air Force Transition Team Update (Version 2.1), ca. 2 October 2006, slide 5.

58. Lyles, “Comp Air Aircraft History.”

59. Brown, “CH2000 Aircraft History.” [General Allardice briefing book]

60. Beech Aviation, the maker of the Beechcraft Model 350ER, had been absorbed by Raytheon, Inc. in September 1994. Powered by two Pratt & Whitney Canada PT6A-60 turboprop engines, the King Air 350ER could operate at gross takeoff weights of up to 16,500 pounds. It had extended endurance because of additional fuel contained in its overwing engine nacelle tanks. The 350ER had a range of about

2,400 nautical miles, allowing it to fly out 100 nautical miles, conduct low altitude reconnaissance operations for up to eight hours, and then return with over 45 minutes' fuel reserve still remaining. It could accommodate two pilots and up to five sensor operators in its pressurized and heated cabin. The USAF subsequently ordered 30 examples of the ISR-specialized variant of the King Air 350ER, which it designated as the MC-12W Liberty. "Standing up the IqAF: King Air 350s," *Defense Industry Daily*, 29 August 29, 2009, accessed 30 August 2009, <http://www.defenseindustrydaily.com/Standing-Up-the-IqAF-King-Air-350s-05101/>; and Tamir Eschel, "U.S. Air Force Deploys the Last MC-12 to Afghanistan," *Defense-update.net*, 13 July 2010, accessed 25 September 2011, http://www.defence-update.net/wordpress/20100713_mc-12_afghan_istan.html.

61. Although Raytheon was to be the prime contractor for Peace Dragon, the integration of the ISR suite, including its electro-optical systems and ground station links, would be subcontracted to General Atomics Aeronautical Systems, Inc., because of its specialized experience in those technologies. Tom Shroyer, 659 AESS/SYIA, interview with the author, 22 July 2009. See also Raytheon Aircraft Co., "Iraq Air Force Orders Beechcraft King Air 350ERs," press release, 6 March 2007.

62. Lyles, "King Air Aircraft History with the Coalition Air Force Transition Team (CAFTT)," BBP, 10 February 2007. [General Allardice briefing book]

63. DSCA, "Iraq—King Air 350ER for Intelligence/Surveillance/Reconnaissance (Transmittal No. 06-73)," press release, 27 September 2006.

64. SAF/IA, "IQ-D-SAA," LO&A, 30 November 2006. [555 IMATTS files]; and Shroyer, interview.

65. The Cessna C208 Caravan first flew in 1982 and was sold worldwide thereafter as a light transport capable of carrying up to a dozen passengers or a comparable weight in cargo. Cessna began marketing a modified model C208 as a low-cost reconnaissance/COIN aircraft in the late 1980s. Although DOD designated that variant as the U-27, no examples were procured for US military use. Mike Gaines and Janice Lowe, "Cessna Cameravan," *Flight International*, January 1989, 28–29.

66. Col R. Kevin "Duckie" Hoffman, 645 AESG/CC, interview with the author, 22 July 2009.

67. Jay Miller, *Lockheed's Skunk Works: The First Fifty Years* (Arlington, TX: Aero-fax, 1993).

68. Ben R. Rich and Leo Janos, *Skunk Works: A Personal Memoir of My Years at Lockheed* (Boston: Little Brown and Co., 1994), 9.

69. Bill Grimes, *The History of Big Safari* (Richmond, BC: Archway Publishing, 30 January 2014).

70. 555 IG, "B3-D-SAB," LO&A, 27 November 2006.

71. *Ibid.*, 4.

72. The last of the three deliveries arrived in Iraq in June. Lyles, "Cessna Caravan Aircraft History with the Coalition Air Force Transition Team (CAFTT)," BBP, 3 February 2007; and Hoffman, interview.

73. Lt Col Steven Hardy, "CAFTT Rotary Wing Support for Jet Ranger, Huey II, and Mi-17," BBP, 1 February 2007. [General Allardice briefing book]

74. *Ibid.*

75. The first operational Mi-17 arrived at Camp Taji on 1 January 2007. See “Iraqi Helos Arrive,” *Advisor* 4, no. 1 (6 January 2007): 8; and Hallwood, memorandum. [CAFTT files]

76. *Ibid.*; and North, briefing, subject: Coalition Air Force Transition Team Update (Version 2.1), slides 6 and 8.

77. DSCA, “Iraq–Helicopters, Vehicles, Weapons and Support,” press release, 9 September 2006.

78. Hardy, “CAFTT Rotary Wing Support”; and North, briefing, subject: Coalition Air Force Transition Team Update (Version 2.1).

79. Matishak, “What Should Fly?”

80. Although the formal change took place on 7 September, it had been announced on 28 August. See “News Briefs,” *AirForces Monthly*, November 2006, 24. For more details, see Pistone, “Iraq Assumes Operational Control of Military,” *Advisor* 3, no. 34 (9 September 2006): 3; and “Iraq Gains Operational Control of its Air Force,” *AirForces Monthly*, November 2006, 22.

81. SSgt Lucia Newman, “Iraqi Air Force Takes over First-Line Maintenance,” *Advisor* 3, no. 37 (30 September 2006): 3 and 5.

82. Newman, “Keeping an Eye in the Sky during Ramadan,” *Advisor* 3, no. 38 (7 October 2006): 4 and 5.

83. In March 2003 the coalition expanded the role of the regional air movement control center (RAMCC) to include scheduling military and humanitarian aid flights into Iraqi airfields. In August 2003 the CPA opened Iraqi airspace to commercial carriers, and RAMCC set up a dedicated overflights section to deal with those transits. Humanitarian cargo flights into Baghdad and Basrah began soon thereafter under RAMCC control. In 2006 RAMCC began to return national airspace control to the ICAA. See SrA Alyssa C. Miles, “Teaches Iraqis to Touch the Sky,” *CENTAF News*, 23 August 2009, accessed 30 June 2010, http://www.centaf.af.mil/news/sotry_print.asp?id=123164548; and “Iraqi Airspace Now Fully Back to Iraqi Control,” accessed 30 June 2010, http://www.airliners.29266net/aviation-forums/general_aviatio/read.main/45/. For example, according to a March 2005 contract, the BIAP air traffic control system was to have been operated by Iraqi controllers trained by Dyncorp, Inc. That effort was apparently unsuccessful, as the first tower-certified Iraqi air traffic controllers did not finish their training until May 2008. Combined Airspace Planning Group, “Executive Summary—CAPG Executive Steering Committee Meeting [Bahrain],” 3 March 2005; and “US DOT and Iraq’s CAA Designate Baghdad’s First Tower-Certified Air Traffic Controllers,” US Department of Transportation news release, 30 May 2008, accessed 26 June 2010, http://www.traveldailynews.com/pages/show_page/25972. [CAFTT files]

84. In addition to the aircraft operating in and out of Kirkuk, the 506th CERAP controlled the air traffic using six satellite airports and two major airways. SSgt Stacey Fowler, “CERAP: Making Safe, Expeditious Travel Possible for All over Skies of Iraq,” *Krab Kronickle* [Kirkuk AB] 4, no. 17 (14 August 2006): 6–7.

85. Brig Gen Stephen L. Hoog, CAFTT/CC, memorandum for record, subject: ACCE/CAFTT, 5 July 2006. [CAFTT files]

86. *Ibid.*, 2.

87. Marie E. Tinka, “IQ-D-QAA,” LO&A, 20 November 2006. [AFSAC files]

88. A pseudo case for ASR-11 radar systems was negotiated in June 2007; the \$24.9 million cost was paid by the US government; Tinka, “B7-D-QAH,” LO&A, 7 June 2007. [AFSAC files]

89. Maj Jesse Acevedo, “National Air Space and Air Traffic Control Systems (CAFTT),” BBP, 11 March 2007. [General Allardice briefing book]

90. North, briefing, subject: Coalition Air Force Transition Team Update (Version 2.1). General North had replaced General Buchanan as USCENTAF commander in February 2006. “General Gary L. North,” biography, accessed 9 January 2010, <http://www.af.mil/AboutUs/Biographies/Display/tabid/225/Article/104909/general-gary-l-north.aspx>.

91. In its report to Congress one month later, the DOD gave this number as “about 900.” See DOD, “Measuring Stability and Security.”

92. North, briefing, subject: Coalition Air Force Transition Team Update (Version 2.1), slide 9.

93. *Ibid.*, slides 13–19.

94. *Ibid.*, slide 20.

95. *Ibid.*, slide 27.

96. IqAF, “Draft Service Plan,” 1-1.

97. North, briefing, subject: Coalition Air Force Transition Team Update (Version 2.1), slides 26–29.

98. *Ibid.*, slide 30.

Chapter 8

AETC Steps Up to the Iraqi Air Force Training Plate

As the Air Education and Training Command's name suggests, its mission is to provide USAF, USAFR, and Air National Guard personnel with education and training. AETC qualifies and commissions new officers through its Air Force Reserve Officer Training Corps (ROTC) and direct accessions programs. Its Air University (AU) centers, colleges, and schools provide those officers with professional and continuing education throughout their careers. AETC's flying training wings produce the USAF's aircrews. AETC's basic military training (BMT) center brings new recruits into the enlisted force, and its technical training wings give those men and women the skills needed to master the latest air, space, and cyberspace technologies. Thereafter, AETC's NCO, senior NCO, and first sergeant academies qualify the most promising for greater leadership responsibilities as they advance in rank and seniority. Furthermore, AETC fosters civilian leadership skills and good citizenship through its Air Force Junior ROTC and Civil Air Patrol cadet programs. Taken as a whole, this structure forms the "constellation of learning" required to field, operate, and sustain a modern air force.¹

Except for courses offered by the ground force-oriented Iraqi Military Academy at Camp Rustamiyah (IMAR), a few squadron-level "on-the-job" training programs, and a limited number of contractor-operated or donated instruction programs (conducted mostly outside the country), the IqAF had no requisite structure for inducting enlisted airmen or producing junior officers and warrant officers qualified to lead them. In 2006 the Iraqis did not yet have a fixed-wing flight school, nor did they have the means in-country to train critical aviation support personnel such as air traffic controllers or aircraft mechanics. In sum, they lacked most of the key components of that "constellation of learning" needed for a functioning air force. The IqAF would have to expand in order to meet the national need, and it could not continue to function, let alone expand, until these deficits were addressed.

The Assignment

In September 2006 USCENTCOM instructed CAFTT to establish an IqAF training school (AFTS). MNSTC-I had already created an overarching (but largely ground-force-oriented) training architecture for the Ministry of Defense; the AFTS would address the air force's specialized needs within that structure.² Those needs were limited to aircrew production, IqAF-specific BMT, and training in selected enlisted specialties. The AFTS would be located at Taji AB but would also support a fixed-wing flight training school (FTS) at Kirkuk AB.³

In early November CAFTT revised and expanded the AFTS's CONOPS to include a Taji-based officer training school (OTS). In addition to producing new junior officers, OTS would conduct pre-flight screening to identify suitable candidates for flight training. The new CONOPS also concentrated all aircrew training—both fixed and rotary wing—at Kirkuk. This early planning effort anticipated a combined officer and enlisted enrollment of roughly 1,000 students per year, of which about 100 officers would attend the FTS.⁴

The second CONOPS draft gave more specific attention to an issue that every previous coalition mentoring effort had raised as a significant problem: the language barrier. The CONOPS planners predicated their work on the expectation that all IqAF officers would receive comprehensive English language training. This projection consisted of a two-phased effort—initial language instruction provided while they were still cadets (either at the IMAR or the AFTS's OTS) and a comprehensive six-month program after commissioning. The officers would receive any specialized follow-on training after completing both instructions. Warrant officers would receive six months' language instruction in the period between their commissioning and any follow-on specialty training.⁵

As in the initial October edition, the November revision called for near-immediate execution, with USAF instructors/advisors arriving in January 2007 and courses beginning by April. Formal activation of the AFTS and FTS would follow as student pipelines began to fill. Given the tight timetable and AETC's expertise in such matters, General Hoog wasted no time in asking for assistance. By the third week of November, AETC had assembled a working group under the direction of Col P. Michael "Dog" Senna of the operations directorate (AETC/A3). The team included action officers from AETC's three major components: Second Air Force (specializing in technical training,

headquartered at Keesler AFB, Mississippi), Nineteenth Air Force (specializing in flight training, headquartered at Randolph AFB, Texas), and AU (specializing in officer and enlisted professional and continuing education, headquartered at Maxwell AFB, Alabama), along with representatives from six other offices and agencies, including the Defense Language Institute and AETC's Air Force Security Assistance Training Squadron (AFSATS).⁶

Because the preparation period was so compressed, it made sense to adapt—insofar as possible—any available applicable USAF curricula. Nonetheless, the compressed timetable posed a significant challenge, with OTS and enlisted BMT scheduled to open in April and the technical training and flight training schools to follow in October. Dr. Charles Nath, director of curriculum for AU's Air Force Officer Accessions and Training Schools (AFOATS), described the writing process.⁷ "It took seventy-nine days from beginning to end. We worked through Christmas. . . . The syllabus included lesson plans, slides, reading materials—everything that [the Iraqis] would need to conduct an initial officer training course."⁸

The working group's OTS curricula called for 454 hours of instruction. There were 10 academic areas involved, including field leadership (90 hours), communications studies (41 hours), and drill and ceremonies (40 hours). The section on military studies (28 hours) included, among other topics, a guided discussion of the role of the military in a democracy and the importance of subscribing to the Iraqi Patriot Oath, while the profession of arms section (20 hours) contained presentations on the law of armed conflict, standards of behavior and etiquette, and respect for others.⁹

Although IMAR had traditionally been the Iraqi army's principal source of officers, some of its graduates would join the IqAF and would need additional specialized preparation. The AETC curricula team called this "top-off" training and planned for a 350-hour instruction schedule. Similar in many respects to the OTS course, the top-off course was structured to supplement IMAR's offerings as much as possible.¹⁰

Enlisted training was to follow the same top-off principle, with initial training battalion graduates—for example, all enlisted recruits—receiving instruction in the basic skills required of an Iraqi airman. That said, the language barrier would be a major challenge, as would the lack of literacy among so many of the recruits.

Setting Up “the Alamo”

Small teams of AETC instructors began to prepare for deployment in December. Like the C-130 AST members two years earlier, the instructors were to attend the same abbreviated Middle East Orientation Course. This five-day offering included a brief history of Iraq and the differences between Sunni and Shiite Islam, a smattering of Arabic words and phrases, and familiarization with Iraqi customs and sensitivities. The three officer advisors assigned to activate OTS and officer top-off programs arrived at Taji at the end of January 2007, moving to Camp Rustamiyah several weeks later. The first contingents of instructor/advisors for technical training, BMT, and fixed-wing flight training followed similar paths.¹¹

In all, 11 instructor/advisors made up the initial cadre at Taji; their leader was Lt Col Kim “Felix” Hawthorne. Upon arrival, Colonel Hawthorne contacted the USAF rotary-wing flight instructor/advisors working with Squadron 2, only to discover that no beddown preparations had been made prior to their arrival. The immediate priority was to find quarters, dining facilities, and a means of moving between them. Setting up the schoolhouse came next. After negotiating the use of an abandoned, near-windowless warehouse previously used to store medical supplies, the instructors quickly realized that it had served more recently as an impromptu latrine. The waste was removed; some air conditioners were scrounged and installed to counter the suffocating heat; and office furniture was located and taken “on loan.” The dilapidated condition of the building, its relative isolation, and the way the AFTS cadre was forced to improvise or fail soon led to an appropriate nickname for the schoolhouse—“the Alamo.”¹²

Having a schoolhouse was important, but only if there were enrolled students. Textbooks and teaching aids would have to be provided, and student quarters and provisions had to be addressed. To make matters even more uncertain, there was no way to know how many attendees would actually report for instruction. “The projected number of students was wildly variable at first. We only knew that it would be ‘less than 90 and more than 5,’ ” one cadre member said.¹³ Nonetheless, they pressed on. Student dormitory spaces were arranged with a Taji-based military intelligence academy run by the US Marine Corps; teaching materials were given last-minute adjustments; and the officer candidates—primarily degreed engineers or engineering students—began to arrive.

In the meantime, preparations for the summer opening of a basic technical training school were making headway. Courses initially offered on an ad hoc, as-needed basis were soon put on a more formal footing through the formation of a training integration working group. Progress was also being made at Camp Rustamiyah, where the top-off course began in March. In May a team of military training instructors from the USAF's BMT center at Lackland AFB, Texas, took charge of 62 *janood*, or junior enlisted men; they would become the first students to complete the new BMT course at Taji.¹⁴ Air traffic control instruction began there in July, with preparations under way to start a radar course in September.¹⁵ It was by no means a complete solution, but it was at least a good beginning.

From “Ad Hockery” to Formalization: Restructuring for Mission Success

In a July 2009 interview, an AFSATS civilian proudly recalled the role that he and other AFSATS members had played in helping the Iraqis to obtain three C-130s in 2005. He also acknowledged the travails that followed thereafter in trying to sustain those aircraft via temporary measures and the difficulties that accompanied so many other halting efforts to train and supply the IqAF. Reflecting upon their experience, he said that his colleagues had invented a name for that kind of make-do, seat-of-the-pants effort. They called it “ad hockery.”¹⁶

Temporary fixes applied in 2006 could not fully reverse the neglects (and their consequences) of 2004–5. For example, using special, expedited means to procure three ISR airplanes was helpful. So was the mounting of a one-time MiTT training course. That said, neither were sufficient. Marshaling the resources needed to rebuild the IqAF was a systemic challenge that needed systematic solutions, and the USAF finally began to apply those measures in 2007. The time of ad hockery had come to an end.

The January 2007 Situation Report

On 10 January General North convened a meeting of the board of directors for his latest quarterly update. The teleconference included the current CAFTT commander's last presentation to the board—General Hoog was scheduled to be reassigned in March—and for the first time, the board also received an equally detailed briefing on the

status of the Afghan National Army Air Corps (ANAAC). That briefing was presented by General Padilla, the same action officer sent to Iraq by General North's predecessor to evaluate the effectiveness of CMATT-A in the aftermath of the fatal mishap of May 2005.¹⁷

General North had several goals in mind when he gave the two officer-presenters equal billing. Having both briefings delivered in the same format would prompt the board to consider the commonalities in both countries' needs, thereby potentially improving the USAF's return on investment. It also encouraged the board to better synchronize its efforts in the two countries, thereby offering some possible opportunities for synergy.¹⁸

General Hoog summarized the situation before moving on to new developments in his area of responsibility (AOR). CAFTT had 123 Airmen assigned as of January, and he expected that number to reach 350 by year's end. The Iraqis had 915 personnel on strength, of which 184 were assigned to their air operations directorate at NAMAB. The Taji training school would open in April. The first 17 officers had just graduated from IMAR, and January's incoming class had 65 cadets enrolled.¹⁹ The five Jet Rangers continued to train small numbers of rotary-wing pilots at Taji, and two of the 10 Mi-17s were operational. Some of the 16 rebuilt Huey IIs were due to arrive soon, and the first C208 Caravan would be delivered within a few months. In the meantime, Iraq's 10 long-serving ISR aircraft would continue on at Kirkuk and Basrah.²⁰

As to future acquisitions, the Iraq-funded LO&As had been completed for the King Air 350ER advanced ISR aircraft (\$143 million), the air traffic control system at Kirkuk (\$28 million), and the C-130E sustainment program (\$81.5 million). A \$70 million request had been submitted for air force training, including the purchase of flight training aircraft, sustainment for the training helicopters already on hand, and for AFTS operation. Request packages were being prepared to buy COIN aircraft (\$120 million), transport aircraft (\$30 million), additional air traffic control systems (\$45 million), and a national airspace/battlespace management system (\$85 million).²¹

General Hoog also alerted the board to problems looming on the near horizon. The Iraqis had asked for three more C-130s, a request that would be hard to satisfy because of congressionally imposed limits on how soon aging (but still serviceable) USAF C-130s could be retired.²² Providing Iraqi aircraft with a defensive missile warning system was critical if they were to operate freely in areas where enemy ground-

launched anti-aircraft missiles might be a risk. However, employing that equipment (the ALE-47/AAR-47 missile approach warning system) was difficult because some of the technology involved was export-restricted.²³ Fortunately, there were workarounds (for example, sealing the system's "black boxes" in tamper-proof containers to prevent unauthorized access). Permission would also be needed to mount certain weapons on US-funded aircraft serving in the IqAF; this requirement affected the Iraqis' prospects for obtaining AGM-114 Hellfire missiles for their C208 Caravans or for mounting 2.75-inch rocket pods on their Huey IIs.²⁴

Aside from those issues, the CAFTT commander suggested that a larger procurement point was to be made—the need to coordinate the acquisition requirements of both the IqAF and the ANAAC to the greatest possible extent. For example, it might be conceivable for both countries to use the same COIN aircraft, given their comparable operating environments. Similarly, the light airlift and ISR specifications contained in both countries' requests might be satisfied by a common platform. These requests suggested that the two purchasers could use similar contracts or perhaps even consolidate their purchases to save costs—a decidedly attractive possibility given how much money was already being spent to outfit the Iraqis.²⁵

However, the situation facing the USAF's advisors in Iraq gave General Hoog the most concern, particularly their selection and training; moreover, he was apprehensive about the effect that lengthening deployments might have on the advisors and their families. General North wanted to substantially increase the number of USAF Airmen-advisors in Iraq and Afghanistan—to about 530 by late 2008, of which 400 would be assigned to CAFTT. Between June and November 2007 alone, over 120 USAF Airmen-advisors were scheduled to deploy to Iraq for periods of up to a year, leading General Hoog to ask if a deliberate development plan existed for these Airmen.²⁶ The CAFTT commander said that advisor predeployment training should be a "top priority," noting that the US Army gave its advisors special identifiers and incentive packages. Given the special skills required, the arduous duties involved, and the long absences from home, should not the USAF do the same for its advisors? This was certainly not the first time such questions had been asked, but the level at which they were now being raised was significant.²⁷

The board members left the January meeting with a good sense of the way ahead. The MiTTs would be substantially expanded, but their

members needed adequate training—something they had lacked thus far. AETC was willing to accept that task, but it needed assistance from the other major commands involved. The acquisition process was facing some hurdles: making heavy use of sole-source contracts for exigency's sake carried risks, and matching needs and resources to budget cycles presented scheduling problems. The Secretariat's Office of International Affairs, the Air Staff's budgeteers, and AFSAC would all need to watch those issues very closely. For its part, USCENTAF was prepared to establish a full-time team to oversee the coming buildup.²⁸

High-Level Responses

The situations in Iraq and Afghanistan in late 2006 and early 2007 contributed to a conviction among the USAF leadership that the way ahead lay in strengthening the air arms of the two partner nations so that they could function on their own. That process would take considerable investment and years to achieve, but its success would surely depend upon the USAF's ability to identify, train, and deploy capable, culturally aware Airmen-advisors. Providing a partner nation's air force with equipment was only the beginning. In the end, it was the USAF's Airmen-advisors who would work side by side with that nation's airmen to get their aircraft into the air.

The board's January meeting had suggested the importance and urgency of getting more advisors into the Iraqi and Afghani AORs. It also brought renewed high-level attention to the problems that USCENTAF faced—problems that could be solved only at still-higher levels within the Air Force.

The Secretariat Forms an Integrated Process Team

On 22 January Bruce S. Lemkin, the deputy undersecretary of the Air Force for international affairs (SAF/IA), convened an "Integrated Process Team (IPT) on Building Airpower in Iraq and Afghanistan."²⁹ The team's mission was to apply "AF and MAJCOM expertise to help implement the USCENTAF plan and determine USAF costs of building airpower and partner capacity" in both countries, and its membership included representatives from the secretariat, multiple Air Staff offices, major commands, CAFTT, AFSAC, and other organizations.³⁰

During the team's second teleconference on 9 February, General North received an interim report on the members' progress. The IPT

had been tasked to focus on five specific areas: formalizing predeployment advisor training, technical and flying training in the AORs, acquisition strategy, financial commitments, and personnel requirements.³¹

The team was to develop a plan to “institutionalize a CONUS [continental United States]-based Air Force Advisor Training Center” for predeployment advisor training. The team also had to find ways to support the deploying advisors’ immediate needs. The short-term answer appeared to be a two-week course scheduled for late February at Camp Anderson-Peters, located near Lackland AFB, Texas.³² The course could accommodate up to 50 advisors facing deployment dates in April. For the longer term, the team drafted a six-week course syllabus for a notional schoolhouse near Hurlburt Field, Florida. Assuming a 600-student annual enrollment, the school would cost about \$5 million to open and around \$10 million per year to operate.³³

Iraq’s technical and flying training schools needed courseware and training syllabi, and AETC was already working on both requirements. CAFTT reported that the Iraqis envisioned up to 2,900 accessions per year. That sum included 1,600 enlisted recruits and over 500 officers, of which about 100 would become pilots. The officers would need leadership training, and the enlisted personnel would need selected technical instruction in maintenance, intelligence, fuel and lubricant handling, fire and rescue work, air traffic control, and so forth. English-language training had always been and would continue to be the “long pole in the tent.” AETC planned to open a technical school in April and a flying training school by July.³⁴

Acquisition specialists focused upon operating “within legal boundaries to expedite delivery of desired platforms, combining efforts where feasible, to maximize efficiency and interoperability between theaters.”³⁵ That meant using pseudo-case FMS rules wherever possible because the rules offered greater flexibility in satisfying the “unusual and compelling requirements” threshold demanded by US procurement laws. Consolidating and synchronizing contracts would also help meet tight schedules and reduce duplication of effort. Regarding Iraq’s latest equipment requests, the IPT found that some creative security measures could be applied to allow the Iraqis largely unrestricted use of US defensive systems on nonweaponized aircraft. Putting those systems on weaponized aircraft was a different matter, requiring DOD approval for an “Exception to National Disclosure

Policy” (ENDP). SAF/IA’s Foreign Disclosure and Technology Transfer Division worked the issue.

Iraq’s request for three more C-130Es was an especially thorny problem. The multiyear retirement schedule for the older C-130s in USAF and USAFR service had to be carefully choreographed. Sending three aircraft overseas ahead of their previously identified end-of-service dates could be very expensive—perhaps as high as \$38 million, depending upon which aircraft were selected and which others had to be reprogrammed to take their place. The transfers would require permission from the Office of the Secretary of Defense, and the IPT felt that USCENTCOM rather than the Air Force should pursue the transfers.³⁶

The team’s manpower analysis was based upon USCENAF’s expectation that, by mid-2008, over 500 USAF Airmen-advisors would be performing one-year tours and perhaps another 100 Airmen would be engaged in 179-day rotations. Although the RFF process was reportedly going well thus far, one-year deployments would continue to need Air Staff approval because of the additional pay and allowance entitlements involved. The IPT also recognized that the deployment burden was not shared equally among all USAF career fields. USCENAF’s proposal, if fully implemented, would impose especially hard demands upon some career fields already under considerable stress, including security forces, civil engineers, intelligence and logistics specialists, and communicators. The Air Staff’s manpower and personnel representative committed to making a full assessment, and the IPT was to present that finding to the USAF chief of staff by 25 February.³⁷

Finally, there was the matter of paying for the proposal. Thus far, the IPT had identified a one-time \$130,000 cost for immediate pre-deployment training, another \$15 million in FY 2008 for that year’s pre-deployment training and the activation an Expeditionary Air Advisor Training Center, and an unknown amount in FY 2008 and beyond for the additional money entitlements accrued by those deploying to Iraq or Afghanistan for a year. The Air Force Secretariat’s director of budget operations confirmed that the FY 2007 global war on terrorism (GWOT) supplemental fund had enough flexibility to cover the IPT’s FY 2008 estimates. Nonetheless, only the CSAF could decide whether this funding might be used.³⁸

On 20 February Secretary Lemkin dispatched a staff summary sheet to the IPT principals for their approval; it presented brief, affirmative

arguments for the three key issues requiring a CSAF decision.³⁹ The jointly coordinated package was returned to Secretary Lemkin's office within about a week.⁴⁰

The Air Force Chief of Staff Gives the Go-Ahead

The IPT's analyses had identified three decisions that would need CSAF Gen T. Michael Moseley's personal attention before USCENTAF's proposed expansion program could go forward. First, because the existing FID advisor course offerings at Hurlburt Field and elsewhere were already saturated, AETC wanted to create a new predeployment advisor training detachment large enough to process 600 or more USAF advisors and contractor personnel per year.⁴¹ Would the chief authorize AETC to make the necessary commitments—finding facilities, writing and vetting curricula, assigning (or hiring) qualified faculty, and so forth—for that program to proceed?

Second, the costs related to AETC's proposal were not included in the FY 2007 budget. Meeting that request would mean finding an additional \$15 million.⁴² Was General Moseley willing to use GWOT supplemental money to fund the shortfall even though doing so might mean that some other pressing need would have to be refused?

Finally, increasing the number of USAF advisors in Iraq and Afghanistan to over 530 by July 2008—many of them serving one-year tours—would create additional manpower shortages in some already-overstretched career fields.⁴³ Did the chief want to commit the USAF to expanding this mission in spite of the effects it would impose on Airmen deployed elsewhere? More to the point, was he willing to accept this additional burden on behalf of those hard-pressed Airmen and their families?

General Moseley weighed the project's deployment demands and potentially escalating costs against the importance of what was at stake, and his succinct answer was the same to all three questions: "Yes."⁴⁴

US Central Command Air Forces Creates an Air Advisory Division

As General Moseley considered the IPT's analyses and recommendations, USCENTAF was moving forward with its own preparations for managing the soon-to-be expanded MiTTs and introducing the aircraft that were to be delivered to the Iraqis. On 1 February

USCENTAF announced the formation of an Air Advisory Division whose mission was to

assume the lead role in coordinating all CONUS efforts supporting the coalition air force transition teams in Iraq and Afghanistan. Once fully developed, the division will consist of the functional experts needed to support a broad spectrum of Air Force advisory issues related to the USCENTCOM theater of operations. Organizational development is ongoing. A second message will follow detailing the Division concept of operations once the specific construct is approved.⁴⁵

Naturally, the division was a long way from being “fully developed.” Even though General Moseley had approved some key requirements, there were still too many details left adrift in that risk-filled void called “TBD” [to be determined]. In addition to manpower and a budget, the division needed to know USCENTAF’s requirements about mentoring the Iraqis in 2007 and beyond. Fortunately, the IPT was well positioned—in fact, had been specifically assembled—to provide those details for the new division’s subsequent use.⁴⁶

The Integrated Process Team’s Final Report

On 9 March Secretary Lemkin convened a teleconference to ratify the IPT’s final report. As they had during the two previous meetings, the team members focused upon five issues: formalizing pre-deployment advisor training; technical and flying training in the AORs; acquisition strategy; financial commitments; and personnel requirements.⁴⁷

The IPT had been especially successful in working the immediate predeployment issue. The 44 advisors due to report to the two AORs in March through June completed their two weeks’ training as scheduled at Camp Anderson-Peters. Beginning in December 2007, the IPT planned to use the camp’s Common Battlefield Airmen Training (CBAT) initiative to provide the advisors with a one-week “bridge course,” along with specialized FID instruction and other mentoring offered on a brief, temporary duty basis.⁴⁸ The advisors’ CBAT instruction was to be expanded to three weeks, beginning in October 2010.⁴⁹

Preparations for technical and flying training instruction were generally on schedule within the Iraqi AOR although the technical training school still needed training aids and the flying training school’s initial cadre of instructor pilots and maintenance advisors had yet to be named and trained. The training aircraft were on order.

The syllabi for the initial training course had been delivered, and the training school's initial cadre had arrived at Taji. Comprehensive English-language instruction had started at both Camp Rustamiyah and NAMAB.⁵⁰

The equipment acquisition LO&As were also nearing completion. Deliveries were scheduled for both interim and advanced ISR systems, training aircraft, and accompanying flight simulators (an important training adjunct since instructional flying "outside the wire" at low altitudes was risky). The defensive systems issue was almost resolved for the C-130s, ISR and training aircraft, and Huey IIs, but the ENDP for the weaponized aircraft was still being considered. Acquisition budget scheduling continued to be a problem, and both SAF/IA and the Air Force comptroller were working with DSCA to create a supplemental request that would address the rest of the year's needs.⁵¹

The IPT's financial experts had refined their out-year training and deployment cost estimates since the meeting of 9 February. General Moseley's approval of the \$15 million budget increase made it possible to proceed with USCENTAF's plans for FY 2007 (including the AETC advisor school and up to three two-week offerings at Camp Anderson-Peters), but FY 2008 still needed to be addressed. That year's projected predeployment training costs for an advisor force of more than 530 Airmen came to \$12 million (including \$3 million for the training detachment's operations). Costs for the deployers' entitlements had also become clearer: in FY 2007 an additional \$1.2 million would be needed for the Airmen-advisors to spend up to 179 days in the Iraqi AOR. Moreover, in FY 2008 and thereafter, the USAF would have to find \$13 million annually for the additional entitlements earned by advisors serving on 365-day tours. Those sums could be taken from GWOT funds for FY 2007 and FY 2008, but later costs would have to be included in longer-range spending plans.⁵²

Finally, the IPT's manpower specialists had worked with the CAFTT-Iraq and CAFTT-Afghanistan staffs to refine personnel requirements for the expansion. Advisor manning in Iraq was programmed at 398 by July 2008, and training operations in Afghanistan required the deployment of 139 advisors by October 2007. This additional burden to some already-stressed career fields was of serious concern, and the Air Staff's Manpower and Personnel Directorate promised to work with USCENTAF to find trade-offs among the affected career specialties wherever possible.⁵³

The IPT closed out its last meeting by announcing that the members' contributions would continue. However, as of 21 March the USCENTAF Air Advisory Division would have responsibility for the process.⁵⁴

The Air Advisory Division Has Teething Troubles

Although the IPT had announced that it would transition much of its effort to the new USCENTAF Air Advisory Division in late March, it was soon apparent that the division was not yet ready to take on that workload. On 4 May the Ninth Air Force deputy director of staff e-mailed the headquarters staff to announce

the revitalization and expansion of the former CENTAF Iraqi Air Force Development Working Group into a standing [IPT] to support the CENTAF advisory mission in both Iraq and Afghanistan. . . . The CENTAF Air Advisory Division was formed to provide support to both elements; however, manning and organizational development is taking longer than expected and a standing IPT is urgently needed to streamline the staffing process and fully support the needs of [CAFTT-Iraq and CAFTT-Afghanistan].⁵⁵

The standing IPT (SIPT) began meeting on 7 May and would continue to do so on a regular basis until the Air Advisory Division could become fully functional—a process that would take until midsummer. The SIPT included representatives from virtually every directorate in Headquarters Ninth Air Force, and its members focused upon force planning and facilitating predeployment training. As the situation in Iraq became more settled, sorting out the requirements for the ANAAC absorbed most of the team's attention. That said, some factors were common to both AORs.⁵⁶

The SIPT acknowledged that finding suitable advisor candidates was not easy. In fact, it could take up to nine months to find, train, and deploy a qualified advisor. Because of that lag time, it was especially hard to give deployed commanders a "right of refusal" for advisor nominees—a potential issue for filling key leadership positions. Mismatches between candidates' skill codes and the skills desired of an advisor were a routine occurrence. The need to meet fast-approaching production quotas was hanging over everyone: between 1 July and 30 September 180 Airmen-advisors would have to be sent to Iraq, and 36 more needed to arrive in Afghanistan between July and August.⁵⁷

US Air Force Organizational Changes in Iraq

Rapid expansion of the USAF advisor force in Iraq required more than increased preparation and training before deployment. It also called for a more formalized organizational structure within the AOR itself since numerous Airmen were about to be deployed.

On 29 March Headquarters ACC issued a special order activating seven new organizations in Iraq. From that point forward, Airmen assigned to CAFTT's headquarters at Phoenix Base would report to the Air Force Element (AFELM), CAFTT, or CAFTT's subordinate establishment—the 370th Air Expeditionary Advisory Group (AEAG)—also at Phoenix Base and initially commanded by Col Daniel Groeschen. Both organizations would answer to the 9th Aerospace Expeditionary Task Force.⁵⁸

The MiTTs assigned to Iraqi bases and squadrons were similarly reorganized into more familiar “standard” USAF units. NAMAB would host the 370th Air Expeditionary Advisory Squadron (AEAS). Taji would become home for the 770th AEAS and the 370th Expeditionary Training Squadron, and Kirkuk was to host the 870th AEAS and the 52nd Expeditionary Flying Training Squadron. The latter unit would support the Iraqis' Flying Training School when it opened later that year. The smaller ISR MiTT operation at Basrah became Operating Location A, 370th AEAG.⁵⁹

The Coalition Air Force Transition Team Gets Its First Full-Time Commander

Although it would take a little time for the new units to begin functioning smoothly, a major change had already occurred within CAFTT headquarters. On 25 March Brig Gen Robert R. Allardice replaced General Hoog as CAFTT commander.⁶⁰ General Allardice's experience made him a good fit for the position. From October 1998 to May 2000, he had been chief of the Expeditionary Air Force Implementation Division at Headquarters USAF. In the two years immediately before deploying to Iraq, General Allardice was assigned at Headquarters USAF as director of airman development and sustainment.⁶¹ But this new appointment was particularly significant because, for the first time, the CAFTT commander was not also serving as MNF-I's ACCE.⁶² In other words, the position was no longer “dual hatted,” recognizing the growing size and importance of the USAF

advisory program in Iraq. It meant that the USAF had now acknowledged the CAFTT commander's need to focus all of his attention upon just one mission—helping the IqAF to become a viable combat organization.

Flying in the Present, the Iraqi Air Force Plans for the Future

With the exception of several Mi-17 helicopters that were entering service with Squadron 4 in January, the IqAF began flying the same missions with the same aircraft in 2007—minus the Comp Airs—that it had been using since 2005. That practice was about to change.

A year after a number of Huey IIs were delivered to an Alabama-based contractor, the first shipment of five rebuilt helicopters returned to Iraq on 16 February.⁶³ Following several days' reassembly and flight testing at NAMAB, they were turned over to Squadron 2 at Taji. Over the next few months, several were occasionally flown back to NAMAB, Phoenix Base, and Baghdad's Green Zone to take Iraqi defense officials aloft for the benefit of the press; these excursions were moments of considerable pride for the IqAF.⁶⁴ Otherwise, the Hueys were used to train Iraqi airmen. Although the rebuilt aircraft had been factory equipped with protective armor, they remained within Taji's airspace for the first several months. This restriction was not imposed from an excess of caution: between 20 January and 3 March, Iraqi insurgents had shot down or damaged eight US helicopters.⁶⁵ As a result, it was not until 10 April that two Iraqi pilots made Squadron 2's first flights outside Taji's perimeter. Those sorties included live-fire exercises using externally mounted machine guns.⁶⁶ Five more aircraft arrived at NAMAB on 2 May, and the final six were airlifted in from the United States on 29 July, by which time Squadron 2 had accumulated about 1,300 flying hours in training missions, passenger movement, and infrastructure protection and assessment.⁶⁷

Squadron 23, the transport unit, had long since become the brightest jewel in the new air force's crown. The service's largest and most experienced squadron had about 45 aircrews, 120 maintainers, and 130 other airmen assigned in early 2007. Although equipped with only three C-130Es, the squadron had earned a solid reputation over the previous two years—not only for its demonstrated ability to move important passengers and cargo safely but also for the training opportunities that the unit had provided to the IqAF. Many of the

squadron's maintainers, for example, had become equivalent to USAF five-level (journeyman) or seven-level (master) technicians. In keeping with the USAF advisors' "train the trainers" mantra, they were instructing new three-level (apprentice) Iraqi maintenance specialists in turn.⁶⁸

Squadron 23 was also helping other IqAF specialists. To cite a timely example, 11 flight medical officers completed the first offering of the Iraqi armed forces' Flight Surgeon Primary Course on 31 January. Their training syllabus required participation in medical evacuation and airborne patient treatment exercises, and the NAMAB-based squadron's Hercules transports had served as training platforms for the physician-airmen to practice their skills in a truly realistic setting.⁶⁹ On 4 March this training was put to practical use when the squadron made its first intratheater air medical evacuation by transporting a badly wounded Iraqi policeman.⁷⁰

But it was the IqAF's ISR operations that accumulated the most "firsts" in 2007. In February, following the activation of the air operations center, both Squadron 3 and Squadron 70 began supporting Iraqi army requests for ISR support, including convoy surveillance. CH2000 flights resumed over Baghdad that same month as part of Operation Fard al Qanoon, an element of the "surge" operations being conducted in and around the capital.⁷¹ The first of three Cessna C208 Interim ISR Caravans arrived on 30 March; the last arrived in June. All three aircraft were assigned to Squadron 3 at Kirkuk, and its aircrews began conducting some very successful infrastructure surveillance flights in July in conjunction with Squadron 12's Huey IIs.

These flights were particularly significant for the effect they had upon IqAF *esprit de corps* and recruiting. During a press conference held in early September, CAFTT commander General Allardice noted that "the morale of the air force has picked up as they have gotten involved in real operations. . . . About six weeks ago they stopped a pirating operation down in southern Iraq." He noted that both squadrons' participating pilots had been personally thanked by the Iraqi minister of oil and added "that was a complexity of mission . . . that I just didn't think they would be able to do until the end of the year."⁷²

Squadron 3's interim ISR operations progressed to full initial operating capability (IOC) the following month, allowing the retirement of its two long-serving but unarmored and underpowered SB7L-360 Seeker surveillance aircraft.⁷³

Counterinsurgency and Procurement of Counterterrorism Aircraft

Looking to the future meant gaining the ability to conduct COIN and counterterrorism (CT) operations. COIN aircraft had been on the Iraqis' want list for some time, and General Barzanjy anticipated using \$120 million in Iraqi security forces funding for that purpose.⁷⁴ For its part, the DOD included the requirement in the FY 2007 GWOT supplemental budget request submitted for congressional approval in early February 2007, and Congress agreed.⁷⁵

On 3 May AFMC's 337th Aeronautical Systems Group issued a solicitation seeking "potential sources to provide both a [COIN] Aircraft and Contractor Logistics Support (CLS) for the Government of Iraq."⁷⁶ The request envisioned a buy of eight aircraft (with an option for six more) and their logistical needs for a year. It also included provisos that the contract-winning aircraft must already be in widespread use and that it must use a Pratt & Whitney PT-6-based turbo-prop engine. These limits would make the winner compatible with the PT-6-powered ISR aircraft already in IqAF service, but they would also limit the competition to a very few well-marketed aircraft types. The latter included principally the Hawker Beechcraft T-6—already serving in significant numbers in the USAF and US Navy as a primary training aircraft—and the Brazilian-built Embraer EMB-314 Super Tucano light strike/trainer aircraft.⁷⁷

In the meantime, the insurgency gave greater impetus to the need to conduct CT operations. Because of the lengthening time involved in mounting a COIN competition (and thus the winning design's delivery dates), in September Iraqi officials asked for a replay of the means used to acquire the three Interim ISR aircraft in the fall of 2006. Could the 645th AESG—better known as Big Safari—work its special acquisition magic once again? It could, and on 11 December AFSAC's 555th International Support Squadron issued an LO&A for three "Iraqi Armed Caravan (IAC) aircraft." These were to be commercial off-the-shelf Cessna C208B Grand Caravans modified as ISR platforms. When operating in CT mode, they were able to launch AGM-114 Hellfire missiles from two wing-mounted pylons. The total cost of the IAC contract was just over \$42.5 million.⁷⁸ As before, Alliant Technology (since renamed ATK, Inc.) agreed to undertake the work, and the contractor's conversion efforts began in early 2008. De-

livery of the first AC-208B Combat Caravan was expected by the end of that year.⁷⁹

Basic Trainer and Light Transport Procurement

Fielding a combat capability was highly desirable, but the new air force's most immediate needs were to train pilots and rapidly move important passengers and light high-value cargo, including Iraqi currency, about the country. Fortunately, aircraft suitable for both purposes were comparatively inexpensive and readily available from active production lines in the United States. The anticipated October opening of the FTS made it especially important to take early action, and US government funds were made available for that purpose.

On 6 June 2007 AFSAC's 555th International Group issued an LO&A to provide Iraq with 12 Cessna C-172 Skyhawk basic trainer aircraft and five Cessna 208B Caravan light transports, along with 15 months' CLS and 12 months' spare parts. The Skyhawks were priced at \$330,890 each; the cost of the Caravan transports and their associated defensive systems, along with spares and support for all 17 aircraft, brought the total cost to just over \$26 million.⁸⁰ The first two Skyhawks arrived at Kirkuk on 19 October, and two more were delivered soon thereafter.⁸¹

The first King Air 350ER aircraft, outfitted as a light transport, was presented to General Barzanji in a ceremony at NAMAB on 28 December. Delivery of the remaining four ISR-equipped King Airs was to begin in April 2008.⁸²

Rotary-Wing Procurement

The 2004 helicopter purchase negotiations with Bumar, the Polish arms export conglomerate, had been a source of embarrassment to the Iraqis because of the poor quality and high cost of the equipment that Bumar had proposed (and failed) to deliver. Corruption charges had also emerged regarding that original \$400 million purchase. Bumar made a partial settlement offer in 2005 that would provide Iraq with 10 new Mi-17s, and they were delivered in early 2006. In the last few months of that year, the Iraqis reached a new understanding with Bumar to receive an additional 18 Mi-17s as final settlement of the original contract.⁸³ Four of them were delivered in early 2007, and the remaining aircraft were expected to arrive in two deliveries in late 2007 and mid-2008. In a separate FMS contract negotiated in De-

ember 2007, the US Army arranged for the Iraqis to buy an additional 22 Mi-17s, equipped for the CT mission, at a cost of \$322 million.⁸⁴

In August 2007 the DSCA informed Congress that the Iraqis were considering a \$150 million agreement to convert an additional 16 UH-1H helicopters to Huey II standards. A month later, another DSCA announcement noted that the IqAF wanted approval for a further purchase of 32 Huey II conversions; both proposals were reportedly cancelled because of cost overrun concerns.⁸⁵

Long-Range Planning

One principal challenge facing the Iraqis and CAFTT was the need to establish a realistic set of joint plans, goals, and milestones for the IqAF's future. USCENTAF had made a valuable but preliminary effort in the form of the Comparative Aircraft Study, which it completed in late 2005.⁸⁶ The IqAF had also published five-year service plans, initially in January 2005 and later in July 2006, but a lack of funds, manpower, and equipment made them both something less than realistic.⁸⁷ That said, by mid-2007 the situation was improving, and General Barzanji and CAFTT commander General Allardice were prepared to move beyond those earlier efforts.

In early June General Allardice convened a teleconference to update key USAF and US Army participants about the status of the Iraqis' training efforts and to present his vision of how they might achieve an objective force mission capability by the end of 2012. The graphic he presented arrayed eight mission capabilities against notional manpower totals for each year of the analysis. CT, training, and COIN IOCs were indicated and accompanied with explanatory notes.⁸⁸

The Coalition Air Force Transition Team Campaign Plan. By August that vision had become much more structured and specific. In what General Allardice called his "CAFTT Campaign Plan (2007–2015)," he proposed three lines of operation that would proceed in parallel in three sequential, multiyear phases: 2007–9, 2009–11, and 2011–14. Each line pursued different objectives, but all supported the overall mission of building an IqAF "capable of conducting sustained operations, focused on the COIN fight in the near-term, in order to defeat terrorism and create a stable environment, while setting the conditions for achieving air sovereignty."⁸⁹

The first line, “build, train, educate, and sustain,” was the immediate priority. It had two objectives—“organize, train, equip, and sustain air operations” and “exhibit military professionalism”—and it was already well-flagged with achieved and pending IOC dates for the schools in operation or set open in 2007, along with their projected full operational capability dates in 2008 and 2009. The second line, “conduct COIN operations,” had as its objective the ability to “conduct day/night/all-weather operations,” but it projected IOCs only for a “COIN nonkinetic capability” (January 2008) and a “COIN kinetic capability” (January 2009). The third line, “provide homeland defense,” addressed the need to “provide homeland defense capabilities.” For obvious reasons it was the least developed, with only a notional “airspace control capability” IOC projected for January 2011, the initial receipt of an air-defense-capable aircraft in 2013, and “homeland defense capability IOC” in 2014.⁹⁰

As a part of making CAFTT’s mission more widely known and appreciated, a simplified version of the campaign plan graphic was included in a brochure released later that fall.⁹¹ The plan (and its accompanying rationale) also played a central role in an article cowritten by General Allardice and published in an Air Force professional journal in December 2007.⁹²

The Iraqi Air Force Service Plan. While CAFTT was formulating its campaign plan, General Barzanjy’s headquarters staffers were revising and expanding the latest edition of their service plan; an English language version was issued on 1 July. Covering the period 2007–12, it set mission priorities, identified assumptions, and acknowledged shortfalls. The plan also contained detailed annexes assessing current and future capabilities, growth expectations for the following five years, and an analysis of the relative strengths of its likely adversaries, of which Iran was identified as the most serious. Although the plan projected optimistic manpower growth and equipment acquisitions over the five-year period—in 2012 the air force was to have 10,000 airmen and 532 aircraft—it included neither budget figures nor programmed expenditures.⁹³

Some of the differences between the two plans were instructive. For example, the CAFTT campaign plan stressed the need to expand the IqAF in measured, sequential steps. From the Americans’ perspective, training, support, and infrastructure were all equally essential requirements for creating and sustaining combat capability. For the Iraqis, achieving combat capability in the shortest possible time was

more important. General Barzanjy noted in the plan's introduction that "we must fight insurgency as our main role. We will continue to grow our capability to support the joint forces with unique air functions such as surveillance flights, air movement of ground forces, and ground attack of enemy positions. . . . Concurrent with our primary mission, we must focus on training."⁹⁴

Similarly, the Iraqis' limitation list gave first importance to a lack of close air support aircraft. The second entry noted that the air force could not "provide air defense duties because of [the] unavailability of air defense aircrafts [*sic*], surveillance systems and radars."⁹⁵

These differences in perspective influenced the interaction between USAF Airmen-advisors and Iraqi airmen in disguised, and sometimes less subtle, ways. The Americans were trying to build a new air force. The Iraqis were trying to fight a war. General Allardice referenced this tension in his December USAF journal article. "As the IqAF develops operational capacity, it becomes increasingly difficult to manage the balance between continuing training and conducting real-real world operational missions," the CAFTT commander wrote.⁹⁶ It was a balancing act that his Airmen-advisors—and their successors—would have to perform every day.

Notes

1. "Air Education and Training Command," fact sheet, 22 March 2009. http://www.af.mil/information/factsheets/factsheet_print.asp?fsID=138&page=1.

2. The IqAF had had its own officer-producing academy during the Ba'athist era, and it was anticipated that the IqAF would eventually seek to reconstitute that facility.

3. HQ CAFTT, "Training School Operational Requirements Document (Draft Version 1)," report (Randolph AFB, TX: AETC, 30 October 2006).

4. HQ CAFTT, "Iraqi Air Force Training School, Concept of Operations (CONOPS) (Draft Version 2)," report (Randolph AFB, TX: Headquarters AETC, 10 November 2006).

5. *Ibid.* USAF advisors were to assist in training fixed-wing students; CAFTT expected that rotary-wing training would be conducted by IqAF and US Army instructors.

6. Col Philip M. Senna, AETC/A3R, briefing, subject: IqAF Training School (IqAFTS) AETC Support Update, 22 November 2006; and Senna to AETC/A2&3 and AETC/IA, memorandum, subject: Coalition Air Force Transition Team (CAFTT) in-Country Visit, 22 November 2006.

7. AFOATS was redesignated as the Jeanne M. Holm Officer Accession and Citizen Development Center on 2 June 2008.

8. Christine Harrison, "AU Provides Curriculum, Manpower for Iraqi Officer Training," *Wright Stuff* 2, no. 14 (20 July 2007), <http://www.maxwell.af.mil/au/aunews/archive/0214/ArticlesAUprovidescurriculum.html>.

9. The oath states, "I am a patriot. I voluntarily serve in the cause of freedom to fight oppression for my country, Iraq. I am prepared to give my life for this ideal. I will never concede defeat. I will never do anything for pleasure, profit, or personal safety that will disgrace my uniform, my unit, or my country. I will always act with great honor and comply with the Geneva Convention and the laws of war. I will treat others with dignity and respect at all times. Of my own free will I voluntarily choose the path of a patriot. I am dedicated to establishing a united Iraq, free of tyranny and oppression for its entire people." Quoted in HQ AFOATS, "IqAF Officer Training School: IqAF Officer Training," report (Maxwell AFB, AL: AFOATS, January 2007).

10. Kevin Lynn, briefing, subject: IqAF Training School (IqAFTS) OTS and TOP-OFF Update, ca. January 2007.

11. Maj Dale Kolomaznik, Maj Scott Bergren, and Capt Mike Powell, interview with the author, 9 April 2008.

12. Ibid.

13. Ibid.

14. Maj Gen-select Robert R. Allardice and Maj Kyle "Brad" Head, "Coalition Air Force Transition Team: Rebuilding Iraq's Air Force," *Air and Space Power Journal* 21, no. 4 (Winter 2007): 5-14.

15. Susan Griggs, "Back to the Future: Keesler Prepares to Train Iraqi Air Traffic Controllers," *Keesler News* [Keesler AFB, MS], 31 May 2007, 4.

16. Dwyer Stringer, AFSATS/XF, interview with the author, 22 July 2009.

17. The October 2006 briefing contained 33 slides; only 1 focused on Afghanistan. It reported that General Padilla was leading a team tasked to assess the status of the Afghanistan air corps but provided no additional details. General Padilla was the presenter for the slide's accompanying remarks. North, briefing, subject: Coalition Air Force Transition Team Update (Version 2.1).

18. North, briefing, subject: Coalition Air Force Transition Team: Building Airpower Capacity in Iraq and Afghanistan (Version 1.4), ca. 10 January 2007. (Information extracted is not FOUO.)

19. IMAR's incoming January class consisted of 300 cadets. Another source reported that the induction ceremony "formally recognized the beginning of formal air force training at IMAR" and put the number of IqAF cadets at 63. "Iraq's Future Officers," *Advisor* 4, no. 4 (27 January 2007): 8.

20. See SFC Kimberly A. Green, "Air Force Squadron 70 Seeks to Secure Iraq," *Advisor* 4, no. 8 (24 February 2007): 5.

21. North, briefing, subject: Coalition Air Force Transition Team, slide 25. (Information extracted is not FOUO.)

22. As of 30 September 2006, 307 C-130s were in the active inventory, of which 245 were more than 24 years old. The average age of the fleet was 33.4 years. "Equipment, 2007 USAF Almanac," *Air Force Magazine* 90, no. 5 (May 2007): 63.

23. The ALE-47/AAR-47 missile approach warning system combined the ALE-47, a suite of infrared sensors mounted at various points on the aircraft to detect incoming rocket motor signatures, with the AAR-47, which automatically triggers decoy flares to misdirect the missile. The ALE/ALR-47 system is suitable for helicopters and transport aircraft. It has been installed on DOD aircraft as a standard defensive system since the late 1990s. Federation of American Scientists, "AN/AAR-47 Missile Approach Warning System," 8 January 2000, <http://www.fas.org/man/dod-101/sys/ac/equip/an-aar-47.htm>.

24. North, briefing, subject: Coalition Air Force Transition Team, slide 30. (Info extracted is not FOUO.)

25. *Ibid.*, slide 32. (Info extracted is not FOUO.)

26. *Ibid.*, slide 31. (Info extracted is not FOUO.)

27. Arguments for enlarging the USAF's advisory capabilities had been made in various forums in recent years. See, for example, Downs, "Unconventional Air-power," 20–25; Lt Col Norman J. Brozenick, "Another Way to Fight: Combat Aviation Advisory Missions," research report (Maxwell AFB, AL: Air University, June 2002); Maj Ioannis Koskinas, "The Combat Aviation Advisory Mission in Iraq," *Air and Space Power Journal* 19, no. 3 (Fall 2005): 107–8; and Alan Vick, *Air Power in the New Counterinsurgency Era: the Strategic Importance of USAF Advisory and Assistance Missions* (Santa Monica, CA: RAND Corp., 2006).

28. Brig Gen David Gillett, Air Combat Command (ACC)/A4, to Brig Gen Mark T. Matthews, ACC/A5 et al., e-mail, subject: Coalition AF Transition Team (Iraq and Afghanistan), 10 January 2007.

29. Mr. Lemkin was named to head SAF/IA in 2003. A career naval officer prior to his retirement from active duty in 1997, he had commanded several nuclear submarines, including the USS *Michigan* (SSBN-727). After returning to civilian life, Mr. Lemkin held several executive and senior advisor positions in the private sector before becoming principal deputy assistant secretary of the Air Force for financial management in 2002. "Bruce S. Lemkin," biography, February 2010, http://www.af.mil/information/bios/bio_print.asp?bioID=6179&page=1.

30. Bruce S. Lemkin, secretary of the Air Force (SAF)/IA, to chief of staff, US Air Force et al., "Increasing USAF Role in Building Iraq Air Force (IqAF) and Afghanistan National Army Air Corps (ANAAC)," staff summary sheet, 20 February 2007.

31. Bruce S. Lemkin and Col Sharon Holmes, SAF/IARM, briefing, subject: Building Air Forces in Iraq and Afghanistan: Integrated Product Team Interim Report, ca. 9 February 2007.

32. The 28,000-acre facility opened as Camp Bullis in 1994. Much of its infrastructure was dedicated to convoy escort training; it was renamed to honor two Airmen who had lost their lives in Iraq while performing convoy escort duties in October 2005. Donna Miles, "Camp Bullis Provides Example in Joint, Cooperative Training," *American Forces Press Service*, 17 February 2005, <http://www.defense.gov/news/newsarticle.aspx?id=25868>; James Coburn, "Camp Dedication Honors Two Airmen," *Talespinner* [Lackland AFB, TX], 17 October 2005, <http://www.aetc.af.mil/News/ArticleDisplay/tabid/136/Article/263509/camp-dedication-honors-two-airmen.aspx>; and TSgt Mike Hammond, "Combat Convoy—The Air Force Targets Tactical Transportation So the Enemy Has Less Chance of Doing So," *Air Force Print News*, accessed 4 July 2010, <http://www.torch.aetc.af.mil/news/story.asp?id=123065085>.

33. Lemkin and Holmes, briefing, subject: Interim Report, slide 9.

34. *Ibid.*, slides 10–12.

35. *Ibid.*, slides 13–18.

36. *Ibid.*

37. *Ibid.*, slide 21.

38. *Ibid.*, slides 19–20.

39. Inexplicably, the staff summary routing sheet did not include ACC as a coordinating organization, and the package was presented to the CSAF in late February

or early March without formal COMACC concurrence. The ACC commander's staff subsequently assured him that there were no "show-stoppers" involved, and he initialed the package without objection on 19 March. Maj Gen-select Douglas L. Raaberg, ACC/A3, to ACC/CC et al., e-mail, subject: PKG-DS700469: Increasing USAF Role in Building Iraqi Air Force (IqAF) and Afghanistan National Army Air Corps (ANAAC), 19 March 2007; and 1st Lt Paul K. McKinney III, ACC/CCA, to Lt Col Robert C. Troisi, ACC/A3X et al., e-mail, subject: PKG-DS700469: Increasing USAF Role in Building Iraqi Air Force (IqAF) and Afghanistan National Army Air Corps (ANAAC), 19 March 2007.

40. Lemkin, "Increasing USAF Role." The available record does not show exactly when the CSAF received or answered SAF/IA's three propositions, but the fact that he approved them is confirmed in the slides prepared for the IPT's final report briefing. SAF/IA sent the slides out to the IPT membership in the late afternoon of 7 March.

41. Maj Leif Eckholm, "Background Paper on Iraq/Afghanistan Pre-Deployment Training," ca. 15 February 2007.

42. Lemkin and Holmes, briefing, subject: Interim Report, slides 19–20.

43. Eckholm, "Background Paper on Increased USAF Personnel Requirements in Iraq and Afghanistan," ca. 15 February 2007.

44. Lemkin, "Increasing USAF Role."

45. Message, 011822Z Feb 07, COMCENTAF to HQ USAF et al., "CENTAF Air Advisory Division," 1 February 2007.

46. Lemkin and Holmes, briefing, subject: Building Air Forces in Iraq and Afghanistan: Integrated Product Team Final Report, ca. 9 March 2007, slide 25.

47. Ibid.

48. For a description of the "Bridge Course," see Patrick Wilson, "A Crash Course in Combat," *Air Force Times*, 27 November 2007, http://www.airforcetimes.com/news/2007/11/airforce_combat_course_071126w/.

49. Lemkin and Holmes, briefing, subject: Final Report, slides 9–11.

50. Ibid., slides 12–14. For reporting on English language instruction at NAMAB in early 2007, see SSgt Zachary Wilson, "Overcoming Language Barrier First Step for Iraq's New Air Force Officers," *Advisor* 4, no. 7 (17 February 2007): 5 and 7; and SFC Ronda Jordan, "English Language Training Takes Flight," *Advisor* 4, no. 15 (14 April 2007): 9.

51. Lemkin and Holmes, briefing, subject: Final Report, slides 15–19.

52. Ibid., slides 20–21.

53. Ibid., slides 22–23.

54. Ibid., slide 25.

55. Maj Jeff Fallesen, 9AF/DDS, to 9AF/A1 et al., e-mail, subject: CENTAF Iraqi Air Force/ANAAC Development Integrated Product Team Kickoff Meeting, 4 May 2007. [9AF files]

56. HQ 9AF, briefing, subject: CENTAF Partner Nation Airpower Development Standing Integrated Product Team (Version 1.0), 7 May 2007. [9AF Files] (Information extracted is not FOUO.)

57. Ibid., slides 25 and 27. (Info extracted is not FOUO.)

58. HQ ACC, Special Order (SO) GB-82, 29 March 2007. See also Erik Holmes, "New Name for Unit Building Iraqi Air Force," *Air Force Times*, 9 April 2007, <http://aimpoints.hq.af.mil/display.cfm?id=17877&printer=yes>.

59. Ibid.

60. General Allardice's official title was Air Force element commander, CAFFT-Iraq, HQ 9 AETF, SO G-08-05, 8 November 2007. [nb: The retroactive date is correct.]

61. "Major General Robert R. Allardice," biography, March 2008, http://www.af.mil/bios/bio_print.asp?bioID=7912&page=1.

62. General Hoog would continue to serve as the MNF-I ACCE for another four months; he was replaced in July by Maj Gen David Edgington.

63. "Special Delivery," *Advisor* 4, no. 8 (24 February 2007): 7.

64. "Huey II," *Advisor* 4, no. 9 (3 March 2007): 11; MC2 Elisandro Diaz, "Iraqi Air Force Celebrates 76 years," *Advisor* 4, no. 17 (28 April 2007): 4 and 5; and "First Five Iraqi Huey IIs Delivered," *Air International*, April 2007, 8.

65. Jordan, "Iraqi Air Force Opens Training Center," *Advisor* 4, no. 15 (14 April 2007): 6; and Claudia Parsons, "Iraqi Air Force Shows Off Rebuilt Huey Helicopters," Reuters, 3 March 2007, <http://www.reuters.com/article/idUSPAR347933>.

66. Erik Holmes, "Iraqis Fly First Helicopter Training Sortie," *Air Force Times*, 11 April 2007, http://www.airforcetimes.com/news/2007/04/airforce_iraqi_airforce_070411/.

67. Diaz, "Helicopters Land in Baghdad," *Advisor* 4, no. 18 (5 May 2007): 3–4; Diaz, "Final Huey II Shipment Arrives at BIAF," *Advisor* 4, no. 27 (4 August 2007): 9–10; and SrA Christie Putz, "Air Force Helps Keep Country's Lifelines Flowing," *Advisor* 4, no. 22 (19 August 2007): 8 and 10.

68. TSgt Kevin Williams, "Iraqi Air Force Takes Flight with Help from U.S. Airmen," Air Force Print News, 29 March 2007, http://www.af.mil/news/story_print.asp?id=123046584.

69. Diaz, "Flight Surgeons Go Hi-Flying," *Advisor* 4, no. 4 (27 January 2007): 3 and 5; and Diaz, "Squadron 23 Takes to the Skies," *Advisor* 4, no. 6 (10 February 2008): 3 and 6.

70. Cpl Jess Kent, "Iraqi Air Force Performs First MEDEVAC," 22 March 2007, <http://www.amc.af.mil/news/story.asp?id=123046014>.

71. SPC Lajuan Hickman, "CAFTT Preparing Iraqi Air Force," 13 March 2007, http://www.usf-iraq.com/?option=com_content&task=view&id=10574&Itemid=128; and Zehner, briefing, slides 7 and 8.

72. "DoD Bloggers Roundtable with Brigadier General Robert Allardice, Commanding General, Coalition Air Force Transition Team," transcript, 6 September 2007, <http://www.defense.gov/home/blog/docs/Allardice%20transcript.pdf>.

73. Col Greg Zehner, CAFTT/A5, briefing, subject: Building a Credible Iraqi Air Force: A History, 25 August 2007, slides 7 and 8.

74. Maj Jeremy Brown, "CAFTT Counterinsurgency (COIN) Aircraft (A/C) Plan," BBB, 25 March 2007.

75. "Future Iraqi AF Development Plans," *AirForces Monthly*, April 2007, 21.

76. 337 AESG, "Iraq Counterinsurgency (COIN) Aircraft, solicitation no. FA8617-07-R-0001," solicitation, 3 May 2007.

77. "US Air Force Starts Bidding for Iraqi Counter-Insurgency Aircraft Fleet," *Flight International*, 4 May 2007, <http://www.flightglobal.com/articles/article.aspx?liArticleID=213671&PrinterFriendly=true>. The T-6A Texan II Primary Trainer entered USAF service in May 2000. The DOD planned to acquire up to 454 aircraft by FY 2010; these were to be apportioned among the training commands of both the USAF and the US Navy. "T-6A Texan II," fact sheet, accessed 6 July 2010, http://www.af.mil/information/factsheets/factsheet_print.asp?fsID=124&page=1.

78. Nancy P. Donnell-Ivy, "B7-D-SAR," LO&A, 11 December 2007. [AFSAC files]

79. ATK, Inc., "ATK Delivers Third AC-208 'Combat Caravan' Aircraft to Iraqi Air Force," press release, 16 November 2009.

80. Tinka, "B7-D-SAG." [AFSAC files]

81. SSgt Jared Marquis, "Wright-Patt Plays a Part in Training Future Iraqi Pilots," Air Force Print News, accessed 16 July 2008, http://www.wpafb.af.mil/news/story_print.asp?id=123074106.

82. DSCA, "Iraqi Air Force Receives New Aircraft," press release, 29 December 2007, http://www.dsca.mil/PressReleases/by-date/2008/122907_Iraqi-Air-Force-Aircraft.html; and Frost, "Taking over the Skies," 9–10.

83. Few details of the settlement were announced, perhaps because of the embarrassment caused by the initial contract awards' questionable circumstances and poor results. See James Glanz, "Rebuilding Iraq's Air Force a Challenge for U.S. Trainers," *New York Times*, 5 February 2007, <http://www.nytimes.com/2007/02/05/world/africa/05iht-airforce.4474337.html>.

84. The Army's sole-source award to Arinc, Inc., later became plagued with delays, cost overruns, and other problems. Sharon Weinberger, "Helo Holdup: Problems Dog U.S. Decision to Buy Russian Helicopters for Iraq," *Defense Technology International*, June 2009, 40 and 42.

85. "Iraqi AF Seeks 32 More Huey IIs, Opens Flying Training School," *AirForces Monthly*, November 2007, 7; DSCA, "FMS: Iraq Requests Upgrade to Huey II Helicopter Configuration," press release, 17 August 2007, http://www.deagel.com/news/FMS-Iraq-Requests-Upgrade-to-Huey-II-Helicopter-Configuration_n000002598.aspx; and D. J. Elliott, "Iraqi Security Forces Order of Battle: November 2007 Update," *Long War Journal*, 8 November 2007, http://longwarjournal.org/archives/2007/11/iraqi_security_force_5.php#ixzz0e7duLOJG.

86. HQ USCENTAF, "Comparative Aircraft Study." (Information used is not FOUO.)

87. See HQ Iraqi AF, "Iraqi Air Force Capability," 11; and HQ IqAF, "Draft Service Plan," 1-1.

88. Allardice, briefing, subject: VTC on IqAF Training, 6 June 2007. (Info extracted is not FOUO.)

89. Allardice, briefing, subject: VTC on IqAF Training, 1 August 2007. (Info extracted is not FOUO.)

90. *Ibid.*, slide 4. [nb: This particular slide is labeled "Ver. 4.1, 29 Jul 07."] (Info extracted is not FOUO.)

91. HQ CAFTT, "Coalition Air Force Transition Team." See also North, briefing, subject: Building Airpower Capacity, slide 9.

92. Allardice and Head, "Coalition Air Force," 5–14.

93. HQ IqAF, "Service Plan." [CAFTT files]

94. *Ibid.*, 3.

95. *Ibid.*, 10.

96. Allardice and Head, "Coalition Air Force," 9.

Chapter 9

The Foundation Has Been Laid

By the second half of 2007, many of the pieces needed for the IqAF to become an effective COIN air force were starting to come together. Its officer accession programs, technical training courses, and basic training facilities produced their first trickle of graduates. Those production flows would become a steady stream over the next 12 months, as would the output of the flying training school after it opened later that year.

Operating tempos also increased. The ISR aircraft of Squadron 3 began conducting coordinated operations with Squadron 2's helicopters in July, and that success provided the Iraqi airmen with a significant improvement in morale at an especially opportune time. The USAF had committed to fielding a substantially larger number of Airmen-advisors and to training them better before they deployed. Those processes, too, were beginning to accelerate.

However, some elements were still missing. The IqAF's near-term and midterm mission was to conduct a COIN campaign, but (among other things) it lacked the intellectual infrastructure—a working doctrine—to shape that campaign. Oddly enough, the Iraqis' American mentors did not have one either, and it was only in the fall of 2007 that the USAF finally addressed that long-standing need.

In the meantime, the halting, tentative nature of the coalition's progress in Iraq—and the accompanying cost in blood and treasure—had drawn increasing notice within the US electorate and thus among its congressional representatives. In the late spring of 2007, Congress created an independent commission to assess the state of Iraq's security forces, including its air force. That group of experts spent most of the summer in Iraq.

Form Belatedly Follows Function: USAF Doctrine Updates

In 2004 two thoughtful airpower analysts, James S. Corum and Wray R. Johnson, considered the status of COIN doctrine in the US military and in the USAF in particular. They found it to be wanting.

Considering that the US military has extensive experience in using airpower against insurgents, and that the United States will almost certainly be involved in fighting insurgents and terrorists and will no doubt assist other nations in their own fights against irregular opponents in the future, the lack of attention in military colleges and in doctrine regarding this subject is scandalous. The US Air Force, in particular, has tended to ignore and downplay air operations in small wars in its education system and in its doctrine.¹

If the USAF's Airmen-advisors were to succeed in helping the Iraqis build an effective COIN air force, then they would need to have a solid grounding in COIN airpower theory and its applications—if only to know how *not* to use airpower in such a campaign. Nonetheless, no officially sanctioned body of doctrine was applicable to COIN operations for most of the first four years of the USAF's mentoring efforts in Iraq. Outside AFSOC circles, the last time that subject had received systematic thought was during the Vietnam War.²

This neglect was finally addressed with the publication of Air Force Doctrine Document (AFDD) 2-3, *Irregular Warfare*, on 1 August 2007. The doctrine defined irregular war (IW) as “a violent struggle among state and non-state actors for legitimacy and influence. . . . IW favors indirect approaches . . . in order to erode an adversary's power, influence, and will.”³ One of the benefits of the new doctrine lay in its ability to clarify “what effects airpower and space power can and should have, leading to [selection of] the types of people and training needed for COIN,” along with the manner of weaponry best suited for that form of conflict.⁴ Although it might take time for the new doctrine to gain traction elsewhere in the Air Force, the need was already quite clear to the CAFTT commander. “Given that their role involves helping the IqAF [to] build an effective COIN force,” General Allardice wrote in the fall of 2007, “advisors must know and understand the general principles and specific airpower applications in a COIN environment.”⁵

In mid-September, the Air Force Doctrine Development and Education Center supplemented AFDD 2-3 with a significantly revised edition of AFDD 2-3.1, *Foreign Internal Defense*. Replacing an edition published in May 2004, it described the USAF's FID effort as “a key Air Force contribution to US support for COIN operations, combating terrorism, and counter-narcotics.”⁶ The new guidance noted that “FID efforts are most successful when they preclude the need to deploy large numbers of US military personnel,” given that the resulting

logistic (and cultural) footprint tended to be counterproductive.⁷ It also acknowledged, if somewhat obliquely, the difficulties involved in trying to balance a systematic, evolutionary approach to force construction against the urgent demands of an ongoing COIN campaign, as was the case in Iraq. The doctrine stated that “commanders should seek opportunities to elevate Air Force training and advisory efforts to higher levels of [host nation] military leadership and address such issues as basic air force infrastructure, organization, training, command and control, logistics, and procurement processes.”⁸

The Last Schoolhouse Comes Online

IqAF schools had made considerable progress since the beginning of the year. The first AFTS class began at Taji in mid-April, and the first students entered the initial offering of the maintenance supervisor course that same week. The first technical training courses began the following month, as did basic enlisted training. The enlisted students graduated in mid-June, and the first IqAF officer course graduates received their commissions a week later. The interim Air Force Academy held its first graduation in late July, and by mid-August the 370 Expeditionary Training Squadron could boast of having graduated over 100 Iraqi officers and airmen.⁹

On 12 September General Barzanjy attended the formal dedication of the AFTS at its new quarters—once a Ba’ath Party headquarters building previously used by Saddam Hussein’s Republican Guard. Although “the Alamo” had served its purpose, the new facilities were better suited for technical training and future expansion. The dedication ceremony also honored the graduation and commissioning of 11 new officers; three of them would receive flight training at Kirkuk.¹⁰

Another major educational milestone followed when the FTS was formally opened for training operations at Camp Taji on 1 October 2007. The Airmen of the 52nd Expeditionary Flying Training Squadron, under the command of Lt Col Mark Bennett, had spent months in preparation for the event. That morning four student pilots participated in the school’s first training sortie. To mark the occasion, each took a brief turn at the controls of their Cessna Caravan—one of three previously delivered for use as interim ISR platforms but doubling as a light transport.¹¹ Three weeks later, the FTS received its first two Cessna 172 Skyhawk basic trainers. Two more arrived before

year's end; the other 14 would follow as soon as they could be delivered and reassembled. In November the FTS graduated its first pilots. The last critical piece of the IqAF's education establishment had been put in place.¹²

September Situation Reports

In September the USCENTAF commander provided an update on Iraq and Afghanistan to USAF leaders assembled in Washington, DC, for the 2007 Global Air Chiefs Conference. General North told the group that his CAFTT personnel complement stood at 336 and was projected to reach 419 by the midsummer of 2008. The IqAF's equipment situation was improving: 45 aircraft were on hand, and 15 more were to be delivered by year's end. Although the IqAF's overall manning rate was low (32 percent), the pilot pipeline was beginning to fill. General North expected that the air force would be meeting its annual quota of 130 pilots by June. Operational capabilities had also continued to expand: sortie rates for the ISR fleet were approaching 30 per week; the three airlifters were conducting over 15 sorties per week; and the battlefield mobility helicopters were logging over 60 sorties per week.¹³

The USCENTAF commander summarized the update by noting that his air advisor operations were "a major element of the Combatant Commander's strategy for long-term theater posturing," but he added a cautionary note. "While flexibility is the key to airpower," said General North, "patience is the key to developing it."¹⁴

The Jones Commission

General North's progress report was largely encouraging, and the audience was both familiar with the topic and supportive of the presenter's intentions. That same month, a very different team delivered a significantly longer report of far greater consequence to a much more skeptical audience: the Congress of the United States.

On 25 May Pres. George W. Bush signed new legislation creating a commission "made up of individuals with credentials and expertise in military and law enforcement matters to conduct an independent assessment of the Iraqi security forces (ISF)."¹⁵ Chaired by retired Marine Corps general James J. Jones, Jr., and composed of 20 members,

the “Jones Commission” took on a four-part assignment: gauge the readiness of the ISF to (1) take responsibility for their country’s territorial integrity; (2) deny safe haven to international terrorists; (3) bring greater security to Iraq within the next 12 to 18 months; and (4) achieve national reconciliation by ending sectarian violence.¹⁶ The commission also reviewed the ISF’s capabilities in some key functional areas, including training, equipage, command and control, intelligence, and logistics. Eight key congressional committees were to receive the report within 120 days.¹⁷

The commissioners spent three weeks in Iraq, visiting more than 70 sites and interviewing over 150 people, including senior Iraqi military and civilian leaders, along with US, coalition, and NATO officials. More specifically, those Iraqi leaders included “virtually all of the Iraqi Air Force general officers” and many field and company grade air force officers, warrant officers, and enlisted airmen. The inquiry was thorough: one commission member flew with Iraqi aircrews on four different missions in four different aircraft types.¹⁸

Overall, the commission found that the ISF has “made uneven progress, but that there should be increasing improvement” over the next 12 to 18 months. The Ministry of Defense was “one of the better functioning agencies of the Iraqi government,” but its ability to execute a budget “requires significant improvement.” Moreover, the ministry’s “bureaucratic inexperience, excessive layering, and overcentralization hamper its capacity . . . [and] reduce the operational readiness, capability, and effectiveness of the Iraqi military.”¹⁹ Three of the commission’s 50 findings singled out the IqAF.

Commission Finding Number 21 noted that the IqAF had a recruiting and retention problem. The commissioners recommended that “together with its Coalition partners, the [IqAF] must increase the quality of its recruits and the capacity of current and planned training programs, while also increasing the manpower authorizations to compensate for chronic absenteeism. Emphasis on the value of training must be relentless” (emphasis in original).²⁰

The real issue was that while the number of inductees was satisfactory, their abilities were often inadequate. Much of the problem lay in the fact that air forces are inherently technical and that young men willing to consider air force careers tend to be of middle class origins. Unfortunately, much of Iraq’s middle class had fled the country. Many of those left behind lacked the essential twin traits of a potential airman: technical inclination and educability. But there was an additional,

underlying subtlety. The new Iraq was to be more democratic than the old, and the commission was emphatic on this point. It declared that the air force's future depended upon "recruiting quality candidates who can absorb high standards of training and also adapt to a new culture of responsibility and choice unknown during the Saddam era." Such candidates would be harder to find, and thus only "relentless" search efforts could suffice.²¹

Finding Number 22 concluded that, while aircraft procurement had been adequate, sustainment lagged far behind. The commission urged the coalition to act: "[MNSTC-I] must redouble its efforts to inculcate the value of quality maintenance and support into the culture of the MoD in general, and of the [IqAF] in particular" (emphasis in original).²²

The commissioners noted that "the enthusiasm to buy more and better platforms far exceeds the desire to purchase spare parts or perform maintenance." The IqAF's apparent perception that contract logistics support was "a ruse to get Iraqis to give their money to US firms" was equally troublesome. Maintenance training and the timely provision of spares and supplies in sufficient quantity are the "very foundation upon which a capable new IqAF" must be built, the commissioners said, and "even with success in this area, the [IqAF] will likely require Coalition assistance for the next two or three years."²³

Lastly, Finding Number 23 acknowledged that, even with its late start (as compared to the Iraqi army), the IqAF appeared to be on the right track and moving ahead: "Given its good progress to date, the new [IqAF] should stay its present course of developing a [COIN] air force with a view toward establishing quality operations and maintenance capability for integration into the joint fight. As these skills are refined, reliance on Coalition support can diminish" (emphasis in original).²⁴

The commissioners noted that although the air force's "overall capacity is still very small . . . and it has almost no lethal capability," the defense ministry's procurement program was addressing the problem. Once some easily maintained close support aircraft had been added to the existing mix, "a balanced air force will emerge fully capable of supporting the military's [COIN] mission." But a balanced air force was not enough. The IqAF's command and control structure was still largely undeveloped and lacked "a demonstrable ability to operate jointly" with the Iraqi army forces that it was supposed to support. The commissioners attributed at least some of that lack to

“traditional independence and cultural habits” which tempted air force members to think “primarily of their own family or tribe.” The report noted, perhaps somewhat primly, that the commissioners had “discerned some faint progress in this area, but a considerable distance needs to be traveled.”²⁵

The commission’s overall conclusion was that the IqAF was well designed as a COIN air force but that its “relatively late establishment hampers its ability” to support ground operations. The difficulty in finding suitable airmen and “the inclination to value force size and acquisition over operational effectiveness” were continuing challenges, but, taken as a whole, the service was “progressing at a promising rate.”²⁶

The Situation at the End of 2007

In its March 2008 report to Congress, the DOD summarized the IqAF’s accomplishments during the previous year.²⁷ By the end of December 2007, air force personnel strength had risen to about 1,300, of which 146 were pilots. The Iraqis had more than 56 aircraft on hand and 41 more on order. The capacity for producing technicians had risen to 960 graduates per year, and annual pilot production capacity had increased to 135. The IqAF commissioned 74 officers in December 2007, and the AFTS graduated 116 warrant officers—its first class—in January 2008.

Increases in trained personnel and the fielding of better aircraft meant more operations. In January 2007 the Iraqis had flown a total of 120 sorties; in December of that year, they flew 1,205. Most noteworthy was the IqAF’s growing ability to “get in the fight.” With ever-increasing frequency, Iraqis were flying patrols over oil pipelines, highways, and border checkpoints; reporting suspect activities to ground forces; and improving the Iraqi government’s standing by “showing the flag” in an especially effective way. On 12–14 November the air force demonstrated its ability to conduct ISR and nonkinetic counterinsurgency missions in Exercise First Star, the first such event entirely planned and executed by Iraqis since the fall of Saddam. The exercise provided proof that the service could exert effective operational command and control over its forces. Slowly, but surely, the IqAF was regaining its status as a modern air force.

Notes

1. James S. Corum and Wray R. Johnson, *Airpower in Small Wars: Fighting Insurgents and Terrorists*, Modern War Studies (Lawrence: University Press of Kansas, 2003), 4.
2. Lt Col David J. Dean, *The Air Force Role in Low-Intensity Conflict* (Maxwell AFB, AL: Air University Press, October 1986); and Maj Kenneth Beebe, "The Air Force's Missing Doctrine," *Air and Space Power Journal* 20, no. 1 (Spring 2006): 27–34.
3. AFDD 2-3, *Irregular Warfare*, 1 August 2007, <https://www.fas.org/irp/doddor/usaf/afdd2-3.pdf> 1.
4. Beebe, "Air Force's Missing Doctrine," 30.
5. Allardice and Head, "Coalition Air Force," 12.
6. AFDD 2-3.1, *Foreign Internal Defense*, 15 September 2007, http://www.dtic.mil/dosctrine/jel/service_pubs/afdd2_3_1.pdf.
7. *Ibid.*, 1.
8. *Ibid.*, 58.
9. Zehner, briefing; and SFC Nicholas Connor, 15th Sustainment Brig, "New CAFTT Squadron; Training the Iraqi Air Force," Defense Video and Imagery Distribution Center, 11 August 2007, http://www.dvidshub.net/?script=news/news_show.php&id=11763.
10. Maj Edwina Walton, "Symbol of Tyranny Replaced with School for Iraq Air Force," *Air Force News*, 14 September 2007, http://www.af/mil/news/story_print.asp?id=123068109.
11. SSgt Jared Marquis, "Iraqi Air Force Flying Training School Opens at Kirkuk," *Air Force News*, 5 October 2007, http://balad.afnews.af.mil/news/story_print.asp?id=123070092; and "Iraqi AF Seeks," 7.
12. "News in Brief: Up to 28 Cessna 172s Ordered for Iraqi Air Force," *AirForces Monthly*, September 2007, 9; SSgt Trevor Tiernan, "Airmen Help Establish Iraqi Air Force," Air Force Press News, 26 November 2007; and Lauren Frayer, "U.S. Opens Flight School to Help Iraqis Get Airborne Again," *Aim Points*, 3 December 2007, <http://www.aimpoints.hq.af.mil/display.cfm?id=22755@printer=yes>.
13. North, briefing, subject: Building Airpower Capacity.
14. *Ibid.*, slide 16.
15. Gen James L. Jones, USMC, retired, chairman, *Report of the Independent Commission on the Security Forces of Iraq* (Washington, DC: Center for Strategic and International Studies; Independent Commission on the Security Forces of Iraq, 6 September 2007), 1.
16. General Jones entered the US Marine Corps in 1967. On 1 July 1999 he became the Corps's 32nd commandant; in January 2003, General Jones was appointed commander of US European Command. After retiring from active duty in February 2007, he served the US secretary of state as special envoy for Middle East security. On 20 January 2009 General Jones was appointed US national security advisor by newly inaugurated president Barack H. Obama. "James L. Jones," *Defense.gov*, accessed 8 July 2010, <http://www.defense.gov/Bios/BiographyDetail.aspx?BiographyID=66>.
17. "Report of the Independent Commission on the Security Forces of Iraq," 6 September 2007, <http://media.csis.org/isf.pdf>.
18. *Ibid.*, 74.
19. *Ibid.*, 9.
20. *Ibid.*, 15.

21. Ibid., 75.
22. Ibid., 15.
23. Ibid., 76.
24. Ibid., 15.
25. Ibid., 77.
26. Ibid.
27. “Measuring Stability and Security in Iraq,” *DefenseLink*, March 2008, <http://defenselink.mil/pubs/Pdfs/Master%20%20Mar08%20-%20final%signed.pdf>.

Chapter 10

Conclusion

The commitment to assist the Iraqis in reconstituting their air force was made without visible, substantive USAF deliberation in January 2004; the handful of Airmen-advisors appointed to perform that task struggled on thereafter without meaningful support from the USAF's senior leadership. It was not until five exceptionally dedicated Airmen—four Americans and an Iraqi—died in an aircraft accident in Diyala Province on 30 May 2005 that high-level attention was finally paid to the complex, expensive, and difficult task that the USAF had accepted almost absentmindedly 16 months earlier. Even with that high level of attention—and a considerable investment of money and effort—it still took the better part of another two years to begin to put matters right. That, in a nutshell, is the story of the USAF's performance in its role as the IqAF's chief advisor-instructor and supplier before the latter part of 2007.

Any number of explanations account for why events played out the way they did. The Iraq War was largely a ground war, and the principal decision makers in that theater were either senior Army officers or civilian officials working to support them. By their nature, neither group contained very many airpower advocates. Even MNSTC-I, the coalition arm nominally responsible for rebuilding the ISFs' capabilities, was disinclined to commit resources for Iraqi aviation. One observer noted that "out of a list of 184 MNSTC-I funding priorities for the Iraqi military in 2006, the highest priority IqAF item was [ranked at] 171st."¹

Surely the Iraqis must also take responsibility for not fully appreciating the contributions that a properly manned and equipped air force could bring to their government's COIN operations—at least, not until well after the need to undertake such operations had become apparent. The failure of the Iraqis to make an earlier, more effective effort to restore their air force is curious, given the many years of loyal service that the IqAF had previously provided to the state. But the most curious neglect of all is the failure of the USAF, the world's greatest air force, to effectively tutor and support the fledgling IqAF until the former was shocked and embarrassed into doing so. Many observers have noted the USAF's institutional reluctance to engage in COIN warfare and FID operations, and it is at least suggestive

of that reluctance that the USAF issued a formal statement of COIN doctrine only in the fall of 2007—some four years after the Iraqi insurgency had begun.²

To be sure, the USAF was not in a position of strong influence regarding the course of governance in Iraq under the CPA. Moreover, it faced an unusually complicated tangle of issues—political, financial, legal, institutional, and cultural—in dealing with the IqAF, the IqMoD, and the continually shifting roster of political appointees, operatives, and functionaries who controlled Iraq’s defense planning and finances. Those factors certainly played a role as well.

After the mishap of May 2005, the USAF chief of staff clearly recognized the need for a course correction, but it took time to determine precisely what that new heading should be. The actions of 2006 were necessarily ad hoc and temporary. For example, the emergency employment of a one-time advisor training course allowed CAFTT to mount a “surge” of its own in Iraq that fall; still, no permanent arrangement was in place for satisfying future advisor manpower needs. Not until early 2007 did the integrated process teams assembled by Deputy Undersecretary of the Air Force Bruce S. Lemkin and Headquarters Ninth Air Force begin to take full measure of the problem and generate fundable solutions.

The appointment in March 2007 of a CAFTT commander whose attention was not diverted by other responsibilities was also a clear turning point. The joint planning efforts of the summer of 2007 paralleled a series of tactical successes by the IqAF at a time when recruiting and retention had emerged as its most crucial problems. Those small but significant triumphs provided Iraqi airmen with a boost in morale and new volunteers at a time when both were greatly needed.

By the end of 2007, the progress made in Iraq by the USAF’s Airmen-advisors had become established and measurable, as the Jones Commission confirmed. Did challenges remain? Of course. Was the outcome certain? By no means. But both air forces were now firmly in the game, and both were playing to win.

Notes

1. David E. Thaler et al., *Future U.S. Security Relationships with Iraq and Afghanistan: US Air Force Roles* (Santa Monica, CA: RAND Corp., 2008), 95.

2. Childress, “Performance in Irregular Conflict”; Corum and Johnson, *Airpower in Small Wars*; Beebe, “Air Force’s Missing Doctrine”; and Dean, *Low-Intensity Conflict*.

Abbreviations

AB	air base
ACCE	air component coordination element
AEAG	air expeditionary advisory group
AEAS	air expeditionary advisory squadron
AETC	Air Education and Training Command
AFELM	Air Force element
AFFTC	Air Force flight test center
AFI	Air Force instruction
AFMC	Air Force Materiel Command
AFOATS	Air Force Officer Accessions and Training Schools
AFSAC	Air Force Security Assistance Center
AFSATS	Air Force security assistance training squadron
AFSOC	Air Force Special Operations Command
AFSOS	Air Force Special Operations School
AFTS	Air Force training school
AMC	Air Mobility Command
ANAAC	Afghan National Army Air Corps
AOR	area of responsibility
ARINC	Aeronautical Radio, Incorporated
ASP	aerial surveillance platform
AST	advisory support team
ATO	air tasking order
AU	Air University
BIAP	Baghdad International Airport
BMT	basic military training
CAFTT	Coalition Air Force Transition Team
CAOC	combined air operations center
CATC	Coalition Air Training Center
CAWG	Comparative Aircraft Working Group
CBAT	Common Battlefield Airmen Training

CERAP	combined en route radar approach
CFACC	combined force air component commander
CG	commanding general
CLS	contractor logistics support
CMATT	Coalition Military Assistance Training Team
COA	course of action
COIN	counterinsurgency
CONOPS	concept of operations
CONUS	continental United States
CoP	community of practice
CPA	Coalition Provisional Authority
CSAF	chief of staff of the Air Force
CSAR	combat search and rescue
CT	counterterrorism
DOD	Department of Defense
DoS	Department of State
DOTMLPF	doctrine, organization, training, materiel, leadership and education, personnel, and facilities
DSCA	Defense Security Cooperation Agency
EAMS	Expeditionary Aircraft Maintenance Squadron
EAS	Expeditionary Airlift Squadron
ENDP	Exception to National Disclosure Policy
FBO	federal business opportunity
FID	foreign internal defense
FLIR	forward-looking infrared
FMS	foreign military sales
FOUO	for official use only
FTS	flight training school
FY	fiscal year
GOI	government of Iraq
GWOT	global war on terrorism
IAC	Iraqi armed caravan

ICAA	Iraqi civil aviation authority
IIG	Iraqi interim government
IMA	individual mobilization augmentee
IMAR	Iraqi Military Academy at Camp Rustamiyah
IOC	initial operational capability
IPT	Integrated Product Team
IqAF	Iraqi air force
IqMoD	Iraqi Ministry of Defense
ISF	Iraqi security forces
ISIL	Islamic State of Iraq and the Levant
ISR	intelligence, surveillance, and reconnaissance
LO&A	letter of offer and acceptance
MAP	military assistance program
MiTT	military transition teams
MNF-I	Multi-National Force-Iraq
MNSTC-I	Multi-National Security Transition Command-Iraq
NAMAB	New al-Muthana Air Base
NAS	national airspace system
NCO	noncommissioned officer
NIA	New Iraqi Army
NIAAC	New Iraqi Army Air Corps
NOFORN	not releasable to foreign nationals
OAD	Operational Aviation Detachment
OTS	Officer Training School
RAF	Royal Air Force
RAMCC	regional air movement control center
RFF	request for forces
RIqAF	Royal Iraqi Air Force
RJAF	Royal Jordanian Air Force
ROTC	Reserve Officer Training Corps
SAASS	School of Advanced Air and Space Studies

SAF/IA	deputy undersecretary of the Air Force for international affairs
SAR	search and rescue
SIPT	standing IPT
SOC	statement of capability
SOS	Special Operations Squadron
TBD	to be determined
UAE	United Arab Emirates
USAF	US Air Force
USAFR	US Air Force Reserve
USAFSOS	USAF Special Operations School
USCENTAF	US Central Command Air Forces
USCENTCOM	US Central Command
U/SINFO	unclassified/sensitive information
VIP	very important persons
WMD	weapons of mass destruction

Bibliography

- 5 *US Code*, sec. 552. *Public Information: Agency Rules, Opinions, Orders, Records, and Proceedings*.
- 10 *US Code*, sec. 2254(d). *Treatment of Reports of Aircraft Accident Investigations: Use of Information in Civil Proceedings*.
- 337 Aeronautical Systems Group. "Iraq Counterinsurgency (COIN) Aircraft, Solicitation No. FA8617-07-R-0001." Solicitation, 3 May 2007.
- 555 International Group. "B3-D-SAB." Letter of Offer and Acceptance (LO&A), 27 November 2006.
- Acevedo, Maj Jesse. "National Air Space and Air Traffic Control Systems, Coalition Air Force Transition Team (CAFTT)." Bullet background paper (BBP), 11 March 2007.
- "AFMC Proposal and Recommendations to Modify, Repair and Flight Test Iraqi Air Force Comp Air SA-7 Aircraft." Report. Wright-Patterson AFB, OH: Headquarters Air Force Materiel Command (AFMC), 19 December 2005.
- "Airborne Surveillance Isn't Just a Military Role." *AMEinfo*. Accessed 14 April 2010. <http://www.ameinfo.com/53684.html>.
- Aircraft Manufacturing & Development Corporation. "SAMA CH2000—Military Tactical Surveillance Aircraft (SAMA CH2000—MTSA)." Accessed 4 January 2010. <http://www.newplane.com/amd/amd/sama/sama.html>.
- Aircraft Manufacturing & Development Service Bulletin March 2006, Rev. #0. Accessed 4 January 2010. http://www.newplane.com/Service_Letters_Bulletines/Service%20Bulletin%20March%202006.pdf.
- "Air Education and Training Command." Fact sheet, 22 March 2009. http://www.af.mil/information/factsheets/factsheet_print.asp?fsID=138&page=1.
- Air Force Doctrine Document 2-3. *Irregular Warfare*, 1 August 2007. <https://www.fas.org/irp/doddor/usaf/afdd2-3.pdf>.
- Air Force Doctrine Document 2-3.1. *Foreign Internal Defense*, 15 September 2007. http://www.dtic.mil/dosctrine/jel/service_pubs/afdd2_3_1.pdf.
- Air Force Flight Test Center (AFFTC). Flight Test Assessment Team. Briefing. Subject: SAMA CH-2000, October 2005.
- . Flight Test Team. Briefing. Subject: Seabird Seeker, October 2005.

- Air Force Instruction 51-503. *Aerospace Accident Investigations*, 16 July 2004.
- Air Force Instruction 91-204. *Safety Investigations and Reports*, 29 November 1999.
- Air Force Materiel Command/A4. To Air Force Flight Test Center (AFFTC)/CC et al. E-mail. Subject: Tasking to Design, Modify and Repair Six Iraqi Air Force (IqAF) Comp-Air 7SLX (CA-7) Aircraft, 27 January 2006.
- Air Force Special Operations Command (AFSOC). "AFSOC/USAFSOS Iraqi FID Program, 19 July–19 August 2006." Schedule, 27 June 2006.
- . "USAF Accident Investigation Report, Comp Air 7SL, Aircraft Number 2245." Report. Hurlburt AFB, FL: AFSOC, n.d.
- Allardice, Brig Gen Robert R. Briefing. Subject: VTC on IqAF Training Effort, 6 June 2007. (Info extracted is not FOUO.)
- . Briefing. Subject: VTC on IqAF Training Effort (Version 1.0), 1 August 2007. (Info extracted is not FOUO.)
- Allardice, Maj Gen-select Robert R., and Maj Kyle "Brad" Head. "Coalition Air Force Transition Team: Rebuilding Iraq's Air Force." *Air and Space Power Journal* 21, no. 4 (Winter 2007): 5–14.
- Allawi, Prime Minister Ayad. To Pres. George W. Bush. Letter, 16 January 2005.
- Allport, Dave. "After Saddam." *AirForces Monthly*, February 2008, 52–57.
- Aloni, Shlomo. *Arab-Israeli Air Wars, 1947–1982*. Oxford, England: Osprey Publishing, 2001.
- Atkinson, Col Mark A., AFMC/A4. To AFMC/CC. "AFMC Course of Action to Support Re-establishment of Iraqi Air Force (IQAF) Comp Air 7SLX (CA-7) Aircraft." Staff summary sheet, December 2005.
- Baker, Fred W., III. "Bush Says Baghdad Security Plan on Track." *Advisor* 4, no. 7 (17 February 2007): 2 and 7.
- Barrett, SSgt Kristina. "Iraqi Pilots Get Help from Airmen to Fly Again." *Advisor* 3, no. 17 (6 May 2006): 7.
- Barzanjy, Maj Gen Kamal Abid Al-Sattar, IqAF/CC. To Lt Gen Walter E. Buchanan, US Central Command Air Forces (USCENTAF)/CC. Letter. Subject: Request for Assistance, n.d.
- Bauer, Michael. *Training the Iraqi Air Force: Lessons from a U.S. C-130 Advisory Mission*. Policy Focus 73. Washington, DC: Washington Institute for Near East Policy, August 2007.

- Bedke, Maj Gen Curtis M., AFFTC/CC. To AFFTC/All. Memorandum. Subject: What I'm Thinking—Calm in the Eye of the Storm, 10 July 2006.
- Beebe, Maj Kenneth. "The Air Force's Missing Doctrine." *Air and Space Power Journal* 20, no. 1 (Spring 2006): 27–34.
- Berquist, Maj Ronald E. *The Role of Airpower in the Iran–Iraq War*. Maxwell AFB, AL: Air University Press, December 1988.
- Bishop, Farzad, and Tom Cooper, *Iranian F-4 Phantom II Units in Combat*. Oxford, England: Osprey Publishing, 2003.
- Bloomfield, Lincoln P., Department of State (DoS)/PM. To John Bolton, DoS/T. Memorandum. Subject: Third Party Transfer of FMS-Origin Aircraft—Jordan to the Coalition Provisional Authority, ca. 17 February 2004.
- Bremer, L. Paul, administrator of the Coalition Provisional Authority (CPA) of Iraq. "Coalition Provisional Authority Order Number 2: Dissolution of Entities," 23 May 2003. http://www.iraqcoalition.org/regulations/20030823_CPAORD_2_Dissolution_of_Entities_with_Annex_A.pdf.
- . "Coalition Provisional Authority Order Number 22: Creation of a New Iraqi Army." Sec. 1, 18 August 2003. http://www.iraqcoalition.org/regulations/20030818_CPAORD_22_Creation_of_a_New_Iraqi_Army.pdf.
- . "Coalition Provisional Authority Order Number 67: Ministry of Defense." Sec. 2, 21 March 2004. http://www.iraqcoalition.org/regulations/20030818_CPAORD_22_Creation_of_a_New_Iraqi_Army.pdf.
- . "Coalition Provisional Authority Order Number 100: Transition of Laws, Regulations, Orders, and Directives Issued by the Coalition Provisional Authority," 28 June 2004. http://www.iraqcoalition.org/regulations/20040628_CPAORD_100_Transition_of_Laws_Regulations_Orders_and_Directives.pdf.
- . To Lt Gen Khalid Jameel Elsarayreh, Royal Jordanian Air Force (RJAF). Letter. Subject: Formal Acceptance, 11 July 2004.
- Brown, Maj Jeremy. "CAFTT Counterinsurgency (COIN) Aircraft (A/C) Plan." BBP, 25 March 2007.
- . "CH2000 Aircraft History with the Coalition Air Force Transition Team." BBP, 25 March 2007.
- Brozenick, Lt Col Norman J. "Another Way to Fight: Combat Aviation Advisory Missions." Research report. Maxwell AFB, AL: Air University, June 2002.

- Buchanan, Lt Gen Walter E. Briefing. Subject: New Iraqi Air Force, 25 August 2005 VTC (predecision working paper version 3.5), n.d. (Info extracted is not FOUO.)
- . To Gen Bruce Carlson, AFMC/CC. Memorandum. Subject: Letter of Appreciation, 2 February 2006.
- Bukowinski, Lt Col John. “Donated Helicopters Headed for U.S. for Upgrades.” *Advisor* 2, no. 50 (10 December 2005): 5.
- . “Iraqi Air Force Squadron Resumes Helicopter Training.” *Advisor* 2, no. 52 (24 December 2005): 7.
- . “Iraqi Hueys Bound for the United States for IqModifications.” *Advisor* 3, no. 4 (4 February 2006): 8.
- Byrne, Col Michael. Briefing. Subject: IqAF Assessment Outbrief, ca. 15 October 2005.
- . Briefing. Subject: Iraqi Air Force Development Update, ca. February 2006.
- . Briefing. Subject: Stand-Up of the Iraqi Air Force, ca. November 2005. (Info extracted is not FOUO.)
- . To Lt Col Jack R. Rickman, USCENTAF/A3-DS, and Kathi Jones, 9AF/HO. E-mail. Subject: IqAF Assessment Outbrief to Lt Gen Buchanan, 1 November 2005.
- Carlson, Gen Bruce, AFMC/CC. To Lt Gen William Buchanan, USCENTAF/CC. Memorandum. Subject: Iraqi Air Force (IQAF) Comp-Air 7SLX (CA-7) Courses of Action, 11 January 2006.
- “CH2000 Aircraft Delivered to Basrah.” *Advisor* 2, no. 4 (22 January 2005): 6.
- Chant, Christopher. *Air War in the Gulf 1991*. Oxford, England: Osprey Publishing, 2001.
- Childress, Maj Timothy. “Improving US Air Force Performance in Irregular Conflict: Reestablishing a USAF Special Air Warfare Center.” Master’s thesis, School of Advanced Air and Space Studies (SAASS), June 2007.
- “Coalition Air Force Transition Team (CAFTT).” Fact sheet, August 2006.
- Coalition Military Assistance Training Team (CMATT)-A. “Informal Report on Forced Landing by Iraqi Air Force Comp Air Aircraft, 25 Jan 05.” Report. Baghdad: CMATT-A Headquarters, n.d.
- . “Report on Forced Landing by Tiger 71 Iraqi Air Force Comp Air Aircraft, 10 May 2005.” Report. Baghdad: CMATT-A Headquarters, n.d.

- Coalition Provision Authority. Memorandum for record. Subject: Project Description—C130/UH1-H [*sic*] Acquisition for the Iraqi Air Force, ca. 12 May 2004.
- Coalition Provision Authority/OGC. To CPA administrator. Memorandum. Subject: Acceptance of Offer of Aircraft from the Hashemite Kingdom of Jordan, 28 May 2004.
- Combined Airspace Planning Group (CAPG). “Executive Summary—CAPG Executive Steering Committee Meeting [Bahrain],” 3 March 2005.
- Cohen, Eliot A. *Gulf War Airpower Survey*. 6 vols. Washington, DC: Government Printing Office, 1993.
- Combat Studies Institute (CSI). “Interview with BG James Schwitters.” Ft. Leavenworth, KS: CSI, 13 December 2006. http://cgsc.cdmhost.com/cdm4/item_viewer.php?CISOROOT=/p4013coll13&CISOPTR=338&CISOBOX=1&REC=9.
- Cook, Capt Russ. “Iraqi Air Force Gets Mi-17 ‘Hip’ Helicopters.” *Advisor* 3, no. 7 (25 February 2006): 6.
- Cooper, Tom, and David Nicolle. *Arab MiGs*. Vol. 1, *MiG-15s and MiG-17s, 1955–1967*. Houston, TX: Harpia Publishing, 2009.
- . *Arab MiGs*. Vol. 2, *Supersonic Fighters: 1956–1967*. Houston, TX: Harpia Publishing, 2011.
- Cooper, Tom, and Farzad Bishop. *Iranian F-14 Tomcat Units in Combat*. Oxford, England: Osprey Publishing, 2004.
- . *Iran–Iraq War in the Air, 1980–1988*. Atglen, PA: Schiffer Publishing, 2003.
- Cooper, Tom, David Nicolle, and Patricia Salti. *Arab MiGs*. Vol. 3, *The June 1967 War*. Houston, TX: Harpia Publishing, 2012.
- Cooper, Tom, David Nicolle, Holger Müller, Lon Nordeen, and Martin Smisek. *Arab MiGs*. Vol. 5, *October 1973 War: Part 1*. Houston, TX: Harpia Publishing, 2014.
- Cooper, Tom, David Nicolle, Lon Nordeen, Patricia Salti, and Martin Smisek. *Arab MiGs*. Vol. 4, *Transition and War of Attrition, 1967–1973*. Houston, TX: Harpia Publishing, 2013.
- Corum, James S., and Wray R. Johnson. *Airpower in Small Wars: Fighting Insurgents and Terrorists*. Modern War Studies. Lawrence: University Press of Kansas, 2003.
- Daley, Maj Patrick. “Exporting Airpower: The Challenges of Building Partner Nation Air Capacity for Irregular War.” Master’s thesis, SAASS: June 2008.

- Davidson, TSgt Brian. "New Iraqi Airmen Stage First Operational Airlift Mission." *Advisor* 2, no. 29 (16 July 2005): 8.
- Davies, Steve. *F-15C/E Eagle Units of Operation Iraqi Freedom*. Oxford, England: Osprey Publishing, 2004.
- Davies, Steve, and Doug Dildy. *F-16 Fighting Falcon Units of Operation Iraqi Freedom*. Oxford, England: Osprey Publishing, 2006.
- Dean, Lt Col David J. *The Air Force Role in Low-Intensity Conflict*. Maxwell AFB, AL: Air University Press, October 1986.
- Dean, TSgt Paul. "Iraqi Air Force Squadron Flies First Solo Mission." *Advisor* 2, no. 51 (3 December 2005): 3.
- Defense Security Cooperation Agency (DSCA). "Introduction to Security Cooperation Management." In *The Management of Security Cooperation*. Wright-Patterson AFB, OH: DSCA, 2010. <http://www.disam.dsca.mil/Research/Presentations/2%20intros.ppt>.
- Denehan, Maj William F. "Recommendations for Iraqi Air Force (IqAF) Rotary-Wing Aviation Program." Report. Baghdad: 6th Special Operations Squadron, ca. June 2005.
- Department of Defense. "Measuring Stability and Security in Iraq." Report, 17 February 2006. http://www.defenselink.mil/home/features/Iraq_Reports/docs/2006-02-Report.pdf.
- . "Report to Congress: Measuring Stability and Security in Iraq." Report, July 2005. <https://www.defenselink.mil/news/Jul2005/d20050721secstab.pdf>.
- Deputy undersecretary of the Air Force for international affairs. "IQ-D-SAA." LO&A, 30 November 2006.
- Diaz, MC2 Elisandro. "Final Huey II Shipment Arrives at BIAP." *Advisor* 4, no. 27 (4 August 2007): 9–10.
- . "Flight Surgeons Go Hi-Flying." *Advisor* 4, no. 4 (27 January 2007): 3 and 5.
- . "Helicopters Land in Baghdad." *Advisor* 4, no. 18 (5 May 2007): 3–4.
- . "Iraqi Air Force Celebrates 76 years." *Advisor* 4, no. 17 (28 April 2007): 4–5.
- . "Squadron 23 Takes to the Skies." *Advisor* 4, no. 6 (10 February 2008): 3 and 6.
- Donnell-Ivy, Nancy P. "B7-D-SAR." LO&A, 11 December 2007.
- "DoD Bloggers Roundtable with Brigadier General Robert Allardice, Commanding General, Coalition Air Force Transition Team." Transcript, 6 September 2007. <http://www.defense.gov/home/blog/docs/Allardice%20transcript.pdf>.

- Downs, Maj William Bryan. "Unconventional Airpower." *Air and Space Power Journal* 19, no. 1 (Spring 2005): 20–25.
- Dudgeon, AVM A. G., RAF. *The War That Never Was*. Shrewsbury, England: Airlife, 1991.
- Eaton, Maj Gen Paul D. To Maj Gen HRH Faisal al-Husseini, RJAF/CC. Letter. Subject: Acknowledgement of Jordanian Offer, 5 May 2004.
- Eckholm, Maj Leif. "Background Paper on Increased USAF Personnel Requirements in Iraq and Afghanistan." BBP, ca. 15 February 2007.
- . "Background Paper on Iraq/Afghanistan Pre-Deployment Training," BBP, ca. 15 February 2007.
- Eidsaune, Brig Gen David. Briefing. Subject: Iraqi Air Force Transition Team Concept of Operations, ca. June 2005.
- Elliott, D. J. "Iraqi Security Forces Order of Battle: November 2007 Update." *Long War Journal*, 8 November 2007. http://longwarjournal.org/archives/2007/11/iraqi_security_force_5.php#ixzz0e7duLOJG.
- "English Language Training-Iraq." *Foundations* 3, no. 1 (June 2007). [nb: *Foundations* is published by AETC/IA].
- "Equipment, 2007 USAF Almanac." *Air Force Magazine* 90, no. 5 (May 2007): 63.
- Fallesen, Maj Jeff, 9AF/DDS. To 9AF/A1 et al. E-mail. Subject: CENTAF Iraqi Air Force/ANAAC Development Integrated Product Team Kickoff Meeting, 4 May 2007.
- Federation of American Scientists. "AN/AAR-47 Missile Approach Warning System," 8 January 2000. <http://www.fas.org/man/dod-101/sys/ac/equip/an-aar-47.htm>.
- "First Five Iraqi Huey IIs Delivered." *Air International*, April 2007, 8.
- Foley, Sgt David. "U.S. Air Force Trains Iraqi C-130 Pilots." *Advisor* 2, no. 18 (30 April 2005): 6.
- Fowler, SSgt Stacey. "CERAP: Making Safe, Expeditious Travel Possible for All over Skies of Iraq." *Krab Kronickel* [Kirkuk AB] 4, no. 17 (14 August 2006): 6–7.
- Francillon, Rene. "Mirage at War: Iraqi and Kuwaiti Mirage F1s." *World Air Power Journal* 4 (Winter 1990–91): 22–25.
- Freedom of Information Act. Public Law 89-554. 80 Stat. 383. Amended 1996, 2002, 2007.
- Frost, Christopher. "Taking Over the Skies." *Advisor* 5, no. 1 (5 January 2008): 9–10.
- "Future Iraqi AF Development Plans." *AirForces Monthly*, April 2007, 21.
- Gaines, Mike, and Janice Lowe. "Cessna Cameravan." *Flight International*, January 1989, 28–29.

- Garello, Giancarlo. "Italian Wings over Iraq (1937–1941)." *Small Air Forces Observer* 32, no. 4 (April 2009): 114–17.
- . "Italian Wings over Iraq (1937–1941)." *Small Air Forces Observer* 33, no. 1 (July 2009): 21–23.
- George, Larry. "MNSTC-I Commander Nominated for Leavenworth Command." *Advisor* 2, no. 31 (30 July 2005): 9.
- Gillett, Brig Gen David, Air Combat Command (ACC)/A4. To Brig Gen Mark T. Matthews, ACC/A5 et al. E-mail. Subject: Coalition AF Transition Team (Iraq and Afghanistan), 10 January 2007.
- Goyer, Norm. "AeroComp's Climb to the Top." *Private Pilot Magazine*, February 2001, 44–53. <http://www.aerocompinc.com/press/reviews/privatepilot/feb2001/index.htm>.
- Green, SFC Kimberly A. "Air Force Squadron 70 Seeks to Secure Iraq." *Advisor* 4, no. 8 (24 February 2007): 5.
- Grimes, Bill. *The History of Big Safari*. Richmond, BC: Archway Publishing, 30 January 2014.
- Hallion, Richard. *Storm over Iraq: Air Power and the Gulf War*. Washington, DC: Smithsonian Institution Press, 1992.
- Hallwood, RAF Grp Capt J. Q., CAFTT/DD. Memorandum. Subject: The IqAF Mi17 Procurement (Version 3), 15 March 2006.
- Hardy, Lt Col Steven. "CAFTT Rotary Wing Support for Jet Ranger, Huey II, and Mi-17." BBP, 1 February 2007.
- Harrison, Christine. "AU Provides Curriculum, Manpower for Iraqi Officer Training." *Wright Stuff* 2, no. 14 (20 July 2007). <http://www.maxwell.af.mil/au/aunews/archive/0214/ArticlesAUprovidescurriculum.html>.
- Haulman, Dr. Daniel L. "What Happened to the Iraqi Air Force?" Air Force Historical Research Agency, 3 November 2009. <http://www.au.af.mil/au/aunews/archive/2010/0516/0516Articles/Haulman30514.pdf>.
- Headquarters ACC. Special Order GB-82, 29 March 2007.
- Headquarters Air Force Flight Test Center. "Limited Flight Evaluation of a Modified Iraqi Air Force Comp Air 7SL." Test plan, April 2006.
- Headquarters Air Force Officer Accession and Training Schools (AFOATS). "IqAF Officer Training School: IaAF Officer Training." Report. Maxwell AFB, AL: AFOATS, January 2007.
- Headquarters CAFTT. Briefing. Subject: Coalition Air Force Training Team (CAFTT) Organization Charts, 20 April 2006.
- . "Coalition Air Force Transition Team." Brochure, ca. September 2007.

- . “Iraqi Air Force Training School, Concept of Operations (CONOPS) (Draft Version 2).” Report. Randolph AFB, TX: Headquarters Air Education and Training Command (AETC), 10 November 2006.
- . “Iraq Air Force Training School Operational Requirements Document (Draft Version 1).” Report. Randolph AFB, TX: AETC, 30 October 2006.
- Headquarters USCENTAF. Briefing. Subject: Coalition Air Training Center Concept, ca. January 2006.
- . Briefing. Subject: IqAF Advisory Support Team Assessment, 3–19 October 2005.
- . “Comparative Aircraft Study for Iraq Air Force Counter Insurgency Operations.” Report. MacDill AFB, FL: HQ US Central Command, 10 December 2005. (Info extracted is not sensitive but unclassified [SBU]-NOFORN/FOUO.)
- Headquarters IqAF. “Capability Requirement and Development Plan.” Report. Baghdad: HQ IqAF, 20 July 2005.
- . “Draft Service Plan.” Baghdad: HQ IqAF, 14 January 2006.
- . “Iraqi Air Force Capability Requirement and Development Plan.” Baghdad: HQ IqAF, 20 July 2005.
- Headquarters Iraqi Ministry of Defense. Letter. Subject: A Contract of Supplying *Sokol* Helicopters, 23 December 2004.
- Headquarters Ninth Air and Space Expeditionary Task Force. Special Order G-08-05, 8 November 2007.
- Headquarters Ninth Air Force. Briefing. Subject: CENTAF Partner Nation Airpower Development Standing Integrated Product Team (Version 1.0), 7 May 2007. (Information extracted is not FOUO.)
- Henry, Lt Col Jeffrey. “Building the New Iraqi Air Force: Mission Analysis Working Group Executive Summary.” Point paper, 1 September 2005. (Info extracted is not FOUO.)
- Hixon, Tommy. “Phase Two/Three Funding.” Briefing, 26 November 2004.
- Holley, Irving B. *Ideas and Weapons*. New Haven, CT: Yale University Press, 1953.
- Hoog, Brig Gen Stephen L., CAFTT/CC. Memorandum for record. Subject: ACCE/CAFTT, 5 July 2006.
- “Huey II.” *Advisor* 4, no. 9 (3 March 2007): 11.
- Hughan, TSgt Andrew. “Iraqi Air Force Provides Watchful Eyes for Elections.” *Advisor* 2, no. 5 (29 January 2005): 5.

- Hughes, Robin. "Air Corps Evolves from Jordan to Back Army in Iraq." *Jane's Defense Weekly*, 24 March 2004, 14–15.
- "Iran Hoards Iraqi Aircraft." *Flight International*, 24–30 April 1991, 9.
- "Iraq Gains Operational Control of Its Air Force." *AirForces Monthly*, November 2006, 22.
- "Iraqi AF Seeks 32 More Huey IIs, Opens Flying Training School." *AirForces Monthly*, November 2007, 7.
- "Iraqi Air Force." Accessed 17 April 2008. <http://www.milavia.net/airforces/iraq/IqAF.htm>.
- "Iraqi Air Force Development: Mission Analysis Working Group (Version 1.0)." Working Paper, n.d. (Info extracted is not FOUO.)
- "Iraqi Air Force Gives Army a Lift." *Advisor* 2, no. 36 (3 September 2005): 9.
- "Iraqi Air Force to Get Seabird Seekers." *AirForces Monthly*, August 2004, 19.
- "Iraqi Children Get Medical Help." *Advisor* 3, no. 9 (11 March 2006): 3.
- "Iraqi Helos Arrive." *Advisor* 4, no. 1 (6 January 2007): 8.
- "Iraq's Future Officers." *Advisor* 4, no. 4 (27 January 2007): 8.
- "Iraq to Iran: Minders Keepers." *Time*, 8 April 1991. <http://www.time.com/time/magazine/article/0,9171,972677,00.html>.
- Jagger, RAF Grp Capt Neal. To Hon. Edward W. Gnehm, US Ambassador to Jordan. Letter. Subject: ARINC Support Request, 14 September 2004.
- Jeffers, Capt Tim. "'Hueys' Touch Down at Taji Military Training Base." *Advisor* 2, no. 6 (5 February 2005): 3.
- . "Iraqi Air Force Takes Off with Aircraft Delivery." *Advisor* 2, no. 3 (15 January 2005): 3.
- Jewell, Lorie. "Graduation Puts Iraqi Air Force Squadron into Operation." *Advisor* 2, no. 16 (16 April 2005): 4.
- . "Iraqi Air Force Celebrates 74 Years." *Advisor* 2, no. 17 (23 April 2005): 6.
- . "Iraqi Pilots Fly Prime Minister." *Advisor* 2, no. 7 (12 February 2005): 6.
- . "Joint Operations Center to Track Iraqi Forces." *Advisor* 2, no. 18 (30 April 2005): 7.
- . "Pilots Hailed as Heroes Who Died for a Free Iraq." *Advisor* 2, no. 23 (4 June 2005): 6–7.
- Jones, Gen James L., USMC, retired, chairman. *Report of the Independent Commission on the Security Forces of Iraq*. Washington, DC: Center

- for Strategic and International Studies; Independent Commission on the Security Forces of Iraq, 6 September 2007.
- Jones, Kathi R., 9AF/HO. Notes. Subject: Preconference Meeting, 9 September 2005.
- Jordan, SFC Ronda. "English Language Training Takes Flight." *Advisor* 4, no. 15 (14 April 2007): 9.
- . "Iraqi Air Force Opens Training Center." *Advisor* 4, no. 15 (14 April 2007): 6.
- Koskinas, Maj Ioannis. "The Combat Aviation Advisory Mission in Iraq." *Air and Space Power Journal* 19, no. 3 (Fall 2005): 107–8.
- Kuhn, Thomas S. *The Structure of Scientific Revolutions*. Chicago: University of Chicago Press, 1962.
- Larson, George C. "Iraq Air Force One." *Air & Space Magazine*, July 2006, 80.
- Leaming, RAF Grp Capt M. W. Memorandum. Subject: Brief for BGen Eidsaune and BGen Peck for Meeting with Head IqAF on 17 July 2005: IqAF—Unresolved Aircraft Issues, 15 July 2005.
- . Memorandum. Subject: [Iraqi] Air Force Command Agenda for the Next Three Months (June–September 2005), n.d.
- . Memorandum. Subject: Office Call—Kamal/Jumper—11 August 2005, n.d.
- . To Brig Gen William E. Eidsaune. Memorandum. Subject: Record of Meeting between LTG Buchanan and MG Kamal—29 June 2005, 29 June 2005.
- Lee, Douglas E. "Stabilizing Critical Infrastructure Tour Lengths." *CADRE Quick-Look 04-10*. Maxwell AFB, AL: College of Aerospace Doctrine, Research and Education, 2004.
- Lemkin, Bruce S., secretary of the Air Force (SAF)/IA. To chief of staff, US Air Force et al. "Increasing USAF Role in Building Iraq Air Force (IqAF) and Afghanistan National Army Air Corps (ANAAC)." Staff summary sheet, 20 February 2007.
- Lemkin, Bruce S., and Col Sharon Holmes, SAF/IARM. Briefing. Subject: Building Air Forces in Iraq and Afghanistan: Integrated Product Team Final Report, ca. 9 March 2007.
- . Briefing. Subject: Building Air Forces in Iraq and Afghanistan: Integrated Product Team Interim Report, ca. 9 February 2007.
- Letter of Agreement. Case IQ-D-QAC, 11 April 2005.
- Lopez, SSgt C. Todd. "Five Brothers in Fight for Freedom Buried Together." *Advisor* 2, no. 33 (13 August 2005): 3–4.

- Ludwig, CMSgt William A. "Operation Iraqi Freedom Trip Report, 3 October 2005–19 October 2005." Report, ca. 7 November 2005.
- Lyles, Maj Gary. "Cessna Caravan Aircraft History with the Coalition Air Force Transition Team (CAFTT)." BBP, 3 February 2007.
- . "Comp Air Aircraft History with the Coalition Air Force Transition Team (CAFTT)." BBP, 3 February 2007.
- . "King Air Aircraft History with the Coalition Air Force Transition Team (CAFTT)." BBP, 10 February 2007.
- Lyman, Robert. *Iraq 1941: The Battles for Basra, Habbaniya, Fallujah and Baghdad*. Oxford, England: Osprey Press, 2006.
- Lynn, Kevin. Briefing. Subject: IqAF Training School (IqAFTS) OTS and TOP-OFF Update, ca. January 2007.
- Matishak, Martin. "U.S., Coalition Partners Work to Stand Up Iraqi Air Force." *Inside the Air Force*, 29 July 2005, 3–4.
- . "What Should Fly in the Iraqi Air Force?" *Inside the Air Force*, 24 June 2006. <http://www.military.com/features/0,15240,102607,00.html>.
- McCain, Col John M. "Genesis of the New Iraqi Air Force: Security Assistance in Action." *DISAM Journal*, Fall 2005, 25–26. <http://www.disam.dsca.mil/pubs/Archives/Journal28-1.pdf>.
- McCarthy, Maj Thomas D. "National Security for the 21st Century: The Air Force and Foreign Internal Defense." Master's thesis, SAASS, June 2004.
- McCutchan, Brig Gen Clay. "CENTAF Comparative Aircraft Study [Version 4.0]." Report, ca. 10 December 2005. (Info extracted is not FOUO.)
- McFeeters, Neal, Aeronautical Radio, Inc. To RAF Wing Cdr Stephen Shell, CMATT-A. Letter. Subject: The Way Ahead, 27 October 2004.
- McGee, 1st Lt Michael, 412 Training Wing/DR et al. To Col Mark A. Atkinson, AFMC/A4. Memorandum. Subject: AFFTC Statement of Capability (SOC) for the Iraqi Air Force Comp Air 7SL Project, Job Order Number (JON) A06CA700, 24 March 2006.
- McKinney, 1st Lt Paul K. III, ACC/CCA. To Lt Col Robert C. Troisi, ACC/A3X et al. E-mail. Subject: PKG-DS700469: Increasing USAF Role in Building Iraqi Air Force (IqAF) and Afghanistan National Army Air Corps (ANAAC), 19 March 2007.
- Message. 011822Z Feb 07. COMCENTAF. To Headquarters USAF et al. "CENTAF Air Advisory Division," 1 February 2007.

- . 131347Z JUL 06. Headquarters USCENTAF. To AFSOC/CC. “CENTAF Aviation Military Transition Team (MiTT) Academic Course Support Request,” 13 July 2006.
- . COMCENTAF. To Headquarters AF/AXO et al. “CENTAF Iraqi Air Force (IqAF) Site Assessment Support Request,” 23 September 2005.
- . Miller, Jay. *Lockheed’s Skunk Works: The First Fifty Years*. Arlington, TX: Aerofax, 1993.
- “Milestone Iraqi Air Force Flight Takes Off.” *Advisor* 2, no. 14 (2 April 2005): 10.
- “More on New Iraqi Air Force Surveillance Aircraft Plans.” *AirForces Monthly*, July 2004, 15.
- Morse, Stan, ed. *Gulf War Debrief*. London: Aerospace Publishing, 1991.
- National Security Presidential Directive 36. “United States Government Operations in Iraq,” 11 May 2004.
- “New Iraqi Air Force Being Formed.” *AirForces Monthly*, June 2004, 16.
- Newman, SSgt Lucia. “Iraqi Air Force Takes Over First-Line Maintenance.” *Advisor* 3, no. 37 (30 September 2006): 3 and 5.
- . “Keeping an Eye in the Sky during Ramadan.” *Advisor* 3, no. 38 (7 October 2006): 4–5.
- “News Briefs.” *AirForces Monthly*, November 2006, 22.
- “News in Brief: Up to 28 Cessna 172s Ordered for Iraqi Air Force.” *AirForces Monthly*, September 2007, 9.
- Nicolle, David, and Tom Cooper. *Arab MiG-19 and MiG-21 Units in Combat*. Oxford, England: Osprey Publishing, 2004.
- North, Lt Gen Gary. Briefing. Subject: Building Airpower Capacity in Iraq and Afghanistan, ca. 24 September 2007.
- . Briefing. Subject: Coalition Air Force Transition Team: Building Airpower in Iraq and Afghanistan (Version 1.4), ca. 10 January 2007. (Information extracted is not FOUO.)
- . Briefing. Subject: Coalition Air Force Transition Team Update (Version 1.2), ca. 2 October 2006. (Information extracted is not FOUO.)
- . Briefing. Subject: Coalition Air Force Transition Team Update (Version 2.1), ca. 2 October 2006. (Information extracted is not FOUO.)
- “Operation Southern Watch.” Air Force Link, n.d. http://www.af.mil/information/heritage/spotlight_print.asp?storyID=123112876.
- Oswalt, Ron, AFSAT/DOM. To Ken Smith, AETC/IAO et al. E-mail. Subject: Re: Iraq C-130 Urgent Issue, 28 February 2007.

- Padilla, Brig Gen Frank. Briefing. Subject: Comp Air 7SL Decision Brief to Lt Gen Buchanan, 20 October 2005. (Info extracted is not FOUO.)
- Pesapane, Maj John S. "Istikbarat: Rebuilding Intelligence Capabilities of the Iraqi Air Force." Research report. Maxwell AFB, AL: Air Command and Staff College, April 2007.
- Phillips, Lt Col Herb. "Exercise Begins Iraqi Air Force Squadron's Move." *Advisor 2*, no. 45 (22 October 2005): 4.
- . "Exercises Test Air Force Squadron's Independence." *Advisor 2*, no. 51 (17 December 2005): 6.
- . "First Qualified Iraqi C-130 Aircrew Graduates." *Advisor 2*, no. 30 (23 July 2005): 6.
- . "IAF Supports Combat Operations." *Advisor 2*, no. 44 (15 October 2005): 7.
- . "Iraqi Air Force Squadron Wraps Up Second Exercise." *Advisor 2*, no. 49 (19 November 2005): 5.
- Phillips, TSgt Melissa. "Airmen Teach C-130 Ops to Iraqis." *Advisor 2*, no. 30 (23 July 2005): 7.
- Pistone, JO2 John J. "Iraq Assumes Operational Control of Military." *Advisor 3*, no. 34 (9 September 2006): 3.
- . "Iraqi Air Force Opens First Air Base." *Advisor 3*, no. 9 (11 March 2006): 4.
- . "Iraqi Air Force Completes First 'Validation Flight.'" *Advisor 3*, no. 2 (28 January 2006): 9.
- Pontes, William, Combined Air Operations Center (CAOC). Memorandum. Subject: Iraqi Air Force (IqAF) Information and Thoughts, ca. 13 February 2005.
- Pugh, Donald R., director, Case Ops. Letter. Subject: United States of America Letter of Offer and Acceptance, [case] Y7-D-AAA, 13 January 2005.
- Putz, SrA Christie. "Air Force Helps Keep Country's Lifelines Flowing." *Advisor 4*, no. 22 (19 August 2007): 8 and 10.
- Raaberg, Maj Gen-select Douglas L., ACC/A3. To ACC/CC et al. E-mail. Subject: PKG-DS700469: Increasing USAF Role in Building Iraqi Air Force (IqAF) and Afghanistan National Army Air Corps (ANAAC), 19 March 2007.
- Raouf, Ayad, Iraqi Ministry of Defense. To Joint Headquarters. Letter. Subject: Subject/Aircraft C-130-B, 1 November 2004.

- Reardon, Mark, Army Center of Military History. To the author. E-mail. Subject: Historical Information on CMATT-A and the Activation of CAFTT, 22 January 2010.
- “Report of the Independent Commission on the Security Forces of Iraq,” 6 September 2007. <http://media.csis.org/isf.pdf>.
- Rich, Ben R., and Leo Janos. *Skunk Works: A Personal Memoir of My Years at Lockheed*. Boston: Little Brown and Co., 1994.
- Ricks, Thomas E. *Fiasco: The American Military Adventure in Iraq*. New York: Penguin Press, 2006.
- Sadik, Ahmad, and Tom Cooper. *Iraqi Fighters, 1953–2003: Camouflage & Markings*. Houston, TX: Harpia Publishing, 2008.
- . “The First Night: Iraqi Air Force in Combat—17 January 1991.” *International Air Power Review* 26 (Winter 2009): 114–29.
- Santos, Maj Jaime, CAOC Combat Plans Division, Guidance and Targeting [Team]/MAAP. Memorandum. Subject: Item of Interest, 31 January 2005.
- “Seabird Seeker Surveillance Aircraft Bids for Iraqi Order.” *International Defense Review*, 19 May 2004. Senate. *Senate Democratic Policy Committee Hearing, “An Oversight Hearing on the Planning and Conduct of the War in Iraq,” Paul D. Eaton, Major General, US Army, Retired*. 109th Cong., 2nd sess., 25 September 2006. [Http://dpc.senate.gov/hearings/hearing38/eaton.pdf](http://dpc.senate.gov/hearings/hearing38/eaton.pdf).
- Senna, Col Philip M., AETC/A3R. Briefing. Subject: IqAF Training School (IqAFTS) AETC Support Update, 22 November 2006.
- . To AETC/A2&3 and AETC/IA. Memorandum. Subject: Coalition Air Force Transition Team (CAFTT) in-Country Visit, 22 November 2006.
- “6th Special Operations Squadron.” Fact sheet. Accessed 19 June 2010. http://www2.hurlburt.af.mil/library/factsheets/factsheet_print.asp?fsID=3496&page=1.
- Sommerkamp, Col Kathryn, CPA/JA. To Lt Col John E. Lindsey, CMATT/C-9. E-mail. Subject: Planes from Jordan, 25 February 2004.
- “Special Delivery.” *Advisor* 4, no. 8 (24 February 2007): 7.
- Stucky, Lt Col Mark, USAF Test Pilot School (TPS)/ED. Briefing. Subject: Comp Air Briefing, 17 October 2005.
- Stucky, Lt Col Mark, and Maj Vincent Sei. “Iraqi Test Acceleration—the Saga of the Comp Air 7SLX.” Report. Edwards AFB, CA: USAF TPS, n.d.

- "T-6A Texan II." Fact Sheet. Accessed 6 July 2010. http://www.af.mil/information/factsheets/factsheet_print.asp?fsID=124&page=1.
- Taghvaei, Babak. "Race to Iran!" *AirForces Monthly*, June 2010, 44–47.
- Thaler, David E., Theodore W. Karasik, Dalia Dassa Kaye, Jennifer D. L. Moroney, Frederic Wehrey, Obaid Younossi, Farhana Ali, and Robert A. Guffey. *Future U.S. Security Relationships with Iraq and Afghanistan: US Air Force Roles*. Santa Monica, CA: RAND Corp., 2008.
- Tinka, Marie E. "B7-D-QAH." LO&A, 7 June 2007.
- . "IQ-D-QAA." LO&A, 20 November 2006.
- Untitled Note [Oil Pipeline Fire Reported]. *Advisor* 2, no. 12 (19 March 2005): 10.
- "US Air Force Starts Bidding for Iraqi Counter-Insurgency Aircraft Fleet." *Flight International*, 4 May 2007. <http://www.flightglobal.com/articles/article.aspx?liArticleID=213671&PrinterFriendly=true>.
- US Army. Field Manual 101-5-1. *Operational Terms and Graphics*, 30 September 1997.
- US Central Command Air Force/DOOC. Briefing. Subject: Iraqi Air Force CONOPS Development Conference, ca. 9 September 2005.
- Vick, Alan. *Air Power in the New Counterinsurgency Era: the Strategic Importance of USAF Advisory and Assistance Missions*. Santa Monica, CA: RAND Corp., 2006.
- Webster, Fred. "Limited Flight Evaluation of an Iraqi Air Force Modified Comp Air 7SLX (PRR-06-12)." Report. Edwards AFB, CA: USAF Flight Test Center, June 2006. (unclassified/sensitive information [U/SINFO], info extracted is not U/SINFO).
- Weinberger, Sharon. "Helo Holdup: Problems Dog U.S. Decision to Buy Russian Helicopters for Iraq." *Defense Technology International*, June 2009, 40 and 42.
- Wertz, Lt Col James L. To Lt Col Mark P. Stuckey et al. E-mail. Subject: Re: Iraqi Test Accel Reports, 17 October 2005.
- Westgate, Col Charles. "Chronology," ca. August 2005.
- Williams, Van. "Building the Iraqi Air Force: Learning from Tragedy." *Advisor* 6, no. 7 (July 2009): 6.
- Wilson, Patti, and George Cully. "USAF Action in the Aftermath of Hurricane Katrina." Unpublished study. Washington, DC: Air Force History Support Office, May 2006.

- Wilson, SSgt Zachary. "Overcoming Language Barrier First Step for Iraq's New Air Force Officers." *Advisor* 4, no. 7 (17 February 2007): 5 and 7.
- Woodbury, SrA Mark. "Helicopter Pilot Is Role Model to Iraqi, Coalition Airmen." *Advisor* 3, no. 7 (25 February 2006): 7.
- . "Helicopter Pilots Make Iraqi Air Force History." *Advisor* 3, no. 2 (14 January 2006): 6.
- . "Iraq Air Force Completes First All-Iraqi Aircrew Mission." *Advisor* 3, no. 5 (11 February 2006): 6.
- Wright, Dr. Donald P., Col Timothy R. Reese, and the Contemporary Operations Study Team. *On Point II: Transition to the New Campaign; The United States Army in Operation IRAQI FREEDOM, May 2003–January 2005*. Fort Leavenworth, KS: Combat Studies Institute Press, 2008.
- Zehner, Col Greg, CAFTT/A5. Briefing. Subject: Building a Credible Iraqi Air Force: A History, 25 August 2007.

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