

2019
US Air Force
"Year of the Defender"

DEFENDING AIR BASES IN AN AGE OF INSURGENCY

VOLUME II



Edited by

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Foreword by Maj Gen Thomas H. Deale

Afterword by Maj Gen Bradley D. Spacy



Defending Air Bases in an Age of Insurgency

Volume II

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Air University Press
Curtis E. LeMay Center for Doctrine Development and Education
Maxwell Air Force Base, Alabama

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Print Preparation and Distribution
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Air University Press
600 Chennault Circle, Bldg 1405
Maxwell AFB, AL 36112-6010
<https://www.airuniversity.af.edu/AUPress>

Facebook:
<https://www.facebook.com/AirUnivPress>

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Twitter: <https://twitter.com/aupress>



Library of Congress Cataloging-in-Publication Data

Caudill, Shannon W.
Defending air bases in an age of insurgency /
Shannon W. Caudill, Colonel, USAF.
pages cm
Includes bibliographical references and index.
ISBN 978-1-58566-241-8
1. Air bases—Security measures—United States.
2. United States. Air Force—Security measures.
3. Irregular warfare—United States. I. Title.
UG634.49.C48 2014
358.4'14—dc23
2014012026

Published by Air University Press in March 2019

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This book and other Air University Press publications are available electronically at the AU Press website: <https://www.airuniversity.af.edu/AUPress>.



*Dedicated to Thomas and Nicholas . . .
and the “Year of the Defender”*

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As a land-based force, we fight the base first to project power and destroy the enemy. Doesn't do any good to have the best crews and equipment on the planet if we let someone breach our defenses and wreak havoc. We must be the best in the world at integrated base defense.

*—Gen David L. Goldfein
Air Force Chief of Staff*

*18 January 2019
Responding to an advance copy of this book*

Foreword

Defending air bases from attack remains a major operational challenge in every theater and every conflict. Airfields are strategic targets; they allow for the generation and projection of crucial military power and are usually a key joint and/or coalition command and control node. The growing problem of adversary antiaccess and area-denial strategies only adds to the necessity of studying integrated base defense, with special emphasis on ground-based threats. Since the Vietnam War, ground-based threats have been our biggest challenge as adversaries have sought to counter US airpower from the ground rather than in the air. Future conflicts will continue to see enemy strategies designed to inhibit air operations from a distance through not only growing missile technologies but also traditional methods like indirect fire, special operations, and sapper attacks. I am thankful that Air University (AU) Press has invested in a second volume of this anthology to further explore the contemporary challenges to airpower from ground-based threats and am especially pleased that most of the authors conducted their research and writing as students at Air University. As Airmen and joint leaders, we must reflect on and debate the important issues addressed in this volume. We owe it to the young men and women we lead to build on the lessons learned from recent conflicts so that we may lay a solid foundation for the security of future air operations and Airmen.

Since AU Press released *Defending Air Bases in an Age of Insurgency* in May 2014, there has been a groundswell of support for a second project designed to add more depth and fill gaps in the literature. The first volume essentially bridged the gap in the literature that existed since the last publication on this subject in 1995. This second project examines more current topics like base defense in AirSea Battle (renamed the Joint Concept for Access and Maneuver in the Global Commons), modern air support for base defense, counter-intelligence enablers, and commander responsibilities for air base defense. Further, it offers a more focused assessment of base defense in the Afghanistan theater of operation, projected technological advances in base defense, and unique air base defense challenges found in the beginning (getting in) and ending of conflicts (getting out). This volume also presents new research based on Colonel Caudill's Air Command and Staff College base defense research elective, fea-

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turing a research partnership with the Air Force Historical Research Agency.

I had the unique privilege of leading base defense at two locations in Afghanistan and would like to offer some insights into the air base defense challenge. At the senior-leader level, base defense is all about developing effective and cooperative relationships with fellow commanders across the battlespace. To be effective at base defense, you have to have an accurate, detailed perspective of the threat and mission environment as well as the organizational dynamics of friendly forces and the resources that will interact to effectively provide for the defense. As the commander charged with base defense, you must integrate and synchronize your efforts with the surrounding battlespace commander. You're not just on your own—you will need support and resources from across the joint force or coalition.

Airmen use an “air-minded” approach to air base defense; this mind-set is different than that of solely defending a large forward operating base. Airmen need to ensure that defense of an air base goes well beyond perimeter security. Doing so includes defending the mission by addressing the surface-to-air missile threat and approach corridors and integrating military deception and other innovative methods to assure continuity of air operations. Effective nonlethal countermeasures are essential because in many cases, kinetic responses are not appropriate given the context of the situation. In most environments, intelligence, surveillance, and reconnaissance are critical enablers, but rarely are they dedicated to air base defense. As such, the air-minded defender will integrate and utilize residual capability and loiter time of air component assets as they return to base or get rerolled to different missions.

Finally, as a service, we are not optimally equipped for the counterinsurgency engagement and development mission. In Afghanistan we reached out to other organizations for human terrain expertise, linguists, and resources to support outside-the-wire development and community engagement. In a counterinsurgency, security forces and others involved in base defense need to ensure they expand their mind-sets from only providing security to proactive engagement. Defensive forces and commanders must foster relationships with the communities outside the wire to ensure the local population has a vested interest in the security and welfare of the base.

Colonel Caudill and his fellow authors have done a real service for the Air Force and joint community by tackling the thorny issues dis-

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cussed in this book. They are adding a rich new volume to an important and often underappreciated part of airpower history and the operational art.

THOMAS H. DEALE
Major General, USAF

About the Authors

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ABOUT THE AUTHORS

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Reserve and Air National Guard, including an additional 18,800 personnel and more than 200 aircraft. As commander, Air Forces Southern—a component to the combatant commander, US Southern Command—he oversaw Air Force assets, five forward-operating locations, and civil and military engagements in Central and South America as well as the Caribbean. The general was an exchange officer with the US Navy, serving with VF-41 on board the USS *Nimitz*. He has also served in key positions during tours with Air Combat Command, the Air Staff, and the Joint Staff. General Seip was a command pilot with more than 4,500 flying hours, primarily in fighter aircraft. He flew the F-15E in support of Operations Southern Watch, Northern Watch, and Iraqi Freedom. As the deputy commander, combined force air component, US Central Command, General Seip had a direct impact in supporting combat operations in Iraqi Freedom, Enduring Freedom, and Joint Task Force–Horn of Africa.

Maj Gen Bradley D. Spacy, USAF (BA, Fresno State University; MS, University of Southern Mississippi), is the commander, Air Force Installations and Mission Support Center (AFIMSC), Joint Base San Antonio–Lackland, Texas. AFIMSC is an Air Force Materiel Command center comprised of a cross-functional headquarters and six primary subordinate units; the Air Force Installation Contracting Agency, Air Force Civil Engineer Center, Air Force Security Forces Center, Air Force Services Activity, Air Force Financial Center of Expertise, and Air Force Financial Services Center. AFIMSC is responsible for providing installation and mission support capabilities to 77 Air Force installations across nine major commands. General Spacy is a career security forces officer and former instructor of the Air Base Defense Command course at Lackland AFB. His previous command experience includes leading two squadrons, a mission support group, and two wings. In addition to command, General Spacy served multiple staff tours on the Air Staff and Joint Staff and as the USAF liaison to the US Senate. General Spacy was also the director of Force Protection for US Central Command Air Forces Forward in support of Operations Enduring Freedom and Iraqi Freedom, during which time he created, planned, and participated in Operation Desert Safeside/Task Force 1041 (an offensive ground combat operation to kill or capture insurgent forces attacking Balad AB, Iraq). His more recent assignments include director of Logistics, Installations, and Mission Support, Headquarters US Air Forces in Europe and Air Forces Africa, Ramstein AB, Germany, and the Director of Expeditionary Sup-

port, Air Force Installation and Mission Support Center. General Spacy is a graduate of Squadron Officer School, Marine Corps Command and Staff College, and Joint Forces Staff College. He received a National Defense fellowship and is a senior executive fellow at Harvard University.

MAJ Michael M. Wellock, USA (BA, University of Tennessee-Knoxville; MA, Air Command and Staff College), is the chief of Current Operations at the Army's Human Resource Command in Fort Knox, Kentucky. Previously, he served in the Army's First Infantry Division headquarters, Fort Riley, Kansas, as a plans officer; the 1-16th Infantry Battalion as the battalion operations officer; and in the 1/1 Armored Brigade Combat Team as the operations officer. Prior to the Big Red One, he served at the National Training Center as a senior infantry company trainer and a battalion S3 trainer. As a career infantry officer, he has held a variety of leadership, command, and staff positions including platoon leader in a rifle and antiarmor company; executive officer in a rifle company; Ranger instructor at the 5th Ranger Training Battalion; company commander in a mechanized infantry company; and an observer, controller, and trainer at the National Training Center. He deployed in support of Operation Iraqi Freedom (OIF) V as an antitank platoon leader and a rifle company executive officer with the 82nd Airborne Division. He also deployed for OIF VII / Operation New Dawn as a combined arms battalion assistant operations officer and to the Republic of Korea as a battalion operations officer.

Acknowledgments

First and foremost, I want to thank and salute the eight Air Command and Staff College students who participated in a yearlong research elective on base defense and insurgency, which I taught in Academic Year 2015. They produced eight of the chapters in this anthology. Accolades to Air Force officers Lt Col Russell “Big” Badowski, Lt Col Jason Baggett, Lt Col Scott “Shaggy” Black, Lt Col Loren “Nike” Coulter, Lt Col Colby “Thor” Edwards, Lt Col Ray Fortner, and Maj Stewart “PR” Parker and MAJ Mike Wellock, US Army. I was thrilled with the enthusiasm each student brought to our seminar discussions and research tasks and thankful for the broad backgrounds of the class. We are grateful for the support of the Air Force Historical Research Agency in our research project, specifically Thomas Lauria and Neil Franklin.

For three years I had the privilege of teaching American and international military officers and US government civilian leaders in my Air Command and Staff College and Air War College electives, named after my first book project—*Defending Air Bases in an Age of Insurgency*. These students brought their very best intellectual efforts to the seminar discussions and provided a wealth of case studies from their own base defense accounts. These electives benefited from senior leaders who gave of their time to talk about their experiences leading the base defense in combat. Specifically, I’d like to thank Lt Gen Steven Kwast; Maj Gen Brian Bishop, USAF, retired; Maj Gen Thomas Deale, USAF; and Brig Gen Robert Thomas, USAF, retired. Many thanks to General Deale for his long-standing support for this project and his writing of the foreword, as well as my appreciation to Maj Gen Bradley Spacy for his advocacy and contribution of the book’s afterword.

I’m indebted to Brig Gen Paul Guemmer and Col Patricia Hoffman, both USAF, retired, for their unwavering support of my writing, teaching, and research efforts while I was assigned to the Jeanne M. Holm Center for Officer Accessions and Citizen Development. Colonel Hoffman was nice enough to officiate my retirement ceremony at Turner Field on the Air Force’s birthday in 2016. The Braves named me as the Hometown Hero, which included time on the field, a video profile on the jumbotron, and a very generous standing ovation from the crowd. Needless to say, Colonel Hoffman’s thoughtful remarks at my private retirement ceremony in front of my extended

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family provided a poignant send-off, especially since she used the language of baseball to explain my career in an incredibly artful and meaningful way. The Braves' festivities left quite an impression on my boys, and it was a wonderful moment in time. Thank you also to Lt Col Steve Packard for acting as the master of ceremonies for my retirement and to the men and women of the Holm Center Support Directorate who amazed me with their professionalism, innovation, and sense of humor. It was a pleasure to serve with you all on my last tour of duty.

Thank you to Air University Press and its Publication Review Board members. The voting members treated the subject of air base defense with the seriousness and attention it deserves. AU Press has supported this work at every step and enthusiastically accepted a second and third volume. Special thanks go to Jeanne Shamburger, my AU Press editor, who brought out the best in me as a writer, editor, and book project manager. Jeanne did an amazing job, and I'm so proud of the results. I continue to be grateful to Daniel Armstrong, whose original and creative cover art design will grace all three volumes of this book series. Thanks also to Dr. Ernest Rockwell, who edited my first book and whose encouragement and support I greatly appreciate.

Many thanks to Dr. Alan Vick, by far the most established expert and advocate for base defense research. His two 1995 RAND reports were recently joined by his 2015 study. He continues to provide informative data points for senior leaders validating the necessity for base defense planning and resources. Dr. Vick has been a longtime inspiration for many in the security forces career field, and I was particularly pleased to contribute to his 2015 work as a reviewer and thrilled that portions of our AU Press volume were referenced in his work.

I also appreciate the support and encouragement of Dr. John "Jack" Cann who has published widely on insurgencies in Africa and inspired me as my thesis advisor while at Marine Corps Command and Staff College from 2003 to 2004. His 2015 book, *Flight Plan Africa: Portuguese Airpower in Counterinsurgency, 1961–1974*, details several insurgent base attacks using indirect fire and shoulder-launched missiles against the Portuguese in the 1960s and '70s.¹

I have truly been inspired by many of the great friends, mentors, and leaders in the security forces career field: Col Brian Greenroad, USAF; Maj Dan Massey, USAF; Col Russ Daisley, USAF, retired; Col Donald Collins, USAF, retired; Col Erik Rundquist, USAF; Col

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Scott Farrar, USAF, retired; Col Chris Bargery, USAF; Col Rich McComb, USAF; Col Joe Milner, USAF, retired; Brig Gen Tom Wilcox, USAF; Col Chris Frederiksen, USAF; Col Ken Ohlson, USAF; Lt Col Brad Wayland, USAF, retired; Lt Col John “Greg” Worley, USAF, retired; Lt Col Ben Jenkins, USAF, retired; Lt Col Thomas Morea, USAF, retired; Lt Col Paul Cairney, USAF, retired; CMSgt Rick Martinez, USAF, retired; CMSgt Brian Wilson, USAF, retired; CMSgt Bruce Spurling, USAF, retired; CMSgt Pat Poth, USAF, retired; CMSgt Larry Pinkham, USAF, retired; CMSgt Jim Tormasi, USAF, retired; CMSgt Mike Lintz, USAF, retired; and so many others. I would like to thank Col Joe Milner for his care in officiating my colonel promotion ceremony in front of my extended Georgia family at the Southern Museum of Civil War and Locomotive History in 2013. It was a wonderful moment in a special place.

My profound thanks to all the men and women who served with me when I commanded the 85th Security Forces Squadron, Naval Air Station Keflavik, Iceland (1999–2001), the 100th Security Forces Squadron, Royal Air Force Mildenhall, England (2005–7), and the 532nd Expeditionary Security Forces Squadron, Joint Base Balad, Iraq (2009–10). It was a privilege and an honor to serve alongside each of you.

I’m also grateful to the wonderful chaplains who have helped me and my Airmen grow spiritually and deal with the challenges of combat. For my Iraq tours, I would like to thank Capt Brandy Brown, USAF (now a lieutenant and chaplain in the US Navy); Capt Paul Amiliri, USAF; and Maj Paul Fitzpatrick, USAF. I’m also indebted to Father Ernest Berthelette who welcomed me into the faith at RAF Mildenhall, England, and Father Linn Harbour who shepherded my family and baptized my youngest son at Maxwell AFB, Alabama. Thank you also to the godparents of our two boys, Jack and Delores Stockman. We are blessed to have you in our lives and appreciate your encouragement and example of faith. We love you.

There are some who exemplify the concept of being a good “wingman”: Frank Kayter, my former first sergeant in Iceland; Troy Carpenter; David Stringer; Dave Cope; Bill Norton; and my brother, Matt Caudill—all of you made a difference in my life when I needed it most. I’m also blessed to have stayed in contact with good friends from my early years: CAPT Tony Bayungan, USN; Rick Brown; and Bob Williams, a fellow veteran and police officer.

During a long military career with many moves, you appreciate the moment your family can plant their roots in one spot and be part

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of a community. I would like to thank some special people in our Georgia community who have made a real difference in my life and that of my boys. First, I extend my appreciation to the board members, coaches, players, and parents of the Kennesaw Baseball Association (KBA). Both of my boys have played baseball at Adams Park through KBA during the past three years (the same park Dansby Swanson played in his youth; he now plays for the Atlanta Braves). I'm thankful to Coach Dennis McCoy for recruiting my oldest son for the Adams Park All-Star Team right after we moved from Alabama and then took the team on to win the district championship. I'm grateful to Coach Rich Gross who then took the All-Star Team to a second district championship and onto a Georgia Training Legends World Series title. Rich is a special coach, and we are privileged to have an extraordinary group of boys and parents on our team. I'm excited to see what our newly converted travel ball team can do with these amazing players and coaches (Rich Gross, Troy Brooks, Bruce Bartlett, and me). Go Kennesaw Outlaws!

I would also like to thank the good people at Ralph's Tavern in Kennesaw for catering my parents' 50th wedding anniversary and being my dad's favorite pub for over 25 years. I have spent some real quality time with Dad there, and I also did quite a bit of writing and editing at Ralph's over a pint. Thank you Ross, Brandon, Justin, Amy, and the rest of the Ralph's Tavern family. Many thanks to the Atlanta Area Norwich Alumni Club for the great welcome as I retired to Georgia. Doug Isbecque and the rest of the gang even honored me with the Hometown Hero honors at an Atlanta Gladiators hockey game, which my family greatly enjoyed. Norwich forever! Essayons! Our appreciation also goes to the Georgian Club, a special place with terrific people who have known my father over 20 years.

I want to express my deep appreciation to my alma maters, Point Loma High School and Norwich University, for providing me a sound grounding in leadership and academics. Both Mrs. Smith's journalism class at Point Loma and the Communications Department at Norwich were instrumental in shaping my writing and editing skills (and love for the craft). I'm also grateful for my Naval Junior Reserve Officer Corps experience and the encouragement and mentorship of CDR Gordon Wiram, USN, retired, and CPO Jack Quinlan, USN, retired—both were father figures to me and so many others.

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When I retired from the Air Force in the fall of 2016, I had an amazing experience working in the entertainment business. I got to meet celebrities like Jerry Seinfeld, Hillary Clinton, the cast of the Avengers, the Eagles of Death Metal, and so many other terrifically talented performers and artists. It was an interesting chapter in my life. The true blessing was I got to meet some truly amazing people who work in that industry: Betty, Helen, Bernice, Andy, Chico, Hunter, Edna, Ariel, Elliot, Andrew, Charles, Lester, Leigh, Julianne, Ashley, Jessie, Shelby, Nancy, Cindy, Tisha, William, Jamie, Janice, Shelly, Michael, Azie, Mike, Eric, Sue, Glen, Jimmy, Jon, Len, Paul, Zach, Mark, Alex, Edgar, Sean, Chris, Elmo, Laura, Greg, Jerome, Trevor, and Vanessa. To Mike Casey, I say thank you—my boys will always remember your kindness and your extraordinary talent entertaining patrons. Thanks also to Larry Green, a fellow Air Force security forces veteran and director of safety and security at the Cobb-Marietta Coliseum and Exhibit Hall Authority, for his support and mentorship on entertainment and venue security. I also want to thank Amanda Brookhuis and Kirby Smith for their excellent counsel and support.

I've since started my journey as a doctoral student at the University of Charleston in the Executive Leadership program. I appreciate the faculty, staff, and members of the cohort. In particular, I'd like to thank Dr. Ruth Wylie; Dr. John Barnette; Dr. Philip Shields; Dr. Kristen Dugan; and Nicole Byrum, a George Walker Fellow, for their encouragement and mentorship. I'm enjoying the journey, intellectual discovery, and rigor of the work.

Finally, I thank my family. Military life is not easy. My parents set a very good example of service and sacrifice. My father is a Vietnam veteran and served in the Navy for 26 years. My mother took great care of my brother and me while Dad was out to sea sometimes six to eight months out of the year. It was not easy, but my Mom did it with grace, kindness, and love. I will forever be indebted to my parents for their spirit and the many gifts of character they gave me. You will always have my love and respect.

Similarly, my wife endured a lot as an Air Force spouse, raising a son for the year I was in Iraq; dealing with a pregnancy while I was in combat on my second tour; and suffering the many inconveniences, moves, and uncertainties of military life. She sacrificed a promising and successful career as a defense analyst to be with me and share my military adventure. Thank you—I love you, Corinna.

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I couldn't ask for a greater blessing and ending to my Air Force career than to have you at my side and in my life.

Notes

1. Cann, *Flight Plan Africa*, 333–43.

Introduction

Shannon W. Caudill

This book examines both the art and science of one of the most important aspects of Air Force military operations . . . defending air bases against counterinsurgency. The tenets cataloged in this body of work provide lessons learned and academic insights that further the education and advocacy that began in volume I. It clearly informs defenders and senior leaders on the perplexing ground defense challenges we must defeat in order to achieve vital US objectives in contested environments. Job well done!

—Brig Gen Richard A. Coleman, USAF, retired
Former Air Force director of security forces
Headquarters US Air Force

I'm gratified by the response to Air University Press's *Defending Air Bases in an Age of Insurgency*, published May 2014. The book was the AU Press number one download for 2014, highlighting the thirst for this material in meeting an operational and educational need. There has been a groundswell of support for a second volume to add more depth and fill gaps in the literature and historiography. I feel that the first book was just the opening salvo in an intellectual renaissance for this field of study and component of airpower and military operations. It has since been joined by new publications and media from the RAND Corporation's Dr. Alan Vick; air base attack lessons learned videos from Air Combat Command's Col Erik Rundquist; and the book *Security Forces History 1947–2006* written by two retired Air Force colonels, James Conrad and Jerry Bullock. The re-awakening for this field of study is driven by a deep desire by leaders to capture the experiences of recent conflicts, the challenges presented by the strategic pivot to the Asia-Pacific, lessons from ongoing operations in Afghanistan and Iraq (again), and the proliferation of new technology-driven threats to airpower.

Why a second volume? First, there was a thirst for more material. Volume 1 bridged much of the gap in the literature that existed since the last publication on this subject in 1995 by Dr. Alan Vick and RAND Corporation. I was thrilled to see the response from the field

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as I had leaders of all ranks ask for time over lunch or an office call to discuss the material and my research. My favorite was the visit by a young captain who had read the book in its entirety within two months of its online release and brought notes on each chapter with follow-up questions for me. This is precisely the level of intellectual engagement we need to ensure we are thinking beyond our own personal experiences and parochial interests.

I'm also pleased that this book is being published in 2019, which Gen David Goldfein has declared the "Year of the Defender."¹ This second volume provides another intellectual building block supporting the Air Force's larger effort of revitalizing our ability to project airpower efficiently and safely abroad. As he stated, "We must take integrated and layered base defense to a new level by increasing investment in our defenders with new equipment, new training, new techniques, and procedures, and renewed focus at every echelon of command."² As an organization, we can't take base defense operations and preparedness to a new level without examining and learning lessons from past conflicts.

The authors in this volume examine lessons from Afghanistan, Iraq, Vietnam and other air base attacks and terrorist incidents affecting airpower. It includes an examination of base defense challenges at the beginning (getting in) and end of conflicts (getting out). Importantly, this volume features material collected through a research partnership with the Air Force Historical Research Agency, which assessed and categorized the effects of air base attacks during the Iraq Conflict (2003–12) using Air Force history reports. This effort is important because no one in the Air Force could answer the simple question, How many aircraft were destroyed or damaged during the Iraq conflict? This research answers that question, offering valuable insights into enemy attacks and base defense effectiveness and adding to the historiography in this field of study.

Air base attacks are not simply a clean story about numbers. These attacks have real effects on people, both operationally and psychologically. Stories and impacts of air base attacks surround us if we only listen. I attended a Catholic Mass at Maxwell AFB when my priest, Chaplain Linn Harbour, reflected in his homily on his time in Vietnam as a young Air Force captain serving as a personnelist. He spoke about rocket and mortar attacks, the stress of combat, and the resiliency he witnessed among fellow Airmen. I asked him later about his memories about the base attacks he experienced:

I was at Phan Rang AB RVN Jun 70-71. We had three wings of aircraft there. During that period, we were the most attacked air base in country. Rockets flew in from the surrounding mountains until one day in November when a FAC [forward air controller] spotted the launching site and called for an air strike that came from Phu Cat. That was an awesome sight to watch from the front porch of wing headquarters as those planes tossed napalm and destroyed the launchers. We had no more rockets from then on. Earlier, mortars had also been lobbed over the fence toward the flight line and tore that up a few times.³

Even Gen Merrill McPeak, former chief of staff, reflected on his Vietnam base defense experience in his memoir *Hangar Flying*:

It was our good fortune to be collocated with the ROK [Republic of Korea] Tiger Division. The Koreans gave us reasonably good security, being well known for not taking any snot off anybody. Nevertheless, we merited the occasional Vietcong [VC] assault. One particularly memorable foray occurred the night of 23 February 1969, when VC fighters attacked more than 100 targets across the country, including some in Saigon. Sappers penetrated Phu Cat's perimeter defenses. Our security force captured a couple, along with a quantity of B-40 rockets, some hand grenades, and other explosives. We all kept a flak jacket and steel hat under our cots; this incident made me appreciate these, as well as the sand-filled blast walls bunkering my trailer. Still, the ROK presence made us rather safe at Phu Cat. We took nothing like the pounding they were getting at Bien Hoa or Da Nang.⁴

The integrated defense of air bases is an ongoing challenge. The security of air bases is central to airpower itself. It needs to be a part of airpower studies, leadership training, and the preparation of group and wing commanders. We must ensure that future leaders have a better understanding of base defense fundamentals, the history of this threat, and its importance to airpower sortie generation. Exposure to enemy air base attacks leaves an impression about its importance.

The journey toward volume 2 has been a long one. I would like to thank the senior leaders who allowed me to choose my own course in the final years of my career. I could have pursued group command but asked to remain at Air University to finish volume 1, continue to write and teach, and coauthor volumes 2 and 3. This work is truly my and the other authors' legacy to the Air Force, security forces career field, and our joint partners. I have been privileged to work with some truly great writers and thinkers who contributed to this three-volume series of books. I'm simply the organizer, advocate, and conduit for these great thoughts. My motivation has been simple—to document and evaluate the changing nature of base defense, elevate the thinking

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and innovation in this field of study, provide fodder for the policy and resource debate, and influence future generations of Air Force and joint leaders on the criticality of this subject. Too often, the Air Force has treated the defense of its own bases as simply a parochial interest of security forces or a problem for the US Army to solve. The authors of both volumes have secured their own intellectual legacy in this field of study and contributed to the literature in this component of airpower. The question for the reader is, What will you do to build upon this work and make the “Year of the Defender” a success in modernizing and expanding our base defense capabilities to benefit American and coalition airpower projection?

Notes

(All notes appear in shortened form. For full details, see the appropriate entry in the bibliography.)

1. Goldfein, Remarks to Air Force Association Air, Space, and Cyber Conference, 18 September 2018, 9.
2. Ibid.
3. Harbour to Caudill, e-mail.
4. McPeak, *Hangar Flying*, 263–64.

PART 1

Getting In . . . and Getting Out

**Securing Air Bases at the Beginning
and End of Conflicts**

Chapter 1

First In!: Expeditionary Air Base Seizure and Operations

Power Projection through Mobility Warriors

J. William DeMarco

The global strategic environment changed in a massive way when the Cold War ended. Gone is the moderating existence of two superpowers exerting suppressive influence on otherwise explosive regions. There was armed conflict during the Cold War, and it occurred with some regularity. Yet these superpower nations had an implicit understanding that nearly every encounter carried with it the potential to widen into a regional conflict or perhaps even nuclear war. Both knew that neither country would benefit from a global confrontation and the possibility of an Armageddon scenario. However, after the demise of the Soviet Union and the emergence of new states, the stabilizing influence of the superpowers dwindled, leaving the United States as the leading political force on the globe.

The United States no longer finds itself in the arena with another heavyweight power in an all-or-nothing contest for supremacy. America must shed the pounds of that heavyweight boxer and transform into a ninja that lurks in the dark alleys of the world, attacking a myriad of foes. In the early 2000s, the goal of US military transformation became focused on building light, lean, and lethal forces.¹ Attempting to adjust to the new strategic realities, each branch of the US armed services is struggling to determine its relevance in this new setting.

America has withdrawn forces from all over the world and has become a continental United States (CONUS)–based force. The ability to respond to a crisis overseas has led the Air Force to become more expeditionary. These expeditionary forces must be capable of rapid, small-footprint deployments into areas of strategic and operational im-

This essay is an edited excerpt of an original research paper entitled “Courage in Adversity: Defending Austere Airfields with Air Force Contingency Response Groups” (research paper, US Army Combined Arms Center, Fort Leavenworth, KS, 2004).

portance.² This light and lethal deployment capability represents a significant transformation from the Cold War force and is a key enabler for the current expeditionary Air Force.³

The air and space expeditionary force (AEF) concept is to rapidly deploy, employ, and sustain aerospace power around the globe from a predominantly in-CONUS force structure. The AEF's requirement to respond swiftly means that force and support packages must be quickly tailored to meet the operational needs of a specific contingency. The deployment and sustainment of resources must be coordinated to arrive at forward operating locations (FOL) so that initial and sustained operations can occur without interruption.⁴ These operations have been a challenge for the USAF in permissive environments, but they will face even greater complications in a hostile, nonpermissive, antiaccess environment where a forced-entry seizure of an airfield is required (fig. 1.1).

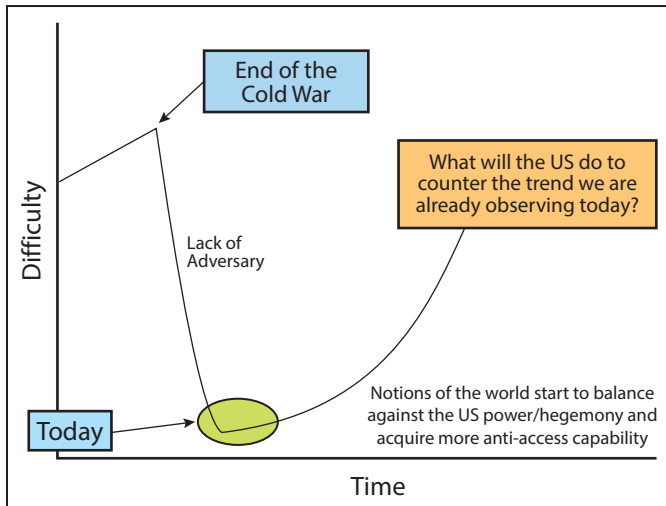


Figure 1.1. The antiaccess dilemma. (Reproduced from Col Thomas P. Ehrhard, PhD, USAF, briefing to the School of Advanced Air and Space Studies, Maxwell AFB, Alabama, 17 May 2004.)

The Vision

As the United States emerges from two nearly simultaneous conflicts in Afghanistan and Iraq, global airpower trends have clearly

proven the strategic importance of the expeditionary concept and suggest that few opponents will be able to challenge the United States Air Force in the air. However, adversaries of the future are likely to look for alternative means to counter US airpower. One means of doing so is through antiaccess tactics. The United States faced natural, geographical antiaccess issues in Operation Enduring Freedom (OEF)—the war in Afghanistan. America faced an enemy in a landlocked country with no easy access. Through the initial use of US naval airpower and USAF long-range strike aircraft, combined with a heavy reliance on the tanker fleet, America was nonetheless able to strike the Taliban effectively. Eventually America secured air bases in permissive areas such as Kazakhstan, Uzbekistan, and Kyrgyzstan.⁵ US forces also seized airfields in hostile environments—at landing zone (LZ) Rhino and Kandahar International Airport in Afghanistan. The post-9/11 world will find the seizing and opening of airfields in distant and unusual places increasingly important.

Significance

This concept of airfield seizure and secure lodgment is essential for the projection of American power. The doctrinal importance of airfield seizure and air base opening to US security strategy is supported by a continuum of key policy documents ranging from the White House to the Department of Defense (DOD), Joint Chiefs of Staff (JCS), US Air Force, and Air Mobility Command (AMC). The 2017 *National Security Strategy of the United States of America* asserts, “We must enable forward-deployed field work beyond the confines of diplomatic facilities, including partnering with military colleagues in conflict-affected states.” Further, since “adversaries constantly evolve their methods to threaten the United States and our citizens” our response must be agility and adaptability.⁶ Joint Chiefs of Staff (JCS) guidance in Joint Publication (JP) 3-18, *Forcible Entry Operations*, advocates forcible entry in situations where “securing the lodgment” is needed “to protect the force and ensure the continuous landing of personnel and materiel, . . . support the increasing flow of forces and logistic resource requirements, and . . . support the joint force in preparing for and executing follow-on operations.”⁷ Air Force doctrine notes, “As the United States moves into a realm of uncertain adversaries, it is the capability of our mobility forces that will ensure the force

projection necessary to protect US national interests.”⁸ It further describes how “deployable air mobility support forces can expand the GAMSS [global air mobility support system] at existing locations or establish capabilities where none exists,” thus establishing an infrastructure for global air mobility operations.⁹

According to retired USAF colonel John Cirafici’s research, “A war-fighting commander depends on the airhead to introduce combat forces in the shortest time possible and to sustain them during the initial and probably the most critical phases of the operations.” Further, Cirafici states that “where a threat of force is necessary, concerned parties must realize that the means to project force is as credible as the force itself.”¹⁰ In short, all US military services must contribute forces capable of rapid, decisive, forced entry operations in support of airfield seizure to enable follow-on forces.

The USAF—and more specifically Air Mobility Command with its vast array of air transports, aerial tankers, and air mobility specialists—is critical to effective power projection. US Army (USA) Field Manual (FM) 3-99, *Airborne and Air Assault Operations*, lists airlift as the number one item the USAF must deliver for such operations.¹¹ Air mobility capabilities are the key enablers for rapid force-projection forces. Therefore, the robustness of the air mobility system determines the speed at which America can generate forces for power projection. Future contingency operations will require a credible and versatile force tailored to each unique situation. Any force package will require a secure staging area to transition from deployment to employment. This is true whether that package is airpower or ground power. When a secure lodgment is not available, a forced entry into the objective area is required to seize and secure a forward base for the introduction of combat forces.¹²

A forced seizure of an airfield is a complex and difficult operation. The mission is normally performed by airborne troops, air assault forces, and/or ground special operations forces (SOF) and specially trained mobility crews either from Air Force Special Operations Command (AFSOC) or AMC. These units, both Army and Air Force, are lightly equipped and vulnerable to enemy maneuver and firepower. The operation is further complicated by the requirement for firepower via aircraft in a close air support (CAS) or interdiction role. Precision engagement is key in such an operation; destruction of the airfield and its facilities could render the inserted ground forces helpless as follow-on forces will be unable to proceed.

With extended-range air operations becoming increasingly important, is the USAF organizing, training, and equipping the force to handle the antiaccess issues of establishing forward air bases in a denied environment? An analysis of case studies will demonstrate the strategic importance of airfield seizure. We then examine whether the USAF is adequately preparing to execute this critical function in the future. Clearly, strategists find such operations increasingly critical: without airfields, force projection is close to impossible. For this reason, the history of some select operations is pertinent to future USAF operations. While the basic technique of airfield seizure has not changed markedly over the past 50 years, new information and sensor and weapon technologies offer opportunities for future conflicts.¹³

Each historical case study is examined through the lens of *Joint Vision 2020*. It presents the application of four operational concepts that will result in full-spectrum dominance: dominant maneuver, precision engagement, full dimensional protection, and focused logistics (fig. 1.2).

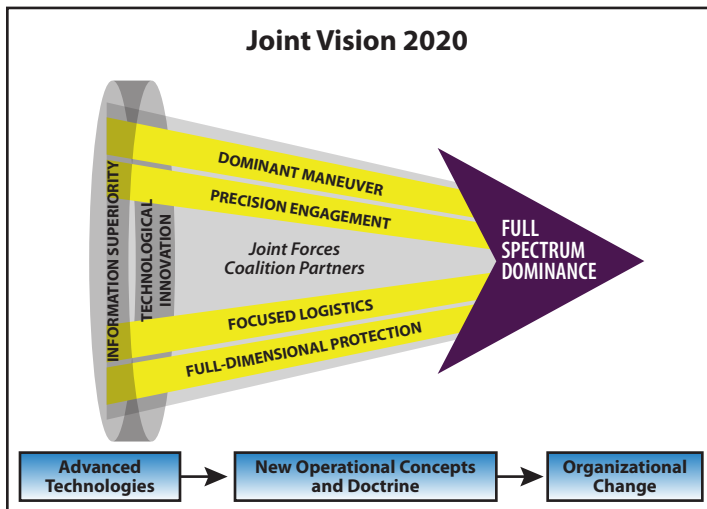


Figure 1.2. Joint Vision 2020. (Reproduced from Gen Henry H. Shelton, chairman of the Joint Chiefs of Staff, *Joint Vision 2020* [Washington, DC: Government Printing Office, June 2000], <https://permanent.access.gpo.gov/LPS5598/jv2020.pdf>.)

This template provides a common direction for US military services in developing their unique capabilities within a joint framework of

doctrine and programs as they prepare to meet an uncertain and challenging future. Furthermore, one of the best analyses of the future is to understand the past. By applying *Joint Vision 2020*'s concepts to the case studies, we can gain a better understanding of how to shape our future capabilities.

Historical Outlook

Airborne forces usually perform the seizure of an airfield when it is to be used as an airhead. Such forces have attacked airfields multiple times since 1940 to secure airfield facilities for the landing of troops, heavy equipment, and supplies.¹⁴ It is critical to review the theory and history of airfield seizure, follow-on air base opening, and the strategic significance of such operations. The Germans were the first to recognize the strategic value of an adversary's airfields as insertion points for their own forces. We also examine the Luftwaffe's operations in northern Europe, where German paratroopers captured airfields at Aalborg, Denmark, and at Sola, Oslo, and Stavanger, Norway. A month later, the Luftwaffe captured three airfields at The Hague and another at Rotterdam in Holland. A year later, in the largest German airborne operation of the war, German paratroopers assaulted the three Commonwealth airfields on Crete.¹⁵

This chapter also describes the Soviet view of airfield seizure and airhead operations. In 1979 Soviet airborne forces seized the Kabul airport and several other air bases for use by follow-on forces in the Soviet invasion of Afghanistan.¹⁶ Another focus is American operations using the experience of Operation Iraqi Freedom (OIF) to demonstrate the criticality of airfield seizure. However, airfield seizures have been a part of US military operations for some time. In 1983 American forces conducted attacks in Grenada during Operation Urgent Fury, capturing the Salinas and Pearls airports.¹⁷ Again in 1989, during Operation Just Cause, US Army Rangers captured Rio Hato and Tocumen airfields in Panama.¹⁸

As the world emerges from the Cold War and the US armed forces become increasingly expeditionary in nature, such airfield seizure operations will be more frequent. The linear battlefield has disappeared in Afghanistan and Iraq. This change has placed an even greater requirement on the need for airfields to resupply ground forces or forward deploy air assets. LZ Rhino was secured as a foot-

hold in Afghanistan during OEF, leading to the seizure of Kandahar International Airport.¹⁹ In OIF, airfield seizure operations were crucial pieces of the campaign. Iraqi airfields were turned into US operating bases at Tallil, Bashur, Bushmaster, H1, Kirkuk, K1, and Balad (discussed later in greater detail).²⁰

In the future, the USAF will encounter scenarios where it must secure lodgment to project power. The United States must develop the forces and organizations now to prepare for such operations. We explore how the USAF is posturing forces today and in the near future to meet this threat. The future of conflict is uncertain, and we consider how best to organize, train, and equip the force of tomorrow to meet a wide spectrum of conflict. Air base seizure and opening are key to US power projection.

Assumptions and Limitations

The USAF found that much of its post-Cold War thought regarding opening air bases did not withstand the reality test after 9/11. In the pre-9/11 world, the Air Force opened bases in locations with a robust infrastructure and a permissive environment. Strategies for those conditions have little to do with post-9/11 air base opening in austere locations with a modicum of or no infrastructure. The US mobility air forces (MAF) and US SOF have a myriad of lessons to study following OEF and OIF.

The topic of base opening received attention at the chief of staff of the Air Force (CSAF) and AMC commander levels in 2003. The Air Force and AMC explored a variety of initiatives to better enable expeditionary base openings, including the expeditionary mobility task force (EMTF) and the contingency response wing (CRW). As CSAF, Gen John Jumper, USAF, retired, stated that base opening and CRW skills are critical to the “modern expeditionary Air Force.” He noted, “We will continue to grow these skills and get the people in these groups that we need to be able to do this [air base opening] in any condition, anywhere in the world. And it’s going to get people’s attention.”²¹ Since then, the Air Force has implemented initiatives to better enable expeditionary base openings, including the air mobility operations wing (AMOW) and the CRW.²² Both the 515 AMOW at Hickam AB, Hawaii, and the 521 AMOW at Ramstein AB, Germany, were stood up in 2008.²³ The 621 CRW was activated in 2005 at Joint Base

McGuire-Dix-Lakehurst, New Jersey, and at Travis AFB, California. The goal of these organizations is maintaining a rapid air mobility capability to seize and open airfields.

An essential premise for implementing a truly effective airfield seizure and air base opening team, as history will show, is that it must be truly joint. US armed forces must transcend parochial interests to develop the most effective force. Without an airfield to operate from, in many cases, there will be no introduction of combat forces. If the American military is committed to creating an effective, light, and lethal fighting force, it must take action that reaches beyond bureaucratic entanglements and service rigidity. One must understand the Air Force role in airfield seizure and air base opening—how such operations have been performed in the past and whether those methods will translate well into the future of such operations.

Airfield Seizure Case Studies

The practice of capturing airfields dates back to World War II and the Luftwaffe's attacks in Norway. However, the concept of securing lodgment for friendly troops to ensure the capability of follow-on attack is centuries old. Evidence is found in the earliest recorded history, back to 416 BC with Thucydides and the Sicilian Campaign. The argument in favor of the expedition was that by subduing Sicily, which had a large number of Greek colonies, the Athenians would receive an increase in their forces with which to defeat the Peloponnesians. Athenian general Nicias debated fellow countryman and general Alcibiades on the merits of the campaign:

Against a power of this kind it will not do to have merely a weak naval armament, but we shall want also a large land army to sail with us, if we are to do anything worthy of our ambition, and are not to be shut out from the country by a numerous cavalry. . . . We must therefore start from home with a competent force, seeing that we are going to sail far from our country, and upon an expedition not like any which you may undertake. . . . We are cutting ourselves off, and going to a land entirely strange.²⁴

In 415 BC the Athenians sent out a great fleet and in 414 BC besieged Syracuse, the main Greek city in Sicily. The campaign proved to be a disaster for the Athenians and the beginning of the end for their empire.

Fast-forward to an America that up until World War I had fought most all of its wars on the continent of North America. For two cen-

turies the United States enjoyed near isolation behind two broad oceans. The country's participation in World War I against the Central Powers was the first major break with these traditional isolationist policies. The United States fought in World War I as an associate power, not as an ally. Even after a world war, America attempted to return to being an isolationist country.

The first turning point for US isolationists occurred in 1940. German military triumphs in Europe and the Battle of Britain forced widespread American reconsideration of its relation to the war now raging in Europe. Many worried that if Germany and Italy triumphed in Europe and Africa, and Japan triumphed in East Asia, the Western Hemisphere would be the next target. Even if America withstood assaults, its democracy, freedom, and economy could be traumatized in the "fortress America" it might have to maintain to guard its security. Given that frightening worst-case scenario, by the autumn of 1940, most Americans believed in ensuring the defeat of the Axis—even at the risk of war. The ultimate turning point from isolationist to global power proved to be the December 1941 Japanese attack on Pearl Harbor, Hawaii.

As America emerged from isolation in World War II, force projection became increasingly important. In Europe, the projection was less of a challenge since US forces could secure lodgment in North Africa and England. In the Pacific, the Allies witnessed the birth of airfield seizure—an entire campaign based on acquiring new lodgment after new lodgment.

Thousands of miles separated the United States from ultimate victory in the Pacific during World War II. Lt Col James H. "Jimmy" Doolittle led the famous raid on the Japanese home islands early in the war, but spanning the vast oceans with concentrated air power proved a daunting task. American naval and ground forces had to secure bases in China and wrest far-flung islands from the tenacious grip of the Japanese. From these bases, the United States Army Air Forces (USAAF) launched specially designed, very long range bombers against the home islands. The strategic bombing campaign, climaxed by the destruction of enemy cities with conventional and atomic bombs, helped force Japan to surrender and spared the United States a bloody invasion. The US air offensive against Japan is the central story of the Pacific war, a drama of island hopping, airfield seizures, and the truest sense of joint operations.²⁵ Much of the WWII Pacific

experience in airfield seizure is pertinent to today's expeditionary Air Force.

A RAND corporation study by Alan Vick notes that a broad range of objectives may be gained from attacking an air base. These range from simple harassment of the enemy and its operations to the focus of this paper, capturing an airfield for US operations. Vick further divides the capture of an airfield into two categories: (1) for use as an airhead or support base or (2) for offensive air operations or FOL.²⁶

The capture of an airfield for offensive air operations, where attacking air forces sought to capture enemy bases to perform their own offensive air operations, was limited to World War II until recent operations in Afghanistan and Iraq.²⁷ WWII had 23 FOL operations, and, in many of these, the attackers could mount offensive air operations within hours or days after ground forces had secured the airfield. These operations were akin to the conflicts in Afghanistan and Iraq. Ground forces captured airfields so that their own air forces could occupy the base and conduct offensive air operations from the airfield, extending the reach of the attacker's air force.²⁸

Fighting in the Pacific theater of WWII was noted for its jointness. In particular, the campaign plans of both sides were largely determined by the need to capture and defend air bases.²⁹ As such, joint operations were launched to capture enemy airfields. Subsequent air operations from these new bases extended the offensive range of airpower, allowing for new naval and ground operations that, in turn, seized new airfields.

Both the Allied and Axis powers had noteworthy FOL operations in World War II. Among these are the Japanese attack on Wake Island and Japanese landings at Singora and Patani, Thailand, and Kota Bharu, Malaya. Japan secured two Thai air bases and three Royal Air Force (RAF) fields, subsequently defeating the British in Malaya on 15 February 1941. The Japanese also captured the RAF airfield at Palembang, Sumatra, in February 1942.³⁰ The Japanese attack on Midway Island in 1942 was a failed attempt at airfield seizure—changing the tide of the war.³¹ Notable Allied efforts include the British assault on the Vichy French airfield at Souk-el-Arba, Algeria, in November 1942 and the US landings on Tinian, Iwo Jima, Okinawa, and Ie Shima in 1944 and 1945.³² These examples are a few of the operations in an entire campaign bent on the seizure of airfields to attack and counterattack the enemy.

The Soviet and American Cold War following World War II stifled such operations on a grand scale. Airfield seizures occurred in several conflicts but were limited. The Korean War witnessed the United States rapidly opening air bases as land was seized from the North. Operation Chromite (or Inchon) is an excellent historical example of the strategic importance of airfield seizure. The objectives of Operation Chromite were multifaceted: “(1) neutralize the fortified Wolmi Island, which controlled access to Inchon Harbor; (2) land and capture Inchon, 25 miles west of Seoul; (3) seize Kimpo Airfield just south of Seoul; and, finally, (4) capture the city of Seoul.”³³ On 24 September 1950, just days after the invasion, Kimpo Airfield opened for 24-hour operations. Cargo aircraft brought in much-needed supplies and air evacuated the wounded and sick back to hospitals in Japan. Nine C-119 transports emergency air-dropped ammunition and rations to the frontline troops as they pushed north out of the Inchon area. Eight C-54s landed at the newly captured airfield at Suwon on 24 September to bring in some 65 tons of ammunition and rations. The Combat Cargo Command lifted the 187th Airborne Regiment into Kimpo on 25 September to guard the offensive’s flank as the troops moved forward.³⁴

As mentioned, from the end of Korea until the 1980s, the two superpowers had somewhat stabilized the global environment, and the United States faced the USSR along stagnated lines. The static “Iron Curtain” over Europe allowed for the building of forward bases and the deployment of permanently stationed troops in the theater of conflict. The ability and requirement to seize bases significantly decreased in strategic importance. The operations were relegated to a small force of special operations experts.

These infrequent operations included Operation Eagle Claw—the failed rescue attempt of American hostages held in Iran. Eagle Claw planned on the seizure of Manzariyeh AB in Iran. This putative lodgment would have allowed for C-141 Starlifter transports to fly the hostages and rescue teams out of the country.³⁵

Operation Urgent Fury—the rescue of American students in Grenada—required the seizure of Salinas and Pearls airports.³⁶ During Operation Just Cause, US Rangers captured Rio Hato and Tocumen airfields in Panama for insertion of forces to remove dictator Manuel Noriega.³⁷ These operations differ from those of WWII in that the objective of these seizures was never to sustain forces. The

operations were a bolt out of the blue—a surprise special operations effort for temporary effects.³⁸

In essence, the Cold War was the driving factor in diminishing the US military's need for airfield seizure and the requirement to open bases. Europe and the Pacific were fertile ground, littered with bases to support troops in combat with the USSR. If World War III were to occur, a nuclear exchange would end the war quickly. If nuclear weapons were not used, the conventional battle between the United States and USSR would be one of forces already deployed in Europe and fought from fixed bases, with follow-on forces deploying to forward NATO airfields and ports. These forces and forward bases were a requirement of the Cold War and integral to deterrence.

Following the Cold War, America and its allies faced what President George H. W. Bush called a “new world order.” In his 11 September 1990 address to a joint session of Congress and the nation, he stated:

A new world order—can emerge: a new era—freer from the threat of terror, stronger in the pursuit of justice, and more secure in the quest for peace. An era in which the nations of the world, East and West, North and South, can prosper and live in harmony. A hundred generations have searched for this elusive path to peace, while a thousand wars raged across the span of human endeavor. Today that new world is struggling to be born, a world quite different from the one we've known. A world where the rule of law supplants the rule of the jungle. A world in which nations recognize the shared responsibility for freedom and justice. A world where the strong respect the rights of the weak.³⁹

Ironically, 11 years later, his son, President George W. Bush, would face a completely different world.

Instead, the “new world order” ushered in a new realm of conflict. America was forced to change from a Cold War force that was deployed forward to a force that was in garrison and home, based in the United States with the ability to deploy rapidly. The US approach to combat in Desert Storm was based on Cold War thought. The United States–led coalition built up forces in the Persian Gulf at allied bases and was afforded the time to meet the Iraqis with overwhelming force.

Conflicts in Somalia and Rwanda stimulated discussion among US strategists regarding the notion of air base opening. The United States needed more open airfields in austere places at the very limit of its logistical reach. US military strategy increasingly stressed force projection and the strategic role of air mobility forces. The pre-9/11 air base opening sequence proved a good start in thought, but a

leaner military structure required the USAF to develop doctrine for the optimum use of forces. The United States no longer enjoyed scores of airlifters and tankers flying to fixed bases. To strengthen and grow this budding expeditionary culture, new strategies would have to emerge.

A regional combatant commander requires his forces to flow into the theater in a timely manner to where they are needed so that they can quickly prepare for employment. The linear battlefield made these objectives a challenge; today's nonlinear battlefield makes them even more difficult. New units in-theater make vulnerable, lucrative targets for the enemy. Whether on an FOL or a support base, the airfield can be exposed and a bottleneck. Because of its critical importance for force insertion and sustainment, it is a likely center of gravity that a competent enemy would be expected to attack. No longer can air mobility alone open bases as we saw in the pre 9/11 world. Today, forces must be integrated.

CONOPS Theory

During the early 2000s the DOD focused its efforts on military transformation. Then secretary of defense (SecDef) Donald H. Rumsfeld defined the goal of transformation: "We need rapidly deployable, fully integrated forces, capable of reaching distant theaters quickly and working with our air and sea forces to strike adversaries swiftly, successfully and devastating effect."⁴⁰ Key to this effort was the creation and modernization of forcible entry capabilities. JP 3-18, *Joint Forcible Entry Operations*, states that Army airborne and air assault forces are primary forces in such operations.⁴¹ Such forces cannot project themselves on a global scale and require the USAF to seize airfields. RAND's study *Lightning over Water* cites research that questions whether airborne and air assault assets "have the survivability and killing power for future . . . contingencies." The study indicates that light forces "will need to have much greater survivability and lethality to operate effectively."⁴² The Air Force enhances this survivability and lethality of forced entry operations. Air Force forced entry capabilities like airlift, counterair, CAS, tactical air reconnaissance, air interdiction, special air warfare operations, electronic warfare, and suppression of enemy air defenses (SEAD) are central to the air component's forced entry missions.⁴³

Air Mobility

This forcible entry option of either airborne or air assault requires a delivery method. The preferred method for conveying these forces is via the USAF's air mobility forces. Without the robust capability of the USAF, the airborne unit is a rider without a horse. With an effective and timely USAF response, however, seizure forces can be employed with the maximum probability of success.⁴⁴ JP 3-17, *Air Mobility Operations*, states, "Air mobility operations are a rapid means to project and sustain power across the globe in support of US national interests and a critical enabler to the US National Military Strategy."⁴⁵

Air mobility is a system of systems combining airlift, air refueling, and air mobility support assets, processes, and procedures into an integrated whole. Airlift and air refueling can operate independently of one another, but neither can operate without air mobility support.

Current forcible entry forces—airborne and air assault—lack survivability and lethality, especially in a high threat environment.⁴⁶ The Air Force's global strike CONOPS package of aircraft can establish air dominance, but troops on the ground are usually required to occupy terrain and secure lodgment. The solution is an integrated force using airborne forces, the USAF global strike CONOPS, and the global mobility (GM) CONOPS.

Lodgment and the Global Mobility CONOPS

A contingency mission requires a secure base of operations where combat power can be introduced, projected, and sustained to conduct joint operations. Seizure of an airfield is one means of securing such a base. Operations to support this goal can be conducted via ground, air, or sea. Once the field is attacked, it must be secured and defended, and subsequent air and/or ground operations must ensue.

The projection and employment of US forces has almost inevitably required the establishment of bases near the area of operations.⁴⁷ Today, air base opening is fulfilled in the following steps (fig. 1.3): (1) "Open the Airbase," which first employs the base assessment team (C-BAT), (2) Create a synchronized "Command and Control [C2]," (3) "Establish the Airbase" to achieve initial operating capability and provide sufficient force protection, (4) "Generate the Mission," and, finally, (5) "Operate the Airbase" to bring its full operating capability to bear to meet overarching military objectives.⁴⁸

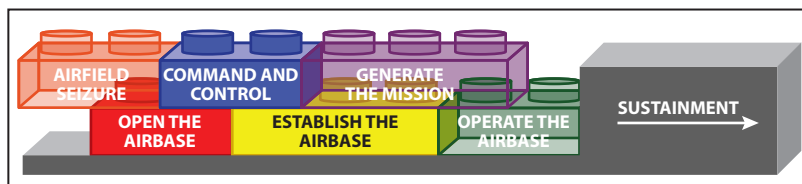


Figure 1.3. Air base opening force model construct. (Reproduced from Curtis E. LeMay Center for Doctrine Development and Education, “Airbase Opening,” in “Annex 3-17, Air Mobility Operations,” 65, 5 April 2016, <https://doctrine.af.mil/download.jsp?filename=3-17-Annex-MOBILITY-OPS.pdf>.)

Implementing the GM CONOPS in a hostile environment requires direct, detailed coordination and integration between the GM CONOPS planners and airfield seizure forces. These forces usually consist of SOF or conventional Army or Marine Corps (USMC) forces combined with Air Force forces. Of these roles, the USAF’s part in “opening the air base” is the most imperative.

History shows the strategic importance of airfield seizure, and we will examine such operations in context. Case studies start with German operations in Norway, continue with the Soviet concept of airfield seizure and its effects in Afghanistan, and conclude with the US operation in Iraq during OIF. These case studies are offered as reflection prior to further addressing the USAF’s concept for air base openings in the wake of OIF and OEF. Finally, future organization, training requirements, and doctrine are amplified as recommendations for future operations.

The German Way: The Luftwaffe in Northern Europe

In World War II the Germans conducted major airfield seizure operations only twice—May 1940 in Holland and May 1941 involving the occupation of Crete. Thus, Germany’s experience with airborne operations in this war is derived primarily from these two engagements, “constitut[ing] the first large-scale airborne operations in the history of warfare.”⁴⁹ Airborne operations during Operation Mercury, the seizure of Crete, were less than impressive. Despite taking the island, Adolph Hitler saw the battle as a fiasco and lost faith in the paratroopers under Gen Kurt Student. He never ordered another

major airborne attack for the remainder of the war. The focus here, however, is the campaign in Norway and the strategic effects caused by forcible entry and subsequent airfield seizures.

Context

Operation Weserübung, the invasion of Norway and Denmark, was a campaign of many firsts.⁵⁰ The operation demonstrated the first combat airborne operation and airfield seizure, the first campaign in which air superiority cancelled the opponent's naval superiority, and the first major campaign in which aerial supply through seized airfields became a deciding factor.⁵¹ Hitler first envisioned the invasion of Scandinavia around Christmas 1939 and revisited the concept in early 1940. German motives for the invasion included not only the fear of the British forestalling Germany and seizing Nazi supplies of iron ore but also "a wish to push the British naval blockade as far away from the German coast as possible."⁵² Germany also recognized that the Norwegian air bases offered the Luftwaffe the range to strike the northern portion of the British Isles. In turn, if the British were to occupy Norway, they could use the airfields as bases for the RAF and enable bombing missions against German cities at a much shorter range.⁵³ With the commencement of operations in Scandinavia, Hitler stated that "this operation will prevent British encroachment in Scandinavia and the Baltic; further, it will guarantee our ore base in Sweden and give our navy and air force a wider start-line against Britain."⁵⁴

For Germany to attain its diplomatic, military, and economic objectives in Norway, the Norwegian military had to be defeated. The German military was, at the same time, preparing for the invasion of France and the Low Countries and had few forces to engage in an invasion to the north. Hitler's concern was that the British would occupy Norway as soon as Nazi forces pushed west with their invasion of France, thereby limiting German options. The Germans faced a dilemma. With forces awaiting the campaign in the Low Countries, Hitler could not afford to divert an overwhelming force to a northern front. Yet a force that could strike rapidly, with surprise, and hit centers of gravity decisively could be employed. Any option required the ability to secure lodgments in Norway to support military long-range operations so far from Germany. Hitler chose to use stealth, speed, and precision in his forcible entry of Norway.⁵⁵

Dominant Maneuver

The German planning staff developed the concept of a surprise attack to simultaneously seize all of Norway's major ports and airfields (fig. 1.4). According to *Joint Vision 2020*, forces adept at conducting sustained and synchronized operations from dispersed locations employ dominant maneuver.⁵⁶ The Navy would land troops at Oslo, Kristiansand, Bergen, Trondheim, and Narvik.⁵⁷ Paratroop followed by airlanded units would seize the Oslo and Stavanger airports.⁵⁸ Just outside Stavanger, Sola was the “biggest and best airport in Norway with a perfect position to control the sea approaches to southern Norway.” Oslo Airport at Fornebu was still being built but was almost complete.⁵⁹

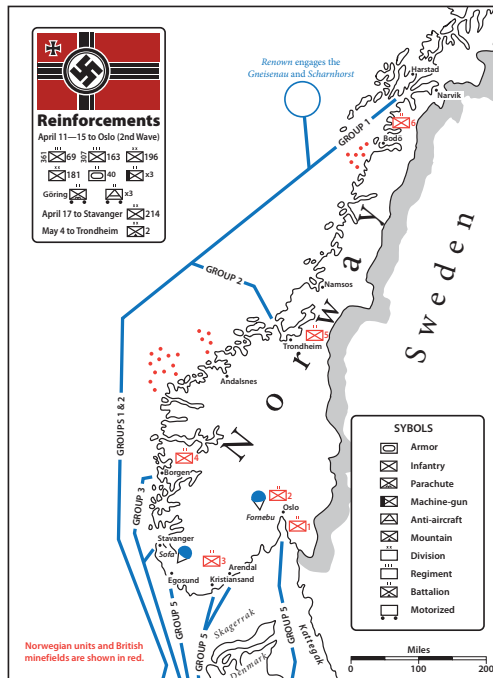


Figure 1.4. The German invasion of Norway, 1940. (Reproduced from “Blitzkrieg in Poland and Norway,” PowerPoint presentation, slide 14, UK teaching resources website, accessed 7 July 2017, <http://schoolshistory.org.uk/EuropeatWar/invasionofnorway.htm>.)

German planners required the seizure and occupation of Denmark as well. The Luftwaffe required the two major airfields at

Aalborg in northern Denmark to conduct operations over Norway. The fields at Aalborg were strategically important as an advanced base with a land connection to Germany and a staging point en route to Norway.⁶⁰ The German bomber and transport force had the range to fly from northern Germany and reach southern Norway. However, without a staging airfield within short range of home airfields in Germany, Luftwaffe fighters and short-range reconnaissance aircraft could not fly to Norway and protect the army and navy from British attack. The airfields at Aalborg were ideal for these purposes. German occupation there would extend the range of the Luftwaffe bombers well over the North Sea and central Norway.⁶¹

As noted, the Germans further anticipated that the British had plans to land troops in Norway to cut off German ore supplies. It was now a race to quickly maneuver forces to occupy Scandinavia first and meet the timing requirements for the planned offensive in the west. The campaign in Norway would require most of the Luftwaffe's transport force—the same transports needed for paratroop operations in the Low Countries. Norway would therefore have to be secured within weeks before the attack in the west began.⁶²

Precision Engagement

Joint Vision 2020's definition of *precision engagement* includes “the ability of joint forces to locate, surveil, discern, and track objectives or targets” as well as to “reengage with decisive speed and overwhelming operational tempo as required, throughout the full range of military operations.”⁶³ Today, Air Force doctrine codifies this concept as a key enabler to the Air Force's “global reach” mission. Global reach “is the ability to project military capability responsively—with unrivaled velocity and *precision*—to any point on or above the earth, and provide mobility to rapidly supply, position, or reposition joint forces” (emphasis added).⁶⁴

As with any engagement involving airborne forces and seizure operations, success of the invasion depended heavily on all of the above—especially surprise and stealth. Planners in the Oberkommando der Wehrmacht (OKW), or Supreme Command of the Armed Forces, knew that the operation hinged on such theories, and the best way to actualize these two elements was by an overwhelming aerial assault on the first day. It was a visionary but realistic concept considering the

aviation assets that Germany had in 1940.⁶⁵ Operations against Scandinavia enjoyed additional surprise as it was the first time that Germany had initiated an airborne operation. However, “once the existence of these special units and the methods of committing them had become known, surprise was possible only through careful selection of the time and place for the attack.”⁶⁶ For the first time in war, parachute soldiers and airlanded troops were to be used together—the paratroops to seize and subsequently operate airfields and airlanded units to then consolidate and spread out from the seized bases.⁶⁷ These tactics were later used in both Holland and Crete.⁶⁸

German High Command designated the 1 Parachute Battalion for the invasion. With the requirement to conduct major airborne operations in the Low Countries in support of the Spring Offensive, the Luftwaffe refused to consider providing two airborne divisions.⁶⁹ Instead, it turned over a reinforced paratroop battalion to Weserübung.⁷⁰ The full-scale invasion of two separate countries would be conducted with the support of only one battalion. The X Air Corps was tasked with air support for the operation, which would be reinforced with additional bombers and fighters. The Luftwaffe’s transport force of over 500 aircraft, consisting mostly of Ju 52s, would be required to airlift troops and vital supplies to Norway.⁷¹ Approximately 1,200 aircraft would support the invasion.⁷²

The commanding officer was given four tasks to fulfill, two in Denmark and two in Norway. The first was to secure a road bridge prior to its destruction by Danish defenders. The second was to capture two airfields at Aalborg. In Norway, the battalion was to capture Sola airfield at Stavanger and the main Oslo airfield at Fornebu and hold and operate them while airland troops arrived and built a force large enough to occupy the city.⁷³

Focused Logistics and Full-Dimension Protection

One of the main concepts driving the requirement to capture airfields in Denmark and Norway was a logistical one. The Luftwaffe paid close attention to the need for focused logistics. After the initial siege of the two major airfields in Norway by paratroop detachments, the Luftwaffe began flying troops in by air. The Germans would fly in specialist army, navy, and Luftwaffe headquarters and signal units along with their equipment. The Luftwaffe alone would deploy over

3,150 signal troops—the equivalent of nine signal battalions—to support communication requirements.⁷⁴

When the airfields were seized, the Luftwaffe planned to fly in airfield engineers and maintenance units, their equipment, and flak units for airfield protection so that several of the German fighter and bomber units could deploy immediately to Norway. Once situated in Norway, the fighters and bombers would establish air superiority over the North Sea and North Atlantic and press attacks against the Royal Navy.⁷⁵ The Luftwaffe placed over 1,000 aircraft under the control of X Air Corps for the Norway operation: four bomber wings, three fighter groups, a Stuka group, as well as two reconnaissance groups.⁷⁶

The air mobility or air transport force was organized into nine wings under the leadership of Col Freiherr von Gablenz, a former senior manager of Lufthansa and one of the Luftwaffe's best air transport specialists.⁷⁷ The mobility plan was carefully crafted to ensure infantry reinforcements and support troops such as engineers, signal troops, and airfield support units were on the ground on day one of the operation.⁷⁸ One dimension of the plan was the consolidation of the larger seaplanes and flying boats of the naval air arm into a naval air transport wing.⁷⁹ These aircraft provided logistical support and reinforcements via direct delivery on the fjords of Narvik and Trondheim.⁸⁰ The attention to detail shown by the Luftwaffe in the mobility CONOPS is one of the most impressive aspects of the Scandinavian campaign.

Operations

In Denmark the invasion and occupation were a complete success. On 9 April 1940 at Aalborg, a 30-man platoon dropped without incident; within half an hour, the two airfields were completely under German control. Within two hours, the Luftwaffe was operating from the runways and establishing a forward fighter base. At Sola the operation unfolded in a different manner: the Germans faced opposition. Bad weather combined with heavy defenses led to severe casualties. Just hours after the first wave of jumpers landed, airland troops arrived and secured the surrounding area.⁸¹

Oslo presented another challenge to the Germans. The Norwegian government refused to surrender and ordered a full mobilization of its forces. Deteriorating weather conditions again plagued the mission as two Ju 52s collided, forcing a mission recall. The Junker carrying

the commander of the airland forces received the call just as the Norwegian mountains came in sight and recalled the aircraft. While 26 Ju 52s turned around, three did not receive the recall and continued to Oslo.⁸² Eight Messerschmitt Me 110s were engaging ground targets as the Junkers made an approach to the airfield. Three AAA sites at the eastern edge of the field and two sites at the northern end defended the field. A few hundred meters west of the runways, a searchlight platoon of the Oslo air defense was positioned with two AAA guns.⁸³ The transports sustained severe damage on the approach but managed to abort the approach as the Messerschmitts, low on fuel, landed at Fornebu. The fighters engaged targets while on the ground, clearing the opposition for the Junkers to land. It was at this point the Norwegians retreated to Oslo.⁸⁴ The airport was then quickly seized and X Corps Headquarters notified, and several hundred German infantry were immediately flown into Oslo.⁸⁵ Norway's capital fell without further resistance to the few infantry who arrived due to the risks and quick decisions of some fighter pilots and a couple of transport crews.⁸⁶ Seizure operations at Sola airfield at Stavanger almost failed as well due to poor weather. The Junkers' crews managed to find a break in the clouds and quickly acquire the drop zone. The field was quickly seized, and southern Norway's best and most strategically sited airfield was in German hands.⁸⁷

Scandinavia was won with a great deal of luck. This, combined with the capability of airfield seizure and operations, greatly extended the range of the Luftwaffe. The terror of the airborne forces also struck fear into the defenders. The force was incredibly small—4,000 troops by air and 9,000 by sea.⁸⁸ Without the airfields seized by the Luftwaffe, operations in Norway would not have succeeded.⁸⁹

Lessons Learned

The first and perhaps most prominent lesson in terms of airfield seizure and the “open the base” force module is that—from day one—the Luftwaffe flew in highly capable airfield engineers, logistic units, and ground crews. Within days, the Luftwaffe had the ground organization to support a force of three bomber wings, one Me-110 group, one Me-109 group, a long-range reconnaissance squadron, and a naval air group.⁹⁰ German air forces at Oslo flew air support for ground forces advancing into central Norway. By all accounts, the support was highly effective—not least because of the pure psychological ef-

fect on not only the Norwegian troops but also the Allies as a whole. The Norwegian troops in central Norway suffered from a total lack of air support.

The main contributions of the newly opened bases in Norway were the heavy bombardment of the ports at Namsos and Andalsnes and the shipping in both ports. The Luftwaffe's bombing efforts devastated the ports and road and rail junctions behind Allied lines.⁹¹

According to the after action report of Gruppe XXI, the primary lesson for the Germans was that "in future operations the three Wehrmacht branches must have one commander with full authority and a joint personal staff organized toward a fully unified conduct of the campaign."⁹² The strategic advantages Germany gained through victory in Norway served the Third Reich in three areas. First, Germany secured its northern flank by rendering a British occupation of Norway impossible. Second, Germany secured the route of the Swedish iron ore so important to the German war effort. Third, Norway offered naval and air bases from which to strike Britain.⁹³

The invasion of Norway ushered in new methods of operations to overcome the long distances from supporting German air bases to the theater of operations. In the air, exploitations of technological advances allowed the use of airborne troops and airfield seizure teams. Both of these enabled Germany to reinforce lodgments rapidly via airlift, making it unnecessary to maintain a ground or sea line of supply to selected airheads. Norway, however, would prove to be the high point for German joint operations. The Wehrmacht would never progress beyond the level of competence it displayed in April 1940.⁹⁴

The follow-on airborne assault on the island of Crete was much less of a success. The Germans captured the island in 10 days but at heavy cost: 6,600 German soldiers, including one in four paratroopers, lay dead on the battlefield. Hitler was so shocked by German losses that he never approved a third large airborne operation scheduled against the British on Malta.⁹⁵ The Allies learned much from Norway and would incorporate those lessons into future joint operations. Winston Churchill noted of Operation Weserübung that "the superiority of the Germans in design, management and energy [in the 1940 Norwegian Campaign] [was] plain. They put into ruthless execution a carefully prepared plan of action. They comprehended perfectly the use of the air arm on a great scale in all its aspects. . . . We, who had command of the sea and could pounce anywhere on an undefended

coast, were outpaced by the enemy moving by land across very large distances in the face of every obstacle.”⁹⁶

The Soviet Way: The Red Air Force in Afghanistan

After World War I, the Soviets, along with the German General Staff, embraced the radical concept of airborne warfare. The Red Army developed thought on deep battle under the sponsorship of Marshal Mikhail Nikolaevich Tukhachevskii. His concepts called for aviation and airborne, mechanized, and motorized formations organized to cooperate with one another but to operate independently of the main force, penetrating to the enemy’s “operational depth.” This approach translated to infiltration through the line of the enemy’s operational reserves, airfields, and headquarters.⁹⁷

Tukhachevskii’s concepts and much of the Soviet’s prewar thought were made irrelevant in the first hours of Operation Barbarossa in 1941 when Nazi Germany invaded Russia. The Germans managed to destroy virtually all the Red Army’s transport aircraft, and the Soviet airborne operations were consequently limited to short-range assaults for the rest of the war.⁹⁸ Postwar Soviet airborne forces were organized into three corps but were limited by inadequate air transport. Their principal goal was to achieve shock and surprise, but they were incapable of executing major power projection.⁹⁹

The USSR continued to develop its airlift fleet, airborne corps, and supporting doctrine. This evolution culminated in two operations: the 1968 airborne operation in Czechoslovakia and the 1979 invasion of Afghanistan. In Czechoslovakia, Soviet transports—escorted by MiG-17s—landed at Prague and seized the airfield. Simultaneous airborne operations landed troops to take control of two other airfields in the area. Thus began a massive airlift of supplies and equipment through these airheads. The efficiency of the airlift and subsequent airhead operations were credited with having prevented a logistical debacle when the ground forces outdistanced their supply trains.¹⁰⁰ Landings in Czechoslovakia were unopposed, but airborne forces were credited with a performance in the Czech invasion that was well executed and successful.¹⁰¹

The December 1979 Soviet invasion of Afghanistan marked the first time the USSR conducted a full-scale invasion of a country outside Eastern Europe since the assault on Manchuria in August 1945.

Although Afghanistan bordered the Soviet Union, it was a Third World, Muslim country with considerable geostrategic importance.¹⁰² A *New York Times* editorial noted that “the primary lesson for the United States . . . in the Soviet Union’s swift airborne movement into Afghanistan is that the Russians have the ability to move significant numbers of troops in a relatively short time into situations they consider critical to their policies.”¹⁰³ As there is still debate on why Russia invaded, the thrust of our discussion is not the reason for the intrusion. Rather, we touch on some theories for the attack, discuss the invasion, and highlight the unique capabilities the Soviets developed in airborne operations and airfield seizure tactics.

Many political analysts suspect that the Soviet move was a first step motivated by a desire to secure warm-water ports and to control the immense oil wealth of the Gulf States and the sea lanes that transport it to the West. The invasion challenged US policy makers’ perceptions of Soviet intentions, calling into question the USSR’s interpretation of *détente* and Soviet strategic ends in the Third World, particularly the vital areas surrounding the Persian Gulf and Arabian Sea.¹⁰⁴

The Soviet military intervention in Afghanistan did aim to reverse a deteriorating political situation as evidenced by emboldened and aggressive popular resistance to the Democratic Republic of Afghanistan (DRA) regime in Kabul. Having invested money and influence in Afghanistan for 25 years, the Soviet Union would not watch idly while a client state on its southern border collapsed. A 1956 accord provided for the USSR equipping the Afghan army, and with that, Russia had steadily insinuated its influence into Afghan politics. Afghanistan’s 1978 “April Revolution” brought the country’s relationship with the USSR to a critical stage. The proclamation of the DRA and signing of a friendship pact with Russia marked an advanced stage of assimilation into Moscow’s bloc of socialist states.¹⁰⁵

The Soviet-Afghan war is divided into four phases. Phase one (December 1979 to February 1980) began with the entry of Soviet forces into Afghanistan, their stationing in garrisons, and their final organization for securing bases and various installations. Phase two (March 1980 to April 1985) was characterized by active combat. The Soviets undertook combat on a wide scale. During phase three (April 1985 to January 1987), the Soviets transitioned from primary active combat to supporting loyal Afghan forces with aviation, artillery, and engineer subunits. Finally, in phase four (January 1987 to February 1989), the Soviets joined the Afghan government’s program of national

reconciliation. During this time, Soviet forces conducted virtually no offensive actions and fought only when attacked by the mujahideen or when supporting combat by Afghan forces.¹⁰⁶ The following discussion focuses on phase one and the initial seizing of air bases and lodgment.

The elements of the first phase of the Soviet invasion included the establishment of an in-country Soviet military and KGB element to support the invasion force. These units developed cover or deception operations to divert attention from any future invasion. Under some pretense, a General Staff group toured the country prior to the invasion to assess and fine-tune plans. When the operation began, the in-country Soviet military and KGB element disarmed or disabled the national military forces. Airborne and Spetsnaz units then spearheaded the invasion and seized critical airfields, transportation choke points, the capital city, key government buildings, and communications facilities.¹⁰⁷ They apprehended or executed key government officials. Soviet ground forces then crossed into the country and captured major cities and road networks, suppressing any local military resistance. A new government was installed, and it was supported by the armed might of the Soviet forces.¹⁰⁸

Dominant Maneuver

The Soviets understood the strategic importance of mobility via air, as noted in the previous *New York Times* quote. The Soviets displayed no sudden expansion of airlift capability. It was simply an incremental, sustained growth largely unnoticed by the West, as its attention had been distracted by the launch of the new Soviet fighters, bombers, and ICBMs. When considering the USSR's power projection, most students of Soviet military affairs have generally treated air mobility and even airborne forces as an afterthought. The Russians had developed, prepared, trained, and equipped their airborne troops to perform as a capable intervention force at a considerable distance from the USSR and Warsaw Pact territory. The Soviet forces had developed the strategic ability to open and operate bases to enable strategic force projection.

To many, the invasion of Afghanistan was a landmark shift in Soviet military tactics. The Russians departed from 50 years of slow prodding and smothering their enemies with raw power-type tactics to adopting a lightning strike strategy. Overnight, the USSR struck with speed and precision, capturing the Kabul airfield and surrounding the capital city with tanks.¹⁰⁹

Early in July 1979, the Soviets crossed a new threshold with the first known movement of a combat unit into Afghanistan—a battalion of airborne troops deployed to Bagram AB near Kabul. Bagram already had become the main Soviet operational base in Afghanistan, with Soviet air transports shuttling in and out with supplies of weapons and military equipment. At the time, US intelligence concluded that the combat troops were to provide security for the air transport units with no commitment to engage in combat operations.¹¹⁰

In late summer 1979, the 5th Guards Motorized Rifle Division (MRD) moved out of garrison. Some of its subunits included a battalion of tanks, an antiaircraft artillery battalion, a mortar battery, and several groups of trucks. Components of the 105th Guards Airborne Division (ABN DIV) were also detected in preparations for air movement. The airborne units' activities seemed to involve training in specific techniques for loading equipment on a new and more advanced military transport aircraft (the IL-76). Indications were that the Soviets were preparing to commit airborne troops to Afghanistan. Assessments supposed such an operation would be to defend Kabul in the event of sudden, drastic deterioration in the Soviet-supported regime that threatened to overwhelm the Afghan capital.¹¹¹

In late November, the Soviet 105 ABN DIV was placed on alert and remained at a heightened state of readiness. The Soviet motorized rifle divisions' activities indicated possible deployment as well.¹¹² On 29 November and continuing over the next few days, Soviet military transports flew into Kabul. Some remained parked at the Kabul airport, but reports from observers there suggested that a portion of the aircraft had discharged whatever cargo or personnel they were carrying and quickly departed. Whatever they brought was expeditiously moved into the city.¹¹³ US intelligence officers in Kabul described an apparent infiltration of special Soviet troops into the city, and numerous reports from the field also indicated that some covert operations appeared to be afoot. An assessment from senior US intelligence officers concluded that some Soviet military operation was being readied.¹¹⁴

Reports in mid-December indicated that a Soviet combat battalion was being discreetly stationed around the Afghan capital. This information confirmed the mysterious Soviet military air transport flights into Kabul at the end of November. The US presumption was that these troops were from the Spetsnaz.¹¹⁵

On 15 December 1979, intelligence disclosed that the Soviet 5th Guards and 108th MRDs had been brought to full strength and the 108th was leaving its garrison. A buildup of transport and combat helicopters had been detected at Kokaty AB in southern Russia, and other military transport aircraft were being marshaled at air bases in this area. A substantial buildup of tactical combat aircraft, fighters, fighter-bombers, and light bombers was also detected at air bases in the region, including some fields that did not routinely serve as bases for such aircraft.¹¹⁶

Thus, the brilliantly orchestrated invasion of Afghanistan commenced (fig. 1.5). The nearly perfectly synchronized overland movement of heavy armor and the airland insertion of airborne forces characterized the initial invasion. The Soviet minister of defense gave the time to cross the international border at 1500 hours Moscow time (1630 Kabul time) on the 25th of December.¹¹⁷

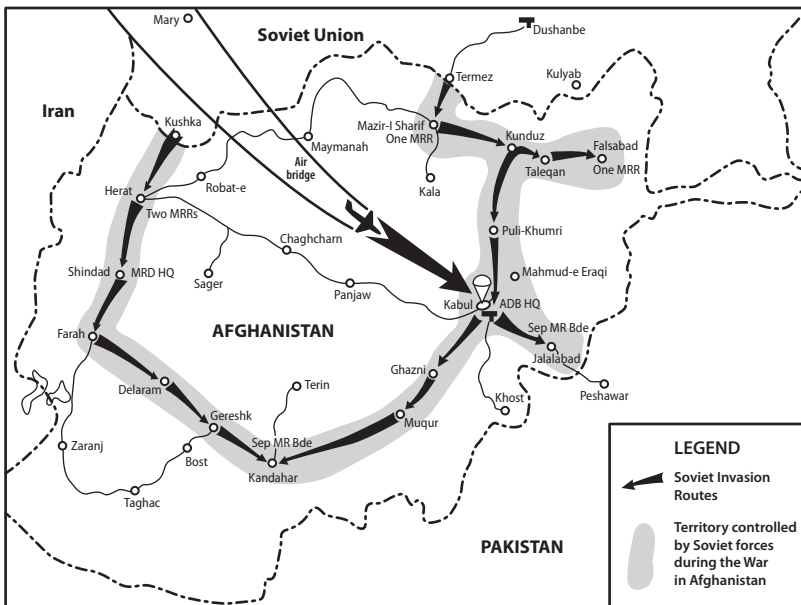


Figure 1.5. The Soviet thrust into Afghanistan. (Reproduced from The Russian General Staff, *The Soviet-Afghan War: How a Superpower Fought and Lost*, translated and edited by Lester W. Grau and Michael A. Gress [Lawrence: University Press of Kansas, 2002], 17. Used by permission of the publisher.)

The crossing of the Amu Darya River commenced in the evening twilight. A BMP-mounted motorized rifle battalion began to cross pontoon bridges.¹¹⁸ The battalion crossed the river and moved deeper into Afghanistan. Behind it, the 108th MRD followed during the night. On the evening of the 27th, the division was issued new, unexpected orders—to change the direction of its drive and enter Kabul on the following day by 1700 hours.¹¹⁹

At the same time in Kabul, the main body of the 103rd Guards ABN DIV had landed at the airfield, and a smaller airborne regiment also landed at Bagram airfield.¹²⁰ From the very start of the forcible entry into Afghanistan, the airborne forces had to successfully seize major airfields in the two cities. From 28 to 30 December 1979, paratroopers landed at Kabul and Bagram air bases while air assault forces landed at Kunduz airfield.¹²¹

Russian veterans of these operations recalled the planning for the first landings. At each of the targeted airfields, a reinforced airborne battalion would parachute onto the field to seize the control tower and runways, to neutralize the security forces (SF), and to support the landing of the main airborne force. However, it turned out that the Afghan forces guarding the airfields were neutralized well in advance. Their resistance did not hold up the operation, and the airborne forces merely disembarked from the aircraft as they landed.¹²²

The first to disembark at the airfields were the groups that seized the fields and scouted the area. They occupied key points, conducted reconnaissance, and supported the air landing of the main forces. For several hours, dozens of IL-76, AN-12, and AN-22 transports landed the main body of an airborne division at Kabul and Bagram. At Kunduz, Mi-6 and Mi-8 helicopters arrived with subunits of an air assault brigade. At intervals of one and a half to three minutes, aircraft landed with their rear fuselage loading doors and ramps open and taxied to the end of the runway without shutting down their engines. Paratroopers disembarked from the aircraft quickly and moved to their planned objectives. The empty aircraft taxied for takeoff and departed, leaving the runway free for the next arrival. After the main force of the division was on the ground, subsequent flights brought in the division's vehicles, necessary supplies, support units, and personnel.¹²³

The operation further called for a very complex orchestration of air traffic through the Soviet air traffic control (ATC) units. Only a minimum number of aircraft and helicopters could be at the airfields at any one time. However, not all the aircrews worked together precisely.

Several aircraft had to make more than one approach to the field or had to circle the airfield while other aircraft on the ground were unloaded. Such exposure of large transport aircraft would have devastating effects in a high-threat combat scenario. In this case, the Soviets' preparation and training, combined with the ineptitude of the Afghans, mitigated the dangers. Landings at the three airports proceeded swiftly and successfully, mainly due to multiple training exercises the Soviets previously conducted at their home airfields.¹²⁴

Precision Engagement

According to Lt Col Denny Nelson, "Soviet military doctrine stresses the primacy of offensive operations aimed at stunning and preventing organized resistance by opponents. In Afghanistan, as in Czechoslovakia in 1968, the Soviets used the surprise landing of airborne units at strategic centers, particularly around the capital, in conjunction with the speedy movement of ground units along strategic routes toward vital centers to gain the initiative." The Soviets began their invasion on Christmas night, 1979, with "a massive, single-lift operation involving an estimated 280 transport aircraft packed with troops, munitions, and equipment."¹²⁵

The seizure of the airfields at Kabul, Bagram, Jalalabad, Kandahar, and Shindand enabled the Soviet operations that were to follow. After the parachute units were on the ground, they left part of their force to secure the airfield and their stockpiled material and set out on their assigned missions. It was a well-planned, well-executed operation—one that involved precision engagement as well as several elements of sabotage and deception. Soviet doctrine, training, and capability gave the Russians options that further enabled the USSR to exploit the scenario on a myriad of levels. The airfield seizures were merely the "tip of the spear" in the truest metaphoric sense. As was the case with the Germans in Norway, the Soviets used their tactical ability to seize, open, and operate bases on a much grander strategic level.

The invasion of Afghanistan was launched on Christmas Eve—not a major Muslim holiday but a time when the Western governments were unprepared to react.¹²⁶ The Afghan government's central communications complex was occupied and its key officials killed by a Soviet commando team. Without communications, President Hafizullah Amin was initially unaware of the invasion. By the time he was, there was no longer time for effective resistance. Afghan officials believed

that the new troops were coming as a part of an authorized buildup, and there was no opposition. When the Soviet troops finally engaged the Afghans, Red Army numbers and firepower were overwhelming.¹²⁷

H-hour was 1915 Kabul time on 27 December. Two regiments that landed in Kabul secured the Ministry of Defense, Ministry of Communications, television center, Soviet embassy, and *microrayon*—the modernized area of the city where Soviet specialists and advisors lived. They seized the army staff building, nearby depots, and President Amin's palace.¹²⁸ Paratroopers also established a post on dominant terrain overlooking the city and on bridges across the Kabul River. They established roadblocks on the main roads leading into Kabul. The parachute regiment that landed at Bagram conducted a swift march to Kabul and on the morning of 31 December concentrated in the city center, from there deploying its staff to the army corps headquarters building.¹²⁹

On 27 December, late in the evening Kabul time, the Soviets engaged in another form of precision engagement—regime change. Soviet troops carried out an assault on Amin's new residence that resulted in his death. Versions differ, even from Soviet and Afghan participants, of how Amin was killed—whether his Soviet attackers shot him, or if he shot himself as they burst into his palace. There was no doubt, however, that it was a Soviet operation to install a new regime of its choice. Spetsnaz troops attacking Amin's presidential palace were outfitted in Afghan army uniforms and appeared to have been selected by ethnic origin to assist their disguise. It was quickly understood that the purpose of the airlift in the first week of December was the insertion of covert Soviet troops.¹³⁰

Strategic Effects on the World Stage

A new combat zone had now emerged on the Cold War battleground. The world was aware that the Soviets had airlifted major combat forces into Afghanistan. These forces were used to seize control of airfields and eventually the capital, major cities, and transportation nodes throughout the country. They eliminated the existing government and installed a proxy regime used to provide cover for sending in the additional combat divisions.¹³¹ Robert F. Baumann provides an excellent summation of the initial view of Soviet operational effectiveness:

At first glance, the Soviets' skillfully executed surprise incursion seemed to achieve its objectives: a change of regime, capture of Kabul, and control of the principal lines of communication. Forces inserted by air paralyzed the capital while a conventional column of about 15,000 approached the country along the main road from the Soviet frontier. The strike was complete within hours. In the view of the government of the General Secretary of the Communist Party of the Soviet Union, Leonid Brezhnev, this lightning success ought to have stabilized the situation in Afghanistan.¹³²

For their part, the Soviet attackers lost several vehicles, with about 25 killed and 225 wounded.¹³³ By 1 January 1980, 50,000 Soviet troops were in Afghanistan, and more were on the way.

Focused Logistics and Full Dimension Protection

The Soviet airborne forces engaged in seizing and operating air bases in Afghanistan were light, lethal, and highly mobile. The Soviets understood that military transport is, in a sense, the arm that swings the fist, and its Military Transport Aviation (VTA) branch had the benefit of constant attention from Soviet planners to create a balanced system of air transport. The system was fully capable of operating at the intratheater and possibly strategic ranges.¹³⁴

The Soviets gained many strategically important air bases. Seven air bases were built or improved by the Soviets in Afghanistan: Herat, Farah, Kandahar, Kabul International Airport, Bagram, and Jalalabad. All fields were all-weather, jet-capable bases that operated 365 days a year. Each base was capable of handling large numbers of tactical aircraft, and a huge fleet could be operated in Afghanistan or against other southwest Asian countries from these seized and improved air bases.¹³⁵

The two most important Soviet installations in Afghanistan were Bagram and Shindand. Bagram was the local supreme headquarters of the Soviet army in Afghanistan, where the most senior Soviet officers were stationed. Additionally, Bagram was home to the army's satellite communications systems and other major facilities. At Shindand, no Afghans were permitted on the air base, as the Soviets had installation support and maintenance equipment for their naval aviation reconnaissance bombers. Soviet electronic warfare aircraft operated from this installation by the air command of the Soviet navy. Most of the aircraft were not stationed permanently in any one location, so the very sensitive technical support and maintenance capabilities needed for them were available at various forward bases.¹³⁶

The Soviets enjoyed a significant strategic advantage in Afghanistan through air base seizure. Having jet bases in the western and southwestern sections of Afghanistan also placed long-range MiG-27 Flogger fighter-bombers and MiG-25 Foxbat reconnaissance aircraft 200 miles closer to and within the range of the Strait of Hormuz—the strategic choke point at the mouth of the Persian Gulf. The new bases allowed Soviet electronic warfare aircraft more time to trail and monitor US naval activities in the Indian Ocean.¹³⁷ The USSR's ability to seize and operate air bases in Afghanistan had effects well beyond the theater. The results caused the United States, NATO, and other Gulf nations to ponder Soviet intentions.

In the initial phases of the USSR advance into Afghanistan, protection was a large concern. The Soviets devoted a large effort to ensure their forces were not hampered. To provide constant protection from guerilla attack, two Soviet air divisions, totaling more than 400 aircraft—mainly MiG-21, MiG-23, and Su-17 fighters and Mi-24 helicopter gunships—thundered back and forth over the main invasion axes.¹³⁸ The Soviet invasion of Afghanistan achieved full-spectrum dominance during the initial thrust into the country. However, the course of conflict in Afghanistan would find the Soviets ousted in similar fashion to the British in 1881 almost 100 years earlier.¹³⁹

The seemingly brilliant invasion of Afghanistan is eclipsed by other factors—why the Soviets invaded, political and world opinion and support, and the fact that the USSR left Afghanistan in disgrace. Nonetheless, the initial invasion met the doctrine of forcible entry. JP 3-18 states that a joint force commander (JFC) may launch such operations “to *seize and hold an airhead* . . . to facilitate the continuous landing of troops and materiel and expand the maneuver space needed to conduct follow-on operations” (emphasis in original).¹⁴⁰

The initial Soviet invasion demonstrated that the USSR was capable of rapid mobilization. It could perform major operations without severe logistical breakdown, had sufficient ground forces to mount a major conventional operation outside of the Warsaw Pact or Chinese border area (albeit still in a contiguous area), and was reliable in “political” operations, such as assassination and disarming unreliable “friendly” forces.¹⁴¹

Soviet military analysts wrote extensively on the lessons and knowledge gained from the Afghan fighting—the importance of rapid deployment, the advantages of surprise, and the need for flexibility to meet unforeseen developments. They stressed the coordination of

units and subunits and the particular advantages to be gained by the strategic use of new weapons systems and capabilities.¹⁴² Employing Marshal Tukhachevskii's theories of deep battle, the Soviets did not allow the Afghans to deploy any defense. Airfield seizure and subsequent operations were, again, of strategic importance to the operation.

As noted above, history (and the CIA) proved unkind to the USSR in Afghanistan. Despite the initial success of the invasion, it soon became apparent that Soviet equipment functioned inadequately and force structure was inappropriate for the task at hand.¹⁴³ One Joint Forces Staff College research paper summarized the experience: "The operational change from invasion to occupation revealed glaring inadequacies in Soviet doctrine and command and control. . . . With so much momentum and early success, it is difficult to imagine the Soviet Army losing the initiative and forced into a war of attrition with the *mujaheddin*."¹⁴⁴ Thus was the fate of the Soviets.

A nation that possesses such a force—light, lethal, mobile, flexible, and well trained—can grant a strategic key to victory. Airfield seizure and operations did open Afghanistan up for the Soviets, and it enabled the initial successes. Such success must be followed up with a well-conceived strategy. The lesson of the Soviets, in a nutshell, is that strategy is not just about the first move.

The American Way of War: A Comparison of World War II and the US Invasion of Iraq

Airfield seizure and operations are nothing new to the American way of war. Along with the Germans in World War II, the United States and the Allies understood the strategic importance of these operations. As was mentioned, in World War II alone, a myriad of such seizures spanned a vast spectrum of combat operations. In Europe, the Allies captured airfields as Operation Overlord was under way.

Shortly after the D-Day landings and the furious expansion of the American lodgments behind the Utah and Omaha beaches, the USAAF's Ninth Air Force tactical fighter groups began to deploy in Normandy. While the deployment's primary objective was to protect and support the ground forces, it would also help to realize the obvious advantages of operating from airstrips on the continent versus in England. Fighters based in France were not only able to strike deeper into Germany but also could spend more time over targets, especially those in

the immediate area. Fighter sweeps were more effective, and more enemy materiel was destroyed. Interdiction missions became increasingly efficient since more planes could be directed to objectives and could spend more attack time on station owing to the proximity of the frontline airstrips.¹⁴⁵

Other efforts include the forerunners of today's special operators, the air commandos. The 1st Air Commando Group debut was in Operation Thursday, a disruptive action that successfully stopped the Japanese invasion of India. On the first night, 5 March 1944, the unit successfully delivered over 500 men and 15 tons of supplies behind Japanese lines to LZ Broadway using gliders and C-47 cargo aircraft. Broadway was an airfield seizure in classic SOF manner; air commandos seized a strip of land and quickly created an airfield where there was none. Two nights later, operations reached a high tempo when 92 plane loads—roughly one every four minutes—arrived in the small jungle clearing in a night. This airfield seizure went on to enable a British special operations unit, known as the Chindits, to raid and sabotage Japanese forces in-theater.¹⁴⁶

Perhaps one of the best known of such operations occurred on the island of Iwo Jima. It is one of the volcanic islands to the east of Okinawa and roughly south of Japan itself. Hilly, rocky, and generally barren, the island did not figure in the grand strategy of the Pacific for the first several years of the war. Formosa was the longtime goal of the Americans' Central Pacific drive once Gen Douglas MacArthur had recaptured the Philippines.¹⁴⁷ Formosa, however, was huge, stoutly defended, and still a long stretch for bombing missions against the empire of Japan. Meanwhile, the Japanese built airstrips for their own bombers and fighters on previously unoccupied Iwo Jima. Planners on both sides could see the strategic importance and geographic reality of the island. Iwo Jima was almost exactly halfway between the Marianas and the Japanese home island of Honshu.¹⁴⁸

Operational airfields represented valuable rungs on the strategic ladder leading to Tokyo. The American seizure of the Marianas in mid-1944 brought the main Japanese home islands within range of the newly developed Boeing B-29 Superfortress.¹⁴⁹ B-29s based in Saipan and Tinian began striking targets in Japan in late 1944, but the strikes were not yet truly effective. The thorn in the side of US forces was Iwo Jima.¹⁵⁰

American fighters did not have the range to escort the Superfortresses to and from Japan, and the B-29s were often at the mercy of

fighter interceptors launched from Iwo's airstrips. Japanese bombers based on Iwo were an even graver threat. In fact, the Twentieth Air Force lost more B-29s to enemy bomber raids from Iwo Jima than it did on any of its long-range forays over the Japanese homeland.¹⁵¹ The absence of an emergency landing or refueling field for B-29s along the return route from Tokyo was yet another problem for strategic planners. In American hands, Iwo Jima would not only provide fighter escorts and a suitable divert base for the B-29s but also erase the threat from Japanese attack aircraft. All were compelling reasons to seize the island.¹⁵²

The seizing of Iwo Jima achieved all the strategic goals desired by the Joint Chiefs of Staff. American B-29s could henceforth fly with less reserve fuel and a greater bomb payload with Iwo Jima available as an emergency field. Iwo-based fighters escorted the Superfortresses to and from Honshu. For the first time, all the Japanese islands were within bomber range, including Hokkaido. The 2,400 USAAF crew members forced to land at Iwo Jima between its capture and V-J Day had no doubt of its importance. Said one, "Whenever I land on this island, I thank God and the men who fought for it."¹⁵³

While these historical notes are probably of interest to the military-minded, they offer stark lessons for military planners now. Contemporary American military thinking on forcible entry operations has been codified in joint guidance. JP 3-18 captures the lessons learned from historical analysis and updates the strategic framework for such operations. It defines *joint forcible entry operations* as those that "seize and hold lodgments against armed opposition." It explains that a "lodgment is a designated area in a hostile or potentially hostile operational area that, when seized and held, makes the continuous landing of troops and materiel possible and provides maneuver space for subsequent operations (a lodgment may be an airhead, a beachhead, or a combination thereof)." The publication lays out three types of joint forcible entry operations—amphibious assault/raid, airborne assault, and air assault—and states that "any combination" of those types can be used to seize objectives depending on the nature of the lodgment target.¹⁵⁴

Beyond the scope of the case studies discussed, many other historical events illustrate the operational art of forced entry. Examples that readers can study include the WWII operations Merkur (the German attack on Crete), Husky (in Sicily), Overlord, and Detachment (also known as Iwo Jima); the Bay of Pigs operation in Cuba;

Operation Thunderbolt in Entebbe; and Operation Eagle Claw in Iran.

Any forcible entry requires a contingency response group (CRG) or a group with similar capability to operate the air base. There are always exceptions, the most obvious being the third case presented above. In this case, a special operations unit or special tactics team (STT) might be used alone, but in others, a CRG or the like will deploy. Any of the above case studies could demonstrate the historical and strategic significance of the CRG. In examining them, a military planner would have to ask whether the USAF is prepared to provide the required support for such forcible entry operations. In an attempt to be as relevant as possible and to extract the most difficult scenario, it is important to examine the second case above—that of a forcible entry operation using multiple entry points to establish multiple lodgments. The case of OIF is the genesis for the CRG construct and the basis for current thought on the matter.

On 19 March 2003, at 0534 hours in Iraq, US stealth fighters and Tomahawk cruise missiles struck “leadership targets” in and around the Iraqi capital of Baghdad to begin the second major war between a United States–led coalition and Saddam Hussein’s Iraq. Soon thereafter, air attacks began against Iraqi targets in southern Iraq, followed by missile attacks from Iraq toward US military positions in the Kuwaiti desert. The stated goals of the coalition were the disarmament of Iraq and the overthrow of Saddam Hussein and his Baath political party.¹⁵⁵ Three days later, on 22 March, coalition forces seized the H-2 and H-3 airfields in western Iraq and controlled parts of Umm Qasr, Basra, and Nasiriyah (fig. 1.6). Elements of the 3rd Infantry Division (ID) charged 150 miles into Iraq, roughly half the distance from Kuwait to Baghdad. The 3rd Brigade captured the Tallil airfield after its artillery began shelling Iraqi military emplacements there. Meanwhile, the 1-30th Infantry protected its flanks, preventing intervention by forces in Nasiriyah.¹⁵⁶

On 26 March 2003 and a week into the war, late in the evening, about 1,000 paratroops from the 173rd Airborne Brigade were dropped into a strategic airfield in Kurdish-controlled territory at Bashur. Approximately 160 special forces personnel were in the area around the airfield directing air strikes against Iraqi positions. Within days, Kurdish Peshmerga troops, along with US special forces units, assaulted the stronghold of the Ansar al-Islam group along the Iranian border.¹⁵⁷

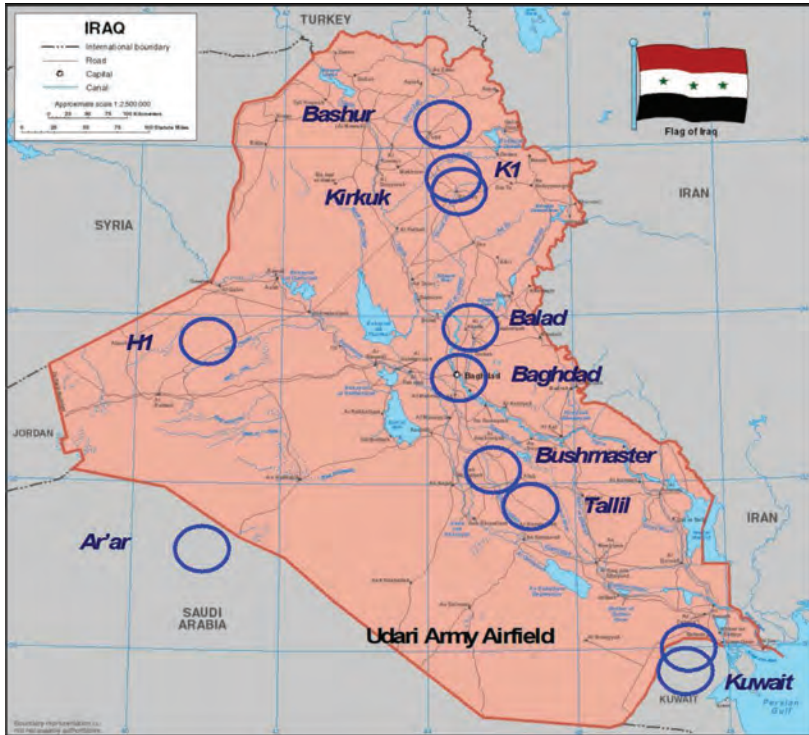


Figure 1.6. Iraqi airfields. (Reproduced from HQ AMC, briefing, “AMC Global Assessment Teams [GATs] Mission Summary,” November 2003.)

During the night of 3 April and into the early morning hours of 4 April, elements of the 1st Brigade Combat Team (BCT), 3rd ID (Mechanized) completed the capture of Saddam International Airport. During clearance of the runways and facilities, a large Iraqi force was encountered at approximately 0430 local time. In one engagement, two companies of Task Force 3-69 Armor engaged Iraqi Special Republican Guard (SRG) forces on the east side of the airfield. Fighting continued for three hours, resulting in 250 SRG killed, three tanks destroyed, and other equipment destroyed or captured. Over the 12 hours of the battle for the airport, US forces suffered one killed and eight wounded.¹⁵⁸

On the 26th day of combat operations, a US Marine Corps task force captured Tikrit, bringing the last major bastion of the Hussein regime under coalition control. Tikrit and the nearby village of Auja

(Saddam Hussein's home village) were heavily fortified and defended by an estimated 2,500 regular and paramilitary fighters. However, air and ground attacks reduced the Iraqi positions, and the Iraqi troops were reportedly leaving their positions, weapons, and uniforms to flee the coalition advance. Four Iraqi tanks were confirmed destroyed in the skirmishes around Tikrit. Through April of 2004, the airhead at Bashur airfield in northern Iraq had received an estimated 3,200 troops and 12 million pounds of supplies and equipment.¹⁵⁹

OIF occurred at a faster pace than most ever anticipated, and in keeping with that pace, there is a deeper story. In Iraq, seven airfields were captured and opened throughout the initial conflict. Each airfield presented its own unique story and problems. Two of the larger fields with two very different stories were Tallil in the south and Bashur to the north.

Precision Engagement

In the interest of space and time, we focus only on these two airfields of many seized in OIF, which also included Kirkuk, H-1, Bushmaster, Balad Southeast, and Baghdad International. Tallil and Bashur have both become stories of success; each was seized differently and for distinct reasons. Logistics and protections are addressed in the following discussion.

Planning

Prior to the first bombs falling in OIF, there was early planning on how air bases in Iraq would be seized and operated. On 28 February 2003, United States Central Command (USCENTCOM)—the military headquarters charged with planning operations in Iraq—delivered the first planning order to identify airfields to be taken. Shortly thereafter, a multiservice group met at Prince Sultan AB in Saudi Arabia to discuss airfield seizure and air base operations for the war.¹⁶⁰ An ad hoc group of 25 people formed an airfield coordination and planning team (ACPT). The group structured a CONOPS around seize, secure, assess, establish, and sustain. The group initially addressed joint forced entry capabilities and limitations in each phase of the conflict, the capacity of available assets, and how to hand off the air base during each phase. Early on, the group did not select air bases as its main impetus was simply to come up with a way to seize

and operate air bases in Iraq. Once hostilities commenced, the group was disbanded.¹⁶¹

The group identified shortfalls in airfield planning actions, and United States Central Command Air Forces (USCENTAF) further identified significant open issues in airfield preparation for the operational plan. The consensus from the group was that no doctrinal structure existed to integrate the requirements for base opening. In the absence of a coordinated airfield plan, CENTCOM requested three conventional air traffic controller teams to provide relief in place (RIP) for special tactics people at recently opened airfields. Planners engaged CENTCOM to ensure that the land and air component commanders synchronized their airfield requirements and plans. Subsequently, a message was released requesting all component airfield plans to deconflict requirements and avoid duplication of effort. At this time, the CFACC realized that “the airfield opening process [was] drifting from the CRG concept.” CENTCOM appointed Maj Gen Daniel P. Leaf to lead and oversee the airfield coordination effort.¹⁶² The issue at hand was that nothing was in place to develop and/or deploy units.

During the time leading up to OIF, AMC developed four assessment teams (AT), each led by an O-6 mobility leader with tanker airlift control element (TALCE) experience.¹⁶³ Commanders and deputy commanders of the 615th and 621st Air Mobility Operations Groups (AMOG) were selected as AT commanders, and three AT teams were offered up by AMC for contingency operations. The fourth, led by Col Peter W. Gray, deputy commander, 615 AMOG, concentrated on experimentation of the AT concept at exercises in CONUS. In addition to the O-6, AMC designated seven to nine personnel from various backgrounds to be assigned to each team. These Airmen would supply the skills required to make initial field assessments to bring in Air Force assets.¹⁶⁴

Assessment Team Myers and Tallil

Col A. Ray Myers, deputy commander, 621 AMOG, McGuire AFB, New Jersey, led a group referred to as Assessment Team Three (also called AT Myers) into Iraq to prepare for the arrival of mobility and other aircraft at Tallil.¹⁶⁵ Tallil was an Iraqi air force base located in the southern no-fly zone near An Nasiriyah. The base was nonoperational, but the runway was not cratered and appeared to be in

operational condition. The seizure of Tallil was indeed a joint operation, and the US Army's 3rd ID would conduct the seizure and deployment to the airfield via Army convoy.¹⁶⁶

Early in the planning for the seizure of Tallil, AT Myers was briefed on the operation. On 22 March 2003, the battle for Tallil AB began with the 1st BCT of the 3rd ID, and on the same day, AT Myers departed Kuwait in an Army convoy bound for Tallil. There was little in the way of organized resistance at the air base after US artillery shelled Iraqi placements in the area. The 1st BCT began clearing the area of unexploded ordnance and putting security patrols out around the perimeter. According to Army brigadier general Jack Stoltz, deputy commanding general of the 377th Theater Support Command, "Almost immediately, we started to get into some light skirmishes around the perimeter with small groups of paramilitary that were trying to get back into this area to get to the weapons that they had stored there. . . . But once we got our active [Army] patrols out and around the perimeter, they quickly realized they could not get in here, and they and fell back into the Nasiriyah area."¹⁶⁷

On the morning of 23 March, the airfield was under US control, and members from the 23rd Special Tactics Squadron (STS) arrived to assume ATC duties and conduct an LZ assessment.¹⁶⁸ Tallil now transitioned from the seizure phase to the "open the air base" phase. Later that evening, the AT and 621 TALCE/CC arrived, and AT Myers was handed command of the airfield from the seizure force commander. The following day, the official assessment of Tallil was complete.¹⁶⁹

Airfield security at Tallil was an extremely high priority, and on 25 March the 1st BCT received orders relieving it of security duty so that it could move on; it was to be replaced by another unit. Air Force security teams were delayed due to airlift problems, border clearances, and C-5 maintenance. The handoff of duty was not clean, and questions as to who was responsible for security remained in the minds of many, including Colonel Myers, who realized conflicting orders had been issued. Colonel Myers intervened to ensure that the Army still had security duties at Tallil.¹⁷⁰ Combat engineers started work on the runways and cleared obstructions from runway 30 right while the assessment team cleared obstructions from 30 left. The AT continued to prepare for the arrival and beddown of the 820th Security Forces Group (SFG) and TALCE. Tallil was now ready to handle inbound aircraft. A brutal sandstorm erupted on the 26th, however, delaying aircraft arrival until the following day.¹⁷¹

On 27 March 2003, Tallil began the “generate the mission” phase as the TALCE was on the first C-130 flown into the base; this was the beginning of what would be a busy day at the base. With the arrival of the TALCE, Tallil now had a robust C2 capability and the capacity to handle passengers and cargo as well as to maintain aircraft. Later that day, Tallil was able to officially begin aeromedical evacuation missions, enabling injured Soldiers to be flown out of the combat zone and receive required care. The 820 SFG’s advance team arrived by convoy and quickly assessed the base for security requirements.¹⁷²

With the AT, TALCE, and security force advance team on base, the group established the initial air expeditionary group (AEG) organizational structure, along with C2 capability. Forces at Tallil further assessed and established initial communication infrastructure with reachback capability to the combined air operations center (CAOC) and AMC’s Tanker Airlift Control Center (TACC). The team also established the Tallil Air Force command post, ATC, fire, crash, rescue, medical, and other nodes on the base as well as provided the initial AEG staff.¹⁷³ The evening of the 29th, the first combat aircraft arrived. USAF A-10s began to use Tallil as a fueling base for strikes in northern Iraq.¹⁷⁴

The “establish the base/C2” phase began on 31 March 2003, and the speed of the transition was quite remarkable. On the 30th, Col John Dobbins of the 392 AEG arrived at Tallil, and the base was ready to accept the A-10s from the Whiteman AFB Reserves for beddown. The 820th Force Protection Team assumed security for Tallil. The AT officially transferred command of Tallil to the AEG and redeployed to Kuwait City to regenerate for another mission. Ten days later, Colonel Myers and his team were deployed to Baghdad International to begin the assessment at that field. On 11 April, the 23 STT redeployed, followed by the TALCE departing on 22 April.¹⁷⁵

Due to the exceptional work of Colonel Myers and his assessment team, Tallil was now able to “provide lethal combat airpower from the coalition’s Air Force air component commander to other forces in the coalition. Secondary to that was also being able to provide combat search and rescue support from a forward location—that would extend the legs—and also being able to support the airlift mission for all forces that were in Iraq.” Colonel Dobbins stated, “We think we have done that well. . . . [We have] enabled especially A-10 aircraft to get up to an extra hour over most of the target areas.”¹⁷⁶

With the capture and subsequent rehabilitation of the Iraqi air force base at Tallil, the 3rd Marine Aircraft Wing and the RAF were able to create a forward arming and refueling point (FARP) for their Harriers 100 miles inside of Iraq. The USAF moved A-10s onto Tallil's tarmac, allowing CAS to remain immediately responsive to the needs of ground forces. Further, the work of AT Myers allowed for refueling, taking pressure off the hard-pressed tanker fleet.¹⁷⁷

Tallil became an air base of many firsts. It was the first to use an AT to open newly acquired airfields.¹⁷⁸ It was also the first time a TALCE unit traveled via combat convoy to an airfield to begin operations by land route.¹⁷⁹ Moreover, Tallil AB was the first forward air base that coalition forces were able to use for combat operations.¹⁸⁰

Assessment Team Martin and the 86th CRG

Col Fredrick Martin, commander of the 615th AMOG at Travis AFB, California, led Assessment Team One or AT Martin. Back in December 2002, AMC had received the first indication that it would be conducting airfield assessments in support of the 173rd Airborne Brigade. These assessments would be conducted from Vicenza, Italy. Even before access through Turkey was denied, the 173rd was selected to establish a stabilizing, conventional presence in northern Iraq. In February 2003, the 615 AMOG deployed TALCEs to Batman, Diyarbakir, and Oguzeli, Turkey, to support the northern front of OIF. The 615th also then deployed ATs to Ramstein AB, Germany, to stage and begin determining with United States Air Forces in Europe (USAFE), United States European Command (USEUCOM), CENTCOM, and SOF planners several possible northern Iraq bases of operation.

Following the denial of Turkish basing rights and two planning conferences at Vicenza and Doha, it was determined that the 86 CRG at Ramstein would pair up with the 173rd to open Bashur Airfield in the first-ever combat C-17 personnel airdrop. The 86 CRG is a USAFE asset with robust security forces as well as a TALCE—the only AT with the unique ability to air-drop a 21-man assessment team with the 173rd into Iraq. The 86 AT consisted of C2 elements, medics, security forces, intelligence, civil engineers, and communications experts. AT Martin was unable to support the 173rd's combat drop but could assist in the deployment from Italy. AT Martin conducted assessments at Pisa, Villa Franca, and Aviano AB for C-17 airdrop

operations. When the 173rd thought it was deploying to Turkey, it had sent all of its equipment forward to the port at Livorno in preparation for overwater shipment. Unfortunately, AT Martin found that nearby Pisa airport was unsuitable for upload operations and made the final recommendation to use Aviano AB as the initial staging base for the 173rd and the 86th.

Since AT Martin now had no mission in northern Iraq and did not have the required airborne qualifications, it redeployed to Kuwait to stage and await forward movement into Iraq from the south. Meanwhile, Col Steve Weart, commander of the 86 CRG and of Air Force forces at Bashur, began planning for what looked to be the largest airborne assault since D-Day. His AT of 20 Airmen would parachute into northern Iraq with the 173rd Airborne Brigade.¹⁸¹

The 86th “went to war on the dark and rainy early morning” of 26 March with 1,000 Soldiers of the 173rd Airborne Brigade. A formation of 15 C-17 Globemaster IIIs, with fighter escort, ingressed into Iraq under the cover of darkness and bad weather. The crews flew with all external lights extinguished and used night vision goggles (NVG) for the airdrop. Colonel Weart and his team parachuted into Iraq in a historic jump. The group’s security forces commander, Maj Erik Rundquist, said that “the airmen were the first from a conventional Air Force unit to parachute into a combat zone.”¹⁸² Despite some issues with drop zone identification, the operation went as planned from the CRG’s point of view. However,

troops jumped into a muddy quagmire. It had rained for days before the jump, and it was raining on jump day. The clay-like mud was knee-deep in places. But not one airman was hurt in the landing, apart from a few scrapes and sprains. They were also the first to assemble—though it took more than an hour.

On the ground, the soldiers became the coalition’s largest fighting force in northern Iraq. . . . To sustain the paratroops and other troops in the area would take a big airlift. They’d need millions of tons of food, water, supplies and equipment.¹⁸³

Rundquist, who made the jump, recalled that “there was no other way [except airborne insertion] to get Air Force boots and eyes on the ground to assess the situation and prepare to receive aircraft.”¹⁸⁴

After the drop, paratroopers shed their harnesses and secured the airfield and terrain from which they could defend the airfield. Artillery was set up, and howitzers were prepped to fire. Other Soldiers scrambled through bundles and began moving loads to the airfield.

Elements of the 10th Special Forces Group met the newly arrived Soldiers and Airmen and introduced them to the Peshmerga guerrillas.¹⁸⁵

The rapid pace of the deployment and the nature of the mission required the teamwork of both Soldiers and Airmen. According to Colonel Weart, “It was important to insert the (group) with the airborne brigade so we could assess the airfield and operating environment as quickly as possible.”¹⁸⁶ The 86 CRG immediately went into action, assessing the field and readying the runway for heavy aircraft. An hour after setting up, the group was ready to receive airplanes. The first airland mission, however, would not arrive until the following night. All C-17 operations would be conducted at night in “blacked-out” conditions, both in the air and on the ground.¹⁸⁷ The next evening, C-17s were landing with heavy combat loads and reinforcements. Over five days, the 86th received 62 C-17A missions, 2,000 troops, almost 400 vehicles, and more than 3,000 short tons of equipment.¹⁸⁸ The 86th set up shop on a corner of the aircraft ramp to avoid the mud. The group’s 14 security forces troops controlled the runway and ramp. The 173rd secured the area around the airfield and was able to provide protection for the Kurds should the Iraqi army make a major move into northern Iraq.

As the Peshmerga applied pressure on the collapsing Iraqi military in the north, Bashur prepared to receive heavier forces. At the end of April, the field prepped to receive an armored task force from Germany to reinforce the 173rd. The force was small—only a tank and mechanized company of five Abrams battle tanks and five Bradley fighting vehicles, plus a command element. Additional combat forces followed, including an infantry company mounted in lighter M-113 armored personnel carriers.¹⁸⁹

In the end, Colonel Weart felt that “the group was doing everything it set out to do. And his initial worries that his people—and the group’s mission concept—wouldn’t meld with the Army and coalition forces disappeared soon after the group parachuted in. The group set up air operations and started receiving and unloading planes. In a few days, it had established a fully functioning forward airfield.”¹⁹⁰ He stated, “Bashur was a total validation of the CRG operational concept. . . . From airborne insertion to conducting airfield and aerial-port operations in tactical blackout conditions, to full bare-base expeditionary combat support, we (used) every mission-essential task resident in the CRG—and we did so with astounding success.”¹⁹¹

The lessons of Iraqi Freedom have been felt throughout the Air Force. The CRG's performance at Bashur has affected the accepted norms for expeditionary airfield operations, and it has not gone unnoticed. "We knew it was big, but we didn't realize how big it would prove to be," said Colonel Weart in describing the fallout from Bashur. "We have fundamentally (affected) the way the Air Force plans to conduct future expeditionary airfield operations."¹⁹²

In August 2002, General Jumper outlined a plan to overhaul the way the Air Force organizes trains and equips. Faced with the unique challenges presented in today's security environment, he recognized that the processes in place were not responsive enough to enable "expeditionary operations." General Jumper outlined task forces charged with developing separate CONOPS (as mentioned earlier) to define the objectives, effects, and capabilities required to accomplish the Air Force mission. Naturally, AMC was designated the lead for GM CONOPS.¹⁹³

The ATs used in OIF were a success, but much of the effort was ad hoc. According to Lt Col Kevin Kreps, chief of the Mobile Command and Control Branch at Headquarters (HQ) AMC, air base openers were tasked at such a high rate that openers deployed as soon as the need was identified. He relayed that "the requirement came so quickly, the teams were out the door before the CONOPS were finalized, so we're simultaneously fielding an operational capability while we are experimenting with the concept."¹⁹⁴

The 86 CRG was one unit that was rapidly deployable with minimal planning time. It was the only unit capable of meeting the Army's requirements for airborne insertion. Some in the USAF may balk at the 86th's airborne qualifications and figure that the AT could have landed with the C-17s on the second night of the operation. In a worst-case scenario, if the airfield were deemed unusable on night two, what would the fate of the operation be at that time? General Jumper, who developed the CRG at Ramstein during his tenure as the commander of USAFE observed that

the CRG needs to be the thing that ensures the airfield is like an airfield. It has the ability to go in with whoever goes in first, whether it be special operators, or Rangers, or Army [and this is what demands special qualifications]. And then they need to go in there and hit the ground under any conditions and be able to set up and determine quickly what is going to make the airfield an airfield. It would be lighting, communications, NAVAIDS [navigational aids], obstacle assessments, runway [assessment]. They would be able to assess the

security needs, so we can take right over, especially if they are special forces that are going to want to get out of there quickly. We can take right over the security responsibilities from them with whatever size forces are needed to secure an airfield.

Now, we are not going to be able to put 1,000 people around an airfield like the Army can, so we are going to have to do it high-tech. And once those guys get on the ground, they can make that assessment, and it is a callback—and the first airplane in on the ground has to have the stuff that it takes to do whatever is required. And that airplane has to be able to land in whatever conditions it finds. I think this leads to a bunch of requirements that we have to get squared away.¹⁹⁵

The lessons of OIF and other case studies in this chapter should be examined as the Air Force takes steps in future force development enabling global reach for the United States. Enemy capabilities will continue to grow with a focus on denying American airpower from gaining theater air bases from which to launch combat sorties or act as an air bridge for force deployments. Planners must be thoughtful in the continuous analysis and assessment of expeditionary airfields and the capabilities of host-nation and friendly forces to protect them from ground and air attack. Having said this, the evolution of the CRG concept must continue to ensure the right sizing of needed capabilities, including security and force protection. The following outlines some possible configurations.

Putting More Arrows in the Quiver: Developing More Capabilities within the CRG Construct

The operations of the past illustrate that those nations able to project power effectively have an advantage in the early phases of conflict. Granted, without a strong follow-on strategy, the projection of force is not effective—as the Germans and Soviets found out in their respective operations. A relatively small group with a unique ability, trained and equipped to seize and then operate out of foreign air bases, had immediate, strategic impact. As was noted earlier, the United States is increasingly reliant on its ability to project power from the CONUS. So how is the USAF preparing to do this today and into the immediate future? Senior leaders in the USAF understand the mission's importance and are attempting to posture the force of tomorrow for success. The importance of the mission and of the individuals who perform that mission is clear; this chapter's focus is on

the units and the people from the strategic doctrine level down to the tactical individual.

“The time for air mobility is now. . . . It’s here, and it’s time to take it to the next level,” said General Jumper in his opening address to the annual Airlift Tanker Association in 2003.¹⁹⁶ In examining the case studies presented thus far, it is evident that airfield seizure and subsequent airhead operations are major keys to force projection. History illustrates this fact—since the early days of airpower through events in Operations Enduring and Iraqi Freedom. The United States’ capability to open airfields, whether via seizure or a permissive environment, has long rested with USAF’s mobility forces. Today Air Mobility Command is designated as the lead command to “take it to the next level.”¹⁹⁷

While the USAF currently has several air base opening organizations, they are not standardized in organization or capabilities. Thus, C2 relationships are strained. “Users” of air base opening services do not know what type of organization is working at a particular air base, and core elements of these groups are not the same. Some of these groups have inherent defensive capabilities or have unique employment qualifications, and others do not.¹⁹⁸ All CRGs need to be trained to a high level, and users should be able to anticipate that a USAFE CRG is as capable as an AMC CRG.

CRG Overview

As noted in the historical case studies, the first people on the ground are significant. Participants in the initial air base opening module are security forces and a CRG assessment team, usually accompanied by USAF special tactics (ST) personnel, who will enter the airfield area and work with any seizure force as liaisons until the airfield is assessed and ready for follow-on forces. These security and AT forces may air-drop into the airfield or enter via another method and are small in number. Once the field is judged secure and capable of operations, forces will begin to flow in either via aircraft (airland) or ground convoy (overland). Both the initial security and AT forces as well as TALCE and other forces then begin to establish C2 capability and other airfield functions. These groups may be drawn from trained United States Transportation Command (USTRANSCOM) forces or from theater CRGs if available in the region. The target time to reach the “operate the base” phase is 14 days (fig. 1.7).

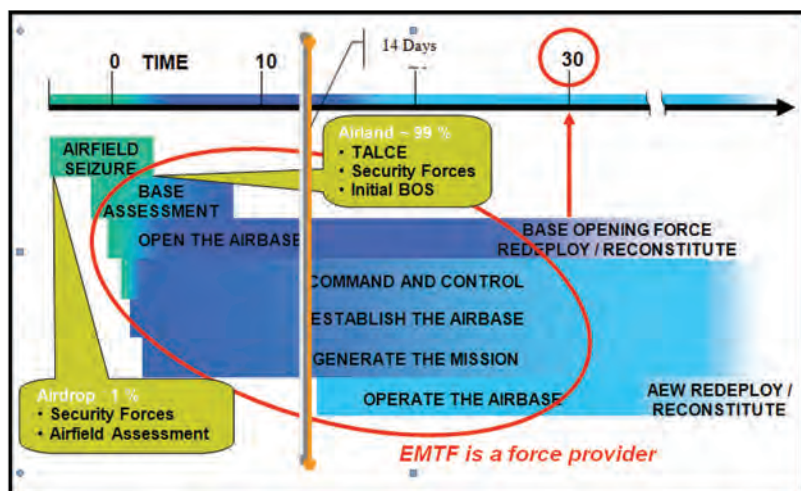


Figure 1.7. Air base opening timeline. (Reproduced from HQ AMC/A3CCE, “Base Opening: How it Works,” draft, 12 November 2003.)

The CRG assessment team is a primary focus of this chapter. The Luftwaffe, the Soviet air force, the USAAF, and the US Air Force have all understood the importance of maintaining a light, lethal force capable of speed and surprise in seizing and operating forward air bases. Covering all aspects of the CRG, although worthwhile, is a venture for another work. The tip of the spear for CRG operations is the AT. It is the enabler allowing the USAF to open the base, which in turn will enable the follow-on air or ground forces. Consequently, the United States can project force and achieve national security objectives. The AT usually has eight members but may have up to 20 (as was the case with the 86th CRG for the air base opening at Bashur during OIF.)

Capability

The CRG’s main mission is to provide seamless transition from airfield seizure to air base opening to force employment and sustainment in concert with follow-on force modules and theater-assigned mobility forces.¹⁹⁹ The CRG concept will transform the legacy AMOG into a light, lean, quick-to-deploy (and employ) unit. The speed at which such a unit can deploy is strategically important. If the unit is able to get into a theater quickly and open an air base, the adversary

is caught off-balance. This compressed time is used to exploit the forward base, secure it, and establish operations for follow-on forces. A force capable of such rapid mobility enables the United States to operate inside the enemy's decision-making cycle, thus inhibiting an immediate enemy response. This is the lesson learned from the lightning strikes of the Germans in Norway and, more specifically, the Soviets in Afghanistan. Amin, the Afghan president, did not even realize his country was under attack until it was too late.²⁰⁰ A force of this nature cannot be an ad hoc unit thrown together at the beginning of a conflict as the USAF was forced to do in OIF. It cannot be a smattering of people from around an Air Force base. This unit must live, work, and train together to enjoy the optimal speed and performance the Luftwaffe and Soviet air force ensured prior to operations in Norway and Afghanistan, respectively.

The CRG is composed of versatile personnel who are both war fighters and functional experts. Units must have state-of-the-art equipment to facilitate airfield assessment, C2, force protection, reachback communications, timely intelligence, combat engineering, rapid airfield repair assessment, and rapid redeployment. The CRG may provide the initial FOL leadership and thus be responsible for establishing the preliminary operations tempo until arrival of the designated regional mission leadership. The CRG assessment team must include a senior field grade officer (O-6) to assume this critical role.²⁰¹

In a resource-constrained environment, CRG standby capabilities and configurations are continuously under review and debated.²⁰² AMC commands the contingency response wing. USAFE commands the 435th Air Ground Operations Wing, a small but highly effective airborne-capable unit. Pacific Air Forces (PACAF) and Air Combat Command (ACC) have pieces and parts of CRGs that possess their own unique capabilities. The question of what these forces should look like has yet to be fully answered. Major commands (MAJCOM) from different theaters have unique visions of what capabilities a CRG should possess. The CSAF has suggested molding the CRGs on the Royal Air Force regiment design. USAFE has developed a capable unit with unique abilities, including airborne insertion and NVG operations. The CSAF's suggested vision for all CRGs may incorporate C2 elements the current AMC AMOG offers, blended with the defensive capabilities of the RAF Regiment (similar to ACC's 820 SFG). The envisioned CRG may also have some of the unique airborne insertion abilities of today's AFSOC STS, as found in USAFE's 86 CRG.²⁰³

USAF Assessment Team

AT actions serve to validate and determine the suitability of a designated airfield for a future air mission. Assessment teams may obtain airfield information from means such as site surveys, satellite imagery, previous operations, the logistics capability assessment tool (LOGCAT), and GeoReach. An AT conducts a physical investigation by deploying to an airfield and validating preassessment information and/or prior surveys if available.²⁰⁴ The Soviets enjoyed the luxury of having troops on the ground in Kabul and also deployed Spetsnaz forces to survey and observe the fields to be assaulted. One of the biggest challenges facing the USAF is how the AT will get to a forward airfield, and much of this problem is situation dependent. The team should provide leadership with several options; airdrop, airland, and overland strategies have all been used and validated in the past, and a few are highlighted in this book. If airland or overland were the only options for the Luftwaffe, the Germans would have never taken Norway. While the AT is not part of the seizure or forced entry teams, its ability is a critical node to any air base opening. The sooner the AT can be inserted, the quicker operations can begin.

Operations in Iraq illustrated several key events and issues that ATs must contend with to establish forward air bases. ATs must meet with representatives of the initial security airfield seizure and follow-on forces to understand the gaining commander's vision for the airfield and proposed layout. AT Myers faced several of these issues at Tallil; security forces were in question as well as the type of aircraft that would be flown from the field. Once operations have commenced, an AT will deploy to rapidly verify pre-action information and evaluate or obtain any items not known theretofore and report back through secure, dependable, long-range communications.²⁰⁵ It is essential that these teams be equipped to be self-sufficient and have as minimal an impact as possible on the host forces they are operating with. In Bashur the 86 CRG operated with the 173 ABN DIV, but these forces could have been SOFs, Army, or Marines. Paramount in these operations is the ability to work alongside the ground security forces. These requirements further validate operations at Bashur and the necessity for having jump-qualified ATs. They also demand that ATs carry on their backs everything they need to accomplish their mission. This five- to seven-man team would, normally, not insert

with the kick-down-the-door or seizure forces but would come in with the first wave of follow-on forces.

Team members must all be experts in their specialties and chosen as much for their experience as their specific skills. The team *commander* requires a rated mobility O-6 with TALCE commander or ops officer experience. The commander's focus will primarily be on coordinating with the ground forces, host nation forces, and primary POC for reaching back to the AMC TACC or theater decision makers. The team *leader* is essentially the "ops officer" for this team. This officer is a highly experienced TALCE officer whose focus is the completion of the airfield assessment. The security forces' member is a highly experienced midgrade captain or noncommissioned officer (NCO) whose focus is force protection. The communications element is comprised of two members who can complete two taskings. First and foremost, this midgrade captain and 7-Level NCO must provide secure and reliable communications reachback to the decision makers.²⁰⁶ They may also be called upon to assess the communications equipment at a larger hub-and-spoke airfield. The airfield manager requires a midgrade captain or senior NCO capable of assessing the ATC facilities and NAVAIDS and determining if the airfield meets minimum requirements for operations. The civil engineering element has at least one midgrade captain and one 7-level NCO and is responsible for assessing airfield pavements and airfield structures and evaluating any unexploded ordnance. Depending on the size and complexity of the airfield, the AT may need to be augmented by additional specialties. Augmentees may include a tactician, a logistics planner, a medical or public health specialist, a logistics and fuels specialist, and contracting and/or finance specialists.²⁰⁷

Once the AT is deployed into the area of responsibility (AOR) and arrives at the airfield, it is tasked to gather airfield data. The basic requirements include assessing the runway, taxiways, and ramps and gathering data on any obstacles that may obstruct aircraft operations during takeoff or landing. The team will further evaluate airfield lighting, runway markings, and the pavement on the field. The AT will also investigate airfield operations facilities for areas to deploy TALCEs, ATC, and weather stations. Additionally, the AT will assess aerial port requirements and help establish the maximum number of aircraft that can be on the field at any given time (MOG/maximum on ground). Fuel, power, and maintenance logistic requirements will also be examined, along with base support requirements such as bil-

leting, messing, medical, and bioenvironmental. The AT security representative will further establish a threat assessment, examine airfield security, and set up force protection.²⁰⁸

RAF Regiment

The Air Force was “so pleased with the performance of 20 Airmen who parachuted with the Army’s 173rd Airborne Brigade into northern Iraq in 2003” that it considered patterning certain aspects of the CRG after the RAF Regiment’s model for such operations in the future.²⁰⁹ General Jumper stated at the time, “Those airmen were responsible for getting down there and making sure that airfield was ready to be used as soon as possible.” He added, “Within minutes, they were able to call on the radio and say what airfield lighting was needed, what navigation aids were needed to get that airfield up quickly and into active use.”²¹⁰

The RAF Regiment is the Royal Air Force’s corps of ground-warfare specialists, often compared to the Royal Marines. The regiment includes approximately 3,000 officers and enlisted personnel organized into squadrons of 100 to 150 troops. One squadron is airborne qualified.²¹¹ The RAF Regiment was created during WWII to defend RAF airfields from attack. It operates surface-to-air missiles to defend against air attack and has infantry and light armored units to protect against ground attack. The unit’s mission “includes the ground defense of RAF aircraft and bases. Four of the squadrons—equipped with the Rapier surface-to-air missile system—provide anti-aircraft defenses for RAF facilities.”²¹²

The idea of using the RAF’s Regiment as a roadmap for the future of the USAF CRGs was not a new thought for General Jumper in his role as CSAF. In 1999, as the USAFE/CC, his view was that

the CRG needs to be able to operate in scenarios across the spectrum of conflict. . . . The Air Force needs to work with the other services to enable the CRG to rapidly assume control of a base captured or secured by ground forces. We must be capable of defending this freshly seized expeditionary air base from both ground- and air-based threats. This will be a large transition from our standard security infrastructure. To defend an air base in such a demanding environment requires that we reexamine the CRG to determine if it is properly organized and trained. The Royal Air Force’s Regiment provides us with a standard we should aim toward. The success of the CRG will rest upon its people—people who are as proficient at warrior skills as in their Air Force Specialty Codes [AFSC].²¹³

Currently, only ACC's 820th Base Defense Group (BDG) has the capability described by General Jumper. Several years ago, the 820th was tasked to develop the capability to air-drop a small, "first-in" force protection team. These teams can liaise with Army units conducting an airfield seizure and prepare to receive additional forces.²¹⁴ USAFE's 86 CRG is the closest unit behind the 820th with such forces organic to its base opening units. All other units must reach across command lines to access the capabilities of the 820th. The dynamics of command lines are discussed later in the doctrine portion of this chapter.

Special Capabilities

Getting an AT to the fight may require special capabilities not organic to most CRGs, such as airborne or air assault qualifications. In a hostile environment after opening an air base, additional force protection is likely to be one of the most critical additions to CRG forces. Other useful additions might include USAF civil engineers, RED HORSE (rapid engineer deployable heavy operational repair squadron engineer) troops, or Prime BEEF (prime base engineer emergency force) assets to conduct rapid runway repair or construction and facilitate the flow of additional "open the air base" forces and follow-on forces. In this role, RED HORSE directly supports combat airpower worldwide by providing air component commanders a "dedicated, flexible airfield and base heavy construction and repair capability, along with many special capabilities." For instance, RED HORSE gives unified combatant commanders access to "approximately 2,200 short-tons [of vehicles and heavy construction and support equipment], which can be tailored to meet specific construction and repair requirements . . . for extended periods of time." This capacity is in addition to the standard capability of 1,000 short-tons.²¹⁵

Special tactics teams or squadrons are an essential part of the force module; they belong to AFSOC and are not organic to any CRG. For a hostile environment, they are highly likely to already be in place as a part of the seizure force, as witnessed at Bashur. The initial force package includes controllers to manage the initial air flow into the air base and ground-to-air radio communications equipment, AN/TRN-45 mobile microwave landing system (MMLS), and the contingency airfield night lighting system (CANLS).²¹⁶

At one time, AMC, and Military Airlift Command before that, owned the predecessors to STTs—the combat control teams (CCT)—

but has since passed STTs on to AFSOC. The history of the STT is noteworthy when pondering why the need for such forces has been rediscovered. We have noted the significance of these units in WWII and how they became “specialized” and reduced during the Cold War. As the USAF becomes increasingly expeditionary, these forces are critical. Such units were required in the expeditionary operations of WWII and are a huge requirement again in today’s AEF. The Combat Control School Heritage Foundation (CCSHF) outlines the history of the CCTs:

After the establishment of the U.S. Air Force as a separate service on 18 September 1947, organizational changes resulted in tactical airlift and aerial port squadrons assuming responsibility for support of the U.S. Army ground forces. Air Force pathfinder teams, later called combat control teams, were activated in January of 1953 to provide navigational aids and air traffic control for the growing airlift forces. They were incorporated into aerial port squadrons and remained there until 1977, when they were assigned to the Director of Operations. In 1984 combat control was restructured into a system of squadrons and detachments reporting directly to numbered Air Forces, and in 1991 they were placed under the control of host wing commanders.²¹⁷

In the mid-1990s, combat control moved under AFSOC, and AMC now must re-create an organization similar to the STS to meet its expeditionary mission.²¹⁸

The CRG AT will never come close to the capability offered by AFSOC’s STS units but can serve as a unit to relieve the ever-increasing tasking level of the STS. While an STS has highly skilled warriors, it is a small force of fewer than 400 Airmen.²¹⁹ These forces position NAVAIDS and target designation equipment and also control offensive fire systems in permissive and hostile environments. Teams are trained in the use of mission-unique skills involving various parachuting techniques and amphibious as well as aquatic employment methods. Special tactics personnel are skilled in demolitions, weapons, ATC, small unit tactics, trauma medical response, communications, and forward weather observation.²²⁰

The CRG would not need anything near the STS qualifications. Basic requirements include airborne, ATC, and possible air assault qualifications. A comparison of a special tactics squadron to a CRG AT is akin to that of the Army’s 82 ABN DIV to the Rangers.²²¹ While the 82nd is a highly capable group of Soldiers, the US Rangers are a smaller group with unique training and more varied mission capabilities. The AT should train to be able to open bases in certain scenarios

without the assistance of an STS, but it will never replace STS capability. If the AT could jump into an air base with an STS, it could relieve the STS quickly. The squadron could move on to its other missions, such as directing CAS operations or integrating with other SOF teams. The AT's inability to insert with special tactics delays the STS's ability to move out of the airhead. This delay may hamper the element of surprise that such operations rely upon so heavily. Speed is of the essence, as noted in the Luftwaffe and Red Air Force experiences. The USAF may never fully realize the full potential of the CRG if it is unwilling to take steps to train these units beyond the usual AMOG legacy-type missions.

Reflecting on OIF and OEF, it is clear that the 86th CRG's ability to insert with the Army's 173rd was indeed a force enhancement and should be the new level to which future CRG ATs are trained. General Jumper described his vision for the CRG-STS relationship: "Quite frankly, the STS guys are also going to be out in the field. They are going to be doing other sorts of combat control. . . . But just like with the CRG, if we do this right, you will be able to flow back and forth . . . between those kinds of career fields. . . . [They would have] transferable skills with all of the benefits of having the same equipment and everything else."²²²

Posturing the CRG and the AT for future success requires defining the capability the AT must possess, the doctrine to enable the AT to integrate and function in a joint environment, and the vision for the CRG and the AT in the future. In examining the past, we see that the strategic effects of air base opening capabilities have served their owners well. It is evident that a country that can perform air base opening quickly and effectively will have a strategic advantage over an enemy.²²³

The USAF's challenge remains the creation of units with streamlined command lines incorporating the outstanding RAF Regiment defense capabilities and the tactical mobility and insertion capability of the USAF STS. These tasks must be accomplished to complement the STS mission without duplicating it. The road map is not an easy one to follow and will entail constant communication with senior USAF leadership, integration with USAF and other services, and a willingness for all to examine recent conflicts and the global environment to define requirements for these teams. With this vision as a guide, the Air Force can begin to organize, train, and equip the USAFE CRG, PACAF CRG, ACC CRG, and AMC AMOGs to this standard (fig. 1.8).

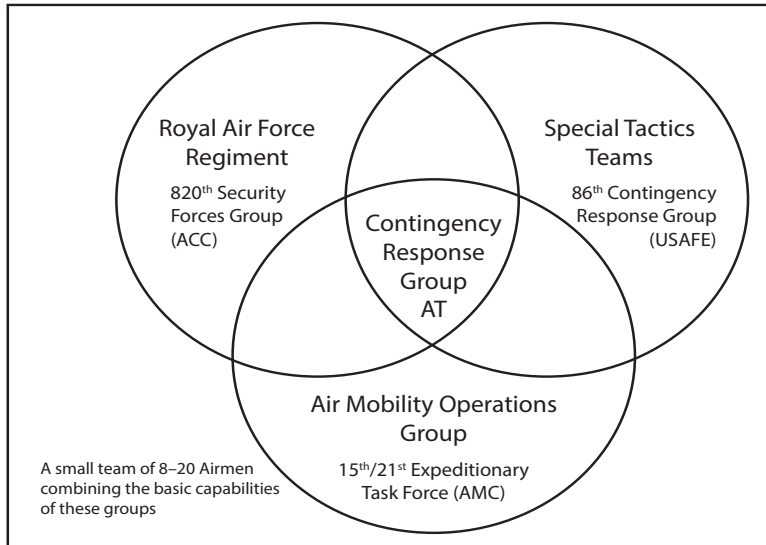


Figure 1.8. The melding of career fields

Doctrine

Doctrine is never an easy subject to broach, especially when the USAF is attempting to develop concepts for a new organization with a distinctive capability. One of the biggest doctrinal issues for such units is that over the previous five years, Air Force MAJCOMs and numbered air forces have developed numerous disparate units. These new units were designed to increase the resolution of information at the forward edge of an operation and improve the USAF's ability to establish and operate from forward airfields. Differing from existing AMC TALCEs, ACC combat communications airfield operations flights, and AFSOC STSs, these units are the

- USAFE Air Ground Operations Wing,
- ACC Base Defense Group,
- Ninth Air Force Contingency Response Wing,
- ACC/ANG airborne RED HORSE squadrons,
- ANG air traffic control squadrons,
- AMC global airfield assessment teams, and
- expeditionary operations support squadrons.

The second large issue facing the USAF is that once the teams are sourced and command lines streamlined, seams remain between the seizure forces and the operating forces. The transition between these phases is crucial to the speed at which these air bases are fully operational and to the delivery of follow-on forces.

Command Lines

These activities suggest a requirement arising at the operational or tactical level that caused the development of a capability by the affected commands. Since these activities are geared toward support of an AEF, it is reasonable to think that the transition from a “forward-based Air Force” to the AEF was the stimulus for this activity. However, command lines of such units remain blurred.²²⁴ What follows is a discussion of the proposed solution of doctrinal command issues.

As noted above, matters are made even more difficult with the myriad of capabilities that cross MAJCOM and theater lines and serve to exacerbate doctrinal issues. While USTRANSCOM and AMC have a unique doctrinal foundation based on their global reach mission, USAFE and PACAF have totally different command relationships as theater-based assets. To date, much has been written on the subject of CRG doctrine and command relationships, but no agreements have been reached within the USAF or joint community. The capabilities of all the CRGs will probably require standardization. This standardization ensures that users will understand and be able to plan airfield seizures and air base operations on a global level, not just in a theater that might have a CRG available. Theater expertise will always be a plus, but to have a unit in Europe more capable than a unit in New Jersey (i.e., airborne or organic security forces) or a Pacific unit that needs augmentation from California for basic missions is not efficient.

Many parallel efforts are under way to use legacy doctrine and organization to standardize this capability.²²⁵ Expeditionary operations are designed to rapidly respond to contingencies. They include opening and protecting airfields, performing initial airfield and air base operations, and smoothly transitioning to subsequent operations. These unique capabilities provide the foundation for CRGs and should be standardized.²²⁶ As noted, the primary functions for opening an air base are assigned to various units across the Air Force. The

Air Force must synchronize these individual efforts and ensure consistency with its GM CONOPS.²²⁷

AMC CRGs fall under USTRANSCOM in its role as DOD's provider of air, land, and sea transportation during peace and war. USTRANSCOM has a standing support command obligation to provide air base opening functions (through the CRG) while maintaining operational control (OPCON) over its forces. That control enables USTRANSCOM to determine the forces, tactics, methods, procedures, and communications employed to satisfy the supported commander's objectives. Thus, the AMC CRG will "work for" the theater commander, receiving direction via the director of mobility forces (DIRMOBFOR). However, OPCON of the CRG will not be transferred.²²⁸

Non-AMC CRGs fall within their respective AORs, and theater CRGs will remain under the combatant command (COCOM)/OPCON of their respective theater commanders. If CRGs deploy outside their theaters, SecDef approval is required. Currently, other commands do not have standing SecDef-approved support command relationships. They would either have to establish such a relationship or transfer OPCON of forces to the theater commander prior to deployment or employment. Either option would require SecDef approval.²²⁹

There are some roadblocks to overcome. The intent of the CRG OPCON is to outline a tasking process responsive to the war fighter's needs, and the group is required to respond in 12 hours. The USAF must be able to task the CRG in minimum time. Notably, the US Air Force Air and Space Expeditionary Center is not a 24/7 operation. New processes need to be implemented to increase the responsiveness of the AEFC, or all CRGs must fall under one command to be tasked through the AMC's 618th TACC.

Under current standing agreements, the tasking process is somewhat different for each MAJCOM CRG. Command relationships play an important role. Ideally, the DIRMOBFOR, through the joint force air component commander (JFACC), will recommend a CRG source to the JFC. Doctrinally, the process works differently for AMC and non-AMC CRGs.

In AMC, the COCOM can request support directly from USTRANSCOM for CRG forces. While seemingly contrary to the normal process, this procedure is doctrinally correct. JP 0-2, *Unified Action Armed Forces*, discusses support command relationships. In short, depending on how the support command relationship is set up be-

tween the war-fighting commanders, the supported commander has the authority to task the supporting commander to provide forces or support—with SecDef approval implicit in the standing support agreement.²³⁰ In AMC's case, USTRANSCOM's role as the "single manager for defense transportation" and responsibility to provide "global transportation management of common-user air, land and sea transportation for the Department of Defense by employing an integrated transportation system across the range of military operations" allows commanders the ability to bypass the request for forces (RFF) process and task USTRANSCOM (and thus AMC) directly.²³¹

CRG commanders in USAFE and PACAF do not have a standing support agreement allowing them to request CRG forces through USTRANSCOM. Therefore, to be tasked outside of their assigned commander's AOR, these CRGs would have to be tasked through the normal RFF process, requiring SecDef approval prior to deployment. This process requires an RFF message to the Joint Staff (J-3), which includes a description of the forces, mission, duration, and commander's preference for the source of forces; the resulting SecDef deployment order (DEPORD) or execute order (EXORD) authorizes troops to deploy.²³² This process may delay the deployment of a CRG.

In a structure where AMC possessed organic forces, to include SF, ATC, and jump-qualified ATs, there would be no need to reach across command lines. If the tasking process were streamlined and all CRGs were standardized, there would rarely be a situation that required tasking outside of a theater commander's AOR, resulting in a quicker CRG response time. Europe and the Pacific could respond with organic resources, augmented as required by AMC. AMC could internally handle South America, the Middle East, and any other requirements.

Operational Seams

Joint doctrine does not fully address the transition between initial airfield seizure forces and base opening forces. JP 3-18 addresses "stabilization of the lodgment" and acknowledges that "details concerning the introduction of follow-on forces must be prepared during the planning phase of the operation."²³³ However, there is no discussion of the scenarios that frequently occur—airfield security or seizure followed by employment of air mobility forces to establish base operations and sustain the air flow. This gap was evident early on in the planning for OIF and had to be worked out in an ad hoc manner.

JP 3-17, *Air Mobility Operations*, addresses briefly the interrelationship between special operations and air mobility forces. While JP 3-17 provides for some integration of airfield seizure and follow-on forces, it remains narrowly focused on initial airland operations for the purpose of ground combat power in lodgments or austere airfields. Multiservice TTPs, and ultimately joint doctrine, must reflect the Air Force's requirements to expand base operations to accommodate high throughput or beddown of aircraft to project air and ground combat power.²³⁴ Again, lessons from Tallil highlight the need for such doctrine: the operation was a success in huge part due to the intelligence and foresight of leadership involved.

Responsibilities of CRG forces should be specified during planning of seizure and base opening operations. The two transition periods or seams (when control of the airfield passes from one force to another) are vital. First is the transition from seizure force to the base opening force; second is the transition from the base opening force to the follow-on user (not necessarily USAF). AT Myers and its base opening at Tallil is an outstanding model for doctrine. The first transition should be made as soon as security and AT forces are satisfied that the airfield is secure enough for follow-on forces and the seizure force is ready to relinquish control. If AT forces are postured to rapidly employ, this assurance may happen only hours after initiation of seizure. Colonel Myers arrived at the base quickly and assumed command of the field. As the base opening force grows in capability and the follow-on user's forces begin to arrive, a threshold will be reached where the follow-on user is ready to assume control from the base openers. This growth will be in stages, including ATC forces assuming control of air operations from the STS forces, the C2 element for a follow-on air expeditionary wing (AEW)/CC assuming reporting, and the TALCE commencing communications duties.²³⁵ We saw earlier the buildup of Tallil in exactly this manner. The speed of transition can be further expedited if the AT possesses ATC capability, hence allowing the STS to depart sooner for follow-on missions.

Ideally, this transitional threshold would be detailed in the operation order (OPORD) or EXORD, as well as what portions of the airfield and its environment are under Air Force control. Advance agreements between USAF airfield operators and any remaining sister service security personnel on control issues on or near the airfield can preclude detrimental conflicts. They might include issues of storage of hazardous materials, proximity to aircraft operations, commu-

nications usage, and security approaching the airfield in the air or on the ground. Shortly after the formal transfer to the follow-on user, the base opening force (including the TALCE) should redeploy and reconstitute for about 30 days.

The key factor of this effort is the need to close the seam between seizure forces and the CRG. The Air Land Sea Application Center is beginning to develop a working group to address this shortfall and to develop multiservice tactics, techniques, and procedures (TTP) for joint air lodgment operations. This parallel joint effort is important to employment and execution and is a critical step in the road ahead for CRGs and air base opening operations.²³⁶

Case studies of the Luftwaffe and Red Air Force illustrate the importance of rapid deployment and the element of surprise. Developing a force that combines the virtues of the CRW, RAF Regiment, and STSs will ensure that the USAF CRG can open an air base anyplace at any time. The United States Air Force in Iraq serves as a reminder of the necessity of strong doctrine and, in the absence of that, strong leadership. The USAF can do better; the key is to develop ideas and concepts of operations now. As General Jumper pointed out in discussing C-17 operations in OIF and OEF, AMC did a good job in adapting to the combat environment. However, most ideas came after OEF/OIF was under way and were developed after the war fighter had an immediate need for them. The CSAF's desired end state was a combat culture that is out in front and on the leading edge, which pushes capabilities anticipating the war fighter's needs.²³⁷ The same can be said of the CRG ATs in OIF. We should not rely on luck and wishful thinking; now is the time to develop the concepts to ensure that we have the capabilities required to confront the threats of the future.

The Future: Combat Structuring

The United States has witnessed many contingency operations recently that were without deliberate plans or an infrastructure in place. The Air Force has responded with changes in organization and technology—the CRG was one example. In the past, Air Force units were committed into a combatant commander's theater through stovepipes: engineers, communicators, medics, airfield managers, security forces, airlift control elements, and so forth. Many times these units outpaced the deployment of commanders and sister services.²³⁸ During such deployments, the units could not function effectively until senior leader-

ship arrived. The CRG was an attempt to guarantee that this does not happen in the future. It is an effort to build a multidisciplinary, cross-functional (and in some cases cross-cultural) team whose mission is to provide first-on-scene Air Force personnel to command, access, and prepare a base for expeditionary operations. To make such a guarantee, the USAF must be positive we are not just putting new wine into old bottles.

In examining the future of US military operations, a few assumptions must be made to adequately posture the CRG for future success. The first key premise is that the terrorism and regional instability, especially in the Middle East and Northern Africa, will continue for the long term. As demonstrated by recent operations in Iraq and Syria, expeditionary operations requiring CRG expertise will only increase in frequency and value.²³⁹ Further, we must assume that a future adversary will recognize that victory over the United States through force-on-force combat is unrealistic. The three case studies presented illustrate that taking that ability away can marginalize a nation projecting forces through air base seizure. If Norway were not taken, the Germans would have had a northern front to deal with. If Kabul and other airfields were not seized, the Soviets would have required more forces and allowed the Afghan leadership time to prepare for the initial assault. Finally, had the United States not been able to seize bases in Iraq, the coalition would have had major issues with power projection and logistical support to friendly forces. Adversaries are designing capabilities and doctrine to deny or limit US forces ability to gain access to a region. Most potential adversaries conclude that developing the ability to limit and/or interrupt access will enable reducing our military capability to manageable and sometimes vulnerable levels.²⁴⁰

Organize: Contingency Response Group Combat Culture

Organization of the CRG mission is receiving attention at the highest levels in the USAF (fig. 1.9). This construct will shore up AMC units but will not bring the structure and practices of ACC or overseas units any closer to those of AMC. Currently, AMC has the preponderance of CRGs and ATs, but not of capability. USAFE and ACC have special proficiencies that AMC is referring to as “playbook options.” These options include security forces from the 820 SFG, airborne capability from the 86 CRG in USAFE or possibly ACC, and RED HORSE civil engineers from ACC.²⁴¹ Any air base opening op-

eration other than an airland or overland insertion in a permissive environment will require forces from outside AMC.

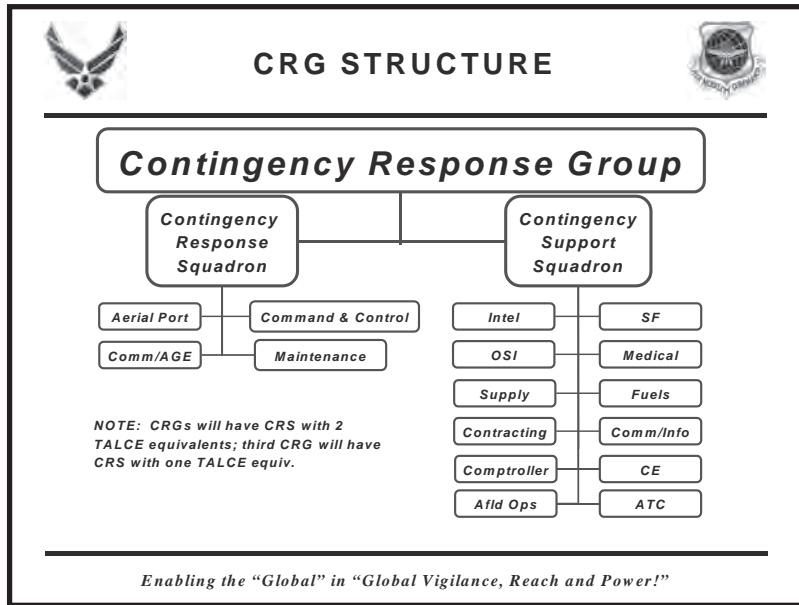


Figure 1.9. EMTF/CRW organizational structure. (Adapted from Brig Gen Kip Self, HQ AMC, CRG conference brief, 2005.)

Organization of the personnel in the CRG is another issue. The group is unique in that it contains AFSCs or career fields from a myriad of Air Force organizations. Airmen from the intelligence, medical, fuels, communications, and operations fields—among many others—come together to work in the CRG. This diversity creates an environment where a cohesive combat culture is difficult to nurture. Airmen may identify more with the AFSC or career field they came from and not the organization to which they are assigned. One concept to alleviate some of these issues is to create an AFSC for the CRGs Air Force-wide. If USAF senior leadership is serious about CRG personnel being key to the future of the Air Force, they should be recognized. Having a CRG AFSC would not only give CRG personnel an organizational identify but also would facilitate their placement in future assignments and leadership positions.

Furthermore, the CRG AT has already undergone numerous name changes in its short history. Names have ranged from the global mo-

bility assessment team (GMAT or GAT) and the contingency base assessment team (C-BAT) to today's AT. The origins of the AT can be traced to the Army Pathfinders, first used to mark drop zones in Sicily during the Italian campaign of World War II. The Army currently has Pathfinders; such a name in the Air Force might find issue with the Army. As mentioned, the CRG is a unit benefiting all armed services. Armed forces must transcend parochial interests in the development of the most effective force. The Pathfinder history is easily traced to the USAF; the title USAF Pathfinders might serve the Air Force well in building a combat heritage. The Air Force might opt to build a new tradition in a name such as the USAF Forerunner Team. A *forerunner* is defined as "one that comes before and indicates the approach of another; a harbinger."²⁴² The name is seemingly perfect for a group designed to be the first into an airfield to assess its capabilities for follow-on forces.

Train: The Battlefield Airman

Training is a key issue for the CRG, but the Air Force must determine what capabilities it should possess before investing too many resources into this area. A USAF study on air mobility leaders identifies a need not only for just-in-time training supporting mobility deployments but also for a long-term developmental strategy to meet ongoing contingency leadership and mobility capabilities. The study observes that "the resources and emphasis that AMC places on the Phoenix Mobility program indicate how much the command values the EMTF mission in the post-9/11 environment. It also reveals that by deliberately trying to build a cadre of officers who have the contingency-response mission as a core competency, the command continues to develop future mobility leaders who are experts in all aspects of air mobility operations."²⁴³

In addition to training courses, both physical and on-line, the Expeditionary Warfare Center developed Eagle Flag, an exercise held at Joint Base McGuire-Dix-Lakehurst (JBMDL), New Jersey. Eagle Flag is used as a predeployment workup for CRGs as they become aligned with the AEF rotations.²⁴⁴ As noted, lead CRGs will be pre-identified with each AEF pair. Those CRGs will be targeted for Eagle Flag just prior to assuming lead status in conjunction with their respective AEF pair.²⁴⁵

CRG forces must further exercise routinely with a variety of joint combat maneuver forces to effectively open air bases across the spectrum of operations. Exercising these CRG forces using a variety of existing training events would greatly facilitate developing joint TTPs and prevent the USAF from having to assemble ad hoc teams. Events that would serve CRGs well include combat training center rotations; joint / service / combatant commander exercises; bilateral training; or piggybacking on exercises AMC is already a part of, such as Large Package Week (LPW) with the 82 ABN DIV.²⁴⁶ Such training would integrate air base opening capabilities and address deficiencies in the areas of doctrine and force packaging. Today's joint exercise objectives should be refined to include transition from airfield seizure to base opening forces. Improvement in these areas will highlight the changes required to ensure more effective operations.²⁴⁷

Such joint exercises also serve to build habitual relationships with sister services that pay dividends in combat operations. They will validate required training, which might include jump qualifications for ATs. A "special capabilities" AT of eight people would have strategic effects if a future conflict required its employment. This AT would be part of one of the CRGs at Travis AFB and one at JBMDL, giving that CRG the designation "special capabilities CRG." AMC has organized flying units in similar ways at Charleston AFB, including the 16th Airlift Squadron that was at one time a special operations low-level II (SOLL II) C-141B outfit. The cost is minimal to train 16 Airmen commandwide for airborne insertion.²⁴⁸ The concept has already been validated in Iraq (see chap. 5).²⁴⁹ The capability in such teams would yield increased options for the nation's leaders. However, evaluating the ability such qualifications can offer is difficult until the CRG has the capability.

General Jumper stated in 2003 that "contingency response group capabilities are also emerging within air mobility operations, providing nontraditional skills to base opening. Response group airmen attend Army Ranger School and are jump qualified." His vision for the CRG was clear. "These are skills of the modern expeditionary Air Force," he noted. "We will continue to grow these skills and get the people in these groups that we need to be able to do this in any condition, anywhere in the world. And it's going to get people's attention, because we're going to have jump-qualified engineers, jump-qualified contracting officers, jump-qualified lawyers [and] jump-qualified doctors."²⁵⁰

It may be shortsighted to dismiss the capability on the grounds that it may never be employed. If the 86 CRG did not have airborne qualification, who would have opened Bashur? Some would argue that the jump was not required and the CRG could have airdropped in on the first C-17 on the second night. If the field were not capable of handling a large flow of heavy C-17 aircraft, night two would have been a terrible time to find out with 1,000 airborne Soldiers then stranded in northern Iraq.

There is another little-known possibility that never occurred during Operation Allied Force (OAF) because assessment of the field was deemed impossible. As General Jumper tells the story, this may have been the genesis for the 86 CRG airborne qualification. The USAF was unable to stand up a bare base in Kukas, Albania. No roads led to the base, and General Jumper, the USAFE commander, needed an airdrop to get an AT and RED HORSE team on the field to assess and possibly to repair it. He was briefed that insertion was not possible.²⁵¹ Lt Gen Mike McDuffie, director of joint staff logistics, briefed reporters on 2 February 1999 that “there is a dirt strip up close at Kukas.” He added, “We don’t know the usability of that airfield, though, for C-130s. I mean everybody wants to say it’s C-130 capable because of the length, but we really don’t have that assessment. Our view, it probably is not.”²⁵²

As mentioned above, playbook options such as airborne insertion are farmed out to USAFE. The original Air Force Contingency Response Group Operational Concept, version 1.0, states: “Some situations may require airborne insertion of forces; therefore, several of these METs (Mission Essential Tasks) will also require airborne/airdrop capability. To address this *intermittent* requirement, the 86th CRG in USAFE, 613th CRG in PACAF, and the 820th BDG in ACC will be responsible for maintaining one Assessment Team each that is airborne/airdrop qualified” (emphasis added).²⁵³

Antiair access will become more of an issue for the United States in future operations (as mentioned previously and in chap. 2). Issues with Turkey in OIF should alert America that our allies may not always provide us with basing rights in future conflicts. Thus, forced entry options should be examined now, before they are required. Furthermore, the DOD has shifted its collective focus toward the so-called “southern arc that will begin in the Balkans, pass through the Greater Middle East and Persian Gulf, cross South Asia, and continue along the Asian crescent from South East Asia to Taiwan.”²⁵⁴ Even a

quick glance illustrates the requirement for forces beyond USAFE to prepare for operations similar to those in Bashur. The “arc of instability” includes forces not only in the European theater but also in South America, the Middle East, and the Far East (fig. 1.10). Furthermore, the RAND study *A Global Access Strategy for the US Air Force* recommends that the USAF “plan, organize, equip and train itself according to a new set of principles suited to a world that demands frequent, short-notice deployments and employments across a spectrum of conflict that may occur virtually anywhere in the world.”²⁵⁵ Again, AMC has the bulk of CRG assets, and common sense dictates it should have the bulk of capability. The operational concept must be updated to include jump-coded billets for an assessment team at Travis and McGuire AFBs to respond to crisis anywhere on the globe in the 12-hour time frame laid out in the operational concept.

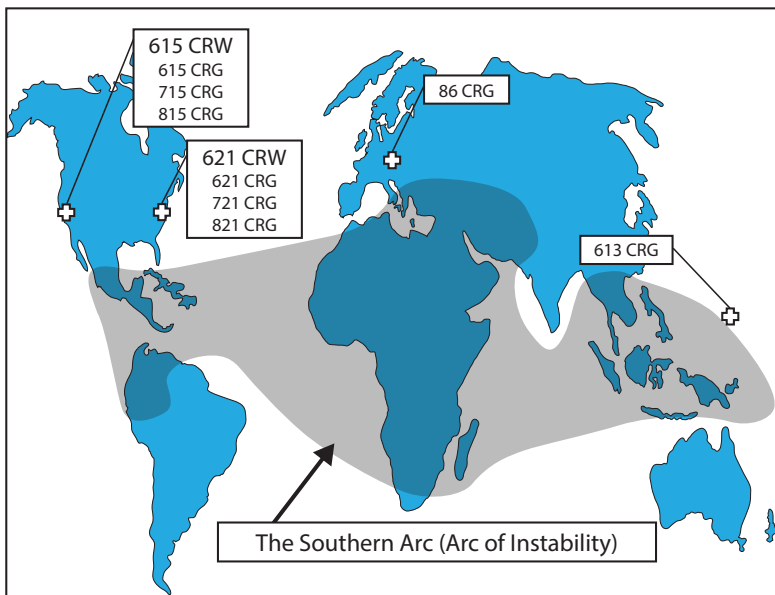


Figure 1.10. CRGs and the arc of instability. (Adapted from US National Intelligence Council (NIC), *GlobalTrends 2025: A Transformed World* [Washington, DC: US NIC, November 2008], 61, https://www.dni.gov/files/documents/Newsroom/Reports%20and%20Pubs/2025_Global_Trends_Final_Report.pdf.)

Finally, President Bush observed in the 2002 *National Security Strategy* that “before the war in Afghanistan, that area was low on

the list of major planning contingencies. Yet in a very short time, we had to operate across the length and breadth of that remote nation, using every branch of the armed forces. We must prepare for such deployments.”²⁵⁶

No one in the world challenges the USAF in air-to-air combat, yet F-15 units continue to thrive. The 82nd ABN DIV has not made a combat jump in years, yet it is the Army’s pride. Both the USAF’s F-15 Eagle squadrons and the Army’s 82nd ABN DIV have a known capability that offers this country’s leaders options and a deterrent to potential adversaries. Airborne qualifications for the AT may be the first such capability the USAF requires in the group. Ranger, air assault, and other options should be examined as required.

Another training opportunity for CRGs may be to leverage against the battlefield Airman concept. At the Air Force Association’s Symposium in Orlando, Florida, in February 2004, James G. Roche, secretary of the Air Force, “directed special attention to what he termed ‘battlefield Airmen’—USAF personnel on the ground who work directly with land forces.”²⁵⁷ The Air Force plans to pull together all battlefield Airmen—including combat controllers, pararescuemen, combat weather specialists, enlisted terminal attack controllers, and tactical air control party (TACP) Airmen—under a common organizational and training structure. Dr. Roche said that will “strengthen the combat power they bring to the battlefield, whether they bring it as part of ACC or part of AFSOC.”²⁵⁸ Now is an excellent time for AMC to bring forward the CRG as an essential capability on the ground for working with land forces. Without the CRG, forces will have a difficult time getting on the ground through newly opened air bases. The CRG could use this opportunity to integrate and train with other USAF battlefield Airmen and build those habitual relationships for the future.

ATC in the CRG is still an item of intense discussion. As far back as Joint Endeavor (December 1995), a lesson learned was that having ATC capability early in the flow when opening a new air base is critical. However, the capability continues to exist primarily with AFSOC STT forces. Although AMC has developed a concept for rapid deployment to provide the required capability, these personnel are not yet in the open-the-air-base force module and thus are not in the proposed CRG.²⁵⁹

Training is critical to the future success of these units, and it is all the more tough to accomplish in a unit such as a CRG that has a high

deployment rate. Yet with the predictability of the AEF cycle, the opportunities can be realized to great effect. The learning curve will be steep, especially when the USAF is setting out to create a new organization with new capabilities. As the units are trained, however, this curve will diminish. Leveraging CRG training against training already scheduled will foster the development of working relationships with sister services. Examples include airborne training with LPW at Fort Bragg and working with the Joint Readiness Training Center (JRTC) at Fort Polk and the National Training Center at Fort Irwin. Channels of communication must be developed with the Europe-based CRG and CONUS-based STS units.²⁶⁰ Creative thinking might suggest partnering with the RAF Regiment or using capable contractors that provide robust military training. The Air Force has several options at its disposal to mentor these newer AMC CRGs and to have an eminently capable force for the future.

Equip: For Tomorrow's Conflict

Equipping a CRG for its mission is somewhat intuitive; providing the unit with personnel might require some deeper thought. For the mission, a CRG by its very nature must be light. Everything the AT needs initially should be carried on the individuals' backs. Once the base is open and airlift starts to flow, more equipment can be brought in. In building the habitual relationships with STSs and sister services, the USAF will have the opportunity to examine best practices of other units and adapt its requirements.

Former PACAF commander Gen Patrick K. Gamble noted that "the CRS [contingency response squadron] was born from lessons learned in the Balkans. . . . In Kosovo they found when they had to go into an airfield, a small field never seen before, they didn't know what they were getting into until they looked at it. The lesson is we've got to get eyes on the target. The squadron is the command's eyes. Its job is to fly into contingency operations first and evaluate the situation, surroundings and terrain." Gamble's only direction to the planners was that the team had to fit in one C-130. "Build me one C-130's worth of capability," Gamble said. "Tell me what you need, what the team ought to look like, and what kind of communications and assessment equipment it'll need. You'll get it."²⁶¹

Critical thinking is required as well. Any member involved in creating this future force must reflect beyond the last war to bring out

any combat capability the war fighter might need now, before the next fight. As General Jumper pointed as CSAF, it will not be the command that figures out how best to employ a weapons system. It will be the line captain who lives and breathes combat operations who comes up with innovative ideas. The command's job is to foster and embrace this process, providing an avenue for that "smart" captain's ideas to come to fruition.²⁶² With today's technology, many available items may be adapted to the mission of the AT. For example, a potential idea worth borrowing is the bomber community's adaptation of a helicopter "smart kneeboard." This smart kneeboard incorporates a GPS data link. A CRG Airman could use this device on the ground and circle the unit position with a stylus. The smart kneeboard simultaneously displays the information entered by the ground personnel to others on the ground or to inbound aircraft.²⁶³ The same kneeboard could display inbound aircraft landing times and parking positions to the CRG, decreasing aircraft turn times and expediting the buildup of forces at the airhead.

Devices such as the backpack remotely piloted aircraft (RPA) should find great use in the CRG. RPAs can be employed by either the AT or security forces, with the CRG manned with the necessary people and equipment to monitor threats in aircraft approach and departure corridors. The information gathered provides the CRG and aircrew with data on threats from shoulder-fired anti-aircraft missiles or small arms fire. This capability is available now and is being used by some military units. The RPAs are equipped with miniature cameras that beam video streams to a laptop computer being operated by a SF team overseeing airfield security.²⁶⁴ General Jumper noted, "Now we are not going to be able to put 1,000 people around an airfield like the Army can, so we are going to have to do it with hi-tech."²⁶⁵ The backpack RPA is just one example of innovations enabling a small group to provide force protection on a large scale.

While the possibilities for adapting technology for the CRGs are limited only by imagination and funds, equipping the CRG with the appropriate personnel is a more challenging premise. The key is to get the word to people in the Air Force that the CRG is an exciting place to work and a growth industry. When people understand that they can make a difference in a unit, they flock to it. Therefore, AMC must continue to improve its ability to recruit officers into the CRG using programs like Phoenix Horizon. Horizon's goal is to create a large pool of highly competitive mobility officers through leadership de-

velopment programs, increased visibility for the CRG, and increased opportunities for selected officers.²⁶⁶ One aspect of the program, Phoenix Horizon–Mobility, assigns 11M (mobility pilots), 12M (mobility combat systems officers), 21A (maintenance officers), and 21R (logistics readiness officers) “to CRW and en-route locations to gain extensive experience in mobility leadership and mission planning.” The two-year Phoenix Horizon–Torch program pairs “company grade officers with a general office counterpart at HQ AMC, US-TRANCOM, or 18th Air Force . . . to expand their leadership abilities and understanding of the global mobility mission.”²⁶⁷

CRGs need to market themselves at the Airman Leadership School, NCO Academy, and the Senior NCO Academy. Senior leadership in the EMTF should travel to the wings under their purview and deliver “spread the word” briefings on the changes, challenges, and opportunities at the CRG.

Taking care of people in the CRG is key as well. Identifying with the unit and developing culture are integral to any organization. The CRG, as a career field, should have a way to be identified (fig. 1.11). Most career fields in the USAF have career badges that associate individuals with their specialties. The CRG must do the same to build community in the career field. AT uniform “tabs” similar to what AMC Phoenix Ravens wear on their shoulders would identify the AT to sister services.²⁶⁸ Further, all organizations that identify themselves as battlefield Airmen—the security forces and STTs present during the initial phases of air base opening—wear a beret. Another way for CRG members to identify with their heritage and community is to issue them berets. The color is not important—it could be Air Force blue or dark gray—but the beret would distinguish those responsible for base opening.²⁶⁹ In an environment where helmets are not required, a distinctive beret would enable both the USAF and sister services to immediately identify those responsible for the expeditionary base, be it the STS, BDG, or CRG.

The Way Forward

There are several areas that need to find closure in the CRG operational concept. The total number of CRGs required across the Air Force has not yet been definitively established. This requirement will drive some overarching organizational changes, such as the CRW, as-

well as manpower and equipment needs for the various CRGs. The current assumption is that nine CRGs will be formed—six for AMC and one each for ACC, USAF, and PACAF.²⁷⁰

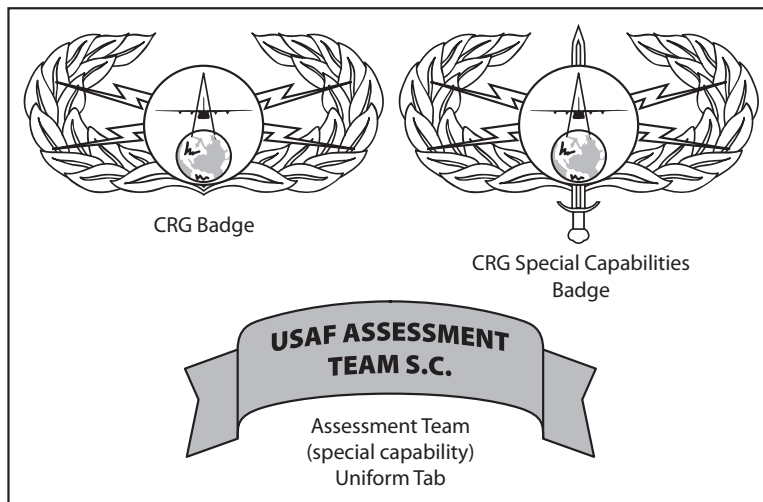


Figure 1.11. CRG badges and tabs

The Air Mobility Warfare Center is working on developing a syllabus to stand up a CRG FTU. Joint training is critical to the success of air base opening / CRG operations. Eagle Flag is but one of the many opportunities to exercise this capability; we must also take advantage of those offered by the JRTC, LPW, “Flag” exercises, and others. These venues will help ensure that CRGs maintain a high level of proficiency not only in their respective AFSC skills but also in expeditionary skills required for air base opening operations.

What must be done now? All of the items listed above must be worked through, but the concept will still take time to initiate. Changing physical artifacts—such as equipment, physical symbols, organizational charts, and AFSCs—as soon as possible is a high priority. Doing so will illustrate to Airmen in the field that the CRG is indeed the way of the future and that senior leadership is serious about its importance. First, the names for units—the CRG, the AT, and CRW—must all be agreed upon quickly. Training must be examined and a course determined. The USAF should send leaders to advanced schools like Air Assault and/or Airborne to improve expeditionary and joint warfare capabilities needed to support the future vision of a

robust CRG capability. It should also schedule exercises with sister services and set up a cross-tell program between CRGs and other organizations, to include STSs. Finally, any of the above suggestions—headgear, uniform tabs, CRG badges—create a sense of community and evidence of CRG membership. Any or all of these actions are low in cost for the USAF yet high in payoff to a new career field. They further illustrate that the new CRG is not just a renaming of an old, stovepiped system.

Conclusion

The United States is standing on the verge of incredible capability on a strategic scale. The USAF is undergoing changes that will impact the organization for years to come: it needs to get this transformation right. As the Air Force contemplates changes to its structure, organizations, and weapons systems, it must remember the basics—how it deploys and supports global reach, including a more dynamic and flexible concept for securing austere and dispersed airfields.

The case studies presented illustrate that speed and surprise are key to enabling successful air base seizures and follow-on air base opening. The Germans, Soviets, and the United States have historically spent much time and thought developing these capabilities. US capability flourished in World War II. Importantly, the case studies underline how vulnerable air bases can be to ground and air assault. However, the United States has struggled after the Cold War in developing and sustaining the capability of units that can rapidly deploy, organize, and open an air base in a hostile or semipermissive environment.

Harkening back to the past, we have seen that the Luftwaffe used a CRG-like organization to enable the seizure of airfields in Norway. The strategic effect of the operation prevented the Allies from developing a northern front, pushed the British naval blockade as far from the German coast as possible, and allowed the Germans the iron ore required for its war effort. The newly seized air bases in Norway allowed the Germans to strike northern portions of the British Isles. The Soviet Air Force used its special forces in a CRG role in Kabul and other cities in Afghanistan to strike quickly and keep the Afghans off balance during the initial phases of their invasion. The United States deployed units in Iraq that were highly successful in rapidly opening bases, but it can do better. Against a smart adversary,

the USAF might not have enjoyed the success it did in OIF. We must organize, train, and equip today for the future.

Air Mobility Command must be ready to transform its legacy CRWs into the light, lean, and lethal organization that future conflicts will demand. Doing so is not an easy feat. The training will be tough, the doctrine will be nontraditional, and leaders will have to think creatively. But those in the CRG will be able to make a difference in future operations. The CRG concept is too important to permit failure; the impact will be felt not only in the way the USAF deploys and how effective it is in combat but also in how personnel perceive their contribution to the fight. The CRG concept is on the leading edge of a service culture change and influencing a new career field mind-set and developmental path. The time for change is now, and the rewards from the change will be felt quickly. Future conflict will depend on how fast the USAF can deploy and employ our air assets to theaters in which the enemy will invest mightily in denying our access. It is incumbent upon today's planners and leaders to ensure investments in capabilities like the CRW and CRG are made to ensure airpower has the needed theater footing to bring its full capability to bear on the enemy.

Notes

(All notes appear in shortened form. For full details, see the appropriate entry in the bibliography.)

1. Tripp et al., *Sense and Respond Logistics* 3.
2. Per Joint Publication (JP) 1-02, *Department of Defense Dictionary*, a footprint is the "amount of personnel, spares, resources, and capabilities physically present and occupying space at a deployed location," 90.
3. Weaver and Cain, "Task Force Concepts of Operations," 51.
4. Tripp et al., *Supporting Expeditionary Aerospace Forces*.
5. Dzyubenko, "Coalition Seeks Use of Kyrgyz."
6. Trump, *National Security Strategy*, 8, 33.
7. JP 3-18, *Joint Forcible Entry Operations*, xii.
8. LeMay Center, "Annex 3-17, Air Mobility Operations," 3.
9. *Ibid.*, 63.
10. Cirafici, *Airhead Operations*, xvi, 1. JP 3-17, *Air Mobility Operations*, defines *airhead* as "a designated area in a hostile or potentially hostile operational area that, when seized and held, ensures the continuous air landing of troops and materiel and provides the maneuver space necessary for projected operations. [It is] also called a lodgment area." A second definition is "a designated location in an operational area used as a base for supply and evacuation by air." *Ibid.*, GL-6.
11. FM 3-99, *Airborne and Air Assault Operations*.

12. Bonham, "Airfield Seizure," 4.
13. Vick, *Snakes in the Eagle's Nest*, 2.
14. Ibid, 9.
15. Griess, *Second World War*, 29.
16. Middleton, "Soviet Display of Flexibility," A1, A13.
17. Adkin, *Urgent Fury*, 200–214.
18. McConnell, *Just Cause*, 73, 99.
19. Maj (now Brig Gen) Robert A. Armfield (director of operations, 24th Special Tactics Squadron, Pope AFB, NC), interview by the author, 1 December 2003.
20. Headquarters (HQ) AMC, briefing.
21. Bauer, "CSAF"
22. Wilkes et al., "Expeditionary Mobility Task Force."
23. Bowyer, "Consolidating AMC's Contingency Response," iii.
24. Thucydides, *Peloponnesian War*, The Sixth Book, chap. XVIII.
25. Haulman, *U.S. Army Air Forces*, 5.
26. Vick, *Snakes in the Eagle's Nest*, 11–12.
27. Ibid., 13.
28. Ibid.
29. Ibid.
30. Royal Air Force, "RAF Timeline 1942"
31. US aircraft discovered the Japanese fleet and sank four carriers, turning back the invasion force before it could land. RAND analyst David Shlapak has observed that this may be the most significant airfield attack in history. The resulting battle, and the destruction of the Japanese attack force, was a turning point in the war. Noted in Vick, *Snakes in the Eagle's Nest*, 13.
32. Ibid.; and Craven and Cate, *Army Air Forces in World War II*, 81.
33. "Operation Chromite," fact sheet.
34. Davis, "Combat Cargo Command," in *Air War over Korea*, 161.
35. Valliere, "Disaster at Desert One," 70.
36. Adkin, *Urgent Fury*, 200–214.
37. McConnell, *Just Cause*, 73, 99.
38. Ibid.
39. Bush, "Persian Gulf Crisis."
40. Rumsfeld, "21st Century Transformation."
41. JP 3-18, *Joint Forcible Entry Operations*, A-4.
42. Matsumura et al., *Lightning over Water*, 6.
43. JP 3-18, *Joint Forcible Entry Operations*, A-2, B-1–B-2, I-3, I-7, II-4, IV-5.
44. White, "Airborne Forces," 7.
45. JP 3-17, *Air Mobility Operations*, vii.
46. RAND, *Lightning over Water*, 6.
47. HQ AMC/A35, "Airbase Opening Operational Concept," 1.
48. Ibid., 2–3.
49. US Army, Center of Military History Publication 104-13, *Airborne Operations*, 1.
50. Hooker and Coglianesi, "Operation Weserübung," 100–111.
51. Corum, "German Campaign in Norway," 50.
52. Weeks, *Assault from the Sky*, 18.

53. Knauss, “Der Feldzug im Norwegen 1940” [“The Campaign in Norway in 1940”], 8. General der Flieger Knauss was one of the senior planners for Norway who wrote a detailed memoir of the event.

54. Derry, *Campaign in Norway*, 18.

55. Weeks, *Assault from the Sky*, 19.

56. Shelton, *Joint Vision 2020*, 20.

57. Ottmer, “Das Unternehmen Weserübung” [“Weserübung Land Invasion”], translated by Corum, “German Campaign in Norway,” 57. Hereafter page number cited refers to Corum.

58. *Ibid.*, 58.

59. Mårtensson, “German Assault on Fornebu.” Mårtensson’s website notes that “the text relies heavily on the splendid Norwegian book *Fornebu 9.April* by Cato Guhnfeldt.”

60. *Ibid.*

61. *Ibid.*

62. Corum, “German Campaign in Norway,” 60.

63. Shelton, *Joint Vision 2020*, 22.

64. LeMay Center, *Volume I, Basic Doctrine*, 4.

65. Knauss, “Der Feldzug im Norwegen 1940,” 60.

66. US Army, *Airborne Operations*, 3.

67. Weeks, *Assault from the Sky*, 19.

68. US Army, *Airborne Operations*, 5.

69. Of note, airborne troops are organic to the Luftwaffe as opposed to Army ownership of airborne assets in the United States.

70. Corum, “German Campaign in Norway,” 61.

71. According to the National Museum of the US Air Force,

The Ju 52 trimotor was first built in the 1930s and remained in service for more than a quarter century. This transport made its maiden flight in April 1931, and three years later a heavy bomber version appeared. The latter aircraft formed the nucleus of the Luftwaffe’s infant bomber force in the mid-1930s and was used during the Spanish Civil War.

The Ju 52 was obsolete as a bomber by 1939, but because of its durability, simplicity of design, and handling characteristics, it continued to serve throughout WWII as a versatile workhorse of the German transport fleet. Ju 52s delivered the attacking forces and their supplies during the German invasions of Norway, Denmark, France, and the Low Countries in 1940. Almost 500 Ju 52s participated in the historic airborne assault on the island of Crete in May 1941, and Junkers later supplied Rommel’s armored forces in North Africa.

72. *Ibid.* Comparison of Ju 52 capability with current-day C-17 capability:

| <i>Characteristic</i> | <i>Ju 52</i> | <i>C-17</i> |
|--------------------------------|---------------------------------|-------------------------------|
| Weight empty | 12,610 lbs | 277,000 lbs |
| Max takeoff | 24,250 lbs | 585,000 lbs |
| Speed | 178 mph | 517 mph |
| Ceiling (mean sea level [msl]) | 19,360 msl | 45,000 msl |
| Range | 810 miles w/ auxiliary tanks | unlimited w/ air refueling |

National Museum of the US Air Force, “Junkers Ju 52”; and US Air Force, “C-17 Globemaster III.”

73. Weeks, *Assault from the Sky*, 20.
74. Durr, “Luftnachrichten-Truppe” [Signals Troops], 76.
75. Corum, “German Campaign in Norway,” 64.
76. Ottmer, “Das Unternehmen Weserübung,” 49.
77. Oberbefehlshaber der Luftwaffe, Führungsstab 1.c. (Office of the Supreme Commander, Luftwaffe), “Einstaz der Fallschirm und Lufttransportverbände” [“Use of Parachute and Air Transport Associations”], in Corum, “German Campaign in Norway,” 65.
78. Ottmer, “Das Unternehmen Weserübung,” 96.
79. Ibid.
80. Corum, “German Campaign in Norway,” 65.
81. Ibid.
82. Mårtensson, “German Assault on Fornebu,” 1.
83. Ibid., 2.
84. Weeks, *Assault from the Sky*, 22.
85. For a full account of the airdrop and airland mission, see Mårtensson, “German Assault on Fornebu.”
86. Vasco and Cornwell, *Zerstörer* [Destroyer]: 11–15.
87. Corum, “German Campaign in Norway,” 66.
88. Ibid., 63.
89. Weeks, *Assault from the Sky*, 23.
90. General Speidel, ed., “Der Feldzug in Norwegen,” in AFHRA file K113.305, 2, in Corum, “German Campaign in Norway.”
91. Corum, “German Campaign in Norway,” 71.
92. Gruppe XXI, Erfahrungsbericht (7 Oct 1940), in BA/MA 24-21/50, 4, in Corum, “German Campaign in Norway,” 75.
93. Richardson, “Forcible Entry,” 2.
94. Corum, “German Campaign in Norway,” 74.
95. Blau, *German Campaigns in the Balkans*, pt. 1, “The Seizure of Crete.”
96. Churchill, *Gathering Storm*, 648–49.
97. Simpkin with Erickson, *Deep Battle*, 40.
98. Allard, “Soviet Airborne Forces, 42.
99. Ibid., 43.
100. Ibid.
101. Heiman, “Soviet Invasion Weaknesses,” 39.
102. Aspaturian, Dallin, and Valenta, *Soviet Invasion of Afghanistan*, 1.
103. Middleton, “Soviet Display of Flexibility,” A1.
104. Ibid.
105. Public Broadcasting Service, “Soviet Occupation of Afghanistan.”
106. Russian General Staff, *Soviet-Afghan War*, 12–13.
107. Spetsnaz Soviet military units are roughly comparable to US special forces.
108. Grau, “Artillery and Counterinsurgency,” 36–41.
109. Luttwak, Block, and Carus, *Grand Strategy of the Soviet Union*, 6.
110. Central Intelligence Agency, interagency intelligence memorandum, 7.

111. Aspaturian, Dallin, and Valenta, *Soviet Invasion of Afghanistan*, 18, 21, quoting *National Intelligence Daily*, 7 September 1979.

112. *Ibid.*, 23–24, 29, 47.

113. Bradsher, *Afghanistan and the Soviet Union*, 176. Bradsher is referring to the flights into Afghanistan beginning on 29 November 1979, although he describes them as going into Bagram. He may have drawn this conclusion, quite logically, from the fact that newly arrived Soviet units were discovered at Bagram a few days later, indicating that some flights had indeed gone there. But there is no question that there also were flights into Kabul. Defense attachés at the US Embassy saw the aircraft there.

114. *Ibid.*

115. The fact that the embassy reported these sightings is described in Bradsher's book (*ibid.*). Bradsher notes that this was reported in the *Washington Star* on 13 December 1979, A10.

116. Aspaturian, Dallin, and Valenta, *Soviet Invasion of Afghanistan*, 29, 33.

117. Russian General Staff, *Soviet-Afghan War*, 17.

118. A BMP is an amphibious infantry combat vehicle.

119. Russian General Staff, *Soviet-Afghan War*, 17.

120. *Ibid.*

121. *Ibid.*, 197.

122. *Ibid.*

123. *Ibid.*, 198.

124. *Ibid.*

125. Nelson, "Soviet Air Power."

126. Grau, "Artillery and Counterinsurgency."

127. Arnold, *Afghanistan*, 94.

128. The presidential palace was guarded by Afghan troops and "the Muslim Battalion"—a Soviet Spetsnaz battalion of central Asian soldiers in DRA uniforms. When the paratroops arrived, the Spetsnaz and airborne forces accidentally became engaged in a firefight that killed half a battalion of Soviets. Russian General Staff, *Soviet-Afghan War*, 339.

129. *Ibid.*, 199.

130. Aspaturian, Dallin, and Valenta, *Soviet Invasion of Afghanistan*, 16.

131. *Ibid.*

132. Baumann, "Compound War Case Study," 288–89.

133. Noorani, "Afghanistan and the Rule of Law," 43.

134. Allard, "Soviet Airborne Forces," 46.

135. Bodansky, "Bear on the Chessboard," 291.

136. *Ibid.*

137. *Ibid.*, 280.

138. Girardet, *Afghanistan*, 17.

139. In a replay of 1841, the British managed to have their Kabul garrison annihilated. By 1881 the British had had enough; despite the victorious slaughter at the Battle of Maiwand in July 1880, they left. The British gained some territory and retained a little influence. *Encyclopedia: The Free Dictionary*, s.v. "European Influence in Afghanistan," accessed 23 February 2016, <http://encyclopedia.thefreedictionary.com/Dost%20Mohammad%20and%20the%20British%20in%20Afghanistan>.

140. JP 3-18, *Joint Forcible Entry Operations*, I-8.
141. Collins, *Soviet Invasion of Afghanistan*, 81.
142. Bodansky, "Bear on the Chessboard," 282–83.
143. Nawroz and Grau, "Soviet War in Afghanistan?"
144. Lyons, McDuffie, and Webb, "Soviet Campaign in Afghanistan," 11.
145. Belmont, "USAAF Airfields in the ETO."
146. Kelly, *From a Dark Sky*, 23.
147. Levine, *Pacific War*, 124.
148. Haulman, *U.S. Army Air Forces*, 17.
149. Levine, *Pacific War*, 150.
150. Haulman, *U.S. Army Air Forces*, 17.
151. *Ibid.*
152. *Ibid.*
153. *Ibid.*
154. JP 3-18, *Joint Forcible Entry Operations*, vii–viii.
155. Lee, "Third Persian Gulf War."
156. Perry et al., *Operation IRAQI FREEDOM*, 5.
157. "Operation Iraqi Freedom—March 26."
158. "Operation Iraqi Freedom—April 4."
159. *Ibid.*
160. Schuldheiss, briefing, subject: Airfield Planning and Coordination.
161. *Ibid.*
162. *Ibid.* General Leaf was the JFACC's representative to the land component commander. He worked with the coalition forces' air component commander to develop the air and space strategy and coordinated CAS missions with the Army. General Leaf acted as the coordinating authority between the land and air commanders.
163. The CRG operational concept suggested that this O-6 (colonel) be a rated officer, which would require him/her to be a pilot or navigator. HQ AMC/A3A, "Contingency Response Group Operational Concept."
164. Tomczak et al., briefing, subject: Global Mobility CONOPS in Action.
165. *Ibid.*
166. *Ibid.*
167. Stoltz and Dobbins, briefing.
168. Cichowski, Perraut, and Self, briefing, subject: AMC's Transformation, 4.
169. Briefing, subject: Air Base Opening—Lessons Learned.
170. *Ibid.*
171. Cichowski, Perraut, and Self, briefing, subject: AMC's Transformation.
172. Briefing, subject: Air Base Opening—Lessons Learned.
173. Cichowski, Perraut, and Self, briefing, subject: AMC's Transformation.
174. Briefing, subject: Air Base Opening—Lessons Learned.
175. *Ibid.*
176. Stoltz and Dobbins, briefing.
177. Murray and Scales, *Iraq War*, 193–94.
178. US Central Air Forces (CENTAF), "Operation Iraqi Freedom," 15.
179. *Ibid.*
180. Stoltz and Dobbins, briefing.
181. Ulmer, "Airmen Jump In."

182. Arana-Barradas, "Bashur or Bust," 31–32.
183. Ibid., 32.
184. Ibid.
185. Murray and Scales, *Iraq War*, 193–94.
186. Ulmer, "Airmen Jump In."
187. Allardice, briefing.
188. Bauer, "Commander Recounts Historic C-17 Airdrop"
189. Murray and Scales, *Iraq War*, 193–94.
190. Arana-Barradas, "Bashur or Bust," 35.
191. Lowe, "Group Reflects on OIF Mission."
192. Ibid.
193. Cichowski, Perraut, and Self, briefing, subject: AMC's Transformation.
194. Lt Col Kevin Kreps (chief, Mobile Command and Control Branch, Headquarters (HQ) AMC, Scott AFB, IL), telecon with the author, 15 April 2004.
195. Gen John P. Jumper (CSAF), interview by the author, Atlanta, GA, 19 April 2004.
196. Quoted in Bauer, "CSAF"
197. Ibid.
198. Air Staff/XOOS, "USAF Ground Warriors," 2.
199. HQ AMC/A3A, "Contingency Response Group Operational Concept," 3.
200. Public Broadcasting Service, "Soviet Occupation of Afghanistan."
201. HQ AMC/A3A, "Contingency Response Group Operational Concept," 4.
202. Bowyer, "Consolidating AMC's Contingency Response," iii.
203. The 820th Base Defense Group provides force protection and contingency response for expeditionary air forces. The unit specializes in bare-base, semi-/non-permissive, airland-denied scenarios.
204. HQ AMC/A3A, "Contingency Response Group Operational Concept," 5.
205. Ibid.
206. A 7-level NCO is a craftsman, a professional whose work is consistently of high quality and who is technically proficient and trained to perform duties in a chosen career field. Civilian craftsman are highly skilled technicians whether they are workers performing hands-on tasks such as plumbing, road construction, or building construction; IT professionals maintaining computer networks; or human resource (HR) managers running an HR division in a medium-sized company of 200 to 1,000 employees. White to DeMarco, e-mail.
207. HQ AMC, briefing, subject: AMC Global Assessment Team.
208. Ibid.
209. Kennedy, "Jumper Eyeing New Unit."
210. Ibid.
211. Ibid.
212. Ibid.
213. Jumper, "Rapidly Deploying Aerospace Power," 10.
214. Volcheff and DeCuir, briefing, subject: Air Base Opening.
215. Air Force Instruction (AFI) 10-209, *Red Horse Program*, 10.
216. AFI 13-217, *Space, Missile, Command, and Control*, 46.
217. ShadowSpear Special Operations, "Combat Control Team."
218. A CCT history notes that AFSOC "was established [in 1990] at Hurlburt Field as the Air Force component of US Special Operations Command. In 1992 the

USAF reorganized, and combat control forces were split among seven separate commands creating severe challenges. Training, tactics and equipment began to vary widely. Manning suffered, with seven separate staff functions draining experienced controllers from the field. In 1996 all operational combat controllers were realigned under AFSOC." "If You Ain't First . . . You're Last," Facebook.

219. Callander, "Controllers," 52–56.

220. 720th Special Tactics Group, "First There."

221. The 82 ABN DIV mission is to "within 18 hours of notification, strategically deploy, conduct forcible entry parachute assault and secure key objectives for follow-on military operations in support of U.S. national interests." US Army, Fort Bragg, "82nd Airborne Division." Also a rapidly deployable force, the 75th Ranger Regiment "plan[s] and conduct[s] special missions in support of U.S. policy and objectives," with a primary mission "to conduct large-scale joint forcible entry operations . . . across the globe." "Army Rangers," Military.com; and US Army, "75th Ranger Regiment."

222. Jumper, interview.

223. HQ AMC/DOX, "Air Force Operational Concept," 10.

224. Air Staff/XOO, "Airfield Seizure to Airfield Opening," 3–4.

225. Air Staff/XOOS, "USAF Ground Warriors," 2.

226. HQ AMC/DOX, "Air Force Operational Concept," 7–8.

227. Ibid.

228. Volcheff and DeCuir, briefing, subject: Air Base Opening.

229. Ibid.

230. JP 0-2, *Unified Action Armed Forces*, III-8–III-10.

231. Ibid., II-15; and Detwiler, Bullet Background Paper.

232. Volcheff and DeCuir, briefing, subject: Air Base Opening.

233. JP 3-18, *Joint Forcible Entry Operations*, IV-7.

234. JP 3-17, *Air Mobility Operations*.

235. HQ AMC/A3CCE, "Base Opening," 1.

236. Volcheff and DeCuir, briefing, subject: Air Base Opening.

237. Cook, "USAF After Action Report for CSAF"

238. Jumper, "Rapidly Deploying Aerospace Power," 4–10.

239. Bush, "435th AGOW [Air Ground Operations Wing] Deploys Team."

240. Ibid.

241. There is some debate as to when or if ACC will have the organic ability to open air bases; the 820 SFG can provide security forces to enhance the "open the base." HQ AMC/A3A, "Contingency Response Group Operational Concept," 3; Brig Gen Kip Self (AMC/A3, HQ AMC, Scott AFB, IL), interview by the author, 30 January 2004; and Maj Ted Detwiler, interview by the author, 10 January 2004.

242. *The American Heritage Dictionary of the English Language, 5th ed., s.v. "fore-runner,"* <https://ahdictionary.com/word/search.html?q=forerunner>.

243. Lenderman, *Rise of Air Mobility*, 51.

244. Schanz, "Eagle Flag," 69.

245. Ibid., 15.

246. "Large Package Week," *GlobalSecurity.org*. LPW is a "joint Army and Air Force preparation exercise for the 82nd Airborne Division at Fort Bragg, NC. The exercise culminates the 82nd Airborne's intensive training cycle, which prepares one brigade, designated the division-ready brigade, to go on 24-hour standby for deploy-

ment.” LPW is “held several times a year to practice large-scale airdrop missions for personnel and equipment” and is “designed to build cohesiveness between the 82nd Airborne and Air Mobility Command units.” *Ibid.*

247. HQ AMC/A3A, “Contingency Response Group Operational Concept,” 14.

248. Sending a service member to the Basic Airborne Course at the US Army Airborne School requires paying only travel and per diem costs (per discussion with Mr. Steve Crumley [Training and Integration Branch, XVIII Airborne Corps, Fort Bragg, NC], 2004). Recurring training costs should be minimal as AMC owns all assets that participate in LPW, National Training Center, Joint Readiness Training Center, and other airborne training events. LPW alone trains thousands of jumpers at a rate of one week every 90 days; AMC would require just 16–20 of those training slots. Thus, an increased strategic capability would come at a small price. Basic jump currency requires one jump every 90 days.

249. Along with the Luftwaffe in Norway and Soviets in Afghanistan, airborne insertion was planned but not utilized.

250. Bauer, “CSAF.”

251. Cook, “After Action Report.”

252. General McDuffie stated that

the report out of Kukas, which is the tough area there in Albania, was that we had about ten days of food. . . . When people come across the border, they usually are eating something and clothed. The one issue that we’re working on right now is the health issue. The initial refugees as they came across were actually pretty healthy. But if you remember, they weren’t moving too far because they were in the southern part of Kosovo. Now, the refugees that are starting to come across the border have come from quite a ways. And we’re starting to see a little bit more of a deterioration in health. (DOD, News Brief, 2 April 1999)

253. HQ AMC/A3A, “Contingency Response Group Operational Concept,” 8.

254. Bennendij et al., *Strategic Assessment 1999*, xvii.

255. Shlapak et al., *Global Access Strategy*, xiv–xv.

256. Bush, *National Security Strategy*, 29.

257. Tirpak and Herbert, “Battlefield Airmen,” 26–32.

258. *Ibid.*, 28.

259. Volcheff and DeCuir, briefing, subject: Airbase Opening.

260. Bowyer, “Consolidating AMC’s Contingency Response,” 18.

261. Greeley, “Wave of Change,” 40–43.

262. Cook, “After Action Report.”

263. *Ibid.*

264. Lunsford, “Bird-Size Spy Planes.”

265. Jumper, interview.

266. Knight to DeMarco, e-mail. *See also* Clements, “AMC Pushes Boundaries.”

267. Clements, “AMC Pushes Boundaries.”

268. Phoenix Ravens are specially trained security force teams that travel with AMC aircrews and protect the aircraft while the crew is in crew rest. These teams are used when an AMC asset is forced to remain overnight at a field where security is in question.

269. Wear of the beret in the Air Force began in 1979, when

enlisted personnel in the TACP AFSC were authorized to wear the black beret. In 1984, two Airmen from Pope Air Force Base . . . submitted a design for the flash and crest design, which was approved for all TACP Airmen in 1985. Air liaison officers (ALO) were also authorized to wear the black beret after they graduated from the Joint Firepower Control Course . . . at Nellis AFB, Nevada. Instead of the crest, they wear their rank insignia on the beret. Air mobility liaison officers (AMLO) were authorized to wear the black beret in the Air Force as well.

In addition to the black beret worn by the TACP/ALOs/AMLOs, colored berets in the Air Force are worn in the pararescue, combat controller, security forces, and combat weather AFSCs. Powers, "Beret."

270. HQ AMC/A3A, "Contingency Group Operational Concept," 12.

Chapter 2

Getting Out

Securing Air Bases during a Withdrawal

Michael M. Wellock

Former defense secretary Robert Gates observed that “if Iraq and Afghanistan have taught us anything in recent history, it is the unpredictability of war and *that these things are easier to get into than to get out of*” (emphasis added).¹ Extracting a country from a war is a difficult and dangerous enterprise. Regardless of the political reasons behind the transition out of a war zone, the most important and practical concern is maintaining security of air bases while the logistical withdrawal takes place. Indeed, air bases are the strategic hubs from which force redeployments succeed or fail.

American leaders and military planners must consider several key issues when forces exit an area. They include (1) managing expectations for host-nation security capabilities, (2) avoiding ceding ground and initiative to the enemy during the withdrawal, (3) developing more explicit doctrine and training for the withdrawal process, and (4) maintaining a unity of effort between coalition and host-nation forces in the security of the air base defense battlespace. Unfortunately, these factors seem to be forgotten and relearned with each conflict.

Three case studies deserve examination to distill lessons for air-field security transitions: (1) the USAF transition of air bases to Vietnamese forces; (2) the British military withdrawal from Basra, Iraq; and (3) the American military’s responsible drawdown of forces in Iraq and transition of Joint Base Balad (JBB) to the government of Iraq. Each case offers a unique experience through the lens of different generations and countries, as well as many lessons learned. Lessons will show that tactical-level planners, given strategic-level guidance, can and will successfully withdraw or transition an air base. Doing so requires that they manage their expectations regarding host-nation forces, remain flexible in planning and executing the withdrawal and/or transition, and recognize that tactical missteps can produce negative strategic effects.

However, in the case of the British withdrawal from Basra, the lack of a coherent, organized, and synchronized security drawdown plan caused negative second- and third-order effects and jeopardized local, regional, and theater operations. In other words, tactical missteps during the redeployment can generate negative strategic effects, namely, the perception that the withdrawing nation lost the conflict and departed in disgrace. Poor or improper tactical security measures, inadequate employment of counterinsurgency (COIN), and a premature drawdown of security personnel can create unforeseen vulnerabilities that lead to increased attacks and a reduction of sortie generation.

Vietnam: The American Experience in Southeast Asia

The first case study examines the USAF's transition of air bases to the Republic of Vietnam (RVN) Air Force (RNAF or VNAF) and Army of RVN (ARVN) forces in Vietnam. Partnership and trust are the bedrock of a successful transition, just as Vietnamization was crucial for the transition of US forces in Vietnam.

Vietnamization

Vietnamization was the policy of the Richard Nixon administration that was developed by defense secretary Melvin Laird to end the US involvement in the war. In fact, a cornerstone of Nixon's presidential campaign was his Vietnam policy. *Vietnamization* was defined as "the process by which the U.S. assists the Government of Vietnam to assume increasing responsibility for all aspects of the war and all functions inherent in self-government."² Nixon's vision of Vietnamization was addressed at the Republican National Convention in 1968.³ Once elected, he was expected to bring an end to US involvement in Vietnam through his Vietnamization policy of an organized, systematic withdrawal enabled by a competent and capable host-nation force.⁴

Key to the successful implementation of Vietnamization was the transition of security to the host nation. In the case of the USAF, it shared six joint-use air bases with the VNAF and ARVN. A 1969 base defense policy cosigned by US and RVN commanders "called for [the] VNAF to publish the minimum training requirements for

its air police [security forces] and air base defense units. The aim was an early turnover of all air base defense to VNAF and a speedup in the withdrawal of U.S. forces.”⁵ USAF advisory teams decided to expedite training by having security force (SF) teams of one USAF officer and NCO each train VNAF supervisors and instructors, who would subsequently train VNAF SF.⁶ However, the VNAF did not share a sense of urgency in taking over security responsibilities for air bases and had to be prodded by USAF leaders to move forward.⁷

In 1970 the Air Force Directorate of Security Police published the “Air Base Defense Supervisors Guide” that finally established how to “plan, organize, conduct, and evaluate base defense and security operations.”⁸ This guidance helped to offset the lack of a VNAF concept of operations in tactics, procedures, and general security operations.⁹ Despite the increased and concerted efforts to prepare the host nation to assume security and transition the six air bases, USAF leaders were not pleased with the results.

Chronic manpower, equipment, and logistical shortfalls plagued the RVN forces. They suffered from a lack of leadership and an inability to make timely staff-level and operational decisions. The inherent factors within the politics of the Vietnamese armed forces crippled any effort for unified command, based largely on personal political rivalries and a complete distrust between the military and civilian politicians.¹⁰ US commanders made several observations on the reliability and effectiveness of the Republic of Vietnam Armed Forces (RVNAF). In one interview, the commander of the 377th Combat Support Group (CSG) suggested that the “RVNAF responsible for external defense have not yet attained a reliable capability to detect hostile forces moving against the air base nor can the RVNAF responsible for perimeter defense be relied upon. Hence, effective defense of Tan Son Nhut necessarily rests with US Forces.”¹¹ Similarly, the commander of the 3 CSG stated that during perimeter checks, American forces “repeatedly found [RVNAF] troops sleeping on post.”¹²

Formal Transition

That said, the USAF continued its training mission, and by 1971, the VNAF took formal control over perimeter defense at remaining joint-use bases. However, American base commanders still did not have faith in the VNAF and continued to play an active role in monitoring and repairing base perimeter fences, controlling vegetation,

and maintaining security lighting systems. Air Force security police (SP) operations continued to shrink to those base cantonment areas with USAF personnel, resources, and facilities. Based on the concerns from commanders and fast-dwindling SP forces, the emergency temporary deployment of 100 SPs from CONUS to South Vietnam was required to meet the VNAF's perceived air base security shortfalls.¹³ Air Staff visitors to bases that the Vietnamese had taken over found that "because VNAF air base defense groups were undermanned, owned too few vehicles, and had paltry maintenance, they continued to rely on USAF security police for reaction teams."¹⁴

Lessons Learned

The takeaway lesson from the Vietnam base transition was the maintenance of appropriate levels of security. Managing expectations of the local or host-nation forces is key. A host-nation force is unlikely to replicate the standard of US forces. In this case specifically, the VNAF and RVNAF neither lived up to the expectations of commanders nor met the standards of the SP.

Iraq: The British Experience in Basra

The British military invaded Iraq along with the US-led coalition in 2003. Its main area of responsibility (AOR) was southern Iraq, with Basra as its basing point.

British Peacekeeping Model

After the 2003 Iraq invasion, British troops quickly settled into a peacekeeping model they developed in Northern Ireland and Bosnia, which contrasted with methods used by their American counterparts. Instead of helmets, they wore regimental berets, and instead of driving armored vehicles, they opted for unprotected 4x4 vehicles. Many observers in the press, British military leaders, and politicians lauded the initial British COIN strategy in southern Iraq as a potential template for the rest of the country.

To put it simply, the British military commanders did not understand their operational environment and resorted to their more recent experiences and operational templates from Northern Ireland and the Balkans. They employed passive peacekeeping principles toward the population instead of a COIN approach that emphasized

presence and a firm monopoly on the use of force as prerequisites for influencing hearts and minds.¹⁵ This well-intentioned approach proved insufficient, contributed to a downward stability spiral in the local area, and led to “looting and lawlessness.”¹⁶ As a result, what was praised widely as the model for coalition COIN operations quickly disintegrated into a military disaster and was viewed as strategic defeat. As Shiite criminal and Mahdi militia groups organized, British casualties began to cascade.

Political Pressure to Withdraw

During 2006–7 as much as 80 percent of recorded attacks in Iraq targeted British forces in Basra, causing the British government and military command to argue that “withdrawing those forces would reduce the levels of violence.”¹⁷ This recommendation conveniently sidestepped the political motivation; an October 2006 poll showed that 61 percent of British voters wanted British troops out of Iraq by the end of that year.¹⁸ Political pressure mounted on the British government due to the casualties, causing it to expedite the transfer of security control to the Iraqi security forces (ISF) and local police. Additionally, the accelerated withdrawal ceded the region to criminal and insurgent elements, and the “rushed process” made the fragile Iraqi police force “susceptible to infiltration by various militias.”¹⁹

Repercussions

The UK government did not supply enough personnel or resources to enable COIN in the Basra region, undercutting the British and coalition efforts to promote long-term infrastructure improvement and economic stability.²⁰ The military attempted to implement quick-fix projects to fill the void, but infrastructure and service problems coupled with looting and chaos turned the population against the British.²¹ Over the course of a year, Britain’s presence in Basra spiraled down as its forces were withdrawn from six main bases and transferred to Basra Air Station. The net effect was to abandon the battlespace to the enemy, isolate and barricade the remaining British forces at one base, and give the insurgents a consolidated and lucrative mortar and rocket target.²²

Mistakes by the military were compounded by political judgments in London. The UK government reduced its forces from 46,000 to just 9,000 in the span of a few months in 2003, a move that was ill-

conceived and poorly timed.²³ The military was unable to perform its duties or transfer forces to appropriate host-nation institutions, creating capability gaps that other factions such as the Supreme Council for the Islamic Revolution in Iraq and the Badr Brigade would fill.²⁴

The most glaring failing of the UK's first transition was "the inability to establish a legitimate and functioning provincial apparatus capable of redistributing resources, imposing respect for the rule of law, and ensuring a peaceful transition at the local level."²⁵ Additionally, the rapid, premature drawdown of British troops—similar to the ill-timed removal of too many USAF security forces in Vietnam—caused a security void filled by insurgent factions. That said, following the major operation Charge of the Knights, the UK experienced better results in its AOR due to several important adaptations: a renewed, heavy focus on advising the ISF; the establishment of joint security stations that linked Iraqi police with army, military, and police transition teams; and an improved encouragement toward infrastructure development and economic recovery.²⁶ This victory proved to be fleeting.

One report by a nongovernmental group that seeks to avert conflict observed that "relentless attacks against British forces in effect [have] driven them off the streets [of Basra] and into increasingly secluded compounds" and that "Basra's residents and militiamen view this not as an orderly withdrawal but rather as an ignominious defeat."²⁷ Britain's mismanagement of its redeployment and subsequent impacts to its remaining air base illustrates the strategic effects failure can have, namely, empowerment of insurgents, highly critical and negative media attention, and loss of public support. The British newspaper *Telegraph* highlighted the perceived initial failed withdrawal from the operating environment in its article "Iraq: British 'Abandoned Basra to Terror.'" In the article, Gen Jack Keane, US Army, retired, said that "it was a huge mistake to pull out" while Col Peter Mansoor, US Army, retired, stated, "I don't know that you could see the British withdrawal from Basra in 2007 in any light other than a defeat."²⁸

Lessons Learned

Much can be learned from the British experience in Basra. First and foremost, the chief lesson for US and coalition forces defending air bases is to stay engaged in the battlespace to maintain accurate intelligence, gain support of the populace, and leverage local authori-

ties for the security of the installation. Basra is a cautionary example of how air base defense forces should maintain the initiative, constantly adapt to a changing enemy, and connect the strategic framework to the local redeployment objectives. David Kilcullen's seminal paper "Twenty-Eight Articles of Counterinsurgency" offers wisdom for success in COIN operations, and all of the articles apply to the defense of air bases. In the 28th point—"Whatever else you do, keep the initiative"—he says,

In counterinsurgency, the initiative is everything. If the enemy is reacting to you, you control the environment. Provided you mobilize the population, you will win. If you are reacting to the enemy—even if you are killing or capturing him in large numbers—then he is controlling the environment and you will eventually lose. In counterinsurgency, the enemy initiates most attacks, targets you unexpectedly and withdraws too fast for you to react. Do not be drawn into purely reactive operations: focus on the population, build your own solution, further your game plan and fight the enemy only when he gets in the way. This gains and keeps the initiative.²⁹

Ultimately, four factors were identified that prevented the British from conducting a successful counterinsurgency: "the armed forces' misinterpretation of their own legacy, the absence of civilian support, lack of strategic guidance, and ceding control and initiative to the enemy."³⁰ Initial success can quickly succumb to a poorly thought-out force redeployment and a rush to hand over security responsibility to a nascent and unproven host-nation force. The British failure to manage the security of their air base and the operational environment surrounding it allowed the perception of strategic defeat to sow the enemy narrative about the nation's redeployment.

Iraq: Joint Base Balad

Strategic guidance was developed, written, and published on 17 November 2008 in the form of an agreement between the United States and the government of Iraq on the withdrawal of US forces from Iraq no later than 31 December 2011. Additionally, no later than 30 June 2009, the ISF would assume full security responsibility in Iraq.³¹

Monumental Task

Iraq transition planners had a monumental task facing them square in the face. United States Forces–Iraq (USF-I) began prepara-

tions for the withdrawal in July 2011, and in October 2011, military forces began the movement out of Iraq.³² JBB represented the largest airfield and logistics hub in-theater. As Operation New Dawn (OND) unfolded, leaders attempted to distill some of the lessons from previous conflicts, but there was little written material to base historic assumptions upon.³³

The 332d Expeditionary Security Forces Group (ESFG) analyzed the Vietnam experience as related to securing air bases and transitioning security to the host nation. In a 2010 briefing on the topic, Lt Col Shannon Caudill, USAF, commander of the 532d Expeditionary Security Forces Squadron (a unit under the 332 ESFG) stated, “Just as in examples from Vietnam, we still see personality, tribal, and religious differences between various entities in Iraq.” He noted that the enemy knows the withdrawal timeline and that the Iraqi army (IA) “may not be able to provide adequate resources/personnel for effective joint base defense operations.” Additionally, in an environment reminiscent of that of the South Vietnamese defense forces, Colonel Caudill warned of the Iraqi army’s “potential lack of commitment” to air base defense and counter-indirect-fire (C-IDF) missions (fig. 2.1).³⁴

The planners at JBB received little guidance regarding the way ahead for JBB. In fact, Col Carolyn Patrick, USAF, deputy commander, 332d Expeditionary Mission Support Group (EMSG) and JBB base transition officer, stated that the majority of US leadership did not believe that JBB would actually transition to the Iraqis.³⁵ Col Gerald P. Szybist, USAF, director of security forces operations at the 332 ESFG during the JBB transition, said that the uncertainty about departure and closure was one of the biggest challenges they faced.³⁶ Ultimately, the 332d relied heavily on several methods and products. Colonel Patrick acknowledged that the “USF-I Base Transition Smartbook” presented a sound logistical transfer concept, and leadership adopted the recommended teams.³⁷

JBB planners drew on lessons from other base closures but recognized that no base closure doctrinal products existed or were used. One leader stated that they simply viewed the transition as an operation and applied the Army’s military decision-making process model to the problem (table 2.1). To ensure unity in the planning process, Air Force and Army leaders worked closely together and held base closure working group meetings often. The frequency increased as the transition date grew closer.

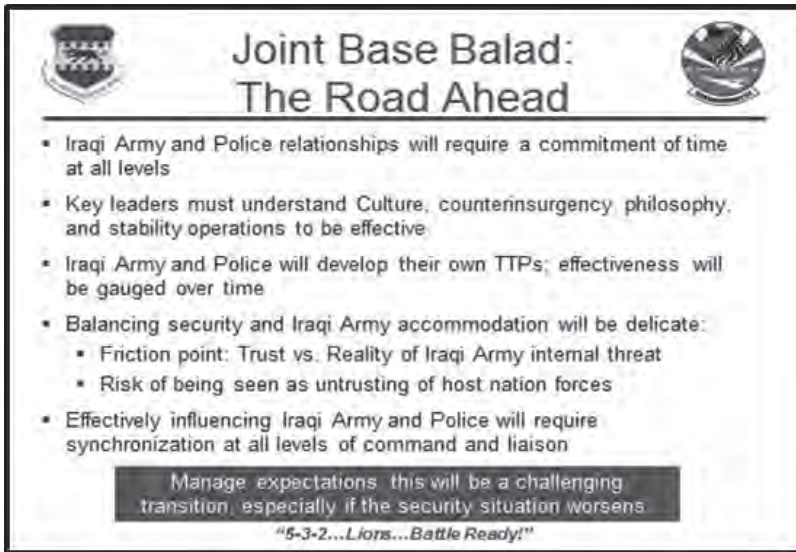


Figure 2.1. Joint Base Balad: The Road Ahead. (Lt Col Shannon Caudill, USAF, and 2d Lt Ryan Bradley, USAF, briefing, subject: Drawdown Lessons from Vietnam: Integrating Host-Nation Forces into Base Defense, 532d Expeditionary Security Forces Squadron, Joint Base Balad, Iraq, June 2010, slide 12.)

Responding to congressional inquiries, the Government Accountability Office (GAO) found that “the drawdown from Iraq demonstrated the importance of early planning.”³⁸ Doing so is critical not only to sustaining the logistical enterprise but also to maintaining adequate force protection and operational security. Developing a military deception plan can moderate the risk of personnel and equipment casualties during an air base transition. The goal of deception operations is “to deter hostile actions, increase the success of friendly defensive actions, or to improve the success of any potential friendly offensive action.”³⁹ For instance, to ensure force protection, “USF-I considered it unwise to share its closure schedule with the Iraqi government until the planned transfer was imminent.”⁴⁰ A RAND study of Operation New Dawn—the withdrawal from Iraq—found that “the threat of improvised rocket-assisted mortar attacks persisted until the end of the operation, forcing USF-I to take more aggressive unilateral action to ensure force protection.” Planners recognized that because “extremists remained capable of attacking U.S. forces with rocket, mortar, IED, and direct-fire attacks, the opera-

tional maneuver involved significant risk” and that the redeployment of forces from Iraq “required a comprehensive security plan to minimize casualties.”⁴¹

Table 2.1. Military decision-making process

| Key inputs | Steps | Key outputs |
|---|---|--|
| <ul style="list-style-type: none"> Higher headquarters’ plan or order or a new mission anticipated by the commander | <p><i>Step 1:</i> Receipt of Mission</p> | <ul style="list-style-type: none"> Commander’s initial guidance Initial allocation of time |
| | Warning Order | |
| <ul style="list-style-type: none"> Commander’s initial guidance Higher headquarters’ plan or order Higher headquarters’ knowledge and intelligence products Knowledge products from other organizations Army design methodology products | <p><i>Step 2:</i> Mission Analysis</p> | <ul style="list-style-type: none"> Problem statement Mission statement Initial commander’s intent Initial planning guidance Initial CCIRs^a and EEFLs^b Updated IPB^c and running estimates Assumptions Evaluation criteria for COAs^d |
| | Warning Order | |
| <ul style="list-style-type: none"> Mission statement Initial commander’s intent, planning guidance, CCIRs, and EEFLs Updated IPB and running estimates Assumptions Evaluation criteria for COAs | <p><i>Step 3:</i> Course-of-Action Development</p> | <ul style="list-style-type: none"> COA statements and sketches <ul style="list-style-type: none"> Tentative task organization Broad concept of operations Revised planning guidance Updated assumptions |
| | Warning Order | |
| <ul style="list-style-type: none"> Updated running estimates Revised planning guidance COA statements and sketches Updated assumptions | <p><i>Step 4:</i> COA Analysis (War Game)</p> | <ul style="list-style-type: none"> Refined COAs Potential decision points War-game results Initial assessment measures Updated assumptions |
| | Warning Order | |
| <ul style="list-style-type: none"> Updated running estimates Refined COAs Evaluation criteria War-game results Updated assumptions | <p><i>Step 5:</i> COA Comparison</p> | <ul style="list-style-type: none"> Evaluated COAs Recommended COAs Updated running estimates Updated assumptions |
| | Warning Order | |

Table 2.1 (continued)

| Key inputs | Steps | Key outputs |
|---|--|---|
| <ul style="list-style-type: none"> • Updated running estimates • Evaluated COAs • Recommended COAs • Updated assumptions | <p>Step 6: COA Approval</p> | <ul style="list-style-type: none"> • Commander-approved COA and any modifications • Refined commander's intent, CCIRs, and EEfIs • Updated assumptions |
| | Warning Order | |
| <ul style="list-style-type: none"> • Commander-approved COA and any modifications • Refined commander's intent, CCIRs, and EEfIs • Updated assumptions | <p>Step 7: Orders Production, Dissemination, and Transition</p> | <ul style="list-style-type: none"> • Approved operation plan or order • Subordinates understand the plan or order |

Source: Field Manual 6-0, *Commander and Staff Organization and Operations*, 5 May 2014, Change 2, 22 April 2016, 9-3, http://www.milsci.ucsb.edu/sites/secure.lsit.ucsb.edu.milid7/files/sitefiles/fm6_0.pdf.

^acommander's critical information requirement

^bessential element of friendly information

^cintelligence preparation of the battlefield

^dcourse of action

Threats to JBB

Mortar and rocket attacks presented the largest threat against JBB and directly affected American planning, which focused a great deal of effort in addressing the enemy threat and redeployment security posture. These attacks also drove military planners toward the employment of deception operations.⁴² While indirect fire (IDF) attacks posed a threat to sortie generation, facilities, and personnel, they never materialized into a strategic victory for the enemy as they were sporadic and harassing in nature (fig. 2.2).⁴³ However, senior leaders understood the strategic impact of losing an aircraft to attack during the redeployment and continued to commit resources to counter the IDF threat, including USAF security force terrain-denial efforts and a counter-rocket, artillery, and mortar (C-RAM) system.

In addition to the continual IDF attacks, JBB experienced an increase in perimeter breaches during the redeployment.⁴⁴ These breaches were not coordinated, direct attacks against JBB but local Iraqis attempting to steal material that they could use or sell. One reason for the increase in breaches and attempts was that the United States was leaving. All the Iraqis knew this, and the employment offered at JBB to an estimated 1,150 Iraqis was evaporating as the tran-

sition quickened. Further, a pervasive concern among senior leaders was the strategic effects of a successful attack that destroyed aircraft, especially those loaded with redeploying personnel.

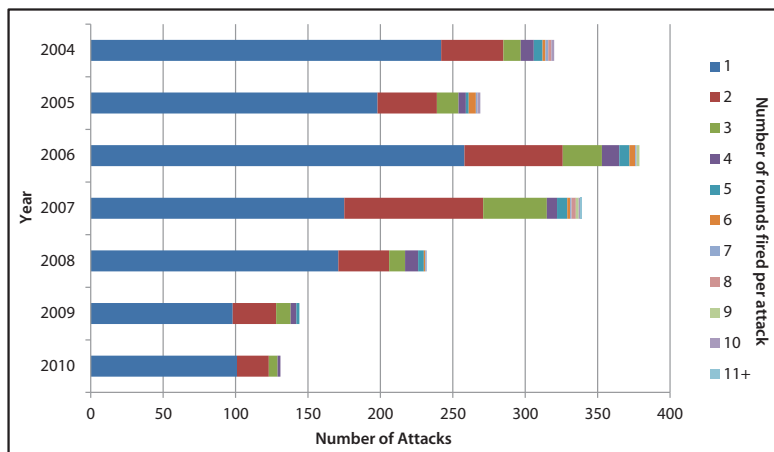


Figure 2.2. Indirect fire attacks (frequency vs. number of rounds per attack) against JBB, Iraq. (Reproduced from Joseph A. Milner, *Integrated Defense: Lessons Learned from Joint Base Balad*, Air Force Research Institute Paper 2012-3 [Maxwell AFB, AL: Air University Press, 2013], 31.)

Security a Transition Priority

Security was the number one priority for the transition of JBB. Joint partnership was a crucial component since the US Army owned the battlespace exterior to the base and the Air Force owned the base perimeter and interior security. Close coordination between the base commander and the battlespace owner (BSO) is critical to providing appropriate protection for aircraft using approach and departure corridors and to defending the sortie generation from IDF attacks.⁴⁵ Both Army and Air Force leadership at JBB said that while friction existed initially, they worked well together as they built trust and synchronized operations. As OND proceeded, the Army BSO—who changed several times leading up to and during the operation—moved from a distant forward operating base to collocating next to the Air Force ESFG at JBB with adjacent tactical operations centers. Additionally, the BSO commander conducted joint operations and synchronization meetings to ensure synergy

between the organizations. In particular, he held joint patrol synchronization meetings weekly to ensure that all had a common operating picture and that their efforts to continue to project combat power into the operational environment remained unified until the transfer was complete.⁴⁶

Another major issue for managing security around the airfield was the deconfliction of intelligence, surveillance, and reconnaissance (ISR) and fire support affecting flying operations (e.g., Rapid Aerostat Initial Deployment [RAID] balloons, Scan Eagle remotely piloted aircraft, C-RAM fires, M-109 Paladin fires) in the base security zone (BSZ). Both JBB Air Force and Army leaders went to great lengths to coordinate these efforts to ensure that proper C-IDF operations were effective and to prevent any fratricide. Further, Air Force exterior patrolling focused on IDF threat rings and the shoulder-launched-missile threat in the flight corridors. The Air Force commitment of resources to exterior security was important because it allowed the Army BSO to continue to concentrate on COIN efforts with the local population.⁴⁷

It is clear that the Air Force SF integrated defense of the air base was well coordinated and synchronized with its Army counterparts. Air Force security forces at JBB “provided the equivalent of more than one infantry company’s worth of combat power that [the commander] could use to attain specific desired effects outside the wire.”⁴⁸ Col Joseph Milner, USAF, argues that “the JBB defense model has proven that the USAF can ensure its place on the battlefield as a true joint and combined partner by defending not only its own air assets and war fighters but also those of the joint team.” He adds, “Air Force leaders at all levels embraced the [integrated defense] concept and searched for ways to support the BSO’s COIN campaign plan because it paid dividends to the installation’s defense, ensuring the conduct of air operations in a more secure and stable environment.”⁴⁹ Col Nathan E. Cook II, US Army, commander, 3d Battalion, 82d Field Artillery (FA) Regiment (3-82), 1st and 2d Cavalry (CAV) Divisions (the Army BSO during OND), observed that Air Force SF were well equipped—in some cases better than Army units—and proved very capable in the execution of their exterior and interior security missions.⁵⁰

Planners at JBB balanced security considerations with the logistical drawdown, prioritizing the systems that would remain and the sequencing of defense capability withdrawal. Since the threat of IDF was so prevalent, the C-RAM system was high on the list for remaining

until near the end of JBB US operations. In fact, C-RAM was not removed until seven days before JBB's closure.⁵¹ Next, planners had to manage property transfer, contractor drawdown, and essential service breakdown and determine how to collapse security and transfer it to the host nation. An operational timeline was developed to ensure close coordination, planning prioritization, and synchronization throughout the withdrawal.⁵²

Overcoming Transition Obstacles

Counteracting internal conflict. Partnerships and relationships are key when transitioning operational control of an air base to a host nation. The USAF executed the transition with the Iraqi Air Force (IAF), the IAF relied on the Iraqi army for security, and the US Army was transitioning the battlespace to the IA. The largest friction was between the IA and the IAF. The IAF was not well respected, resourced, or prepared to assume control of JBB.⁵³ To complicate matters, the IA was trained and integrated into the base defense while the IAF was not. According to Col Martin L. Rothrock, commander, 65th Air Base Wing (ABW), Lajes Field, "We completely excluded the Iraqi army from any planning. We mostly excluded the IAF from planning, except to try to get them to commit to receive facilities. We saw Iraqi involvement in drawdown as an OPSEC [operations security] issue."⁵⁴

Senior Air Force planners decided to isolate the IA on an internal compound within JBB given a recent increase in green-on-blue insider attacks in Afghanistan and a loss of confidence in the IA due to an incident at the front gate with the IA commander. Several restrictions were placed on IA soldiers during the planning and execution of the transition. First, they were not allowed freedom of movement on JBB and had to be escorted anytime they left their compound. Second, they were not authorized to carry weapons, and, finally, they were allowed entry and exit at only one installation entry control point.⁵⁵ These constraints allowed development of an operational deception plan that facilitated the successful withdrawal of all US forces from JBB with a mitigated security threat.⁵⁶ Key leader interviews with BSO members responsible for the transition of three large bases revealed that they used input from the entire unit to devise their deception plans.⁵⁷

The 332 ESFG conducted joint and coordinated deception operations that proved crucial to a successful transfer of facilities and security responsibilities to the Iraqi government.⁵⁸ The Army BSO closely coordinated with the Air Force ESFG, Air Force mission support group, and other Army units handling the passage of line operations to Kuwait. As units left JBB for Kuwait, all vehicles were loaded as if they were going on a regular patrol. The unit would patrol through local IDF hotspots, then continue on to Kuwait. This method kept any potential adversaries guessing the strength of JBB, projected a commitment to external security throughout, and allowed the BSO to maintain operational security in the IDF threat rings around the installation.⁵⁹

Joint leaders made a point to continue area saturation with as many operational units as possible up to the very last opportunity; within the final 72 to 96 hours, the remaining units surged exterior patrol operations to project an even larger force. Meanwhile, JBB leaders continued to engage local leaders with a business-as-usual mind-set and gave no indication they were leaving earlier than the Iraqis expected. The measure of success is that the Army BSO continued to receive phone calls from local leaders asking for assistance up to three and four days following the departure of the last US forces from JBB.⁶⁰ The cumulative effect of this effort was keeping the enemy off-balance, maintaining counterinsurgency relationships, and ceding no ground to the enemy during the transition—the central error made by the British in Basra.

Reliance on contractors and local workers. American forces in Iraq—air bases in particular—relied heavily on contractor support from both the United States and third-country nationals (TCN) (table 2.2). In fact, according to the Congressional Research Service, in 2008 contractors comprised approximately 50 percent of the Department of Defense (DOD) workforce in Iraq.⁶¹ Of the total contractors, 18 percent augmented security at bases and the international zone, safeguarded logistical convoys, or provided security for coalition officials.⁶²

Lessons Learned

The US GAO released a study in September 2011 outlining several theater-level recommendations for achieving an orderly and efficient drawdown of contracted services.⁶³ JBB leadership did not receive them in time to implement them into its planning. As essential services shut down and some 4,000–5,000 contractors departed

JBB, Air Force and Army personnel had to assume those support functions and duties.⁶⁴ Additionally, since JBB was the main hub for Army personnel transitioning out of the country, services such as the dining facilities had to remain open until the last possible moment.

Table 2.2. Contractor personnel and troop level in Iraq, September 2007–March 2012

| | US Nationals | Third Country Nationals | Local Nationals | Total Contractors | Troop Levels |
|------------|-----------------|-------------------------------|--------------------|----------------------|--------------|
| Sept. 2007 | 26,869 | 45,422 | 82,534 | 154,825 | 169,000 |
| Dec. 2007 | 31,325 | 56,368 | 75,898 | 163,591 | 165,700 |
| Mar. 2008 | 29,351 | 57,270 | 62,757 | 149,378 | 160,500 |
| June 2008 | 26,611 | 62,650 | 70,167 | 159,428 | 153,300 |
| Sept. 2008 | 28,045 | 72,109 | 63,292 | 163,446 | 146,800 |
| Dec. 2008 | 39,262 | 70,875 | 37,913 | 148,050 | 148,500 |
| Mar. 2009 | 36,061 | 60,244 | 36,305 | 132,610 | 141,300 |
| June 2009 | 31,541 | 56,125 | 32,040 | 119,706 | 134,571 |
| Sept. 2009 | 29,944 | 53,780 | 30,007 | 113,731 | 130,000 |
| Dec. 2009 | 27,843 | 51,990 | 20,202 | 100,035 | 114,300 |
| Mar. 2010 | 24,719 | 53,549 | 17,193 | 95,461 | 95,900 |
| Jun. 2010 | 22,761 | 46,148 | 10,712 | 79,621 | 88,320 |
| Sept. 2010 | 20,981 | 42,457 | 10,668 | 74,106 | 48,410 |
| Dec. 2010 | 19,943 | 40,776 | 10,423 | 71,142 | 47,305 |
| Mar. 2011 | 18,393 | 36,523 | 9,337 | 64,253 | 45,660 |
| June 2011 | 18,900 | 34,974 | 8,815 | 62,689 | 46,010 |
| Sept. 2011 | 16,054 | 29,213 | 7,370 | 52,637 | 44,755 |
| Dec. 2011* | 11,237 | 9,445 | 3,204 | 23,886 | 11,445 |
| Mar. 2012* | 3,260 | 5,539 | 2,168 | 10,967 | - |

Source: CENTCOM Quarterly Census Reports and “Boots on the Ground” monthly reports to Congress.

Notes: The DOD did not begin releasing data on contractors in CENTCOM until the second half of 2007. The military mission in Iraq ended in December 2011.

*Includes DOD contractors supporting US Mission Iraq and the Office of Security Cooperation–Iraq.

Reproduced from Moshe Schwartz and Jennifer Church, Congressional Research Service (CRS), *Department of Defense’s Use of Contractors to Support Military Operations: Background, Analysis, and Issues for Congress* (Washington, DC: CRS, 17 May 2013), 25, <http://www.dtic.mil/dtic/tr/fulltext/u2/a590715.pdf>.

Colonel Patrick authored a case study on the JBB closure and recommended a theaterwide effort of hiring local Iraqi contractors temporarily six months prior to the departure date.⁶⁵ She argued that this proposal should have been captured in the “USF-I Base Transition Smartbook” to ensure theaterwide unity of effort. Doing so would have assisted a smoother transition and better enabled additional population-centric COIN tactics to enhance long-term security and partnership with the local, governmental, and security elements of Iraq.⁶⁶

As the United States drew down, more pressure was placed on the Army BSO. As USF-I focused on transition and resources evaporated, the BSO’s bargaining power and influence diminished. For example, money and resources for construction projects began to decline, and the need for locals to operate the JBB bazaar was significantly reduced because there were fewer American customers left to buy goods. These financial opportunities were traditional tools of leverage used by the BSO to influence local government and tribal behavior. Colonel Cook, the Army BSO during the JBB closure, agrees with Colonel Patrick’s recommendation in that hiring local contractors would have offered him leverage up to the completion of the transition and mitigated the need for American forces to fill the support services gap.⁶⁷

Further, doing so would have provided a continued spark for the local economy, maintained trust and positive relations with the local community leaders, and assisted the IAF with personnel who could operate the infrastructure upon the departure of US forces. The GAO reinforces this concept in stating that American forces need to “evaluate the risk of having too few qualified contract oversight personnel in light of the planned proportional increase in the number of Iraqi contractors during the drawdown and take steps to rectify [that situation], if needed.”⁶⁸

Recommendations for Transfer of Security

Expectation management. Leaders and planners (to the lowest level) must manage their expectations for transition to a host-nation security force. It may not be as proficient or committed to force protection as are US forces, share the same initiative, or embody a Western-style “results based” leadership culture. However, all US personnel must make a concerted effort to understand the host-nation’s

culture and accept its differences. Building and maintaining working relationships with host-nation security are within our national interest and strategic guidance. Planners must also manage expectations with contractor support. They can use local contractors to execute base functions instead of overly relying on US contractors or TCNs. As T. E. Lawrence once said, “Do not try to do too much with your own hands. Better the Arabs do it tolerably than that you do it perfectly. It is their war, and you are to help them, not to win it for them. Actually, also, under the very odd conditions of Arabia, your practical work will not be as good as, perhaps, you think it is.”⁶⁹

Do not cede ground. The British experience at Basra demonstrates tactical missteps such as applying a COIN approach that does not adapt to changing circumstances and enemy tactics. While the British were initially successful, they employed a flawed COIN strategy that collapsed into a singular stand at a walled-off air base. The net effect was the ceding of ground to the enemy, the loss of influence and intelligence in the operational environment, and, eventually, the strategic perception of defeat during a redeployment of forces.

The American experience at JBB demonstrates several notable techniques that enable redeployment at an air base. Surging base defense patrols, employing all available forces in an external patrol and deception plan, and using force protection assets such as M-109 Paladins (if available) and C-RAM until near the end of the redeployment proved to be vital, synchronized lines of effort. Additionally, air bases should continue flying until the last possible moment to reinforce the sense of normalcy to operations and act as a deterrent to attacks through shows of force. Such displays of force from aircraft, counterfire from friendly artillery, and patrol saturation in the BSZ are critical to keeping the enemy and criminal elements off-balance.

Doctrine and training. Joint and service doctrine should be developed based on these recent lessons that suggest guidelines for air base closure. The “USF-I Base Transition Smartbook” and numerous RAND studies are useful beginning points, but their lessons need to be expanded, developed, and distributed. Drawdown and transition teams should be identified well before a deployment to the contested area, and they should receive standardized guidance.⁷⁰ Plans personnel on expeditionary wing and battalion combat teams need predeployment training to prepare them for planning and executing an installation, air base, or expeditionary base closure. Several key points transcend each of the case studies. Planners did not

have Air Force or joint doctrine to guide them through the closure and transition process. “Smartbooks”—resident knowledge of recent lessons learned and best practices—were the primary method guiding the planning and execution process. Going forward, intellectual capital needs to be committed to writing while doctrine and training must be codified. Such documentation can help ameliorate the historic shortfalls in guidance and literature about the redeployment phase of combat operations.

Unity of effort. Unity of effort among the commanders on the ground is essential. The Army or other land-owning unit cannot transition security of the battlespace to the host nation in a vacuum. The same can be said for the Air Force in its transition of the perimeter and inner ring of security. Commanders must prioritize the synchronization of the transition plan for their respective staffs with an emphasis on the shared interest in dominating the IDF threat rings surrounding an air base.⁷¹ It is imperative for leaders at all levels and in all services to understand the strategic implications and constraints faced by senior leaders during a drawdown—including budgetary restrictions, force caps, and the political nature of redeployment timelines. These factors impact military deception planning and can affect relationships with the host-nation’s forces. In the end, it is critical for the remaining and dwindling forces to increase their synchronization, communications, and joint planning efforts to create a unified front to the enemy that eliminates unnecessary gaps and seams.

Conclusion

Wars do end, but few contemplate this fact when they start. As forces redeploy, air bases and their supporting mobility aircraft play a pivotal and strategic role in a successful withdrawal strategy. However, the services and academia have not focused much effort on capturing this phase of the military operation. Doctrine and other literature must be developed to sufficiently document historical case studies, lessons learned, and recommendations that address large redeployments of forces and the changing security situation affecting retrograding and closing air bases.⁷² Failure to do so will leave future leaders unprepared for their transition responsibilities and may well contribute to the perception of strategic defeat as casualties mount during a force redeployment from a future American or coalition air base.

Notes

1. Fishel, "Israel Months from Striking."
2. Fox, *Air Base Defense*, 122.
3. Prentice, "Getting Out," 82. Nixon stated that "we need far greater and more urgent attention to training the South Vietnamese themselves, and equipping them with the best of modern weapons. As they are phased in, American troops can and should be phased out" (*ibid.*).
4. For an extensive review of the background and origins of Vietnamization, see *ibid.*, as this chapter cannot present the desired in-depth view on the subject.
5. Fox, *Air Base Defense*, 122.
6. *Ibid.*, 123.
7. *Ibid.*, 122–23.
8. *Ibid.*, 123.
9. *Ibid.*
10. *Ibid.*, 120.
11. *Ibid.*, 122.
12. *Ibid.*
13. *Ibid.*, 124.
14. *Ibid.*
15. Ucko, "Lessons from Basra," 134–35.
16. *Ibid.*, 136.
17. *Ibid.*, 143.
18. Glover, Norton-Taylor, and Wintour, "Iraq."
19. Ucko, "Lessons from Basra," 136.
20. *Ibid.*
21. *Ibid.*, 137.
22. *Ibid.*
23. *Ibid.*
24. *Ibid.*, 137–38.
25. *Ibid.*, 147.
26. *Ibid.*, 149.
27. Fidler, "British Army Lost Basra."
28. Harding, "British 'Abandoned Basra.'"
29. Kilcullen, "Twenty-Eight Articles," 35.
30. Ucko, "Lessons from Basra," 134.
31. Agreement between the United States of America and the Republic of Iraq on the Withdrawal of United States Forces from Iraq (also known as the U.S.-Iraq Status of Forces Agreement). This agreement gave US planners two important dates regarding the withdrawal of troops and transfer of equipment, bases, etc. Article 24 "recogniz[es] the performance and increasing capacity of the Iraqi Security Forces . . . [and] the assumption of full security responsibility by those Forces" and therefore calls for the withdrawal of all US forces "from all Iraqi territory no later than December 31, 2011." Article 24 also directs all US combat forces "to withdraw from Iraqi cities, villages, and localities no later than the time at which Iraqi Security Forces assume full responsibility for security in an Iraqi province, provided that such withdrawal is completed no later than June 30, 2009" (*ibid.*).

32. Brennan et al., *Smooth Transitions?*, 3. The report provides a by-the-number breakdown of the drawdown. The multiyear effort included many agencies, commands, and locations encompassing seven large bases and logistical hubs: more than 50 bases were closed. USF-I had to haul 1,800,000 pieces of equipment out of Iraq over long distances through Kuwait, Jordan, and Turkey. In 2011 the transition affected 50,000 military members and over 56,000 American civilians stationed in Iraq, as well as hundreds working elsewhere in the region and in the United States (ibid.).

33. Jaffe, "War in Iraq."

34. Caudill and Bradley, briefing, subject: Drawdown Lessons from Vietnam, slide 7.

35. Col Carolyn Patrick (deputy commander, 332 EMSG, and JBB transition officer), interview and e-mail correspondence with MAJ Michael M. Wellock, 19 January 2015.

36. Col Gerald P. Szybist (director of security forces operations, 332 ESFG, during JBB transition), interview and e-mail correspondence with MAJ Michael M. Wellock, 13 November 2014.

37. Patrick, interview. Teams that Colonel Patrick assisted in establishing for the purposes of the base transition included the Base Advisory and Assistance Team (BAAT), Container Assistance and Assessment Team (CAAT), Material Redistribution Team (MRT), Expeditionary Disposal Remediation Team (EDRT), and the Environmental Response and Cleanup Team (ERCT).

38. GAO, *Afghanistan Drawdown Preparations*, 2.

39. JP 3-13.4, *Military Deception*, vi.

40. Brennan et al., *Ending the U.S. War in Iraq*, 94.

41. Ibid., 132n30, 282.

42. JP 3-13.4, *Military Deception*.

43. Milner, *Integrated Defense*, 32.

44. Cook and Wilson, interviews.

45. JP 3-10, *Joint Security Operations in Theater*, IV-16–IV-17.

46. Cook, interview.

47. Lt Col Sean P. Tiernan (deputy commander, 332 ESFG, during JBB transition), interview and e-mail correspondence with MAJ Michael M. Wellock, 11–12 February 2015.

48. Lt Col Eric R. Timmerman (commander, 1st Battalion, 28th Infantry Regiment "Black Lions," 4th Infantry Brigade Combat Team, the BSO), interview by Lt Col Shannon W. Caudill, 17 July 2010.

49. Milner, *Integrated Defense*, 47.

50. Cook and Wilson, interviews.

51. Tiernan, interview.

52. Ibid.

53. Col Martin L. Rothrock (commander, 65 ABW, Lajes Field, Azores, Portugal), interview and e-mail correspondence with MAJ Michael M. Wellock, 3 November 2014.

54. Ibid.

55. Ibid.

56. Ibid.

57. Ibid. BSOs executed deception planning and operations to mask the actual brigade departure and used several methods to include “fake aerostats launched at night with lights indicating continued night operations. Decoy personnel and weapons were used at night in the towers. False dates were disseminated to Iraqi security forces, police, and civilian activities. Real events were scheduled for after the actual final departure date and supporting planning events conducted with Iraqi agencies” (ibid.).

58. Rothrock, interview and e-mail correspondence.

59. Cook and Wilson, interviews.

60. Ibid.

61. Schwartz and Church, *Use of Contractors*, 2 (see fig. 1).

62. Dunigan, “Lesson from Iraq War.”

63. GAO, *Iraq Drawdown*, 47. GAO recommendations included the following:

- (1) assess the risk of providing all contractors, including their subcontractors, with the information—such as base transition dates—required to descope services and demobilize their workforces against the risk of contractors’ inability to meet milestones without it and take the appropriate actions based on this assessment; (2) take appropriate measures, such as enforcement of guidance laid out in the template to be developed by the office of the Senior Contracting Official—Iraq, to ensure robust contractor planning associated with demobilization; and (3) engage contractors to ensure that total personnel headcounts accurately reflect all personnel, including those working under subcontracts (ibid.).

64. Col Brent D. Bigger (commander, Mission Support Group, 332 AEW, during JBB’s transition), interview and e-mail correspondence with MAJ Michael M. Wellock, 12 February 2015.

65. Patrick, “Military Partnership Lessons Learned,” 16.

66. Ibid., 18.

67. Cook and Wilson, interviews.

68. GAO, *Operation Iraqi Freedom*, 36–37.

69. Lawrence, “Twenty-Seven Articles,” art. 15.

70. Rothrock, interview.

71. Ibid.

72. Research on the topic of ending war and air base withdrawal is limited by the scant information available. However, information and training resources for opening and operating air bases are abundant. Among existing doctrine, instructions, guidance, and lessons learned is JP 3-18, *Joint Forcible Entry Operations*. It describes the “planning, executing, and assessing” of joint military operations to “seize and hold lodgments against armed opposition” to conduct one or more operations (i, I-1). Much of the available literature on drawdown and transition—such as policy documents from the DOD, DOD inspector general, Congress, US GAO, Center for Army Lessons Learned, and US Department of the Air Force—offer broad guidance and mostly focus on the logistics, resource, and material cost of getting out. As such, the Air Force develops drawdown and transition security plans on an impromptu basis. For example, USF-I did not publish a transition smartbook until March 2011—just a few months before all forces were expected to be out of Iraq. Also, the smartbook focused on transition of property—not security—to the Iraqi government.

Historical documentation of the planning and execution of JBB's transition was severely hindered due to several factors. These included the rapid closure of the digital infrastructure and data storage limitations. Colonel Szybist stated, "We had a lot of base defense history that was lost, to include all of the supporting documents that led to the final 2011 base defense transition plan. I conducted my base defense plan out-brief in our CAOC [combined air operations center] (Al Udeid AB, Qatar) from memory. We lost a lot of great data. A lot of things are stuck inside the heads of the thousands that served there" (Szybist, interview).

PART 2

Iraq and Afghanistan Case Studies

**The Base Defense Task Force and Air Force Historical
Research Agency Research Results**

Chapter 3

An Airman Reports

Task Force 455 and the Defense of Bagram Airfield, Afghanistan

Erik K. Rundquist
Raymond J. Fortner

In late summer of 2011, a two-person USAF security forces (SF) sniper team assigned to the 455th Expeditionary Security Forces Squadron (ESFS) observed a rocket-propelled grenade (RPG) launch at an outbound C-130 aircraft. Perched in their overwatch tower and armed with M-24s, the Airmen—after reporting the incident—immediately fired two well-aimed shots at the point of origin several hundred meters north of Bagram’s perimeter. This action represented the initial steps of the 455th Air Expeditionary Wing’s (AEW) effort to influence and conduct active base defense operations, ultimately ending with an Air Force–led task force (TF) planning and executing operations throughout Parwan Province.

On 21 May 2012, Regional Command (RC)–East activated TF 1/455 at Bagram to integrate all force-protection (FP) activities from the 1st Infantry Division (IID) and the 455 AEW under a single group/brigade-level commander. From the wing’s partnership with the US Army in the fall of 2011 to the deactivation of the task force nearly two years later, the 455 AEW was responsible for the largest outside-the-wire combat mission in the history of the USAF.¹ Additionally, this event marked the first time in the service’s history of an Airman being the responsible battlespace owner (BSO) at the brigade level in a combat zone. This chapter reviews the rationale for creating the task force, examines its organization and operational tasks, and considers its effectiveness—with an eye toward future expeditionary environments.

Fundamental Truths of Air Base Defense

In 1921 Italian airpower theorist Giulio Douhet observed that “it is easier and more effective to destroy the enemy’s aerial power by destroying his nests and eggs on the ground than to hunt his flying

birds in the air.”²² While Douhet’s centerpiece for attacking airfields was the strategic bomber, modern counterinsurgencies have pitted ground-based attackers against defense forces in attempts to degrade airfields, destroy parked aircraft, and disrupt air operations. Taking Douhet’s position to heart, the USAF’s foundational doctrine, *Volume 1, Basic Doctrine*, notes that “aircraft are most vulnerable on the ground. Thus, force protection is an integral part of airpower employment.”²³ Once this tenet is understood, certain truisms appear. First, *air base defense [ABD] is inherently an airpower problem* and central to sortie generation. No air force can project power if it does not possess secure platforms (either on land or sea) from which to launch and recover. Security is essential to the projection of airpower and critical to the freedom of maneuver for air component commanders and planners. Opening and operating airfields are central to maintaining and supporting lines of communication during combat operations. The ability to secure forward airstrips or main operating bases directly supports the combatant commander. While primarily occurring on the ground, air base defense is a function that the USAF must either control or directly influence.

Second, there is a *unique perspective to defending airfields* that an Airman is often best suited to understand. Airfield security planning considerations cover a myriad of topics ranging from aircraft approach and departure profiles and ground taxiing plans to pavement analysis, navigational aids, power production, and fuel hydrant systems. Any airfield—whether a seized assault strip in Iraq, a forward operating location for unmanned aerial systems in Africa, a major command and control (C2) hub in Qatar, or an aerial port of debarkation in the United States—poses strategic considerations for combatant commanders. While understanding the effects of air operations is crucial, recognizing the impact of airfield (or aircraft) loss or degradation is arguably just as important. Fifth-generation fighters, stealth bombers, and remotely piloted aircraft are unmatched in the air. However, these systems lose their asymmetric advantages when parked and require specialized enablers such as engineering support, logistical resupply, maintenance, and dedicated protection as they lie dormant “in the nest.”

On the surface, ceding security operations to US or coalition ground combat forces may appear efficient; in fact, history has demonstrated that this practice may expose gaps and seams. Just as Airmen are trained to be “air-minded,” their joint counterparts often

possess institutional perspectives, cultural biases, and different levels of risk tolerance. Given the complex nature of counterinsurgency (COIN) operations, it is understandable that other services have competing priorities and may not necessarily value securing an air base at the expense of another mission. For example, during the Vietnam War, Gen William Westmoreland pulled the US Army battalions away from their ABD mission (their original *raison d'être* for being in country) to attack Vietcong sanctuaries. He was more concerned about the strategic “deep fight” than the close-in tactical fight to secure allied air bases throughout South Vietnam. Much to the chagrin of the Air Force, General Westmoreland sent a directive to his commanders: “I desire that all service units and all forces of whatever service . . . [that] find themselves operating without infantry protection . . . will be organized, trained and exercised to perform the defensive and security functions.”⁴ In Vietnam, as in Iraq and Afghanistan almost two generations later, Air Force security forces were leading and executing missions beyond garrison policing and point defense operations. The emphasis remained the same: ensure a secure operating environment at expeditionary air bases, where the relative safety of the Cold War’s linear battlefield rear area was nonexistent.

Third, owing to the unique Airman’s perspective, *air and space power should have an active role in air base defense operations*. Just as air planners exploit the advantage of operating and fighting in the third dimension against enemy air and ground forces, commanders should leverage these capabilities to ensure that their air bases are appropriately defended. Critical enablers in a COIN environment are operational capabilities such as airborne quick reaction forces (QRF); tactical mobility to rapidly insert forces throughout the base security zone (BSZ); aeromedical evacuation; air and space intelligence; intelligence, surveillance, and reconnaissance (ISR); and dedicated or residual close air support (CAS). When commanders are faced with manning and resource constraints, ground and air forces can mutually support each other.

Per JP 3-10, *Joint Security Operations in Theater*, “Threats to an active airfield may extend far beyond the surface area designated as a base boundary. To address these threats, the air component uses the planning construct of the base security zone.”⁵ Figure 3.1 illustrates that addressing threats to air bases and airpower beyond the fence line is paramount. Airfields are often located in and around urban areas that offer a ready supply of laborers and access to materials,

fuel, power, information, and civic leaders. All of these resources are crucial to commanders in a COIN environment. Conversely, airfields represent a magnet for organized crime and an obviously easy target for terrorist and insurgent activity. COIN forces operating within the BSZ must balance their actions to ensure smooth operation of the airfield while simultaneously denying the effectiveness of insurgents in the local area.

In addition to the competing priorities of dedicated ground combat forces, the central argument for Airmen to conduct light-

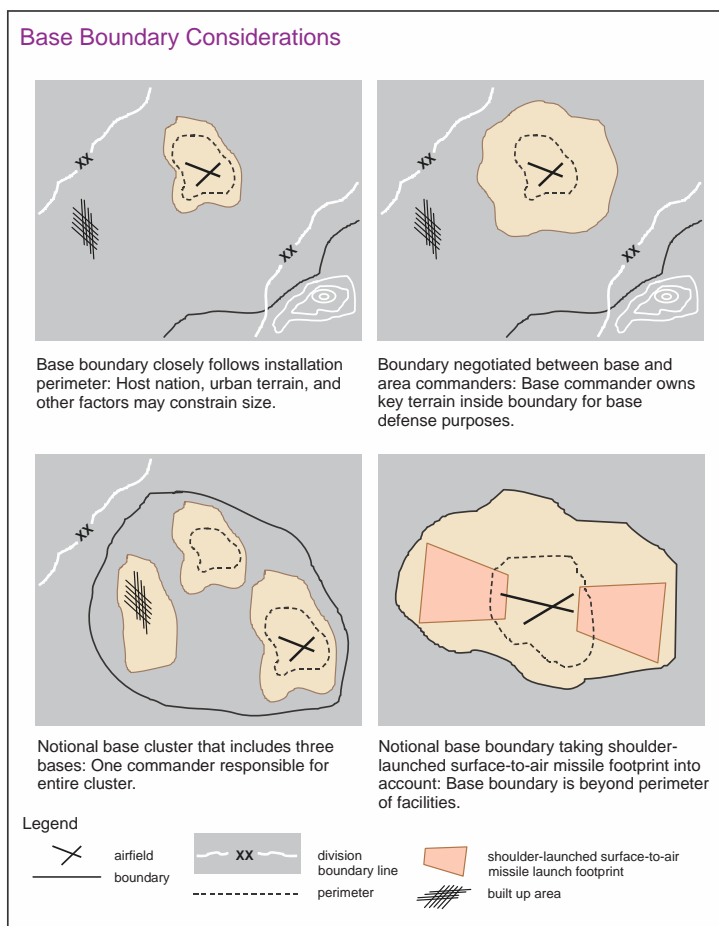


Figure 3.1. Base boundary considerations. (Reproduced from JP 3-10, *Joint Security Operations in Theater*, 13 November 2014, IV-3, http://dtic.mil/doctrine/new_pubs/jp3_10.pdf.)

infantry-style operations to secure airfields hinges on the theme of air-mindedness. Dr. Dale Hayden provides a broad, operationally centered definition in which *air-mindedness* is “the lens through which Airmen perceive warfare and view the battlespace.”⁶ In essence, all Airmen possess a unique air-to-ground (and arguably ground-to-air) perspective that shapes their way of thinking, fighting, and applying resources. The Royal Air Force’s (RAF) doctrine is more specific. *Air-mindedness* to the RAF is “an approach which shapes the conduct of operations and training to maximize the effectiveness of air operations, based on a thorough understanding of how air power effects are delivered and results in the natural tailoring of actions to best support it.”⁷ These two perspectives are critical as they form the basic argument for the establishment of the task force at Bagram.

The Defense of Bagram Airfield

Specific roles for security at Bagram changed several times between 2001, when coalition special forces seized the airfield, and 2012, when TF 1/455 was formally activated. Before the stand-up of the task force, the airfield could be best described as a fragmented puzzle with a disparate number of organizations owning certain parts of force protection without an overall integrator. The USAF secured the flight line and adjacent areas, while the US Army provided a garrison military police (MP) element force.⁸ Several joint and coalition partners secured individual compounds with a patchwork defense force comprising coalition military and contracted guards manning perimeter towers. In the truest form, it resembled a “defended locale” scheme with each agency ultimately responsible for its respective area. The US Army was tasked with battlespace ownership surrounding Bagram and throughout Parwan Province. The decision to activate an Air Force–led task force evolved over several years and can be seen in distinct operational phases.

Phase 1: Perimeter Defense

In late 2008 the US Army and US Air Force began discussions to enhance Bagram’s security. By July 2009 the 455 AEW took its first major steps off the flight line with a focus on perimeter defense and installation entry control points (ECP).⁹ Both of these tasks were extremely compatible with standard ABD activities at other expedi-

tionary airfields throughout southwest Asia and around the world. The foundation for these initial steps had been developed between 2008 and 2009 when Col Chris Bargery was assigned as the director of force protection for United States Air Forces Central Command (USAFCENT). During his tenure, Bargery noted that the USAFCENT commander, Lt Gen Gary North, was going to shift the focus of the air operation's main effort from Iraq to Afghanistan—and with it, a corresponding heavier emphasis would be placed at both Bagram and Kandahar airfields in Afghanistan. In Bagram's case, this emphasis would move the Air Force's security operations beyond the senior airfield authority (SAA) effort on the flight line and would expand the roles to include enhanced C2, a QRF, USAF-led installation entry control points, and some dismounted operations with the Army. However, the USAF did not have enough security forces for both Bagram and Balad, with the Iraq base being given the priority effort at the time.¹⁰ Demonstrating the importance of the perimeter defense mission, during this phase Bagram troops from multiple services (largely Airmen from the 455 ESFS) successfully defended the airfield during a major assault in May 2010.¹¹

Phase 2: The Close Fight

In late 2010 the 455 ESFS commander, Lt Col Craig Allton, negotiated limited maneuver operations outside of the base perimeter to 500 meters, or approximately small arms range. This change increased coordination for the perimeter defense, with the towers and close-in forces reporting to the same commander. The effort was initially started as a remedy to fill the void as the US Army presence throughout the BSZ was drastically reduced. The focus of these first patrol teams (dubbed “Reapers”), according to Allton, was to “strengthen the perimeter and perimeter response to make sure it wasn't like an eggshell if cracked.”¹² Hazards such as undocumented minefields, unobserved areas from perimeter tower overwatch, and difficult maneuver terrain (both by foot and vehicle) were in abundance. These dangerous conditions were highlighted in 2011 when an Airman and his military working dog were seriously injured as their off-base perimeter patrol ventured into a mined area. Likewise, in this phase Airmen perfected their internal response capabilities in that manpower, tactics, and technology were effectively merged. The USAF internal perimeter response teams were arrayed within the base to

reinforce towers and respond to sensor alarms along Bagram's entire perimeter. The USAF further reinforced the perimeter with a QRF to counterattack any perimeter breaches and respond to emergencies. While these tactical tasks appear routine in nature, processes were built so that Airmen "knew their beat" and responded to perimeter incidents in a matter of seconds. These quick responses were founded largely on technology fused with USAF SF sensor operators and controllers operating at Bagram's joint defense operations center (JDOC).

Phase 3: Expansion

From July 2011 to February 2012, the USAF continued to expand its role, moving further from the base perimeter. This enlarged focus was born of necessity as the Army maneuver forces continued their withdrawal from the BSZ. Analysis of significant activity in the BSZ began to show a rise in reported surface-to-air fire incidents, indirect fire (IDF) attacks (primarily 122 mm unguided rockets) against Bagram, and improvised explosive device (IED) attacks targeting supply lines leading to Bagram. To the casual observer, the situation seemed to demonstrate gaps in patrol coverage from the airfield to approximately 10 miles out. The initial SF patrols focused almost exclusively on observation of aircraft approach and departure profiles. However, the mission quickly expanded to include countering the emplacement of IEDs along the roadways surrounding Bagram and counter-tunneling in and around the base perimeter.



Covering all approaches. USAF SF troop entering part of a karez tunnel system outside of Bagram, circa 2011. (Courtesy of CMSgt Cody H. Pemberton, former 455 SFS patrol leader, personal photograph.)

The most critical part of this phase occurred in August 2011 when the Army's lack of manpower forced it to essentially discontinue its dedicated exterior patrols for Bagram. The approach of the new fighting season made it clear to all parties that the lack of patrols needed to be addressed. Col Kevin Cullen, the former 455 ESFS commander, summed up the situation: "In our assessment, the perimeter and

airfield were hard targets, but there were holes in the defense outside the wire and gaps in combating the insider threat on base.”¹³

Col Erik Rundquist, the 455th Expeditionary Mission Support Group (EMSG) commander, relayed, “We had been hit repeatedly, to include some shots within 70 to 800 meters of the perimeter. In my estimate, we had lost the initiative as the Army shifted its focus in different areas. The Army element did not appear to synchronize its efforts in the BSZ based on air operations nor did there appear to be a concerted effort to share information. The Army seemed to be disengaged in what was taking place in the biosphere around Bagram.”¹⁴ These gaps manifested themselves during three key events and set the stage for the final move to change the defensive scheme.

The first event was the previously discussed RPG attack on an outbound C-130 from just outside the fence. While the insurgent shooter was effectively engaged, the attack highlighted the fact that the enemy maintained complete freedom of action in and around Bagram airfield. The incident resulted in expanded dialogue between the 455 ESFS and its Army counterparts to examine activities within three to five miles of the installation. In a second event, two 122 mm rockets slammed into Bagram airfield and skipped along the parking ramp, slightly damaging two MC-12 aircraft and an aircraft maintenance hangar. The 455 AEW immediately enhanced FP engineering on the flight line, including erecting concrete T-wall revetments throughout the aircraft parking ramp. The third event was a rocket attack in September 2011 that, along with the subsequent fire, destroyed most of the United Arab Emirates living compound and nearly overwhelmed Bagram’s ability to combat the flames.¹⁵ These incidents, combined with several minor ones, provided a compelling case for the 455 AEW to confront the concept of Airmen operating out to five miles from Bagram to regain the initiative within the BSZ.

A key priority was to obtain a clear force-protection picture of the BSZ. For instance, in 2011 the US Army’s 1st Cavalry Division (ICAV) conducted patrols



A response to IDF activity. “T-Walls” emplaced to protect C-130s at Bagram. (Reproduced by permission from John A. Tirpak, “The Aerial Life-line,” *Air Force Magazine* 95, no. 8 [August 2012], <http://www.airforce.mag.com/MagazineArchive/Pages/2012/August%202012/0812life-line.aspx>.)

in Parwan Province, but few directly supported Bagram's security. In fact, little information was shared between Bagram's defense forces and patrols operating in the BSZ. Moreover, the patrols focused on strategic issues as they attempted to interdict weapons, supplies, and insurgents flowing across the border from Pakistan. When the IID replaced the 1CAV, BSZ patrols were reduced even further with combat service support Soldiers replacing combat arms (infantry) and combat support (MP) Soldiers.¹⁶ The Army had simultaneously changed the calculus of friendly forces operating in the BSZ—where both the number and capability of Soldiers were diminished.

Phase 4: Activation

By early 2012 the IID had completed its relief in place with the 1CAV, and as a result, the commanding general of RC-East (Maj Gen William Mayville) directed a meeting with representatives from the US Army Garrison Command, Combined Joint Task Force (CJTF-1) Division Headquarters and Headquarters Battalion (DHHB), and the 455 AEW. During this meeting, each organization identified force capabilities and expertise for leading an integrated defense effort. Just as Bagram's perimeter defense appeared to be a patchwork during Phase I, the concentric circles representing multiple layers around Bagram followed a similar pattern (fig. 3.2).

By applying Bagram's situation to a notional airfield threat template, as depicted in figure 3.2, one sees that the IID's DHHB was the responsible battlespace owner. It had only a small force (one to two maneuver elements) operating throughout Parwan Province, with a primary focus of supporting several combat outposts throughout the region and performing area security operations. The DHHB's limited COIN focus was mainly directed toward supporting the battalion commander's key leader engagements. The 455 ESFS conducted independent patrols closer to the installation—most of the effort was out to five miles from Bagram's perimeter and linked to protecting air operations and counter-IDF activities. The 455 ESFS defended the bulk of the perimeter, with soldiers from the Republic of Korea and contractors assigned to the 455 ESFS manning significant portions.¹⁷ Bagram's installation entry operations were executed by the 455 ESFS; however, since base policies and entry criteria were managed by a separate office in the US Army Garrison Command under IID, the

effort was considered joint. The base QRF contained elements from both the 455 ESFS perimeter response teams and the DHHB. While Bagram's MP function fell under the direction of RC-East, its police also maintained a small QRF responsibility. At the heart of the installation, the flight line entry control and aircraft security response activities came under the purview of the 455 ESFS, with the JDOC comprised of elements from all parties.

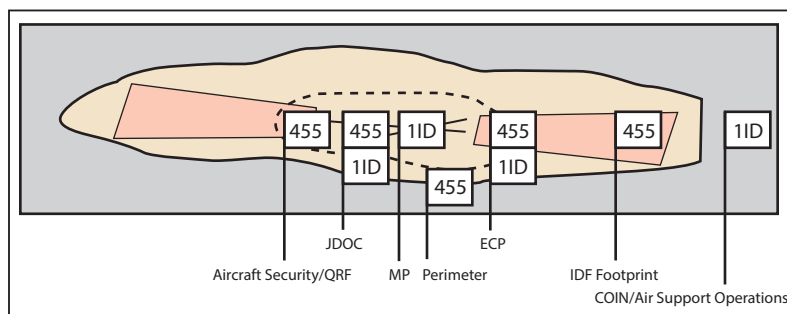


Figure 3.2. Bagram's defensive scheme prior to the stand-up of TF 1/455. (Developed by Col Erik Rundquist, USAF.)

At the completion of the meeting, the RC-East senior staff felt that the lack of a single commander was problematic for Bagram's defense. After quick deliberation and consultation among the 455 AEW and RC-East leaders, the 11D's DHHB was placed under the operational control of the 455 EMSG, and TF 1/455 was created.¹⁸ While the task force was formally activated on 21 May 2012, a coordinated FP effort had been under way for nearly three months under the name Operation Danger Shield. This operation focused on strengthening Bagram's multiple entry control points and synchronizing FP activities. There was an increase in command post exercises, tactical and procedural reviews, and information sharing (to include a USAF SF liaison officer placed in the RC-East command center).

The 455 EMSG commander took on the task force responsibilities without relinquishing any of his previous roles and responsibilities. In addition to the SF squadron, the EMSG was responsible for five other squadrons: aerial port, civil engineering, communications, force support, and logistics readiness. These units were focused on keeping one of the world's busiest military airfields operational. Since the EMSG

commander was now dual-hatted, he leveraged the other five squadrons to support the base defense effort.

With nearly 1,000 military and civilian personnel assigned, the 455 ESFS was by far the group's largest squadron. The ESFS was already task organized into sectors and flights, so this aspect remained relatively unchanged. The addition of the 11D's DHHB gave the task force a total of six maneuver formations—five USAF and one Army—dedicated for use throughout the battlespace. More importantly, the DHHB afforded TF 1/455 an organic capability focused on intelligence and significantly enhanced its tactical communications. The task force thus had an enhanced flow of information on threats occurring outside Parwan Province that could impact Bagram. Moreover, TF 1/455 gained full access to RC-East logistical support services, received increased support for airborne ISR assets, and got greater attention within the Army structure for force-protection projects such as barriers and guard towers.

The 455 EMSG staff increased from five administrative personnel to a full brigade staff of almost 50 Airmen and Soldiers focused on intelligence, operations, logistics, plans, communications, vehicle maintenance, and some engineering capabilities. To ensure mission success, the commander added a second deputy, enabling one to focus on the defense functions and the other to cover the mission support areas required to operate and maintain the airfield. Colonel Cullen noted, "Relationships at Bagram were confusing at best. The EMSG commander was able to refocus the different squadrons to get us a lot of the things we needed."¹⁹

Phase 5: Employment and Evolution

As of this writing, US air base operations continue in Afghanistan; therefore, technical data (numbers/locations of forces, weapon configurations, range of operations, capabilities, etc.) are not fully discussed. However, a broad-based narrative on how the task force was initially employed should still prove beneficial.²⁰

Command and control. Owing to RC-East's primary concern on the lack of unity of command, the obvious focal point for Bagram's TF 1/455 was the JDOC. The JDOC was comprised of USAF SF controllers, task force soldiers, and contracted specialists. The team, led by a battle captain (generally a USAF SF officer, but occasionally a senior noncommissioned officer [NCO]) monitored the overall sta-

tus of the installation and activities within the province. As the processes matured, an Army office was often teamed with a USAF senior NCO and vice versa.²¹ The installation's counter-rocket, artillery, and mortar (C-RAM) notification system alerted Bagram to incoming IDF rounds and was capable of basewide or localized warnings of impending rocket impact. C-RAM was operated and maintained by a civilian contracted force (most former military), which easily blended into the task force's military structure. In addition, the JDOC was the central hub of Bagram's sensor systems. The tactical automated security system (TASS) covered the perimeter to identify incursions onto the base and helped alert the perimeter response teams to quickly assess and react to local alarms and potential breaches. In addition, the TASS camera systems (day, night, and thermal) monitored key areas such as entry control points, mass gathering areas, avenues of approach to the airfield, the flight line, and others the mission commander deemed important.

Feeding the base defense system was a wide array of information sources—including tactical radio base stations, data-link feeds from ISR platforms, secure computers, local human networks, and open source news channels. This information was correlated with locations on local and regional maps throughout the center. The Army's Command Post of the Future system ensured that brigade commanders throughout RC-East could instantaneously communicate and pass along information on standardized maps and graphics. The Blue Force Tracker system gave the S-3 patrol master real-time information on team locations plus an ability to text information to minimize radio chatter. Liaison officers from various agencies populated the JDOC during specific times or events, to include an on-call joint terminal attack controller to effectively integrate CAS and other air activities. Intelligence staff, future and current operations staff, translators, MPs, and occasionally leadership from the 455 AEW's crisis action team or joint emergency operations center (JEOC) would report to the JDOC based on the nature of the emergency or complexity of the tactical task.²²

The 455 ESFS had subordinate sector command posts that were led by a SF officer and senior NCO, allowing for specialization and a full understanding of their respective areas. Sectors were roughly aligned to the pedestrian entry control area, vehicle entry operations area, built-up western portion of the base, and larger but more sparsely populated area in the eastern expanse. A sector dedicated to

the interior portions of the base focused on the flight line. Despite the attempt to decentralize operations, daily security operations involving nearly 400 posted base defenders ensured that the JDOC was a constant beehive of activity.

Air and ground interface. Securing an expeditionary airfield with over 30,000 inhabitants in an active insurgency presented obvious challenges. The sheer volume of air traffic (with long periods where an aircraft was either launched or recovered every 90 seconds)—making Bagram one of the busiest airfields in the world—only compounded the task force’s situation.²³ Planning with the 455th Expeditionary Operations Group (455 EOG), in particular the 455th Expeditionary Operations Support Squadron (EOSS), initially centered on two major areas. The first was how TF 1/455 could better secure the airfield—including aircraft operating in the pattern—and the second was how leveraging airpower could support the ground defense force operating throughout the BSZ.²⁴

In fall 2011, three of the 455 EMSG squadrons (security forces, aerial port, and communications) and the 455 EOSS began to construct an “air estimate of the situation.”²⁵ The effort initially focused on gathering information on insurgent ground-to-air weapons capabilities. However, the most important parts of building the estimate were to fully understand the types of aircraft operating in and around Bagram and to educate the SF mission planners on the approach, departure, and local air traffic pattern templates to prioritize combat patrols. The 455 EOSS gathered operators from all of Bagram’s airframes to verify aircraft vulnerabilities and determine the time and distance from takeoff where these aircraft were especially susceptible to ground fire. The aerial port representatives presented daily air tasking orders (ATO) for the heavier transient aircraft, giving special emphasis to passenger aircraft, which if shot down would represent a strategic event. Once the picture of the air traffic patterns and their vulnerabilities was defined, the communications squadron planners identified dead spots in the BSZ, determined maximum ranges for SF patrols, and engineered solutions to boost their operational ranges where possible. With all of these inputs, the 455 ESFS determined patrol times, locations, and a variety of activities involving overt occupation or covert observation.

Just as the BSZ patrols supported air operations from the ground, there was an obvious role for the defense force to have access to air assets. The 455 EMSG worked closely with the 455 EOG to establish

an “operations box” where the SF organic RQ-11 Raven small, unmanned aerial system was able to operate. However, this capability was more tactical in nature and confined to only a certain section of the BSZ with limited loiter and observation capabilities. The most important organic ISR capability was Aerosonde’s ScanEagle. Operated by contractors at the JDOC, it had greater range and speed, longer loitering time, and better optics than the RQ-11. Moreover, it was able to transmit real-time data to both the JDOC staff and SF combat patrols operating in the area. Other ISR mechanisms such as the large, tethered aerostat-based Persistent Threat Detection System and the smaller, tactically mobile Rapid Elevated Aerostat Platform (REAP) gave JDOC leaders a continuous bird’s-eye view of large portions of the BSZ. Establishing these systems on an airfield as busy as Bagram took tremendous levels of coordination; the importance of the relationship between the 455 EOSS and the task force cannot be overstated.



Dedicated airborne ISR for TF 1/455. (Left) REAP airship and (right) ScanEagle. (Courtesy of Lt Col Matt Pignataro, former 455 SFS operations officer, personal photographs.)

Outside of the readily available ISR, Bagram’s aircraft also supported TF 1/455 through other means. The US Army maintained Bell OH-58 Kiowa armed reconnaissance helicopters at Bagram that quickly launched and established direct communications with BSZ security patrols. In 2012 Bagram’s fixed-wing fighter aircraft (F-16, F-15E, and A-10) returning to Bagram offered base defense forces a “residual base defense capability” where these aircraft operating in the traffic pattern would make contact with SF patrols.²⁶ Bagram’s assigned MC-12 Liberty ISR aircraft proved itself to be a superior platform that regularly relayed communications between the Reaper pa-

trols and the JDOC.²⁷ In addition, opportune “aerial force protection” support such as B-1B Lancers transiting at higher altitudes regularly contacted the SF patrols.²⁸ Finally, the task force planned and coordinated support from the US Army UH-60 Blackhawk squadrons and conducted several missions where rotary-wing assets inserted USAF SF patrols throughout the province.

Area security operations. As noted earlier, TF 1/455’s main emphasis in the BSZ was to control and influence key terrain in direct support of air operations. A secondary mission was to analyze the points of origin of improvised rocket attacks and begin to observe and deny this terrain to insurgent activity. To set the conditions for these two active defense missions, the 455 ESFS initially tasked one Reaper team to start reconnoitering the area and confirm routes where the heavier Mine-Resistant Ambush Protected (MRAP) vehicles could safely operate. More importantly, it was tasked with mapping the “human terrain” and gauging the climate of the BSZ. This team (Reaper-1) paid particular attention to key/street leader engagements. The results were surprising—despite Bagram’s massive population and the hundreds of logistical convoys transiting through Parwan, the SF determined that several of these smaller village leaders had not spoken directly to a coalition member in years. Reaper-1 engagements matured into a synchronized effort with the US Army’s Civil Affairs branch, to which the TF 1/455 commander leveraged considerable support from RC-East. The task force generated contract projects, prioritized trash removal, and executed simple road repair. It also employed a SF female engagement team (FET) (led by then-captain Melissa Hull and CMSgt Jennifer Kersey) to increase trust from and access to more of the population within Bagram’s biosphere.²⁹ More traditional “soft power” focus areas included clothing, firewood, and toy distribution and tactical care when medics accompanied patrols. In addition, “venting sessions” were employed in which senior village leaders could talk to SF leaders to voice concerns with coalition (and ultimately Afghan) leaders. As the teams became acclimated to the BSZ, the number of key leader engagements (*shuras*) increased, as did the patrol coverage. On several occasions, USAF patrols received phone calls from village leaders alerting them to the presence of outsiders who had dropped off weapons or supplies in their respective villages. This information netted captured supplies and demonstrated the trusting relationship with the SF patrols operating within the BSZ.³⁰ The increased inclusion of Afghan National Security Forces

(police and army) ensured that an Afghan “face” was at the forefront of dealing with the local populace. Such collaboration was especially important during law-enforcement-type missions. These included assisting locals involved in vehicle accidents and employing tactical operations like snap traffic control points, where TF 1/455 randomly controlled civilian vehicle movement around Bagram.

Base security operations. Despite the complex nature of the area security mission, TF 1/455 committed the bulk of its manpower and effort to Bagram’s perimeter defense and close-in protection. Installation entry control operations consisted of a combined team of Afghan security, third-country contracted members, and USAF security forces searching and screening up to 5,000 local workers daily. Some ECPs were primarily dedicated to admitting local national day laborers and others to specific needs, such as hospital patients, coalition forces, or vehicle deliveries. In fact, hundreds of trucks were searched every day using a combination of military working dogs, physical checks, and advanced scanning technologies targeting all sorts of contraband. A similar process was used for outbound vehicles to combat criminal activity such as theft or intelligence gathering.

All of the installation ECPs were heavily defended with armed overwatch positions. Manned towers covered the urbanized areas to the south and west and the rural areas surrounding Bagram to the north and east. Bagram’s perimeter TASS alarm sensors were reinforced by mobile response teams that immediately reacted to the alarms to assess the situation; in turn, the teams were backed up by sector QRFs if needed. One of the biggest challenges for the perimeter towers involved responding to the constant harassment and criminal activity of the local population. The 455 ESFS commander had negotiated with local leaders for a clear zone around the perimeter to ensure the safety of all involved. Everything from grazing animals that damaged fiber-optic cables to local criminals who approached the perimeter unobserved to steal metal or sensor components (like solar panels) demanded constant vigilance from the SF Airmen. While all the towers were armed with standard light and heavy automatic weapons, the defense force also possessed a wide variety of nonlethal options, including sting-ball grenades, acoustic devices, optic laser dazzlers, and several types of projectiles launched from shotguns to enforce the clear zone.³¹

To highlight the complexity of base security operations, in February 2012, a strategic event occurred with the inadvertent burning

of Qurans at the theater internment facility. The result was a massive protest in excess of 2,000 Afghan nationals who, over a three-day period, severely damaged the pedestrian ECP infrastructure and wounded several members of the 455 ESFS. However, the defenders—with known insurgents present—held the mob at bay, leveraged relations with senior leaders to calm the situation (gained through Reaper teams operating within the BSZ), and ultimately enabled air operations to continue. It must be noted that in this case, installation security was the main effort. Area security operations were temporarily halted until the situation was deemed more favorable for patrol operations.

In the confines of Bagram's perimeter, countering the insider threat was a critical concern for the 455 AEW commander. First, the 455 ESFS teamed with organizations across the installation to form Task Force Colonist. It included force-protection-focused agencies like the Air Force Office of Special Investigations, MPs, and US Army Criminal Investigations Division. More importantly, the bulk of support was from off-duty military volunteers who had a clear interest in maintaining a secure environment and wanted to actively support the base's defense. The task force performed no-notice inspections throughout the housing areas of third-country nationals who permanently lived on Bagram. TF Colonist raids seized contraband items such as cameras, computers, weapons, and others stipulated by installation policies.³²

Another aspect of combating insider threats centered on combat readiness training for the 455 AEW's personnel. The 455 ESFS and antiterrorism staff held unit exercises and battle drills to respond to large-scale ground assaults, single active shooters, and IDF attacks. Of note, the 455 ESFS led live weapons training for all Airmen that covered a variety of scenarios: shooting with combat equipment, night firing, executing immediate/emergency action drills, and firing from seated positions (to simulate an attack in an office or dining facility). Overall, this training was well received by the Airmen and increased competency and confidence within the wing.

The final part of installation security operations was protecting key resources. The defense force manned ECPs leading to the aircraft parking areas. Security forces conducted flight-line mobile patrols and responded to security incidents, established cordons during ground emergencies, or controlled ground movements during aeromedical evacuations in support of the Bagram theater hospital. The 455 ESFS

also provided specially trained and task-organized Airmen who focused solely on aircraft security operations away from Bagram. As the 455 AEW's C-130 Hercules accomplished intratheater airlift, armed SF often accompanied the transport aircraft and provided close-in security at austere airfields or airborne flight-deck denial missions if detainees were on board. These flyaway security teams were tactically controlled by the aircraft commander and considered part of the aircrew in performance of their duties. Just like their Air Force counterparts, TF 1/455 Soldiers manned entry points leading into key headquarters and living facilities. The Army MPs assigned to the task force handled law and order operations, including traffic management, criminal investigations, emergency response, and postattack reconnaissance in coordination with the JDOC. They also maintained a small confinement facility for unruly coalition members.

The end game: what's in a name? Once TF 1/455 was operational, the first step in the evolution occurred when the 455 AEW removed the 455 ESFS from the EMSG and activated the 455th Expeditionary Security Forces Group and the 755 ESFS. This group, with its two squadrons, formed the structure of the task force. The 455 ESFS was responsible for base security operations (interior security, entry control, perimeter) and out to one kilometer from the perimeter. The 755 ESFS was responsible for all activities outside of one kilometer throughout the BSZ. Owing to the changeover with a new RC-East supporting division, the group was redesignated as TF 455. By June 2013, the task force was operating at full USAF capacity and was notified that Army Field Artillery Regiment 3-82 would support the base defense mission to provide additional combat power for the remainder of the fighting season. After much discussion on the command relationship, the 455 ESFG eventually received tactical control of the Army maneuver unit, leading to another name change—Joint Task Force (JTF) 455.

The final phase of the evolution was twofold. First, JTF 455's name changed again to CJTF-455 as a result of an infusion of coalition forces. As noted earlier, the base defense force already partnered with a detachment of Republic of Korea soldiers securing one of Bagram's internal sectors. The international presence became more pronounced with the addition of soldiers from the Kingdom of Jordan and the Czech Republic. The Jordanians augmented 455 ESFS base security operations. The Czechs augmented the CJTF staff and expanded their mission by dedicating another maneuver element (now

a total of seven teams) to the BSZ. The Czech forces performed so well that, once the order was given to inactivate the task force, they replaced the 755 ESFS.

The second change was the unit designator. As the ESFG comprised 11 different specialties, the 455 ESFG represented much more than just a SF capability. As such, the ESFG sought, and on 27 September 2013 received, an organizational change request redesignating the 455 ESFG as the 455th Expeditionary Base Defense Group (EBDG) and the 455 ESFS as the 455th Expeditionary Base Defense Squadron (EBDS). The new names linked the 455th's mission to the 820 BDG and the chief of staff of the Air Force's 2009 "Base Defense Group Enabling Concept."³³

Fourteen months after its official activation, CJTF-455 was deactivated on 1 January 2014 and passed BSO responsibilities to the 3-82d Field Artillery Regiment. At the time of inactivation, the 455 EBDG had approximately 680 Airmen. They combined with US Soldiers, civilians, and contractors as well as soldiers from the Kingdom of Jordan, Republic of Korea, and Czech Republic to form a 1,700-person-strong CJTF. The 455 EBDG subsequently inactivated three weeks later on 23 January 2014. Following the dissolution of the task force, the 455 AEW turned its base defense and FP focus to the airfield, Air Force lodgment areas, and operational support facilities. In addition, the USAF temporarily retained responsibility of Bagram's installation ECPs as RC-East believed that the Airmen did a superior job and were better suited to the task. This situation continued for a few months until deployed Airmen were redeployed back to their home stations. The installation entry control task was then passed on to the US Army.

The Air Force-led task force was considered to be a success, appeared to accomplish its primary mission to secure Bagram Airfield and the surrounding areas, and was sustainable for the SF community. However, the political objectives had changed regarding the overall mission and role of US forces in Afghanistan. In his State of the Union address on 12 February 2013, President Obama announced his intention to withdraw 34,000 troops from Afghanistan by February 2014.³⁴ This reduction required US forces to decrease their strength by half. One of the first cutbacks at Bagram included USAF mission support personnel—with the bulk of these coming from the base defense force.

Final Observations

One of the frustrating components of operating in a COIN environment is the considerable amount of time required (strategic patience) to generate positive movement and set the conditions that favor COIN forces. From the body counts of the Vietnam War, to “clear and hold” operations in Iraq, to the number of Afghan police forces trained, statistics do not always tell the full story of the situation on the ground. Metrics and measures of merit in a COIN campaign are often highly elusive, and those of security and base defense often mirror the same challenges; Bagram was no exception. Commanders are forced to ask themselves this question: the base was not attacked last night—is it something I did (or did not) accomplish or something the enemy did (or did not) attempt? Of course, the base being attacked might not be a negative indicator when one examines how the defense force responded and whether the insurgents attacked out of frustration as the BSZ became more uncomfortable for them to freely move in. The final observations on an Air Force–led JTF that lasted just 14 months can be examined from multiple perspectives. Did the task force hold fast to the proposed fundamental truths of defending air bases? More importantly, was the task force combat effective, and if so, what were the results of its actions? Finally, did TF actions prove relevant, with the potential to have a lasting impact on the Air Force and future operations?

Examining the Fundamental Truths

At the beginning of this chapter, the authors proposed three fundamental truths concerning ABD operations. To what extent did the task force’s actions reflect these principles? Recall that TF 1/455’s primary reason for patrolling outside Bagram’s perimeter was to protect the airfield and the aircraft approach and departure threat envelope. The damage to two MC-12 aircraft and a maintenance hangar forced the hand of 455 AEW’s leadership to scrutinize incidents in the BSZ due to their direct bearing on air operations. In other words, because the 455th’s mission was affected, the Air Force should have had a vote in what was going on inside and outside of the installation’s perimeter. With the 455 AEW comprising only about 10 percent of the base’s total population, defending Bagram was more than just an airpower problem. Bagram was home to multiple headquarters, C2 facilities,

hospitals, logistical staging areas, special operations compounds, and Afghan military activities (to name a few). However, by not defending Bagram properly, the 455 AEW's mission had potentially the *most* to lose—with critical infrastructure, delicate communications nodes, fragile aircraft, and stretched logistical supply lines supporting air operations, all in an inhospitable environment.

Additionally, the task force executed operations with an air-minded perspective and was able to leverage airpower to play a more active role in the defense of Bagram Airfield. The unique mind-set of the task force helped shape patrol priorities, determine snap traffic control point locations, and accelerate defense project timelines. Just as USAF flight operations are based on an ATO, TF 1/455's patrols operated from a ground tasking order. Some SF missions focused entirely on countering surface-to-air firing locations, while others attempted to control or influence historical points of origin for IDF attacks against Bagram. Operations from airborne residual base defense support to aerostat deployment on a busy airfield demonstrated that air operations and the base defense missions were inextricably linked.

Combat Effectiveness

Mark Twain wrote, “There are three kinds of lies: lies, damned lies, and statistics.”³⁵ In the case of determining the effectiveness of TF 1/455, statistics prove useful. The first potential measures of merit for TF 1/455 are the number and locations of IDFs against Bagram. As stated earlier, one of the major reasons for the stand-up of the task force was to regain initiative in the BSZ—with the intent to create a more difficult environment for the insurgents to attack Bagram. Data shows a marked reduction of IDF activity against Bagram as the task force conducted its campaign.³⁶ Impeding the enemy's freedom of movement in the BSZ reduced the number of IDF attacks and lowered the number of rounds fired per attack. The Reaper patrols operated overtly as a deterrent for would-be insurgents, forcing the enemy to launch attacks against Bagram from greater distances. This increased range affected the accuracy of the rounds and, more importantly, added flight time for the improvised rocket (and in some cases, increased the apogee of a normally flat rocket trajectory). The longer flight time had a corresponding positive effect on the C-RAM's ability to track and warn Bagram's inhabitants of an impending im-

pact. Finally, SF patrols operating in the area facilitated not only quicker assessment of the attacker's points of origin but also exploitation of accumulated data/evidence.

Another measure of effectiveness is to compare enemy activity at Bagram with that at other coalition airfields or to examine the status of Bagram after the task force was deactivated. As forward operating bases collapsed and consolidated their activities at Bagram, the North Atlantic Treaty Organization's largest base became an even more lucrative target. However, the sheer numbers applied to protecting Bagram during the existence of TF 1/455 outpaced those for all other military installations. A poignant reminder of the serious threats to coalition airfields during this time manifested itself at Camp Bastion, Afghanistan. In September 2012, an attack resulted in the destruction of six USMC AV-8B Harriers and the killing and wounding of several US members. Further, 10 months after the task force's deactivation, Bagram suffered two personnel killed by a rocket attack in November 2014—demonstrating that the threat was present during the operational life of TF 1/455 and continued well after it concluded.³⁷ The most compelling evidence of success is the relative quiet during the task force period, with a reduction of significant enemy activity and the absence of insider attacks at Bagram—despite spikes in these areas elsewhere in the region. It is possible that the active posture and resources committed by TF 1/455 dissuaded insurgent attacks and encouraged the attackers to go elsewhere. It is also just as likely that the task force's area security patrols forced local insurgents to remain inactive or change their tactics.

Implications for the Future

The final set of observations relates to the future of the USAF. At the time of this writing, concepts like the Joint Concept for Access and Maneuver in the Global Commons—formerly known as AirSea Battle—and the supporting dispersal concept of “Rapid Raptor” are being developed to change how the United States deploys and presents its operational combat forces. Both frameworks require the USAF to use diverse security tools in some situations, and many assumptions in the security arena remain largely unchanged. The USAF has become accustomed to operating close to enemy insurgents. Neither of these emerging concepts will change these risk factors. In all likelihood, plans to disperse aircraft to areas where they do not typi-

cally operate from will require more, not less, defense capability in ways beyond simply posting an Airman on a fence line. Thus, the Air Force will require forces that are better trained and equipped, have a higher degree of flexibility, and are more capable of approaching challenges creatively.

The USAF has learned some categorical lessons through this process. Because security is an inherent function of airpower, the USAF can and should institutionalize the mission of operating and owning battlespace in the ABD environment. The threat to air bases will continue to exist and to evolve in new and dangerous ways. Therefore, to fly, fight, and win, the USAF must ensure that bases are properly defended.

The lesson from Bagram is clear: all Airmen (not just security forces) must understand that with the abrogation of Joint Service Agreement 8, the Army cannot always provide air base ground defense, nor is it obligated to do so.³⁸ However, someone will always influence the BSZ; the question is whether it will be the USAF or the enemy.

Notes

1. The phrase “outside the wire” is not doctrinally based; however, it commonly refers to a delineation denoting operations inside or outside the confines of a defended or undefended/administrative perimeter of an installation. The combat and combat support tasks regarding base defense fall under “area security operations” as highlighted in JP 3-10, *Joint Security Operations in Theater*, III-14.

2. Douhet, *Command of the Air*, 53–54.

3. LeMay Center, *Volume 1, Basic Doctrine*, 57.

4. Fox, *Air Base Defense*, 27–28.

5. JP 3-10, *Joint Security Operations in Theater*, III-18.

6. Hayden, “Air-Mindedness,” 44.

7. RAF, Air Pamphlet 3241, *RAF Force Protection Doctrine*, LEX-1.

8. The USAF often deployed Airmen to fulfill the role of the MPs under the guise of “in lieu of” or “joint expeditionary task” forces.

9. Christensen, “Lessons Learned,” 9.

10. Col Chris Bargery (commander, Air Force Security Forces Center, Lackland AFB, TX), interview by Col Erik Rundquist, 15 January 2016.

11. Levine and Hancocks, “Nearly a Dozen Militants Dead.”

12. Christensen, “Battle Space Ownership Lessons,” 9.

13. Cullen to Fortner, e-mails.

14. Col Erik Rundquist (chief of security forces, Air Combat Command, Langley AFB, VA), interview by Maj Raymond Fortner, 14 January 2015.

15. *Ibid.*

16. Christensen, “Battle Space Ownership Lessons,” 4.

17. The Republic of Korea (ROK) was the lead sponsor for a hospital on the western side of Bagram, as well as a stand-alone facility in Charikar, Afghanistan. As such, the Koreans integrated a highly trained and extremely competent special operations force into Bravo Sector's command post and took on the responsibility for manning several western towers. As TF 1/455 was activated and increased its focus throughout Parwan province, US and ROK patrols regularly linked up and coordinated activities and shared threat information.

18. The nomenclature of TF 1/455 emphasized the joint partnership of the 11D and the 455th Air Expeditionary Wing. It is not to be confused with "1st Brigade/455," as Colonel Rundquist often witnessed in joint meetings.

19. Cullen to Fortner, e-mails.

20. Personal observations by Colonel Rundquist, TF 1/455 commander, July 2011–June 2012.

21. SMSgt Ken Broughman (former 455 ESFS patrol member, Bagram Airfield, Afghanistan), interview by Col Erik Rundquist, 3 March 2016.

22. The JEOC played a critical role in activities that ensured base operations and a coequal role in air base defense operations. The JEOC coordinated fire response, directed postattack assessments, ensured personnel accountability, and prioritized resources for longer duration emergencies, as evidenced during the 2012 Bagram riots, aircraft crashes, and major fuel spills.

23. Lt Col Dan Lemon (former commander, 455th Expeditionary Aerial Port Squadron, Bagram Airfield, Afghanistan), interview by Col Erik Rundquist, 3 March 2016.

24. The 455 EOSS possessed capabilities such as intelligence, air traffic control, and airfield management, which proved essential in providing TF 1/455 an air-centric approach to defending Bagram Airfield.

25. Colonel Rundquist coined this term to designate a tilt toward airpower as an adaptation from the term "estimate of the situation," wherein a commander considers all circumstances to arrive at a course of action to accomplish a mission/task.

26. While residual base defense is a concept perfected during Operation Iraqi Freedom in the defense of Joint Base Balad, it was not the first time USAF aircraft were employed to defend their own airfields. For instance, in April 1967, AC-47 gunships "began flying nightly airborne alerts at in the Bien Hoa-Ton Nhut areas." Berger, *Air Force in Southeast Asia*, 263.

27. Broughman, interview.

28. During a rare daytime IDF attack against Bagram in 2012, Colonel Rundquist witnessed a coordinated FP support mission to an SF patrol (Reaper 1) involving two OH-58Ds, two F-15Es, and a ScanEagle ISR platform.

29. FETs were used by joint forces (USMC and USA) in Iraq. SF Airmen operating throughout Iraq in 2004–5 observed this activity as they indirectly supported FET operations. The 455 ESFS FET members were task organized and trained to operate outside the wire at Bagram. The FET enabled the defense force access to a large portion of the population that otherwise remained in the shadows from standard SF Reaper team activities. FET teams gained information about and better understood the priorities of the local population. The result allowed TF 1/455 planners to prioritize soft-power projects (i.e., medical support, school, family activities)

within the BSZ. CMSgt Jennifer Kersey (former 455 ESFS security forces manager), interview by Colonel Rundquist, 16 March 2016.

30. Broughman, interview.

31. USAF SF core capabilities for security operations and law enforcement gave commanders a highly flexible, light-infantry-like capability in conducting static and mobile defense. Security forces were fully trained on escalation of force, use of nonlethal weapons, etc., often associated with MPs.

32. Additional items usually seized included alcohol, pornography, and stolen items. At the completion of the raids, the appropriate agencies would take charge of their specific specialties (e.g., counterintelligence or criminal).

33. Department of the Air Force, *Expeditionary Airbase Defense*.

34. White House, "State of the Union Address."

35. Twain, *Chapters from My Autobiography*, chap. 23.

36. Since at the time of this writing, data indicating points of origin and points of impact were classified, and operations in Afghanistan are ongoing, Colonel Rundquist's comments are based on personal observations.

37. Fitzgerald, "Rocket Attack."

38. Jumper and Schoomaker, memorandum for record.

Chapter 4

Outside the Wire

Recollections of Operation Desert Safeside and TF 1041

Walter E. Buchanan III

Bradley D. Spacy

Chris Bargery

Glen E. Christensen

Armand “Beaux” Lyons

In the early morning hours of Jan. 1, 2005, the first combat patrols of Operation Desert Safeside left the northern perimeter of Balad Air Base, Iraq, and began an aggressive 60-day combat operation to kill or capture insurgents attacking the air base.

This was a historic mission for Air Force security forces. It was bold, put Airmen at risk, and the stakes were high. We knew the results of Operation Desert Safeside would have far-reaching implications on the future of Air Force security forces as a credible ground combat force.

—Col Bradley D. Spacy, 5 September 2006

In 2004, shortly after the Iraq War began, USAF and Army leaders terminated Joint Service Agreement (JSA) 8 assigning the exterior security of an air base to the US Army. The tremendous manning stress of counterinsurgency campaigns in two conflicts—Iraq and Afghanistan—proved this long-standing agreement to be hollow. It was clear that the Air Force would have to take on a larger role in the defense of its own air bases. Lt Gen Walter E. Buchanan III, US Central Command’s (USCENTCOM) coalition forces air component commander, “lobbied for and received permission to organize, train and equip the USAF’s first ever offensive ground combat Task Force,” designed to conduct a 60-day operation focused on reducing standoff attacks against Logistics Support Area (LSA) Anaconda—the Army’s logistics base near Balad, Iraq, and location of the USAF’s busiest airfield.¹ Known as Task Force (TF) 1041, the unit quickly established its capability: “In just 60 days [it] captured 17 high value targets, eight major weapons caches,

98 other insurgents and reduced enemy attacks from [its] area of operations to nearly zero.”²² Operation Desert Safeside (ODS) was the first time since Vietnam that USAF security forces (SF) were given the mission of deliberately fighting “outside the wire” (OTW) in defense of an air base; it remains the first of only two times the Air Force has ever been intentionally given an “offensive” ground combat mission.

This chapter is a monograph of firsthand accounts and reflections of the key leaders involved in the stand-up and operation of TF 1041. There are three main parts to this story, and each was critical to mission success. The first part of the story revolves around the strategic context at the time ODS was approved. Specifically, it deals with the maturation and approval of the TF concept leading to USAF Airmen fighting offensively in ground combat and convincing both USAF and Army senior leaders to allow it to happen. The second part centers on building the task force itself—putting the operation together and then assembling the personnel and equipment the task force would need. The third part of the story is the execution of the operation itself—innovative tactics, techniques, and procedures (TTP); new methods of developing and using intelligence; and individual courage under fire. Prior to proceeding, it is important to highlight a fourth part of the story. Although not critical to the actual execution, it illustrates considerations reflected in the final section on key ODS lessons learned. It is significant that this operation happened quickly—just six months from conception to mission completion. And although it laid the groundwork for changes across doctrine, organization, training, materiel, leadership and education, personnel, and facilities, little is written about the details of the operation—with only a few unclassified sources to cite.

This is the story of ODS/TF 1041 as told by the people who created, planned, and led it. It is difficult to capture the scope of the challenge and impact of the success without sounding self-promoting, but that truly is not the intent. It was an exciting and challenging time, and all those involved in ODS were passionate about their roles—hopefully that is how it comes through.

Strategic Context

Lt Gen Walter E. Buchanan III, USAF, retired, combined force air component commander/Ninth Air Force commander, August 2003–

April 2006: Picture air base defense (ABD) as it was in Iraq in 2004. We had invaded in March of 2003 and by May began to move operations into Iraq. Our first air base was Tallil in the south, now known as Ali Base. It was situated along the main line of communication between Kuwait and our forces in Iraq. Tallil AB was used early in Operation Iraqi Freedom, first to stage air rescue forces and later to rearm and quick-turn A-10 fighter aircraft providing close air support. Soon after, the air component, United States Air Forces Central Command or USCENTAF, moved to begin airlift operations at Baghdad International Airport (BIAP) and fighter operations out of Kirkuk AB in the northern Kurdish region. With the insurgent threat, coalition air forces had to operate off of a different playbook. No longer was this the envisioned Cold War scenario where air bases were situated in a relatively secure rear area. Our bases were now right in the middle of the insurgent's backyard. Thus, securing the approach and departure corridors as well as the immediate surrounding areas was a challenge. Iraq is a big country, and our forces found themselves stretched thin. Doctrinally, we were still operating off guidance based on Joint Service Agreement (JSA) 8 signed by the Air Force and Army chiefs of staff on 25 April 1985. It gave the Air Force responsibility for air base ground defense (ABGD) inside the base perimeter and the Army that tasking outside the wire.³ As I talked to my Army counterparts, they admitted that the best they could do was secure such a wide area by occasional presence. They just did not have the troop manning to "own" the ground surrounding all of our bases, much less comply with the 1984 memorandum that went further to state that Army forces tasked with the ABGD mission would be under the operational control of the base commander. While service doctrine had evolved over time and been refined, this agreement was the basic framework that drove service Title 10 activities (organize, train, and equip) for the ABGD mission prior to OIF.

Following the 9/11 attacks, the Air Force conducted a formal review of the entire force to ensure that we were postured to address this new and emerging threat. Among its many findings and recommendations, the review identified the need to add approximately 1,500 security force billets to the force. The review further determined that SF were not adequately manned for the new security environment that emerged post 9/11. To help fill the gap in capability and also to free up SF Airmen to deploy overseas, the USAF began by

first using support from the Army National Guard and then contractors to guard stateside bases.

Prior to 9/11, the Air Force used the construct of the air and space expeditionary force (AEF) to support overseas contingencies. The concept's basic premise was that forces were organized into 10 AEF rotations or "buckets" that would be deployed and employed in 90-day increments. By following this model, CENTAF was trading out forces every 90 days. New troops spent the first few days getting acclimated and doing a handover with the departing unit. After that it was business as usual for most units, especially those whose jobs kept them on base. For those who departed the base—aircrew and others—it meant a steep learning curve to grasp the operational environment and establish relationships with supported and supporting units. All of this took time. As a result, CENTAF forces were always in a churn with troops coming and going.

Every deployable SF Airman was scheduled to deploy as part of one of the 10 AEF buckets, and each bucket was sized to fit the air component's mission and little more. Part of this mission was ABGD inside—not outside—the wire as that was doctrinally the Army's mission. The bottom line was that the Air Force did not have enough SF Airmen to expand the mission OTW. Additionally, even though SF were trained in ground combat skills, it was thought that most were not trained to a high enough level to operate effectively OTW.

This constant turnover also meant that we lost not only our institutional knowledge of the mission and threats every 90 days but also any operational relationships we had developed with associated Army and Marine units that were deployed for 12–15 months. This climate made the idea of a sustained OTW presence even more difficult. It should be noted that eventually CENTAF was able to make the case for extended rotations; the Air Force went to 120-day rotations, with many critical specialties deploying for six months to a year. This change helped tremendously and clearly increased our combat effectiveness.

When US Central Command decided to make Balad AB its major logistics hub (LSA Anaconda) and directed CENTAF to move major airlift operations to Balad from Kirkuk (late 2003), I held a meeting in the tower at Balad AB with the 332nd Air Expeditionary Wing commander, then-colonel "Hoot" Gibson, and his Army counterpart, Brig Gen Vinnie Boles, 3rd Corps Support Command (COSCOM) commander. As we overlooked the base from the tower, I told them that I

expected us to be there for some time and wanted us to “do it right” so the operation would be a case study for future war college classes.

At the time, the Army had taken over the base as a major logistics hub along with a large number of helicopters. However, the security for the base was set up somewhat haphazardly—divided into slices with individual units responsible for their own portion of the perimeter—and was not well coordinated. The airfield was also not treated like an airfield; a wide variety of ground units had set up shop and were using many of the hardened aircraft shelters (HAS) and other airfield facilities for purposes other than supporting the air mission. If left in place, this arrangement would have impeded efforts to expand airfield operations as the mission grew. Additionally, the airfield complex itself had no coordinated security.

Leaving that meeting, I asked Hoot and Vinnie to come up with a long-range plan that identified the airfield and supporting facilities and areas for future expansion (ramps, etc., which we eventually built). The plan would then move current “squatters” out of the airfield facilities and transition them all to their intended purpose. The plan was accomplished as units rotated so as to not impede ongoing activities as much as possible. Hoot was also directed to establish and maintain airfield security in accordance with USAF doctrine. Doing so meant that SF would take ownership and secure the flight line and other adjacent areas. I asked the senior Army commander to look at better coordinating outer perimeter security since the Army owned everything but the airfield.

As we established operations, Balad AB was attacked frequently by insurgents using unguided rockets and mortars. Many times these rockets were launched using simple timers. Finding and stopping the insurgents were therefore nearly impossible. Because of this threat, we established procedures to protect our airlift assets and their valuable cargo. Approaches to the airfield were random, with most C-130s approaching the airfield from a low level and then quickly pitching up into a modified overhead pattern that kept them close to the airfield. Once they landed, most flights conducted engine-running offloads to minimize the aircraft’s time on the ground. This practice was partly done because the ramp was small, and we could not park more than a few aircraft. Also, they were a huge target mostly because of the rocket attacks. We had good intelligence that insurgents were actively targeting that part of the ramp, so we kept it clear as best we could.

Balad AB was also home to the major medical hospital in Iraq. Just about all serious combat casualties came through Balad. Consequently, we also had the casualty airlift staging facility (CASF) adjacent to the flight line. Each evening, those wounded who were to be evacuated to Landstuhl Army Hospital in Germany were moved to the CASF and prepped for air transport. Then, during the night, they were transloaded onto a C-17 and flown out. Whenever I remained overnight at Balad, my nightly ritual was to visit the CASF as my last duty before calling it a day. These wounded had given their all, and we were sending them on, sometimes in pieces.

I routinely briefed CENTCOM and my fellow component commanders that my recurring nightmare was a rocket hitting a C-17 loaded with medevac patients at Balad because they would not be able to evacuate a burning aircraft on their own. It was a vision I could not get out of my head: wounded Soldiers strapped down on gurneys—some conscious, some not—as the aircraft burned around them, unable to get up and out to save themselves.

CENTCOM, and particularly Army general John Abizaid, ran a tight ship. He took the time to know all of his component commanders well and ensure that we knew each other. He recognized that in the heat of battle, relationships would trump doctrine every time—and he was right. He called us together about once every two months when we would brief him, our fellow components, and the CENTCOM staff on our current operations and concerns. General Abizaid would then brief us on his commander's intent and vision for the future. I remember a particular "commander's huddle" where I used a slide of a burned-out C-141 that had been on the ramp at Fort Bragg ready to load Army paratroopers when the terrible C-130/F-16 mid-air crash occurred. It was a way to underline my concern about the threat surrounding Balad AB and the need for a more robust ABGD. Everyone acknowledged the threat against Balad but saw little else that could be done to lessen it. Every component had its challenges, and the ground components just didn't have the forces to provide the kind of ABGD needed to minimize the threat.

Despite the lack of resources, CENTAF was not short of motivated Airmen ready to get the job done. During one of my first visits to Kirkuk AB, I discovered that SF Airmen there were covering the sector north of the airfield OTW because they had offered to help the Army. While the effort was admirable, I directed them to pull it back in as they were really only sized and manned to maintain airfield se-

curity, and Kirkuk AB was right up against the city of Kirkuk itself. With the urban terrain on the east and south sides of the air base, insurgents could get dangerously close before being detected. I needed our SF Airmen inside the base perimeter ready to respond when and if an attack occurred. I also knew that once we relieved the Army of that mission, it would be ours forever—and we were not sized to take it on full time. It was not a popular decision.



DOD photo by Marcus Castro, Aviation Safety Network

Green Ramp disaster

Kirkuk and Balad ABs were not unique. CENTAF had challenges across the area of operations when it came to ABGD. There had to be a better way.⁴

Maj Gen Bradley D. Spacy, USAF, director, Force Protection Air Forces Central (Forward), July 2004–June 2005: I always believed that security forces should fight OTW in air base defense operations. It was at the core of how we were trained: take the initiative, dominate key terrain, hit the enemy before he can hit you. These were things I was taught throughout my career and things I taught students as an air base defense instructor. SF had all the skills and equipment required to fight OTW; however, they had not had the mission since Operation Safeside in Vietnam. Over time, confusing agreements and vague doctrine relegated this very capable combat force to guard-

ing perimeter fences, entry control points (ECP), and tent cities. This situation was all extremely frustrating and central to my thinking as I arrived at Al Udeid AB, Qatar, and my job as the director of force protection for CENTAF Forward. I intended to get SF into the fight.

I was well aware of SF worldwide manning concerns, the status of doctrine, and the apprehensions about the capability of SF to fight OTW. Nevertheless, Iraq and Afghanistan were a new type of war for the USAF with a new type of enemy—a new way of thinking would be needed. As General Buchanan highlighted above, air bases were no longer tucked “safely” in the rear. They were in the middle of the combat zone, and the enemy was all around. There was only one way to stop determined enemies in this environment: you had to find them, kill or capture them, and take their weapons. Security forces could do this mission, but to become a credible ground combat force they would have to fight OTW.

I arrived at Al Udeid on 13 July 2004. General Buchanan was the combined force air component commander and my direct boss. In our first meeting he made one point clear to me—SF would not go outside the wire. I told him I disagreed. I said that fighting OTW was a core mission for SF and that they would have to fight there if we were to successfully defend air bases. He simply said, “Well, then, you’re going to have to prove that to me.” I did not know at the time why he didn’t want SF outside the wire, and he didn’t explain it to me. But his statement succinctly captured the challenge for SF in defending air bases in Iraq and Afghanistan—we would have to prove ourselves capable.

I spent most of August and part of September traveling with a small team of Airmen throughout Iraq learning about the insurgents and what was or was not working to combat them. There were four of us, including Capt John Grimm, MSgt Joe Pritchard, and TSgt Dennis Karner. Captain Grimm and Sergeant Pritchard were SF; Sergeant Karner was an administrative NCO. We visited dozens of Army and air bases, forward operating bases (FOB) and locations, and remote sites. We participated in numerous combat patrols and got a good picture of operations OTW. We paid special attention to operations around our major air bases at Kirkuk, Tallil, Baghdad, and Balad. We also examined what TTPs were being employed to combat the insurgents.

We came back to Al Udeid with some clear observations about defending air bases in Iraq: first, the joint forces had no common

understanding of exactly what ABD meant. To some units, ABD meant frequent patrolling in the areas surrounding the air base, while to others it simply meant manning guard posts on the perimeter. Second, responsibility for ABD was not precisely defined; this ambiguity left gaps in the defense. Third, ABD operations were primarily focused on the base perimeter, and SF were mostly confined to guarding flight lines, ECPs, and tent cities. Fourth, the Army did not necessarily use military police or infantry to conduct base defense operations; it used Soldiers from all specialties and levels of training. Fifth, although the Army gave SF permission to patrol outside the base perimeter at several bases, we found that these patrols were designed to show a presence versus being intelligence driven and deliberately focused on finding and eliminating the enemy.

During this time, insurgents continued to attack air bases with impunity, and Balad AB was by far the target of the most attacks. Between 1 January and 30 December 2004, Balad was attacked by indirect fire 359 times. These attacks killed 14 US troops, wounded another 25, damaged or destroyed four helicopters, and damaged an F-16 fighter aircraft. Mortar fire also damaged numerous ground vehicles, sleeping areas, and dining facilities.⁵ General Buchanan's fears of a mortar hitting a C-17 medevac were well founded. It was only a matter of time before one of these attacks killed a large number of troops or destroyed airlift aircraft on the ramp. General Buchanan was not satisfied with the Army's efforts to stem these attacks (see fig. 4.1).

It was not that the Army wasn't concerned about the insurgent attacks on Balad; it was. However, Balad AB was only one of many important sites in a huge AO owned by the First Infantry Division, Second Brigade Combat Team. The 2 BCT AO stretched from Tikrit to Baghdad, and it was taking casualties regularly. It did not have the manpower to focus operations specifically on defeating the standoff threat around any base or site including Balad AB. TF Tacoma attached to the 2 BCT as the defense force for Balad. TF Tacoma was made up of elements from the 81st Brigade Combat Team (81 BCT) of the Washington State National Guard. The 81st was also stretched thin and had other tasks besides base defense, such as manning guard towers and monitoring traffic. TF Tacoma was not focused on stopping "Rocket Man" to the level expected by General Buchanan. Part of this outlook was due to a lack of what is now referred to as "air-mindedness" or an Airman's unique appreciation for the total capa-

bility of the air base as a weapons system. We found this to be true around other bases too; some sister service units just didn't appreciate the impact a burning C-17 would have on the mission or the information war. It was clear that if we wanted the air base "weapons system" defended to the standard the USAF expected, we would have to bring something more to the fight.

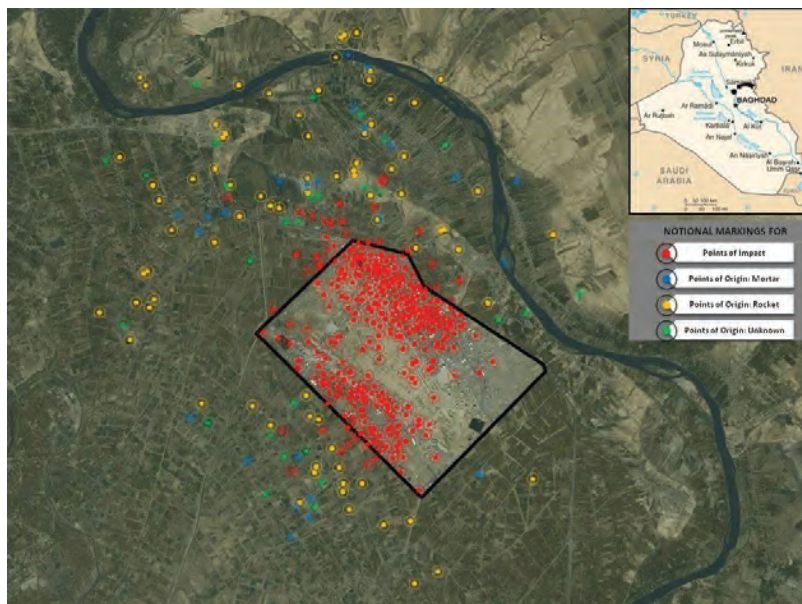


Figure 4.1. Balad AB notional points of origin / points of impact map prior to TF 1041. (Courtesy of Maj Gen Brad Spacy, USAF.)

Concepts of the Task Force

Concept of the Plan

General Spacy: In September 2004, I began developing a plan to use SF as an offensive ground element to fight OTW at Balad AB. Balad was chosen primarily because of the high number of enemy attacks; we wanted to help stop them. Another key factor in choosing Balad was the need to show impact. The best place to show impact was in an area with a lot of activity, and Balad was the center of a high level of insurgent activity. Showing impact was essential because this

strategy was going to be a first for SF, and we couldn't allow our Airmen to simply be added to an existing ground force. If SF were going to prove themselves to be a capable ground combat force, they would need to have their own ground, develop their own plans, and succeed or fail based on their actions; we needed SF to be accountable.

I wasn't interested in debating doctrine. There were dozens of papers analyzing doctrine—what it said, what it should say, and how it could be interpreted. That was a debate for the academics and staffs—we could do that later. I knew that if we got dragged into a doctrine debate, we'd never get anything done. Besides, the Army and Air Force commanders we talked to on the ground didn't care what doctrine said; they would take help from anyone willing to fight the insurgents.⁶

Col Glen E. Christensen, USAF, S-3, TF 1041, November 2004–March 2005: My participation in TF 1041 started at a picnic table in the chaplain's morale area of Camp Sather, BIAP. Colonel Spacy had just returned from travelling around Iraq trying to figure out how to stop Rocket Man. During our conversation, Colonel Spacy laid a small map on the table and outlined what would eventually become tactical area of responsibility (TAOR) Mitchell. He asked what I thought about the idea of actually "owning ground" for the express purpose of fighting insurgents outside of Balad AB. I told Colonel Spacy that I fully supported the idea as my previous deployment to Tallil and current deployment to BIAP had highlighted a notable lack of forces dedicated to fighting OTW in defense of the air base. Further, I told him that I concurred with his idea to use a squadron from the 820th Security Forces Group (SFG) as the foundation for the task force. Admittedly, as the commander of the 824th Security Forces Squadron (SFS), I was a bit biased. I would argue, however, that putting some "science" behind my position were two factors: 820th squadrons were self-sustaining (i.e., the multi-specialty code [AFSC] nature of their organization) and—unlike AEF security forces—focused solely on ABD training while in garrison. The conversation ended on that note. My deployment with the 824th to BIAP also ended a short month and a half later. The next time I would see Colonel Spacy would be at Al Udeid as I waited with the rest of the 824th for our air transport back to Moody AFB, Georgia. Little did I know at the time, I would be back in about two months to join TF 1041.⁷

General Spacy: As we started building the plan, we immediately discovered significant shortfalls in available secure communications

and armored vehicles. Before we went any further, we ordered 70 sets of PRC-177 secure radios with vehicle mount options. These radios facilitated communication with the Army and subsequently would be critical in any ground operation. We also ordered armor kits for about 40 soft-skinned high-mobility multipurpose wheeled vehicles or HMMWVs. There was a worldwide shortage of up-armored HMMWVs (UAHMMWV), and we hoped to use the kits on our soft-skinned HMMWVs in-theater. We knew that the kits weren't ideal for combat patrolling as they left the underside of the HMMWV vulnerable, but there were no other options. We weren't sure how we would use the kits, but we wanted to have some capability moving our way. Even if we never got to conduct any new missions, the armor kits could be used to at least reduce risk somewhat at bases throughout the theater.



Courtesy of MSgt Joseph Pritchard, USAF

Captain Grimm and Colonel Spacy reviewing the original ODS draft plan, September 2004

I took a basic outline of the plan to Brig Gen “Stormin’” Norman Seip, USAF, the deputy CFACC. The “plan” was barely a sketch, and I briefed him from pen drawings in a steno notebook that Captain

Grimm and I put together. It was an aggressive approach that called for developing a task-force-style organization, deploying it to Balad AB, securing a TAOR from the Army, and conducting a 60-day combat operation starting on 1 January 2005—just a little over three months away.⁸

Lt Gen Norman Seip, USAF, retired, deputy CFACC, May 2004–June 2005: Despite the minimal information and basic presentation, I liked Brad's concept. I was also tired of the mortar and rocket attacks and wanted the USAF to help out. It was an aggressive timeline, and I didn't know how we would pull this off—but I knew it was the right thing to do. I wanted the boss to see the plan and promised to help wherever I could. I told Brad to add some details and be ready to brief General Buchanan when he returned.⁹

General Spacy: In the following days we evolved our sketches into basic PowerPoint slides, but there wasn't much information—the plan was still little more than an idea. There were just a few slides; one slide outlined the basic mission to kill or capture insurgents attacking Balad. Another showed a map of Balad and the surrounding areas with the number of indirect fire attacks marked on it and TAOR Mitchell superimposed (fig. 4.2). This map was important because it visually captured the number of attacks and highlighted General Buchanan's fear about a soft target hit like a C-17 air evac. The TAOR we wanted to own outside the base perimeter of Balad was named TAOR Mitchell after Brig Gen Billy Mitchell because his historically bold, innovative approach to war fighting was inspirational to us.

The proposed TAOR was approximately 6 kilometers (km) deep and 10 km wide, extending from Balad AB to the Tigris River. TAOR Mitchell encompassed the majority of enemy activity in the area. The last slide pitched it as a 60-day operation using a squadron of the 820 SFG as the basis for a task force to execute the mission. I would have liked the operation to be longer than 60 days, but I knew that SF would have to prove they were capable before we would be given a permanent OTW mission. I didn't like this, but it was a reality at the time.

The plan was thin on details. We didn't know if we could get the 820th, if we could get enough heavy weapons, where we were going to get the required armor capability, and if the PRC-117s would arrive in time. We didn't even know how much other equipment we might need. Virtually every aspect of this proposal involved a lot of

guesswork and risk, and I was worried we'd never get the support. Then another tragedy struck.

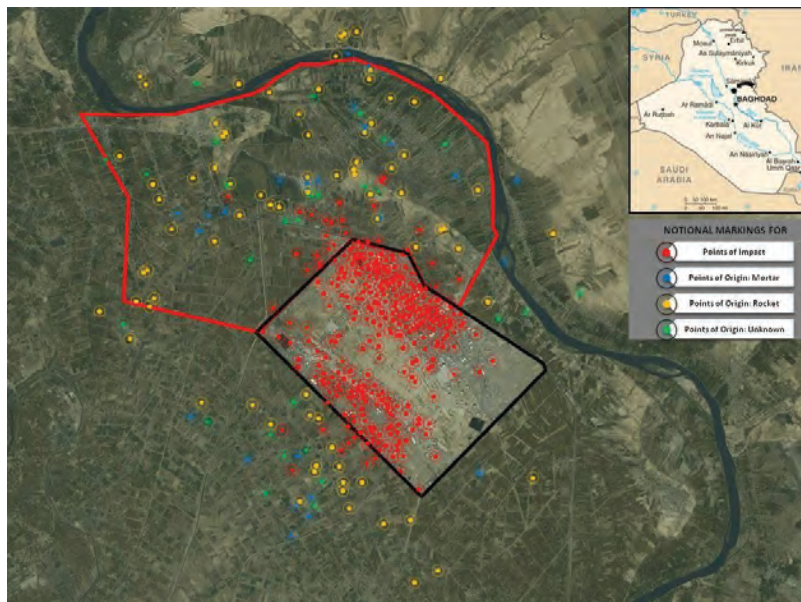


Figure 4.2. Balad AB notional points of origin/points of impact map with proposed TAOR. (Courtesy of Maj Gen Brad Spacy, USAF.)

On 11 September 2004, SrA Brian Kolfage from SF was severely injured when a 107 millimeter (mm) rocket exploded in the Balad AB tent city. He lost his right arm and both legs. When General Buchanan returned to the combined air operations center (CAOC) shortly afterward, he called the staff together. I had not seen him since late July. He barely sat down when he looked directly at me and said, “What are you going to do to stop the attacks on Balad?” The Airman Kolfage tragedy seemed to be a driving force to his comments, and he clearly wanted solutions. Before I had time to respond, General Seip grabbed his arm and said, “Boss, he’s got a plan to brief you on after the meeting.”¹⁰ General Buchanan just glared, but it seemed to be a turning point.¹¹

General Buchanan: CENTAF had experienced casualties before, but most had occurred OTW and typically while in contact with the enemy or his weapon of choice, improvised explosive devices. The

attack on Airman Kolfage highlighted the fact that our air bases were no longer (if they ever were) safe havens. The attack proved that just being “inside the wire” did not mean we were any safer than being outside. It had a profound impact on base personnel. That evening we found more than a few personnel who had moved into a hardened aircraft shelter to await the next attack. We couldn’t let that stand. We were American Airmen, and we were there to fight an ugly enemy who knew no rules or bounds. We weren’t going to defeat him by hiding in a HAS. We had to recognize that this was war, risks are inherent in war, and we would only defeat the enemy by taking the fight to him. Brig Gen Blair Hansen, USAF, the 332 AEW commander, ordered everyone back to our normal billeting area, and we reset the force. In many ways it was a turning point for those stationed at Balad.

Colonel Spacy had always advocated having SF Airmen OTW. I understood his view and loved his warrior spirit but was rightfully concerned that the USAF did not have the force size to cover both the inside and outside the wire missions. Additionally, our Air Force had just come off 12 years of fighting Operation Southern Watch on the heels of Operation Desert Storm. At the highest levels of our Air Force, there were those who were adamant that such a long-term commitment would not happen again and remained against any increase in mission or force size for just about any reason. While I believed in Colonel Spacy’s concept and wanted to see him succeed, I knew there were many who did not.¹²

General Spacy: General Buchanan really wanted to do something to stop the insurgent attacks on air bases. Despite the lack of detail, he agreed to the idea of a short-term SF OTW operation but wanted Air Staff buy-in. He directed me to go to the Pentagon to brief the Headquarters Air Force (HAF) SF staff; he wanted to know what SF thought about our plan. I resisted going because I knew that the SF staff wouldn’t like it. I really just wanted to build our plan in secret and not tell anyone until it was too late for them to intervene. This plan was full of risk, and the SF staff at the time was a risk-averse group. I knew if they found out about the plan, they would try and stop it.

General Buchanan still thought HAF input was needed, so he told me to go ahead and brief the staff and report back. I briefed the senior HAF SF staff on the ODS concept in mid-September; as expected, they were quick to nonconcur. The staff pressed me for details we didn’t have yet, challenged the ability of SF to fight OTW, and even

called the proposal reckless. They used every unknown detail as rationale against an OTW mission. They seemed to be focused on maintaining “traditional” base security and establishing supportable routine deployment schedules with as little disruption to home station activity as possible.

I had another mission on my trip to the Pentagon: finding a potential commander for the operation. I knew that only a couple of SF officers were capable of leading this effort, and the best one was Lt Col Chris Bargery. Colonel Bargery was on the Joint Staff, and it was going to be tough to get him released for this. The Joint Staff is demanding, and it doesn't often release officers for duty not directly related to their job on the staff. I went to see Chris's boss and good friend, Col Daryl Roberson, USAF. Colonel Roberson was a war fighter and immediately supportive, but he recognized that it would take general officer involvement to make the request happen. He told me that he would take it up his chain and see what he could do. When he came back, he said that it would take a personal phone call from General Buchanan to Lt Gen James Conway, USMC, Joint Staff director of operations (J-3), to get Colonel Bargery released. For all the above reasons, I was worried the whole thing would fall apart before it got going.¹³

General Buchanan: I was not surprised with his findings when Colonel Spacy reported back after his visit to the HAF SF staff. That said, the HAF SF staff would not be making the final decision. Regardless, we needed them to be aware of the plan so we knew their objections. With regard to obtaining Colonel Bargery's release, calling General Conway was easy. He had commanded the Marines who invaded north into Iraq as part of Operation Iraqi Freedom, so we knew each other from our time in-theater. Even better, General Conway understood the environment and the tactical problem we were trying to solve.¹⁴

General Spacy: We were excited that General Buchanan gave us approval to continue the planning, but we still had a huge mountain to climb. General Buchanan approved the plan on 7 October 2004 with a start date of 1 January 2005. We hadn't moved a single Airman or piece of equipment, so this gave us just over two months to put it all together. Although this timeline was extremely aggressive, we chose the 1 January start date for good reason; first, we wanted to help reduce the attacks on Balad AB as soon as possible. The enemy was getting better at targeting, and Airman Kolfage was still fresh in

our minds. Additionally, there were plans to expand the airlift ramp at Balad to accommodate more aircraft. An expanded ramp would make an even more lucrative target. Second, we knew that if we didn't move fast, naysayers in the Pentagon would have too much time to marshal resistance. By starting in January, we benefited from the US holiday season since many of those opposed to the plan would be on leave. Third, we decided to use a squadron from the 820 SFG based out of Moody as the core of the task force, and the timing worked best for a rotation.

The above notwithstanding, there was an added wrinkle. General Buchanan approved the plan with the caveat that we keep it low key. The Air Combat Command staff did not support the plan. General Buchanan was working the issues at his level but didn't know when he would get formal buy-in, so we had to do all of our planning without "going public" until after he gave us the go-ahead. That meant we couldn't move anything before then; this was a challenge.¹⁵

General Buchanan: With the memory of 12 years of Operation Southern Watch deployments still fresh, ACC and in particular Gen Hal Hornburg, USAF—our primary force provider and my stateside boss—were adamant that we minimize our force size and redeploy assets as soon as they were not needed. General Hornburg was not open to any expanded mission and was quick to remind me that following Desert Storm, the Air Force was left behind in-theater for 12 years. He did not want a repeat and made my job tough as the mission in Iraq evolved and expanded. It was a constant fight to maintain our force levels, much less build them up when requirements changed. As it was, to accommodate mission requirements, CENTAF routinely had to work within the system to plus up combat assets in support of planned operations. We did this by extending overlap periods as units swapped out, thereby giving us twice the combat power for a short period of time. I knew that General Hornburg would never support the plus-up needed to execute ODS. As it turned out, General Hornburg retired before we executed TF 1041.¹⁶

Concept of the Organization

General Spacy: We literally built the operation on the fly as quietly as we could. We'd figured the mission called for a squadron-sized unit of about 200–250 organized as a cross-functional TF. We quickly discarded using SF from the AEF rotation. First, as mentioned above,

worldwide SF manning was at critical levels, and it would be tough to get additional forces allocated for this operation—especially since HAF SF would not support it. The second main reason was the level of training. It wasn't that regular SF didn't have the equipment and basic combat skills; they certainly did. All SF Airmen receive quality combat skills training in their initial qualification schools and during spin-up for deployment. However, SF normally don't deploy as squadron-sized units; they deploy in smaller unit type code (UTC) packages such as squad-sized (13-person) elements, headquarters teams, heavy-weapons teams, or even as individuals. These teams weren't trained together and normally didn't even meet each other before arriving at the deployed location. This approach worked okay for routine base security operations inside the wire at most bases but wouldn't work for the high level of combat we anticipated.

The reasons highlighted above outline why we decided to use a squadron from the 820 SFG as the core of the task force. Additionally, the group was specifically designed for this kind of operation. The 820 SFG was made up of three SF squadrons organized, trained, and equipped for ABD operations: the 822 SFS, the 823 SFS, and the 824 SFS. These squadrons trained and deployed together continuously. They did not have a home station mission other than training and preparing for the next deployment. They also came as a composite force with many inherent capabilities like combat arms training and maintenance specialists, intelligence NCOs and officers, Air Force Office of Special Investigations (AFOSI) special agents, military working dog (MWD) teams, vehicle maintenance, ground/satellite communications, supply specialists, physician's assistant, and independent duty medical technicians. An added benefit of using the 820th vice AEF SF was that the 820th reported to the Ninth Air Force commander, General Buchanan, dual-hatted as the CFACC; in short, we could use those forces without HAF approval.

The next key decision was which of the squadrons from the 820 SFG to use for the mission; they would all want it. There were actually only two options available: use either the 823 or 822 SFS. We couldn't use the 824th as it had just returned from Baghdad and was in reconstitution mode. The 823rd was already at Kirkuk providing base security. It had arrived in September for a 120-day rotation and was due to rotate home on or about 1 January. The 822nd was back at Moody in training mode preparing to replace it. We ultimately chose the 823rd mainly to capitalize on its experience in-theater. It also had an

innovative intelligence officer named Capt Armand “Beaux” Lyons who really understood the insurgent fight; he would become critical to this effort.

To augment the 823rd, we added a bunch of extra capability: six 50-caliber machine gun teams, five MK-19 automatic grenade launcher teams, five close precision engagement teams (brand new capability for SF), additional MWD teams, and additional headquarters personnel. There was still a lot of guesswork involved, and we weren’t sure how all these components would fit together—but the teams would bring 72 additional Airmen to the fight. It wasn’t the best situation, but we felt the extra firepower and capability would be required.

As we planned through October and November, it became clear we would need to name the operation. After much discussion, we settled on the operation name Desert Safeside and TF 1041 as the name for the task force itself. Both were designed to attach the effort to the Vietnam security police legacy. As a sidenote, though the TF is named 1041, we were never able to get Air Force administrators to buy off on it. They argued that the Air Force had no organizational structure called a “task force.” Moreover, USAF instructions are specific about how units with support specialty codes are named and numbered. Subsequently, although most commonly referred to as TF 1041, history recorded the official unit designator as Detachment 1, 332nd Air Expeditionary Wing.¹⁷

Lt Col Armand “Beaux” Lyons, USAF, S-2, TF 1041, November 2004–March 2005: Intelligence is about presenting opportunities for a commander to gain advantage over an adversary. While it includes boilerplate elements of the operational environment—terrain, enemy forces, weather, and human factors—the critical element to identify advantage is accurate appraisal of enemy force behavior in that environment. Templating that behavior provides a spatial context to identify weak points and decisions for friendly advantage. As the senior intelligence officer for ODS, my challenge was to identify opportunities for friendly advantage.

In fall 2004, my home unit, the 823 SFS, deployed en masse in a force rotation to northern Iraq, providing a headquarters and the bulk of USAF SF to become the 556th Expeditionary Security Forces Squadron defending Kirkuk AB, just west of the city of Kirkuk. We joined a top-notch crew of USAF personnel from various locations, harnessing the total force (active duty, reserves, and Air National

Guard) to assume a robust defense along the perimeter extending into rural areas approximately 10 km north and west of the airfield. Organized in three perimeter defense sectors with a quick reaction mobile defense, the structure was not unlike other locations in-theater. Kirkuk, however, also used an aggressive, constant Air Force ground presence beyond the perimeter to mitigate threats to friendly aircraft.

The 823rd trained in many disciplines that could specifically be used for offensive operations to defend against ground threats against friendly air operations; however, the unit did not know how to orchestrate those capabilities into a cohesive plan. Training comprised basic ground combat skills such as patrolling and conducting military operations in urban terrain, paired with more advanced skills for select personnel including designated marksman, airborne, air assault, pathfinder, and US Army Ranger training. Threat training detailing enemy operations and countertactics development augmented the 823rd Airman's skill set to achieve what could be described as a bachelor's-degree-level capacity for ground operations in Iraq. Despite prowess at the individual level, the headquarters was severely inexperienced in combat operations—comparable to a junior-high level at best. The crux of the headquarters problem was a failure to adopt a ground combat mind-set shifting from a reactive, law enforcement approach to a more offensive ground combat C2 focus. The 823rd commander attempted to reorient the staff toward ground combat but not without considerable friction, both inside and outside his organization.

While unrelated to this situation, both the operations officer and the operations superintendent were relieved the initial week of the deployment, severely exacerbating problems. Leaders in the 823rd, particularly senior noncommissioned officers, were highly motivated and firmly attached to the law enforcement paradigm and saw no advantage to total force integration. They lacked capacity to visualize the command and control necessary to plan and execute ground combat operations. In fact, with an honest sense of pride, some actively refused and even undermined the necessary paradigm shift. Thus, despite well-trained and well-equipped troops, the headquarters was in chaos.

The saving grace at Kirkuk was total force integration and resilient Airmen from across the Air Force, including the 823rd. Total force experience ranged from the practicality of recent high school gradu-

ates to the wisdom of former Marine infantry NCOs who had transferred to the Air Force. The difference in capacity between the 823rd and total force troops was striking. Even a cursory look by an experienced eye could see that the definitive, multitiered mobile defense implemented by the total force Airmen sharply contrasted with the static and vulnerable defense implemented by inexperienced 823rd leadership. While the total force element was ready for ground combat, the 823 SFS members were positioned as well-armed night watchmen—which was ironic as the roles should have been reversed.

The 556 ESFS maneuver element was far better organized and led, the product of an outstanding staff NCO who deployed with the 823rd advance team. Although notably junior to others, he was perhaps the most combat minded on the operations staff. He became familiar with the cooperation and coordination necessary to conduct operations outside the air base, alongside Army units. His capacity for skillful cooperation was second only to his ability to perceive the battlefield in a larger context, including the realization that the lives of his Airmen relied on his ability to employ them to best effect. He harnessed every element of the staff, implementing additional standards for training, communication, mission planning, execution, and postmission recovery. He also displayed wisdom in deliberately integrating the total force in patrol operations in contrast to—and against the advice of—those senior to him. Perhaps a unique element of destiny, his efforts laid the groundwork for what would become the baseline for the tactical implementation of ODS.¹⁸

The Concepts in Motion

General Spacy: General Buchanan got approval to proceed with ODS on 15 November, and things finally started moving. Colonel Bargery arrived at Al Udeid on 16 November, and after he got a quick in-brief, we headed up to Balad. We had Thanksgiving dinner together in the Balad dining facility as we went over the mission requirements. We were just over a month from combat operations, and Colonel Bargery hadn't even met his troops. The 823rd was still at Kirkuk, and its replacements were still in the States just beginning to move. Colonel Bargery stayed only a couple of days before he headed to Kirkuk to build Task Force 1041.

Command and control for ODS was a sensitive subject. The 2 BCT was the formal battlespace owner for all the ground around Balad

AB. We'd secured TAOR Mitchell from Army colonel Randy Dragon, the 2 BCT commander, but doing so came with a caveat. The TAOR would belong to TF 1041, but Colonel Dragon wanted to retain tactical control (TACON) over the task force. This proviso almost ended the operation before it started.

TACON meant that Colonel Dragon could do just about anything he wanted with TF 1041—move it or even reassign it to other duties with little coordination; he all but “owned” the unit. General Buchanan was adamant that the USAF retain TACON for just this reason; he didn't want the Army moving TF 1041 or giving it some other less critical duties. Colonel Dragon held almost all of the cards, and he had a valid point. He was responsible for the entire AO surrounding TAOR Mitchell, and even though TF 1041 was using the ground, Colonel Dragon was still responsible for TAOR Mitchell itself. If something happened there, he was the accountable commander and therefore insisted he have TACON over TF 1041. Both sides were intransigent.

Once again I was concerned that this impasse would derail the operation. I went to General Buchanan and argued that we could hammer out some kind of agreement clearly defining the TACON relationship. Colonel Dragon didn't really have any other intentions for TF 1041; it was a simple command relationship to him. General Buchanan grudgingly allowed Colonel Dragon to retain TACON of the TF with literally a handshake deal not to move or reassign it. Fortunately, General Buchanan's concern for protecting Balad AB overruled his concern about the TACON agreement. No one was really happy with this relationship, but it was the best we were going to get. As it was, the handshake agreement almost fell apart at the eleventh hour.¹⁹

Colonel Christensen: While Colonel Spacy and the CENTAF FP team were working hard on putting the TF together, I was at home on my Baghdad postdeployment leave in Minnesota. During my leave, I received a call from the deputy group commander, Maj Mike Ross. He said that he'd received word from CENTAF, and he needed me to return to Moody. Not long after I returned, I was back on an airplane headed to Al Udeid; the order had been given to build TF 1041, and I would be a part of it. The original plan was for me to serve as the CFACC's liaison to TF 1041 once ODS commenced. In the meantime, I was directed to forward deploy to Balad to accept vehicles/equipment and to establish the TF's tactical operations center (TOC). Prior

to forward deploying, however, I worked with the CENTAF staff to identify the equipment from across the AOR that the TF would need to conduct operations. There were many challenges with first identifying and then finding the requisite equipment; the most notable challenge was obtaining vehicles. During mission analysis, we quickly identified two critical factors. First, we would need about 36 vehicles. Second, UAHMMWVs were our only real option as the aftermarket armor was not holding up well in Iraq. Given the level of intensity in Iraq, we simply had to find a way to obtain them. As we looked across the AOR, we quickly realized that UAHMMWVs were at a premium such that shipping them to Balad—originally identified as our biggest limiting factor—paled in comparison to actually finding them. I vividly remember walking around the war reserve materiel yard with Colonel Spacy late one night as we tried to find UAHMMWVs that perhaps the logistics folks had overlooked. I think the plan was to “borrow” some if we could find them—literally drive them away into the night. It was during this little adventure that I fully realized not only how much Colonel Spacy believed in the TF concept but also how much he refused to be deterred. Having been told that there was no way we would be able to come up with the number of UAHMMWVs locally, we expanded our search to the entire AOR.

At first, our search seemed an impossible task. It just didn't look like we were going to be able to find the vehicles we needed to successfully execute the mission. I couldn't believe it; after all this work, the operation might not happen due to a lack of armored vehicles. It was at this point that Colonel Spacy made it very clear that we'd come too far to give up now. I must admit that despite his determination, I remained skeptical. Fortunately, I was wrong; we just had to get creative. The CENTAF FP staff had ordered 40-plus armor kits for soft-skinned HMMWVs back in August. We got on the phones, in airplanes, and on e-mail looking for any combat units with “extra” UAHMMWVs we could trade for our armor-kitted HMMWVs. We ended up finding explosive ordnance disposal (EOD) and SOF units with some backup UAHMMWVs they were willing to trade. These war fighters understood combat requirements and really saved the day. Between the UAHMMWVs we already had in the theater and the ones we were able to trade, we came up with exactly 36 vehicles—just enough!

After serving with the CENTAF staff for about a week, I forward deployed to Balad AB the Monday before Thanksgiving and quickly

set about finding a suitable TOC location. After reviewing a number of options, I finally settled on an unoccupied hardened aircraft shelter. While the shelter itself lacked the facilities to serve as a TOC, it provided protection against indirect fire. Further, it had more than enough room for the tents and generators inherent to an 820th squadron logistics detail designed for use in more austere locations. My next order of business after establishing a TOC location was to acquire temporary working space so the TF commander and advanced echelon could begin planning operations prior to the arrival of the 823rd. With the TOC location and temporary workspace identified, I prepared for Colonel Spacy's arrival. In addition to checking on my progress, he had chosen to also personally escort the TF commander to Balad. Both were scheduled to arrive Thanksgiving Day.²⁰

Colonel Lyons: In November 2004, Colonel Spacy called select members of the 823rd to CENTAF Headquarters Forward at Al Udeid AB outside Doha, Qatar. We arrived via C-130 from Kirkuk with limited knowledge of the plan that we would help shape over the coming days. The plan was more a rough sketch, less than a skeleton, seeking scope and scale for the Air Force to assume offensive ground operations against enemy elements attacking Balad. The concept was well beyond the perceived Air Force role in joint operations. Air Force security forces were generally believed to be organized and equipped for provost and internal security. In fact, excepting bases in Korea, true ground combat skills were not widely perceived as core tasks for SF personnel. Many in the SF community were keen to keep it this way, and the few experienced individuals (e.g., counterinsurgency operations in the Philippines, ground-launched cruise missile security operations in Europe) were a fading alumni.²¹

Col Chris Barger, USAF, commander, TF 1041, November 2004–March 2005: I was working at the Pentagon in the Joint Staff, J-3, when I got a call from Colonel Spacy asking if I was a volunteer for a temporary duty (TDY) command in Iraq. Years earlier when we were both lieutenants, we attended the Ground Combat Leaders Course together at Fort Dix, New Jersey, and had kept loosely in touch over the years. He didn't discuss any details of the operation but explained that it would be personally and professionally risky for me. He also said that the Air Force's reputation would be on the line and that there would be dangerous work for the Airmen involved. I had returned from Iraq in March of that year after having served with a small joint team designed to keep the coalition sound through work-

ing directly with the coalition forces. That job had taken me to seven different FOBs, where I lived, worked, and sometimes saw action alongside Bulgarian, Thai, Polish, Mongolian, Spanish, El Salvadoran, Honduran, and Dominican Republican forces at their respective camps. I was not looking for a trip back to Iraq, but I felt a sense of duty toward the involved Airmen and the Air Force and wanted to do my part.

General Buchanan gained my release from the J-3, General Conway, but before I could go, he met with me privately to discuss the mission. General Conway said that he needed to look me in the eye to be sure I wasn't being forced into the TDY. He could not imagine an Air Force officer leading such an endeavor on the ground. He even offered to leave the TF intact but to provide a US Marine Corps officer to lead it. I assured him that many of the Air Force's "all-weather fighters" really do operate on the ground. I always respected General Conway and appreciated his concern. He became the 34th commandant of the Marine Corps.

I met Colonel Spacy at Al Udeid AB, where I spent three days becoming intimate with the CAOC capabilities, refining an initial operational plan, drafting the operational orders Headquarters CENTAF would eventually send to me at Balad AB, and meeting with General Buchanan and General Seip. The most memorable conversation occurred when General Buchanan asked what help I needed from him. I told him I would need his trust and support when TF 1041 Airmen were wounded, injured, or killed in action because we were going to Balad seeking to engage the enemy, and though we would work hard to avoid any casualties, we had to prepare for the worst. General Buchanan, General Seip, and Colonel Spacy were with us every step of the way. After the meeting, I left Al Udeid AB in Qatar for Kirkuk to meet the Airmen.²²

General Spacy: After Colonel Bargery finished explaining how he would handle casualties, we all sat there quietly for a few seconds before General Buchanan said, "Okay, let's do it. . . . We're going to call this Operation Brad Spacy's Career." I said, "I'm good with that." It had been a short, tough road, but security forces were going to be in the fight—at last!²³

Colonel Christensen: Late in the evening on Thanksgiving Day, I stood on the flight line and awaited the arrival of both Colonel Spacy and the TF commander who, by this point, had been identified as Lt Col Chris Bargery.

The moment I met Colonel Spacy and Colonel Bargery at the aircraft serves to this day to be a highlight in my Air Force career. From the moment I shook his hand, I could feel how much Colonel Bargery cared about his Airmen. I mean, who was I? I was just the guy selected to do some behind-the-scenes work, and yet Colonel Bargery made me feel like what I'd done to that point was critical to the success of the task force. After our initial introduction, Colonel Spacy, Colonel Bargery, and I made our way to one of Balad's many dining facilities for a late Thanksgiving dinner. During the dinner we discussed the status of preparations as well as initial thoughts with regard to the actual execution of the mission. Again, unbeknownst to me at the time, that dinner turned out to be an interview of sorts as after dinner Colonel Bargery asked Colonel Spacy to modify my role in the task force. As a result of their conversation, my role was subsequently changed such that I was no longer the CFACC's liaison officer (LNO) but instead the Task Force LNO to 2 BCT/1ID. What Colonel Bargery knew based on previous deployment experience, and I would eventually learn during TF 1041, was the vital role of an LNO in not only relaying information but also (and more importantly) representing a subordinate unit's plans to its higher headquarters (HHQ). That said, with my role as LNO not yet necessary, Colonel Bargery first tasked me with both developing the TF's organization and beginning the development of what would eventually become the TF's scheme of maneuver.

Organizationally, the 823rd's basic multifunctional USAF specialty code S-function (support) makeup served as the near-perfect model for TF 1041's unit structure. With this in mind, Colonel Bargery directed me to focus on flight-level organization. In a nutshell, he had envisioned a concept of execution, and he wanted me to focus on structuring the three 823rd flights to fit that concept. The result was two maneuver flights with a third assault flight. The idea was that the maneuver flights would serve to fix the enemy during engagements while the assault flight would then be used to engage and destroy enemy formations. We would eventually have to adjust this organizational methodology because while it was sound in theory, as in any situation, the enemy gets a vote; the enemy we would face simply didn't mass like we had anticipated. Subsequently, we had to reorganize into slightly smaller tactical units. These units would prove to be capable of engaging in day-to-day smaller scale squad-level operations while retaining the ability to merge together, with inherent of-

ficer and senior NCO leadership, to also conduct flight-level operations when required. This experience would serve as the first of many lessons to prove the Air Force adage that flexibility is the key to airpower. With our initial organizational efforts completed, we next turned our attention to developing the initial scheme of maneuver.

From a scheme of maneuver perspective, Colonel Bargery's initial guidance was to develop a concept in which TAOR Mitchell would be split into two subsectors. The idea was that the two maneuver flights would occupy the subsectors and operate to identify enemy operating locations. Once identified, the assault flight would then also engage to assist with defeating the enemy in detail. Again, while this plan was sound in theory, the enemy had a vote, and its vote did not end up supporting our initial concept of operation. Much like the organizational modifications, we would also adapt our unit-level tactics based on intelligence and associated enemy activity. For the time being, however, we felt we had laid the basic foundation for operations such that it was now time to focus on preparing for the arrival of the TF main body (e.g., the 823rd, augmentation forces from the 820th Group staff as well as the 824 SFS and those AEF forces needed to round out the task force).

The 823rd and augmentation forces arrived in the middle of December 2004. At about the same time, the TF's vehicles and equipment also arrived. The first order of business was to establish the various squadron areas. Inside the hardened aircraft shelters were the S-1 (Personnel and Administration), S-2 (Intelligence), and S-3 (Operations—the ops and TOC tents), the armory/weapons cleaning area, and the command section. The remaining S-functions (e.g., the S-4 [Logistics], S-6 [Communications], and Medical Division) were established immediately outside the HAS. The idea was to try and put as many of the high personnel traffic areas inside the HAS as possible. The S-4 and S-6 were placed outside the HAS to position them as close as possible to their assets/resources.

While able to handle any and all communications issues, the S-6's focus was vehicle communication. Unfortunately, while we received all the UAHMMWVs we requested, none of them came with communications equipment. Eventually the equipment arrived, but installing the kits inside the vehicles turned out to be no easy task. Thankfully, as with all 820th squadrons, the 823rd brought its own ground communications expertise. These squadron communications personnel were further augmented by the 820th Group's chief of

communications and the ranking ground communications senior NCO. The rather robust nature of our communications capability turned out to be a huge blessing. It became clear pretty early on that while our inherent capability was more than equal to the task of *maintaining* the vehicle communications equipment, given the complex nature of installation coupled with the relatively short timeline we had to get the vehicles fully mission capable (FMC), outside assistance would most certainly be necessary. USAF captain Sean Kern adeptly directed the installation, and when it became clear he'd outstripped his own capability, he reached out to an Army communications unit. Together, the Airmen and Soldiers were able to achieve communications FMC in relatively short order. While the combined team made it look easy, the keen observer could see the task was actually quite complicated.

At the same time the TF staff focused on setup and achieving FMC, the maneuver flights focused on training, rehearsing, and practicing precombat checks/inspections. The training phase brought to light a fundamental flaw that not only struck me in the moment but also would be something I would never forget. Specifically, it was obvious pretty early on that while flight personnel demonstrated a certain level of expertise, they were not yet ready for the robust nature inherent to offensive ground combat operations—especially at the flight level. This revelation was striking because the 823rd had been conducting outside-the-wire operations at the squad level during its previous four months at Kirkuk. Training performance highlighted the fact that we as security forces had not encountered the level of ground combat intensity we expected to experience during TF 1041. We also had to face the reality that despite war stories to the contrary, as a community, we'd never really trained for operations above the squad level. To confront these shortfalls, it became clear we'd have to train as extensively as time would permit on concepts such as fire and maneuver, team tactics, and team integration if we were going to meet Colonel Bargery's training intent as well as his intent as outlined in the initial CONOPS. Fortunately, we were able to effectively articulate our concerns to the Airmen so that they fully embraced the fact that they had work to do, despite their experiences at Kirkuk. As a direct result of their understanding, motivation, and dedication, we were able to take squads and flights that had performed admirably at the squad level in a lower intensity environment and turn them into an effective combat fighting force. It would eventually be ready to

tackle the challenges inherent in being the Air Force's first squadron-level battlespace-owning unit since at least Vietnam, if not ever.

Despite the short timeline, as the 1 January 2005 mission start date approached, the flight personnel made the transformation. During this training period, my role as the TF LNO to the brigade headquarters was again modified. Instead of serving as the liaison between the TF and the brigade, I was again reassigned but this time to serve as the TF S-3. Given that I had been a squadron commander for over a year at this point with two deployments under my belt, I thought I could easily make the transition. What I found as I evolved into the S-3 role, however, was that much like the SF I was serving with, I had never before faced the challenges I would face as an S-3 in charge of offensive ground-combat operations. Thankfully, with the support of tremendous flight and squad leadership; the help of a talented S-3 team; and the leadership, mentorship, and guidance of the most tactically proficient ground-combat commander I'd ever served with, I was able to adequately fill the role. Looking back, I'm somewhat amazed I pulled it off given where I was in my career from a training, education, and experience point of view. But somehow I did, and as ODS's D-Day approached, I did my best to ensure that the S-3 staff was as ready from a plans point of view as the flight-level Airmen were from a tactics point of view.²⁴

Eleventh-Hour Change of Mission

General Spacy: It was 2200L (local time) on 30 December 2004, less than two days before the start of Operation Desert Safeside. We had done all we could from the staff; it was now up to Colonel Bargery and the men and women of TF 1041. I was in my trailer in the CAOC compound at Al Udeid AB getting ready for bed when Brig Gen Blair Hansen, the 332 AEW commander at Balad AB, called. I was surprised to hear from him at this hour. He said, "Brad, you need to get up here right away. Randy is breaking the deal." Randy was Army colonel Randy Dragon, and the "deal" was the handshake deal about executing the TACON relationship he had made earlier with General Buchanan. Events on the ground in Mosul drove Colonel Dragon to consider moving TF 1041 from Balad to Mosul to help bolster the brigade's defenses there. This news was alarming, to say the least. We had worked so hard and overcome so many obstacles just to make

this operation happen, and now it might all go away just two days before it started—I was in shock, and I was mad.

I told General Hansen I would try and get on a C-130 in the morning but that I couldn't get to Balad that night. He told me to stand by, and then he hung up on me. I sat there on my bed trying to think of what I could do. After about 10 minutes, General Hansen called back and said that a C-17 was on the ramp with engines running—he told me to get on it. I couldn't believe it. I tried to call Sergeant Pritchard; we always travelled together for security, but I couldn't find him. So I grabbed my rucksack and headed to the flight line. Sure enough, a C-17 was parked in front of Base Operations with its engines running. I ran straight out to the plane and got on; I was the only passenger, and there was no cargo. The loadmaster took me up to the cockpit as the engines spooled up, and we started to move. The aircraft commander looked over his shoulder and said, "You must be someone important!" I didn't say anything back—I just let him think I was special.

I arrived at Balad at about 0200. General Hansen and Colonel Bargery met me at the plane. We all went over to General Hansen's office to get our argument together; Colonel Dragon was coming over at 0600. We discussed Colonel Bargery's plan, our agreement, and other details, but really it came down to a handshake. I was pretty fired up by the time Colonel Dragon showed up and was ready for a fight. He rolled into the conference room with four of his Soldiers. They were dirty and had full combat gear on—they were an impressive looking group. I said, "Randy, this is BS—we had an agreement!" He looked back and simply said, "Yea, you're right, I don't know what I was thinking. I won't mess with your guys." That was it. After a night of flurried activity prepping for a fight, Colonel Dragon didn't even argue. He just consented to stick with the agreement. It was anticlimactic; we almost wanted more of a fight. We talked for a few minutes, and then Colonel Dragon and his team left as suddenly as they had appeared. We were stunned. General Hansen had decided he wanted a photo of the task force before the operation began, so we all went over to the TF 1041 area and posed for the photo below. General Hansen and I left immediately after the photo and let Colonel Bargery focus on his troops—they had a combat operation to execute in less than 24 hours.



Courtesy of 332 AEW Public Affairs

Task Force 1041, 31 December 2004

I wanted to stay at Balad and be there for the next day's first combat patrols but knew I would just be in the way, so I went back over to the flight line and caught a C-130 back to Al Udeid. I found my guys, and we spent New Year's Eve under the "Bra" at Al Udeid. We drank our two beers, and I told them what had happened. We said a quiet prayer for TF 1041. We were exhausted. It had been a wild five months, and we couldn't wait for ODS to begin.

Concept of Intelligence Support for TF 1041

General Spacy: Prior to transitioning to the execution phase of TF 1041, there is one last critical part of the concept phase that merits consideration. Specifically, we knew that intelligence was going to be critical for ODS. To be successful at stopping attacks on Balad AB, TF 1041 would have to get inside the insurgent planning and decision cycle. I wanted to somehow use the intelligence collection and analytical power of the CAOC Intelligence, Surveillance, and Reconnaissance Division (ISR/D) to support ODS. We were using some of the ISR/D products for basic intelligence preparation of the battlespace (IPB), but we needed a more deliberate effort. We called this new look at intelligence "force protection intelligence" (FPI) and planned to use it throughout the theater to support base defense. Fortunately, Lt Col Roger "Ajax" Trueblood landed on my doorstep in November with no warning but ready to work. Ajax was an experienced intel officer with the creativity and innovation we needed—I assigned him to developing the ISR/D capabilities. Ajax would upset a few apple-carts in the process, but his work establishing an operational FPI network would be invaluable.²⁵

Lt Col Roger "Ajax" Trueblood, USAF, retired, FPI, Air Forces Central (Forward), November 2004–May 2005: By 2004 the insurgency in Iraq had grown into a lethal threat with many tentacles. Violence in most of the country was on the rise, and extremists were becoming adept at using a range of weapons and tactics, including IEDs, snipers, ambushes, assassinations, and kidnappings. One of their methods was to launch mortar and rocket attacks on coalition bases and installations. These indirect fire attacks were normally inaccurate and at first were little more than a nuisance. However, as their frequency mounted and assailants began using heavier and more accurate weapons, the IDF threat became more serious.

To the US Army, with Soldiers outside the wire every day dealing with IEDs and other threats, IDF seemed like a relatively minor problem. From the USAF perspective, however, IDF attacks on forward air bases in Iraq were a dangerous force-protection issue. At Balad AB, incoming rounds had become so common (with several attacks each day) that the base became known as "Mortaritaville."

By mid-2004 there were some coordinated efforts to deter and disrupt the IDF threat at Anaconda/Balad, with surveillance assets scanning likely launch sites and counterbattery fire quickly directed against points of origin (POO) when an attack was detected. Points of impact (POI) were photographed and analyzed to determine the round fired and direction of attack. Still, rounds continued to fall daily on the base. Most worrisome were the impacts of 120 mm mortar shells and 122 mm rockets.

Setting Up FPI and Analyzing a "Wicked Problem"

In November of 2004 I arrived at Al Udeid AB in Qatar, assigned to the CENTAF director of force protection to be his chief of FPI. This job certainly wasn't normal for a lieutenant colonel Air Force Reserve intelligence officer, but it turned out that much of my past experience (tracking guerrilla forces in Central America early in my USAF career and later analyzing weapons smuggling and arms trade for a national agency) was directly applicable.

The first time I met Colonel Spacy, he launched right in to brief me in-depth on the plan for ODS and talked about how important intelligence would be for its success. He wanted me to leverage as much "intel power" as possible to support TF 1041 and to help figure out how to reduce the IDF threat against Balad AB. He was passionate

about the mission, and it was clear he understood how intelligence could drive successful operations.

The other charter he gave me was to work with the SF squadron intelligence sections, or S-2s, deployed to all the forward air bases across the CENTCOM AO. Filling most of those positions were young security force NCOs or Airmen—completely new to the world of intel—with just a few trained USAF intelligence personnel augmenting them.

Beyond gearing up the intel system to support the operation at Balad, we were working hard to forge a first-ever FPI network across the theater. Both were groundbreaking initiatives, and both necessarily ran into bureaucratic roadblocks and ruffled some feathers.

Early on, I decided to embed on the main floor of the CAOC's ISRD rather than work in the FP trailer or a separate office. This positioning allowed the best access to information, communications, and people whom I could turn to for help—which turned out to be highly valuable. But it also emphasized a “square peg in a round hole” problem.

My orders assigned me to the special staff reporting to Colonel Spacy—not to the A-2 or ISRD chief—causing significant friction. Moreover, my role in advancing the FPI cause was not readily understood or appreciated by ISRD leadership. Frequently, I had to overcome resistance to get access to necessary data or wrangle my way into key meetings. My efforts necessarily put me into heated debates with the A-2, ISRD chief, OSI, and others, and some of that heat transmitted up to Colonel Spacy. But it was clear to me that the troops of TF 1041 needed all the intel support they could get to succeed in their mission and survive in a dangerous place.

Almost immediately after checking in, I began trying to understand the “wicked problem” of the IDF attacks. From an analytic perspective, it posed many tough intel questions. Who were the perpetrators of the attacks? Were there specific insurgent cells dedicated to firing mortars and rockets? Were they trying to hit certain targets? What was their objective? Did they have operational patterns we could exploit? Although there was much reporting on the daily attacks on Balad AB and other installations across Iraq, not much real analysis had been done to answer the deeper questions.

Fighting for Collection Priority and Platforms

Working the CAOC system to submit collection requirements and arrange for ISR coverage was a distinct challenge. As per doctrine, the ISRD's collection management function was set up to prioritize and arbitrate among multiple requests for ISR support from across the CENTCOM AOR, normally coming in from corps level or higher. It was completely nonstandard for a tactical-level conventional unit to submit collection requests directly to the ISRD, so I had to pull some bureaucratic jujitsu to submit ISR requirements for TF 1041.

Given the high interest in the operation from the CENTAF commander and USAF leadership, I argued strongly that ISR requirements for TF 1041 should be bumped up a few notches in priority. That request met with mixed success. The ISRD collection manager was an RAF major who was very thorough and knew I was pushing at the edges of standard operating procedures. He was sympathetic with the mission and understood the importance of protecting vulnerable air assets, so he gave a little—but only so far. In one collection priorities meeting, I pressed for bumping TF 1041 requirements up a level by calling it a counterterrorism mission. The ISRD deputy shot back, “You’re just playing semantics,” but I persisted, and in the end, the collection manager gave the task force a higher priority on his requirements matrix.

Sometime in November I caught a C-130 to Balad AB, mainly to see what kinds of intel support I could arrange with organizations there on the ground. I found many promising possibilities and gathered contact information. But I was struck that there was really no central coordinating intel hub at Balad, and most organizations had priorities other than countering the IDF threat. The Army's intel structure at Balad was highly fragmented.

We did make an encouraging connection with the officer in charge of the USAF Predator launch and recovery unit. He was enthusiastic about providing ad hoc full-motion video (FMV) coverage for TF 1041 as Predators returned to Balad from missions and had “play-time” remaining. Having Balad-based Predators support on a noninterference basis would have provided around a dozen FMV missions each week. Apparently, though, USAF higher-ups back in CONUS quashed the initiative just before the operation began.

Just at that point, I got wind of a contractor-operated test program using several smaller Mako RPVs flying out of Balad. They

would have been a perfect platform to support TF 1041, and the program managers were trying to find an operational customer before they had to pack up their aircraft and leave Iraq. Unfortunately, the strings that needed pulling to keep the Makos flying for a couple more months reached all the way to DC and couldn't be yanked fast enough.

Project Angelfire

I was able to wrangle up concrete support in two areas. The small National Geospatial Agency (NGA) geospatial cell embedded in the ISRD was eager to help. Through it, we ordered several special imagery products—including a custom-made 3-D terrain map of the AO—that were provided to the TF. More importantly, I was able to establish a great working relationship with Mr. Joe DeAngelo, the NGA data scientist on TDY rotation. As I explained the TF mission and the challenge of analyzing the IDF threat around Balad, he proposed using ArcGIS to create a geospatial information system (GIS) to portray all the mortar/rocket POOs and POIs. Doing so would enable high-fidelity pattern analysis of the problem.

I made sure that he got the IDF incidents as far back as the data was reported and then worked closely with him to clarify information on weapons and enemy activity. Then, after the IDF data was entered, we began to add data layers for IEDs, weapons caches, direct fire attacks, and other incidents. What resulted was a multidimensional, multisource, geospatial picture of insurgent activity around Balad AB that could be sliced and diced chronologically and in various ways to better understand what the enemy was doing.

We called it Project Angelfire, and once word spread, it became a high-interest project. For several weeks, general officers and their civilian equivalents dropped by to see Angelfire's multilayered, animated display and get briefed on its implications. In 2004 the art of using geospatial intelligence in a counterinsurgency environment was still being developed by the NGA and others. While Angelfire was not entirely unique (special mission units were already using these methods for pattern analysis), it was new to the CAOC and was certainly the first purpose-built GIS to support USAF SF or to analyze IDF patterns.

A few weeks before ODS began, we managed to deliver an NGA-built computer, with Project Angelfire installed, to Balad for the use

of TF 1041. The original GIS stayed in the ISRD, where the NGA cell and I continued to use it to reveal interesting patterns. For example, using Angelfire, it became obvious that many of the IDF attacks on Balad were originating along the irrigation canals that stemmed from the river and crisscrossed the fields around the villages in TAOR Mitchell. This data indicated that insurgents were using the thick foliage to conceal caches and launch points and possibly to move in weapons and munitions by small boat. Later, that theory proved to be correct.²⁶

Additional Considerations

Colonel Lyons: From an intelligence perspective, one key aspect of TAOR Mitchell that has not yet been discussed is that the area became uncharacteristically hostile in early 2004 when the villages were “PUCked” en masse. The practice of processing potential hostiles as “persons under control” was awkward and inaccurate. It essentially involved processing a large group of people to discern which persons might be enemy operatives. Usually, a PUC event took place in a building, perhaps a street, or a small section of a neighborhood. This particular PUCking was atypically large—a collection of three or four villages in an area greater than 20 square km. Specifically, friendly troops surrounded the area with concertina wire and established roadblocks, and all males 16 and over were PUCked. They were then collectively processed as prisoners, though most were allowed to return home within 48 hours. This approach proved to be anything but productive. It not only failed to result in the capture of perpetrators but also undercut the mandate of the area sheikh to implement civil order and emasculated the local farmers.

The experience was enough to inspire a few hot-blooded and unemployed villagers, with the support and at the direction of the local sheikh, to initiate an area-denial campaign with IEDs. The coalition response was swift and unforgiving as houses near bomb emplacements were torched and surrounding farms burned. Villagers in nearby residences who were both unaware and uninterested in the bombings, including women at home alone, were also PUCked. The tactic failed to catch the perpetrators and instead incited further violence. Villagers reached out to enemy forces for support, offering them safe passage and logistical support in return for enhanced security against the coalition threat. IDF attacks against the air base in-

creased with villager support. From mid to late 2004, Army units in the battlespace directly north of Balad incurred heavy losses—as high as 30 percent—primarily from IEDs.

It is also important to understand that since 2003, tribal leaders in area farming villages were pressured to implement anticoalition action for political and humanitarian reasons. Their only interaction with the coalition was hostile, forging their resolve to support and participate in anticoalition activities. The villagers perceived coalition forces as irrational and unjustifiably hostile because tactical implementation was not centered on effective communication. Civil affairs operations were limited and awkward. As one example, a coalition civil affairs team built a school far from the villages on government land without the knowledge or buy-in of the villagers. Though almost a year had passed since breaking ground, the “school” was an empty shell of concrete, wholly unoccupied. The villagers referred to it as the “American building,” and they believed that since it was on government land, it was for tactical military use. They naturally avoided the premises for fear of arrest or worse.

The chasm of misunderstanding between the coalition and the villagers was immense. The mechanism to correct this gap—Arabic- and English-speaking interpreters—was rare. Coalition units operating in the villages north of the base selected a local interpreter, young and inexperienced with little understanding or interest in coalition objectives. A small and weasel-like figure with little local importance, the interpreter saw working with the coalition as an opportunity to enhance his personal prestige. Locals viewed coalition troops as overly aggressive against what they perceived as innocents; the interpreter, by association, could not provide an explanation and put his life at risk. The interpreter was not particularly well treated and, finding that he could not defend or explain coalition action, began to alter translation to vent his hostility and gain local prestige. Soon he was spouting themes about pork eaters and infidels, eventually including standard rhetoric that coalition forces were actually Israeli troops forcing him to work.

For their part, the villagers were perhaps more tolerant by Western standards. They easily forgave what they saw as accidental, such as stray rounds that killed children, car accidents, and wrongful arrest. They did not forgive, however, aggressive violations of what they perceived as rights of privacy and independence. In their view, violations were willful and preventable—continuing despite protest.²⁷

Execution

In war, the only sure defense is offense, and the efficiency of the offense depends on the warlike souls of those conducting it.

—Gen George S. Patton Jr.

Colonel Bargery: To this point in its history, the United States Air Force had never formed and fought an offensive ground campaign. On 1 January 2005, ODS officially commenced offensive ground-combat actions to enable safe air and ground operations in the joint operating area and on Balad AB/Logistics Support Area Anaconda.



Courtesy of TSgt Michael Buytas, USAF

TF 1041 mounted patrol on mission

Over the course of the deployment, TF 1041 quickly grew and matured into an extremely savvy hunter force: culturally aware, intelligence focused, and unpredictably effective. Brig Gen Blair Hansen described its impact over 60 days as “greater than similar six-month efforts.” At the end of 65 days of offensive actions, TF 1041 Airmen conducted over 500 combat patrols, to include 56 clandestinely inserted close precision engagement teams or armed reconnaissance missions, 26 direct action raids, and 131 time-sensitive hasty raids against anti-Iraqi forces (AIF). In addition, numerous other intelligence gathering, information operations, and relationship building patrols were executed. TF 1041’s operations resulted in the destruction of many organized AIF cells and the capture of 17 confirmed

enemy operatives, to include 10 HVTs. Additionally, regional logistics nodes and funding systems were uncovered along with eight large weapons caches.

From a command relationship perspective, the Army interpreted our TACON relationship in the true sense of the word. However, the USAF expected TF 1041 to safely integrate with 2 BCT forces yet be free to conduct its mission on the ground in the manner necessary to achieve the greatest impact for Balad AB. The TF 1041 staff presented its plan to the 332 AEW commander, HQ USCENTAF/FP, and CFACC. They accepted the plan. It was significantly different from the 2 BCT focus.

To have maximum impact in its allotted time, the TF sought to match its existing and available USAF capabilities to the problem at hand. Its aim was a system of intelligence-driven, targeted operations designed to eliminate hostile insurgent activity against the air base and influence the villages in the surrounding area to accept the base as an enduring fixture and regional asset. The USAF version of the TF 1041 mission was to capture or kill AIFs to ensure successful air operations and eliminate threats to forces on Balad AB. In the TF's capture/kill mission, primary importance was given to identifying local insurgents, foreign fighters, terrorist cells, bomb makers, AIF financiers, and organizers. A secondary mission was to identify, locate, and seize unauthorized weapons and ammunition caches to reduce AIF war-fighting capability. Finally, the TF sought to engage the local populace—both to dissuade those considering hostile action against the base and as a FP measure for TF forces. In all cases, predictive analysis and targeting would be extremely critical.²⁸

Comprehensive, Integrated Collection Plan

Colonel Lyons: TF 1041 designed an integrated collection strategy and tailored named areas of interest (NAI) to specific platforms with intent to maximize results. Each collection platform was tasked to provide specific information according to its capabilities, thus feeding the greater intelligence picture while developing actionable targets. Collector platforms included seven traditional platforms, human intelligence teams, nontraditional ISR, combat patrols, and organic sniper/observation/reconnaissance teams. Collection NAIs were overlaid on enemy templates for logistics and operations, generating ideal locations to observe, monitor, and collect against enemy activity.

Once NAIs were determined, these were matched with the commander's priority intelligence requirements (PIR) to determine the best collection opportunities. PIRs were subdivided into specific information requirements and essential elements of information for specific tasking. Assembled in a collection matrix, adjustments could be facilitated to ensure collection opportunities were met.

NAIs tailored to the platform and collection capabilities integrated with analysis of enemy templates produced positive results. Many enemy templates are available through conventional AOR intelligence sources, but local enemy templating derived through the IPB process and course of action (COA) analysis allowed for accurate predictive analysis.

IPB was centered on digital construction of the modified combined obstacle overlay (MCOO), including terrain, mobility, enemy profile, vegetation, canals, roads, and urban areas. In constructing the MCOO, the ArcGIS program was used with extensive support from the NGA representative at the ISRD. Digital construction allowed manipulation and modeling to include time and space, three-dimensional terrain, event frequencies, data types, and route selection. Local AIF historical and proven capabilities were factored in. Planners developed a doctrinal fighting template for the enemy—amending it with situational data, terrain, weather, most likely and dangerous AIF COAs, and so forth—and then analyzed it with a view toward constructing the TF planning cycle. The planning cycle included decision points and offered branches and sequels so alternative options were readily available for A-3/commander consideration. The commander's critical intelligence requirements for decision points were woven into patrol requirements and collections matrices, allowing tactical agility for ground leaders.

Regarding the intelligence cycle, TF 1041 followed each step—focusing most on the final two phases based on robust attention to the first two.

- Planning and direction: Incorporated commander's intent; included planning of data collection, conducting initial IPB (terrain, population, known targets, historic data), and determining centers of gravity.
- Collection: Used *all* available sources, tailored to the source capability targeted against the best collection vantage points for that source. Consistently debriefing patrols also constituted a

large portion of this effort—information reentered the cycle via these debriefs as patrol after action reports were analyzed and relevant information was redistributed into subsequent patrol intelligence prebriefs.

- Processing and exploitation: Built IPB data, assembled various intelligence disciplines into exploitable information, and coordinated with agencies for enemy TTP data.
- Analysis and production: Determined targets, modeled IPB, built charts and target packages, determined and built link analysis, developed blacklists, and built C2/ops/logistics networks.
- Dissemination: Shared information through target packages and mission folders, GIS products, “be on the lookout” (BOLO) books, blacklists, gridded reference graphics (GRG), link analysis, patrol briefs, and current intelligence and threat briefs.²⁹

From an intelligence perspective, information sharing was critical to mission success—as it is for any operation. Transparency between HHQs (Army and Air Force) and among lateral agencies was attempted via e-mail, chat, frequent meetings, telephone conversations, and web publishing. Most area agencies and counterintelligence (CI) entities were cooperative and forthright when sharing information. While TF 1041 tried to disclose intelligence to neighboring task forces, no official forum existed for the melding of linked analysis of insurgent cells. As well, those TFs did not share our TF’s focus on targeting and eliminating the AIF cellular structure. Task forces even had differing opinions as to the level of affiliation many locals had with the AIFs. HVT lists were not synchronized across TFs, with TF 1041 enjoying the most robust and comprehensive list by far.

Sharing of intelligence between TF 1041 and Headquarters CEN-TAF was hampered by TF 1041 A-2 staff deltas but improved steadily over the course of the mission. As the TF 1041 mission processes matured, a weekly intel report was forwarded to the headquarters. Cultural differences, struggles for primacy, and divergent priorities also hampered intelligence sharing between the TF 1041 A-2 and AFOSI CI nodes. It should be noted that with the relief in place of 2 BCT by 1 BCT, the new Army HHQ sponsored three seminars in which TF 1041 A-2 personnel trained other TFs to adopt its link analysis and targeting models.³⁰

The Operational Approach

Colonel Bargery: In analyzing the area's AIF forces, conclusions were drawn about how they might present themselves. They were expected to use hit-and-run techniques. As well, they would watch the TF and continuously change and adapt to its TTPs. Ambushes and traps would be set for first responders. To counter this patient, adaptive enemy, a "red-team" approach was woven into the fabric of TF 1041 planning, with the intent to maintain the initiative and dictate the tempo of operations.³¹ Great pains were taken not to set consistent patterns as the insurgents would surely seek to adapt to the TF TTPs. Instead, the TF hunter Airmen sought to change their TTPs before exhausting the TTPs' usefulness, even when they proved successful. The operations and intelligence fusion cell developed decision points for shifting to a new set of tactics, designed to keep the enemy off balance, and made recommendations as to which tactics to employ. TF 1041 briefs described the concept as "changing offenses in a football game from run to pass and changing offensive formations to disguise the intent." This concept was instilled not only to achieve a greater degree of operational success but also as a FP measure. AIF interrogations confirmed that these planning techniques were working.

Air-mindedness was also woven throughout the TF operational offensive scheme for protecting the expeditionary air base. RAF Regiment tactical doctrine defines it as "an approach, which shapes the conduct of operations and training to maximize the effectiveness of Air operations (and minimize fratricide and accidents)." Further, "it is based on a thorough understanding of how Air Power effects are delivered and results in the natural tailoring of actions to best support Air operations. It is therefore important that FP for Air operations is delivered by *Air Minded* force elements and individuals with doctrine, structures, and equipment to meet the task, supported by thorough training and experience in focusing on the delivery of Air Power" (emphasis in original).³² Through implementation of this concept, the task force maintained a focus on air operations and the needs of the USAF at the forefront of the ground campaign.

Another offensive strategy often employed was the double-tasking of patrol missions. In studying enemy COAs, the USAF made the assumption that all attacks—IED, IDE, ambush, or other—on friendly forces were designed to disrupt patrol activities, divert attention from

AIF activities such as arms movements, or provoke an overreaction in the local populace. As such, missions were often dual-tasked between stay-behind, quick reaction force elements and the nominated maneuver flight. If the originally tasked element was attacked en route to its mission, the QRF element could be dispatched to execute the previously tasked mission—an unexpected planning factor for the insurgents.

As mentioned, AIF *movement* was targeted, and USAF security forces are adept at mobile intercept operations. The following excerpt is from an early TF 1041 planning document addressing possible employment formulas for anticipated attacks:

Enemy (AIF):

IDF – buried mortars – mobile mortars – rockets on timer

Proactive Efforts—Use technology and covert patrols (ambush, sniper) to set up/monitor likely points for emplacement. Use all-source intel to determine perpetrators and detain them prior to acting.

Reactive Efforts—Must be able to react to detection of incoming rounds. [This] requires numerous patrols available in the sector. Move to cut off likely escape routes from [POOs] and capture or kill. Use technology (JLENS [Joint Land Attack Cruise Missile Defense Elevated Netted Sensor], Predator, FPASS [Force Protection Airborne Surveillance System], SIGINT [signals intelligence]) to assist with real-time information feeds. Use air support when available, but enemy usually does not act when air coverage is up.

Organizers/financiers and supporters – low profile – trained and connected – on the move

Proactive Efforts—Use all-source intel to determine identities/locations for these persons. Plan and execute directed patrols to capture or kill them. Anticipate conducting raids, snap vehicle checkpoints, cordon, and search.

Reactive Efforts—Be prepared to conduct all the above in a hasty fashion, when necessary, upon acquisition of actionable intel.

IED teams – work at night – remote detonated with lookouts – pressure plates

Address the same as IDF.

Small arms fire, ambush, and sniping

Primarily react to contact. Employ good security techniques to prevent losses. If engaged, look to move to contact and kill the attackers.

Criminals – kidnappers – extortionists

Address same as organizers, above.

Key to this illustration is that in responding to IDF, the teams plan to move not to investigate the point of origin but to key roadway choke points in an attempt to capture fleeing AIFs. Also of note is the emphasis on being ready to alter planned missions and redirect efforts to conduct hasty raids or other missions based on actionable intelligence. Such responsiveness would prove to be one of the most effective techniques for TF 1041.³³

Colonel Lyons: All task force planning was driven by intelligence, whether reconnaissance, combat patrols, or direct action missions. Intelligence input for mission planning was primarily derived from predictive analysis based on the MCOO and IPB modeling. When specific, credible intelligence was available, direct action missions were assembled.

TF 1041 A-2 personnel also routinely took part in operations, contributing greatly to the level of awareness and involvement of the headquarters staff. Furthermore, the A-2 personnel, well trained in tactics, were major contributors to operations on the ground. Consequently, communication and information cross flow between A-2 elements and operational flights/squads were very good. The case was not the same for communication between the A-2 and A-3 functions, critical to and hindering mission planning. As the TF was breaking new ground for Air Force operations, the internal TF organizational structure and familiar methodologies did not adequately support mission planning efforts for this new type of operation. Effective leaders in each section worked tirelessly to overcome this problem.³⁴

Colonel Christensen: Aside from the stark realization that—while prepared for lower-intensity ground-combat operations at the squad level—we were neither organized nor trained to perform higher-intensity operations above the squad level, I took away three basic S-3 lessons from TF 1041. The first of these was the concept of true intelligence-driven operational planning. We were extremely fortu-

nate in that we had a talented intelligence division. With the initial assistance of OSI agents and analysts, Captain Lyons and his staff identified the key terrain in TAOR Mitchell and pieced together a detailed link diagram tying together the key insurgents and their cells. As a direct result of their efforts, we were able to specifically target the personnel and resources critical to the insurgent's efforts against Balad.

The second lesson I learned centers on planning methods and processes. I've said many times since TF 1041 that I wish I knew then what I know now. As a graduate of the Command and General Staff College and School of Advanced Military Studies—both of which happened immediately *after* my time in TF 1041—I have a much better understanding and appreciation of concepts like the military decision-making process, the 96-hour planning cycle, and others. At the time, however, I didn't fully understand them. Fortunately, Colonel Bargery knew what he wanted from a commander's intent perspective and, more importantly, understood how to meet that intent through the plans process. In short, he explained three concepts that would prove critical to the task force's overall success: current operations (CuOps), future operations (FuOps) (and the relationship of the two), and the concept of named operations as well as its role in the planning process.

From a CuOps/FuOps perspective, I quickly learned that we needed not only to provide the maneuver flights with daily plans in the form of operation orders but also to have a forward-looking view with an eye to the future. In short, based on the commander's intent, FuOps focused on where were we going operationally while CuOps focused on what were we going to do today to get there. Again, Colonel Bargery knew what he wanted and how to explain it such that despite my lack of experience, he could guide me there. In essence, he described to me, in layman's terms, the concept of the 96-hour planning cycle. At the risk of oversimplifying it, FuOps planners approached their task by "walking the process backwards" and basically doing two things. First, they articulated the commander's intent into an end state of sorts. I say "of sorts" because it was a fluid target that would adjust based on what the S-2 was telling us about the impact of our efforts. Moreover, the end state was a rolling target in that it always stayed approximately 96 hours out.

Besides establishing a rolling end state, FuOps planners identified and initially planned "named operations." I must again admit, at first

I had no idea what that term meant. More importantly, I didn't understand the relevance of the concept to our Army leadership. What I soon learned was that a named operation served as a focal point for planning and resource allocation (e.g., intelligence collection, fire and logistics support, etc.). It also conferred a formal structure for presenting higher-headquarters commanders with a clear picture of our focus and level of effort. Together with the rolling end state, named operations afforded a formal, institutionalized process to ensure that as a division, we in the S-3 didn't become singularly focused on the immediate threat and/or crisis. That task was left to the CuOps planners.

Regarding CuOps, I learned two critical lessons. The first of these is that detail matters. Specifically, it is not enough to simply state that a certain maneuver unit (who) is going to a certain location (where) for a certain period of time (when). What must also be identified is the how (e.g., movement to contact) and why (e.g., to disrupt insurgent resupply efforts). Without these last two pieces of information, a combat patrol turns into nothing more than a ride through the countryside. As trite as that may sound, it has been my experience as a TF/S-3, base defense squadron (BDS) commander, and EBDG commander that such instances happen way too often—limiting our ability to be truly effective in the combat environment.

The second CuOps lesson learned was the need for flexibility. A single story best captures this lesson. Exactly four days after the national elections in January of 2005, we experienced TF 1041's most violent day from an IED perspective. Given the combat intensity in the days leading up to and on Election Day and our relative effectiveness during the entire period, to say we were surprised by the insurgents' ability to conduct such aggressive operations would be an understatement. I can't remember the exact number of IEDs coalition forces endured in our TAOR, but I do know the mounting losses were absolutely unacceptable. Greatly concerned with what was happening, Colonel Bargery approached me and asked what I planned to do about it. I responded by telling him that I didn't plan to adjust at all from the strategy in place. My exact words to him (and it makes me shudder even now to think about them) were, "We need to hold course with our current scheme of maneuver and not let the enemy inside our decision cycle." Colonel Bargery's response was direct. He simply stated, "Screw the decision cycle. I cannot and will not accept these kinds of losses among this task force or any other coalition

forces. I'm going to the brigade to explain to Colonel Dragon that we are doing everything we can to fix the problem. When I get back, you better be doing everything you can to fix the problem." Colonel Bargery was not only passionate about the fact that we could not allow the situation to continue—he was also right. Operational necessity must always preempt a doctrinally correct planning process.³⁵



Courtesy of TSgt Michael Buytas, USAF

TF 1041 Airmen conducting house-clearing operations

Colonel Bargery: Great effort was placed on profiling the seven villages north of Balad AB, each having a distinct character. Personalities in the villages were profiled with equal determination and in great detail. Criminal elements—to include hijackers and extortionists—were classified as hostile, along with AIFs, as the entities were often in league or indistinguishable. Link analysis, using Analyst's Notebook software, would serve to indicate alliances and cooperation among individual operational cells. A comprehensive HVT list of wanted persons was established, and over 180 detailed target packages were constructed.

In an effort much analogous to behavioral influences analysis (BIA), actor classifications in the seven-village region outside Balad AB were examined in-depth. We wanted to understand *who* the adversaries were in terms of motivations and behavioral history, *why* they would choose to oppose us, and finally, *how likely* they were to

select a particular hostile COA against the air base. Though this effort was accomplished at a very tactical level, the BIA themes translate across several stratified echelons. Additionally, personalities were targeted not only for elimination or a hard kill but also for soft kills for intelligence gathering and, still others, for influence operations to gain accessibility for information operations and collection.

A predictive analysis methodology was used to build insurgent target data. For the capture/kill mission, the enemy's center of gravity was determined to be his movement, with local civil support playing the role of a critical decisive point to enable enemy actions. Intensive terrain analysis and historical insurgent activity—to include attacks, IDF points of origin, IED attacks, temporal analysis of attacks, and known insurgent residences and villages—were layered to create probable movement corridors, launch sites, and weapons cache sites. This data provided patterns for study, contributing to predictive analysis. While historical and trend information are helpful, the TF kept its attention on the predictive dimension of analysis to better facilitate offensive operations. Types of intelligence and platforms used in intelligence collection efforts included but were not limited to imagery intelligence (IMINT), signals intelligence (SIGINT), measurement and signature intelligence (MASINT), human intelligence (HUMINT), Predators, Global Hawks, the Joint Surveillance Target Attack Radar System (JSTARS), U-2s, and Makos. Conscious effort was made to ensure that collection platforms were chosen to fit the situation and that situations were not shaped to fit collectors. In addition, nontraditional collection methods included rotary-wing attack aviation; fighter aircraft; and sniper, reconnaissance, and combat foot patrols. Crews and patrols were debriefed upon return to base, and that information was incorporated into future planning.

Targeting

Colonel Barger: TF 1041 used deliberate and time-sensitive targeting (TST). With a large number of potential insurgent residences and/or compounds identified in the AO, deliberate targeting focused on the “manhunt” and tailored direct action raids. TST was initially a complementary effort to interdict enemy operatives and operations through the well-engrained rapid maneuver or intercept ability of USAF SE, but TST eventually proved to be the most lucrative method for eliminating AIFs and their cells. TF 1041 staff and operational

squads gained an instinctive understanding of the enemy/friendly situation and operational concepts for striking targets through the numerous, extensive deliberate planning sessions. The residual from these sessions was an uncanny ability to deliver quick orders to tasked squads, enabling them to effectively strike TSTs in keeping with the overall TF 1041 offensive CONOPS—most often based on actionable intelligence. TF 1041 Airmen proved extremely adept at quickly gaining a high degree of situational awareness for their areas of responsibility and focusing already honed human instincts to achieve decisive results in capturing AIFs through individual and team initiative. Squad leaders memorized every inch of their assigned sectors, every face in every village, and every bump in every road. Like “cops on the beat,” they developed relationships and source networks, which, along with studying HVT packages, allowed them to capture human targets on their own. Good squad leaders were key to TF 1041’s success.³⁶

Colonel Lyons: The TF 1041 target list was assembled borrowing from other organizations’ lists and then further developed through our own networks with specific restrictive criteria: sufficient data for conviction and geolocational data in TF 1041’s AO. This list was compiled in the TF 1041 A-2 operations center during a weeklong targeting board including a broad array of invited units and agency guests, as well as other personnel. The resulting list was prioritized by the board, with a view toward impacting AIF operations while enabling exploitation through interview/interrogation of detained targets to dismantle enemy cell structure. With this prioritized list as a guide, a synchronization matrix was built to strategize the effort in the AO.

A target package was produced for each identified target. Packages were assembled in six-part folders:

Part one: First, a target profile covering biographical and identification data (e.g., photograph and physical description) as well as activity and offenses. The profile clearly indicated reasons to detain and process the individual.

Part two: Cell structure identification and related linkages. This section could include several diagrams (Analyst’s Notebook software).

Part three: Charts showing individual’s known residence, operating locations, and other associated locations such as place of worship or other known associates.

Part four: Imagery of primary target areas, including a controlled image base or GRG overview as well as handheld photos.

Part five: Intelligence gaps and PIRs on this specific target.

Part six: Miscellaneous.³⁷

Colonel Barger: Despite a comprehensive, deliberate targeting effort, the inability to effectively consistently conduct prestrike surveillance hampered the success of most of these missions. Associated work, however, was critical for TST operations and assisted with detainee interviewing. As in most cases, the planning versus the plan was key to the success achieved by both deliberate targeting and TST.

Time-sensitive targeting vignette. In September 2005, 1st Lt Doug Whitehead led two squads of Defenders in a nighttime area ambush along some of the predicted enemy movement corridors when USMC fighter jets spotted hostile fighters digging along one of the Balad area roadways. The USMC fighters relayed the information to the Balad ALO in the Balad TOC. Simultaneously, the TF 1041 TOC liaison plotted the location and notified the TF operations center, which instructed the ambush squads to move back to an objective rally point and prepare to receive new orders.

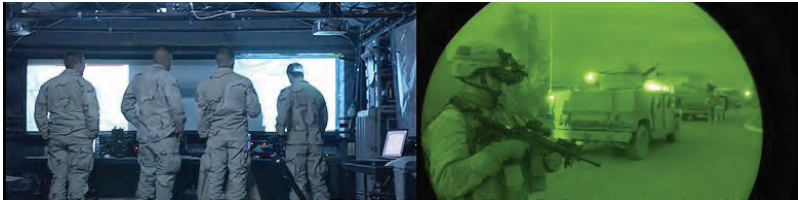
Meanwhile, still tracked by the USMC fighters, the hostile IED team departed the scene in a vehicle and drove to a village, dropping fighters at two separate resident locations in the village. Given new assault orders for two separate grid coordinates, Lieutenant Whitehead gave quick battle orders and moved his squads to the village. He deployed the squads, approaching on foot, to simultaneously strike the two residences located in different areas within the village. The Marine jets continued to watch from above and, using the US Army TOC as a communications link, guided the USAF Defenders onto the targets. The Marines eventually designated the specific buildings with lasers from their aircraft, which could be seen through the Defenders' infrared-capable night vision goggles. Lieutenant Whitehead's Defenders struck the houses simultaneously and captured the IED cell, confiscating weapons and bomb-making materials and collecting evidence of their crime, to include taking residue samples from their bodies. Our S-2 intelligence capability would gain a great deal of information from these detainees, which would prove useful in future operations as we systematically unraveled the criminal, terrorist, AIF network within the Balad AB security zone. A USMC aviation element e-mail excerpt sums up the success of the mission:

We got the positive feedback on last week's flight/mission. Profane 51&52 were a section of Marine two-seat F/A-18D Hornet aircraft.

Capt . . . initially noticed the suspicious activity on his Litening Pod and started tracking on the suspect vehicle. We all piled on from there. We think Firebird 27 deserves the credit for being proactive and alerting the appropriate personnel. He had the KC-135 tanker come to meet our aircraft to maximize our time on station. Additionally he passed word to your security forces to bring NVGs so we could illuminate the target house with our Litening Pod's IR [infrared] marker. The patrol had the fastest response I have seen for a quick reaction force—well done!

Glad we were able to help capture HVT 9 & 13. Good teamwork all around. I look forward to working with you all in the future.

Semper Fidelis,
VMFA(AW)-242



Courtesy of Col Chris Bargery, USAF

Left, TF 1041 tactical operations center; *right*, night operations

Named operation vignette: Operation Desert Patriot. The first free elections in Iraq occurred on 30 January 2005. News and intelligence sources predicted poor voter turnout, especially in the Sunni-dominated tribal areas like Balad. Reflecting back, many of us recall the news reports highlighting resolute, smiling Iraqis who voted—proudly displaying their purple-inked fingers for the world to see. Purple ink was to prevent people from voting twice, and it was a sign of pride. The Iraq reality, however, was such that the purple ink also marked you as a target for those sworn to disrupt the elections and create a “river of blood” among those who had voted. In our AO, hostile forces were posting flyers on houses and leaving red handprints on cars and homes, warning local residents not to participate in the elections or their families would be killed.

As mentioned, the TF 1041 battlespace contained seven villages, four of which had voting stations. Though we were not specifically detailed to support the elections, we knew they would escalate violence in our area. We also knew that a successful vote in our area would signal a new level of security and serve as a sign to hostiles that

the environment was changing in the Balad BSZ. We could clearly see the link between securing the locals and achieving not only a successful voting day but also uninterrupted air operations for Balad AB—our ultimate goal. We redoubled our efforts within the AO and surged to disrupt enemy plans, focusing on the most likely high-casualty, high-effect enemy tactics: vehicle-borne IEDs, potential suicide bombers, and bomb factories. US forces were not allowed near the voting stations to avoid the appearance of election tampering or forced voting, so Iraqi National Guard and Iraqi police provided protection inside the villages near the voting stations. Due to the likelihood of violent contact and the day's political sensitivities, I personally led the predawn and daylight security operations. Meanwhile, my S-3, Major Christensen, coordinated support and fires from inside our operations center at Balad AB. I handed off to him to take the afternoon and night cleanup actions.

Albu Hishma village was our largest village and the source of most of the trouble around Balad. On Election Day the mayor assembled the village's voters on one end of town, waiting for the voting station to open and planning a freedom march through town to the voting station. We controlled the roads leading to and from the village and remained positioned along the town's perimeter. The TF senior enlisted leader, CMSgt Dennis Vannorsdall, and I were out in the sectors early. We checked a .50-caliber machine-gun team on a vehicle checkpoint outside Albu Hishma and proceeded into the village. The voting station opened, but it was found to contain a large IED made from howitzer shells. We held back the anxious voters, cordoned the area, and called for EOD personnel. As the EOD team arrived to disable the IEDs, we were attacked by enemy mortars from the east, beyond the town near the Tigris River. Coordinating with the TOC at Balad, we were able to triangulate the mortar POO and coordinate counterfire from US Army artillery on Camp Paliwoda, 12 miles from Balad. The sound of the 155 mm howitzer shells sailing overhead probably should have been unnerving, but in this case, it was a welcome sound and eventually silenced the enemy mortars. As the mortars went quiet, one of our .50-caliber machine-gun teams opened up just outside the village. It was the same team Chief Vannorsdall and I had checked earlier that morning, led by SrA Nick "Maji" Megyesi. Maji's team included A1C Sumner Cowan and featured Senior Airman William Ponder manning the .50 caliber. Ponder was a Citadel graduate and extremely respected in his flight.



Courtesy of TSgt Michael Buytas, USAF

Blocking position outside Albu Hishma village

Maji's team used effective fire to stop an onrushing vehicle—heading straight for their position—that refused to heed the warning signs and negotiated the road obstacles. It was hard to believe that anyone in the car survived, but the passengers were wounded and detained by the team. The rules of engagement for the shoot were clear, especially since across all of Iraq, no civilian vehicles were allowed on the roads on Election Day.



Courtesy of TSgt Michael Buytas, USAF

Moving into position

Back in Albu Hishma village, the EOD team completed its task disabling the bomb and departed to address another IED in a different village. Iraqi villagers began their walk through town to the voting station only to find the road leading to the voting station blocked by a large dead animal with wires protruding from its body—another IED. This would not be an easy day. Across the sector, other teams were beginning to have contact.



Courtesy of TSgt Michael Buytas, USAF

Airman renders first aid to injured Iraqi on Iraqi election morning. TF 1041 secured Albu Hishma village, which was under mortar attack.

Eventually all the IEDs were eliminated, and the Iraqis voted in Albu Hishma and throughout other villages across our battlespace and others. One voting station in our AO was destroyed by a bomb just before Election Day. The TF 1041 Defenders participated in eight separate engagements on that day alone, some occurring in the late afternoon and into the evening. Several of these encounters included maneuvering to secure Iraqi army / National Guard positions and patrols during multiple attacks as the AIFs attempted to convince locals that the Iraqi army could not protect them. For actions in one engagement, Major Christensen was awarded the Bronze Star with Valor. Nearly equally impressive was the valor displayed by the Iraqi voters who had exercised their freedom to choose but whose purple fingers now made them targets for local terrorists and AIFs in the Balad AB BSZ. They did not back down, and with them, our Airmen helped make history.



Courtesy of Col Chris Bargery, USAF

Iraqis showing the “purple finger”—the overt sign they had voted

The commander wrote the following open letter to TF 1041 Defenders at midnight on Election Day’s end:

In this and previous weeks, you have been amazing. You were particularly exceptional today.

Throughout our brief American history, a small number of people have enjoyed the honor of standing strong for freedom. Today you stood bravely in harm’s way to allow *all* the people, men and women, young and old, of this foreign land to democratically elect their government; and the Iraqi people rewarded your efforts with a massive voter turnout, far beyond the expectations of those who would say your sacrifice in this war is for naught [emphasis in original]. It is not.

Your actions demonstrate perhaps the noblest of all of man’s inclinations—the fortitude to heed a higher calling and place a just cause above all else—above fear of futile effort, or scorn, or even death. Today is a truly historic day. Do not underestimate your part in it. Etch this day’s memories into your brain and burn its purpose into your soul, for you earned its glory. You are truly the heart and soul of what is best about your Air Force and America . . . each of you.

Tonight/this morning, as you pry the boots off your tired feet, as you wrench the body armor off your aching back, as you scrub the dirt and oil from your cracked hands, pause to think of the example you set today to the Iraqi people—its children, to America, and to the world. Think of all that may be possible, borne from your bravery, sacrifice, and effort. Think of it and know you have great reason to be proud of all you are doing here.

TF 1041 . . . know that this team, in this place, in this moment in time is no mistake. It is not luck or chance but the result of a predestined higher purpose. Today look your brothers and sisters in the eye and know that you are special. Briefly relish today, then lace up your boots, and continue your good fight . . . because that's just what we do.

CHARLIE MIKE—"Continue the Mission"

Named operation vignette: Operation Baywatch. Following the intense enemy activity surrounding the Iraqi elections, our analysis concluded that the AIFs would need to resupply their rocket and mortar caches near and inside the Balad BSZ. For some time, Captain Lyons had been refining our intelligence preparation of the operating environment. The Tigris River served as the 2 BCT boundary with another Army BCT whose main effort was focused further eastward, which meant it had little interest in patrolling near the Tigris. Thus, the Balad AB BSZ was left exposed and with an open seam running along its north and east flanks. Captain Lyons believed that the enemy was exploiting this seam by operating against Balad from the other side of the river and by moving fighters, weapons, and supplies up and down the river within a few miles of the base. Having mastered the area's movement patterns, he brilliantly focused his collections efforts and refined his analysis to provide Major Christensen's S-3 team targeted operational corridors. Together, they built Operation Baywatch, designed to interdict enemy transportation and supply efforts in and around the Balad BSZ.

Success with most of TF 1041's operations rested with young officers and NCOs leading in the field. Equipped with good intelligence analysis, operational planning, and extensive rehearsals, they made decisions and carried out actions on the objectives that proved to be very good. The patrols supporting Operation Baywatch would be no different.

On one particular patrol, the young technical sergeant leading the patrol asked for a personal meeting with me. He was only recently assigned to the 820th Security Force Group and confessed that he had absolutely no air base defense experience. He had spent most of his career performing law enforcement duties, most recently having served as an investigator stationed at Bolling AFB. Now in an environment starkly different from Bolling, he worried he would fail as a squad leader. I assured him that success would result from sound NCO leadership with proper task delegation and decision making and that his police instincts would serve him well.

Approximately two nights after our conversation, the same NCO squad leader led his squad into the target box established by the intelligence fusion and targeting cell. Patrolling in darkness along the Tigris River, he established an ambush on what appeared to be a likely location for boats to slip into shore. Remaining undetected as they observed the nighttime traffic moving on the river, one small boat seemed suspicious as it killed its engines and silently moved directly towards their position (fig. 4.3). With NVGs and PAC-4 night fighting aids, the squad had the advantage on the enemy fighters—targeting and watching them all the way to shore, directly into their ambush where they captured the AIF weapons smugglers without firing a shot.



Figure 4.3. Ambush on AIFs at Tigris River logistics node. The boat was used to transport and launch mortars. Three insurgents, captured during TF 1041 logistics interdiction ops, routinely used this small boat to transport weapons and equipment. Note the red rocket-propelled grenade launcher, painted to blend with the boat's red bottom, in photo inset. Courtesy of Col Chris Bargery, USAF.

The successful mission was reason to celebrate, but more importantly—using information obtained through subject interviews—Captain Lyons's team constructed a major portion of the AIF's supply, logistics, and weapons staging network. It included financiers

and support personnel, most of whom became targets on the TF 1041 HVT list as well as on lists shared by other agencies. In addition, the weapons cache and warehousing network provided ample terrestrial targets on which to focus, leading to other AIF captures (fig. 4.4).³⁸

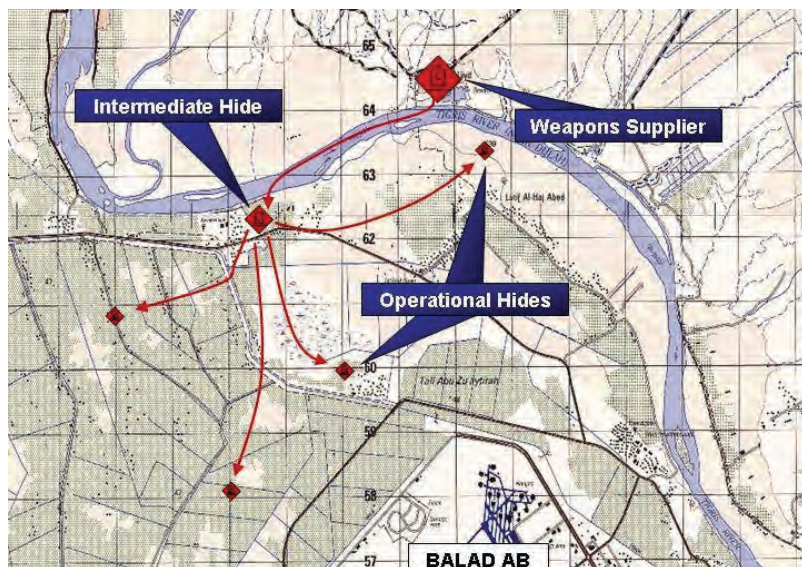


Figure 4.4. Operation Baywatch enemy scheme of maneuver. (Courtesy of Col Chris Bargery, USAF.)

Engagement Techniques

Colonel Lyons: To target local civil support, insurgent activity patterns were analyzed alongside known insurgent residences. Overt and covert reconnaissance patrols, cordon/search, cordon/knock, full-motion videotaping, and CI force protection source operations were targeted at specific areas with intent to engage and determine sentiment. Analysis of these events indicated focus areas for engagement activity.

Colonel Bargery: From the start, TF 1041 engaged the local village inhabitants. The overarching strategy consisted of four elements: demonstrated military competence, precision targeting, fair exercise of power, and respect for human dignity. The TF would prove proficient and precise at eliminating bad actors. Success in this area dem-

onstrated the TF's military prowess and proficiency in eliminating threats. It would also inspire faith in its abilities and promote the hope of security from AIF influence. In keeping with this theme, Airmen took care to ensure they presented a professional, ready image in dress, appearance, and action. Assuming constant observation, the unit would strive to demonstrate a high level of discipline in its TTPs, advertising its professionalism.

Precision targeting of hostile elements attempted to minimize disruption to village harmony and avoid detainment of innocents. Large, wholesale roundups of AIF-age males and indiscriminate searches of domiciles, not uncommon in the area, were avoided. Though risking the nondiscovery of possible AIF schemes, this strategy paid off through avoidance of spoiling relationships and resulted in valuable information flow to enable precision targeting of insurgents. In keeping with this theme, power was fairly exercised by young ground leaders coming in contact with locals. The TF Airmen were adept at understanding the routines of the villages and making good decisions on the ground that impacted them. For example, damage to homes, power lines, and walls was common in the villages. Squad leaders went to great pains to avoid this damage but when it occurred made efforts to correct the problem. This effort was noticed by the locals.

As well, the TF medical staff was put to good use treating children. One such case was a small girl wounded during a firefight. Sustained treatment over the course of weeks served to prove the TF's respect for humanity. Squad leaders and CI personnel built extensive relationships and source networks that proved invaluable. Finally, the TF demonstrated its general respect for human dignity by maintaining consistent, polite contact with the populace and presenting the American human face to them. It cultivated this relationship primarily by not remaining in vehicles but instead relying on foot patrols in urban settings. The practice of speeding recklessly through villages and endangering women and children was abandoned. While commonly seen as a FP measure to avoid IEDs or ambush, it served more to provoke the local inhabitants considering IED emplacement as an option. Perhaps the most effective engagement piece was accomplished through one mature and savvy linguist/interpreter. Having spent time in both Iraq and the United States, this person actively sought out misinformation about US forces that AIFs distributed and often became accepted as truth. In doing so, he was able to paint a

more accurate human picture of the TF personnel as well as the intentions of the United States and the air base to the local populace.

The combination of all these actions proved extremely successful in building relationships around Balad AB, increasing information flow to enable targeting and protecting USAF forces. Proof was realized in TF 1041's ability to build an extensive source network in a short period of time, its amazing record of HVT captures, and its seemingly purposeful exclusion from IED targeting. Though the TF was attacked five times by IEDs, these attacks were disproportionate when contrasted with those against other service forces in the area. While this difference may have been attributed to the unpredictable nature of the TF operational scheme, TF Airmen instinctively believed they were being targeted less.



Courtesy of TSgt Michael Buytas, USAF

Airmen render aid to an injured Iraqi child

TF 1041 Final Thoughts

Our warriors are no longer limited to people who fly the airplanes. . . . Our entire force is a warrior force. Being a warrior is not an AFSC. . . . It's a condition of the heart.

—Gen John P. Jumper
USAF Chief of Staff, 2004

Leadership Challenges

Colonel Bargery: Forging the team and keeping it together was no easy task. Most of the individual Airmen were motivated and proud to be on the team, but among the various mission support and operational communities, “tribalism” was definitely present. To keep individual Airmen mission focused, I issued five combat imperatives that I believed appropriate for the groundbreaking mission.

**TASK FORCE 1041 COMMANDER'S
COMBAT IMPERATIVES
(THE BIG FIVE)**

**NOBODY GETS LEFT OUTSIDE THE WIRE
EVERY COMBAT-TRAINED AIRMAN FIGHTS
ALWAYS EXPECT TO BE ATTACKED
KNOW THE MISSION AND YOUR ROLE
FINAL INSPECTIONS & REHEARSALS ARE MANDATORY**

1. *Nobody gets left outside the wire.* As the number one imperative, troops would likely read it most often. TF 1041’s innovative offensive mission, the extent to which it would be exposed to hostilities, the potential severity of the clashes, and the untested nature of many of its formal and informal leaders all begged the question, How would a maneuver element respond when desperately engaged? The obvious and pragmatic element of the imperative answers this question for TF leaders. When chaos reigns on the battlefield, leaving a TF member behind is not a consideration. The leader’s decision cycle is narrowed, and all TF members are assured that their comrades will never leave them alone. Finally, this rule focuses the TF on the nature of the mission. It clearly relates, “You will be operating in a hostile area. You will likely engage the enemy and may be hurt or isolated, but you will not be abandoned. We are in this as a team.” During several chaotic moments reacting to contact, and even when US Army ground personnel required assistance, TF personnel were diligent to bring every person home.
2. *Every combat-trained Airman fights.* This imperative was designed to build cohesion and ownership of the mission among

all AFSCs. As we embarked on our new mission, we were modifying the staff functions and incorporating some new and varied functional experts not normally associated with combat patrolling in the Air Force. Basic skills were enhanced with field training in place. In the end, only one of the 227 Airmen assigned did not go on a patrol. Most went routinely, even as they were pulled from their headquarters staff or C2 function. This policy built an innate understanding between functional experts and security operators and enhanced the awareness of the staff, planning, and support functions. An irreplaceable trust and brotherhood were also achieved in most areas. AFSCs included intelligence, medical, communications, administration, personnel, first sergeant, supply, OSI, logistics, combat arms training and maintenance, and security forces. For several large, direct action raids, intelligence specialists were able to match overhead imagery and Predator feeds with ground they had already patrolled. Medics on patrol routinely capitalized on opportunities to initiate civic actions and engagement tactics by treating injured indigenous personnel, resulting in source networks and the development of a FP buffer with locals. Troops were seen as war fighters, protectors, and humanitarians.

3. *Always expect to be attacked.* Airmen on Balad AB were prone to attack inside and outside the wire. As we assumed our role, I expected the insurgent enemy to test us in one of two ways: (1) The enemy would immediately strike the TF in an attempt to dictate tempo, impose shock, and/or derail our strategy; or (2) The enemy would patiently watch/study our TTPs and attempt to strike us once we became predictable or complacent. The insurgent enemy chose the second option, but our sustained momentum and the unpredictable nature of our operations kept him off balance.
4. *Know the mission and your role.* As we pieced together our headquarters staff, many of the planners, analysts, and support personnel were ready to be on the manhunt or engage in security operations and ignore their less exciting duties. This imperative was designed to focus all members of the TF on their roles within the unit and their contribution to the mission. The overarching mission brief/order was given to the entire TF body en masse to promote understanding. Entities joining the

TF and those in Tier 1 support could also be referred to this rule to better achieve unity of effort. It was important for all to understand this operation's unique mission and its theoretical boundaries so capabilities would be modified to fit the mission and not vice versa. The TF 1041 deputy of operations used this imperative to get better planning efforts from multiple functional experts and to bring JTACs, Predator operators, US Army attack aviation ground liaison elements, and other entities into specific operations with much success.

5. *Final inspections and rehearsals are mandatory.* We go to war with the tools and training we have, not those we would like to have. We could add onto but not completely reshape our junior leaders' abilities to plan, order, and execute the offensive missions. In final rehearsals, mission problems can be noted, roles verified, and questions asked. In the absence of remarkable orders, a thorough, noisy rehearsal can prevent mission failure, loss of life, or both. In the insurgent combat environment, inoperable personal equipment or vehicle items can result in mission failure, death, or the annihilation of an entire maneuver element. Final inspections are designed to catch such problems. They require a dogmatic discipline among all personnel and the development of a responsible culture. The TF grade for final rehearsals and inspections was mediocre. Much of the vehicle damage was born out of negligence in vehicle inspections. At almost any time, leaders could conduct a no-notice final inspection on a patrol about to depart and discover troops without eye/hearing protection, body armor attachments, knee pads, and so forth. Even so, troops survived enemy fire, five IED attacks, and two vehicle rollovers, with survival credited in large part to battle drills and rehearsals.

Still, not only did unhealthy rivalries exist among the squadrons within the 820 SFG but also its leaders didn't trust outsiders to play key roles within their ranks. Some functional communities were reluctant to participate from the beginning while others literally knocked on the door asking to be included. Some watched to see if the endeavor would be successful, then gave full effort. Halfway through the operation one functional community performed an unscheduled change of its personnel, all of whom had performed extremely well and been consummate team players. On the second day of the new

team's arrival, the team chief came into my office demanding that 50 percent of the patrols be executed under his direction, or his team would no longer support the task force. Some functional communities worried too much about who would get the credit for successes while others attempted to ignore lessons learned and called the operation's successes "anomalies." As the commander, I believed that many functional communities or Air Force "tribes" were concerned that ODS's operational success would set a precedent that would cost them money or manpower; create new organization, training, or equipping demands; or change the culture of their functional stovepipes. To that end, some made support difficult or refused to embrace its lessons. Stovepiped USAF functional communities aren't accustomed to being task-organized for the mission but are instead fiercely comfortable operating within singular functional skill lanes. I spent a tremendous amount of energy just keeping the team unified when I should have been allowed to focus solely on defeating our enemy.⁴⁰

Lessons Learned

Colonel Trueblood: Ultimately, valuable intelligence-specific lessons were learned from ODS and the whole ISRD/FP intel effort in 2004–5. In terms of TF 1041, two things stood out for me:

- The insurgents firing mortars and rockets at Balad AB from TAOR Mitchell were part and parcel of the wider Sunni/jihadi network. The same bad actors who were setting up mortars were also kidnapping people, launching suicide bombers, and bringing in foreign fighters from Syria and beyond. We weren't fighting a strictly local enemy but engaging one of the tentacles of the wider jihadi network.
- This scenario meant that the IDF problem was just one dimension of the insurgency. Consequently, the TF mission to disrupt and destroy IDF cells had to be widened in scope. Once ground operations began, TF 1041 was quickly involved in classic counterinsurgency activities, such as engaging with locals, securing the populace, and protecting polling stations. Countering the IDF meant countering the insurgency across the sector.

From the wider FPI perspective, these are the takeaways:

- The nature of force protection intelligence in a combat theater will necessarily be ad hoc. From a USAF perspective, the re-

quirement to collect, coordinate, analyze, and disseminate intelligence specifically relevant to protecting air bases from insurgent-type threats is a doctrinal gap unlikely to be filled. The FPI function will always have to be build-as-you-go and will require much flexibility and initiative—as well as a willingness to ruffle a few bureaucratic feathers. In that regard, the unique experience of TF 1041 should be closely studied by those facing a similar challenge in the future.

- This provisional environment also means that USAF security forces (or any forces dedicated to air base defense) will have to establish their own organic intelligence function at some level. Whether that means growing S-2s out of the SF career field or assigning professional intel personnel as is done in the 820th, air base defenders have to figure out how to integrate intelligence. Unfortunately, mission priorities and budget constraints mean that they cannot expect Air Force intelligence or the wider intel world to provide full and enthusiastic support.⁴¹

Colonel Christensen: In the final analysis, I would argue that while as a division we in the S-3 weren't as effective as we could have been, all in all, we got the job done. In the process, as outlined above, I was privileged to learn a number of valuable lessons. Chief among these was the fact that while we—as security forces—have indeed engaged in limited OTW operations, before Task Force 1041 we had never engaged in the level of intensity and effort required in true battlespace ownership (and all that it entails). We learned concepts like the control and deconfliction of fires and the authorization of combat operations both inside and—in the case of a few special operations activities—outside the task force. Most importantly, I learned that while we in security forces definitely had the capacity to conduct true battlespace ownership, it was not something we were inherently or institutionally organized, trained, or equipped to do. As we closed up operations in the TF, I told Colonel Bargery that—in a perfect world—we would take the TF back to the States lock, stock, and barrel and use what had been built to formally establish a battlespace-owning ground-combat capability for the Air Force. Unfortunately, it was not to be. In fact, we wouldn't again have the opportunity to execute formal battlespace ownership until Col Erik Rundquist and Col Kevin Cullen advocated for and officially received the mission to do so at Bagram Airfield, Afghanistan, in the spring of 2012.

Perhaps the best way I can think of to describe what it felt like to have the opportunity to execute battlespace-owning ground-combat responsibilities is summed up in a comment I made to General Buchanan when he came to see the end result of what he had authorized when he approved the TF 1041 concept. During his visit to the S-3 tent, I had the opportunity to brief the general on our concept of operations, scheme of maneuver, and even lessons learned. Seeing I was losing his interest in the briefing and having a bit of sympathy for the fact that he must have received dozens of briefings on Air Force operations of varying types in his time as CFACC, I abruptly stopped and summed up everything I was trying to get across by one simple assertion. I told him that of all the things TF 1041 represented to the Air Force in the form of ground combat capability, the most satisfying element, by far, was the fact that for the first time in my Air Force career, when an adversary took a shot at an air base, we, as Airmen, got to truly shoot back. More definitively stated, every time an enemy of the United States got the bright idea to attempt to destroy superior American airpower at its most vulnerable point, we, as Airmen, were allowed to find, fix, and then destroy in detail.⁴²

Colonel Bargery: TF 1041's brief but intense experience operating around Balad AB contributed numerous lessons to the USAF and proved concepts that now exist in USAF ABD doctrine and guidance. Upon touring the TF 1041 operation, Brig Gen Robert Holmes, USAF director of force protection and a career special operations force operator, declared it "a classic guns and roses campaign, using conventional troops in an unconventional manner to achieve a conventional effect—security of the air base." Attacked by five IEDs and four IDF events (outside the base) and engaging in five firefights, the TF incurred only minor injuries. The TF's impact is still being considered, but interim studies indicate that it inflicted severe damage to the local AIF operational cell structure—resulting in drastic reductions in IDF events, hijackings, and IED attacks. More difficult to quantify is the intelligence residual gained through interrogations and analysis of the area operations, some of which linked Balad's local AIF cells to national actors. Finally, no metrics were available to measure the "security quotient" gained in local villages through demonstrated TF competence and engagement strategies; however, positive social environmental changes were evident. Villagers initially reluctant to communicate with US forces became more trusting and willing to exchange information. In addition, the hostile, primarily

Sunni area had a much stronger than expected voter turnout on the historic January 2005 Election Day in Iraq. While these elements stand as possible testaments to impact in this area, one TF officer noted that locals had begun to refer to US Army personnel as “the enemy” and TF Airmen as “the police.” Key elements to the success of TF 1041 were a keen intelligence focus tempered with cultural and behavioral analysis; an effective and precise offensive capability coupled with populace engagement strategies; and for the operation, a force-protection hedge built more on relationships and interaction than on speed and contact avoidance. These capabilities were made possible by the focused cohesion of a multifunctional team of ground enablers. My commander’s lessons learned are formed from significant common themes running through the TF 1041 story, and many hold lessons for the USAF’s future ground warriors:

- A small, highly trained, mobile fighting force with heavy firepower, good ISR, and strong leadership can get the job done.
- Airpower is best protected by Airmen who shape the operating environment and nurture and grow a secure ops environment for enduring air operations.
- Conventional forces can perform in an unconventional manner to achieve conventional results. They can
 - o prove/demonstrate military effectiveness and power to the local populace;
 - o promote civil security to minimize criminal and hostile activity; and
 - o target people, groups, and organizations deliberately, forcefully, and accurately.
- Engagement strategies can be used to sway the populace.
 - o Use dismounted operations to connect with diverse groups.
 - o Develop tailored tactical information operations.
- Focused all-source intelligence fusion is critical.
 - o HUMINT is important, but other collection platforms complete the threat mosaic.
 - o Focus on predictive analysis, not telling yesterday’s news.

- Source operations must be active and network-focused in law enforcement ops.
- In counter-IED initiatives, targeting bomb makers is more effective than targeting IED emplacement. Financing and logistics are also highly targetable.
- Demonstrating fair and intelligent military and policing effectiveness leads to successful operations and likely contributes to FP.
- USAF FP forces are uniquely well suited to countering threats in an insurgent environment due to their rare combination of tactical, behavioral/human skills, and intelligence focus.
- In engagement strategies, show the human face of America through dismounted operations, and employ trusted, indoctrinated, on-message linguists at the most tactical level.
- For FP, technology advances play a secondary role to increased cultural intelligence, behavioral analysis, intelligence preparation of the battlespace training, and engagement strategies. Invest in the human weapon system.
- Use a red-teaming approach to planning that anticipates adversary adaptation in order to adjust the friendly maneuver scheme/playbook and TTPs.
- For FP, speed and contact avoidance when moving in vehicles are less effective than are mastered area, situational awareness, and engagement strategy buffers.
- Develop the “strategic sergeant” and junior and midlevel officer. Train Airmen in close combat operations, joint war fighting, and cultural intelligence.
- In planning, develop the cultural battlespace with a view toward targeting personnel, groups, or organizational nodes for influence, security, or elimination.⁴³

General Spacy: As ODS progressed, TF 1041’s success made continuing major OTW operations around Balad AB a real possibility. The task force was not only having a significant impact on the ground but also gaining great credibility with the joint forces as a capable combat force. Around 1 February, roughly the halfway point of the operation, General Buchanan asked how we could continue TF 1041. He wanted to know if we could deploy another similar unit to replace

TF 1041 in TAOR Mitchell. Although we very much wanted to continue ODS, I told him we should plan more strategically. Rather than replacing TF 1041 in TAOR Mitchell, I wanted SF to assume responsibility for all security and base defense for Balad AB—and eventually at every air base in the AOR. Captain Grimm led the study and predicted that to provide all security and base defense at Balad AB would require around 1,200 security forces with associated equipment (fig. 4.5).

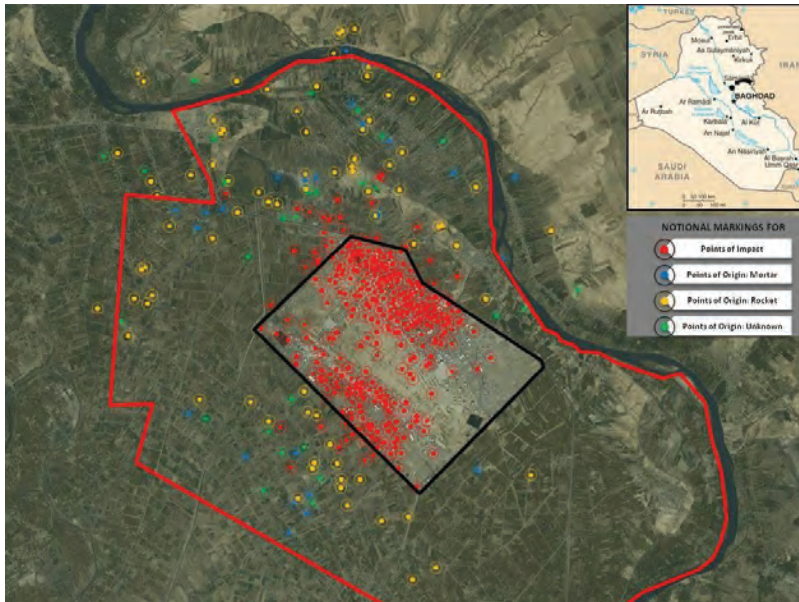


Figure 4.5. Balad AB notional POO-POI map with proposed total AB AOR

The reality of SF manning still loomed large for the Air Force. Despite TF 1041’s success, a worldwide shortage of SF personnel existed. This shortage made any plan to expand base defense at Balad difficult to support. It is important to remember that we also began detainee operations at this same time—a requirement that would soon demand 1,200-plus SF Airmen on six-month rotations. Recognizing this reality, we developed a plan to work with the Army and “exchange” all USAF detainee operations requirements for all base defense and security operations at Balad. This deal would give the USAF the approximately 1,200 SF we needed to take on base defense at

Balad and would return roughly a BCT-sized organization to the Army for retasking. General Buchanan liked the idea and told me to pursue it.

Even if the numbers worked out, the challenge still remained of getting 1,200 security forces and their leadership up to the performance level of TF 1041. As Colonel Bargery discovered, SF have all the basic combat skills but lacked training and experience in combat organization/leadership above the squad level. If we were going to expand OTW operations to roughly a base defense group level, we would have to systematically prepare SF for this level of responsibility. Once again our plan centered on building a cross-functional, task-force-style organization for the 820th Security Forces Group. We intended to use the entire 820 SFG—all squadrons and support personnel—as the basis for the organization. Doing so would give us roughly 600–700 of the 1,200 required SF. We then planned to round out the numbers by creating additional BDSs from AEF security forces. This entire new 1,200-person BDG would deploy to Silver Flag Alpha at Creech AB outside Las Vegas for a two-month training period. During this time, troops would focus on improving combat skills while also training in leadership based on lessons learned from TF 1041. The entire BDG would then deploy as a composite unit to Balad AB and work a relief in place / transfer of authority with the assigned Army units. Our plan was for the first training rotation to begin in the summer of 2005 with the assumption of base defense at Balad by the fall of 2005. Just as with ODS, implementing the plan was an aggressive undertaking.

Our small team hit the road to sell the plan. We worked our way up the Army chain of command in Iraq to the corps level and got good buy-in. We then worked the deal back in the Pentagon with the Army and Air Force staffs, this time getting good support along the way. Word of TF 1041's success had spread, and opposition among the SF senior staff seemed to fade away. Unfortunately, just as we were finalizing the exchange deal, Air Force leaders balked at the plan due to the long-term commitment of such a large number of security forces. While the concern was reasonable, I was convinced that the drain driven by detainee operations should be an even bigger concern. I argued that at least with an SF commitment at Balad, we were investing in Air Force equities and had something we would control. To me, detainee operations were not only outside of our core mission but also a growing requirement with no end in sight.

Much more back-and-forth discussion ensued, but the end result was that we would not replace TF 1041. The deal to trade detainee operations for base defense operations at Balad AB fell apart. It was a crushing blow, and it would be five more years before SF finally assumed responsibility for security and air base defense inside and outside the wire at Balad.

Although we failed to continue the OTW mission, ODS/TF 1041 showed that security forces are a credible, capable ground combat force. There were dozens of lessons learned; over the next few years, we worked these lessons into USAF policy and doctrine. We may have failed to continue ODS at Balad, but Colonel Bargery and the men and women of TF 1041 proved that USAF security forces belonged on the battlefield.⁴⁴

Notes

1. Christensen, "Air Base Defense," 8.
2. Spacy, "Future of Security Forces in Combat."
3. Joint Service Agreement on United States Army–United States Air Force Ground Defense of Air Force Bases and Installations, art. II, pars. 1(b) and 2, in Davis, *31 Initiatives*, app. 6, 128. The agreement is known as JSA 8 because it enacts the eighth of the 31 Initiatives. The USA and USAF CSAFs signed the Memorandum of Agreement on US Army–US Air Force Joint Force Development Process on 22 May 1984, prescribing the JSA's development (in *ibid.*, app. 3, 105–6).
4. Lt Gen Walter E. Buchanan, III, USAF, retired (combined force air component commander, August 2003–April 2006), written statement, 29 January 2016.
5. Spacy, briefing.
6. Maj Gen Bradley D. Spacy, USAF (director, Force Protection Air Forces Central [Forward], July 2004–June 2005), written statement, 1 February 2016.
7. Col Glen E. Christensen, USAF (operations officer, Task Force 1041, November 2004–March 2005), written statement, 1 February 2016.
8. Spacy, statement.
9. Seip to Spacy, e-mail.
10. *Ibid.*
11. Spacy, statement.
12. Buchanan, statement.
13. Spacy, statement.
14. Buchanan, statement.
15. Spacy, statement.
16. Buchanan, statement.
17. Spacy, statement.
18. Lt Col Armand Lyons, USAF, retired (intelligence officer, Task Force 1041, November 2004–March 2005), written statement, 6 April 2015.
19. Spacy, statement.
20. Christensen, statement.

21. Lyons, statement.
22. Col Chris Bargery, USAF (commander, Task Force 1041, November 2004–March 2005), written statement, 3 February 2016.
23. Spacy, statement.
24. Christensen, statement.
25. Spacy, statement.
26. Lt Col Roger Trueblood, USAF, retired (chief, Force Protection Intelligence, Air Forces Central [Forward], November 2004–May 2005), written statement, 30 January 2016.
27. Lyons, statement.
28. Bargery, statement.
29. BOLO books were very sensitive items and strictly controlled. Patrol leaders were made to sign books out for operations, and the utmost attention was paid to their accountability. The loss of a BOLO book could have severely stunted operations, and extreme care must be exercised in issuing such materials.
30. Lyons, statement.
31. A red team provides “an independent capability to fully explore alternatives in plans and operations in the context of the operational environment and from the perspective of adversaries and others.” Red teams also “assist joint operation planning by validating assumptions about the adversary, as well as participating in the wargaming of friendly and adversary COAs.” JP 2-0, *Joint Intelligence*, I-28.
32. RAF, Air Pamphlet 3241, *Force Protection Doctrine*.
33. Bargery, statement.
34. Lyons, statement.
35. Christensen, statement.
36. Bargery, statement.
37. Lyons, statement.
38. Bargery, statement.
39. Lyons, statement.
40. Bargery, statement.
41. Trueblood, statement.
42. Christensen, statement.
43. Bargery, statement.
44. Spacy, statement.

Chapter 5

Three Enemies

Lessons from Enemy Air Base Attacks in Vietnam, Iraq, and Afghanistan

Shannon W. Caudill

“By God, we’ve kicked the Vietnam syndrome once and for all!”¹ So said President George Bush in a euphoric victory statement at the end of the Gulf War, suggesting the extent to which Vietnam continued to haunt the American psyche more than 15 years after the fall of South Vietnam. The same sentiment was on the minds of many Air Force leaders when they compared the results of ground-based attacks on US airfields in Iraq and Afghanistan to the effectiveness of the Vietnamese foe.

In Vietnam, Vietcong and North Vietnamese forces attacked American air bases 475 times between 1964 and 1973—primarily with indirect fire (IDF)—destroying 99 US and South Vietnamese aircraft and damaging 1,170 aircraft.² Such losses would be unsustainable today due to the high cost of aircraft production and the lengthy manufacturing process. In Iraq, only 15 fixed-wing aircraft were damaged across all bases.³ In Afghanistan, air base attacks destroyed six aircraft and damaged four.⁴ (Table 5.1 compares above statistics.) To put it simply, there is no comparison between Vietnam and the recent conflicts in Iraq and Afghanistan with regard to aircraft losses.

While such comparisons appear impressive on the surface, they are fundamentally flawed. The enemy differed dramatically in each of these conflicts. If the success of defending air bases in Iraq and Afghanistan is misinterpreted, senior leaders and planners could easily be lulled into a false sense of security related to the air base defense (ABD) problem—which could well distort security planning despite growing threats. A misplaced confidence could be detrimental to present and future resource allocation for base defense functional areas.

A 2015 RAND Corporation study on airfield attacks found that ABD “has not been a priority for the institutional air force, primarily because it has not been conceptualized as a core warfighting problem. It also has not received the attention and resources from the joint community, a critical problem because ground-based air defense of air

bases is an Army responsibility.” The study also indicated that “the relatively low priority for air base defense has led to a variety of shortfalls in USAF capabilities and in Army ground-based air defense capabilities.”⁵

Table 5.1. Statistical comparison of fixed-wing aircraft destroyed and damaged by air base attack

| Theater | Number of fixed-wing aircraft destroyed | Number of fixed-wing aircraft damaged | Estimated size of insurgency |
|-----------------------|---|---------------------------------------|------------------------------|
| Vietnam (1964–73) | 99 | 1,170 | 300,000 ^a |
| Iraq (2003–12) | 0 | 15 | 20,000–100,000 ^b |
| Afghanistan (2002–14) | 6 | 4 | 20,000 ^c |

Source: Data was produced during the 2013–14 Air Command and Staff College yearlong research elective Defending Air Bases in an Age of Insurgency, instructed by Col Shannon W. Caudill. Student researchers were Maj Russell S. Badowski, Maj Jason F. Baggett, Maj Scott Black, Maj Loren M. Coulter, Maj Colby B. Edwards, Maj Raymond J. Fortner, Maj Steward J. Parker, and Maj Michael M. Wellock. Researchers reviewed all available Air Force history reports covering Sather AB (Baghdad International Airport), Joint Base Balad, Tallil AB, Kirkuk AB, and al-Asad AB. See notes 1–3 and below for specific sources.

^a“Origins of the Insurgency in South Vietnam, 1954–1960,” *The Pentagon Papers*, Gravel ed., vol. 1 (Boston: Beacon Press, 1971), chap. 5, sec. 3, 314–46, www.mtholyoke.edu/acad/intrel/pentagon/pent14.htm.

^bDaniel L. Byman, “Iraq and the Global War on Terrorism,” Brookings Institution, 1 July 2007, <https://www.brookings.edu/articles/iraq-and-the-global-war-on-terrorism/>.

^cPeter Bergen and Katherine Tiedemann, “Commentary: More Troops Needed for Afghan War,” CNN, 4 August 2009, <http://www.cnn.com/2009/POLITICS/08/04/bergen.afghanistan/index.html>.

Prior to the wars in Iraq and Afghanistan, the USAF considered threats outside the air base perimeter the responsibility of either the host-nation or sister service forces.⁶ In 1985 the USAF and Army signed Joint Service Agreement 8, formally tasking the Army with the exterior defense of USAF bases.⁷ By 2005 the USAF had acknowledged that the Army would not have sufficient forces in some instances to effectively perform exterior ABD missions. As a result, USAF and Army leaders terminated the agreement, giving USAF commanders more latitude in defending air bases with their own assets.⁸ Thus, today’s base defense operational environment is hamstrung by uncertainty as to which service is responsible for securing air bases, especially expanded outward from the perimeter of the installation. This lack of clarity projects a shadow of uncertainty on future responsibilities and resource allocation to meet potential ABD gaps and seams in capabilities.

Future air base attack threats may prove more daunting than those in Iraq and Afghanistan. Comparing the threats in Vietnam, Iraq, and Afghanistan is useful in identifying reasons for the disparity in

aircraft losses. However, it is also important to examine enemy forces and future threats to which the United States has not yet been directly exposed. Groups like the Liberation Tigers of Tamil Eelam (LTTE)—also known as the Tamil Tigers, the Islamic State in Iraq and Syria (ISIS), and Hezbollah—have pioneered the use of airpower in their deadly work of targeting enemy forces. The LTTE went so far as using small aircraft to attack government air bases and facilities.⁹ Finally, leaders need to ponder the current mix of forces and pursue the right organizational and operational template to meet the adaptable needs of future conflict.

US Base Defense History: A Comparison of Vietnam, Iraq, and Afghanistan

IDF was the number-one threat to air bases in Vietnam, Iraq, and Afghanistan because standoff weapons enable enemy forces to attack from a distance, giving them a better chance of survival. A 1995 RAND report observed, “The standoff threat, particularly from rockets, proved troublesome through the end of the [Vietnam] war. Given the nature of the conflict and the terrain, there was no foolproof countermeasure to this threat.”¹⁰ The single unifying commonality of air base attacks in Vietnam, Iraq, and Afghanistan was the principal use of IDF. Beyond that, the three conflicts had little similarity. The terrain, political environment, and enemy were radically different.

Former deputy secretary of state Richard Armitage once argued that “Hezbollah may be the A-team of terrorists and maybe Al Qaeda is actually the B-team.”¹¹ Armitage was simply looking at the capabilities and lasting effects of Hezbollah vice al-Qaeda. Similarly—when examining overall effects—one can stipulate that of the three conflicts examined herein, there is a clear distinction between the enemy threat and proficiency of each. The Vietnamese deserve an “A” for their effectiveness in damaging and destroying aircraft. When contrasted with the Vietnamese, the Taliban is really a “D”-level player. While the group has mounted some spectacular attacks on air bases, its fire has been less effective. Finally, the insurgent effort in Iraq was haphazard and lacked any real impact against coalition airpower sortie generation—clearly an “F” effort. This categorization provides some context, but further case study analysis will show that even more daylight exists between the top and bottom tiers of these three enemies in their capabilities and effectiveness.

Vietnam 1964–75

All sides saw the control and use of air bases in Vietnam as strategic. The defeat of the French at Dien Bien Phu denied them their northern air hub from which to project airpower and disperse ground forces. After the withdrawal of the French, the entry of significant American ground forces was predicated on protecting air bases that had been attacked and harassed by enemy strikes. Finally, the North Vietnamese and Vietcong effort to overrun the US Marine Corps (USMC) air base at Khe Sanh showed the enemy's all-out effort to deal a strategic defeat to the United States—similar to the impact of its victory at Dien Bien Phu. The sheer number of successful attacks on American air bases in Vietnam displays what a truly committed enemy can do to mitigate the effectiveness of airpower and hasten the negative effects of such attacks on political and public support at home.

The enemy in Vietnam was the most sizable, organized, exceptionally trained, and effectively led force of the three enemies studied. Its commitment to its cause was motivated by nationalism and ideology, sustaining its morale and will to fight despite major setbacks in the field.¹² Insights can be gained from captured training documents emphasizing intelligence preparation of the battlefield:

Before mounting any attack, you must learn exactly the number of enemy troops and their armament . . . [and] all you can about the commander. . . . You should also study the morale of the enemy soldiers, the location of their strong points . . . and heavy weapons emplacements, and the organization of their forces. Find out what is the chain of command and how many men are in a squad, a section, or a company; identify enemy units by number or name. Find out the equipment of each unit, the fire power of which it is capable, and the political and military training received by the enemy troops.¹³

US forces put Vietcong and North Vietnamese air base attack methods into four categories: standoff attacks (today known as indirect fire), sapper raids, battalion-size assaults, and sabotage.¹⁴ Enemy forces claimed that it took between 3 and 18 months of training to prepare for air base attacks.¹⁵ Importantly, the Vietcong followed the Kiem Thao method, also referred to as “criticism/self-criticism sessions,” that proved effective in analyzing and correcting training and operational issues.¹⁶ The sessions also bolstered the psychological health, resiliency, and trust in leadership needed for sustained unit cohesion and continuous operational improvement. As an example, table 5.2 is a translation of the daily training schedule from 1 to 16 May 1967 for the Vietcong's 514th Battalion:

Table 5.2. Vietcong training schedule for May 1967, South Vietnam National Liberation Armed Forces—514th Battalion

Document No. 15
 Training Schedule for May 1967*

The South Vietnam National Liberation Armed Forces — The 514th Battalion

| Date | Contents | Length of time | Checked by | Instructor | Night time | Remarks |
|--------|--|----------------|--|-----------------------------------|------------|---------|
| May 1 | Party Chapter Conference and meeting of cadres. | 7 Hrs. | Party Committee | Party Secretary | | |
| May 2 | Study of financial policy for 1967. | 7 Hrs. | Assist. Company Com. | Bn. Command Staff | | |
| May 3 | Individual fighting technique, 3-man cell fighting technique. | 6 Hrs. | Company Com. | Squad Leader and Pl. Leader | | |
| May 4 | Evaluation of policy for 1967. | 7 Hrs. | Dept. Bn. Commander | Command Staff | | |
| May 5 | Practice of raid on enemy forces by 3-man cells and squads. | 6 Hrs. | Co. Commander | Squad and Platoon Leaders | | |
| May 6 | Indoctrination on the 3 good points of the Party Chapter. | 7 Hrs. | Party Committee | Party Secretary | | |
| May 7 | General practice of raids. | 6 Hrs. | Co. Commander and Mil. Staff | Assist. Platoon and Pl. Leaders | | |
| May 8 | Indoctrination on the 3 good points of the Party Chapter. | 7 Hrs. | Party Committee | Party Secretary | | |
| May 9 | Principles of raid by platoon and company. | 4 Hrs. | Party Committee | Military Staff | | |
| May 10 | Practice by the platoons of attack on enemy forces stationed in the field. | 6 Hrs. | Mil. Staff and Co. Com. | | | |
| May 11 | Indoctrination on the responsibilities of the military personnel, and discussion. | 6 Hrs. | Military Staff | Company Command Staff | | |
| May 12 | Practice by the platoons of attack on enemy forces stationed in the field. | 6 Hrs. | Mil. Staff and Co. Com. | Platoon Leaders and Co. cadres | | |
| May 13 | Theory concerning firing at night. | 3 Hrs. | | | | |
| May 14 | Tactics for fighting against the Americans. | 4 Hrs. | Command Staff | Deputy Bn. Commander and Bn. Com. | | |
| May 15 | General practice by the Companies of attack on enemy forces stationed in the field, in accordance with the plan of attack. | 6 Hrs. | (The plan of attack will be drawn up by the companies) | | | |
| May 16 | Political mission in the fight against the Americans. | 7 Hrs. | Bn. Command Staff | Company Political Officer | | |

-The remaining 13 days of the month will be devoted to moving and fighting.
 -The companies and sections are free to use their nights as they see fit, but they should inform the Battalion of their plan.
 -Evaluation and observation on training should be made as we go along. For example, the 3-man cells make a preliminary evaluation of the training and next comes the turn of the platoons. This is to be done at night.
 -The units should not take one hour devoted to one subject to add to the teaching of another subject. They should report a day in advance whenever they want to make a change. The training program will be approved by the Party Chapter and the unit commander.
 -Upon completing the training of one subject, the training document should be returned in order to maintain secrecy. The units are not allowed to keep these documents.
 -In the case of the Signal Unit, the Reconnaissance Unit, and the Demolition Unit, they should draw up a political training time schedule with the help and approval of the Battalion, but they can fill out their time schedule for military training themselves.

May 1, 1967.
 For the Command Staff of the 514th Bn.
 Signed: TU NN

*One - page typewritten document.
 Source: Reproduced from David W. P. Elliott and Mai Elliott, *Documents of an Elite Viet Cong Delta Unit: The Demolition Platoon of the 514th Battalion— Part Four: Political Indoctrination and Military Training*, RM-5848-ISA/ARPA (Santa Monica, CA: RAND Corporation, May 1969), 98, http://www.rand.org/content/dam/rand/pubs/research_memoranda/2008/RM5851.pdf.

One key difference between Vietnam and recent wars is that in Vietnam, a deficit of airfields early in the war led to a propensity among American and South Vietnamese forces to overfill runways with tightly parked aircraft. Dr. James Corum noted that buildup of American aircraft, particularly interceptors, “contributed to the overcrowding at South Vietnamese airfields, and it was not long before such lucrative targets became irresistible to the Viet Cong.”¹⁷ In fact, a survey of assigned aircraft circa 1969 showed a dizzying array of American and South Vietnamese aircraft to target. For instance, Bien Hoa airfield had 515 aircraft while Da Nang’s had 347. All told, the enemy had 1,956 aircraft to target at 10 major airfields.¹⁸ According to the Air Force History Office (AFHO), urban sprawl near air bases in South Vietnam and civilian population collusion with the Vietcong added to enemy effectiveness. The AFHO observed that the

concentrations of civilian dwellings adjacent to the 10 USAF operating bases afforded the enemy an absolute tactical advantage since they provided cover and concealment to the threshold of the target base. These same conditions seriously restricted defense forces by prohibiting or limiting use of booby traps, trip flares, sensors, free-fire zones, and exclusion areas around base perimeters. . . .

The USAF and VNAF buildup soon saturated the six older air bases to a point that invited enemy attack. Near the peak of the war, 76 percent of the total aircraft and 60 percent of all USAF aircraft operated from these more vulnerable airfields, whose target value was further heightened by large stores of ammunition and aviation fuel.¹⁹

Indeed, one Vietcong unit noted that “in the attack on Tan Son Nhut airbase, the people there helped us for the first time. We have a strong armed force that extends from our rear bases to the towns and cities.”²⁰ The same Vietcong paper documents an “attack on two ammunition dumps in Bien Hoa, . . . 11 attacks on Soc Trang airfield[,] . . . two attacks on Tan Son Nhut airbase[,] . . . [and an] . . . attack on [a] hotel housing close to 200 pilots.”²¹

Attacks in Vietnam were more complex than those in Iraq and Afghanistan. Air base defenders in Vietnam could not effectively patrol the IDF threat ring around their installations. Consequently, enemy forces in-theater had greater freedom of movement, enabling them to mass fires and ground attacks from hard to reach jungle areas or large, adjacent urban squalor. Vietnam theater air bases endured not only IDF attacks but also 29 sapper attacks during which forces attempted to penetrate bases to destroy aircraft and key defenses.²²

Eight of those attacks used IDF as a diversion for base defense forces, thereby screening attackers during ground assaults.²³ Sapper attacks were well organized, trained, and equipped (fig. 5.1).

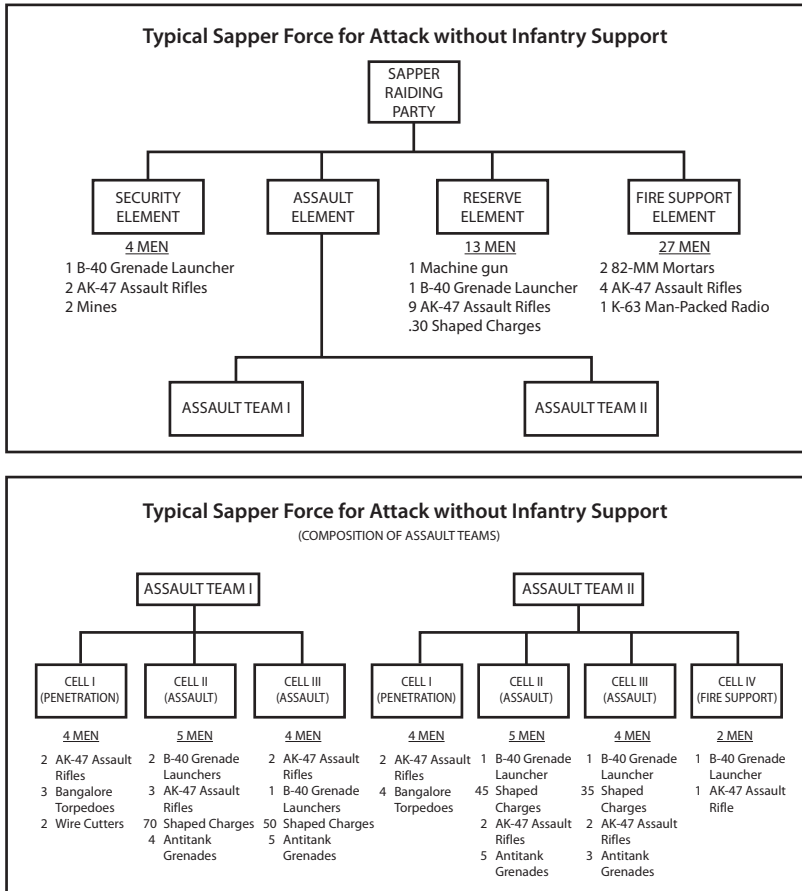


Figure 5.1. Vietcong sapper attack configurations. (Reproduced from Roger P. Fox, *Air Base Defense in the Republic of Vietnam, 1961–1973* [Washington, DC: Office of Air Force History, US Air Force, 1979], 48–49.)

Afghanistan 2002–15

The American military was determined not to repeat the mistakes of the Soviets in their Afghanistan loss in the 1980s. Pivotal to the

mujahedin's campaign, supported by the American Central Intelligence Agency (CIA), was the notion of taking away the airpower advantage enjoyed by the Soviet military early in the conflict. The Afghan objective was realized through IDF, direct ground attacks, and US-supplied shoulder-launched missiles.

The threat against US air bases since the American-led campaign began in 2002 has consisted primarily of indirect fire, occasional direct ground attack, and insider attacks. IDF has been largely harassing in nature with few major accomplishments to its credit. Direct attacks, sometimes masked with IDF, have featured attackers wearing US Army combat uniforms designed to confuse defenders and a mixture of rocket propelled grenades (RPG), small arms, hand grenades, and suicide vests. Two of the most impressive ground assaults are reviewed next.

The 19 May 2010 attack on Bagram Airfield illustrates the commitment and audacity of Taliban planned attacks. Between 20 and 30 insurgents attacked the installation in an audacious effort to penetrate the security perimeter.²⁴ Later, 10 dead insurgents dressed in US Army combat uniforms were found along the perimeter. The contingent had attempted to mount a ground assault by foot using a combination of hand grenades, small arms, and IDF from supporting insurgents. The insurgents focused their main assault on a section of perimeter guard towers. While no aircraft were damaged, the attack disrupted flying operations for hours as well as other operations for the coalition base. One civilian was killed in action and nine military were wounded.²⁵

Bagram's perimeter defense was largely the responsibility of the USAF's 455th Air Expeditionary Security Forces Squadron; however, the integrated defense of the installation was a complex framework of joint and North Atlantic Treaty Organization (NATO) units. The incident was captured in Bagram's military paper with the description of one Airman's experience at a perimeter tower:

Airman Zeising, deployed from Ramstein Air Base, Germany, explained he had been in his tower on the south side of the airfield for about five minutes when he heard an explosion. "When I heard the explosion it was a small one and I thought it was an IDF attack."

He stepped onto the catwalk of his tower and began to scan the area to look for a point of origin but did not see the initial explosion. As he proceeded back into his tower to grab his radio, Airman Zeising noticed some suspicious personnel.

“Two individuals were walking along the perimeter in [Army combat uniforms],” he said. “As they were walking, one raised a rifle and began firing.”

Once he saw the individuals firing, Airman Zeising proceeded out to engage them and noticed two more individuals in the distance. “Once I started engaging, they moved to a covered position out of sight. I ran inside, grabbed my radio and when I was trying to call in, they reappeared and began to shoot randomly and throw grenades.”

As Airman Zeising, a Logan, Iowa, native, engaged the enemy, a support element of 455th ESFS personnel and Army quick reaction force moved to his position in support. He neutralized two enemy combatants and when the other units arrived, the other enemy combatants were eliminated.²⁶

Although the May 2010 Bagram attack turned out badly for the enemy, it continued to pursue and refine this ground-based tactic with similar attacks elsewhere, such as against Forward Operating Base (FOB) Fenty near Jalalabad, Afghanistan, on 13 November 2010.²⁷ The most spectacular and effective ground attack against an air base was at Camp Bastion, a coalition base supporting US Marines, the Royal Air Force, and the Afghan army. Wearing US Army uniforms, the attackers penetrated the air base’s defenses under the cover of night. Armed with rifles, RPG launchers, and suicide vests, the 14-man team began its deadly mission against an air base in Helmand Province, Afghanistan, jointly manned by NATO’s International Security Assistance Force (ISAF). On 14 September 2012, 15 Taliban insurgents infiltrated the perimeter of the Camp Bastion, Leatherneck, and Shorabak (BLS) Complex specifically to attack the aircraft and adjoining airfield support facilities (fig. 5.2). The ensuing battle resulted in the deaths of two Marines, the wounding of eight US and eight British military personnel as well as one British civilian contractor, the annihilation of six and damage of two US Harrier jets, and the destruction of six refueling stations.²⁸ In September 2012, this insurgent operation constituted the most successful ground attack against NATO’s ISAF air assets to date in the Afghanistan conflict and the most devastating wartime attack against American airpower since the Vietnam War.

Camp Bastion illuminated the complexity of Taliban intelligence preparation, training, and operational effectiveness. The small-team tactics exhibited looked much like what one would expect from a small special forces team. US Central Command (USCENTCOM) later interrogated a detainee who attended training at the same compound as the attackers. He stated that the “training consisted of weapons training, physical training, communications, individual move-

ment techniques, and chain link fence breaching, among other things.” The detainee also pointed out that he “did not know the other attackers until he arrived at the training compound,” illustrating a high level of operational security used to compartmentalize the parties who might know of the pending attack.²⁹

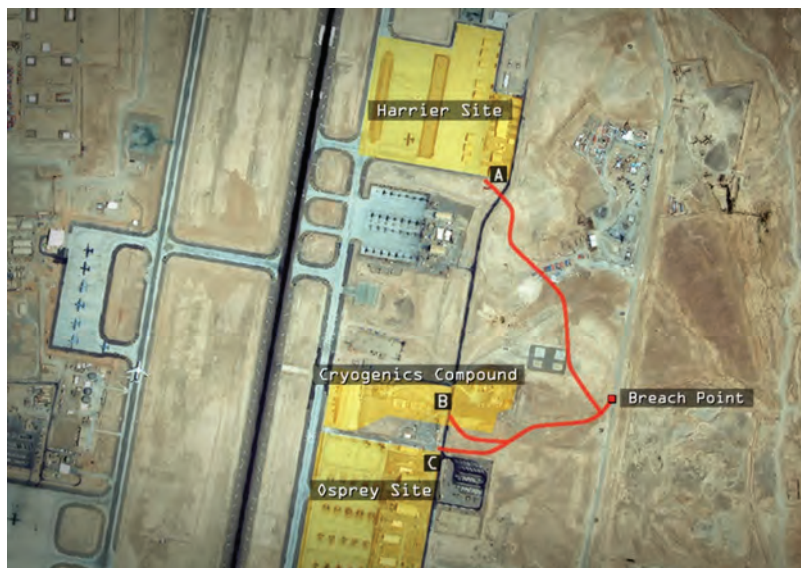


Figure 5.2. Route and targets of the three Taliban insurgent attack teams. (Reproduced from Maj James Allen and MSgt Thomas Grubbs, storyboard, in “2014 Camp Bastion Complex Attack,” ed. Col Erik Rundquist, USAF/ACC [Hampton, VA: Training Brain Operations Center, Sims Directorate, US Army Training and Doctrine Command, February 2014].)

These attacks appear to have later inspired ISIS operatives because the tactics appear similar. On 13 February 2015, ISIS elements attacked al-Asad AB with “between 20 and 25 ISIS fighters wearing Iraqi Army uniforms.” The attack featured two waves. The first used suicide vests at the base’s perimeter while the second used 10 to 15 fighters in an attempt to breach the perimeter. The Iraqi army, backed by US attack helicopters, defeated the threat. At the time, the air base housed approximately 400 American troops who were training and advising the Iraqi army.³⁰

The Afghan threat also portrays the unique aspect of insider attacks. From 2007 to 2011, Pentagon statistics highlighted 42 attacks

by members of the Afghan National Security Forces on US and NATO personnel, claiming the lives of 70 coalition troops and wounding 110 others.³¹ One of the most egregious and horrific instances of an insider threat occurred on the morning of 27 April 2011, when an Afghan air force colonel killed eight Airmen and one contractor at Kabul International Airport.³² Another incident demonstrated how a determined, crafty suicide bomber could infiltrate a CIA base in eastern Afghanistan and kill eight Americans.³³ This disturbing trend intensified in 2012 as uniformed Afghan security forces conducted 46 insider attacks against coalition forces, killing 60 NATO personnel.³⁴

Iraq 2003–12

Unlike enemy forces in Vietnam and Afghanistan, those in Iraq were diverse and disorganized with wide-ranging skill sets. Iraqi forces preferred to attack with IDF and appeared to lack the commitment and sophistication needed for penetrating ground attacks. Indeed, sapper attacks did not materialize in Iraq because they require highly complex, synchronized operations involving extensive coordination, preparation, and training. The Vietcong were aligned with a state power and used its training and organizational templates to facilitate ground attacks. The Taliban in Afghanistan executed ambitious ground assaults on air bases and FOBs. Conversely, the insurgents in Iraq were disparate, uncoordinated, and most often at odds with one another. They were united in one way only—their opposition to the US occupation of Iraq. Sharing this “negative” goal was the singular unifying theme of these multifarious insurgent groups ranging from Sunni factions to Shiite militia to Islamist groups like al-Qaeda. The Sunni-Shiite divide simply did not allow for a united effort.

Sunni groups used largely leftover munitions from the Hussein regime to supply and sustain attacks against coalition forces. Inspiration and support for Sunni insurgents came from a spectrum that included al-Qaeda and Baathist holdouts. Syria encouraged Sunni Arab insurgent groups and former Iraqi Baathists to organize and attack American forces in Iraq.³⁵

Shiite groups were supported and inspired by Iran and Hezbollah. The Iranian Quds Force, a special operations element of the Islamic Revolutionary Guard Corps, ran three training camps modeled on Hezbollah operations in which groups of 20 to 60 radical Iraqi Shiites

were trained in the use of improvised explosive devices (IED), IDF (mortars and rockets), sniper operations, and insurgent tactics.³⁶ US intelligence officials identified the Quds Force as “backing the creation of Iraqi Shiite ‘special groups’” based on Hezbollah organization and tactics.³⁷ Gen David Petraeus, US Army, commander, Multi-National Forces–Iraq, testified to Congress that Hezbollah created a special unit called Department 2800 “to support the training, arming, and funding and in some cases direction of the [Iraqi Shiite] militia extremists by the Iranian Republican Guard’s Quds Force.”³⁸ Shiite groups were responsible for the rout of the British in Basra, Iraq, and targeting of their forces at the Basra airport, which is discussed later.

Additionally, many of these groups, both Sunni and Shiite, subcontracted their deadly work to criminal groups. According to the US Army Strategic Studies Institute, “The U.S. 4th Division’s Taskforce Ironhorse reported in November 2003 that between 70 and 80 percent of those apprehended for making attacks in their area were paid to do so, the going rate being anything between \$150 and \$500.”³⁹ Iraqi insurgent forces ranged from well-trained former Baathists to disenfranchised tribes with militialike capabilities and unskilled attackers motivated solely by monetary reward for attacking US patrols and air bases. Consequently, many IDF attacks were perpetrated by novices who undertook subcontract work for insurgent groups. Joint Base Balad’s (JBB) counter-IDF strategy focused on deterring and disrupting attacks to prevent the enemy from massing fires for maximum effect. As a result, enemy IDF attacks were typically short in duration and performed hurriedly from unprepared firing positions.

While these groups appear to have emphasized conducting operations against US ground forces and the Iraqi government and creating secular disorder, they nonetheless sustained harassment of US air bases through IDF. As an example, the security at JBB’s entry control points and perimeter drove the enemy to IDF attacks as the course of least resistance, giving it the best chance for disrupting US operations. Each attack required personnel at the installation to take cover and clear the terrain of unexploded ordnance prior to returning to normal operations. The patterns of attack in Iraq displayed a lack of specificity in targeting, but their basic objectives sought to disrupt coalition military operations and inflict casualties in order to undercut the American public’s resolve. Insurgent forces attacking JBB maintained a steady drumbeat of mortar and rocket attacks—albeit largely ineffective (fig. 5.3).

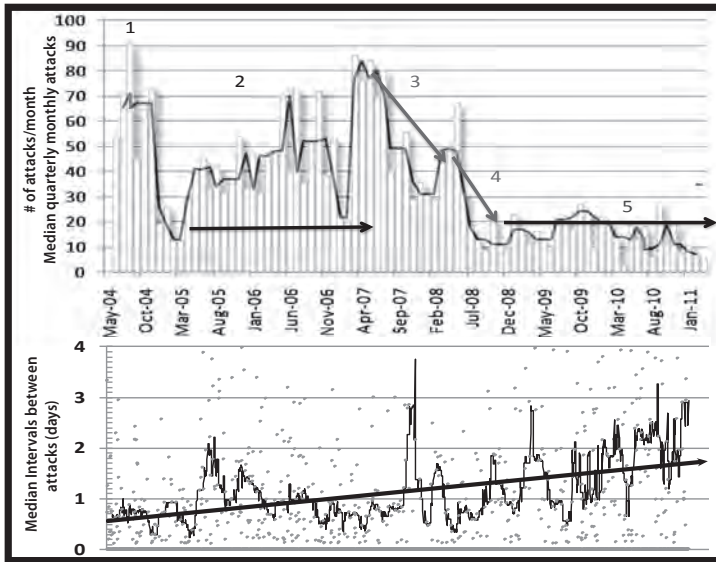


Figure 5.3. Median monthly attacks and attack intervals on Joint Base Balad. 332nd Expeditionary Security Forces Group, Joint Intelligence Support Element, 2011. (Reproduced from Joseph A. Milner, “The Defense of Joint Base Balad: An Analysis,” in Shannon W. Caudill, ed., *Defending Air Bases in an Age of Insurgency* [Maxwell AFB, AL: Air University Press, 2014], 235.)

Despite persistent attacks, USCENTCOM and the US Air Force were so unconcerned by the air base defense threat in Iraq that they did not track the number of aircraft damaged or destroyed. When the data was requested, Air Forces Central directed researchers to the Air Force Historical Research Agency to cull through history reports.⁴⁰ After a year of research, students at Air Command and Staff College (ACSC) found that only 15 fixed-wing aircraft had been damaged across all the bases—10 in Balad and 5 in Baghdad—with zero aircraft destroyed.⁴¹

The Growing Three-Dimensional Threat to Air Bases

If Amazon plans to “deliver parcels of up to five pounds to customers in the U.K. within 30 minutes of order” using off-the-shelf remotely piloted vehicles (RPV), what could a determined enemy do with that same technology to disrupt, deter, or destroy airpower?⁴²

Imagine a fleet of small RPVs flying quickly and accurately to land on each wing of a B-2 stealth bomber with five pounds of explosives. Aircraft are fragile, so a small amount of explosives in close proximity to a wing filled with fuel is a formula for disaster. For an investment of mere thousands, someone could take out billions of dollars in aircraft and have a huge strategic effect on the military balance of power.

In the case of the Islamic State of Iraq and the Levant (ISIL), it has pioneered the use of small RPVs as combat enablers. Indeed, ISIL used RPV surveillance to plan its successful August 2014 assault on the Syrian al-Tabqa AB in Raqqa, effectively removing the Syrian government's ability to project power into that area of Syria.⁴³ On 2 October 2016, ISIL successfully used an IED-laden RPV to kill two Kurdish troops and injure two French paratroopers in northern Iraq—a first for the organization.⁴⁴ What makes ISIL's effort unique is its use of off-the-shelf technology rather than the larger explosive-laden RPVs used by Hamas and Hezbollah based on Iranian military-grade technology, like the Ababil-3.⁴⁵ The ISIL effort provides a “how to” for anyone with access to a retail store.

Another insurgent venture into airpower was by the LTTE—one of the deadliest and most innovative insurgent and terrorist groups in modern history. The LTTE (Tamil Tigers) is credited with creating the suicide vest, and the Federal Bureau of Investigation states that it is the “only terrorist group to have assassinated two world leaders.”⁴⁶ Its 26-year history of combating the Sri Lankan government exemplifies ingenuity and a deadly commitment to a cause. During the course of the conflict, the LTTE planned and executed more than 200 suicide-bomber attacks with “tens of thousands” of Sri Lankans killed in the crossfire.⁴⁷

The LTTE conducted an audacious attack on the Bandaranaike International Airport and its adjoining Sri Lanka Air Force (SLAF) base in July 2001. Using suicide squad tactics, terrorists infiltrated the military runway.⁴⁸ Their attack destroyed or damaged 26 civilian and military aircraft and “revealed [first] the weakness of strategic and tactical intelligence collection, analysis, dissemination and review and second, force protection. . . . There was no prioritization of intelligence gathering, projection and sharing to erode the LTTE's network.”⁴⁹

What if insurgents had an Air Force? In the case of LTTE forces, they pioneered the use of aircraft to support their operational objectives.⁵⁰ They conducted three air attacks on Sri Lankan government air bases and facilities using commercial light aircraft modified to

drop small bombs during the final year of the Sri Lankan civil war. One notable Indian naval officer observed that the “acquisition of air capability does add a new dimension to the ongoing warfare . . . [but that] . . . the limited numbers and the type of aircraft do not pose such grave danger.” He added, “The aircraft procured are no match for the SLAF. The only reason for the success is some excellent planning based on sound intelligence and well-coordinated simultaneous/advance ground commando operations as in the case of the recent attack on Anuradhapura.”⁵¹

The LTTE and ISIL case studies show the innovation of a determined enemy and the lack of initial preparedness of air base defenders in facing an insurgent air threat. Could this shortfall also be the Achilles’ heel of future American base defense efforts?

Today, the DOD views the challenges of antiaccess/area denial (A2/AD) as a pressing strategic issue for American force projection and a key factor in shaping the planning for future operations, especially in the Pacific.⁵² The central premise of A2/AD is that an enemy force will seek to deny the United States and its allies the access to bases or sea lanes that would allow follow-on power projection into the region. Much of the focus of A2/AD has been on a potential enemy’s use of long-range precision weapons and evolving technologies to target air bases. Literally nothing has been written about ground-based threats posed by enemy-aligned indigenous groups, insurgents, and special forces—all of which could play a role in a final line of denial by a potential enemy committed to a full-spectrum A2/AD concept. Thus, the incorporation of small, IED-laden RPVs or small aircraft into the full-spectrum defense formula is paramount because it presents a potential gap in the defensive operating picture.

During the Cold War, planners at NATO bases concentrated on the USSR’s intent to attack air bases. The Soviets explored a number of ways to assault and disable bases, primarily by employing the Spetsnaz (Russian special forces). A review of Spetsnaz airfield-attack profiles in declassified Cold War-era CIA reports would prove useful because of their insights into methods for direct strikes on these targets. In one method, 30 special operators were air-dropped near an air base. They then broke into “four operations teams, each team with specific responsibilities including capturing vehicles and personnel for the purpose of infiltrating the target [air base],” using surface-to-air missiles (SAM) and explosive devices to destroy aircraft.⁵³ Additionally, “in a second method, a Spetsnaz company (approximately 10

teams of five to 12 men) operated against a heavily defended airfield. The company could not get closer than 2 to 3 km to the target. During the first night Block Strelas [three-tubed SAM launchers mounted on a tripod] were positioned as close as possible to either end of the field, and then attacks were initiated against pipelines, powerlines, communication lines, security personnel, and crews heading toward the airfield.”⁵⁴ This tactic would disrupt airfield operations, create the impression that a larger Soviet force was in the area, and draw more NATO forces in for defense and away from the front lines.⁵⁵

Imagine well-trained enemy special forces like Spetsnaz coupled with the motivation of the Vietcong and innovation of the LTTE, and married to technological advances like small aircraft, RPVs, and precision-guided munitions (PGM). The base defense problem becomes incredibly difficult, and the complexity (and cost) of countering these emerging threats escalates significantly. Thus, the successful defense of air bases from such threats may be the critical linchpin for either a successful or disastrous military campaign in the future. It depends very much on whether leaders will take these threats seriously, provide sufficient resources, develop accepted joint doctrine to address these gaps, and use the right template for force structures and operations.

Templates for Air Base Defense: Time for an Update

These case studies and technological advances should spur American leaders to review how best to organize an effective “joint” defense against a rapidly changing threat. However, the American view of integrated ABD is largely monolithic, uninformed by other examples outside of American or British experiences. Indeed, the USAF has been singularly focused on the British approach to ABD. This pattern is born of intellectual laziness—the British do write in English—and the close and enduring ties both countries enjoy, including having exchange officers at the US Air Force Security Forces Center and Royal Air Force Regiment. Yet the recent British ABD record is problematic: failures at Basra, Iraq, and Camp Bastion, Afghanistan.

After the invasion of Iraq in 2003, British troops quickly adapted a peacekeeping model. They began foot patrols of Basra wearing regimental berets instead of helmets and started driving unarmored vehicles. However, what was praised widely as the model for counterinsurgency operations in Iraq disintegrated into a disastrous rout

over time. As Shiite criminal and Mahdi militia groups organized, British casualties began to mount. During a period in 2006–7, as many as 80 percent of recorded attacks in Iraq targeted British forces; this situation directly affected the political support for British military action.⁵⁶ In turn, the British government pressed its military forces to swiftly transfer security control to the Iraqi security forces. Over the course of a year, the British forces in Basra went from patrolling the streets from six main bases to withdrawing all forces to their contingency operating base at Basra Air Station. The net effect was to abandon the battlespace to the enemy, isolate and barricade the remaining British forces at one base, and become a magnet for IDF until their unheralded withdrawal in 2008. The British newspaper *Telegraph* highlighted the perceived initial failed withdrawal from the operating environment in a 2010 article portraying the British Army as “abandon[ing] Basra to terror.” Gen Jack Keane, US Army, retired, said that “it was a huge mistake to pull out” while retired US Army colonel Peter Mansoor stated, “I don’t know that you could see the British withdrawal from Basra in 2007 in any light other than a defeat.”⁵⁷

Likewise, in Afghanistan, the failure of British forces was clearer. The attack on USMC aircraft and personnel fell in the British base defense sector where its forces were responsible for the perimeter, towers, and construction of a defense in depth designed to repel an attack. Taliban insurgents instigated a sophisticated sapper attack on the BLS Complex, realized with extensive preparation, recruitment, and training far exceeding the expected threat of rocket and entry control point attacks that were the norm in Afghanistan.⁵⁸ In the British Parliament’s House of Commons report on the incident, members observed that “no one was actually doing any guarding” from the perimeter to the aircraft—a wide-open door exploited by the enemy.⁵⁹

Regardless of British responsibilities, two USMC general officers were relieved because they did not ensure the safety of American aircraft. One British politician opined, “That is the sticking point. . . . We [the UK] manned the perimeter, but the Americans lost their jobs.”⁶⁰ Another remarked that the American generals either “fell on their sword—or the sword was stuck in them.”⁶¹ Finally, the House of Commons report concluded, “Given that the attack took place in the British sector of the camp, British commanders must bear a degree of responsibility for these systemic failures and associated reputational damage.”⁶² To date, no British officers have been held responsible for the Camp Bastion failures. Accordingly, British performances at both

Basra and Camp Bastion deserve scrutiny and have no doubt impacted the standing of the British in the annals of ABD history.

Bucking the trend of “templating” the British ABD organizational model, Canadian officer Lt Col Paul M. Thobo-Carlsen offers his perspective in an essay entitled “Ad Hoc Is Not Good Enough,” in which he contrasts and compares the ABD organizations of Canada, the UK, France, Germany, Australia, the Netherlands, Italy, and the United States.⁶³ His work serves as a reminder that base defense can be conceptualized and organized in many ways, and, importantly, that American leaders must look beyond the comfortable templates of their own experience (and that of the British) to stay relevant and agile. Further study of non-European models of ABD is warranted to expand the aperture beyond Western thinking.

Conclusion

Dr. Alan Vick, RAND Corporation, highlights the growing vulnerabilities to US airpower by ground and missile attack due to improving enemy capabilities that “are bringing the era of [airpower] sanctuary to an end, with significant implications for the American way of war.”⁶⁴ If such is indeed the case, new resources don’t appear to be materializing to meet the growing threats. In that respect, the pivot toward Asia has proven hollow.⁶⁵ Sequestration has strait-jacketed defense spending.⁶⁶ Furthermore, the Army and Air Force continue to lack the agreements that made them more synergistic and cooperative on ABD matters in the ’80s and ’90s.⁶⁷

The Vietnam War was a watershed moment for US forces engaged in the protection of air bases because they faced a determined and competent enemy focused on harassing and neutralizing the American hubs of strategic power: US air bases. The Vietcong and North Vietnamese forces were well trained, well led, highly disciplined, and committed to their cause—just as were enemy forces in Afghanistan. However, Afghan forces were far fewer in number and faced a daunting base defense scheme. Only once at Camp Bastion did they have a real air base attack success. Finally, Iraq was a diverse, uncoordinated mix of insurgents and criminals who never had any strategy other than harassment and were ineffective in their effort to blunt airpower.

As leaders look to the future of ABD, the growing technological prowess of terrorists and insurgents should give them pause. Analysis of these case studies leads to some recommendations.

Complacency is the enemy. The American templates used in Iraq and Afghanistan will likely fail against a rapidly changing threat environment and more sophisticated enemy—one that will focus and dedicate resources to mitigate and destroy the traditional American airpower advantage. Accordingly, the USAF and, importantly, the joint force should invest in studying, analyzing, and programming to meet the threat posed by an ever more complicated base defense threat. As noted earlier, during the conflicts in Iraq and Afghanistan, the Air Force and USCENTCOM did not track the total number of aircraft destroyed or damaged. It was left to ACSC students to cull through site history reports. This example is indicative of the lack of seriousness given to ABD as well as the ineffectiveness of the enemy.

Therefore, the USAF should create a standardized reporting system for air base attacks that would populate a database similar to the Theater History of Operations Reports (THOR), which plot and track every bomb dropped in the history of US airpower.⁶⁸ Using research and mapping tools pioneered by THOR, the USAF could learn much from the historical data, attack patterns, and results of air base attacks. As air attacks from small RPVs and enemy use of precision munitions for mortars materialize—and they will—such data will become even more imperative in capturing the explosion of technology and the capabilities that are now beginning to be easy to acquire. If leaders are armed with this information, they may well make increased, targeted investments in the joint capabilities needed to meet future ABD challenges.

AirSea Battle (ASB) must holistically address all of these threats. ASB's name itself is designed to evoke and template the success of AirLand Battle (ALB)—an operational concept jointly developed by the Army and USAF in the early 1980s. As part of ALB, the services developed the “31 Initiatives” to address gaps and seams in their operational approach, improve and synchronize procurement, and reduce redundancies.⁶⁹ Six of these initiatives dealt specifically with the defense of air bases and the rear areas from which they operate.⁷⁰ In the mid-2000s, these ABD agreements between the Army and Air Force were abrogated. If American leaders want to guarantee access of friendly forces to project military power within the theater of operations, then a similar accommodation must be made in agreeing on a joint approach to meeting the threat to air bases. The current ad hoc approach will leave shortfalls in resources and operations if not addressed as a joint problem.

Limited resources drive the need for an enlarged focus on developing host-nation ABD capabilities—especially to support the concept of dispersal. Development of foreign internal defense (FID) capabilities for security forces would ensure a continuous investment in training host-nation forces to provide a defense in depth for austere and contingency air bases. The US government implements FID programs or operations to assist a host nation with its “internal defense and development (IDAD) program by specifically focusing on an anticipated, growing, or existing internal threat.”⁷¹ Expanding the traditional use of special forces in FID could prove vital in developing more robust partner capacity in securing airfields used for American airpower—a force multiplier.

While the United States has been largely successful in defending its air bases in Iraq and Afghanistan, the enemy in these conflicts was not optimally trained, organized, or equipped. It would be wrong to simply cite ABD efforts in Iraq and Afghanistan as the proper template for future defense or perpetuate the mind-set that new thinking is not needed to meet future threats. Vietnam showed what a determined, well-trained, and committed foe could accomplish in attacking air bases. In the future, the merging of competent enemy forces with precision weapons and modern technology will likely be the impetus for the real change needed to treat the defense of airfields with the seriousness of purpose it truly deserves. Given the replacement cost and lengthy manufacturing timetables of modern aircraft, the USAF and its coalition partners would not be able to sustain Vietnam-level ground-attack losses. Leaders must ensure that the full spectrum of air base threats is addressed, including the traditional ground threat married with the high-tech capabilities of precision-guided IDF and RPVs. It is often said that generals try to fight the last war. The lack of enemy effectiveness against air bases in recent conflicts should not lull leaders into underresourcing or dismissing the growing threats against air bases if a major strategic calamity is to be avoided.

Notes

1. Dowd, “After the War.”
2. Vick, *Snakes in the Eagle’s Nest*, 68.
3. Data was produced during the Air Command and Staff College (ACSC) year-long research elective Defending Air Bases in an Age of Insurgency, 2013–14, instructed by Col Shannon W. Caudill. Student researchers were Maj Russell S. Badowski, Maj Jason F. Baggett, Maj Scott Black, Maj Loren M. Coulter, Maj Colby B.

Edwards, Maj Raymond J. Fortner, Maj Steward J. Parker, and Maj Michael M. Wellock. Researchers reviewed all available Air Force history reports covering Sather AB (Baghdad International Airport), Joint Base Balad, Tallil AB, Kirkuk AB, and al-Asad AB.

4. At Camp Bastion on 14 September 2012, six AV-8B Harriers were destroyed; aircraft damaged included two AV-8B Harriers, one C-130E Hercules, and three MV-22B Ospreys. Casualties included 2 military killed in action, 16 military coalition troops wounded in action (WIA), and 1 civilian WIA; insurgent force size was 15. Garrett and Murray to commander, US Central Command, memorandum, 2.

At Bagram AB on 20 August 2012, one C-17 was destroyed and two troops were WIA; force size is unknown. Taylor, "General's Aircraft Damaged"; Rayment, "Harrier Destroyed"; and Rubin, "Audacious Raid."

5. Vick, *Air Base Attacks*, xiv–xv.
6. Briar, "Sharpening the Eagle's Talons," 263–64.
7. Davis, *31 Initiatives*, 125.
8. Headquarters USAF/XOS-F, Validating the Abrogation.
9. "Sri Lankan Rebels Launch Air Raid," *BBC News*.
10. Vick, *Snakes in the Eagle's Nest*, 102.
11. Lewis, "Lebanon."
12. Kellen, *Conversations with Enemy Soldiers*, ix, 99.
13. Fox, *Air Base Defense*, 32.
14. *Ibid.*, 41.
15. *Ibid.*, 36.
16. Kellen, *Conversations with Enemy Soldiers*, 30.
17. Corum and Johnson, *Airpower in Small Wars*, 265.
18. Fox, *Air Base Defense*, 61, ref. fig. "Aircraft Assigned to Primary RVN Bases 3 January 1969," from *USAF Management Summary: Southeast Asia*, 3 January 1969, 39.
19. *Ibid.*, 61–62.
20. Elliott and Elliott, *Political Indoctrination and Military Training*, 38.
21. *Ibid.*, 37.
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PART 3

Air Base Defense Enablers

Air-Mindedness and Counterintelligence

Chapter 6

Enabling a Three-Dimensional Integrated Defense

Colby B. Edwards

In a world of proliferating precision, threats against air bases are growing at an ever-increasing rate. With modern military aircraft becoming more complex and expensive, costs of synchronized attacks against air bases by ballistic or cruise missiles coupled with traditional ground attack could run into the billions of dollars. Worse, aircraft assets may not be easy to replace, and their airfields may be difficult to repair. As a result, a quick, massed attack against US air bases could be a national disaster—granting potential adversaries tremendous offensive initiative and strategic room for maneuver. Defending air assets while on the ground is one of the least understood and underinvested operational aspects of airpower. Today's strategy for defending USAF air bases is known as integrated defense (ID) (formerly known as air base defense or air base ground defense), yet it provides only a component of the capability needed to meet the full spectrum of modern threats.

The threat to air bases is not limited to just high-end weapons. Attacks from small remotely piloted vehicles (RPV) or precision-guided munitions (PGM) now available in mortars could soon be used by proxy or criminal forces.¹ These technological advancements will enable enemy forces to cause strategic devastation with low-cost methods and complicate attribution to the true source of the attack. Thus, air base vulnerabilities are more prevalent and insidious than ever. The successful defense of air bases may therefore be the critical piece in the success or failure of an entire campaign.

The Air Force has the most obvious interest in air base defense (ABD) and must take the lead for joint forces as an advocate for an effective defensive scheme. In addition, while the joint force will continue to be integral to the base defense plan, the USAF must apply its own resources more effectively to protect its most valuable assets. The Air Force must ensure that its air base commanders are armed and resourced appropriately to achieve effective defense. Current ABD planning is ground-centric and focuses on low-tech threats while advanced threats are relegated to higher commands. Although doctrine

and resourcing are sufficiently attentive to ground attacks and ground-based defenses, air-based threats or air-defense concepts are not well integrated.

An air-minded approach properly categorizes air bases as strategic assets, prioritizes resources for their defense, and incorporates cross-domain defense assets to cover the spectrum of threats three-dimensionally. By adopting an air-minded approach and applying adaptive command and control (C2) architectures, the local air base commander can leverage the creativity and flexibility inherent in decentralized control and execution to employ assets in an integrated, three-dimensional defense plan.

This chapter describes the challenges of an effective three-dimensional integrated defense concept in the context of the spectrum of threats and operational environments. It discusses the strategic impact of this concept and then examines the operational environment and threat expectations. To frame the problem, the challenges and responsibilities of balancing centralized control and decentralized execution (CCDE) in the ABD role are examined. Finally, recommendations are presented for advancing ABD thinking toward a three-dimensional approach in the context of future contested environments.

Meeting the Threat Head-On

The wide spectrum of threats to air bases requires a tailored yet flexible response. While traditional threats may be effectively combated with ground-based systems and forces alone, defense against emerging and advanced threats requires cross-domain-capable assets including air and missiles. Current doctrine lacks a full-throated discussion on this subject regarding ABD.

The Air Force should primarily be concerned with the defense of its air bases and associated assets, yet the Air Force air base commander is not *clearly* responsible for many aspects of ID. Additionally, the assets and personnel dedicated to ID are often variable, scarce, multiservice, and assembled ad hoc. Furthermore, rapid advances in technology widen the spectrum of low-cost means for an adversary to use in attacks and thus raise the risk for commanders to mitigate or accept. With the increasing costs and complexity of today's aircraft, the associated risks of parking them on a ramp also rise.

Strategic Impact

In the broad historical context, the strategic effect of large attacks on American forces abroad is significant. Limited resources force commanders to choose between conducting offensive operations and performing base defense. US policy shifts and second-order effects after major attacks like the Khobar Tower bombings and others on US forces and embassies must also be considered by strategists when making basing and security decisions.² Dr. Alan Vick, a RAND Corporation expert in base defense studies, exemplifies the historical strategic significance of ID in the American “island hopping” campaign in World War II’s Pacific theater, in which the entire plan rested on the ability of the combatants to take or defend airfields.³ It is easy to envision a similar contested environment in today’s geopolitical arena.

Bringing the threat to reality, a September 2012 attack on Camp Bastion destroyed eight AV-8 Harrier fighter aircraft and damaged several transport aircraft.⁴ While the attack was spectacular and costly, the effects would be multiplied tremendously if the aircraft were expensive F-22s or F-35s. According to experts and budget documents, the current estimated costs of the F-35 is over \$170 million per copy.⁵ Even a conservative estimate of costs would put an attack on F-35s equivalent to that of Bastion at over \$1 billion. While F-35s are not in Afghanistan, the system *will* replace many aircraft used in these austere locations. Despite the location, with a ramp full of F-35s rather than A-10s, F-16s, and AV-8s, the risk and cost of attacks on airfields increase.

Adding incentive to target US aircraft on the ground is the difficulty of countering advanced US aircraft while they are airborne. Specifically designed to survive in an antiaccess/area-denial (A2/AD) environment, the F-35 has stealth characteristics and onboard sensors that make the jet difficult to find and engage while airborne.⁶ Paradoxically, these features increase its vulnerabilities while on the ground. Stealth composites and fragile electronics are susceptible to damage, require a lengthier maintenance tail, and take more time to repair. The aircraft thus has a longer ground time and decreased availability for missions. In addition, with the expanding use of PGMs and RPVs, the threat is widening in scope and becoming more difficult to defend against. These low-cost threats are easily proliferated and have already caused other national security concerns.⁷ As a compound effect, both the threat and strategic advantages are growing.

An opponent's ability to deny the US Air Force the use of its most advanced aircraft with little cost is concerning.

The Operational Environment and Threat Expectations

The threat to air bases will vary drastically based on the operational environment. Both traditional and emerging threats challenge the integrity of defenses, and commanders must adapt. A thorough assessment of the operational environment and associated threats provides a starting point for planning, however.

Each operating environment is unique, and the defenses must be tailored accordingly. The doctrine for base security, Joint Publication (JP) 3-10, *Joint Security Operations in Theater*, states that “knowledge of the enemy’s identity, capabilities, vulnerabilities, and likely intentions is essential to prepare for combat operations, prevent surprise, and protect the joint security area.”⁸ But a thorough assessment of the operating environment must also consider a vision of *how* ID will be applied. When considering joint defense efforts in an irregular warfare (IW) setting, the complications of communication, battlespace responsibilities, and fires deconfliction are ever-present. These challenges are magnified in a major contingency fight against a near peer—an environment in which communications and control networks may be limited while chaos from attacks inhibits normal operations.⁹ Recent IW conflicts have presented an opportunity to adapt and mend procedures *during* the campaign with little risk to the mission in the process. Under such conditions, defense concepts are fine-tuned as defenders learn and apply new methods. Altering procedures, technologies, or resources in IW is a matter of efficiency and effectiveness rather than survival. In contrast, effective defenses must be in place *prior to* hostilities to ensure force survival in a robust threat environment. A surprise attack with ballistic missiles or aircraft offers little time to learn or discuss changes. Then, the only survivable option is to put into action predetermined, clear responsibilities and procedures.

Recent discussions regarding a pivot to the Pacific and the concept of AirSea Battle (now referred to as the Joint Concept for Access and Maneuver in the Global Commons or JAM-GC) are indicative of the challenges that future air base commanders may face in the ID role.¹⁰

Considering the robust capabilities of the Western Pacific Theater of Operations (WPTO) and the Chinese People's Liberation Army (PLA), having a vigorous ID takes center stage. According to the Center for Strategic and Budgetary Assessments, "Apart from increasingly vulnerable bases and facilities on allied territory, bases and facilities on US territory in the Western Pacific comprise a small number of very large and effectively undefended sites located on a handful of isolated islands, all within range of PLA weapons systems."¹¹ Defending air assets against these advanced threats is a complex endeavor; current joint forces simply are not up to the task. The modern threat environment requires a different approach, one that truly synchronizes the defensive posture against anything from missiles to unmanned vehicles to the traditional mortar and rocket threats common in IW environments. This importance is noted in the JAM-GC concept, where the critical first step is "withstanding the initial attack and limiting damage to US and allied forces and bases."¹² That is, without initial force survival, the concept is inept. By first understanding these operational environments, the services can tailor an effective defense plan.

Ground-Centric Integrated Defense

There is a disconnect in the application of three-dimensional capabilities to ID concepts. Current approaches to ID do not include the necessary consideration of the air dimension's unique capabilities and vulnerabilities. The air-minded approach is to realize the value of air bases and assets and thus prioritize their defense, consider attack from the air, and enable cross-domain assets to aid in effective defense.¹³ A ground-centric approach and blurred responsibilities challenge the realization of an air-minded vision in today's ID concepts and doctrine.

The current perspective on ID is mostly ground based, and any mention of airpower is rooted in support for ground operations (intelligence, surveillance, and reconnaissance [ISR]; air-ground fires; etc.). Even these concepts lack true integration. A review of applicable ID doctrines highlights the ground-centric nature and lack of integrated defense spanning the air-to-ground threat.¹⁴ JP 3-09, *Joint Fire Support*, and JP 3-09.3, *Close Air Support*, are well-known and practiced doctrines in the execution of air support to friendly ground forces. However, ground elements responsible for base defense are

unlikely to be familiar with these procedures. While security forces and military police continue to be the US military's primary means of defending air bases, they do not possess the relevant skill sets, training, or equipment to integrate the air component through tactical air control.¹⁵ In fact, relevant doctrine does not seem to consider these capabilities necessary. Conversely, while pilots and aircraft operators practice air support procedures with other ground forces regularly, they are likely unaware of ID doctrines and do not integrate with base defense personnel except on an ad hoc basis. While the Department of Defense has made strides to leverage the air component in the defense of ground-based threats for ID, the concept still relies on niche expertise (in the form of joint tactical air controllers or JTACs) to truly integrate the air and ground components. At a minimum, planners must consider this crucial link when developing defenses.

Threats commonly associated with ID are traditional, ground-based attacks such as direct and indirect fire, sappers, and shoulder-launched missiles—also known as man-portable air-defense systems or MANPADS. Joint doctrine makes little mention of emerging and/or high-tech threats such as small RPVs, PGMs, and cruise or ballistic missiles. Level III threats (airborne, heliborne, large ground forces, etc.) as described in JP 3-10, *Joint Security Operations in Theater*, are considered beyond the scope of security force (SF) capabilities and as requiring other significant combat forces, yet it does not discuss how these defenses are formed or integrated.¹⁶ Although revisions to JP 3-10 captured lessons learned from recent conflicts, it has yet to look forward to conflicts other than IW and address attacks from advanced threats.¹⁷ In a major contingency operation with a near-peer competitor, the Air Force may have to accept limited air superiority due to limited basing, logistics, and force density—a prospect that seems impossible based on recent experience. This scenario likely involves protection of air bases from more than IDF and ground assault.

Responsibilities

Clear responsibility for coverage of a three-dimensional battlespace is an important aspect of ID. In historical examples, uncertainty in security responsibilities has hindered defense effectiveness. Defenses failed when Air Force commanders relied on other services for security. As one RAND air-base-attack study concludes, “In each case, air base defense had to compete with other missions to which ground

commanders assigned higher priority.”¹⁸ While a joint approach to ID is expected, relying on other services for the defense of air bases will not likely be effective because of competing priorities.

Many of the issues associated with uncertainty regarding roles in an ID environment are derivatives of doctrinal conflicts. In considering a comprehensive, three-dimensional plan for ID, commanders must reference numerous doctrinal sources. These doctrines have several gaps and overlaps distinctly drawn along dimensional seams, reflecting the very challenges for effective ID. On one hand, ground-based threats such as mortars, rockets, and ground-assault forces are addressed in ID concepts and doctrine.¹⁹ On the other hand, defense concepts for air and missile threats reside in other doctrine.

Local defenses are further detached from the responsibility for ID in the case of advanced threats. For instance, JP 3-01, *Countering Air and Missile Threats*, is devoted to defensive counterair (DCA) planning and concepts, cruise-missile defense, and integrated air defense systems; however, these concepts are rarely mentioned or discussed in the context of localized ID.²⁰ The role of defending the theater (and therefore air bases) from airborne threats and missiles is the responsibility of the area air defense commander (AADC), not the base commander.²¹ ID concepts and doctrine lack any discussion of air threats and rather relegate this responsibility to theaterwide defenses with dangerously little discussion tying the concepts together. The 2017 revision of JP 3-01 briefly mentions the phrase “base defense” four times in the context of counter-rockets, artillery, and mortars; air combat orders; and combat air patrol. However, it does not provide a great deal of clarity on how local commanders can address advanced air threats to bases.²²

Similar to relegating responsibility for ground security to the Army, relying fully on the AADC for protection from advanced threats may be problematic. The AADC is typically responsible for a large area of responsibility (AOR) and will have competing priorities. In this highly centralized system, the AADC has limited ability to respond to specific ID needs. These constraints highlight yet another seam in ABD and detail the very conundrum that local commanders face. So where do the local responsibilities end and higher commands become accountable?

To assume that another agency, service, or higher headquarters will ensure defense of air bases from advanced threats without clear responsibilities and contingency plans would be negligent. As a con-

sequential example, a short-range, surface-to-surface missile may be beyond the capabilities of local security forces; however, the short-range nature of this attack will complicate a timely response in a centrally controlled theater air defense system. Likewise, a small RPV (or many RPVs) hovering over a base will exploit the seam between theater and local defenses. Moreover, these threats may be too small, low, or unidentified to affect typical air defense systems. How these threats will be countered through clearly outlined responsibilities is yet to be thoroughly addressed and indicates one of many voids in current defense plans.

Unity of Command

Unity of command is a long-practiced military principle to ensure that direction and efforts are focused toward a common objective. For instance, having one commander allocate and account for joint defense assets has proven effective in the past, as illustrated at Joint Base Balad (JBB), Iraq, and Bagram AB, Afghanistan.²³ Maj Gen Brian Bishop, former wing commander at JBB, observed that “consolidation of efforts/tools under a single commander was the best operational aid to effective ID.”²⁴ The concept of unifying efforts has been employed from a ground perspective in an IW setting, but more discussion must focus on the advanced threats that now augment the traditional ground threat.

The diverse and advanced nature of air and missile threats complicate the C2 relationships for defenses. In his paper “Effective Command and Control for Global Missile Defense,” Maj Stephen Mann describes the complex architecture and command structure for missile defense using a combination of Air Force satellites and aircraft, Navy Aegis cruisers and destroyers, and Army Patriot missile systems and Terminal High Altitude Area Defense (THAAD) radars.²⁵ Underscoring geographic complications, Mann describes how these systems are scattered globally and allocated to various commands yet are used in combination for missile defense. Thus, he observes that the “doctrinal command and control authorities for these sensors and weapons systems can be somewhat confusing or even conflicting, increasing the complexity of defending against missiles that cross areas of responsibility.”²⁶ Given that many of these missile threats range over thousands of miles, the command relationships and defense assets are global. While this operational range complicates

things for the AADC—who is geographically limited and usually designated by a joint force commander under a combatant command—a local air base commander is even further removed from control of these assets.²⁷ In this architecture, unity of command is geographically and spatially separated from a particular base being attacked and may or may not be distanced from appropriate defense assets. This plan may be insufficient for timely intervention, especially in an A2/AD environment.

The complexities associated with missile defense have obvious implications for individual base commanders—even with the assumption that normal communications architectures are effective. Although some ID assets (such as Patriots and aircraft) may reside on the base, the base commander is not directly in charge of them. How would local base commanders defend their assets if normal C2 relationships were degraded? At a time when they were defending against less advanced threats, commanders were often able to use ad hoc procedures and tactical innovation to defend the base during an attack.²⁸ For advanced threats, similar measures would offer fewer survivable options during an attack.

Commanders must ensure that they fully understand the operational environment particular to their air base and associated defenses, how that base operates, and what they are responsible for. Ensuring that defense assets are definitively tasked to a responsible commander with clearly defined AORs will aid in effective ID. Empowering lower-level commanders to use (typically) centrally controlled assets may offer additional benefits in time-critical circumstances, but it will require a shift in the approach to C2.

Flexible Command and Control and a Decentralized Approach

The effective application of joint air operations requires an adaptive balance of CCDE that may be difficult to achieve in ID.²⁹ Current doctrine describes joint air operations as centrally controlled, providing a single commander to plan and direct air throughout the AOR; however, decentralized execution at an operational and tactical level is also noted as the key to flexibility and responsiveness.³⁰ The dichotomy of this balance becomes apparent in the ID concept.

In the ID role, centrally controlled assets must be used for a flexible, timely response to threats. Centralized command of air assets—similar to that for other high-value, low-density defense assets—is driven by several factors: the scarcity of platforms available, the need for efficient synchronization, and the geographic span of influence and responsibilities (fig. 6.1).³¹ In the area defense role, airpower and other theater defense assets, such as Patriots, ostensibly must be centrally controlled to ensure proper application of effects and cover large areas with scarce resources. While this strategy provides for the entire AOR, it challenges a decentralized approach required for timely, flexible ID options at the local level.

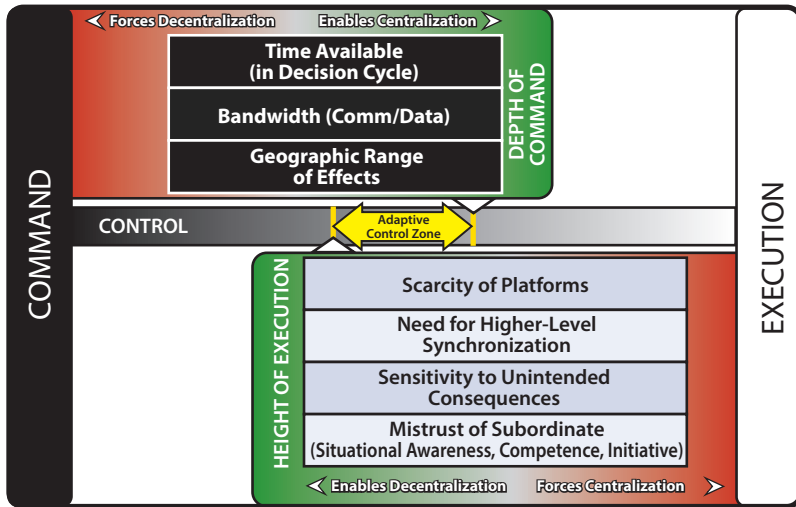


Figure 6.1. Balancing levels of command and control. (Reproduced from Harry Foster, deputy director, Center for Strategy and Technology, briefing, subject: Airpower’s Fight for Strategic Superiority in 2035: Getting It, Using It, Sustaining It, Maxwell AFB, AL, January 2015.)

Joint publications highlight the need for a decentralized approach to provide tactical flexibility. JP 3-30, *Command and Control of Joint Air Operations*, describes decentralized execution as enabling flexibility in making tactical-level decisions. It also states that levels of centralized control should be based on levels of complexity and uncertainty in certain missions. The JP specifically notes close air support

(CAS) as an example that requires a high level of decentralization.³² CAS is typically used in ID against ground-based threats, leveraging an in-place C2 architecture designed to be highly decentralized. Further collaboration is found in JP 3-09, which states that to keep fire support responsive, the “support coordination between Service and functional components should occur at the lowest possible level.”³³ General Bishop determined that “you have to push the authorization level down, or it will not be effective.”³⁴ While the need for decentralized execution is evident in the ID role, the ability to gain agile support in a centrally controlled architecture can be difficult.

Like other air defense assets, air sorties are tasked via centralized control through an air tasking order (ATO) and are not typically at the discretion of the local base commander for use in ID. JP 3-30 states that “sorties provided for air defense . . . are not ‘excess’ sorties and will be covered in the ATO,” but it adds that ATOs do not necessarily restrict their responsive use by commanders.³⁵

An example of the dynamics of CCDE in the base defense role is found in the Vietnam experience. The use of AC-47 fixed-wing gunships over air bases in Vietnam served as an effective deterrent and fires platform for ID. Though Seventh Air Force centrally controlled the gunships, lower-level direction of their employment demonstrated that “decentralized control can be advantageous when tactical considerations, such as response time, outweigh considerations of efficiency.”³⁶ Yet, another factor driving centralized control—scarcity of assets—limited the decentralized approach because the AC-47s were often needed to support other priority missions.³⁷ This dilemma highlights the challenge of properly balancing CCDE in ID. Finding a solution may depend on a commander’s initiative and creative approach.

Thinking outside the box may allow a commander to leverage local assets in a decentralized manner for ID. Recent examples in Iraq and Afghanistan illustrate an innovative approach to ID in a concept called residual base defense (RBD).³⁸ RBD directs that returning aircraft use remaining fuel to support ID prior to landing. These aircraft add significant ISR capability and fires response without interrupting the normal asset-allocation priorities. This strategy is similar to that for the use of AC-47s in Vietnam. Air assets are centrally tasked—offering the benefits of ATO allocation and priority—but also provide the decentralized flexibility and persistence that proved beneficial to base defense commanders in Vietnam.

A similar creative approach may be used for advanced threats, but these solutions cannot be developed ad hoc or ex post facto. The existential nature of advanced threats to air bases will not allow time to react and remedy defenses in a survivable way. With the realization that C2 networks will be degraded in a major contingency, the balance of CCDE is at the forefront of discussions regarding an A2/AD environment, especially in regard to dispersed operations.³⁹ One option for enabling C2 in this environment is the adaptive C2 model in which the primary goal is “the creation of unity of effort through integration at the lowest appropriate level, thereby achieving agility and speed of action in delivering desired effects.”⁴⁰ The applications of adaptive C2 are situation dependent and must consider the resources available, the mission at hand, levels of trust in subordinates, and acceptable political risks.⁴¹ Yet the issue remains—if these concepts are not practiced and trained for prior to hostilities, there may be little room for survivable adaptations.

Recommendations

For air base defense to be holistic and synchronized, the Air Force must adapt a three-dimensional and joint approach to ID doctrine. This approach should include addressing relevant advanced threats and A2/AD operational environments. It should also seek to integrate ground-based ABD doctrine tenants with those of air defense. Doing so will expose the seams in ID and force a reconciliation of the gaps between air and ground defenses. A proactive approach to solving doctrinal conflicts will pay dividends as a foundation for testing future ID concepts.

First, in light of the complexities of the Pacific theater and JAM-GC, ID doctrine can no longer remain ground based and relegated to ad hoc procedures. Likewise, the challenges of an A2/AD environment indicate that a fully centralized approach to air defense, via the AADC, is insufficient. While the US military has improved ID doctrine after years of involvement in IW, its focus remains ground-centric. A similar, proactive approach to air base defense should leverage these doctrinal advances to include a three-dimensional methodology that addresses the full spectrum of threats.⁴² Gen Mike Hostage, USAF, retired, former commander of Air Combat Command (ACC), points to the need to resource this effort and observes that the “rebalance to the Pacific should drive a critical review and

adaptation of existing doctrine in a highly contested environment—on scale with the past decade’s renewal of counterinsurgency doctrine.”⁴³ At the heart of survivability in A2/AD are the strategic bases that project US combat capability in the region, and ID must be a precursor to any discussion in this environment.

Second, the Air Force must enable the development of adaptive C2 through training and education. The creation of a trusting and adaptive C2 culture must include rigorous training that involves all relevant levels of command. Doing so will undoubtedly challenge normal C2 procedures, service cultures, and tenets of central control but may be the only survivable option in advanced and degraded environments. Air Force “Flags” and Army training events at the National Training Center are aptly suited for large-force training and should be leveraged as an incubator for these concepts, including rank-appropriate decision makers in the process. These joint exercises should test the fabric of normal C2 channels and force an adaptive approach, with a frank assessment of results.

As another measure to build a robust C2, the Air Force must establish a framework that empowers lower-level commanders and provides practiced authority delegation. Higher command authorities must embed the element of trust through practice and action. They can establish more effective operating procedures through empowerment and clearly stated commanders’ intent in operations and exercises. In a realistic A2/AD scenario, contingency plans must be enacted for C2. Through training, a graceful degradation of C2 can be developed. A generic ATO and simulated command architecture will not be sufficient. Commanders at higher levels—from the joint force air component commander to the wing level—must be participants in these exercises. Air Force leaders will thus be challenged by the complexities of a realistic scenario in which their authority must be delegated. These training practices will not only help build the element of trust and empowerment in combat situations but also may be leveraged for peacetime.

Third, the Air Force must initiate a comprehensive review of the US approach to basing and associated defenses. This analysis should include a deliberate attempt to complicate an enemy’s ability to target and attack from the beginning of force planning. Concepts for a comprehensive approach include dispersion, camouflage, concealment, and deception (CCD); hardening; and airfield design and repair.⁴⁴ While these changes will challenge the current approach to basing

and resourcing, the costs of not adapting to this complex environment will severely limit power projection in these areas. ACC and Air Force Materiel Command (AFMC) must coordinate core functions to enable integrated ID concept development. ACC is the core function lead (CFL) for air superiority and C2.⁴⁵ AFMC is responsible for agile combat support (ACS), including security and civil engineering aspects pertinent to ID.⁴⁶ Therefore, AFMC should lead the creation of an innovative and integrated three-dimensional ID concept. It should be developed and coordinated with *all* relevant core functions working in conjunction. Responsibility for combining efforts in future ID must begin with these CFLs as comprehensive defenses are developed and resources are allocated.

Fourth, strategists should reconsider basing decisions in the context of the threat and geopolitical environment. Policy makers at the highest levels will be required to develop plans in concert with allies. The United States must reaffirm commitments and explain challenges associated with traditional approaches to basing so that US allies may understand and support a necessary shift to enable survivability. Accepting the tradeoffs in vulnerability and capability between distant/dispersed and forward/consolidated basing is an important aspect of these decisions. Defenses and resources needed for a few large, consolidated bases are much different than those for several small, dispersed bases.⁴⁷ On the one hand, robust defenses and hardening will be necessary for consolidated bases. On the other hand, more flexible, mobile defenses may be necessary for several dispersed bases. Likewise, combat projection capabilities and C2 architectures will vary greatly in these options. These decisions must be made in the full context of the operating environment and expected power-projection needs. Such a shift will take years to adjust; a proactive approach must begin now.

Conclusion

US adversaries have clear incentive and intent to damage or destroy American and coalition aircraft on the ground. This tactic is cost effective and represents the only time aircraft are stationary targets. A realistic assessment of the situation should be a wake-up call to leaders of the Air Force, and nation, when deciding to build air bases or deploy aircraft around the world. Potential US adversaries continue pursuing low-cost options to defeat or mitigate a techno-

logically advanced airpower advantage, and the methods, risks, accuracy, and benefits continue to grow in their favor.

Given that the dynamics of each operational environment do not allow for a single solution, commanders must take a comprehensive approach. In forming a plan for basing locations, leaders cannot assume the defense of a base and its assets. Rather, they must perceive an effective ID plan as a prerequisite for all other operations to be successful. Commanders must understand the characteristics associated with a particular air base environment; fully analyze the associated risk levels; and create effective, efficient procedures across all relevant domains. Typically, air defense assets are not available to the local air base commander for discretionary use in ID, complicating the orchestration of relevant systems in ID—regardless of the threat. While ID is a daunting and complex task, commanders must demand and apply sufficient resources to ensure appropriate defenses for the acceptable level of risks.

The current ID plan against advanced threats is deficient, and a centrally controlled approach is likely too inflexible for survival in these advanced environments. With rapidly changing technologies and complicated operational environments, such as A2/AD scenarios, a flexible, multilayered defense plan will be essential. Also, the time available to adjust defenses and react to enemy actions will be limited in this environment and therefore must be addressed proactively through clearly outlined procedures *before* hostilities begin. Through an air-minded approach and the application of adaptive C2 architectures, the Air Force can enable a three-dimensional integrated defense.

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17. Caudill, *Defending Air Bases*, vol. 1, 271.
18. Vick, *Snakes in the Eagles Nest*, 108. Complications arise because various doctrines for integrated defense offer conflicting guidance. Fortunately, some Air Force and joint publications on ground-based defenses of air bases and personnel have been modified, combined, or removed to help alleviate this paradox. These include JP 3-10, *Joint Security Operations in Theater*, 13 November 2014; AFI 31-101, *Integrated Defense*, 5 July 2017; LeMay Center, “Annex 3-10, Force Protection,” 17 April 2017; and LeMay Center, “Annex 3-2, Irregular Warfare,” 12 July 2016.
19. JP 3-01, *Countering Air and Missile Threats*, ix, I-2, IV-15.
20. *Ibid.* JP 3-01 discusses advanced and emerging threats as a C2 issue for which the AADC is primarily responsible. However, it does not mention how a local base commander would integrate command or assets in such conditions, even in a contingency scenario.
21. Caudill, *Defending Air Bases*, vol. 1, 35, 293.
22. JP 3-01, *Countering Air and Missile Threats*, xx, III-5, V-24, V-28.
23. Caudill, *Defending Air Bases*, vol. 1, 174.
24. Bishop, discussion with ACSC students.
25. Mann, “Global Missile Defense,” 6.
26. *Ibid.*, 6, 8.
27. *Ibid.*, 6, 8, 11.
28. Caudill, *Defending Air Bases*, vol. 1, 35, 293; and Vick, *Snakes in the Eagles Nest*, 108. Caudill provides case studies describing how commanders implemented ad hoc procedures and innovative approaches in response to low-tech threats such as manned assaults and mortar attacks. This strategy proved effective in such environments versus those involving advanced threats, such as aircraft attacks, in which there was little time or ability to react.
29. Hinote, *Centralized Control and Decentralized Execution*.
30. JP 3-30, *Joint Air Operations*, I-3.
31. Foster, briefing, subject: Airpower’s Fight for Strategic Superiority in 2035. Harry Foster was the lead for an air dominance war game involving advanced threats and an A2/AD environment at Air University’s LeMay Center in January 2015. The scenario included basing constraints related to the subject of this chapter. As deputy director of the Center for Strategy and Technology (CSAT), Foster is a renowned subject matter expert regarding future applications of airpower. Mr. Foster was consulted on the subject of this paper several times via e-mail and personally in April 2014.
32. JP 3-30, *Joint Air Operations*, I-3.
33. JP 3-09, *Joint Fire Support*, IV-2.
34. Bishop, discussion with ACSC students.
35. JP 3-30, *Joint Air Operations*, II-16.
36. Caudill, *Defending Air Bases*, vol. 1, 173.
37. *Ibid.*, 174.
38. *Ibid.*, 207, 218.

39. Hostage and Broadwell, "Resilient Command and Control," 38–43. This article discusses in-depth the C2 levels in an A2/AD environment, including the concept of adaptive control and degraded C2 networks.
40. Hukill et al., *Air Force Command and Control*, 7.
41. Ibid., 7–9.
42. Air Force Policy Directive 10-25, *Air Force Emergency Management*.
43. Hostage and Broadwell, "Resilient Command and Control," 41.
44. Foster, briefing.
45. Air Combat Command, *Securing the High Ground*, 8.
46. Air Force Mission Directive 4, *Air Force Materiel Command*, par. 3.1. This directive outlines the responsibility of AFMC as the agile combat support core function lead integrator for the Air Force.
47. Foster, briefing.

Chapter 7

Dissipating the Fog of War

Improving Intelligence Support to Air Base Defense

Jason F. Baggett

US Air Force brigadier general Andrew Wells found himself in command of deployed air bases responsible for the majority of combat airpower in the western region of the joint operating area. His units have reached high levels of combat effectiveness, carried out crushing strikes against insurgent forces, and proven the criticality of airpower across the full range of military operations. What General Wells doesn't know is that the insurgent forces in his area are planning their own strikes. In fact, two days ago, insurgents moved specially trained and equipped fighters from another country to a village immediately outside the air bases to carry out those attacks. Those foreign fighters will attack tonight, and by tomorrow, they will have inflicted significant damage to General Wells's aircraft and killed two of his Airmen. General Wells won't be able to stop the attack before the insurgents infiltrate the installation because his key leaders and security team are blind to the external threat—despite foreign fighters being present in a friendly village for two days. The general and his advisors have a blind spot in their situational awareness caused by a lack of a tactical air-base-focused, ground-defense-oriented intelligence apparatus.

This fictional account may seem improbable, but its details follow the same timeline and results as the 14 September 2012 attack on Camp Bastion, Afghanistan. The aftermath of this real-world attack found

two US personnel killed in action (KIA), eight US personnel wounded in action (WIA), eight UK personnel WIA, one civilian contractor WIA, six AV-8B Harriers destroyed, two AV-8B Harriers severely damaged, one C-12 damaged, three MV-22B [with] minor damage . . . , one C-130E severely damaged, one UK SKASaC (Sea King) [with] minor damage . . . , two UK Jackal vehicles significantly damaged, three fuel bladders destroyed, five sun shades destroyed, one sun shade with structural and fire damage, three sun shades with fabric damage, extensive concrete damage, and damage to the VMA-211 hangar/maintenance facility.¹

In short, the Camp Bastion attack was the most devastating loss of American airpower since Vietnam.² Postincident investigations determined a lack of tactical intelligence assets that may well have detected the attack. The presence of foreign fighters in the friendly village adjacent to Camp Bastion was a key contributor to the success of the attack.³ Case studies based on lessons learned from Afghanistan, Iraq, and Vietnam will show that the Air Force employs a piecemeal, ad hoc system of tactical human intelligence (HUMINT). Consequently, it is ill prepared to provide full intelligence support to air base defenders and guarantee that another Camp Bastion attack will not occur. The Air Force must doctrinally solidify intelligence analysis support to air base defense (ABD) forces and increase HUMINT collections dedicated to air base defense. To validate this argument, the following discussion examines some of these gaps in tactical HUMINT and intelligence analysis support to Air Force security forces (SF).

The Camp Bastion attack demonstrates the vulnerability of aircraft while on the ground. Italian airpower pioneer Gen Giulio Douhet observed that “it is easier and more effective to destroy the enemy’s aerial power by destroying his nests and eggs on the ground than to hunt his flying birds in the air.”⁴ His prescription placed air bases in the crosshairs of American enemies in all conflicts because he recognized that they would be strategic strong points. Since World War II, USAF air bases have been defended by Air Force security forces, American sister services, foreign partner forces, and a mix of all the above. However, the USAF lost a component of these reinforcements with the 2004 abrogation of Joint Security Agreement 8—a US Army and US Air Force mutual support agreement whereby Army personnel would provide exterior security for air bases. Subsequently, Air Force security forces became *de facto* responsible for the defense of Air Force airpower from ground threats while the “eggs” were on the ground.⁵

In 2008 Joint Base Balad (JBB), Iraq, featured the largest deployment of security forces since the Vietnam War, whose responsibilities included the off-base combat defense mission of patrolling to deter enemy indirect fire (IDF) attacks.⁶ Intelligence support has been a critical enabler for the expanded security mission. Air Force doctrine states that “effective intelligence, surveillance, and reconnaissance (ISR); counterintelligence [CI]; and liaison efforts are critical to identifying, analyzing, and disseminating threat information to commanders and ensuring FP [force protection].”⁷ Security forces’ de-

mand for force protection intelligence increased, and time-sensitive, tactical HUMINT emerged at JBB as a key enabler to air base defense operations.⁸

Joint doctrine defines *HUMINT* as “a category of intelligence derived from information collected and provided by human sources.”⁹ The Air Force Office of Special Investigations (AFOSI) has proven to be the primary source of tactical, ABD-oriented HUMINT through its CI collections and counterthreat operations (CTO). However, the AFOSI is not doctrinally a HUMINT organization. The CI discipline takes steps to mitigate foreign intelligence threats and leverages multiple intelligence disciplines, including HUMINT, to fill informational gaps associated with CI activities. CTOs involve “the employment of AFOSI capabilities to find, fix, track, and neutralize enemy threats in order to create a sustained permissive environment for air, space, and cyberspace operations.”¹⁰ Such operations use CI collections to produce intelligence similar to that gathered from HUMINT methods. The term *HUMINT* is used here to describe intelligence gleaned from humans regardless of mission type.

First, to set the context for the evolution of intelligence support to ABD forces, this chapter discusses the experiences of security forces during Vietnam and at modern air bases, such as JBB, Iraq, and Bagram AB, Afghanistan. Also discussed are the Air Force’s deficiencies in the ABD intelligence apparatus, which create great risk for the future success of protecting air bases. Recommendations are offered to close the gaps in tactical intelligence support to ABD. Finally, with the emergence of new airpower strategies for the Joint Concept for Access and Maneuver in the Global Commons (JAM-GC), formerly known as AirSea Battle, the ability of security forces to secure airpower assets while on the ground will be much more difficult. Thus, a leading concept of employment for JAM-GC—known as Rapid Raptor—is presented and used as a baseline from which to make suggestions on how intelligence can evolve to give needed support to the ABD mission in the JAM-GC environment.

Vietnam: A Study in Intelligence Improvisation

As Roger Fox indicates in his book *Air Base Defense in the Republic of Vietnam, 1961–1973*, the Air Force has a history of ad hoc planning for base defense intelligence. In late 1965, US ground combat units were pulled into offensive operations. This change resulted in the

units that were previously providing perimeter and outside-the-base security effectively leaving the full ABD mission to the Air Force security police (SP). The SPs were not manned, equipped, or organized to take on the ground-defense mission required of ABD.¹¹ By 1968, Seventh Air Force had worked to properly man, equip, and organize the new combat SP units to conduct their security mission; however, intelligence support to ABD was left largely unfulfilled. Fox contends that ABD commanders needed tactical ground intelligence and that Air Force intelligence should have fulfilled that need. Unfortunately, Air Force intelligence units were consumed with support for flying missions.¹² The tactical intelligence Fox refers to would be known as force protection intelligence (FPI) in current Air Force policy. The Air Force defines *FPI* as

fundamental to the prosecution of an effective FP program. It is a mission set used to identify intelligence support to FP. All-source intelligence should be provided on threats to Department of Defense (DOD) missions, people, or resources stemming from terrorists, criminal entities, foreign intelligence entities, and opposing military forces as appropriate under Presidential Executive Order 12333, the US Constitution, applicable law, and DOD and Service policies and regulations.¹³

As an unexpected success story, the AFOSI partnered with air base security to supply critical ground intelligence. The AFOSI repurposed its already existent Area Source Program (ASP), expanding it to include HUMINT for defensive purposes. According to Fox, the program evolved into the “most fruitful source of base defense intelligence information.”¹⁴ The AFOSI ASP, which began in 1964, was a traditional CI collections program consisting of operations with Thai and Vietnamese counterparts to identify enemy spies.¹⁵ Operating from August 1968 through November 1969, “ASP generated 78.3 percent of all Department of Defense Intelligence Information Reports and 84.1 percent of the total items in these reports.”¹⁶ That said, tactical HUMINT collections quickly overwhelmed the extremely limited analytical capability of AFOSI units and displaced AFOSI’s criminal investigation and traditional CI missions.¹⁷

USAF intelligence analysis support to ABD still lagged behind. In response, SPs were forced to develop an ad hoc intelligence analyst cell comprised of untrained SP members to process raw intelligence. After several requests, Seventh Air Force finally garnered formal intelligence training for some of the SPs.¹⁸ As the Office of Air Force History notes, “Hobbling external security [in Vietnam] was the lack

of reliable intelligence on enemy activities within striking distance of bases. This rose chiefly from the Air Force's failure to generate tactical ground intelligence."¹⁹

Afghanistan and Iraq: Modern Expeditionary Air Base Defense Ground Intelligence Support

Support from Air Force intelligence analysts improved drastically in the Iraq and Afghanistan conflicts. JBB and Bagram AB exemplify this turnaround in the degree to which the USAF conveyed tactical ground intelligence to ABD forces there. The responsibility for ABD in these conflicts was similar to that in Vietnam. When the 332nd Expeditionary Security Forces Group (ESFG) stood up at JBB in 2008, it assumed base operating support integrator (BOS-I) responsibilities from the US Army.²⁰ For Bagram AB, Air Force defense forces were part of Task Force 455 and the 455 ESFG, responsible for defense of the interior and exterior base security zone (BSZ). However, unlike for JBB, the 445 ESFG also retained battlespace owner (BSO) responsibilities under its recognized TF 455 role.²¹ While 2008 joint and Army doctrine rescinded the term *battlespace owner*, it nevertheless continues to resonate in combat. The BSO signifies the unit exercising the authority and responsibility for all operations in the assigned operational area—to include those to capture or neutralize threats.²² Bagram was the first Air Force installation with assigned Air Force ground BSO responsibilities since Vietnam.²³

Intelligence support for both locations was similarly structured. Each location used an all-source intelligence fusion center called the joint intelligence support element (JISE), which security forces inherited from outgoing Army units.²⁴ The JISE conducted all-source intelligence analysis and collection management. It also contained an atmospheric collection cell as well as a cell that supported off-base ESFG patrols.²⁵ In this configuration, JISE personnel not only had the ability to analyze intelligence but also could directly task ISR assets to corroborate existing intelligence or complete target analysis. JISE personnel partnered closely with tactical ground-intelligence personnel in developing common intelligence-collection priorities to continue providing fresh intelligence to ABD forces. Compared to the intelligence analytical support for ABD in Vietnam, such support in these conflicts had finally come of age. However, the JISE construct

was not an Air Force invention and is unlikely to be reemployed in the next conflict unless Air Force intelligence trains and plans for reemploying it in future ABD missions.

Despite the advances in intelligence analysis support, tactical ground-intelligence collection remained relatively unchanged with two exceptions. The first exception is the CI screening teams employed at the expeditionary air bases. When SF units took over BOS-I at Balad, they inherited existing contractor-manned CI screening teams. These teams conducted focused interviews of local and third-country nationals working on the installations. Their operations were regulated by the task force CI coordinating authority in Baghdad under the auspices of US Central Command. The teams had the ability to capture key pieces of low-level HUMINT on operational environmental factors and potential threats. As such operations were a CI functional service, the argument could be made that the AFOSI should have been providing this function. Due to CTO manning and mission requirements, however, local AFOSI expeditionary detachments (EDet) were unable to take over the CI screening mission upon Air Force assumption of BOS-I. A second exception is the leveraging of passive HUMINT collections by ABD patrols and the JISE atmospheric cell. The patrols and atmospheric team provided a better understanding of the base defense operating environment. However, most of the information gleaned from passive collections was captured in localized JISE products but not in enduring documentation allowing for long-term analysis.

The vast majority of intelligence was not disseminated theaterwide via the intelligence community's standardized intelligence information reports (IIR). IIRs serve as the vehicle to push intelligence information to the entire US intelligence community and are the DOD-mandated tool for all HUMINT and CI collectors to disseminate raw intelligence. Therefore, passive HUMINT amassed by JBB teams was not received by intelligence analysts looking for common enemy tactics or emerging trends at intelligence analytical cells above the JBB level. With that said, passive HUMINT collections contributed to battlespace awareness for Army and Air Force leaders on JBB and should be seen as a success story.

As for direct or "positive" HUMINT collections, the Army ground BSO owned the Army tactical HUMINT teams, as they were known in 2008—now called HUMINT collection teams. The Army BSO was responsible for a 3,000-square-kilometer area of operations

(AO), with the JBB BSZ encompassing only 243 square kilometers of the AO.²⁶ HUMINT teams were tasked with meeting the BSO's HUMINT-related priority intelligence requirements. As only a sliver of the Army BSO's responsibilities was the area immediately outside JBB, the Army HUMINT teams' focus on JISE HUMINT needs was slight.²⁷ This observation is in no way an attack on the mission dedication of the Army HUMINT teams; their priority for intelligence collections was the requirements of the BSO's full AO. This focus by sister-service collectors is completely in line with their policy—but it is why the Air Force cannot blindly hope that sister-service HUMINT collectors will support ABD needs. The Marine Corps tactical-level HUMINT asset—the HUMINT support team—is task organized to support its owning Marine air-ground task force (MAGTF) intelligence needs.²⁸ Likewise, Army HUMINT collectors are task organized to supported Army commanders to “build, employ, direct, and sustain combat power.”²⁹ Thus, they may give ABD some HUMINT assistance but cannot give it the priority and sustained operational support it deserves.

Air Force HUMINT, however, does not appear to be postured to support the tactical HUMINT needs of the air base defender. This void is rooted in the Air Force's resistance to make ground vice air threats the focus of its intelligence community. In 1995 the Air Force officially terminated its HUMINT squadrons. However, in 2008 it re-instituted the HUMINT program after the experience of several years of war in which tactical HUMINT remained a self-help project for the AFOSI and SE.³⁰ Due to the classified nature of Air Force HUMINT policy, the exact targeting and intent of the program is unclear. The Defense Intelligence Agency (DIA) is charged with implementing the greater CI and HUMINT programs in the DOD. Current direction for DOD HUMINT was seemingly solidified in April 2012 with the creation of the Defense Clandestine Service (DCS), designed to meet the critical need for strategic HUMINT.³¹ Trends in the DIA regarding HUMINT can inform the Air Force's decisions on HUMINT targeting priorities. In this context, for the foreseeable future, the Air Force should continue to prioritize strategic intelligence needs to support its expanding role in JAM-GC—the corresponding US strategy for operating, fighting, and surviving in A2/AD environments.

As in Vietnam, the AFOSI was the primary dedicated HUMINT asset for Air Force ABD in Iraq and Afghanistan. AFOSI EDets produced large quantities of intelligence on threats to the respective

installations, to include targeting intelligence to identify, find, fix, track, and neutralize these threats. The targeted nature of the intelligence sought by CTOs drove AFOSI collection operations—potentially allowing passive, early-warning HUMINT for ABD to fall through the cracks.

Challenges of Future Conflicts

A common counter to the argument for increased Air Force tactical HUMINT is that air bases will not be located near or on the forward edge of the battle area (FEBA) in future conflicts. The Air Force focus on fighting in A2/AD environments will require it to employ forward basing practices radically different from the mega FOBs seen in Iraq and Afghanistan. A2/AD environments need to be better defined before the Air Force looks at solutions for operating in them. Joint Operational Access Concept (JOAC) doctrine describes *antiaccess* as “actions and capabilities, usually long-range, designed to prevent an opposing force from entering an operational area.” JOAC further defines *area denial* as “actions and capabilities, usually of shorter range, designed not to keep an opposing force out, but to limit its freedom of action within the operational area.”³²

For future joint forces to survive and operate in the A2/AD environment, they must “maximize surprise through deception, stealth, and ambiguity to complicate enemy targeting.”³³ The Rapid Raptor concept—an A2/AD solution that has emerged in open-source media—better refines the potential posture Air Force units will employ to meet A2/AD challenges. In this scenario, four F-22 Raptors are paired with one C-17 to deploy to austere airfields with little to no buildup at the location. The aircraft would operate from the location for a short duration and then relocate. The intent is to prevent adversaries from tracing and targeting the Raptors.³⁴ In the Rapid Raptor concept, these five aircraft would be the extent of the operational footprint at the airfield. The C-17 would contain all of the maintenance and support personnel and supplies. The balance between maintenance personnel and equipment in the available cargo space has been a challenge for concept developers.³⁵ Thus, SF would be among the many other personnel that would need to be accommodated. Deployments of group-sized SF contingents to austere airfields would be impossible due to limited transport aircraft involved in the strategy, the increased number of potential airfields employed simul-

taneously, and the capacity of the SF career field to support such large manpower requirements. Therefore, Air Force leadership must accept much higher levels of force protection risk to achieve operational goals. This lack of security personnel and intelligence collectors on the ground will require new ways of providing intelligence support for the protection of austere airfields.

Recommendations

As demonstrated in recent conflicts, the Air Force has heightened its intelligence analysis and support for ABD since Vietnam.³⁶ However, its practices have been ad hoc versus standardized. For instance, the JISE at JBB was transferred from the US Army to the USAF as part of the BOS-I transition, and it is unlikely that the Air Force would have built such a robust capability for ground intelligence on its own. To guarantee continued excellent support, Air Force intelligence should strengthen its guidance on specific skills in which intelligence personnel must be proficient to fulfill the ABD support role.³⁷ Within the Air Force intelligence library of policies are several “14-2” series of instructions identifying such skills for support of specific missions.

Air Force intelligence should oversee the consolidation of lessons learned from deployed JISE intelligence personnel and develop standardized skill sets for those positions. Further, it should develop and publish training standards for intelligence support execution in line with other specialized missions that Air Force intelligence personnel support. Doing so would guarantee that air base defenders receive continued and consistent intelligence analysis and support.

Environmental factors may constrain improvements to HUMINT support of ABD. For instance, the ability of Air Force HUMINT to take on a tactical HUMINT mission is unlikely due to post-sequestration manning and resource reductions.³⁸ Equally difficult is the AFOSI's ability to expand its deployment posture to undertake sole ownership of previously contracted CI screening responsibilities; conduct CTOs; and expand CI collections to offer persistent, early-warning HUMINT support. In fact, during Operation Iraqi Freedom, the DOD restricted the AFOSI from increasing the number of deployed agents due to manning caps.³⁹ Army HUMINT personnel have recognized their inability to cover all HUMINT needs and called for similar fielding of tactical HUMINT collectors from

Army patrols to fill their own requirements in this area.⁴⁰ While training SF personnel as positive HUMINT collectors is a burdensome prospect, ABD patrols could mirror the Army's passive HUMINT strategies from 2004.⁴¹ A possibly more viable option is to embed AFOSI agents with ABD patrols and CI screening teams.

In 2008 the AFOSI increased the size of its JBB EDet by two agents and embedded them with 532 SFS patrols to develop passive HUMINT contacts to serve as preattack indicator sensors. The classified nature of attack after-action reports makes it difficult to determine if this approach ever resulted in successful preattack warning for the installation. Regardless, to leverage all avenues of potential tactical HUMINT, the AFOSI should employ a more fully embedded deployed-unit model in the future. Deployed AFOSI units should embed two agents with CI screening teams to capture intelligence gained via constant access to local nationals working on the installation. Additionally, they should install two agents with off-base SF patrols to create a distinct avenue of reporting for passive HUMINT collected by security patrols. The arrangement also provides the local EDet with trained informant handlers on patrols to identify and assess potential informants for proactive CI or HUMINT collection operations. The remaining AFOSI personnel would continue to conduct CTOs. This construct would ensure a more fused, tactical HUMINT and CI threat picture for air base defense. To meet Air Force and DOD CI program directives, the AFOSI would remain under the control of the senior AFOSI agent in-theater but in a direct supporting role to the air base where the unit was located.⁴²

As we look to future A2/AD or JAM-GC conflicts, the immediately apparent problems are the lack of SF at austere airfields and potential lack of ground intelligence collectors focused on specific threats to the locations. Though Air Force leaders will be forced to accept a higher force-protection risk with strategies such as Rapid Raptor, it is highly doubtful that Air Force planners will accept zero aircraft security in the development of concepts. It is fair to suggest that the Air Force may employ a Phoenix Raven-like/small-fire-team posture for physical security in support of Rapid Raptor-like constructs and rely more heavily on host-nation ground-threat intelligence and local security forces and police.⁴³

Regardless of who performs security for the Rapid Raptor team, those personnel will still need to know what potential threats they will face, who the friendly forces are, and indicators of potential

threats. For austere airfields where Air Force personnel have no persistent presence, intelligence collection on local area threats will need to be accomplished ahead of the Rapid Raptor team deploying. The global focus of strategic Air Force and DIA HUMINT may be beneficial in identifying airfield locations less vulnerable to ground attack. Also, DOD force protection detachments (FPD), located at US embassies worldwide, can give threat assessments for general airfield areas by leveraging developed relationships with host-nation security and intelligence liaisons.

The DOD implements the FPD program with special agents from the AFOSI, the Naval Criminal Investigative Service (NCIS), and Army CI. The program's premier mission is to "detect and warn of threats to DoD personnel and resources in-transit at overseas locations without a permanent DoD CI presence." FPDs also work with their respective American embassy country teams to conduct vulnerability assessments of potential DOD transit locations as well as CI collections and reporting.⁴⁴ FPD agents could conceivably serve as conduits with the host-nation law enforcement and security services to support the Air Force element securing the ad hoc airfield.⁴⁵ Consequently, the Air Force should lean on the DOD FPD program to serve as its HUMINT support to air base defense at austere airfields.

Conclusion

Tactical ground intelligence and analytical support are vital to the ABD mission. The Air Force has had a mixed history of supporting the intelligence needs of ABD in deployed environments. In Vietnam, Air Force intelligence was not postured to support SPs, forcing air base defenders to develop ad hoc intelligence analysis capabilities. With the exception of limited tactical HUMINT from the AFOSI's ASP, air bases in Vietnam were essentially blind to impending attacks and starved for ground intelligence. That said, Air Force intelligence has made extraordinary strides in ABD support in the realm of intelligence analysis and leveraging ISR assets to improve security forces' understanding of their operational environment. Nevertheless, Air Force-provided HUMINT has lagged behind, with the program again operational since 2008 after being deactivated for over a decade.

The current Air Force HUMINT unit has no demonstrated or professed tactical HUMINT capability. While the AFOSI's CTOs have proven capable of supplying tactical HUMINT for air base defense

through its CI collections, the capacity of its EDets left room for improvements in such operations. The Air Force should address these areas to guarantee that air bases receive the best intelligence support possible. Potential future conflicts in A2/AD environments present a whole new array of challenges to be overcome in order to protect Air Force assets.

To preserve and improve intelligence support for air bases located on or near the FEBA, Air Force intelligence must consolidate its lessons learned from JISE personnel. It must also codify training standards and capabilities for intelligence personnel supporting ABD units—much like intelligence policy dictates standards for support to crisis response units. To overcome current resource constraints, the AFOSI should also commit additional agents to embedding with SF patrols and CI screening teams to capture passive HUMINT and facilitate possible formal collections and counterthreat operations.

The A2/AD environment will require drastic changes in the way Air Force leadership views force-protection risk. As operational security will be paramount, large FP forces will not be possible. Commanders will be required to accept the potential that all FP threats cannot be defeated with the force posture proposed by concepts such as Rapid Raptor. Tactical HUMINT collection teams will not be in place to assist teams while on the ground. Accordingly, atypical solutions for collecting threat intelligence must be employed. Air Force HUMINT's potential clandestine capability would be critical to collecting ground intelligence on potential threats to dispersed, austere airfields. DOD force protection detachments would also provide a vulnerability assessment, CI collection, and host-nation partnership capability that would serve to lend the deployed team intelligence support. The exact operational scheme the Air Force employs to operate and win in the A2/AD environment will evolve over the next few years. However, one fact is clear: Air Force assets will need FP support, and tactical intelligence support will be critical to the success of the FP mission.

Notes

1. Garrett and Murray to commander, US Central Command, memorandum, 2.
2. Owen, "Taliban Inflicted Biggest Loss."
3. Garrett and Murray to commander, US Central Command, memorandum.
4. Douhet, *Command of the Air*, 53–54.
5. Caudill, *Defending Air Bases*, vol. 1, 264.

6. Branum, "Many Airmen, One Mission."
7. LeMay Center, "Annex 3-10, Force Protection," 5.
8. LeMay Center, "Annex 3-2, Irregular Warfare," 26.
9. JP 2-0, *Joint Intelligence*, GL-8.
10. Air Force Tactics, Techniques and Procedures 3-10.3, *Integrated Defense Counterthreat Operations*, 11.
11. Fox, *Air Base Defense*, 79–81.
12. *Ibid.*, 139.
13. LeMay Center, "Annex 3-10, Force Protection," 34.
14. Fox, *Air Base Defense*, 141.
15. According to JP 2-0, *Joint Intelligence*, CI is "information gathered and activities conducted to identify, deceive, exploit, disrupt, or protect against" threats posed by activities such as espionage, foreign intelligence collections, sabotage, or assassinations (I-19–I-20). Specifically, CI targets activities by or on behalf of hostile foreign actors or international terrorist organizations. The CI discipline takes steps to counter foreign intelligence threats and leverages multiple intelligence disciplines, to include HUMINT, to fill informational gaps associated with CI activities. AFOSI, *Air Force Office of Special Investigations*, 228–32.
16. Fox, *Air Base Defense*, 142.
17. *Ibid.*; and AFOSI, *Office of Special Investigations*, 229.
18. Fox, *Air Base Defense*, 143–45. By 1970 the Seventh Air Force intelligence director deemed the self-help AFOSI collections and SP intelligence analysis a success and sufficient to meet ABD needs. The Air Force director of security police argued that the Air Force would be better served with trained career intelligence personnel doing the intelligence work; these lessons and views were not heeded after Vietnam as they were not codified for future conflicts (*ibid.*).
19. *Ibid.*, 171.
20. Caudill, *Defending Air Bases*, vol. 1, 218. With this change in roles, the 332 ESFG was then responsible for defense of the entire installation to include the BSZ outside the installation.
21. Dobrydney, "Group Assumes Task Force Role."
22. Grigsby, *Doctrine Update*, 2-12, 5.
23. Dobrydney, "Group Assumes Task Force Role."
24. Per JP 2-0, *Joint Intelligence*, III-6, *JISE* is typically the terminology reserved for JTF-level intelligence organizations; however, at JBB and other expeditionary air bases, *JISE* and other names were used to identify Air Force–led joint intelligence fusion cells.
25. Caudill, *Defending Air Bases*, vol. 1, 227.
26. *Ibid.*
27. Capt Tyler McSpadden, former intelligence collection manager, Joint Intelligence Support Element, Joint Base Balad, interview and e-mail correspondence with author, November 2014.
28. Marine Corps Warfighting Publication 2-14, *Counterintelligence*, 3-14.
29. FM 2-22.3, *Human Intelligence Collector Operations*, 1-1.
30. Lai, "Officials Stand Up HUMINT Detachment."
31. Miller, "Defense Clandestine Service."
32. Department of Defense, *Joint Operational Access Concept*, ver. 1.0, i.

33. Ibid., iii.
34. Cenciotti, “Rapid Raptor Package.”
35. Mize, “Rapid Raptor.”
36. Caudill, *Defending Air Bases*, vol. 1, 205.
37. Ibid., 205–8.
38. Schogol, “Air Force May Cut 10,000 Airmen.”
39. Headquarters Air Force/A9, Studies and Analysis and Lessons Learned, “Expeditionary Base Security,” 11.
40. Gonzales, “Doctrine Achieve Its Objectives?,” 50.
41. To become trained active HUMINT collectors and to execute active HUMINT collections, SF personnel would have to meet all DIA oversight and control measures for their operations and collections. DIA-directed HUMINT and CI collections controls and training standards would effectively require SF personnel to be cross-trained into Air Force intelligence or AFOSI. Air Force intelligence is the only recognized positive intelligence agency in the Air Force. The AFOSI has standing in the intelligence community by virtue of its CI mission. For SF to gain standing in the intelligence community with trained HUMINT collectors, directives at Air Force, DOD, and US government levels would have to be changed. SF would also need to take on responsibility for establishing complex oversight structures to meet DOD and national intelligence community directives for intelligence analysis and collections controls.
42. To meet intelligence community oversight and control measures as well as Air Force Mission Directive 39, *Air Force Office of Special Investigations*, 7 May 2015, AFOSI agents would need to remain assigned to the senior AFOSI agent in-theater.
43. Air Mobility Command (AMC), “Phoenix Raven.” The Phoenix Raven program is an AMC concept whereby teams of two to six specially trained and equipped SF personnel deploy with AMC aircraft such as the C-17 to provide close-in aircraft security and mitigate the risk to exposed aircraft.
44. Department of Defense Instruction 5240.22, *Counterintelligence Support to Force Protection*, 7.
45. The limited amount of time these aircraft are on the ground makes developing local-area source networks with deployed personnel highly unlikely. Building such networks would have to be done well ahead of the arrival of the Rapid Raptor team and, due to the secrecy of the potential deployment, done in a clandestine manner requiring higher-order HUMINT support than that provided by the FPD locations.

PART 4

The Pivot to the Pacific

Air Base Defense and AirSea Battle

Chapter 8

Airpower Projection in the Antiaccess/Area-Denial Environment

Dispersed Operations and Base Defense

Russell S. Badowski

In 2012 the Defense Department issued guidance that the US armed forces must generate and maintain an ability to “project power despite anti-access/area denial [A2/AD] challenges.”¹ Current Air Force aircraft, bases, and power-projection models provide the available means and ways with which the Air Force seeks to achieve its contribution to the ends laid out by this strategic guidance. Meanwhile, technology available to adversaries continues to advance in precision and lethality, resulting in a basing construct held hostage under an increasingly capable threat. Unfortunately, the significant resources, manpower, and effort applied to actively defending these bases are being outstripped by the capabilities of adversaries; thus, the risk of reliance on these bases is escalating rapidly. Countering these growing threats requires action. Service leaders must strive to introduce technology and training supporting aircraft dispersal. Major and combat commands must ensure that functional staffs understand the risks driven by a dispersal strategy. Further, services and major commands (MAJCOM) must alter how they present forces through unit type codes (UTC) to accommodate force packages that better enable the dispersal concept.²

The joint force is actively looking at alternative, realistic ways to use available means to project airpower into an A2/AD environment without dependence on established bases or substantial resource increases. However, these new ideas challenge conventional thinking about the Air Force’s power-projection model and its associated risks. The model in force offers an acceptable level of risk in the permissive environments that we have operated in for the last several decades. As those give way to the A2/AD environments of tomorrow, the attendant risk to airpower escalates rapidly to an untenable level. Senior leaders have available options to mitigate some of this risk through dispersed operations, but they must accept and facilitate a new model for airpower projection that presents risks of its own.

Service leaders with administrative control must train and equip the war fighter for these new roles and risks. Correspondingly, war-fighting leadership must prepare the battlespace and employ forces using a dispersed operating model that ensures the availability of airpower in an A2/AD environment.

Current Model

The Air Force has made power projection into an A2/AD environment a mission priority, as evidenced by the procurement of advanced fifth-generation aircraft that will maintain capabilities to operate in nonpermissive environments. These aircraft represent the Air Force's kinetic airpower-projection capabilities for A2/AD for the foreseeable future. However, the "inter-related factors of aircraft characteristics, aircrew fatigue, combat mission profiles, aerial refueling requirements, sortie rates, and aircrew to aircraft ratios" dictate that the fighters operate from bases within 1,000 to 1,500 miles of their objectives.³ Current concepts of operation for fighter employment and power-projection models are predicated on a small, concentrated set of forward operating bases (FOB) serving as centralized hubs for logistics, command and control (C2) nodes, and other support functions. These FOBs are located within appropriate operational ranges to potential hot spots around the globe, but their numbers have shrunk due to the drawdown following the Cold War.⁴ The few remaining forward bases serve as a gathering point for all capabilities the United States seeks to have at its ready disposal and have grown in mission scope.⁵

The centralization of capabilities onto fewer bases creates multiple benefits with little risk to planners and decision makers. Advantages include reduced costs for infrastructure and logistics; concentrated manpower requirements; and more efficient, robust C2. In the current fiscal environment and with the geopolitical focus on relatively permissive air environments, decision makers have accepted the risks of reliance on this power-projection model. The assumption is that a base's potential value as a target is easily overcome by the primacy of our defensive capabilities relative to adversary capabilities and will. A contingent of academics and operators has followed the rapid changes occurring in the operating environment and raised the flag about the risks bases will face in the near future.⁶ Indeed, the technological advancements of potential adversaries have surpassed our defensive

capabilities, putting these hubs at much greater risk as a strategically valuable target.

The benefits derived from today's power-projection model are warranted only if the accompanying array of infrastructure, aircraft, and personnel are secure from attack. Integrated defense has demanded more time and focus by air base commanders as their responsibilities have become clearer in Air Force doctrine and policy.⁷ The vast assortment of defense-based weapons—such as the Patriot missile system, Aegis destroyers, and the newer Terminal High Altitude Area Defense system—have been designed to protect bases around the world.⁸ Career fields such as security forces and special investigations have received wider mandates to secure bases much more robustly than in previous decades.⁹ Additionally, base commanders have become intimately involved in base defense plans and are actively seeking new capabilities and competencies that will help to secure bases. Finally, the USAF has developed advanced professional military education courses that address the problem of how to defend air bases despite growing threats.¹⁰

The Air Force has invested in these resources to find the correct combination of ways and means to reduce the risk associated with US power projection. The relatively successful defense of our forward-postured forces under recent contextual settings has bred a sense of complacency that the United States can and will prevail against any threat. The US military lost a trivial number of aircraft to base attacks in Iraq and Afghanistan and never relinquished the ability to use an airfield for more than a limited period in those wars.¹¹ Risk management seemed to work in these conflicts. However, adversaries increasingly possess the potential to upset that environment and change the risk calculus in their favor.

The New Operational Context

The United States now confronts the reality that advanced technologies afford the precision and lethality with which adversaries can jeopardize our forward presence.¹² The Chinese have procured short- and medium-range ballistic missiles, cruise missiles, armed remotely piloted vehicles, rockets, and air-surface strike capabilities in an effort to create a realistic, credible, and redundant umbrella under which their opponents must operate.¹³ Of specific concern are the increased range and accuracy of future weapons such as the DF-4,

DH-10, and D-3A that could easily be used for attacks beyond the first island chain.¹⁴ Additionally, Chinese strategists have stated, “To achieve air superiority, long distance firepower must be applied to ‘control the air through the ground.’ Enemy combat aircraft would be suppressed or destroyed on the ground, and/or blockaded inside their bunkers, thus making it difficult for their air combat forces to play an effective role.”¹⁵ There are examples of how potential US adversaries worldwide have accepted this line of thinking and how it has become a global problem for US forces.¹⁶ Indeed, this operational concept is not new. In 1921 Italian Giulio Douhet wrote, “It is easier and more effective to destroy the enemy’s aerial power by destroying his nests and eggs on the ground than to hunt his flying birds in the air.”¹⁷ As joint force planners acknowledge that technology and strategy are aligning to allow our adversaries to threaten the limited number of bases from which our airpower originates, they can reassess the practicality of the current power-projection model. A 2015 RAND Corporation study on air base vulnerability observes that “emerging long-range strike capabilities are bringing the era of sanctuary to an end, with significant implications for the American way of war.”¹⁸ In short, the predictable and uncontested logistical buildup of American forces (and airpower) is likely to become a thing of the past due to “highly accurate long-range strike systems, particularly ballistic and cruise missiles” coupled with the traditional ground threat against air bases.¹⁹

The modern dynamic creates a situation where planners are forced to reconcile an increased level of risk within the existing ends, ways, and means framework. Efforts to maintain a superior defensive capability in response to an increasingly complex and capable adversary are costly, and the results are often short lived.²⁰ The effects of downsizing and prioritized budgets are that the United States finds itself in a situation where the means cannot be extensively altered to create a long-term advantage. The politicians who dictate the ends have yet to keep stride with changing operational realities—as evidenced by the mandate to maintain the ability to project power into an A2/AD environment. Taken together, these factors force the remaining two variables—risk and ways—to account for the changes in the emerging A2/AD context.

Without fundamentally changing the established models that rely on FOBs, planners are accepting the increased risk of the new threat environment. As the threat grows, so too will the risk involved with

current basing constructs. Adversaries are increasingly capable of completely denying US power projection through their ability to hold our forward bases hostage. Long-term procurement plans to acquire new technology and longer-range weapons systems will help to mitigate the problem—but not in the near future. Before these new means become available, leadership must assess whether the risk of maintaining the status quo is acceptable. Eventually, the untenable risk associated with the difficulty of defending the bases from which airpower is projected will force leaders to look at alternative ways to project power.

Alternative Option: Rapid Raptor Case Study

The defense of FOBs has been a concern long before this current threat began to materialize. During the Cold War, bases in Europe developed resiliency plans that included hardening measures and options for dispersed operations in the event of a Soviet attack.²¹ A 1987 RAND study on the tactical dispersal of fighter aircraft called for a complementary system of main operating bases and dispersed operating locations that would complicate Soviet targeting in the event of conventional hostilities.²² In a related article the same year in the *Air Force Journal of Logistics*, Lt Col Price Bingham argued that two options are available for base defense. The first option, still in practice, involves “hardening measures, active defenses, and rapid repair capabilities.” The alternative is a strategy that “depends on dispersal, mobility, concealment, and deception measures for survival.”²³ A key point from both studies is the requirement for an aircraft capable of, and effective at, operating from dispersed locations. Despite the US desire to attain a capability for dispersed airpower, the concept never gained operational status. The downfall of the Soviet Union and other geopolitical realities allowed the predominant thinking to grow into current projection models. Bingham’s first option was entrenched in Air Force planning, and the idea of using dispersed bases for conventional forces fell out of favor.

In response to the new operational context, the joint force has developed alternative plans to achieve strategic objectives and moderate some of the risks of the current construct. For instance, small teams of F-22 planners (including operators and maintainers) have sought to reinvigorate the concept of dispersed operations with the advent of Rapid Raptor. The F-22 is the aircraft ostensibly designed to allow for

the implementation of the 1987 studies' dispersal recommendations. This idea of a dispersed power-projection capability provides a case study for the discussion of how new ways to project airpower will alter the risks in the emerging threat environment.

Rapid Raptor is a concept that seeks to fulfill Bingham's second option for defending airpower. Reliance on "dispersal, mobility, concealment, and deception" techniques is a cornerstone of this new model.²⁴ It assumes that large bases may be unusable due to the inability to effectively defend against adversary attacks. Instead, Rapid Raptor seeks to use any available and appropriate runway for limited power-projection requirements. The plan has undergone several iterations, beginning with a version described in the 2014 article "Forward Arming and Refueling Points for Fighter Aircraft."²⁵ As it has evolved, the plan has solidified into a variety of flexible deterrent options that a combatant commander can use for power projection in the form of strike, alert, show-of-force, and presence missions. Rapid Raptor pairs a four-ship of F-22s and a single C-17 loaded out with a package of support equipment for the tasked mission.²⁶ The operations and maintenance team of approximately 50 individuals is capable of rapidly deploying to any suitable runway in the operational area and successfully completing an assigned mission of limited duration.²⁷ Former PACAF commander Gen Hawk Carlisle stated in 2014 that the Rapid Raptor exemplifies how the Air Force will "rely on Airmen's abilities to create innovative solutions" and look at alternatives for "utiliz[ing] existing weapons systems and cultivat[ing] tactics, techniques, and procedures" for future operations.²⁸

This updated model for power projection appears to offer a quick fix to a difficult problem. It proposes inventive ways to achieve the ends without a large-scale increase in the means available. However, before leadership can implement this model as a plan, there must be a broad-based analysis and understanding of the risks associated with its adoption. The concept was designed to counter the existing risk of reliance on a limited number of operating bases that fall under a potential threat. While Rapid Raptor may minimize that pitfall, it also introduces vulnerabilities of its own. Despite the difficulty of comparing one form of risk to another, a critical understanding of the risks associated with the different airpower-projection models will allow a dialogue and foster effective decision making across functions and levels of command. Rapid Raptor presents three broad risk areas that together must be weighed against the risk faced by strategic base defense.

Risks to Dispersed Operations

The primary risk associated with Rapid Raptor falls on logistical functions. The concept assumes that F-22s will project power for a limited time and on specific mission sets, then cycle back to a base that has full F-22 support.²⁹ Using the model for a sustained conventional conflict will require several Rapid Raptor teams operating from a variety of locations and cycling into and out of theater on a semiregular basis.³⁰ Additionally, without the support and infrastructure of an established base, sustained F-22 operations will potentially not meet current planned sortie or mission-capable rates, and the likelihood of not delivering an assigned mission may grow. As the duration of the deployment extends, the risk of not delivering on individual missions will also likely increase. The limited personnel and equipment associated with a Rapid Raptor package can only do so much to ensure that the aircraft is mission ready, and some fixes may potentially require more intensive maintenance than what would be available.³¹

Another aspect of the logistical risk is associated with a reliable source of jet fuel. The variants of the Rapid Raptor model have sought to deal with this constraint in one of two ways. One option is to fly the fuel into the airfield using tankers or specially modified C-17s.³² Doing so allows for a reduction in the reliance on local procurement but ties up additional aircraft and resources. The second option requires that the suitability of a runway as a dispersed operating location be dependent on the availability of locally procured jet fuel. Regardless of the source of fuel, the team will not have the support of a dedicated, assured source for its needs.

The logistical risks of a dispersed model exacerbate the fears of functional areas that grade themselves on delivering mission-ready aircraft to the combatant commander. Leaders must be willing to drive Rapid Raptor teams to deliver sorties while acknowledging the logistical challenges involved. At all levels of command, standardized metrics for performance and effectiveness must be developed—with a view toward overall strategy rather than day-to-day sortie production. Another option to quell some of these fears would be to preposition parts, tools, equipment, and fuel at various locations that teams could access as needed. Regardless of the functional imperatives driving caution, leaders must ask if the risk of losing a handful of sorties for logistical reasons outweighs that of losing all the sorties from a strategic base attack.

The second major risk associated with a dispersed airpower-projection model is that of command and control. As a doctrinal concept, centralized control with decentralized execution has been a paramount, yet misunderstood, feature of the Air Force's operations since its founding.³³ In recent times, the air and space operations center (AOC) has consolidated control and leveraged technology so that the combined force air component commander (CFACC) can command and control forces through the dissemination of details via the daily air tasking order and other associated documents.³⁴ The notion that a CFACC in the AOC must centrally control airpower has become fundamentally entrenched in Air Force culture over the last four decades.³⁵ If commanders do not have the infrastructure to support secure communications or information systems to allow for rapid data transfer, their ability to circulate these details to dispersed teams becomes problematic. Proper C2 of assigned forces allows the AOC to take advantage of the speed, reach, and flexibility of airpower. Technology can be leveraged to ensure that limited data can be transferred to the dispersed teams—but not with the reliability and capacity that commanders have come to expect. These technologies must be fully embraced if Rapid Raptor is to succeed at projecting airpower. The ability to designate specific targets, times, or other mission-specific details ensures that tactical units are tied into a broader strategic perspective for a campaign; any degradation in that ability has the potential risk of reducing combat effectiveness.

Gen Martin Dempsey, former chairman of the Joint Chiefs of Staff (CJCS), released a CJCS white paper on mission command in 2012. While not novel, the key attributes of command he expresses have stood the test of time. For instance, General Dempsey conveys that leaders should understand the mission's intent, ensure its mutual understanding throughout the chain of command, and achieve a common operating picture—all while fostering responsible decentralized execution in a complex, dynamic environment.³⁶ The Air Force, however, has had difficulty fully adopting this mentality with respect to airpower as evidenced by its lethargy in finding adaptable C2 structures that operate subordinate to the CFACC and AOC.³⁷ Senior Air Force leaders have addressed the concept of distributed control, and it offers some guidance on the way ahead. Nevertheless, the Air Force has not fully incorporated this concept into day-to-day operations.³⁸ Dispersed operations such as Rapid Raptor are based on the actualization of the mission command and distributed control

concepts. A more adaptable C2 architecture with established mechanisms, relationships, and authorities is required to take full advantage of the capabilities presented by dispersed operations. The question for decision makers is whether the requirement to project airpower in an A2/AD environment warrants a reduction of centralized control in favor of mission accomplishment. Does the risk of embracing adaptable C2 architecture and potentially losing AOC oversight outweigh the dangers posed to executing the mission from strategic hubs?

The final area that faces an increased risk when executing a dispersed power-projection model involves force protection. Rapid Raptor is designed to operate from any airfield, which may or may not have a security presence available. The intent is to use surprise and deception by maintaining a small footprint, making it difficult for adversaries to find the origin from which airpower is generated and thus complicating their targeting. However, because of this very strategy, the deployed team may not have access to the defensive measures that have become requisite for base commanders. It operates outside the layered defenses found at main operating bases, and the plan undermines the dominant thinking on integrated defense measures. The team becomes susceptible to attack or exploitation if its operating location is discovered. The most likely attack would come from the adversary using the weapons already discussed, but there is potential for a smaller attack originating from a local threat near the dispersed base. Regardless, the Rapid Raptor team will not have established force-protection capabilities and will be forced to rely on the limited capability with which it deploys. Leaders must determine if this increased risk to people outweighs the risk to the mission from operating at threatened bases with existing security layers.

Options are available to mitigate the dangers that dispersed teams face from every possible attack. The dispersed nature of the model counters the most likely threat, but it could be augmented by concerted placement of ballistic missile defense systems in-theater. With respect to the ground threat, an example from the Cold War presents a case for including security force members on the Rapid Raptor team. In the 1980s, the Air Force briefly employed small teams in Europe for the ground-launched cruise missiles (GLCM). These teams were composed of the operations, maintenance, and security personnel necessary to function from dispersed locations without any other external support.³⁹ The downside to this option for the F-22 team is the limited space allocated for people on a single C-17.

Current Rapid Raptor planning uses all available seating for maintenance and operations personnel, and adding security teams may reduce operational capability.⁴⁰ Leaders will have to determine the appropriate mix for the team based on the operating locations and perceived threat.

A second option to lessen some of this risk is for combatant commanders to proactively use security cooperation partnerships to bolster indigenous security procedures around potential operating locations.⁴¹ Certifying that local forces understand the necessity to provide secure perimeters and oversight will ensure that airfields are relatively secure when and if Rapid Raptor teams are deployed. This preemptive measure does not necessarily require additional funds but does necessitate a level of focus for teams leading security cooperation endeavors around the globe.

Both previous measures would be incomplete without a final step. Members of a Rapid Raptor team have not had the appropriate training to deploy and provide their own security. Teams must be prepared—with or without augmentation—to discharge basic security for the operating location. The Rapid Raptor dispersal plan deploys teams with small arms and limited battle armor and has not addressed the operational imperative of setting up a perimeter defense.⁴² Other aspects that must be considered are the extent to which the team should be equipped to fall back and the repercussions of losing tools, equipment, and potentially aircraft to an attacking force. Much of this danger can be overcome with a careful selection of the operating location, but team members should still be trained on contingency considerations.

Challenges to Change

The discussion of the specific risks involved with the Rapid Raptor concept illuminates the challenges that would be faced with any dispersed power-projection model. Three broad areas of risk—logistics, command and control, and force protection—form the basis from which an informed dialogue must commence regarding the benefits of this new model over reliance on strategic basing models. Because there is no doctrinal framework that guides risk assessment, commanders and their planning staffs are left to exercise operational art in conducting this dialogue and arriving at the appropriate conclusions.⁴³ Unfortunately, bureaucratic resistance and the risk-averse nature of

the military make it difficult to argue for the far-reaching changes required to promulgate an entirely new power-projection model.

Overcoming structural impediments to enacting these new ways requires commanders to alter existing thought processes, metrics, and established practices. Rapid Raptor has been proven as an operational concept through multiple trial runs in which teams deployed to established air bases within US jurisdiction.⁴⁴ Without a commander's proactive participation that forced disparate functional involvement, these trial runs would never have occurred, lessons would not have been learned, and the concept would have floundered. The commander was paramount to overcoming the functional backlash that arose due to nonstandard operational practices. It is this type of support and experimentation that will allow commanders to break down structural barriers—such as established metrics and existing technical orders / operating instructions—and the bureaucratic resistance associated with those barriers.

In addition to structural impediments, commanders seeking to mobilize these new ways must deal with risk aversion. There has always been a hesitation to try something new—people intrinsically fear change. However, experience shows that the military force as a whole has become more risk averse in the past several years. While some of the proof for this shift is anecdotal, as evidenced by the myriad generals and admirals who speak at Air University, one Department of Navy study captures a widespread concern with risk aversion.⁴⁵ It indicates that leaders are hesitant to alter the status quo for fear of repercussions if something were to go wrong with a decision they make. Regardless of the validity of a growing risk aversion, the current reality that holds ends and means constant forces commanders to find an acceptable risk among a variety of ways to find the best solution to a strategic problem.

Recommendations

The operative power-projection model faces an unacceptably higher risk when transposed from a permissive to an A2/AD environment. The increased risk can be mitigated by following a dispersed power-projection model that would reduce the total risk by negating the most likely and dangerous threat while transferring any residual risk across several functional areas. These individual functional areas may be subject to a risk greater than that which was customary over

the last several decades. However, the ability to project airpower would be preserved at a lower total risk than if the current power-projection model were used in the new operating environment. To make this new model an operational reality and to prepare some functional areas for a changing risk structure, senior leaders can and should proactively train, equip, and employ forces within this new construct. First, service leaders must strive to introduce technology and training supporting aircraft dispersal. Second, major and combatant commands must ensure that functional staffs understand risks driven by a dispersal strategy. Finally, MAJCOMs must alter how they present forces through UTCs to accommodate force packages that better enable the dispersal concept.

As the providers tasked with presenting forces to the war-fighting leadership, MAJCOMs must aim to deliver the training and technology necessary to implement this concept. The training should include the opportunity to practice and refine the skill sets necessary to accomplish the mission via realistic exercises, while the technology should enable and enhance dispersed communications and adaptable C2. In addition to preparing individual units, MAJCOMs must ensure that the functional staffs are aware that there will be risk that is transferred to their areas of expertise. It is critical that all functional hierarchies understand the vision and rationale behind a dispersed power-projection model so that leaders across the chain of command do not generate undue bureaucratic resistance and are willing to accept a changing risk structure. Finally, MAJCOMs must present forces following a renewed model of power projection. The current force-packaging structure of UTCs, which geographic combatant commanders (GCC) can employ, is organized on an assumption that the force will be forward deployed within the model in place. Altering UTCs to accommodate force packaging based on dispersal must be achieved in conjunction with a discussion that will educate the GCCs on these updated force packages.

As the war-fighting leadership, GCCs and CFACCs must actively find ways to assimilate Air Force units that follow a dispersed power-projection model. Typically, GCCs employ these units for four- to six-month rotations—such as for theater security package or continuous bomber presence missions—that use outdated force packaging and established power-projection models. A restructured plan to employ these units at various locations sporadically throughout a period of time would save money, continue to assure our allies, and still pro-

vide a presence in the theater of operations. Additionally, GCCs must be proactive with ongoing theater security cooperation measures that will enable dispersed operations. By focusing these cooperative measures on areas that will benefit dispersed operations, GCCs can ensure effectiveness and help to mitigate some of the risks involved with dispersed operations. As the senior Air Force officer in-theater, the CFACC must enable an adaptive C2 architecture that will allow the capabilities of dispersed operations to be fully realized. Doing so may entail a reduction in the influence and authorities of the CFACC and AOC. Such an architecture must be built on a level of trust and understanding with the dispersed teams, the subordinate JTFs to which those teams may be allocated, and any command/coordination elements in between.

Conclusion: Defending Airpower Projection Capabilities

Airpower pioneer Gen Billy Mitchell recognized that “in the development of air power, one has to look ahead and not backward and figure out what is going to happen, not too much what has happened.”⁴⁶ Advanced technology, rising regional power tensions, and the traditional ground threat to air bases have conspired to paint a new reality for future airpower operations. If American airpower is to maintain its lethality, the USAF must make the initial survivability of its aircraft a priority. Technology, force packaging, and training must support aircraft dispersal. Functional staffs must be open-eyed about the risks associated with a dispersal strategy and alter how they present forces to better enable the dispersal concept.

The capability to deploy units to dispersed locations and effectively execute a mission that does not rely on a limited number of bases lends credence to a strategic message that we can and will operate and project airpower into an A2/AD environment. GCCs and CFACCs who employ this model will gain flexible deterrent options that offer tools to manage escalation under greater threat than would be available under current power-projection models. Retaining realistic, credible deterrent measures will allow GCCs to prevent adversaries from taking advantage of a perceived unwillingness to deploy forces for small breaches of international order. These mea-

asures will also ensure order and the availability of airpower for global operations irrespective of the operating environment.

Commanders must weigh the threat to established air bases with the risks to dispersed operations. The current airpower-projection model faces a potentially existential threat, and leaders can no longer ignore this reality. Alternative models still include risks in the forms of logistics, C2, and force protection. Senior leaders can address and mitigate these risks to ensure that we retain the ability to project national power—and more specifically airpower—into any environment. General Dempsey challenged the services and the joint force to “collectively promote a culture that values calculated risk as a means to generate opportunity.”⁴⁷ Leaders at all levels should find ways to advance this culture. Breaking down structural barriers and moderating potential risks are starting points. The time for action is now.

Notes

1. Department of Defense, *Sustaining U.S. Global Leadership*, 4.
2. Air Force Instruction 10-403, *Deployment Planning and Execution*, 66.
3. Bowie, *Anti-Access Threat*, ii. This study lays out fundamental problems with the current basing construct and the political and military threats to assured access for land-based fighter aircraft power-projection capabilities.
4. Pettyjohn and Vick, *Posture Triangle*, 82. Throughout this study, the authors provide insight regarding the mix of basing arrangements available to US military planners and the relative strengths and weaknesses of different contextual arrangements. For the purpose of this discussion, I am referring to the number of operating bases established for long-term fighter aircraft generation and sustainment. According to these authors, only seven such bases exist abroad.
5. Bowie, *Anti-Access Threat*, 19–30. Bowie identifies the paucity of runways available globally and highlights the myriad requirements for a typical base to operate as a hub for US fighter aircraft generation.
6. Several studies have looked at the A2/AD environment and the risks to our current power-projection model that relies on forward-deployed capabilities. The overarching thesis is that these bases are becoming increasingly susceptible to advanced threats, and thus the United States’ ability to project airpower from these bases is no longer guaranteed. I list several of these studies here for additional reference (see bibliography for full citations): Adderley, “Can’t Get There from Here”; Bowie, *Anti-Access Threat*; Cliff et al., *Shaking the Heavens*; Davis, “Forward Arming and Refueling”; Easton, *Able Archers*; and Haddick, *Fire on the Water*.
7. The Curtis E. LeMay Center for Doctrine Development and Education, “Annex 3-10, Force Protection,” and Air Force Policy Directive 31-1, *Integrated Defense*, prescribe force-protection measures for the people, assets, and bases that the USAF has stationed around the globe. During in-class lectures for an air base defense class offered at Air Command and Staff College (ACSC) in 2015, several former expedi-

tionary wing commanders commented on the time and effort expended in pursuit of these objectives.

8. *Ibid.*, 62.

9. Caudill, *Defending Air Bases*, vol. 1, 339–63. The concluding chapter of this book summarizes lessons learned from the wars in Iraq and Afghanistan as 10 propositions that enable successful base defense. The recommendations are influenced by the perspective of base defense from a security forces professional and are skewed toward the role of security forces and the Office of Special Investigations in base defense. Chap. 11 also highlights the recent changes in doctrine and policy that have supported the measures identified as necessary for successful base defense.

10. During the 2015 academic year, ACSC offered the yearlong elective *Defending Airbases in an Age of Insurgency*, for which the author originally wrote this chapter.

11. A portion of the coursework for the ACSC elective was to research the effectiveness of base attacks in Iraq from 2003 to 2012. The research was conducted at the Air Force Historical Research Agency at Maxwell AFB, AL. The research discovered that despite being attacked 1,964 times, the coalition as a whole suffered only 15 damaged aircraft throughout the campaign, with zero complete losses. While these statistics do not speak to the time a runway was unavailable due to these attacks, aircraft were never lost for lack of a usable runway surface, nor were operations ever suspended beyond a cursory recovery period following an attack. Data from Afghanistan was unavailable at the time of this writing; however, anecdotal evidence suggests a similar limited effectiveness of base attacks for that campaign with the caveat of the US Marine Corps losses at Camp Bastion.

12. Haddick, *Fire on the Water*, 87–90. This section succinctly identifies the problem of advanced precision weapons, but several of the studies mentioned previously highlight the extent to which forward bases are under increased threat of attack.

13. Easton, *Able Archers*, 10. Although this study is conducted from a Taiwanese perspective, the conclusions have ramifications for US forces in the Pacific theater.

14. Davis, “Forward Arming and Refueling,” 7.

15. Easton, *Able Archers*, 11. The original quotation is from a translation of Yu Jixun, ed., *Second Artillery Force Science of Campaigns* (Beijing: Liberation Army Press, 2004), 392.

16. Adderley, “Can’t Get There from Here,” 6–10.

17. Douhet, *Command of the Air*, 53–54.

18. Vick, *Air Base Attacks*, xiii, 63.

19. *Ibid.*, 62–63.

20. Bowie, *Anti-Access Threat*, 62.

21. Berman, *Integrating Basing*. In his argument to incorporate basing considerations as a factor in future aircraft design requirements, Berman acknowledges the different measures available to protect against base attack. Additionally, see Halliday, *Tactical Dispersal of Fighter Aircraft*, 13–16.

22. Halliday, *Tactical Dispersal of Fighter Aircraft*, 7–8, 28–29.

23. Bingham, “Air Base Survivability,” 2.

24. *Ibid.*

25. Davis, “Forward Arming and Refueling,” 11–17.

26. Misiak to the author, e-mail. MSgt Daniel Misiak was the production supervisor in the 90th Aircraft Maintenance Unit, 3rd Aircraft Maintenance Squadron, 3rd Maintenance Group, 3rd Wing, Joint Base Elmendorf-Richardson, AK, at the time of this writing. He was the subject matter expert for the Rapid Raptor proof-of-concept exercises conducted during the author's time as acting director of operations, 90th Fighter Squadron. His expertise and insight were critical to a thorough understanding of the Rapid Raptor concept. In addition to his e-mail and our discussions, Master Sergeant Misiak provided load plans and data sheets outlining the various configurations of the concept available to planners based on mission type. I am indebted to him for his input and information related to the capabilities and risks associated with this particular form of dispersed operations.

27. Ibid.

28. Everstine, "ACC, PACAF Focused."

29. Misiak to the author, e-mail.

30. Ibid. See also Davis, "Forward Arming and Refueling," 20.

31. Ibid.

32. Davis, "Forward Arming and Refueling," 11.

33. Hinote, *Centralized Control*, 3–12. See also Hukill et al., *Air Force Command*.

34. Carozza, "Unspoken Consequence of Communications," 10.

35. Hukill et al., *Air Force Command*, 23.

36. Dempsey, *Mission Command*, 5.

37. Hukill et al., *Air Force Command*, 23.

38. Hostage and Broadwell, "Resilient Command and Control." This paper was written prior to an Air Force C2 symposium in January 2015 in which Air Force leadership concluded that changing the tenet of centralized control / decentralized execution was not necessary since the concept of distributed control was already included in the underlying doctrine. However, symposium members highlighted the need to foster a better understanding of how distributed control could be fully implemented across the range of military operations.

39. Simpson, "GLCM," 3.

40. Misiak to the author, e-mail.

41. Bowie, *Anti-Access Threat*, 53–56.

42. Misiak to the author, e-mail.

43. Huber, "Operational Art and Risk," 67.

44. Misiak to the author, e-mail; and McCullough, "Ace in the Hole," 24–25. Numerous wing- and MAJCOM-level exercises have tested the capability to employ the Rapid Raptor concept. F-22 units at Joint Base Elmendorf-Richardson and Joint Base Pearl Harbor-Hickam (JBPHH), HI, have proven that the concept is viable with successful deployments to locations such as Eielson AFB, AK; JBPHH; and Andersen AFB, Guam. While deployed, these units relied solely on tools, equipment, and personnel sent with the Rapid Raptor team.

45. Snodgrass, "2014 Navy Retention Study," 18, 38.

46. Mitchell, *Winged Defense*, 20–21.

47. Dempsey, *Mission Command*, 8.

Chapter 9

AirSea Battle and the Air Base Defense Shortfall

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Counterinsurgency takes a heavy toll on a nation, its military, and the public. After a long conflict in Vietnam, the United States refocused its efforts on combat power in Europe against a Soviet Union that had grown technologically more advanced and menacing with the advent of the operational maneuver group concept.¹ In a similar scenario, the US military awoke to find the security challenge of China in the Pacific after being fixated on irregular warfare in Afghanistan and Iraq for over a decade. Consequently, America has been pivoting back to the Asia-Pacific region with a wary eye toward China. This redirection evokes similarities to the American military's effort to refocus itself on the Soviet threat in Europe in the wake of a costly war in Vietnam.

In the 1970s and '80s, the United States developed a joint strategy called AirLand Battle (ALB) to meet the growing capabilities of the Soviets. Today, American leadership emphasizes a pivot back to Asia with a refocused military and diplomatic effort centered on the Pacific. Supporting the military component, today's planners have been developing a strategy rhetorically inspired by the success of ALB called the AirSea Battle (ASB) concept. In February 2010, the DOD declared,

The Air Force and Navy together are developing a new joint air-sea battle concept for defeating adversaries across the range of military operations, including adversaries equipped with sophisticated anti-access and area denial capabilities. The concept will address how air and naval forces will integrate capabilities across all operational domains—air, sea, land, space, and cyberspace—to counter growing challenges to U.S. freedom of action. As it matures, the concept will also help guide the development of future capabilities needed for effective power projection operations.²

ASB was renamed the Joint Concept for Access and Maneuver in the Global Commons (JAM-GC) in 2015.³

Much can be learned from the development of the ALB concept in the early 1980s, especially concerning the defense of air bases from ground attack—a topic that has only recently moved to the forefront of JAM-GC planning. As the American World War II island-hopping campaign in the Pacific required deeper penetration of enemy threat rings and strongpoints, so too will JAM-GC require an eventual logistical and force-protection toehold in a contested area requiring defense from ground-based threats.

It is easy to forget that during the Vietnam conflict, more US aircraft were destroyed by air base ground attacks than by North Vietnamese MiGs in air-to-air combat. In Vietnam, Vietcong and North Vietnamese forces attacked American air bases 475 times between 1964 and 1973, primarily with mortars and rockets, destroying 99 US and South Vietnamese aircraft and damaging 1,170 aircraft.⁴ Compare those startling statistics to American losses in air-to-air combat, which stood at 62.⁵ Vietnam and the lessons from Middle East conflicts informed Army and Air Force leaders on the need not only to modernize and integrate forces but also to elevate the defense of air bases into a broader strategic and operational framework through the ALB concept.⁶

Today, JAM-GC centers on the challenges of an enemy with the technological prowess to prevent the United States from projecting forces into its theater of operation. This antiaccess/area denial (A2/AD) conundrum—which analysts view as central to the future operational environment in the Pacific—is the focus of military planners. In January 2012, Secretary of Defense Leon Panetta issued new strategic guidance for the DOD based on an assessment of the viability of US defense strategy in “the changing geopolitical environment.”⁷ The guidance document defines 10 mission areas the joint force must address in today’s globally competitive environment.⁸ For one of these prioritized missions—“project power despite anti-access/area denial challenges”—the report states, “Sophisticated adversaries will use asymmetric capabilities . . . to complicate our operational calculus” and actors will use them to “counter our power projection.” It further affirms that “*accordingly, the U.S. military will invest as required to ensure its ability to operate effectively in [A2/AD] environments*” (emphasis in original).⁹ One of 10 focus areas that the JAM-GC Office identified for the A2/AD environment is distributed (or dispersed) basing in which a force is spread “across several semiprepared positions, making it harder for an adversary to target.”¹⁰

However, much of the strategy for A2/AD has been on the employment of long-range precision weapons, with scant little written about the traditional air base threat posed by ground attack. This traditional, low-cost threat constitutes the enemy's final line of denial for US forces attempting to break into a contested zone. The Air Force advanced two similar strategies to address the A2/AD threat: Rapid Raptor for the Pacific and Untethered Operations for the European theater—the latter focused on the re-emerging Russian threat in Europe.¹¹ Originally developed in 2013, Rapid Raptor seeks to deploy and operate strike aircraft in the contested A2/AD Pacific theater environment and project combat power against China. Supporting the JAM-GC concept of disbursement, Rapid Raptor looks to the deployment of fighter aircraft packages serviced by a single C-17 with the necessary support to refuel, rearm, and maintain the aircraft at an austere airfield but, notably, with no organic security.¹² More recently, the Air Force validated a new concept—Agile Combat Employment (ACE)—that builds on Rapid Raptor by further delineating rapid response and dispersal operations for forward deployed forces in the Pacific theater.¹³

Regardless of theater, American airpower strategies hinge on the concept of dispersed operations to meet the growing threat to US airpower dominance posed by rapid enemy A2/AD technological development. Dispersal is designed to lessen the impact of rapid and accurate long-range strikes by enemy forces. Spreading forces over a multitude of widespread, austere sites will make it exponentially harder for a determined enemy to target aircraft. Therefore, the logic is that the lack of organic security for these aircraft packages is an acceptable risk.

Having said that, the US military should examine and address the full spectrum of threats under A2/AD. Beyond the threat of high-tech missiles and weapon systems, there must be a thoughtful analysis of an omnipresent ground threat across the theater. Such analysis must provide a comprehensive, joint approach to the traditional ground threat component of the A2/AD challenge. In a resource-constrained environment, it would behoove the services to create a joint approach to air base security similar to the Army–Air Force “31 Initiatives” of the 1980s that supported ALB. The services must also develop partnership capacity for host nations to provide exterior security for air bases and refine joint (and specifically Air Force) expe-

ditionary security capabilities to support the stand-up of austere and dispersed airfields.

AirSea Battle's Intellectual Foundation

The use of the moniker AirSea Battle (JAM-GC's forerunner) was designed to evoke the rhetoric and template of the highly successful ALB strategy developed by the Army and Air Force in the late 1970s and implemented in the 1980s. As part of ALB, the services developed the "31 Initiatives" to address gaps and seams in their operational approach, integrate and synchronize procurement of weapon systems, and reduce mission area redundancies. In the ALB concept, the security of air bases was viewed as a strategic imperative—so much so that six of these initiatives dealt specifically with the defense of air bases and security of the rear area.¹⁴ If JAM-GC is to guarantee access of friendly forces to project military power in the theater of operations, then a similar accommodation must be made in agreeing on a joint approach to meeting the threat to air bases.

The pervasive threat of air and ballistic missile targeting of US and ally airpower projection is not a new concept. During the Cold War, North Atlantic Treaty Organization (NATO) airfields faced Warsaw Pact air, missile, and special forces' threats throughout NATO's Central European theater.¹⁵ Threats of a Soviet attack on NATO airfields, air defense installations, nuclear weapons platforms, and command and control locations led NATO allies and the United States to increase their tactical air presence throughout Europe.¹⁶ In doing so, the United States established forward-dispersed air basing throughout Central Europe. As the greatest air arm in NATO, US Air Forces in Europe (USAFE) became the main effort to retaliate against Soviet air and missile attack.¹⁷

USAFE flew dispersed combat air missions from more than 20 air bases throughout Europe, all postured to survive and operate under Soviet attack.¹⁸ The United States continued to increase its air base survivability and retaliatory capability until the fall of the Soviet Union in 1991. The increased number of hardened NATO air operating locations under an umbrella of air and missile defense systems improved USAFE's airpower survivability. Recently, USAFE dusted off elements of Cold War dispersal plans and issued the updated strategy of untethered operations.¹⁹ However, NATO's dispersed air operating locations—much like those required for US Pacific Com-

mand's (USPACOM) JAM-GC—necessitated protection from asymmetric ground threats.

Declassified Cold War-era Central Intelligence Agency (CIA) estimates identified the Soviet special operations force (Spetsnaz) as a credible Level I and II threat to NATO air bases. CIA estimates predicted that, at the outbreak of war, Spetsnaz would infiltrate the target area with the support of pre-positioned clandestine agents. Working behind enemy lines, Spetsnaz would conduct reconnaissance and at the direction of command authorities would execute directed actions toward key NATO air operating locations.²⁰

The Soviet Union's Leningrad Military Academy taught two methods for Spetsnaz air-base-directed actions. The first method consisted of a 30-man airdrop that would break into teams, each with specific responsibilities to infiltrate less defended NATO air bases.²¹ The Spetsnaz would position mines and man-portable surface-to-air missiles (MANPADS) at night near the end of the runways. During the morning, Spetsnaz teams would direct attacks on exposed aircraft, personnel, and facilities. Emplaced mines and MANPADS would be used to fire upon departing aircraft.²² The second method of attack, directed at more heavily defended air bases, involved a Spetsnaz company of 10 teams of 5–12 men. The company would not penetrate the air base but would conduct first-night attacks on the air base's lines of communication, support personnel, and infrastructure. No attacks would take place on the second night. The modus operandi was designed to create an impression that a significant force was within the target area. On the third night, Spetsnaz would conduct standoff attacks on aircraft and fuel storage.²³

Simultaneous to the Spetsnaz operations, Cold War intelligence analysts believed that the operational maneuver groups would rapidly thrust into NATO countries to “overrun Europe quickly, before NATO's nuclear forces could intervene” and “overrun NATO airfields before NATO [could] gain decisive air superiority.” Additionally, the Soviets “discussed the possibility of the units operating from NATO airfields” once seized to support penetrating helicopter units and potentially as logistics hubs.²⁴

The service agreements made air base defense (ABD) a joint service interest in direct support of the Army's AirLand Battle doctrine. Actions taken to protect air bases from the perceived Soviet air base ground threat were costly in passive defense and ABD manpower. Execution of this initiative and the utilization of host-nation security

forces were enabled by the collective understanding of airpower's role in countering Soviet military aggression. Additionally, NATO's strategic and formal partnerships facilitated a multilateral capability spanning Central Europe to collectively fight a common state threat in total war. Thus, all NATO security forces safeguarding air operations were trained and equipped to meet a common standard determined by NATO. Supporting ALB and the 31 Initiatives, in 1985 the Air Force and Army signed Joint Security Agreement 8. Lasting almost 20 years, this joint policy formally tasked the Army with the exterior defense of Air Force bases while assigning interior security of air bases to the Air Force.²⁵

During the Iraq campaign, however, the Army and Air Force acknowledged that the Army was stretched beyond capacity and did not have sufficient forces in to perform dedicated, exterior ABD missions. As a result, Air Force and Army leaders terminated the agreement, giving Air Force commanders more latitude in defending air bases with their own assets.²⁶ Without clear roles in base defense responsibilities between the services, this abrogation of these responsibilities presents a potential gap in planning and resources.

ALB demonstrates the capacity to clarify roles and responsibilities to ensure full synchronization in the battlespace. In short, it was a focal point for both Army and Air Force leaders that air bases receive the requisite resources and defense synchronization to assure these strategic hubs remained operational. Can the same be said today for today's conceptual cousin, AirSea Battle?

The Pivot to Asia and Ground-Based Threats

In 2011 former secretary of state Hillary Clinton outlined America's "pivot" to Asia and its specific interest in China's expanding influence in the region. She stated, "At the end of the day, there is no handbook for the evolving U.S.-China relationship." However, she noted that the United States "will continue to embed our relationship with China in a broader regional framework of security alliances."²⁷ Her comments hint at the military and strategic challenges presented by China and the expanse of the Pacific itself. Clinton clearly stated that "this kind of pivot is not easy."²⁸ This reality is particularly true regarding American force projection in an increasingly hostile A2/AD Pacific environment.

The forward distribution of air assets to increase airpower survivability and complicate adversarial A2 targeting will require the development of different air basing options. USPACOM's JAM-GC will drive a distributed air basing plan—which for the purposes of this discussion will be categorized as air expeditionary basing or dispersal airfields. Dispersal airfields will be serviced by host-nation forces in austere, geographically separated conditions designed to support a small dispersal footprint for launch and retrieval of air assets only. Although the environments will be permissive, distributed air operations could be performed at remote, restricted locations resembling Wake Island airfield. Other operating locations may be in more populated, developed, and accessible environments like that of Subic Bay airport in the Philippines. While siting forward distributed air bases in permissive environments dismisses the probability of conventional ground threat, it does not preclude the possibility of exposing air operating sites to asymmetric ground threats.

As much as planners would like to ignore the ground threat, ground bases are historically a low-cost, pervasive target within easy grasp of any foe. One can expect the enemy to plan ahead by training sleeper cells in countries friendly to the United States, employing special forces similar to the Soviet-era Spetsnaz model (only with more deadly weapons and technology), and leveraging insurgent and criminal groups during a crisis. Indeed, according to Dr. William Dean, an Air Force insurgency scholar, there are over 26 insurgent movements in the Asia-Pacific theater.²⁹ Such was the case in 2001 when a 14-man Tamil Tiger suicide team armed with explosives, grenade launchers, light antitank weapons, and machine guns targeted Sri Lanka's air assets at Katunayake Air Base and the high-value aircraft at the adjoining Bandaranaike International Airport.³⁰ The attackers successfully destroyed or damaged 26 high-value air assets—one-third of Sri Lanka's commercial airline fleet valued at over \$350 million and a quarter of its military fixed-wing capability.³¹

Large ethnic diasporas provide a potential manpower pool from which the mother country can draw. The Russians have used this strategy with great effect in Ukraine to justify their actions as designed to "save" the ethnic Russians from the oppressive Ukrainian regime, which, in their view, allowed them not only to arm and equip the insurgent force but also to intermix their own military advisors and special forces.³² When one looks at the Pacific, the *Economist* points out that "more Chinese people live outside mainland China

than French people live in France, with some to be found in almost every country.”³³ Large Chinese populations are found in Vietnam (1.26 million), the Philippines (1.15 million), Singapore (2.79 million), Indonesia (7.67 million), Thailand (7.06 million), and Malaysia (6.39 million).³⁴ This large Chinese diaspora offers a potential sphere of influence and pool of manpower sympathetic to the Chinese national cause, which could be leveraged for intelligence and air base attacks at dispersed airfields should a conflict arise.

To date, JAM-GC planners largely ignore the ground threat—something ALB proponents did not. Defending air bases was a central component to ALB strategy. Whereas ALB developed four initiatives specific to air base ground defense, thus far, JAM-GC lacks any discussion regarding the ground defense of distributed bases. This omission is a major gap in the JAM-GC concept as contrasted with ALB. As noted by the Air Force’s *Basic Doctrine*, “Aircraft are most vulnerable on the ground. Thus, force protection is an integral part of airpower employment.”³⁵ JAM-GC must therefore include a concept for the defense of airfields. To put it simply, if JAM-GC is to succeed, leaders and planners must treat it with the same level of seriousness and comprehensiveness as the Army and Air Force accord AirLand Battle. When it comes to securing air bases in support of JAM-GC, ad hoc is simply not good enough.³⁶

Total Force: Bridging the Gap by Building Partnership Capacity

In an austere budget environment, JAM-GC must leverage the capabilities of friendly nations in the zone of conflict and build strategic relationships well in advance of hostilities. Central to this effort is the Building Partnership Capacity (BPC) program, whose goal is “to build partner capacity in the following focus areas: sustain[ing] defense through a partner’s human capacity, operational capacity, institutional capacity, civil sector capacity, combined operations capacity, operational access, [and] intelligence sharing . . . and assuring regional confidence and international collaboration.”³⁷ The BPC program’s current efforts include developing capabilities “to defeat terrorist networks; defend the US homeland in depth; shape the choices of countries at strategic crossroads; prevent hostile states and non-state actors from acquiring or using weapons of mass destruction

(WMD); conduct IW [irregular warfare] and stabilization, security, transition and reconstruction (SSTR) operations; [and] enable host countries to provide good governance and conduct ‘military diplomacy.’³⁸ The BPC can easily be expanded to bridge the gap in JAM-GC and provide integrated defense (ID) for distributed operations. A 10-year study by the Joint Staff concluded that

partnering between the US and host nations was essential for the US to achieve its strategic goals and promote a number of key objectives. First, partnering enabled the host nation to develop a sustainable capacity to provide security and counter threats. This provided an exit strategy for the US and offered an alternative to sustaining a large US footprint on the ground. Second, partnering enhanced the legitimacy of US operations and freedom of action. Finally, partnering built connections between the US and host-nation security forces, increasing opportunities for influence both within respective militaries and with other sectors of government and society. Partnering offered the US a way to advance its objectives through influence rather than through direct action.³⁹

The State Partnership Program (SPP) is a DOD security cooperation program under the authority of the National Guard.⁴⁰ It was created in another era of “rebalancing” following the disintegration of the Soviet Union in 1991. US policy makers sought to stabilize the former Soviet states and encourage transition to democratic governance.⁴¹ One method was to increase military-to-military relationships in the former Soviet states. In several of these states the National Guard was viewed as a better option over a full-time, active-duty presence to minimize Russian “concerns about U.S. expansion into its former satellites.”⁴² The program began in 1993 with 13 partner nations primarily from the former Soviet Union.⁴³

The SPP has grown steadily since its inception. With the signing of Cameroon in 2017, the program has created 74 state partnerships across all geographic combatant commands (COCOM).⁴⁴ USPACOM has nine partnerships (table 9.1).

The focus of SPP efforts is based on several key factors: needs of the partner nation, capabilities of the state National Guard, goals of the representative US ambassador and the combatant commander, and statutory authorities and restrictions.⁴⁵ The SPP conducts a broad range of security cooperation activities integral to the Guard’s role in BPC efforts.⁴⁶ Three of the four goals of the SPP published by the National Guard Bureau’s (NGB) International Affairs Division involve BPC.⁴⁷ BPC is also found in the SPP mission statement: “Enhance

combatant commanders' ability to build enduring mil-to-mil and civil-military relationships that improve long-term international security while building partnership capacity.⁴⁸

Table 9.1. SPPs in USPACOM area of responsibility

| <i>Partnered Nation</i> | <i>State</i> | <i>Year of Inception</i> |
|-------------------------|--------------|--------------------------|
| Philippines | Guam/Hawaii | 2000 |
| Thailand | Washington | 2002 |
| Mongolia | Alaska | 2003 |
| Indonesia | Hawaii | 2006 |
| Bangladesh | Oregon | 2008 |
| Cambodia | Idaho | 2009 |
| Vietnam | Oregon | 2012 |
| Tonga | Nevada | 2014 |
| Malaysia | Washington | 2017 |

Source: National Guard Bureau, "State Partnership Program Map," 27 June 2017, <http://www.nationalguard.mil/Leadership/Joint-Staff/J-5/International-Affairs-Division/State-Partnership-Program/>; and National Guard, "State Partnership Program," fact sheet, May 2017, [https://www.nationalguard.mil/Portals/31/Resources/Fact%20Sheets/State%20Partnership%20Program%20Fact%20Sheet%20\(June%202018\).pdf](https://www.nationalguard.mil/Portals/31/Resources/Fact%20Sheets/State%20Partnership%20Program%20Fact%20Sheet%20(June%202018).pdf).

The SPP's unique capabilities make it suited for BPC efforts in support of JAM-GC, distributed airfield operations, and ID. Arguably its primary advantage is the ability to build enduring relationships and trust with partner nations. For example, all of the original 13 partner nations from the program's inception are still active.⁴⁹ One reason for this longevity is that because Guard personnel tend to be in one unit longer than active duty personnel, they can develop long-term relationships with those in partner nations. Also, the SPP has buy-in from partner nations from the very beginning as they—not the United States—must initiate the program's establishment. Finally, relatively few expectations are placed on partner nations. Initial interactions are oriented toward building relationships versus establishing a program with strict objectives. Because the United States requires airfields and the intent is for partner nations to secure dispersed aircraft, the solid relationships required can be created and fostered by the SPP.

A second advantage is that the SPP's small footprint is less threatening to US adversaries and potentially more acceptable to nations

hosting dispersed airfields. Placing a large US active duty force to secure dispersed airfields throughout the Asia-Pacific could create a perceived threat within China. Additionally, because some nations are sensitive to external pressure from China and internal pressure from their domestic constituencies, support for a large US force on their territory would be politically unsustainable. The inherent nature of SPP activities can alleviate some of these concerns since they normally are accomplished in small teams, spread over time, and built around a state militia.

A third advantage of the SPP is its low cost for an enduring effect. According to the NGB, the typical SPP event is a weeklong subject matter expert exchange (SMEE) with three to five guardsmen participating at an average cost of \$20,000 per event.⁵⁰ Gen Martin Dempsey, former chairman of the Joint Chiefs of Staff, put his stamp of approval on the low-cost, high return of SPP, stating, “I think it’s really a modest investment for a pretty substantial return.”⁵¹ With a potential requirement for as many as 50 dispersed airfields, the low cost of the SPP is a strong advantage.⁵²

A fourth advantage of the SPP is its inherently “whole of government” approach. Although the partner nation initiates the process, the program must be approved by the COCOM, US Embassy, and NGB. The involvement of the Department of State brings with it other intergovernmental agency participants, such as the US Agency for International Development and potentially other nongovernmental organization resources, all of which could be used to address causes of instability in communities or counter irregular threats surrounding dispersed airfields.

A final advantage is the dual roles of National Guard personnel as military members and civilian professionals. Many times, the civilian versus military occupations of Guard personnel determine SPP relationships and exchanges. During one SPP event, for example, Oregon guardsmen became aware that Bangladesh was struggling with implementing community policing. Some guardsmen were Portland police officers; they connected their police department—through the US Embassy—with their law enforcement counterparts in Bangladesh.⁵³ This scenario demonstrates the flexibility of the SPP program.

The SPP has one main disadvantage when applied to the JAM-GC concept, dispersed operations, and ID. Building relationships takes time, and it is unclear if China’s rise will be peaceful or not. The JAM-GC concept anticipates the implementation of an A2/AD environ-

ment with little to no warning. Therefore, US forces must consider other options for securing dispersed airfields until the SPPs are fruitful in their capabilities within partner nations.

Development of Air Force Expeditionary Security Capabilities

If countries do not have joint agreements on JAM-GC for resources and air base security and/or if host-nation forces cannot provide exterior security, then the Air Force must further develop its organic capabilities to meet this gap—or risk mission failure. Three off-the-shelf, rapidly deployable models are presently available for organic Air Force security capabilities. The first is the Air Mobility Command Phoenix Raven program, providing a minimal amount of close-in security through fly-away security teams (FAST) with usually a handful of Airmen (two to six).⁵⁴ The second is the contingency response group (CRG) model in which a flight (platoon) of security forces is deployed.⁵⁵ Finally, the base defense group model can project a squadron- or group-sized security force package.⁵⁶

Currently, the USAF has four contingency response force units—two contingency response wings (CRW) in CONUS and two overseas at US European Command and USPACOM. The CONUS-based CRWs fall under Air Mobility Command and are geographically aligned with US Southern Command and US Africa Command. Each CRW has an associated Guard contingency response group.⁵⁷ The CRWs also have a mobility support advisory squadron dedicated to BPC in their aligned region.⁵⁸

Pacific Air Force's 36th Contingency Response Group is based out of Andersen Air Force Base on Guam. The 36 CRG has almost 500 personnel with multiple specialties and the capability to operate in forward locations in austere environments. The group is already active in a wide variety of security cooperation activities, such as international exercises, SMEEs, and humanitarian assistance/disaster response events throughout the Asia-Pacific.

The 36 CRG is well suited for BPC efforts in support of JAM-GC, distributed airfield operations, and ID for several reasons. Its foremost task is to establish and sustain air base operability (ABO). The 36 CRG is tasked to deploy within 12 hours of notification and then conduct airfield assessments and provide initial command and con-

trol, ID, air mobility support, airfield operations, force health protection, and base support operations for a small contingent. The 36 CRG will play a major role in enabling the JAM-GC concept by rapidly opening the distributed airfields that will be used to counter an A2/AD environment in the Asia-Pacific.

Second, the 36 CRG comprises several squadrons with unique capabilities such as combat communications; mobile, rapid engineering (RED HORSE); and security.⁵⁹ The 644th Combat Communications Squadron can deploy, operate, and maintain communications and computer systems under hostile, bare-base conditions. The 554th RED HORSE Squadron is a highly mobile response force supporting contingency operations with engineering, heavy repair, construction, and vehicle maintenance.⁶⁰ Finally, the 736th Security Forces Squadron has capabilities to provide antiterrorism planning, force protection, airfield ID surveys, jungle enforcement patrols, close precision engagement teams, and FASTs. All of the above capabilities could be applied when countering an A2/AD environment.

Ad Hoc Is Not Good Enough

Dispersal alone is not a sufficient strategy to address the challenges of the A2/AD environment. First, JAM-GC must include the seriousness of purpose and comprehensiveness of its intellectual cousin, ALB. Second, leaders must face the A2/AD challenge holistically across the spectrum of threats or risk opening a significant gap for the enemy to exploit. Third, JAM-GC planners must look beyond the threat of long-range, high-tech weapons to include the traditional, low-cost ground threat to airfields. While today's resource-constrained environment presents challenges across mission sets, leaders must take a thoughtful, joint approach to air base (and port) security similar to the construct of the Army–Air Force 31 Initiatives of the 1980s. The joint force must pursue this three-pronged approach to close the base defense gap in its current thinking on JAM-GC.

Joint forces—particularly the Air Force—need to reimagine their forces beyond their job specialties to incorporate a ground defense competency as part of the training and equipping of dispersed forces. Doing so will maximize the survivability of air assets, people, and equipment using the limited resources available. This idea is nothing new. A 1987 RAND study on the Cold War's tactical dispersal of aircraft noted, "Security police [now security forces] could be aug-

mented by arming maintenance and other support personnel. This is the concept used at air-launched cruise missile (ALCM) bases; a total of 69 men defend the 16 nuclear armed missiles of each ALCM flight.”⁶¹ With dispersal comes risk and a lessened ability to send sufficient security force contingents. This eventuality will not only necessitate the need for *all Airmen* and joint force members to play a competent and expected role in defense but also accentuate the role of host-nation forces to push out localized threat rings.

To put it simply, ad hoc defense of airfields is not good enough and risks mission failure against a determined and capable enemy. Today’s leaders would do well to review the comprehensive and strategic approach taken by Cold War leaders toward addressing the Soviet threat to air bases and explore some of the aforementioned remedies to the Asia-Pacific ABD problem.

Notes

1. CIA, *Soviet Operational Maneuver Group*.
2. DOD, *Quadrennial Defense Review Report*, 32–33.
3. McLeary, “New US Concept.”
4. Vick, *Snakes in the Eagle’s Nest*, 68.
5. *Ibid.*, 68–69.
6. Kitfield, *Prodigal Soldiers*, 152–55.
7. DOD, *Sustaining U.S. Global Leadership*, 1.
8. *Ibid.*, 4–6. The 10 missions are as follows:
 - (1) [Conduct] counterterrorism and irregular warfare.
 - (2) Deter and defeat aggression.
 - (3) Project power despite antiaccess/area denial challenges.
 - (4) Counter weapons of mass destruction.
 - (5) Operate effectively in cyberspace and space.
 - (6) Maintain a safe, secure, and effective nuclear deterrent.
 - (7) Defend the homeland and provide support to civil authorities.
 - (8) Provide a stabilizing presence.
 - (9) Conduct stability and counterinsurgency operations.
 - (10) Conduct humanitarian, disaster relief, and other operations. (*Ibid.*)

9. *Ibid.*, 4–5. Supporting quotes from this guidance include the following: “While the U.S. military will continue to contribute to security globally, *we will of necessity rebalance toward the Asia-Pacific*” (emphasis in original); “Over the long term, China’s emergence as a regional power will have the potential to affect the U.S. economy and our security in a variety of ways”; and “The United States will continue to make the necessary investments to ensure that we maintain regional access and the ability to operate freely in keeping with our treaty obligations and with international law” (*ibid.*, 2).

10. LaGrone and Majumdar, "Future of Air Sea Battle." In addition to distributed basing, the focus areas are cross-domain operations command and control; undersea warfare supremacy; war at sea; attack operations to defeat A2/AD; active and passive defense; contested space operations; contested intelligence, surveillance, and reconnaissance; contested logistics and sustainment; and contested cyberspace operations (ibid.).
11. Davis, "Forward Arming and Refueling Points," 5–28; and Brown, Spacy, and Glover, "Untethered Operations," 17–28.
12. "USAF Airmen Evaluate Rapid Raptor," *Air Force Technology*.
13. McCullough, "Rapid Raptor 2.0."
14. Davis, *31 Initiatives*, 54.
15. Director of Central Intelligence, *Warsaw Pact Nonnuclear Threat*, 35.
16. Ibid., 35; and Bowie, *Anti-Access Threat*, 4.
17. Correll, *Air Force and the Cold War*, 42.
18. Ibid.
19. Raley, "Untethered Operations."
20. Director of Central Intelligence, *Warsaw Pact Nonnuclear Threat*, 34–35.
21. Ibid., 35.
22. Ibid.
23. Ibid., 36.
24. CIA, *Soviet Operational Maneuver Group*, 3–4.
25. US Army and US Air Force, Joint Service Agreement 8, art. II, sec. 2, in Davis, *31 Initiatives*, 128.
26. Headquarters Air Force, staff package, Validating the Abrogation.
27. Clinton, "America's Pacific Century."
28. Ibid.
29. William Dean III (faculty, Air Command and Staff College, Maxwell AFB, AL), interview with Col Shannon W. Caudill, USAF, 24 May 2013.
30. Gunaratna, "Intelligence Failures Exposed," 1.
31. Ibid., 3.
32. Butenko, Smith-Spark, and Magnay, "Russian Troops Have Entered Ukraine."
33. "Mapping Migration," *Economist*.
34. Ibid.
35. LeMay Center, *Volume I, Basic Doctrine*, "Security," 57.
36. See Thobo-Carlson, "Ad Hoc Is Not Good Enough," in Caudill, *Defending Air Bases*, vol. 1, chap. 2.
37. JP 3-16, *Multinational Operations*, I-4.
38. Boatright, "Building Partnership Capacity," 3.
39. Joint Staff J7, *Decade of War*, vol. 1, 32.
40. Kapp and Serafino, *National Guard State Partnership Program*, 1.
41. Ibid., 2.
42. Ibid., 3.
43. Government Accountability Office, *State Partnership Program*, 1.
44. National Guard, "State Partnership Program."
45. Kapp and Serafino, *National Guard State Partnership Program*, 6.
46. National Guard, "State Partnership Program." Security cooperation activities include homeland defense and security; disaster response and mitigation; conse-

quence and crisis management; interagency cooperation; border, port, and aviation security; fellowship-style internships; and combat medical events in training and exercise venues.

47. Kapp and Serafino, *National Guard State Partnership Program*, 2, fig. 1.
48. National Guard, "State Partnership Program."
49. Roulo, "Dempsey: Forming Partnerships Vital."
50. Kapp and Serafino, *National Guard State Partnership Program*, 4.
51. Roulo, "Dempsey: Forming Partnerships Vital."
52. Center for Strategic and International Studies, *U.S. Force Posture Strategy*, 75.
53. Bergeron, "National Guard's State Partnership Program," 13.
54. Air Mobility Command, "Phoenix Raven."
55. US Air Force Expeditionary Center, "621st Contingency Response Wing."
56. Sprunk, "820th Base Defense Group."
57. Lengyel, Bullet Background Paper, subject: AMC Contingency Response Wing.
58. Johns, memorandum, subject: Building Partnerships.
59. RED HORSE is the acronym for rapid engineer deployable heavy operational repair squadron engineer.
60. Mull, "CRG Mission Brief."
61. Halliday, *Tactical Dispersal of Fighter Aircraft*, 29.

PART 5

Organizing for the Future

Chapter 10

Target—Air Base

The Strategic Effects of Ground Attacks on Airpower

Scott P. Black

Base commanders must also consider that air base defense is not merely the protection of air assets but the ability to generate air power.

—Joint Publication 3-10, *Joint Security Operations in Theater*

Air bases are strategic nodes. History has shown that attacks on air bases can generate unexpected strategic effects, either for enemy success or an unforeseen reaction to the attack by the country targeted. As the price of modern aircraft continues to skyrocket, the sheer cost and time needed to replenish them (and pilots) could deal a strategic blow in today's operational environment. Therefore, joint leaders must recognize that the special requirements of air base defense have strategic consequences. To defend air bases with suboptimal security only invites strategic disaster.¹

America's strategic global capabilities are enabled by a network of bases worldwide that provide the tools necessary for power projection. The American force-projection model works only when global mobility can move forces to "signal resolve, enhance deterrence, and expand near-term military options for national leaders"; thus, airfields and their enablers are of strategic importance.² Long wars, especially counterinsurgencies, rely heavily on airpower for round-the-clock intelligence, close air support, logistics transport, and medical evacuation. The seminal doctrine used by American and coalition forces in Iraq and Afghanistan—Army Field Manual (FM) 3-24, *Counterinsurgency* (2006)—highlights the advantages of airpower in counterinsurgency (COIN) operations. It cites airpower as providing a "significant asymmetric advantage to COIN forces, enabling commanders to rapidly deploy, reposition, sustain, and redeploy land forces" and states that "air assets can respond quickly with precision fires" whenever insurgents mass for an attack. It also notes that "commanders must properly protect their bases and coordinate their de-

fense among all counterinsurgents”—emphasizing the importance of defending these strategic centers.³

Enemy attacks on US (and coalition) aircraft are not designed merely to destroy or mitigate airpower itself. Rather, they are intended to trigger second-order strategic effects through altered public opinion and political decisions. The strategic value of aircraft is also heightened by their shrinking inventories in parallel with their increased technology and specialization. The number of destroyed aircraft the service can absorb continues to diminish. Therefore, attacks on high-value, low-density aircraft could reduce the effectiveness of our Air Force.

Reasons to Attack Air Bases: Cost-Benefit Analysis

An air base is oftentimes used to strategically extend the range of the force occupying it and demonstrate national resolve in a conflict. The location of bases in these areas or—in the case of our most recent deployments—in proximity to the enemy makes them a highly visible strategic target. In their RAND study, David Shlapak and Alan Vick outline three main reasons an enemy will continue to attack air bases. First, the enemy will attempt to destroy critical, high-value assets. Second, it will attempt to temporarily suppress sortie generation when aircraft are needed most in a conflict or crisis. Third, it will aim to generate a “strategic event” that alters public or political support.⁴

An air base offers more high-value targets than a base without air assets. Bases with air assets are also more visible to the enemy—literally and figuratively. An air base cannot sit quietly tucked away; aircraft departing and returning are constant reminders of its existence. Figuratively, the assets at an air base are a continual reminder of a technological advantage over an insurgent enemy and our continued presence. A conventional enemy also realizes the added value of air assets and air bases. The observation by early airpower theorist Giulio Douhet that destroying aircraft on the ground is easier than hunting them in the air has been frequently used to describe why an air base is particularly targeted.⁵ This reality holds true for a conventional and an insurgent enemy, and both will try to take advantage of this vulnerability.

Finally, the enemy is a rational actor. It understands that it can wreak severe damage by supplying a few people with the weaponry and training to target an air base. The repercussions of effective mortar fire might include causing a strategic event, eliminating billions of dollars in air assets, and/or causing catastrophic loss of life with a fully loaded mobility aircraft.

Historic Examples

World War II

World War II offers many examples of strategic effects from attacks on air bases. Two primary ones are the British army's Special Air Service (SAS) attacks in Africa and the island-hopping campaign of the United States in the Pacific. The SAS attacks involved small groups of lightweight, rapidly moving forces that would penetrate enemy defenses to destroy aircraft with explosives or machine guns.⁶ The island-hopping campaign in the Pacific was different from many of the other attacks discussed here because the goal was not enemy aircraft destruction but airfield occupation and utilization. The purpose of the air base takeovers was to extend the range of our forces and close our proximity to Japan. Both sets of attacks contributed to the success of the war effort.

Another esteemed study by Vick, *Snakes in the Eagle's Nest*, suggests that the loss of Axis aircraft caused by ground attacks from the Allies "may have influenced the outcome of the campaign."⁷ SAS forces destroyed 367 Axis aircraft in Africa and the Mediterranean.⁸ Vick also describes how

in one case—British special forces' attacks on Axis airfields in North Africa—the loss of aircraft from ground attacks was so severe and the airpower balance so precarious that these small actions made a major contribution to the [Royal Air Force's] battle against the *Luftwaffe*. In other instances, the loss of airfields to attacking forces enabled the attacker's air force to move in and extend its range. . . . The U.S. island-hopping campaign in the Pacific was focused on capturing airfields. . . . The Japanese attack on Midway sought to capture the island for . . . [their] airfield; their failure to do so and their losses incurred in the process marked a turning point in the war.⁹

The island-hopping campaign highlights the strategic importance of the position of air bases and why, in addition to their assets, they require a high level of protection.

Vietnam

Vietnam proved the strategic importance of air bases through the defeat of the French at Dien Bien Phu, the American reaction to air base attacks that served only to deepen US involvement in the conflict, and the staunch American defense at Khe Sahn designed to deprive the enemy of a strategic victory. During Vietnam, 99 US and Vietnamese aircraft were destroyed, with 1,170 damaged by ground attacks.¹⁰ These statistics reflect just attacks against USAF main operating bases (MOB). The number of aircraft destroyed increases to 375 if the rest of the supporting bases are included.¹¹ While this number accounts for only 4 percent of all aircraft losses, now that percentage would be much higher due to the fewer aircraft in inventory.¹² Today, the destruction of that many aircraft could nearly wipe out the entire contingent of F-22 Raptors and F-15E Strike Eagles. The United States has 219 Strike Eagles and 183 Raptors; if these aircraft were to take losses similar to those in Vietnam, 93 percent would be destroyed.¹³

Air base attacks during Vietnam had little direct strategic effect as the 4 percent of total aircraft loss occurred over seven years. The United States had a huge aircraft inventory, and most of the 475 attacks did relatively little damage.¹⁴ Although these attacks had negligible material consequence to the outcome of the war, some of the major publicized incidents did hold some sway over public opinion.

The strategic effects caused by air base attacks during Vietnam created inroads on public opinion and political decisions. Col Robert Sagraves, USAF, retired, surmises that “the second-order strategic effects of the large-scale attacks on Tan Son Nhut AB and Bien Hoa AB during the Tet offensive, although a failure militarily, contributed to the overall impact of Tet on American public opinion and the subsequent erosion of popular support for the war.”¹⁵ Public support and political decision effects can be difficult to measure and can rarely be attributed to only one factor. Generally, public opinion is a combination of many influences and often acts as a culmination point for democracies as the public grows weary of casualties and expense. For example, the duration of the war, the number of Americans killed, and the press coverage of the Vietnamese civilian casualties all factored into the public opinion of the time.

Iraq

The strategic effects of base attacks during Operation Iraqi Freedom (OIF) had even less impact than during Vietnam. In fact, Lt Col Paul Thobo-Carlsen, Royal Canadian Air Force, retired, suggests that “most of them were aimed at cumulatively creating the ‘strategic event’ discussed by Shlapak and Vick—in this case, the erosion of military morale and the domestic political will of Western troop-contributing nations in order to force a withdrawal.”¹⁶ The 2015 air base defense seminar at Air Command and Staff College found that these attacks caused only minor damage, if any, to air bases. Furthermore, few attacks damaged aircraft, and no aircraft were destroyed from base attacks.¹⁷ These results should not be used as evidence that we will have the same success in a future war. OIF was a unique case against a minimally competent enemy; facing a more competent enemy, the outcome could be dramatically different.

Enemy forces in Iraq lacked training in mortar and rocket employment. Further, the equipment used to aim was often rudimentary. Both of these factors drastically limited the success of their attacks. Most of their attacks had little effectiveness. Many shots didn’t hit the base—much less anything on it. There were occasional lucky shots, but these were bound to happen with the volume of projectiles the forces were harassing the bases with.

Vick observes that in Vietnam “there were 10 USAF MOBs operating 365 days a year for 10 years, or 36,500 base days. Air base attacks occurred on only 500 base days. Thus, USAF bases had a total of 36,000 attack-free days on which to operate.”¹⁸ Using the same method as Vick, we can compare OIF and Vietnam. The Iraq conflict’s inclusive dates were from 19 March 2003 to 15 December 2011, or 3,194 days.¹⁹ There were five main air bases in Iraq. Given that they operated 365 days a year during that time, there were 15,970 base days. There were a total of 1,964 attack days on all five bases, giving 14,006 attack-free days. This number doesn’t seem very substantial, but let’s take a look at just Balad—the largest fighter base in Iraq where a majority of the attacks took place. Balad had 1,447 attacks during the same time frame, meaning that it was attacked on 45 percent of its operating days. Also, across all the bases, only 15 aircraft were damaged—0 in Balad and 5 in Baghdad—with no aircraft destroyed.²⁰

These statistics indicate that the number of attacks in Iraq was nearly four times greater than in Vietnam, with almost 74 percent of

them occurring on Balad. The number of aircraft damaged in Iraq was a small fraction, 1.2 percent, when compared to the total damaged and destroyed aircraft in Vietnam. Figure 10.1 portrays the number of attacks and aircraft damage/destruction on air bases in Vietnam versus Iraq.

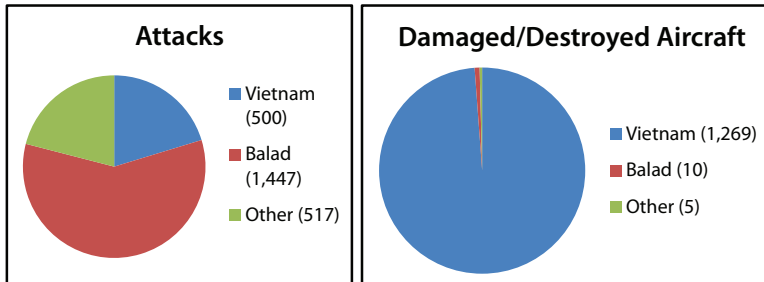


Figure 10.1. Number of air base attacks and damaged/destroyed aircraft in Vietnam and Iraq. (Data produced by the Air Command and Staff College 2015 research elective Defending Air Bases in an Age of Insurgency, instructed by Col Shannon W. Caudill. Student researchers were Maj Russell S. Badowski, Maj Jason F. Baggett, Maj Scott Black, Maj Loren M. Coulter, Maj Colby B. Edwards, Maj Raymond J. Fortner, Maj Steward J. Parker, and Maj Michael M. Wellock. Researchers reviewed all available Air Force history reports covering Sather Air Base [Baghdad International Airport], Joint Base Balad, Tallil AB, Kirkuk AB, and al-Asad AB.)

These numbers are informative but must be considered in context. With today's reduced aircraft inventories, a few major successful attacks could create a direct strategic effect. The number of attacks in Iraq was much higher than in Vietnam, but significantly fewer aircraft were damaged or destroyed. The higher number of attacks in concert with the low number of damaged aircraft further shows that the enemy in Iraq was unskilled and amateur compared to the enemy during the Vietnam conflict.

Afghanistan

While a comprehensive list of attacks is not available for Afghanistan as it is for Iraq and Vietnam, one instance should be highlighted. When insurgents attacked Camp Bastion, Afghanistan, on 14 Sep-

tember 2012, two Marines died and six Harriers were destroyed. This incident was a complex sapper attack—much more intricate than the pervasive harassing fire of mortars and rockets. The aircraft were not destroyed by standoff weapons but from inside the wire with machine guns and grenades.²¹

The attack illustrates a difference in the reduced numbers of aircraft in inventory and how that factor could play a major role in what would be considered a strategic event that could affect the outcome of a conflict. As of 2018 the United States had 126 Harriers in its inventory.²² If an attack occurred today like that at Camp Bastion, the destruction of just six aircraft would constitute a nearly 5 percent reduction in the US Harrier inventory.²³ Even if only a small percentage of the attacks in Iraq and Afghanistan were as organized and successful, the number of damaged aircraft would escalate and hobble a limited pool of sophisticated, modern (and expensive) aircraft.

This event also underscores that when confronted with a more complex enemy attack, we may not be as successful. Moreover, it demonstrates that we must continue vigilance and not take our past success in Iraq as an indication that our success will continue. This attack didn't use advanced technologies or any remarkable tactics; it simply exploited a lack of resources allocated. We cannot be lulled into complacency when addressing the defense of our air bases. Our defenses will not be as successful if our adversaries increase the complexity of attacks and the use of advanced technologies. The Bastion attack gives a glimpse of the devastation that could happen if we don't practice basic defense-in-depth security, press allies and partners to do their part in the defense, and promote awareness of air base defense.

Direct Effects

Dwindling airpower assets make it more likely that a single attack on an air base will create strategic effects. For example, 2,874 F-4s were produced for the Air Force from 1958 to 1979.²⁴ Compare that number to the total of 1,920 fighter and attack aircraft across the active, Air National Guard (ANG), and Air Force Reserve Command (AFRC) forces in today's Air Force (table 10.1).²⁵

Table 10.1. Aircraft total active inventory

| <i>Fighter/attack aircraft</i> | <i>Active</i> | <i>ANG</i> | <i>AFRC</i> | <i>Total</i> |
|--------------------------------|---------------|------------|-------------|--------------|
| A-10C Thunderbolt II | 143 | 85 | 55 | 283 |
| F-15 C Eagle | 89 | 123 | 0 | 212 |
| F-15 D Eagle | 9 | 15 | 0 | 24 |
| F-15 E Strike Eagle | 220 | 0 | 0 | 220 |
| F-16 C Fighting Falcon | 450 | 289 | 54 | 793 |
| F-16 D Fighting Falcon | 109 | 45 | 2 | 156 |
| F-22 A Raptor | 166 | 20 | 0 | 186 |
| F-35 A Lightning II | 96 | 0 | 0 | 96 |
| Total | 1,282 | 577 | 111 | 1,970 |

Source: “The Air Force in Fact and Figures,” in “USAF Almanac 2017,” supplement, *Air Force Magazine* 100, no. 6 (June 2017): 56, <http://secure.afa.org/joinafa/AFMag2017/AFMag0617/mobile/index.html#p=1>.

The total number of fighters in the Air Force today is a fraction of the F-4 fleet. At 33 percent fewer total fighters when compared to the total F-4s delivered to the Air Force fleet, losing an aircraft today not only costs exponentially more but also has far-reaching strategic effects. Consider that in addition to the F-4s, the United States during Vietnam also had a large inventory of many other types of fighter and attack aircraft. Losing a few aircraft today is a much bigger event and could have strategic impact if the aircraft loss rate equalled that in Vietnam.

What would a direct strategic effect look like? If enough aircraft were destroyed, it would obviously reduce the capability of the United States to demonstrate airpower. A more likely scenario—considering the small wars we fight more often these days—is that if we started taking aircraft losses, we would move them to a safer location. A safer location is most likely farther away. Although continuing to fly a long distance to the operational area would incur substantial costs, it is still feasible for the military. One of the direct strategic effects in this case is a reduced reaction time from alert aircraft. Moving a base farther away would also have second-order effects. A potential strategic impact from second-order effects could be a change in political will due to the increased costs involved.

Second-Order Effects

Second-order strategic effects of attacks on air bases come in the form of public opinion and political decisions. In Shlapak and Vick’s RAND study, their third reason why the enemy will continue to at-

tack air bases is to produce a “strategic event” designed to negatively impact public opinion and undercut democratic support for military operations.²⁶ These phenomena could arise in a multitude of ways. Attacks on air bases don’t have much of an effect on opinions or operations unless they take lives or cost dollars. Taking lives has a substantial effect on public support for wars—particularly in the small wars of our recent past. The more lives lost, the lower the public opinion becomes and the less tolerant Americans become of losing more. Eventually, ensuing protests could cause our leaders to change their political decisions about how we continue to fight.

Money always plays a role in the actions of our government. If we lose a lot of high-dollar equipment, defense costs rise and affect the decisions made by our leaders. Air bases offer the highest and most visible concentration of high-value targets, making them a sought-after target of the enemy. Robert Sagraves notes in his School of Advanced Air and Space Studies thesis the reality of strategic events that influence news coverage and public opinion:

Adversaries may reason that a successful ground attack on a US air base could have second-order strategic effects entirely out of proportion to the actual physical damage inflicted. In the past 25 years, the US military has been the target of a number of such “strategic events”: the 1983 bombing of the Marine barracks in Beirut, the bloodying of Task Force Ranger in Somalia in 1993, the 1996 bombing of the USAF’s Khobar Towers complex in Saudi Arabia, and the 2000 attack against the USS *Cole* in Yemen. Although these tragic and unfortunate incidents cannot be classified as a “defeat” in a purely military sense, almost all served as catalysts for changes in existing US policy. Should the Air Force suffer a dramatic ground attack on one of its expeditionary air bases, the reality of today’s round-the-clock global news coverage, disseminated worldwide via television and the Internet, ensures the attack would receive almost instant media focus. The ensuing media coverage could test the resolve of the US public or that of the leadership, particularly for a conflict that does not enjoy broad political support. In the face of mounting political pressure, senior US decision makers might be faced with no other option but to reverse policy course—a potentially humiliating defeat.²⁷

The media often spawns second-order effects. The rapid pace at which information is disseminated to the public increases the possibility that an air base attack will have strategic impact by influencing the perception of the conflict and, thus, affecting voters and politicians in a democracy. Graphic images of carnage and chaos can play repeatedly in the 24-hour news cycle. Such coverage impacts public polling for support for continued military operations in the conflict.

Advanced Technology

Advancing technology will increase the effectiveness of attacks, thus provoking strategic consequences. An enemy with GPS-guided mortars or rockets would be able to hit buildings and aircraft of its choosing and inflict damage with less effort. Even with more readily available technology such as a quadcopter, an enemy could fly an explosive to a target using a preplanned route or high-definition video. Additionally, attackers able to hit specific targets on an air base could be detrimental to morale. We would need to substantially change our infrastructure for protection. The significance of an enemy able to target the chow hall or an aircraft in the open cannot be underestimated. Attacks such as these would quickly diminish public opinion and potentially affect national policy.

The United States Air Force has been complacent since we have not faced a major strategic setback from ground attack. Nonetheless, advancement in rocket and mortar guidance could negate the sense of dominance we have grown accustomed to when opposed by the ill-trained, underproficient, and low-technology enemy we have faced over the last two decades. According to a Center for Strategic and Budgetary Assessment report,

Special forces pose a growing potential threat because of the proliferation of more accurate stand-off weapons, which increases the perimeter US forces must defend. The most worrisome threats include precision munitions for mortars (which would enable attackers to hit high value targets with a small number of rounds); long-range, large caliber sniper rifles (which could be used against high-value aircraft to knock out key components); and anti-tank rockets (which could be used to penetrate aircraft and personnel shelters).²⁸

These advances amplify the effectiveness of trained and untrained forces. While obtaining modern weapons systems might be difficult for an irregular insurgent fighter, strapping an explosive to an off-the-shelf, remote-controlled aerial vehicle would not. These technologies will continue to make it easier for the untrained attacker to be more successful. Combating these technology advancements will become more difficult—but more essential—as we strive to protect our bases.

Recommendations

The Air Force and joint force need to develop joint doctrine and technologies that will counter the advancing threat. As off-the-shelf

technologies progress, we must consider the creativity of the enemy and project how new technologies could be used against us. Some counter defenses will simply be awareness so that we are not caught off guard. Other counter defenses will require employing cutting-edge technology.

Security forces and other base defense enablers should not be sacrificed to the detriment of force protection. The lack of manpower was a contributing factor in the Camp Bastion attack and should be more closely monitored in the future. While technology can assist manpower and reduce the number of people required to protect an air base, security manpower cannot be reduced so low as to put us at considerable risk. Security staffing must be continually assessed to consider the advancements of the enemy and the actual threat we are defending against. In short, air base defense needs an investment strategy that ensures effectiveness and a higher priority for the long haul. Poor investment choices now could play havoc at the strategic level later.

Conclusion

Strategic effects from base attacks since WWII have been minimal. During OIF, ground attacks generated negligible direct strategic impacts. Attacks on the air base could be considered harassment at best; oftentimes attacks would not even hit the base, much less a specific target on the base. Effects may be minimally seen in diminishing public support, but this consequence was due to many other factors—such as the duration of the war—and not just the harassing mortar and rocket attacks. Americans expect quick results and have little tolerance of our forces dying in a seemingly endless war. The reduced public support was caused more by factors other than the base attacks.

Although the number of attacks increased nearly fourfold from Vietnam to Iraq, few aircraft were damaged in Iraq, and none were destroyed. This outcome may look like an amazing success story, but one must consider the skill of the attacker. Military leaders have been left with a false sense of protection from potential effects that could be caused from an attack on an air base. We cannot understate the high cost that a trained enemy could impose on airpower—potentially driving a strategic impact.

Ground attacks have created limited strategic effects on US airpower since the Air Force has not been faced with a well-trained ground threat since Vietnam. Though strategic effects from ground attacks since WWII have been minimal, we must continue to emphasize the protection of our air bases. One lucky attack or an attack that gets played up by the media could cause unexpected strategic impacts. While our nation has been fortunate that strategic effects have been minimal, it could face drastically different effects if faced with a well-trained enemy or one that capitalizes on advanced technology.

Notes

1. In the wake of the 14–15 September 2012 Taliban attack on the Camp Bastion, Leatherneck, and Shorabak (BLS) Complex, Lt Gen Adrian Bradshaw, British army, deputy commander, International Security Assistance Force (ISAF), is reported to have characterized the USCENTCOM-PJHQ (United Kingdom Permanent Joint Headquarters) Memorandum of Understanding as a “sub-optimal C2 [command and control] solution.” Headquarters US Army Forces Command to commander, US Central Command, memorandum, 8.

2. Vick, *Air Base Attacks*, 13.

3. FM 3-24, *Counterinsurgency*, E-1, E-5.

4. Shlapak and Vick, “*Check Six*,” 15–19.

5. Douhet, *Command of the Air*, 53–54.

6. Sidoti, *History of Attacks*, 9.

7. Vick, *Snakes in the Eagle’s Nest*, 109.

8. Sidoti, *History of Attacks*, 9.

9. Vick, *Snakes in the Eagle’s Nest*, xix–xx.

10. *Ibid.*, 68.

11. *Ibid.*

12. *Ibid.*

13. US Air Force, “F-15E Strike Eagle” and “F-22 Raptor,” fact sheets.

14. Vick, *Snakes in the Eagle’s Nest*, 68, 100.

15. Sagraves, “Air Support for Base Defense,” 173–74.

16. Thobo-Carlsen, “Ad Hoc Is Not Good Enough,” 53.

17. Data produced by the Air Command and Staff College research elective *Defending Air Bases in an Age of Insurgency*, instructed by Col Shannon W. Caudill. Student researchers were Maj Russell S. Badowski, Maj Jason F. Baggett, Maj Scott Black, Maj Loren M. Coulter, Maj Colby B. Edwards, Maj Raymond J. Fortner, Maj Steward J. Parker, and Maj Michael M. Wellock. Researchers reviewed all available Air Force history reports covering Sather AB (Baghdad International Airport), Joint Base Balad, Tallil AB, Kirkuk AB, and al-Asad AB.

18. Vick, *Snakes in the Eagle’s Nest*, 101.

19. Torreón, *U.S. Periods of War*, 8–9.

20. Data produced by the Air Command and Staff College 2015 research elective *Defending Air Bases in an Age of Insurgency*.

21. Lamothe, "Taliban Fighter Survived."
22. Rudder, *2018 Marine Aviation Plan*, 37.
23. Gresham, "Attack on Camp Bastion."
24. Boeing, "F-4 Phantoms Phabulous 40th."
25. "Air Force in Fact and Figures," in "USAF Almanac 2017," 56.
26. Shlapak and Vick, "Check Six," 18–19.
27. Sagraves, "Air Base Defense outside the Wire," 27–28.
28. Bowie, *Anti-Access Threat*, iv.

Chapter 11

You Own It

The Commander's Responsibility for Air Base Defense

Loren M. Coulter

Finding the precise balance between force projection and force protection lies with the subjective judgment ultimately reserved for those bestowed with the command. The fog of war, the uncertain risks of combat, and the actions of a determined foe do not relieve a commander of the responsibility for decisions that a reasonable, prudent commander of the same grade and experience would have made under similar circumstances.

—Gen James F. Amos, Commandant, US Marine Corps

A major leadership challenge to Air Force commanders serving in combat zones is their responsibility for base defense. Unlike their Marine or Army counterparts, most senior Air Force leaders who command wings and groups have little to no experience or training in how to mount an effective ground defense of their aircraft, resources, and people. The Air Force simply does not stress these skills as essential to building future leaders from the pilot corps, yet the defense of air bases is a central component of airpower. Airpower theorist Giulio Douhet wrote in 1921 that “it is easier and more effective to destroy the enemy’s aerial power by destroying his nests and eggs on the ground than to hunt his flying birds in the air.”¹ This concept holds true today and is reflected in Air Force basic doctrine: “Aircraft are most vulnerable on the ground. Thus, force protection is an integral part of airpower employment.”² However, air base defense (ABD)—defending one’s air assets on the ground—is one of the least understood operational aspects of airpower. Nevertheless, from the moment Air Force leaders take command, they are responsible for this critical—and often most perplexing—airpower element in their command portfolio. A 2015 RAND Corporation report on air base attacks found that “too often, base defense and recovery are treated as support functions to be delegated to security forces and civil engineers. Although base and wing commanders take base defense seriously, it

has not been a priority for the institutional air force, primarily because it has not been conceptualized as a core warfighting problem.”³

Commanders may well take base defense seriously, but are they equipped to understand it and actively engage in its preparedness? Ultimately, the decisions they make or ignore have profound effects on the security and safety of the people and aircraft under their charge. After reviewing doctrine, training, and key case studies, the author contends that the Air Force must invest in this area of key leader development to better position Airmen for their responsibilities to lead the defense of airpower force projection.

Preparation for this command responsibility is of paramount importance, but the Air Force does precious little to give commanders the grounding and tool set needed to be effective leaders at the wing and group commander levels. Maj Gen Thomas Deale, twice a wing commander in Afghanistan, highlights this area of concern:

We could improve senior leader training in regard to base defense. There isn't anything in the predeployment training I received that specifically prepared me for my responsibilities in base defense. Having experience helps a lot, and I credit my time as a wing commander in Korea as essential. You have to have some basic knowledge of how things work. You get that through personal experiences accumulated over the course of a career.

One thing we must do is continue the left seat and right seat exchanges of information and orientation prior to deployment and change of command. In combat, you do not have time for on-the-job training—you may be attacked at any moment, and as such, you must be ready to assume commander responsibilities from day one. Your Airmen rightly expect that from their leaders.⁴

Similarly, Maj Gen Brian Bishop, USAF, retired, echoed this sentiment as he reflected on his time as a wing commander in Iraq. He relayed that he had no specific training or background in air base defense when he was thrust into this arena head-on as he took over base operating support integrator (BOS-I) for Joint Base Balad (JBB) (formerly known as Logistics Support Area Anaconda and Balad AB).⁵ As the new BOS-I for JBB, General Bishop became responsible for interior and exterior base defense for the 20,000 military, civilian, and contractor personnel working at JBB and, importantly, the air assets transiting and stationed on JBB.⁶ Based on that experience, Bishop stated, “I would change the approach to Air Force base defense by addressing senior leader training in this area to ensure a better understanding of missions and capabilities. It took me a while to be comfortable with Airmen conducting the outside-the-wire mission,

not because I didn't think they could do it, but rather . . . because I didn't want to set up an us-versus-them mentality with the battlespace owner, our Army counterparts."⁷

Regardless of functional background or experience, commanders are expected to understand and lead the defense of their air bases and coordinate closely with host-nation and ground forces to ensure the success of the flying mission. The importance of this problem centers on the fact that an air base is a key strategic center of operations in a combat environment, where it serves as a hub for force projection in the theater. As detailed in Joint Publication (JP) 3-10, *Joint Security Operations in Theater*, the amount of combat capability that exists on air bases in terms of aircraft, personnel, and equipment makes them "critical nodes, and . . . therefore lucrative targets."⁸ No matter the level of contested environment—from the Vietnam War to current-day Afghanistan—the enemy will continue to employ tactics from indirect fire (IDF) to complex attacks in order to disrupt or deny the war-fighting ability of air bases. Effectively defending air bases is a complex challenge that requires understanding a wide spectrum of base vulnerabilities and enemy capabilities.

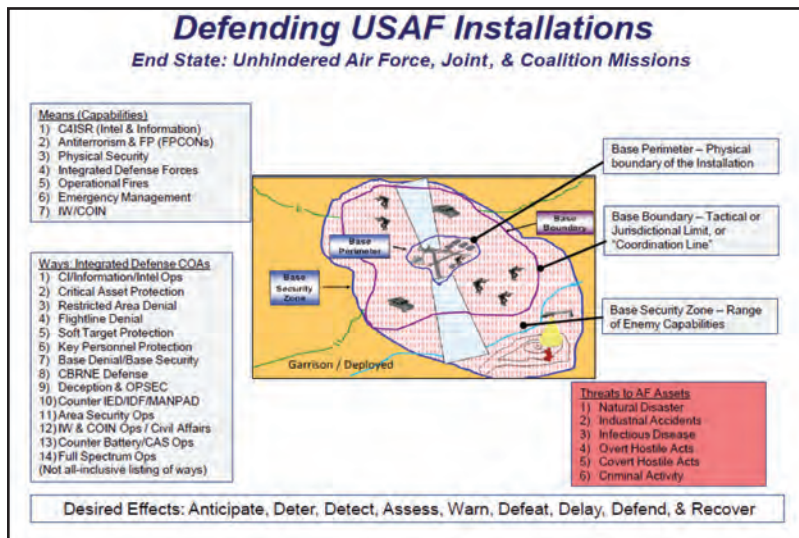
Doctrine and Training: A Mismatch

Responsibility for integrated defense (ID) of air bases and force protection is a core component of command. It cannot be delegated to a subject matter expert or subcontracted out.⁹ As indicated in Air Force doctrine for force protection, this obligation exists at all levels of command (i.e., wing to squadron) and requires commanders to protect the people and property within their control.¹⁰ Doing so as part of air base defense is to assess risks and to ensure that force protection measures are in place within their ability, authority, and available resources. In short, base defense requires the personal attention, involvement, and knowledge of the commander.

Today's Air Force strategy for defending air bases is known as integrated defense (formerly known as air base defense, air base ground defense, or integrated base defense). Air Force Policy Directive (AFPD) 31-1, *Integrated Defense*, defines ID as the "incorporation of multidisciplinary active and passive, offensive and defensive capabilities, employed to mitigate potential risks and defeat adversary threats to Air Force operations within the base boundary and the base security zone." It further states that "threats include, but are not limited to,

terrorists, insiders, foreign intelligence entities, criminals, and enemy forces.”¹¹ The importance of the ID concept is its fundamental shift of the paradigm of applying manpower reflexively to secure specific air assets. Instead, ID gives commanders the flexibility to apply manpower and other security actions focused on meeting the threat—an effort based on analysis and risk management.

When implemented effectively, ID forms a secure foundation from which not only the USAF but also joint and coalition forces can launch combat sorties to protect operational assets—including aircraft, people, and resources. This concept for defense is designed to “achieve synergistic effects using an all-hazards approach.”¹² It requires analysis and expenditure of intellectual capital on what often proves to be a “wicked problem”—one that grows exponentially in a counterinsurgency or antiaccess/area denial (A2/AD) operational environment. Figure 11.1 overviews the many considerations affecting a commander’s ID plan.



Acronyms: C4ISR - Command, Control, Communications, Computers, Intelligence, Surveillance, and Reconnaissance; FP - Force Protection; FPCONs - Force Protection Conditions; IW/COIN - Irregular Warfare/Counterinsurgency; COAs - Courses of Action; CI - Counterintelligence; CBRNE - Chemical, Biological, Radiological, Nuclear, and Explosives; OPSEC - Operational Security; IED - Improvised Explosive Device; IDF - Indirect Fire; MANPAD - Man-Portable Air Defense; CAS - Close Air Support

Figure 11.1. Integrated defense concept. (Reproduced from AFPD 31-1, *Integrated Defense*, 21 June 2018, fig. 1.1, 3, http://static.e-publishing.af.mil/production/1/af_a4/publication/afpd31-1/afpd31-1.pdf.)

One resource for identifying risk is the Integrated Defense Risk Management Process (IDRMP), which helps to inform leaders on the variables present in meeting specific threats (fig. 11.2). The IDRMP is a tool—not an “easy button” for creating a defense plan. The commander must still use judgment, advice from subject matter experts, intuition, and a grasp of the security situation as the primary means from which to mount the defense with limited resources.

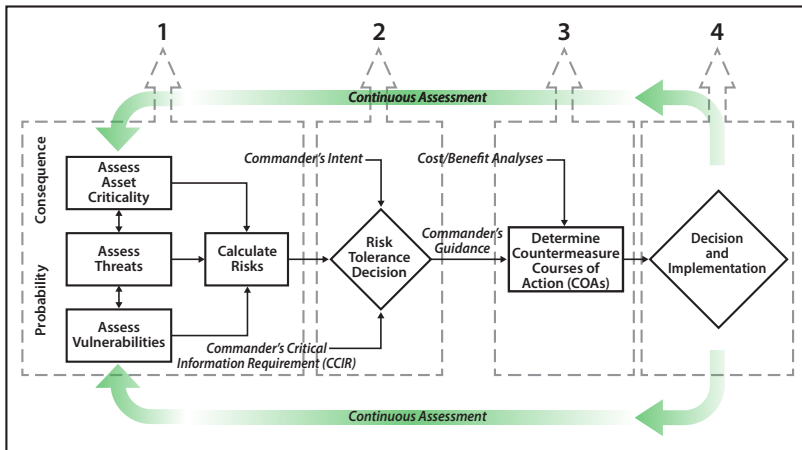


Figure 11.2. Risk management process. (Reproduced from Curtis E. LeMay Center for Doctrine Development and Education, “Annex 3-10, Force Protection,” 17 April 2017, 28, www.doctrine.af.mil/Portals/61/documents/Annex_3-10/3-10-Annex-FORCE%20PROTECTION.pdf?ver=2017-09-19-154247-707.)

As AFPD 31-1 points out, “It is an installation commander’s inherent responsibility to identify risks and develop risk management strategies to produce effects-based, integrated defense plans to ensure unhindered Air Force, Joint and Coalition missions.”¹³ When resources are not available, commanders must either accept risk, change the operational variables, or advocate for more resources to fill the gap. The ability of commanders to assess and make risk-based decisions is part of their sacred responsibility and will be how they are judged in the event of a catastrophic event, such as the Khobar Towers or Camp Bastion, Leatherneck, and Shorabak (BLS) Complex attacks.

Despite the magnitude of the challenge, little training is dedicated to air base defense. An examination of training for senior leaders such as expeditionary and group commanders is warranted. While the responsibility of commanders to protect their people and resources is fairly straightforward, carrying out this charge for a concept or mission outside their normal skill set can be difficult. Commanders who are rated, logistics, or maintenance officers likely have little to no force protection or ground defense experience, yet they are expected to analyze risks and make decisions in these areas with possible strategic effects.

Wing and group commanders receive training and mentorship on their command responsibilities at the Air Force's Ira C. Eaker Center for Professional Development at Maxwell AFB, Alabama. These senior leader courses do not differentiate between those deploying into a combat zone or those serving in a low-threat garrison environment. Consequently, the briefings gravitate toward home station concerns versus the complexity of leading base defense in a high-threat environment. Those assuming command of deployed units may also have breakout sections addressing specific deployed topics but get no additional formalized base defense training. Most of the one-hour block in the wing and group commander courses covering antiterrorism and security forces applies to expeditionary commanders; however, other aspects of wartime ABD are not included.¹⁴ Prospective commanders would benefit from the addition of topics such as interacting with the land forces commander, countering direct and indirect attacks, and conducting host-nation relationships.

While training is one aspect of the tool set that commanders have for carrying out ABD, doctrine is another. Among current doctrine regarding ABD is JP 3-10. It defines a base as "a locality from which operations are projected or supported," but it refers to an air base as just one of the potential base functions.¹⁵ Chapter 4 of JP 3-10 discusses air base considerations such as threats to slow and low-flying aircraft, but no place in the publication discusses the roles and responsibilities between land and airpower organizations. This ambiguity of command and control (C2) is not supported by the Air Force doctrine designating that "clear lines of authority, with clearly identified commanders at appropriate echelons exercising appropriate control, are essential to achieving unity of effort, reducing confusion, and maintaining priorities."¹⁶ However, no specific doctrine sets forth the best practices of integrating air and land forces for the ABD task.

Furthermore, the joint security framework described in the doctrine is arguably land forces–centered and does not account for the air-power mission.¹⁷ Consequently, absent an agreement between the Army and Air Force, the Air Force must be ready to provide for its own external defense.

Case Study: Vietnam

During the Vietnam War, deficiencies in doctrine such as the responsibility for outside the wire (OTW) and unclear command structures were at the heart of many air base defense problems and are still being debated today. Doctrine geared toward Cold War threats emphasized internal security measures and largely did not include the tactical area around an air base. Senior leaders failed to see the importance of the area outside the perimeter and drove a policy of Airmen providing only internal security.¹⁸ Bases such as Da Nang AB therefore emphasized the security of the flight line but had little ability against the external IDF threat to their aircraft and personnel.¹⁹ This deficit combined with the Army and Marines not being allocated for point defense—due to force strength limits and the priority of offensive operations—left the area OTW vulnerable.²⁰ The concept of dealing with an external threat through internal security measures showed a lack of understanding of the problem by senior leaders. However, even had the Air Force recognized the need for an OTW mission, the service was not organized, trained, or equipped for it due to a lack of doctrine.²¹ A reflection of these problems is that by the end of 1973, 99 aircraft were destroyed and 1,170 damaged from ground attacks.²² The lessons learned about the importance of establishing ABD doctrine should have been evident at the end of the conflict. However, it wasn't until 1985 that the development of doctrine covering roles and responsibilities between the Army and Air Force for ABD was directed through the signing of Joint Service Agreement (JSA) 8.²³ However, the JSA was never implemented. In 2005 the agreement was officially abrogated, which renewed a gap in Army and Air Force air base defense responsibilities that is only addressed through ad hoc planning.²⁴

Case Study: Khobar Towers

Regardless of any doctrine gaps or other deficiencies, the expectation is that commanders will ensure force protection. This point was

illustrated in the aftermath of the 1996 attack outside of the Khobar Towers on King Abdul Aziz AB, Saudi Arabia, in which a massive explosion killed 19 Airmen and wounded 500.²⁵ A commission led by retired Army general Wayne Downing was formed to investigate the event, which ultimately ended with the forced retirement and denial of a second star for the wing commander, Brig Gen Terryl Schwalier. Findings from the Downing Report offer valuable insight for the overarching responsibility that commanders have for the force protection of their units. Although the report concluded that many institutional issues existed, such as poor organizational relationships and a lack of force protection guidance and standards, one of the most pointed findings was that General Schwalier “did not adequately protect his forces from a terrorist attack.”²⁶

As the wing commander, General Schwalier had full command and authority for force protection; however, he did not have intelligence support for ABD aside from the security police (SP) squadron commander.²⁷ Instead, intelligence operations focused on the air threat for Operation Southern Watch, which the wing regarded as its primary mission.²⁸ Periodically, the Air Force Office of Special Investigations assisted the wing through security assessments. In January 1996 it recognized the perimeter as a vulnerability to the towers and the credibility of information that terrorists in Saudi Arabia had the capability and intention of carrying out attacks on targets. One of these was Khobar Towers, which analysis concluded was a likely target for a car bomb.²⁹ Although these buildings stood just inside the perimeter fence, neither General Schwalier nor the security police commander seemed to fully consider the implications of the threat or the potential for a bomb the size eventually used in the attack.³⁰ Instead, the general chose to focus the SP unit’s efforts on providing internal security and preventing a breach of the perimeter while relying on the host nation, Saudi Arabia, for adequate external security.³¹ Leadership discussed force protection measures, such as moving personnel away from the exterior of the building, but no significant steps were taken.³²

It is important to note that this example is not meant to cast doubt on General Schwalier’s decisions but to show the litmus of accountability that commanders face. The reality is that whether it is a conscious decision or not to accept risk, the commander still owns the risk regardless. Although the report acknowledges that US Central Command did not afford adequate resources, guidance, or support to avoid the attack or mitigate the effects, the general neither informed

his superiors of force protection matters he couldn't correct nor addressed expanding the perimeter or increasing security outside of the fence with the Saudis.³³ By not doing either of these actions, as the commander, he had accepted the risk for any deficiencies in force protection. In 2015 General Schwalier exhausted his last appeal for reinstatement of his promotion to major general and stated that his punishment would have a chilling effect on commanders. Regarding the decision to demote him, Schwalier said, "I think it's going to force our commanders to think more about checking their 6 . . . than looking ahead and trying to fight a battle."³⁴ The term "check six" is a phrase traditionally used by fighter pilots to denote a threat behind them but has also come to mean to actively take steps to avoid criticism or responsibility at a later date.

If commanders are "checking six" more often to ensure their forces are protected, perhaps that's a good thing. Commanders must simultaneously perform their assigned flying missions and carry out their responsibility to protect all of their missions and the people who implement them. These two tasks are synonymous, and commanders must understand that they own both.

Case Study: Camp Bastion

The assault on the BLS Complex was a sophisticated sapper attack conducted with extensive preparation, recruitment, and training far exceeding the expected threat of rocket and entry control point attacks that were the norm in Afghanistan.³⁵ Just as in the past, an effective organizational structure was not in place with clear lines of responsibility and authority, but the commanders in charge at the time of the attack were the ones held accountable for failing to protect their force. A memorandum of understanding (MOU) between the United States and United Kingdom, the two primary forces on the complex, outlined that the Leatherneck base would be headed by the Americans while Bastion would be run by the British. The MOU did not address the integration of Shorabak, mainly composed of Afghan National Army (ANA) forces, or designate a single base commander over the whole complex. Rather, it left force protection of the BLS complex to be a shared responsibility among the United States, UK, and ANA.³⁶ Further complicating unity of command, many 3rd Marine Aircraft Wing (MAW) Forward (FWD) assets and personnel were at Bastion, which included the airfield, but still fell under the Leatherneck base

commander. This shared responsibility without a single commander to integrate and balance force protection led to a lack of synergy in the collection of information and assessment of the threat. Commanders of US forces at BLS appeared to be unaware of the vulnerabilities at the Bastion complex, including limited perimeter tower manning, a lack of defense in depth, and a porous perimeter fence.³⁷

On 14 September 2012, the problems that existed on the BLS Complex were exploited by 15 Taliban insurgents who breached the perimeter fence, killed two Marines, and destroyed six aircraft while also damaging several others. Similar to Khobar Towers, in the aftermath of the attack an investigation identified command failures by both the Regional Command (RC) Southwest (SW) commander, Maj Gen Charles Gurganus, USMC, and the 3 MAW (FWD) commander, Maj Gen Gregg Sturdevant, USMC. As the area of operations commander, General Gurganus was ultimately responsible for establishing an effective level of force protection for the BLS Complex. Consistent with joint doctrine, day-to-day execution of force protection was placed on the various base commanders under his control.³⁸ Despite organizational C2 issues that had been ongoing before each of these commanders had taken command and the lack of doctrine to outline effective base defense, the report and the Commandant of the Marine Corps determined that these generals had failed in providing force protection. In particular, as the 3 MAW (FWD) commander, General Sturdevant had relied on the British to provide protection for his forces on Bastion.³⁹ Additionally, soon after General Gurganus had assumed command, he became aware of C2 issues that went against US Marine doctrine on the BLS Complex. By the time of the attack, those issues largely still existed, and at no point did he notify his commander that he was unable to successfully protect his force.⁴⁰

In the wake of the attack, force protection measures were quickly reevaluated and vulnerabilities were mitigated, demonstrating that a defense in depth could still be created with existing forces.⁴¹ Finally, while the British were responsible for the sector where the attack occurred, American commanders were accountable for the defense of their own aircraft. The British House of Commons review of the Camp Bastion attack concluded, "Given that the attack took place in the British sector of the camp, British commanders must bear a degree of responsibility for these systemic failures and associated reputational damage."⁴² However, the Ministry of Defense held no British commanders responsible and stated in its rebuttal to the House of Com-

mons report that “no further UK action is required.”⁴³ When it comes to trusting other parties with the security of the mission, commanders should “trust, but verify” to ensure that adequate security steps are taken to mitigate the threat and defend key operational assets.⁴⁴

Recommendations

In the end, it comes down to the individual commander—his or her own self-preparation and the tools gained through training, doctrine, and security assets on the ground. Commanders set the tone for basewide synchronization of defense. If they don’t value it, no one will. For instance, one Army commander was quoted as saying, “I don’t give a damn about base defense”—signaling to all involved that it was not a priority.⁴⁵

Most importantly, since commanders are charged with air base defense, they should prepare themselves for their role and take deliberate steps to assess and mitigate threats once in command. Despite doctrine and training gaps, a commander is always going to be responsible for critically thinking, effectively planning, and acting in a way that sets the conditions for success.⁴⁶ In addition, training and doctrine should be improved to give commanders better tools for accomplishing this challenging mission. As new threats emerge with the progression of technology, future conflicts will become even more complex. Thus, commanders must be better equipped with the skill set of protecting these strategic hubs. With the rebalance to the Pacific and concepts such as dispersed operations in an A2/AD environment, the weight of operational tasks that a commander must balance will only increase.⁴⁷ Sound doctrine and training that senior leaders can base their decisions on become even more critical.

Future commanders of air bases must understand that their role in force protection is primarily that of managing risks through developing an effective strategy. Doing so starts with making security a priority in the unit and encouraging subject matter experts to identify risks. It is the commander’s job to assess those risks, determine the best way to manage them, and match resources to the problem. If commanders are unwilling or unable to adequately manage risk, they must persistently advocate for resources and support through their chain of command for the means to do so as well as communicate the potential mission failure that will result.⁴⁸

Managing risk is one key task a commander must do, but balancing resources is also part of the challenge. One valuable tool to allow commanders to stretch their resources further is through ID—arguably an underdeveloped concept. General Deale summarizes the concept of ID in stating that “base defense is not just the defender’s activities, it has to be a defense-in-depth with all Airmen engaged.”⁴⁹ Integrated defense gives commanders a force multiplier by making each Airman a part of the solution. Fundamental to translating this concept to reality is fostering a climate where all Airmen understand the threats and vulnerabilities around them and the need for being capable of implementing protective measures when required.⁵⁰ The wing commander’s training syllabus covers the concept of ID and asserts that “every Airman is an active participant.” However, it doesn’t go into how to implement this prescript.⁵¹

Therefore, commanders must creatively analyze how ID can benefit overall force protection and ask questions to identify shortfalls. For instance, are there clearly publicized reporting chains for any recognized or perceived vulnerabilities or threats? Do all Airmen know their response actions for base attack such as IDE, and are they being adequately utilized? Airmen can become part of the integrated defense of a base, but plans and procedures must be developed, taught, and practiced to be effective. To maximize this concept, commanders should also think broadly beyond active defense measures, extending ABD to *all* Airmen. A seasoned staff judge advocate can advise the commander within the scope of the laws and regulation of applying effective base defense measures. Financial specialists can identify and allocate monetary resources appropriately to address vulnerabilities to meet ID challenges. Airmen—and their joint and coalition partners—need to play a constructive role in air base defense.

Implementing ID is one topic among many that senior leaders should learn about through a separate course for senior expeditionary commanders, in addition to the current wing commander’s course. Training is a necessary tool to inform commanders about ID challenges and expectations and should be expanded upon for senior leaders prior to a deployment. The current wing commander syllabus shows that force protection focuses on garrison antiterrorism measures. While it is a valuable topic, deployed commanders should be exposed to a host of other issues. These might include developing host-nation and coalition relationships, establishing relationships with land force commanders, and integrating ground intelligence.

Another useful lesson from the past absent from current training is the responsibility for the exterior security mission. Training for this mission is essential since it is not in a typical Airman's skill set, and the land force commander for the area of operations must have confidence in Airmen executing this role. Training can support Air Force leaders in conducting the external mission through their gaining an understanding of how to work effectively with land force commanders and the dependencies of each other's missions and capabilities.⁵²

The last recommendation is that of improving joint doctrine to define roles and responsibilities for air base defense as well as an organizational model for it. Over the years, ABD doctrine has not captured the fundamental lessons learned and therefore has limited value for commanders. In today's conflicts, air bases are a collection of many interwoven joint, coalition, and civilian partners. This diversity adds to the complexity of the challenge and makes ABD more than a service issue, which requires comprehensive joint doctrine. Specific issues that must be addressed include the responsibility for patrolling the external threat rings and an organizational structure that establishes unity of command.

Since the Vietnam War, discussion has ensued about which service has OTW responsibility. In the early 1960s, the Republic of Vietnam Armed Forces (RVNAF) were tasked with the responsibility for perimeter and external air base security.⁵³ As their inability to perform this task became apparent to all, US Army and Marine forces took on a larger role in defending air bases. In 1965 the importance of offensive ground operations took precedence, and again the task of air base defense fell to the RVNAF and Air Force security police.⁵⁴ Even today, after years of lessons and practice, the responsibility for external security of an air base has not been doctrinally established. Thus, the services have not trained, organized, and equipped for the mission. As the predominant airpower force, the Air Force should seek to assume the primary role of developing joint doctrine that can be put into practice by the commander with the preponderance of air assets for an air base. Naturally, this precept will mean that in many cases, the Air Force should hold accountability for air base security—to include the area outside the wire. Being an air-minded service, the USAF can develop the solution from the perspective of countering threats that impede airpower projection and sortie generation.

Besides determining the roles and responsibilities that support air base defense, defining an organizational structure is equally impera-

tive. JP 3-10 describes a notional framework of base defense; however, it is general to any base, whether it has an air base function or not. Also, there is no discussion of organizational models at the base or base cluster level for the execution of the mission.⁵⁵ Without this information, service-specific doctrine and tactics, techniques, and procedures will likely dictate the execution of base defense—providing less consistency since the composition of air bases in today’s environment is likely a diverse joint, multinational landscape. To address these organizational and C2 issues, several models used in both Afghanistan and Iraq can help determine what future force modernization to emulate.

On 1 January 2005, Task Force (TF) 1041 conducted its first patrol in the northern sector of Balad AB, Iraq, as part of a mission to reduce attacks by targeting insurgents.⁵⁶ The successes of TF 1041 were made clear in its near elimination of all IDF attacks within its assigned sector.⁵⁷ As a result of TF 1041, the 332nd Expeditionary Security Forces Group was activated with the responsibility of base defense out to eight kilometers from the base boundary. The 332nd provided perimeter, internal, and exterior security and was supported by a robust staff to execute all the standard staff functions.⁵⁸ The enhanced security put pressure on insurgents, leading to less frequent attacks with higher miss distances of standoff weapons.⁵⁹ Another organizational model is TF 1/455, a USAF-led and -manned ground battlespace owner. It integrated Air Force and Army forces under one commander for the external defense of Bagram AB, Afghanistan, starting in May 2012. This unit was responsible for “one of the largest concerted outside-the-wire missions in the history of the USAF at one of the world’s busiest airfields.”⁶⁰

Each of these units had an overarching structure led by an Airman with the specific purpose of protecting the air base and had a specific mission with limited objectives—matching the definition of a joint task force (JTF) in JP 3-0, *Joint Operations*.⁶¹ Under the TF 1/455 construct, the mission of defending the base (or portion assigned) was organized under a single commander who controlled the exterior terrain and threat patrol zones. Making a JTF the model established unity of command and allowed commanders to use existing joint doctrine within JP 3-33, *Joint Task Force Headquarters*, to synchronize defense efforts and design an effective organizational framework.

Conclusion

Base commanders must also consider that air base defense is not merely the protection of air assets but the ability to generate air power.

—JP 3-10, *Joint Security Operations in Theater*

Air bases are critical centers of gravity enabling airpower to be projected, logistics to flow, and countless other functions to be implemented for an area of operations. Commanders are entrusted to protect these operating locations through a combination of the aforementioned tools and are empowered by their own diligence in understanding and preparing for the task. Doctrine establishes a basic framework for structuring base defense but does not detail specific considerations for air bases. In the future, Air Force leaders should be the primary developers of doctrine that identifies the services' roles and responsibilities.

Recent history is rife with examples in which a combination of doctrine and training has left a gap in base defense that a commander must overcome. Doctrine has failed to adequately address significant tenets and lessons learned about how to effectively protect air bases. A shortfall continues in senior leader training that builds the requisite knowledge for defending air bases in a contested environment. Host-nation and adjacent land force coordination are some of the tasks outside the normal skill set of those who would command in a theater of operations. Regardless of the training and doctrine shortfalls, commanders must prepare themselves by recognizing the challenge, educating themselves on critical thinking in this component of their responsibilities, and vigorously advocating for the resources needed to protect the personnel, equipment, and air assets under their charge.

Notes

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4. Maj Gen Thomas H. Deale (vice commander, Carl A. Spaatz Center for Officer Education), interview by Col Shannon W. Caudill, 17 January 2014.

5. Maj Gen Brian T. Bishop (commander, Carl A. Spaatz Center for Officer Education), interview by Col Shannon W. Caudill, 17 January 2014.
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8. JP 3-10, *Joint Security Operations in Theater*, I-7.
9. Loh, "Leadership in Command," 91.
10. LeMay Center, "Annex 3-10, Force Protection," 2.
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14. Author discussion with Air University Eaker Center personnel regarding Wing Commander Course, Maxwell AFB, AL, 22 October 2014.
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18. Palmer, "Air Base Security Operations," 15.
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25. Downing, *Report of the Downing Assessment Task Force*, viii.
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33. Ibid., 55.
34. Schogol, "One-Star Blamed."
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36. Ibid., 7-8.
37. Ibid., 22.
38. Ibid., 8-9.
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41. Ibid., 19.
42. British Parliament, *Camp Bastion Attack*, 15.
43. British Parliament, *Camp Bastion Attack: Government Response*, 5.
44. Shipler, "Reagan and Gorbachev Sign Missile Treaty." Note: "Trust but verify" is a Russian proverb used by President Ronald Reagan as a maxim for building verifiable arms control treaties.

45. Hubbard, "Base Defense at the Special Forces Forward," 40.
46. Doty and Doty, "Command Responsibility and Accountability," 37.
47. Hostage and Broadwell, "Resilient Command and Control," 38.
48. Lt Gen Steven Kwast (commander, Air University), interview by author, Maxwell AFB, AL, 30 January 2015.
49. Deale, interview.
50. LeMay Center, "Annex 3-10, Force Protection."
51. Author discussion with Eaker Center personnel.
52. Bishop, interview.
53. Fox, *Air Base Defense*, 12.
54. *Ibid.*, 27.
55. JP 3-10, *Joint Security Operations in Theater*. The current version (2014) discusses the basic framework of joint security areas containing bases and base clusters. This high-level C2 organization does not distinguish between air bases and other land-force bases (i.e., forward operating bases). JP 3-10 offers little information about the relationships and interactions between these C2 nodes. Ambiguity also exists in defining roles, such as for the base commander and base cluster commander, in terms of tactical and operational control. Both definitions include bold statements that give tactical control of security assets to the commander, leaving no clarity regarding what forces the base commander gives up when part of a base cluster.
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57. Briar, "Sharpening the Eagle's Talons," 264.
58. Milner, "Defense of Joint Base Balad," 221.
59. *Ibid.*, 235–36.
60. Rundquist, "Short History of Air Base Defense," 35–36.
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Chapter 12

US Air Force Expeditionary Security Operations 2040

A Technology Vision for Deployed Air Base Defense Capabilities

Christopher W. Allen

In the not-so-distant future, the president orders the US military to conduct combat operations against a hostile state to protect national interests. American forces succeed in overcoming advanced antiaccess/area denial (A2/AD) measures and establish new expeditionary air bases from which the US Air Force contributes manned and unmanned sorties to the joint fight. However, the enemy employs novel asymmetric tactics to hinder, harass, and deny USAF power projection. Precision indirect fire (IDF), remotely piloted vehicles (RPV), sophisticated insider attacks, and other innovative enemy capabilities ceaselessly wreak havoc on the bases, threatening to halt critical USAF missions.

In the event of this future worst-case scenario, the US Air Force will undoubtedly be called upon to deploy forces to conduct operations around the world in the next three decades—based on the frequency of expeditionary missions since the mid-1980s. The importance of base defense in hostile areas endures and requires improvement to meet ever-evolving threats in the future. This chapter envisions specific USAF expeditionary security operation (ESO) capabilities and enabling technologies in the 2040 time frame.¹ Technological advances offer opportunities for increasing future USAF ESO capabilities to protect forward bases from ever-evolving challenges and threats to deployed personnel and assets. Current decisions and planning must be influenced toward research, development, and acquisition in specific technology areas to enhance future ESOs.

For this exploration of ESOs, the research methodology is explained first to clarify how future capabilities and technologies are examined. The doctrinal context of how the USAF secures its bases is

This chapter is an edited version of a master's thesis entitled "USAF Expeditionary Security Operations 2040: A Technology Vision for Deployed Air Base Defense Capabilities," Blue Horizons Program (Air Command and Staff College, Maxwell AFB, AL, 2014).

then established—specifically the roles of base security and counter-threat (CTO) operations in ESOs. The relevance of future ESO capabilities and technologies to national defense interests is addressed to emphasize the need for judicious planning and procurement in defending future USAF bases from future threats. The next major topic is projected capabilities for future base security and CTO requirements, followed by technological advances to meet anticipated base security and CTO capabilities requirements. Finally, recommendations are offered for ESO procurements that will posture future base security and CTO capabilities to overcome challenges and defeat anticipated threats in 2040.

Research Methodology

This research effort offers capabilities for effective ESOs over the next 20 years based on expected challenges and threats. Capabilities identification allows for investigating technologies to meet future ESO needs, bearing in mind the simultaneous need to anticipate threats that may counter or negate future ESO technologies and capabilities. Specifically, each technology section first links to a specific capability projected to counter or defeat threats. Next, various existing technologies or systems are introduced and assessed with respect to strengths and weaknesses. Last, recommendations for technology enhancement are presented in each section. The overall intent of this research is to identify and analyze state-of-the-art ESO technologies and, ultimately, to advocate for leveraging improvements in technology trends to satisfy specific ESO capability requirements in 2040.²

ESO Doctrinal Background and Relevance

Doctrinally, the USAF uses the terms *force protection* (FP), *integrated defense* (ID), and *force protection intelligence* (FPI) to explain missions and capabilities needed to secure Airmen and resources from threats and harm, stateside and abroad. Force protection is “the process of detecting threats and hazards to the Air Force and its mission, and applying measures to deter, pre-empt, negate or mitigate them based on an acceptable level of risk.”³ Integrated defense is a force-protection line of effort. USAF security forces are the “enterprise lead” for ID, which operates to “protect and defend Air Force personnel, installations, activities, infrastructure, resources, and information

... worldwide, from mature theaters to austere regions.”⁴ Force protection intelligence is vital to integrated defense. FPI leverages the efforts of USAF intelligence, security forces, and Air Force Office of Special Investigations (AFOSI) personnel to collectively provide a threat sight picture that enables leaders at all levels to enact proper force protection measures.⁵

It is important to understand how ID and FPI are operationalized in a deployed environment to execute what can be termed expeditionary security operations.⁶ Security forces or “defenders” use the full spectrum of defensive ways and means to provide base security.⁷ Defenders not only conduct patrols to deter and detect threats to personnel and resources but also man static posts at entry control points (ECP) to regulate installation entry and exit. Defenders respond to defeat threats when they emerge within the base boundary (“tactical or jurisdictional limit”) or the base security zone (“range of enemy capabilities”), depending on the host-nation relationship.⁸ Threats include indirect fire from rockets, mortars, and man-portable air defense systems (MANPADS). Defenders leverage technologies to track and interdict IDFs before they strike, and aerial assets assist with locating and defeating attackers.

Force protection leadership and AFOSI activities play a vital role in supporting integrated defense and FPI to protect expeditionary bases through the use of “risk-based measures or operations, such as counterintelligence support to FP, to preempt, deter, mitigate, or negate threats. FPI provides support to all phases of FP operations.”⁹ Collection, analysis, and dissemination of timely, multiple-source information provide pertinent authorities “tactical situational awareness to forewarn or preempt enemy or adversarial attack” against aircraft, personnel, and infrastructure.¹⁰

The core CTO activity—counterintelligence collections—primarily involves recruiting, handling, and extracting threat information from human sources. In an expeditionary environment, contacts can be found among the base populace—including local or foreign nationals granted base access—but it is also essential to locate and meet sources residing or working within the base security zone (BSZ). To do so, AFOSI personnel must travel off the installation to local population centers and canvass areas for new sources or meet existing ones. In uncertain or hostile BSZ environments, AFOSI units partner with security force tactical security element (TSE) teams to conduct and secure CTO missions. TSE members transport agents, linguists, and

support personnel in tactical vehicles with significant defensive firepower and the capacity to carry equipment and supplies for convoy security and sustainment.

While tactical in execution, ESO is relevant to strategic interests. Events over the past 30 years indicate that the military instrument of power is likely to see continued use in a variety of operations and levels of conflict over the next three decades. USAF power projection requires basing in areas of operation. Expeditionary bases enable USAF combat operations to support national security priorities; at the same time, bases represent highly visible targets for enemy attacks. The effects of preventing or minimizing these attacks include maintaining mission continuity, averting enemy propaganda due to successful attacks, and reducing negative impacts on American public support for war efforts. Challenges from future threats are unlikely to diminish and necessitate adequate development of capabilities and technologies to confront increasingly sophisticated competitors.

Future Capabilities Requirements

Care should be given to the development of effective air base defense capabilities. For ESOs, three specific base security capabilities will be imperative in the future based on a dynamic, ever-challenging threat environment:

1. *The ability to more effectively counter IDF threats to expeditionary bases.* Rocket, mortar, and MANPADS capabilities will only increase in targeting precision, accuracy, and lethality in coming years.¹¹
2. *The ability to more effectively monitor, patrol, and respond within the base boundary to improve perimeter and ECP protection.* This capacity counters enemy tactics, which continually gain effectiveness against human and technical security measures, while also responding to future remotely piloted ground vehicle threats.¹²
3. *The ability to more effectively detect, interdict, and neutralize violent insider threats.* The continued use of local nationals for support at deployed bases is anticipated, with attendant risks of enemy infiltration among such employees. Additionally, threats from “friendly” individuals unfortunately continue to emerge in deployed locations.¹³

Three specific CTO capabilities will thwart future threats to expeditionary bases:

1. *The ability to more effectively travel outside the wire (OTW) within the BSZ to meet individuals for obtaining counterthreat and atmospheric information on areas in close proximity to a deployed base.* Rugged, austere environments and creative enemies will continually challenge CTO convoy mobility.
2. *The ability to more effectively use nonlethal and lethal means to protect CTO vehicle convoys and foot patrols.* Rules of engagement that allow for local vehicles to travel in close proximity to convoys are assumed. Creative enemies will be relentless in efforts to attack convoys. Crowd control will pose an ever-evolving threat to foot patrols, especially in densely populated, confined spaces.
3. *The ability to effectively communicate with more local individuals to obtain increased threat and atmospheric information for areas in close proximity to a deployed base.* Currently, one or two linguists facilitate communication with a limited number of locals during an engagement visit. Language training for CTO personnel is limited and rarely sufficient to allow adequate understanding of complex descriptions of threats, individuals, and other critical information.¹⁴

The aforementioned base security and CTO capabilities hinge on improvements in existing or new technologies to bring future ESO capabilities to fruition.¹⁵ Technology is operationalized scientific knowledge; it provides a capability in the form of a tool. Technological advances drive development of various systems, enabling improvements in base security and CTO capabilities to meet future threats.

Future Base Security Technologies

Future base security capabilities require technological innovations in counter-IDF systems, unmanned ground vehicles (UGV), and robotic sentries. Counter-IDF systems will leverage technologies to improve accuracy and range in destroying inbound projectiles targeting an expeditionary base. UGVs of various sizes will enhance perimeter security and ECP protection and also conduct inside-the-wire security patrols. Robotic sentries will protect key base facilities and highly

populated areas from violent insider threats. While UGVs and robotic sentries are not the only means to improve specific future capabilities, advances in these technologies offer opportunities to “enable manpower efficiencies and cost reductions.”¹⁶

Counter-IDF Systems

Ground-launched projectiles pose a significant threat for base security. Frequent insurgent IDF attacks on coalition bases in Iraq prompted adaptation of the US Navy Phalanx—a Gatling gun-based antiship missile system—into the Centurion counter-rocket, artillery, and mortar (C-RAM) system to autonomously defend a 1.2 km square area around deployed bases.¹⁷ IDF attacks have also been a constant source of concern for North Atlantic Treaty Organization bases in Afghanistan. C-RAM systems shot down approximately 70 percent of IDF in both conflicts.¹⁸ Overall, imprecise IDF caused more fear and harassment than actual death and destruction, a fortunate outcome that is not likely to continue.¹⁹ In the future, “should precision IDF rounds become part of the operational environment, our Airmen won’t have the luxury of an enemy’s incompetent firing of dumb rounds”—an apt caution indeed.²⁰ Moreover, a 30 percent failure rate will not suffice against future precision IDF attacks. Prospective threats of increasingly precise IDF demand a more effective counter to protect deployed resources.

Other recent counter-IDF technologies include the German Skyshield air defense system. Similar to the Centurion, Skyshield uses revolving guns for C-RAM capability. Unlike the Centurion, Skyshield munitions do not directly strike the targeted projectile. Skyshield rounds containing numerous subprojectiles are fired into the calculated path of the target, creating a destructive field of fire.²¹ This method offers the ability to strike targets at greater distances with less ammunition expended.²²

Additional counter-IDF technological developments include Israel’s Iron Dome C-RAM system. The Iron Dome uses interceptor missiles to protect population centers against multiple, simultaneous IDF threats within a 70 km zone.²³ According to US and Israeli officials (both countries financed its development), Iron Dome’s accuracy rate in destroying inbound projectiles is between 80 and 85 percent as of 2012.²⁴ Meanwhile, Raytheon has explored a laser-based version of the Phalanx and Centurion to allow defense of a larger area—about

three times the area protected by existing systems—at less expense than a Gatling gun-based or missile-based C-RAM.²⁵ Requirements for a laser version of the Centurion include sufficient power to defeat larger IDF threats, ruggedness to effectively operate in harsh environments, and friendly aircraft avoidance.²⁶ These concerns stem from the developmental experiences of other laser-based C-RAM systems.

In 1996 the United States and Israel began joint development of a tactical high-energy laser (THEL) to protect Israel from IDF. After 10 years of work and \$300 million spent, the chemical-based laser program was terminated due to the system's "bulkiness, high costs and poor anticipated results on the battlefield."²⁷ More recent counter-IDF development has focused on electric lasers, which hold the promise of increased targeting precision and speed. Specifically, Boeing is developing the High Energy Laser Technology Demonstrator (HEL TD) for the US Army—an eight-wheeled tactical vehicle with a solid-state laser designed to defeat IDF, RPVs, and other tactical airborne threats.²⁸ A potential limiting factor is the ability to continuously generate sufficient electricity to power the laser in an austere environment.

Future counter-IDF systems—whether based on missile, laser, or other directed-energy technologies—must increase in accuracy and range to autonomously destroy multiple inbound projectiles targeting an expeditionary base. These systems must also minimize collateral damage risks to friendly aircraft and populations. As laser technologies continue to mature into more powerful, smaller systems requiring less energy, effective laser-based, counter-IDF systems with "near-infinite magazines" will be an attractive option in 2040 in terms of cost and risk mitigation to surrounding ground communities.²⁹

Unmanned Ground Vehicles

UGVs have yet to be fully exploited for base security. Existing and developing UGV technologies hold the potential to provide effective capabilities for perimeter, ECP, and inside-the-wire protection. A sensor-carrying UGV can function as "eyes and ears" without the need for a human on site. Multiple UGVs create a network for base defense operations center personnel to monitor in order to respond to threats.

The Israeli Guardium-LS is a currently fielded UGV often used in conjunction with foot patrols to detect and deter threats along the

Gaza Strip security fence. A mobile reconnaissance sensor platform (with a loudspeaker), the Guardium has remote driving technology, four driving cameras, and a 360-degree observation camera.³⁰ It is also used for tactical resupply to eliminate IED threats to manned vehicles and retains the “possibility to install a remotely operated weapons system and non-lethal weapons systems.”³¹ Unlike the smaller UGVs, Guardium provides a full-size UGV that can discreetly integrate with and augment manned vehicle and foot patrols or operate on its own to conduct deterrence, detection, and response missions without risking the lives of friendly forces.

Current and developing systems offer a glimpse of UGV possibilities in 2040. UGVs can appear identical to manned vehicles—such as in size, model, and color—when used for patrols or as reinforcements at static locations. Thus, they will confuse insider threats regarding which vehicles are manned, providing an additional defensive variable for enemies to overcome. Moreover, small UGVs will navigate hard-to-reach places and decrease presence visibility. Mounted, static cameras at key locations offer visibility for a particular area and zoom with ever-increasing effectiveness. However, their limitations of a fixed field of vision and inability to see around obstructions make a small, mobile UGV valuable. RPVs can also obviously be used for the same purposes as UGVs, but the aerial view of the ground that RPVs provide is more relatable for response purposes, including reaction to enemy penetration of a base. Lastly, the Mobile Detection Assessment Response System (MDARS) is a preview of “swarming” multiple small UGVs to quickly respond in suitable numbers to a threat to provide situational awareness, employing nonlethal and/or lethal force as appropriate. Such threats could include “protestors, mobs, and terrorist groups . . . quickly assembling near a base’s entry-control point or perimeter to protest, riot, or attack.”³²

Robotic Sentries

Robotic sentries or “sentry-bots” can also thwart attacks at the base perimeter.³³ In fact, UGV technological developments are closely related to robotic sentry advances since UGVs armed with lethal and/or nonlethal weapons can assume a static posture at specific locations to detect and neutralize violent insider threats. Robotic sentries can conceivably use sensors and facial recognition technologies to check identification to permit or deny entry to various locations.³⁴

The most interesting recent robotic sentry technological developments come from South Korea and Israel.

Samsung Techwin built the SGR-A1 sentry for use on the South Korean side of the demilitarized zone (DMZ).³⁵ Multiple sensors alert human operators to respond in person, or the SGR-A1's operator can warn potential attackers via loudspeaker, track multiple targets, and engage using lethal (5.56 mm machine gun) or nonlethal (rubber bullets) weaponry.³⁶ The Super aEgis 2 is another South Korean DMZ sentry. Like the SGR-A1, the Super aEgis 2 can detect, track, and engage targets up to three kilometers away.³⁷ Its all-weather automatic turret supports lethal weapons—machine guns, grenade launchers, or surface-to-air missiles.³⁸ For the Gaza Strip border, the Israelis erected Sentry Tech towers equipped with sensors and lethal weapons “to create 1500-meter deep ‘automated kill zones.’”³⁹ A single operator controls multiple towers, reducing manpower requirements and decreasing risks to human responders.⁴⁰

For the USAF, the idea of a nonlethal robotic sentry appears less risky and offers a higher likelihood of use in 2040. Autonomous sentries posted among “friendlies” at densely populated locations (ECPs, dining facilities, gyms), critical mission areas (command buildings, flight lines), and critical infrastructure sites (communications nodes, power generation facilities) comprise a key element of an effective future “comprehensive interior security plan” to defeat violent insider threats.⁴¹ Additionally, incapacitating—not killing—an insider threat enables subsequent intelligence or law enforcement information collection.

Future CTO Technologies

Future CTO capabilities require technological advances or innovations in unmanned convoy vehicles, directed-energy weapons (DEW), and language translation devices. UGVs will augment manned convoy vehicles to provide security support, carry supplies and equipment, and deliver humanitarian aid to local populations in efforts to win their support. Directed-energy weapons—nonlethal and lethal—will permit more use-of-force options for CTO convoys and foot patrols. CTO personnel on the ground will use language translation devices to communicate with more local individuals, making it possible to more effectively gain potential threat information to prevent attacks.

Unmanned Convoy Vehicles

UGVs will augment manned CTO convoy vehicles to enable safer, more effective outside-the-wire travel to meet individuals—and deliver humanitarian aid when appropriate—in order to obtain threat information. UGVs enhance the protection and sustainment of CTO convoys by carrying additional sensors and weaponry, as well as equipment and supplies, without necessarily expanding manpower requirements. Two recent systems—the Guardium and the Crusher—represent the future of UGV convoy support.

As discussed, the Israeli Guardium is an off-road, all-terrain vehicle capable of incorporation into convoys that travel unimproved surfaces and traverse rugged terrain. It operates semiautonomously at speeds up to 50 km per hour and carries up to 1.2 tons in supplies and equipment.⁴² Operators control each vehicle “in a remote control room using a steering wheel, joystick and pedals” with “the vehicle driving toward a map coordinate set by its operator.” Israel operationalized this concept in February 2016 with modified Ford F-350 commercial trucks as the workhorse for this remote system.⁴³ If a Guardium vehicle is operated from base, a variable of concern is the maximum distance of control from a stationary control terminal based on the robustness of its wireless communication in a variety of climates and terrains. Additionally, its unmanned nature significantly mitigates survivability concerns, but it is unclear what level of fire Guardium can endure and still function. This factor is important if the UGV is relied upon for fire support to the convoy as well as for transport of vital supplies and equipment. Theoretically, Guardium technology holds the possibility of use on existing and future USAF tactical convoy vehicles.

In 2006 Carnegie Mellon University’s National Robotics Engineering Center (NREC) introduced the Crusher, a seven-ton, six-wheel, hybrid-engine UGV. Its ruggedized, highly versatile off-road chassis furnishes autonomous UGV capabilities to perform various tactical tasks—including reconnaissance and surveillance, resupply, and convoy defense—in a combat environment. It can carry over 8,000 pounds of payload and armor—a significant capacity to transport cargo such as equipment, supplies, sensors, and weaponry. The Crusher operates via multiple control modes—including full autonomy—and travels at speeds up to 26 miles per hour. Its hybrid diesel/electric engine enables relatively quiet movement for a large tactical vehicle in rough

terrain.⁴⁴ While slower than the much smaller Guardium, the Crusher appears to be significantly more survivable and carries over six times the payload.

The Guardium and Crusher show great potential for future UGV integration into tactical convoys, though advantages and disadvantages are evident in both systems. The NREC believes that UGV research and development will ultimately “enable new war-fighting capabilities while putting fewer soldiers in harm’s way.”⁴⁵ The intent with respect to future UGV incorporation into CTO convoys is no different: more capabilities with less risk to Airmen on the ground. While a UGV must be able to traverse the same rugged, austere terrain as manned tactical vehicles, its principal advantage in a convoy is the elimination of the need for an on-board human driver and multiple other occupants, removing targets for enemies to threaten. The UGV operator rides in another manned vehicle in the convoy or controls the UGV from base. Ideally, a UGV will also operate autonomously within a convoy in 2040 as a “doppelganger,” mimicking manned convoy vehicle movements based on programming for speed, distance, and other parameters.

Directed-Energy Weapons

Powerful lasers hold great promise for defeating IDF threats to deployed bases.⁴⁶ On a different level, lasers and other directed-energy weapons offer future possibilities for nonlethal and lethal applications against individual and vehicle threats posed to CTO convoys and foot patrols. Currently, DEWs can be used to disable a threatening vehicle approaching a convoy or dissuade threatening individuals in the vicinity of a foot patrol. Future advances in DEWs will enhance such capabilities, potentially providing lethal options as well.

Recent DEWs include various optical distractors or “dazzlers” that “deliver flash and optical glare effects to deny access [to], move, or suppress individuals.”⁴⁷ Models currently in use include the handheld or weapon-mountable LA-9/P and GLARE MOUT, with ranges of 65–1,000 meters and 18–760 meters, respectively. These devices use “non-blinding lasers” to produce “reversible optical effects,” in compliance with international prohibitions on devices that cause permanent blindness.⁴⁸ Both devices have safety features that disable the laser when an object interrupts the beam within a certain distance.

Likewise, the prototype Personal Halting and Stimulation Response Rifle (PHASR) has a safety feature to prevent permanent eye damage.⁴⁹ The Air Force Research Laboratory (AFRL) developed the PHASR for use in “protecting troops and controlling hostile crowds.”⁵⁰ As with any weapon—nonlethal or lethal—an enemy can develop countermeasures. For example, the effect of dazzlers may be mitigated or defeated through use of light-filtering eye protection, though the PHASR seeks to counter this tactic by using two lasers at different wavelengths.⁵¹ While the PHASR is an innovative, rifle-sized device, this stand-alone nonlethal dazzler weapon appears less advantageous compared to the aforementioned devices that mount onto conventional military weapons and thereby provide more than one capability. If and when a lethal laser weapon is developed, such “rifles” may support a hybrid mix of laser, nonlethal, and/or conventional munition capabilities.

Another directed-energy application does not use lasers to disorient an enemy’s vision; instead, it targets the enemy’s skin. The AFRL developed the Active Denial System (ADS), a truck-mounted, electromagnetic radiation (microwave) device, to induce the sensation of burning skin to force an enemy to move away.⁵² In 2010 the ADS was deployed to Afghanistan. Unconfirmed reasons for the system’s lack of use there include “ineffectiveness in bad weather; lack of penetration of thick clothing; and inability to selectively target individuals in a crowd.”⁵³ In any event, ADS development and refinement continue, specifically with respect to making the system smaller and portable.⁵⁴

Along with a myriad of existing and potential nonlethal weapons and devices, directed-energy weapons in 2040 will provide options for CTO convoys and foot patrols in addition to conventional weapons and munitions. Options are of utmost importance when split-second, life-or-death decisions must be made regarding the use and escalation of force in accordance with applicable rules of engagement. While significant advances have occurred in recent years, work remains to enhance laser- and microwave-based DEWs to fully enable them to defeat potential countermeasures, ensure more precise target selection, and overcome environmental limitations. International and domestic concerns about usage of such weapons must be assuaged as well. Still, DEWs are a promising area for further advances in efforts to equip convoys and foot patrols with multiple ways to defend against hostile vehicles, crowds, and individuals.

Language Translation Devices

CTO personnel require real-time language translation to acquire threat information. Unarmed contract linguists provide this vital capability at great personal risk. However, a convoy supporting numerous CTO personnel conducting various duties typically contains one or two linguists able to facilitate communication with a limited number of individuals during an engagement visit to a locality. While some CTO personnel receive “just-in-time” or even formal language training, it is usually insufficient to enable receipt of complex descriptions of threats, individuals, relationships, geography, weapons, or other detailed information. Therefore, all CTO convoy personnel need the ability to communicate effectively with the local population, which will increase the pool of individuals contacted in efforts to gain vital threat and atmospheric information.

Several technologies aim to enable real-time translation and communication among individuals speaking different languages. One recent development is the ability to connect to language translation service providers, exemplified by the handheld Enabling Language Service Anywhere (ELSA) device. Designed primarily for use by first responders, ELSA connects via cellular signal to a company employing interpreters for over 180 languages.⁵⁵ ELSA provides a possible model for military emulation whereby a pool of linguists is available on call for use in a tactical environment. Unfortunately, this model still depends on scarce linguist resources as well as effective communications links and does not offer as much potential as other technologies that seek to eliminate the need for a linguist altogether. Toward this end, the Defense Department and commercial technology firms seek to perfect speech-to-speech translation, providing the ability “to speak and have one’s words translated automatically into the other person’s language” on the spot.⁵⁶

The Broad Operational Language Translation (BOLT) program is a Defense Advanced Research Projects Agency (DARPA) effort launched in 2011 to “create new techniques for automated translation and linguistic analysis.” The technology would enable English speakers to understand foreign languages in genres such as chat, messaging, and conversation and converse in speech and text with non-English speakers.⁵⁷ Likewise, one software application of the US Army’s Machine Foreign Language Translation System (MFLTS) provides “two-way, real-time speech-to-speech translation.” An-

other application translates social media, electronic documents, and web pages. The MFLTS also plans to have applications allowing users to access over 65 language packs.⁵⁸ Judging by the limited public information available on BOLTS, MFLTS, and other language processing technologies, it appears such programs are progressing but still not quite to the point of being able to realistically replace a linguist in the field.

Information technology giants Apple, Google, and Microsoft are also competing to develop an effective speech-to-speech capability. Each company is pursuing and promoting software or applications (apps) that translate spoken words from one language to another. Third-party apps for Apple devices, Google Translate, and Microsoft Bing Translator are each vying to provide the equivalent of the *Star Trek* “universal translator.”⁵⁹ App-based solutions are appealing due to the ability to constantly refine translation capabilities, but a platform is still required to run the app in a field environment.

In 2040 CTO personnel will use language translation devices to more effectively communicate with local individuals. Significant gains in the field of speech-to-speech translation are currently taking place and bode well for future situations where an entire CTO team can engage, and be engaged by, individuals as necessary during OTW missions to more quickly gain potential threat information to prevent attacks on a deployed base.

Potential limiting factors for speech-to-speech translation devices include excessive background noise and multiple conversations in close proximity to the actual conversation requiring translation.⁶⁰ These issues will prompt constant technological refinement but will likely not pose insurmountable barriers to effective translation device usage. Additionally, translation devices will only translate language, not the nonverbal cultural cues that can be equally, if not more, important to effective tactical communication. Thus, linguists/cultural advisors will remain integral members of the future CTO team not only to provide the most effective means to accurately translate between languages and cultures but also to resolve discrepancies between language translation device outputs and nonverbal cues observed by the device user.

Recommendations for ESO Procurements

The USAF must pursue specific base security and CTO capabilities to counter and defeat future threats to deployed bases. To do so, it must identify technological trends, harness progress, and exploit opportunities to enable specific capabilities. Regardless of executive agency authority or designation as lead on a specific program, the USAF must ensure visibility on, and input into, the development of technologies and capabilities that impact ESOs. Specifically, procurement decisions and planning must be geared toward acquiring technologies that enhance ESOs over the next 30 years.

The USAF must continually refine anticipated capabilities requirements for future ESOs to appropriately fund development and acquisition of enabling technologies. For base security, advances in counter-IDF, UGV, and robotic sentry technologies reflect a general trend toward “far greater use of autonomous systems in essentially all aspects of Air Force operations.”⁶¹ Laser-based counter-IDF systems will autonomously defeat precision IDF projectiles with increased accuracy and range, while minimizing collateral damage risks. A variety of autonomous and remotely operated UGVs carrying sensors and weaponry will enhance inside-the-wire protection and response capabilities. Posted at specific locations, nonlethal robotic sentries equipped with sensors and weaponry will autonomously detect and defeat violent insider threats. Overall, the USAF must pursue counter-IDF systems, UGVs, and robotic sentries that add base security capabilities in 2040 while reducing manpower requirements, minimizing costs, and, most importantly, mitigating risk to deployed personnel and assets.

UGV, directed-energy, and speech-to-speech translation technology trends must be fully exploited to enhance and protect CTOs in 2040. UGVs of sufficient survivability and load capacity will augment manned convoys and thereby enhance OTW travel and sustainment by carrying sensors and weaponry necessary for convoy security. As is the case for UGV employment for base security, UGV use for CTO convoys provides more capabilities with less risk to Airmen. Directed-energy weapons will improve vehicle convoy and foot patrol protection by adding effective use-of-force options. Whether based on laser, microwave, or future directed-energy technology, these weapons must defeat countermeasures, offer precision targeting, and overcome environmental limitations. Speech-to-speech language transla-

tion devices will enable more communications by CTO personnel with more local individuals to swiftly obtain perishable, vital threat information.

Conclusion

State-of-the-art technologies must be leveraged and enhanced to meet specific ESO capabilities requirements anticipated in 2040. This area of research can revolutionize future USAF expeditionary capabilities; it should prompt questions and debate and spur further exploration. USAF leaders must think holistically about ESOs. Although individual capabilities and technologies may seem relatively insignificant by themselves, they provide the opportunity for a truly integrated base defense framework to better secure personnel, aircraft, and equipment supporting USAF force projection in the future.

The employment of USAF airpower is critical to achieving American military objectives in support of national security strategy. Continually protecting deployed USAF resources—man and machine—is a fundamental prerequisite to successful airpower employment. As has been the case in recent decades, technological advances will likely continue to reduce risk to deployed personnel and equipment, which will have the ironic effect of encouraging politicians to put personnel in harm's way with more frequency in pursuit of national interests.⁶² The USAF must be prepared to defend its people, aircraft, and other resources *on the ground* for future expeditionary operations deemed appropriate by civilian leadership.

Notes

1. Holmes et al., “New Ground War,” 41. The term *expeditionary security operations* is purposely borrowed from this influential article to highlight the combined proactive efforts of security force, intelligence, and special investigations personnel to defend and secure a deployed base. *Integrated defense* is a broader term for the security force–led submission of force protection at all USAF installations. See LeMay Center, “Annex 3-10, Force Protection,” s.v. “The Force Protection Community,” 36–37.

2. Due to the multitude of areas and issues that could be explored within ESOs, this research is based on the following key assumptions to focus the scope and intent of the discussion:

- The USAF will deploy forces in the future to conduct operations in an expeditionary environment requiring basing.

- The USAF will not be able to solely project airpower through manned or unmanned global standoff weapons platforms; locally based air platforms will still be required to conduct various missions.
- A2/AD capabilities will not prevent the USAF from forward basing in all potential hot spots around the world.
- The USAF will deploy forces to bases of varying sizes—from large hub bases to smaller forward operating bases—in permissive, uncertain, or hostile environments in varied climates and terrains with a range of indigenous infrastructure and security capabilities.
- USAF security forces will be responsible for security at expeditionary bases, despite shifts in responsibility at different points in time between USAF security forces and US Army units.

The AFOSI will be responsible for CTOs at USAF expeditionary bases. In uncertain or hostile environments, it will conduct OTW operations using overt tactical vehicles for convoys to and from mission locations in the vicinity of the base.

3. LeMay Center, “Air Force Glossary,” s.v. “force protection.”

4. LeMay Center, “Annex 3-10, Force Protection,” s.v. “The Force Protection Community,” 36.

5. *Ibid.*, s.v. “Risk Management Process,” 29–30.

6. Explanation is in order as to use of the term *expeditionary security operations*. Integrated defense and FPI are excellent starting points as doctrinal terms, but they do not specifically convey the proactive, operational nature of combined security forces, AFOSI, and intelligence efforts to defend and secure a deployed base. Base security and CTOs will be used to differentiate between the distinct, but mutually supporting, security force and AFOSI roles in ESOs to facilitate discussion of capabilities and technologies to support both roles in the future.

7. Holmes et al., “New Ground War,” 42–43.

8. *Ibid.*, 44.

9. LeMay Center, “Annex 3-10, Force Protection,” s.v. “Sources of Intelligence and Counterintelligence,” 30.

10. LeMay Center, “Annex 3-10, Force Protection,” s.v. “Counterintelligence Support to Force Protection,” 35.

11. Caudill and Jacobson, “Nowhere to Hide,” 31, 33–34; and Schwartz, “Airpower in Counterinsurgency,” 133.

12. Caudill and Jacobson, “Nowhere to Hide,” 34; and Miner, “Addressing a Gap,” 11.

13. Caudill and Jacobson, “Nowhere to Hide,” 31, 37–38.

14. I selected specific CTO capabilities and noted the threats these capabilities intend to address based on my experiences supporting and leading CTO missions in Iraq and Afghanistan in 2010 and 2012–13, respectively, and conversations with other agents with whom I had the honor to serve OTW.

15. Any number of capabilities related to base security and CTOs could be selected for future projections. Though certainly valuable for further research, many potential capabilities are not addressed here. These areas include ballistic missile defense; defense against land attack missiles; defense against conventional enemy air assets; individual protective equipment, gear, and weapons necessary for self-defense;

access controls and screening; cyberspace defense; and information technology protection.

16. Office of the US Air Force Chief Scientist, *Technology Horizons*, xx.
17. *Defense Industry Daily*, “Laser Phalanx?”
18. Singer, *Wired for War*, 38.
19. Caudill and Jacobson, “Nowhere to Hide,” 33–34; and Schwartz, “Airpower in Counterinsurgency,” 133.
20. Caudill and Jacobson, “Nowhere to Hide,” 34.
21. Rheinmetall Defence, “Oerlikon Skyshield”; and Foss, “Mantis Maximises Protection.”
22. Rheinmetall Defence, “Oerlikon Skyshield.”
23. Rafael Advanced Defense Systems, “Iron Dome.” In addition to its C-RAM capability, the Iron Dome also defends against manned and unmanned aircraft threats. The latter poses a more recent threat likely to grow in sophistication in coming years, offering another interesting avenue for additional research. See Caudill and Jacobson, “Nowhere to Hide,” 34–35.
24. Londoño, “System Represents Breakthrough”; and Rizzo, “U.S. Continues Support.”
25. *Defense Industry Daily*, “Laser Phalanx?”; and Singer, *Wired for War*, 85.
26. *Defense Industry Daily*, “Laser Phalanx?”
27. Broad, “Shelved Laser as a Defense.”
28. *Week* staff, “Army’s Eight-Wheeled Laser Truck”; and Boeing, “Completes System Integration.”
29. Office of the US Air Force Chief Scientist, *Technology Horizons*, 92.
30. Rogers, “Robot Patrol.”
31. “Guardium-LS UGV,” *Army Recognition*.
32. Caudill and Jacobson, “Nowhere to Hide,” 40.
33. Singer, *Wired for War*, 39.
34. Ibid.
35. Awesome-o, “Samsung Techwin’s SGR-A1.”
36. Ibid.
37. Cleary, “South Korean ‘Super Gun.’”
38. Ibid.; and Blain, “South Korea’s Autonomous Robot.”
39. Shachtman, “Israeli ‘Auto Kill Zone.’”
40. Ibid.
41. Caudill and Jacobson, “Nowhere to Hide,” 38.
42. “Guardium-LS UGV,” *Army Recognition*.
43. Rogers, “Robot Patrol.”
44. National Robotics Engineering Center, Carnegie Mellon University, “Crusher”; Watzman and Spice, “Unmanned Ground Combat Vehicles”; DARPA, “Unmanned Ground Combat Vehicle Unveiled”; and Singer, *Wired for War*, 68. The US Army’s DARPA funded the Crusher as part of the Future Combat Systems program.
45. National Robotics Engineering Center, Carnegie Mellon University, “Crusher.”

46. See Office of the US Air Force Chief Scientist, *Technology Horizons*, 30, which claims that “DE [directed-energy] systems will be among the key ‘game changing’ technology-enabled capabilities that enter service during this time frame [2010–30].”
47. DOD, *Non-Lethal Weapons*, 2.
48. Ibid.
49. Technology and Science, “(PHASR) Rifle.”
50. Blaylock, “New Technology ‘Dazzles’ Aggressors.”
51. Technology and Science, “(PHASR) Rifle.”
52. Hornig, “Evolution of Nonlethal Weaponry”; and Singer, *Wired for War*, 84.
53. Hornig, “Evolution of Nonlethal Weaponry.”
54. Ibid.; and “Murphy’s Law,” *StrategyPage*.
55. Wilson, “Translation, Please.”
56. Arora, Arora, and Roy, “Speech to Speech Translation,” 207.
57. Onyshkevych, “Broad Operational Language Translation.”
58. Program Executive Office, Intelligence Electronic Warfare and Sensors, “Army Language Translation System.”
59. Microsoft blog editor, “How Technology Can Bridge.”
60. Weiss and Schlenoff, “Performance Assessments,” 72.
61. Office of the US Air Force Chief Scientist, *Technology Horizons*, xx.
62. Singer, *Wired for War*, 315–25.

Afterword

Defending air bases has always been challenging because the enemy has the advantage. Air bases are large, stationary, and full of high-value targets vulnerable to attack. Attacks on air bases can be devastating too; one has only to imagine the impact of a well-placed mortar or rocket on a loaded C-17, fuel farm, or dining facility. This type of attack would not only have an operational impact, it would also provide an insurgent enemy with a valuable media win. Despite these realities, a comprehensive air base defense strategy has historically been nearly impossible to develop and sustain.

A lasting air base defense strategy has been difficult to sustain partly because the threat hasn't been seen as imminent. Throughout the Cold War, air bases were positioned well back from the front lines. Even during DESERT STORM expeditionary air bases were "safely" tucked away in the rear area. A base defense strategy has also been difficult to sustain because Security Forces, as the base defense advocates, have never had the "functional influence" to keep them on the strategic map. The fact that base defense is viewed as a support function rather than a combat capability further complicates the argument. Security Forces themselves have sometimes made things worse by internally disagreeing on many aspects of air base defense; responsibility, organization, and command and control. Individual Major Commands (MAJCOMs) exacerbated this situation by pursuing MAJCOM-unique base defense strategies, tactics, techniques, and procedures (TTP) and even nonstandard equipment. These factors have made a sustained, coherent approach to base defense almost impossible.

Without an imminent threat and a focused advocacy, the Air Force allowed the role of defending air bases to be assigned to the Army.¹ Throughout the 1980s and '90s Security Police/Security Forces continued to train and exercise Air Base Defense skills but remained mostly confined to guarding the base perimeter, flight lines, and tent cities.

The terrorist attacks of 9/11/2001 and subsequent invasions of Afghanistan and Iraq changed everything. Expeditionary air bases were no longer tucked away safely in the rear area; they were established in the middle of the combat zone. The threat suddenly became more imminent as insurgents attacked air bases with impunity and Airmen were injured or killed. Although Joint Service Agreement #8 still gave the Army responsibility for guarding air bases "outside the wire" (OTW), joint doctrine had been revised to give the responsibility for

base defense to base commanders. This change caused confusion, but it was a moot argument. Regardless of written agreements, the Army was too busy fighting in the field to tie maneuver units down guarding static locations. As the attacks on air bases continued during OIF/OEF, Air Force leaders were confronted with the reality that Airmen would have to defend themselves. The conditions were ripe for a revolution in air base defense, but the revolution never came.

The history of air base defense is both exciting and frustrating. This book is a great example of the exciting part; Operation DESERT SAFESIDE/Task Force 1041, Combined Joint Task Force 455 at Bagram Air Base in Afghanistan; exploration of potential base seizure missions, advances in the use of intelligence, and the challenge of fighting in the anti-access/area-denial (A2/AD) environment. These chapters capture the courage, innovation, and initiative that have kept Airmen safe since Vietnam. They also describe a future where the full capabilities of airpower, and Airmen, can be harnessed and maximized in the joint fight. This is all very exciting!

But the history of air base defense is also frustrating. The frustrating part of the story has been the inability to turn this exciting progress into permanent change. Joint doctrine, Air Force Instructions, pamphlets, and enabling concepts have all evolved and now provide ample guidance for the Air Force to stake a definitive claim on the air base defense mission; inside and especially outside the wire. Security Forces, as the base defense functional owner, should be the driving force behind this effort. Progress, however, remains stagnated. A report on security force readiness observes that “the history of the SF career field is characterized by periods of conflict, each followed by a brief phase of advocating change based on freshly (re)learned experience, followed in turn by inertia; there appear to be systemic barriers to evolution within the career field.”²² This grim statement captures much of the challenge.

The inability to effect permanent change is frustrating because the threat to air bases is perhaps more imminent than ever. In fact things are likely to get even more complicated—and deadly—in the future A2/AD environment as state-level actors like Russia thinly mask regular Army forces as “separatists” and fight using insurgent-style tactics out of uniform. New strategies to deal with future conflicts in the A2/AD environment also promise to keep air bases in the middle of the combat zone. Both the European and Pacific theaters are experimenting with new force packages, deployed using modernized ver-

sions of the forward arming and refueling point (FARP) operations concept. These force packages will stage far forward and be “untethered” from main operating bases: light, lean, and lethal.³ They will be capable of operating semi-autonomously and count on speed and agility to project airpower well inside enemy threat rings. Air base defense in this future will count on fewer Airmen, better trained in more combat skills.⁴ Perhaps it is time for a fresh look. Perhaps we need to stop thinking of air bases as vulnerable, hard-to-defend static locations and start treating them as agile, lethal weapons systems.

One of the first areas of focus should be combat skills for all Airmen. Historically, Airmen received weapons training only and never learned the “shoot, move, communicate” skills necessary to use that weapon in combat.⁵ Since the beginning of OIF the Air Force has made significant progress in combat skills training for all Airmen. These skills give Airmen the ability to operate confidently in a wide variety of missions throughout the combat zone. This not only contributes to the joint fight, it helps build a warfighter ethos among Airmen and it is critical to base defense.

The future of ground combat skills training looked promising in 2006 when a Doctrinal Change Recommendation signed by then-CSAF T. Michael Mosley said “these skills must be taught in all AF accession sources and refined throughout initial skills and continuation/ancillary training, as well as professional military education.⁶ Additionally, Air Force publications also state that base defense is a “fundamental battle competency for all Airmen, whether garrison or deployed” and that “every Airman is a sensor.”⁷ However, today, faced with new fiscal challenges, the AF is in danger of returning to the pre-9/11 approach of addressing combat skills training through home station training and CBT, with most critical skills taught “just in time.” If we want every Airman to have a role and stake in defending Air Bases, routine combat skills training should be institutionalized and exercised regularly.

Next, these combat trained Airmen could be used deliberately as force multipliers in base defense plans. Just as all Sailors have a battle station on a ship they man in times of increased threat, Airmen could have “battle stations” on a base they occupy as part of the base defense.⁸ This was another important recommendation in the 2006 DCR General Mosley signed to “develop an AF ‘fight the base’ concept where all Airmen have an active role in defending the installation. This recommendation takes the individual and collective

ground combat skills and forms them into an operational capability to defend the installation by surging to ‘battle stations.’”⁹ Key is the recognition that Airmen trained in combat skills create an operational capability.

The “fight the base” concept was codified in a draft Air Force Instruction and used locally with great success in 2007 and 2008 but never expanded as envisioned in the DCR. Today, rather than contributing to base defense as force multipliers, the majority of Airmen “shelter-in-place” during emergencies. “Fight the Base” should be revived and expanded.

Finally, the most significant change involves the AF’s ground combat forces. All indicators point to a future that will require the Air Force to field a ground force capable of performing at the high end of combat in the A2/AD environment. As described above, part of this force could comprise more qualified Airmen from all specialties performing at their battle stations as part of a “fight the base” plan. This new base defense capability will free up Security Forces manpower to form the core of a professional Ground Combat Force (GCF), designed to fight across the spectrum of combat operations. This would be a standing force modeled loosely on the Base Defense Group (BDG) discussed in the BDG Enabling Concept, but it would be larger and more capable.¹⁰ The GCF could be built by combining all Air Force ground combat specialties into one coherent capability.

Security Forces (SF) perform at the conventional end of the spectrum in their light infantry role focused on base defense, while Combat Control Teams (CCT) represent the special operations end of the spectrum. Other specialties that have been created and/or matured include Combat Rescue, Tactical Air Control Party (TACP), Special Operations Weather Teams (SOWT), and the Survival, Evasion, Resistance and Escape (SERE) cadre. These “Ground Combat Airmen” represent the beret-wearing forces within the Air Force, yet while they share common core skills, they are aligned under different Air Force functions and trained/resourced/ managed within separate specialty-focused stovepipes.¹¹ There are more optimal ways to use these capabilities.

A new GCF could not only provide the core of a force capable of defending air bases in future combat environments, it could be treated as an operational capability and give joint force commanders more options. In addition to defending air bases, the GCF would continue to provide the Special Operations community the capabilities

they require, while also offering an increased variety of complete, standardized/tailorable packages for Combatant Commands. These packages would evolve single-role mission “platforms” into multi-role capabilities to create force presentation options not currently available.¹² GCF teams could routinely build synergy in ground combat situations where they work together (e.g., TACPs controlling close air support for ABD or SF providing security for CCTs), then project combat power throughout the Base Security Zone or even into an expanded Area of Responsibility (AOR) to help joint forces defeat enemy threats. The AF does not need its own infantry, but it could use existing manpower more effectively by creating a more capable cross-functional GCF able to fight across the spectrum of combat operations.

Yes, defending air bases has always been challenging, but regardless of the status of doctrine or the determination of the enemy, Airmen have always found a way to “make the mission happen.” Where the enemy has been successful, Airmen have used initiative to mitigate the effects. This has created a false sense of security. The lack of mission failure is partly why air base defense, inside and outside the wire, remains a subject of debate instead of an Air Force–owned core competency. There are no quick fixes. However, by institutionalizing combat skills training for all Airmen, deliberately including them in the base defense mission, and creating a capable GCF, we can lay a solid platform on which to build a lasting capability. With this capability we can design doctrine and missions that defend air bases better and contribute more to the joint fight. This will take focus and persistence, but if we want to end the cycle of learning and relearning base defense lessons; if we hope to be successful defending Air Bases in an age of insurgency; then we need to design a comprehensive base defense strategy and commit the resources necessary to sustain it.

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Notes

1. Davis, *31 Initiatives*, 125.
2. Powell et al., *Study into the Posture (OTE) and Readiness of Security Forces*.

3. Raley, "Untethered Operations."
4. Holmes et al., "Air Force's New Ground War," 51.
5. Ibid.
6. Moseley, "Change Recommendation (DCR) for Integrated Defense."
7. Air Force Policy Directive 31-1, *Integrated Defense*, 2; and Curtis E. LeMay Center for Doctrine Development and Education, "Annex 3-10, Force Protection," 5.
8. Holmes et al., "Air Force's New Ground War," 51.
9. Moseley, memorandum, subject: Change Recommendation (DCR) for Integrated Defense.
10. Schwartz, *Expeditionary Airbase Defense*.
11. Editor's note: The author produced a Ground Combat Airmen (GCA) White Paper on 21 April 2014, which outlines some of the ideas and concepts contained in this afterward. This paper has been widely circulated amongst senior Air Force leaders.
12. Ibid.

Abbreviations

| | |
|---------|---|
| AADC | area air defense commander |
| ABD | air base defense |
| ABGD | air base ground defense |
| ABN DIV | airborne division |
| ABO | air base operability |
| ACC | Air Combat Command |
| ACS | agile combat support |
| ACSC | Air Command and Staff College |
| ADS | Active Denial System |
| AEF | air and space expeditionary force |
| AEFC | USAF Air and Space Expeditionary Force Center |
| AEG | air expeditionary group |
| AEW | air expeditionary wing |
| AFDD | Air Force doctrine document |
| AFHO | Air Force History Office |
| AFHRA | US Air Force Historical Research Agency |
| AFI | Air Force instruction |
| AFMC | Air Force Materiel Command |
| AFOSI | Air Force Office of Special Investigations |
| AFRL | Air Force Research Laboratory |
| AFSC | Air Force specialty code |
| AFSOC | Air Force Special Operations Command |
| AFTTP | Air Force tactics, techniques, and procedures |
| AIF | anti-Iraqi forces |
| ALB | AirLand Battle |
| ALCM | air-launched cruise missile |
| ALO | air liaison officer |
| AMC | Air Mobility Command |
| AMLO | air mobility liaison officers |
| AMOG | air mobility operations group |

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| AMWC | Air Mobility Warfare Center |
| ANA | Afghan National Army |
| ANG | Air National Guard |
| AO | area of operations |
| AOC | air and space operations center |
| AOR | area of responsibility |
| ARVN | Army of the Republic of Vietnam |
| ASB | AirSea Battle |
| ASP | Area Source Program |
| AT | assessment team |
| ATC | air traffic control |
| ATO | air tasking order |
| A2/AD | antiaccess/area denial |
| | |
| BCT | brigade combat team |
| BDE | brigade |
| BDG | base defense group |
| BDS | base defense squadron |
| BIA | behavioral influences analysis |
| BIAP | Baghdad International Airport |
| BLS | Camp Bastion, Leatherneck, and Shorabak |
| BOLO | “be on the lookout” |
| BOS-I | base operating support integrator |
| BPC | Building Partnership Capacity |
| BSO | battlespace owner |
| BSZ | base security zone |
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| CANLS | contingency airfield night lighting system |
| CAOC | combined air operations center |
| CAS | close air support |
| CASF | casualty airlift staging facility |
| CCDE | centralized control and decentralized execution |
| CCT | combat control team |

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| CFACC | combined force air component commander |
| CFL | core function lead |
| CI | counterintelligence |
| CIA | Central Intelligence Agency |
| C-IDF | counter-indirect fire |
| CJCS | chairman, Joint Chiefs of Staff |
| CJTF | combined joint task force |
| COA | course of action |
| COCOM | combatant command |
| COIN | counterinsurgency |
| CONOPS | concept of operations |
| CONUS | continental United States |
| COSCOM | Corps Support Command |
| C-RAM | counter-rocket, artillery, and mortar |
| CRG | contingency response group |
| CRW | contingency response wing |
| CSAF | chief of staff of the Air Force |
| CSG | combat support group |
| CTO | counterthreat operations |
| C2 | command and control |
| CuOps | current operations |
| DARPA | Defense Advanced Research Projects Agency |
| DCA | defensive counterair |
| DCR | DOTMLPF change recommendation |
| DCS | Defense Clandestine Service |
| DEPOD | deployment order |
| DHHB | Division Headquarters and Headquarters Battalion |
| DIA | Defense Intelligence Agency |
| DIRMOBFOR | director of mobility forces |
| DMZ | demilitarized zone |
| DOD | Department of Defense |

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| DOTMLPF | doctrine, organization, training, materiel, leadership and education, personnel, and facilities |
| DRA | Democratic Republic of Afghanistan |
| EBDG | expeditionary base defense group |
| ECP | entry control point |
| EDet | expeditionary detachment |
| ELSA | Enabling Language Service Anywhere |
| EMSG | expeditionary mission support group |
| EMTF | expeditionary mobility task force |
| EOD | explosive ordnance disposal |
| EOG | expeditionary operations group |
| EOSS | expeditionary operations support squadron |
| ESFG | expeditionary security forces group |
| ESFS | expeditionary security forces squadron |
| ESO | expeditionary security operation |
| EXORD | execute order |
| FA | field artillery |
| FARP | forward arming and refueling point |
| FAST | fly-away security team |
| FBI | Federal Bureau of Investigation |
| FEBA | forward edge of the battle area |
| FET | female engagement team |
| FID | foreign internal defense |
| FM | field manual |
| FMC | fully mission capable |
| FMV | full-motion video |
| FOB | forward operating base |
| FOL | forward operating location |
| FP | force protection |
| FPD | force protection detachment |

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| FPI | force protection intelligence |
| FuOps | future operations |
| GAMSS | Global Air Mobility Support System |
| GAO | United States Government Accountability Office |
| GCC | geographic combatant commander |
| GCF | ground combat force |
| GIS | geospatial information system |
| GLCM | ground-launched cruise missile |
| GM CONOPS | global mobility concept of operations |
| GRG | gridded reference graphics |
| GSTF | global strike task force |
| HAF | Headquarters Air Force |
| HAS | hardened aircraft shelter |
| HEL TD | High Energy Laser Technology Demonstrator |
| HMMWV | high-mobility multipurpose wheeled vehicles |
| HQ | headquarters |
| HUMINT | human intelligence |
| HVT | high-value target |
| IA | Iraqi Army |
| IAF | Iraqi Air Force |
| 1CAV | 1st Cavalry Division |
| 1ID | 1st Infantry Division |
| ID | integrated defense |
| IDF | indirect fire |
| IDRMP | Integrated Defense Risk Management Process |
| IED | improvised explosive device |
| IIR | intelligence information report |
| IMINT | imagery intelligence |
| IPB | intelligence preparation of the battlespace |
| ISAF | International Security Assistance Force |

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| ISF | Iraqi security forces |
| ISIS | Islamic State of Iraq and Syria |
| ISR | intelligence, surveillance, and reconnaissance |
| ISRD | Intelligence, Surveillance, and Reconnaissance Division |
| IW | irregular warfare |
| JAM-GC | Joint Concept for Access and Maneuver in the Global Commons |
| JBB | Joint Base Balad |
| JBMDL | Joint Base McGuire-Dix-Lakehurst |
| JDOC | joint defense operations center |
| JEOC | joint emergency operations center |
| JFACC | joint force air component commander |
| JFC | joint force commander |
| JISE | joint intelligence support element |
| JOAC | Joint Operational Access Concept |
| JP | joint publication |
| JRTC | Joint Readiness Training Center |
| JSA | joint service agreement |
| JSTARS | Joint Surveillance Target Attack Radar System |
| JTAC | joint tactical air controller |
| J-3 | Joint Staff director of operations |
| LNO | liaison officer |
| LPW | Large Package Week |
| LSA | logistics support area |
| LTTE | Liberation Tigers of Tamil Eelam |
| LZ | landing zone |
| MAF | mobility air forces |
| MAGTF | Marine air-ground task force |
| MAJCOM | major command |

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| MANPADS | man-portable air-defense system |
| MASINT | measurement and signature intelligence |
| MAW (FWD) | Marine aircraft wing forward |
| MCOO | modified combined obstacle overlay |
| MDARS | Mobile Detection Assessment Response System |
| MFLTS | Machine Foreign Language Translation System |
| MMLS | mobile microwave landing system |
| MOB | main operating base |
| MOU | memorandum of understanding |
| MP | military police |
| MRD | motorized rifle division |
| MTTPS | multiservice tactics, techniques, and procedures |
| MWD | military working dog |
| NAF | numbered air force |
| NAI | named area of interest |
| NASIC | National Air and Space Intelligence Center |
| NATO | North Atlantic Treaty Organization |
| NCO | noncommissioned officer |
| NGA | National Geospatial Agency |
| NGB | National Guard Bureau |
| NREC | National Robotics Engineering Center |
| NVG | night vision goggles |
| ODS | Operation Desert Safeside |
| OEF | Operation Enduring Freedom |
| OIF | Operation Iraqi Freedom |
| OND | Operational New Dawn |
| OPCON | operational |
| OTW | outside the wire |

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| PACAF | Pacific Air Forces |
| PGM | precision-guided munition |
| PHASR | Personal Halting and Stimulation Response Rifle |
| PIR | priority intelligence requirement |
| PLA | People's Liberation Army |
| POI | point of impact |
| POO | point of origin |
| Prime BEEF | prime base engineer emergency force |
| PUC | persons under control |
| QRF | quick reaction force |
| RAF | Royal Air Force |
| RBD | residual base defense |
| RC | regional command |
| REAP | Rapid Elevated Aerostat Platform |
| RED HORSE | rapid engineer deployable heavy operational repair squadron engineer |
| RFF | request for forces |
| RNAF | Republic of Vietnam Air Force |
| ROK | Republic of Korea |
| RPA | remotely piloted aircraft |
| RPG | rocket-propelled grenade |
| RPV | remotely piloted vehicle |
| RVN | Republic of Vietnam |
| RVNAF | Republic of Vietnam Armed Forces |
| SAM | surface-to-air missile |
| SAS | Special Air Service |
| SEAD | suppression of enemy air defenses |
| SecDef | secretary of defense |
| SF | security force(s) |
| SFG | security forces group |

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|----------|--|
| SFS | security forces squadron |
| SIGINT | signals intelligence |
| SMEE | subject matter expert exchange |
| SOF | special operations forces |
| SP | security police |
| SPP | State Partnership Program |
| ST | special tactics |
| STS | special tactics squadron |
| STT | special tactics team |
| | |
| TACC | Tanker Airlift Control Center |
| TACON | tactical control |
| TACP | tactical air control party |
| TALCE | tanker airlift control element |
| TAOR | tactical area of responsibility |
| TASS | tactical automated security system |
| TCN | third-country national |
| TDY | temporary duty |
| TF | task force |
| THAAD | Terminal High Altitude Area Defense |
| THEL | tactical high-energy laser |
| THOR | Theater History of Operations Report |
| TOC | tactical operations center |
| TSE | tactical security element |
| TST | time-sensitive targeting |
| TTP | tactics, techniques, and procedures |
| | |
| UAHMMWV | up-armored high-mobility multipurpose wheeled vehicle |
| UGV | unmanned ground vehicle |
| USA | United States Army |
| USAAF | United States Army Air Forces |
| USAFCENT | United States Air Forces Central Command |

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| USAFE | United States Air Forces in Europe |
| USCENTAF | United States Air Forces Central Command |
| USCENTCOM | United States Central Command |
| USEUCOM | United States European Command |
| USF-I | United States Forces–Iraq |
| USMC | United States Marine Corps |
| USPACOM | United States Pacific Command |
| USTRANSCOM | United States Transportation Command |
| UTC | unit type code |
| VNAF | Vietnamese Air Force |
| WPTO | Western Pacific Theater of Operations |

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*The first volume of **Defending Air Bases in an Age of Insurgency**, published in 2014, was an exceptional work of scholarship, careful analysis, and combat lessons learned. It has earned a place among other classics such as John Kreis's **Air Warfare and Air Base Defense** and Roger Fox's **Air Base Defense in the Republic of Vietnam**. Volume 2 greatly expands the issues addressed while living up to the high standards established by the first book. The two volumes together present the most comprehensive treatment of air base ground defense yet published. Colonel Caudill and his coauthors rightly remind readers that the USAF generates combat power from air bases. If air bases are not secure, neither is American airpower.*

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ISBN: 978-1-58566-241-8

