



A US Air Force Strategy for Africa

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Major, USAF



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Foreword

With the creation of United States Africa Command and the resurrection of Seventeenth Air Force, some Airmen responded with trepidation. The African continent seemed truly unknown territory, and many believed that the United States had little prior experience conducting flight operations in the region. But as Maj Paul F. Spaven points out, such concerns are largely groundless. Airmen have been operating in Africa for decades, and rich possibilities exist for crafting an air strategy to serve US interests in the region. This groundbreaking study offers a thorough analysis of the context for USAF strategy making in Africa, followed by a synthesis of what that strategy might look like. The analysis occurs in three chapters, covering the geography of Africa, the complex and varied history of US- and European-air operations in the region, and current US activities and strategic guidance pertaining to Africa. The synthesis occurs in three chapters, covering the conditions the USAF can expect to encounter in Africa, a discussion of how Airmen should think about the area of responsibility, and an examination of the ends, ways, and means of a proposed African strategy.

The study concludes that a viable Air Force strategy in Africa is properly based on modest “ends” that reflect US national interests on the continent that are themselves limited in scope. These modest ends require that correspondingly limited “ways” and “means” be applied in order for the entire Air Force approach to remain balanced. The ways should focus on missions that create conditions for African states to solve their own security issues, thereby increasing their legitimacy. The means should focus on building the capacity for long-term operations in Africa with access to airfields, a force structure that includes strike and transport aircraft specialized for the region, an Air Force organization tailored to the peculiar demands of the continent, and specialized cultural training for Airmen. Spaven concludes that “only by accepting the risk of stepping beyond tactical and operational thinking can the Air Force do great things for the poorest of continents.”

A US Air Force Strategy for Africa was originally written as a master’s thesis for the Air University’s School of Advanced Air and Space Studies (SAASS) at Maxwell AFB, Alabama. The the-

FOREWORD

sis was sponsored by Maj Gen Ronald R. Ladnier, the first commander of the reconstituted Seventeenth Air Force, and was directed by Dr. James M. Tucci of the SAASS faculty. Major Spaven's thesis was the recipient of the Airlift/Tanker Association's 2008 "Global Reach" Award. SAASS is pleased to partner with the Air Force Research Institute and Air University Press to publish it as a Drew Paper, thereby making it available to a wider audience.

A handwritten signature in black ink, appearing to read 'R. Muller', with a stylized, cursive script.

RICHARD R. MULLER
Professor of Military History and Associate Dean
USAF School of Advanced Air and Space Studies

About the Author



Maj Paul F. Spaven

Maj Paul F. Spaven was commissioned from the United States Air Force Academy in 1995 where he received a bachelor's degree in electrical engineering. Graduating from Undergraduate Pilot Training in 1996, he went on to fly F-15Cs in Okinawa, Idaho, and Florida. Major Spaven is a senior pilot with over 1,600 flying hours. He holds a master's degree in management from Troy University and a master's degree in command, control, computers, communications, and intelligence system technology from the Air Force Institute of Technology. He graduated from the School of Advanced Air and Space Studies in June 2008. Major Spaven is currently the strategy division chief for the 612th Air and Space Operations Center, Davis-Monthan AFB, Arizona.

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I would like to thank several people whose support made this study possible. First, Lt Col James Mueller from the Secretary of the Air Force International Affairs Office provided constant feedback on my ideas and a glimpse into the real world of security cooperation. Next, Maj Jean-Phillipe Peltier and Maj Thomas Meer of the USAF Special Operations School volunteered their time and writings to build my understanding of Africa. Dr. Stephen Burgess of Air University helped frame my approach to this study. Maj Mike Kardoos from the United States Joint Forces Command was another source of strategic insight. From US Southern Command, Maj Patrick Weeks, Maj John Manning, and Lt Cdr Thomas Wagener taught me about ongoing efforts to build partner capacity in their area of responsibility. Col Blake Lindner and Lt Col Brian Conant from United States Air Forces in Europe provided invaluable insight on their efforts to organize USAF support for United States Africa Command (AFRICOM). Finally, thanks to Maj Gen Ronald Ladtner for sponsoring this research—I hope it adds some value to his endeavors to establish and command Seventeenth Air Force as the Air Force component of AFRICOM.

From the School of Advanced Air and Space Studies, I owe many thanks to my adviser, Dr. James Tucci, and my reader, Lt Col John Terino, for their guidance, support, and good sense of humor. Though not formally members of my thesis committee, Dr. James Kiras and Dr. John Sheldon were most generous with their considerable knowledge of Africa. To all my instructors this year, I extend a hearty thanks for broadening my mind, even if it occasionally felt like it was about to burst. To my fellow students, thank you for making this year both memorable and enjoyable. Regarding this study, I am especially grateful to my classmates Maj Charles Plummer, Maj Bayne Meeks, Maj Marcel Benoit, and Wing Commander Tim Below, Royal Air Force, for being unpaid, but deeply appreciated, informal research assistants.

Last and most importantly, I thank my wife, Michelle, for her incredible love and support during this year. Michelle, you make everything I do worthwhile.

Introduction

The creation of United States Africa Command (AFRICOM) began the process of resolving the complicated planning and action environment that existed when European Command (EUCOM), Central Command, and Pacific Command shared responsibility for American military interests in Africa.¹ It also created the opportunity for fresh thinking about how the United States engages with the countries of Africa. Not surprisingly, a vigorous debate has emerged regarding the creation of AFRICOM. Some view it as a diabolical tool of American imperialism. Others see it as a logical evolution in US engagement with the continent. While the debate rages on, the Air Force must turn a dispassionate eye to the future and shape its African strategy.

That strategy has a sound basis upon which to build—the USAF's long history of operating in Africa. The continent's combination of great distances, poor terrestrial transport architecture, recurring civil unrest, and proclivity for humanitarian disasters has made airpower an especially useful means of pursuing US national interests there. The challenge for the Air Force going forward is twofold—continue its tradition of service in Africa while striving to improve that service in light of current realities on the continent. The creation of AFRICOM presents an opportunity to effect that improvement by reconsidering Air Force strategy and its interaction with other instruments of national power, as well as other foreign organizations with an interest in Africa. Developing a new USAF strategy for Africa should proceed in two phases: an analysis of the airpower context and then a synthesis of Air Force ends, ways, and means.

Analysis of the context in Africa begins with a look at the continent's physical and human geographies. Next, a thematic treatment of the history of British, French, and American airpower in Africa yields lessons with continuing relevance. Third, this paper considers current US government operations and strategic guidance for Africa. The guidance reviewed includes the national security, defense, and military strategies of the United States. In sum, the analysis presents geographic, historical, and policy reasoning in support of using airpower to pursue US national interests in Africa.

INTRODUCTION

With the analysis complete, this study moves to the synthesis of proposals for USAF strategy in Africa. Since this creative phase rests on anticipating future conditions in Africa, it begins with a discussion of what political, economic, and military conditions may exist in the near term. Next, a few theories of strategic thought are considered to help guide the synthesis. This thesis concludes with an Air Force strategy for Africa consisting of balanced ends, ways, and means.

Notes

1. US Africa Command, Public Affairs Office, "Fact Sheet." When created on 1 October 2007, AFRICOM was a subunified command under EUCOM. In October 2008, AFRICOM transitioned to a unified command.

Chapter 1

The Geography of Africa

Given Africa's immense size and long history, any analysis of its geography for Air Force strategy runs the risk of superficiality. Acknowledging that risk, this study begins with a survey of the physical and human geographies of Africa. To cope with such a huge area, the study references African regions that the United Nations (UN) has identified:

- Eastern Africa—Burundi, Comoros, Djibouti, Eritrea, Ethiopia, Kenya, Madagascar, Malawi, Mauritius, Mayotte, Mozambique, Réunion, Rwanda, Seychelles, Somalia, Uganda, United Republic of Tanzania, Zambia, and Zimbabwe
- Middle Africa—Angola, Cameroon, Central African Republic, Chad, Congo, Democratic Republic of the Congo, Equatorial Guinea, Gabon, and São Tomé and Príncipe
- Northern Africa—Algeria, Egypt, Libyan Arab Jamahiriya (Libya), Morocco, Sudan, Tunisia, and Western Sahara
- Southern Africa—Botswana, Lesotho, Namibia, South Africa, and Swaziland
- Western Africa—Benin, Burkina Faso, Cape Verde, Côte d'Ivoire, Gambia, Ghana, Guinea, Guinea-Bissau, Liberia, Mali, Mauritania, Niger, Nigeria, Saint Helena, Senegal, Sierra Leone, and Togo¹

Physical Geography

The dominant physical feature of Africa is the Sahara Desert. Its ancient and ongoing impact on everything on the continent is easily overlooked when viewing only the political borders on a map. Indeed, this vast and expanding wasteland has a more profound impact on Africa as a whole than any combination of state borders. The Sahara is the reason most literature on Africa speaks of two very different Africas—North Africa and sub-Saharan Africa. Despite this natural break, Africa Command

(AFRICOM) will deal with both sides of the Sahara, and so must an Air Force strategy.

The next notable feature of Africa is its size, but most cartographic projections of the globe fail to represent Africa's extent relative to the rest of the world. The land area of Africa can accommodate the combined areas of North America and Europe; it encompasses 29,805,494 square kilometers to the United States' 9,161,923 square kilometers, a ratio of 3.25 to 1. Airmen already impressed with the expanse of the United States or Europe are rightly humbled by the immensity of Africa. In aircrew terms, table 1 shows some relevant flight times.² The C-17A's range at maximum normal payload is global with in-flight refueling, and its cruise airspeed is 450 knots true airspeed (KTAS). The C-130J's range is 1,800 nautical miles (NM), with a cruise airspeed of 362 KTAS.³

Across such a huge area, large variations in terrain are inevitable. It ranges from the aforementioned Sahara Desert that covers approximately nine million square kilometers, nearly a third of the entire continent, to the southern edge of the Sahara, where desert gives way to grassland called the Sahel. This area acts as a "coastline" on the edge of the Sahara, hosting several concentrations of people. Continuing south leads to the lush jungles of the Congo River basin and a return to the large savannas beyond. Another important feature of Africa is its major river systems. In addition to the Congo that snakes through middle Africa, the Nile River's historic importance continues in northern and eastern Africa. In western Africa, many ethnic, linguistic, and economic divisions follow the banks of the Niger. The importance of rivers as a means of transport is heightened by the dearth of road and rail networks, as is discussed below.

A continent spanning roughly 70 degrees of latitude is, unsurprisingly, home to a dramatic range of climates. The Sahara's arid expanse is contained to the south by the lush river valleys of western and middle Africa. The mountainous plateaus of eastern Africa are cool and dry in comparison. Africa's wide range of terrain and climate has led to another challenge for an air force operating there—malaria. The impact of malaria had a profound impact on European operations in Africa, which "had been defeated before the nineteenth century as much by dis-

Table 1. Relevant flight distances and times

<i>Origin (ICAO Identifier)^a</i>	<i>Destination (ICAO identifier)</i>	<i>Distance (NM)</i>	<i>Aircraft</i>	<i>Flight duration (hours:minutes)</i>
Pope AFB, North Carolina (KPOB)	McChord AFB, Washington (KTCM)	2,060	C-17A	4:50
Pope AFB, North Carolina (KPOB)	Ramstein AB, Germany (ETAR)	3,722	C-17A	8:31
Addis Ababa, Ethiopia (HAAB)	Monrovia, Liberia (GLRB)	2,926	C-17A	6:45
Ramstein AB, Germany (ETAR)	Addis Ababa, Ethiopia (HAAB)	2,885	C-17A	6:40
Ramstein AB, Germany (ETAR)	Monrovia, Liberia (GLRB)	2,747	C-17A	6:21
Pope AFB, North Carolina (KPOB)	Monrovia, Liberia (GLRB)	4,140	C-17A	9:27
Tunis, Tunisia (DTTA)	Cape Town, South Africa (FACT)	4,275	C-17A	9:45
Pope AFB, North Carolina (KPOB)	Ascension Island (FHAW)	4,470	C-17A	10:11
Ascension Island (FHAW)	Abuja, Nigeria (DNAA)	1,647	C-130J	4:48
Ascension Island (FHAW)	Monrovia, Liberia (GLRB)	886	C-130J	2:42
Camp Lemonier, Djibouti (HDAM)	Nairobi, Kenya (HKJK)	857	C-130J	2:37
Addis Ababa, Ethiopia (HAAB)	Abuja, Nigeria (DNAA)	1,868	C-130J	Exceeds maximum range

Adapted from author's original work and "C-17 Globemaster III" (updated October 2008) and "C-130 Hercules" (updated September 2008), fact sheets, *Air Force Link*, <http://www.af.mil/factsheets>.

^aInternational Civil Aviation Organization

ease as by Africans." The region of western Africa was so infested with malaria during early colonization that it was called the "white man's grave."⁴ Although modern medicine allows nonindigenous people to operate in regions rife with malaria, specifically western and middle Africa, the logistical burden of providing medicine and sanitation to preclude widespread infection will remain a factor for any military operation. Beyond the operational hindrance of malaria, the Air Force must consider the disease's impact on the continent: approximately

900,000 deaths per year, mostly children and pregnant women, and annual health and productivity costs of \$12 billion.⁵ This variability in climate will complicate air operations in Africa, while the disease profile of the continent makes humanitarian missions there more likely.

Natural Resources

Africa's natural resources are important to its growth as well as to the economies of many other countries. From a strategic perspective, it is helpful to divide these resources into two broad categories: energy and minerals. Though recent increases in the cost of oil have attracted great attention from many quarters, Africa's mineral wealth is also important to America. Two different perspectives, one external and the other internal to Africa, depict the importance of both categories of natural resources. The first is from the US view of importing resources vital to its economy. The second is from the view of African states seeking to profit from their natural resources. The former points to US efforts to secure resources it imports from Africa, while the latter hints at US intervention in conflict on the continent.

Oil is the first African resource that typically comes to mind, a notoriety driven by recent price increases. Comparing daily US consumption of petroleum to the amount it imports from Africa allows an appraisal of its importance to America. Based on recent data from the US Department of Energy, the United States consumes 20,698,000 barrels of petroleum per day. Of this, 13,942,000 barrels (67.4 percent) are imported.⁶ From the African continent, specifically, the United States imports 14.3 percent of its total daily consumption of oil. The United States does not currently import much natural gas from Africa; that data is included in table 2 for the purpose of comparison to oil imports.

The bulk of African oil exports to the United States comes from Nigeria, Algeria, and Angola. Their current position as sources of America's oil in the world is shown in table 3.

Though Africa's mineral resources have decreased in importance relative to oil, they remain crucial to many aspects of the global economy. This importance is due to the fact that "Africa

Table 2. US energy imports

<i>Continent</i>	<i>African region</i>	<i>Share of US oil imports Jan 2008</i>	<i>Share of US natural gas imports Jan 2008</i>
Africa		21.2%	0.8%
	Eastern Africa	0.0%	0.0%
	Middle Africa	6.6%	0.0%
	Northern Africa	5.5%	0.8%
	Southern Africa	0.0%	0.0%
	Western Africa	9.0%	0.0%
Antarctica		0.0%	0.0%
Asia		23.0%	0.0%
Australia		0.4%	0.0%
Europe		6.5%	0.0%
North America		33.8%	99.2%
South America		15.1%	0.0%

Adapted from "U.S. Imports by Country of Origin: Total Crude Oil and Products," Energy Information Administration, Department of Energy, http://tonto.eia.doe.gov/dnav/pet/pet_move_impcus_a2_nus_ep00_im0_mbb1_m.htm.

Table 3. Top sources of US oil imports

<i>Top six global oil exporters to the United States</i>	<i>Percentage of daily US consumption</i>
Canada	12.9%
Saudi Arabia	7.5%
Mexico	6.5%
Nigeria	5.9%
Algeria	3.2%
Angola	2.9%

Adapted from "World Petroleum Consumption, Most Recent Annual Estimates, 1980–2007," Energy Information Administration, Department of Energy, <http://www.eia.doe.gov/emeu/international/RecentPetroleumConsumptionBarrelsperDay.xls>.

is richly endowed with mineral reserves and ranks first or second in quantity of world reserves of bauxite, cobalt, industrial diamond, phosphate rock, platinum-group metals (PGM), vermiculite, and zirconium." Mineral resources are also vital to many African economies since "for many of these countries, mineral exploration and production constitute significant parts of their economies and remain keys to future economic growth."⁷ A full examination of the importance of mineral resources to African countries would be quite detailed, but the density of

major mineral facilities in Africa gives an idea of the industry's importance on a regional basis (see table 4).

A full analysis of Africa's natural resources is beyond the scope of this argument, but this brief treatment shows the importance of the topic for strategic planners. The United States and, to a growing degree, China receive a large share of their energy from middle, northern, and western Africa. Furthermore, most African states depend on natural resources as an economic engine. This is particularly true in southern Africa. The implications of Africa's natural resources for Air Force strategy are covered in chapter 4.

Physical Infrastructure

Though every form of military power relies on physical infrastructure such as storage, maintenance, and transport facilities to operate most effectively, airpower is perhaps most beholden to it. Any long-term airpower presence in Africa requires airfields and means of aerial navigation, though satellite navigation has replaced some land-based aids to navigation. The ability to provide continual, cost-effective awareness of other air traffic, useful for issues of both sovereignty and safety, is currently available only by means of a few ground-based radar sites in Africa. Although low-cost means of maintaining awareness of aircraft are available, they rely on cooperative aircraft—an invalid assumption when dealing with air sovereignty.⁸ For the near future, Africa's airspace will remain largely unmonitored. Thus, from the Airman's perspective, operations in Africa are similar to those in a series of widely dispersed islands:

Table 4. Mineral facilities in Africa

<i>Continent</i>	<i>African region</i>	<i>Number of mineral facilities</i>	<i>Concentration of mineral facilities per land area relative to Africa</i>
Africa		1,060	100.0%
	Eastern Africa	265	120.4%
	Middle Africa	135	58.5%
	Northern Africa	249	83.5%
	Southern Africa	285	299.2%
	Western Africa	126	58.4%

Adapted from US Geological Survey, US Department of the Interior, 2005 Minerals Yearbook: Africa (Washington, DC: Government Printing Office, 2007).

a few locations that can support aviation separated by vast areas of which little is known. While this would impinge large-scale or long-duration strike operations in Africa, the lack of aviation infrastructure would not drastically affect limited applications of violent force, such as B-2 bomber or cruise-missile strikes. The same is true of long-range intelligence, surveillance, and reconnaissance (ISR) missions performed by platforms such as the U-2 and Global Hawk. If the US Air Force wants to conduct any other air operations in Africa, though, infrastructure on the continent takes on great significance for airpower. One way to assess the state of that infrastructure is along three facets: roads, rails, and airfields.

A review of airfields seems natural for a discussion of Air Force strategy, but the inclusion of road and rail is less intuitive. The reason for this concern over terrestrial infrastructure is twofold: the paucity of road and rail in Africa increases the value of aircraft for mobility and will limit the ability to connect airfields with other transportation nodes.⁹ The first case will drive added requirements for air mobility in Africa while the second will frustrate the effectiveness of it. Table 5 compares the world's road networks (by continent and subcontinent), while table 6 is a similar comparison of the world's rail networks.

Table 5. Global road networks

<i>Continent</i>	<i>African region</i>	<i>Km^a per square km land area relative to North America</i>	<i>Km per capita relative to North America</i>
Africa		21.7%	15.7%
	Eastern Africa	27.8%	13.2%
	Middle Africa	15.3%	19.3%
	Northern Africa	12.9%	12.0%
	Southern Africa	47.4%	56.3%
	Western Africa	23.2%	11.9%
Antarctica		0.0%	0.0%
Asia		64.0%	17.0%
Australia		30.9%	260.5%
Europe		286.0%	64.6%
North America		100.0%	100.0%
South America		42.8%	44.5%

Adapted from Central Intelligence Agency, 2008 World Factbook, <https://www.cia.gov/library/publications/the-world-factbook/index.html>.

^aKilometers

Table 6. Global rail networks

<i>Continent</i>	<i>African Region</i>	<i>Km per sq km land area relative to North America</i>	<i>Km per capita relative to North America</i>
Africa		21.8%	15.7%
	Eastern Africa	23.4%	11.1%
	Middle Africa	12.6%	15.9%
	Northern Africa	17.5%	16.3%
	Southern Africa	70.2%	83.3%
	Western Africa	14.5%	7.5%
Antarctica		0.0%	0.0%
Asia		55.1%	14.6%
Australia		38.9%	328.7%
Europe		368.6%	83.3%
North America		100.0%	100.0%
South America		39.0%	40.5%

Adapted from Central Intelligence Agency, 2008 World Factbook, <https://www.cia.gov/library/publications/the-world-factbook/index.html>; and Air Mobility Command (AMC), Airfield Suitability and Restrictions Report (Scott AFB, IL: HQ AMC/A3AS, 29 January 2008). The information used in this paper is released with the permission of HQ AMC/A3AS.

Table 7 shows the dearth of aviation infrastructure in Africa in terms of total numbers of airfields and airfields that can accommodate C-130 transports. Although the Air Force operates other transport aircraft capable of operating in more places than the C-130, it is the standard of comparison used herein due to

Table 7. Global airfields

<i>Continent</i>	<i>African region</i>	<i>Airports per square km relative to North America</i>	<i>C-130 airfields per square km relative to North America</i>
Africa		15.9%	15.8%
	Eastern Africa	25.6%	19.1%
	Middle Africa	12.9%	8.8%
	Northern Africa	8.1%	16.2%
	Southern Africa	43.8%	17.7%
	Western Africa	7.4%	18.5%
Antarctica		0.3%	0.7%
Asia		15.9%	25.7%
Australia		7.1%	7.0%
Europe		85.5%	179.3%
North America		100.0%	100.0%
South America		67.3%	22.1%

Adapted from Central Intelligence Agency, 2008 World Factbook, <https://www.cia.gov/library/publications/the-world-factbook/index.html>; and Air Mobility Command, USAF Airfield Suitability and Restrictions Report.

its prevalence. The difference in C-130 airfield density, ranging from approximately 5:1 to 10:1 in favor of North America, is especially stark when the unsettled areas of Alaska, Canada, and Mexico are considered. Africa is truly a vast ocean of undeveloped areas with few aerial ports.

The relative dearth of African infrastructure is clear in all three categories. Furthermore, the state of economic development on the continent points to continued backwardness. This means that Airmen accustomed to operating in better-developed regions of the world will find planning for all types of air operations more complicated in Africa.

Human Geography

The theme of Africa's human geography is a profoundly sorrowful one. Poverty, hunger, and persistent tribal violence have come to typify African history in recent decades. Though the continued growth of democratic forms of government on the continent is a sign of hope for the future, the current reality is bleak. The Human Development Index, a composite index of 175 United Nations member states and two nonstates, divides all 177 entities into three categories of human development: high, medium, and low.¹⁰ The entire category of low human development, entities 156 through 177 in the rank-ordered index, consists of African countries. Furthermore, only three African states make the high human development category.¹¹ With that sobering snapshot in mind, this chapter moves on to consider African ethnicity and tribalism, language, religion, and politics.

Ethnicity and Tribalism

Many scholars believe that eastern Africa, in an area near modern Kenya, is the evolutionary cradle of modern man.¹² From this common origin, the physical geography of Africa played a large role in the development and continuance of distinct ethnic identities among its peoples. Ethnicity in Africa has become a common explanation for violence there, but this is the result of postcolonial nationalist rhetoric more than hatred among ethnic groups. Furthermore, "no state . . . is devoid

of ethnic influence.”¹³ Every country in the world contains one or more distinct ethnic groups, often with profound differences that lead to conflict. This raises the question of what, if any, aspect of African ethnic groups has contributed an exceptional share of instability to the region. On a continental scale, the culprit is tribalism.

The large tribal division of modern Africa arose primarily because of European colonization. In an effort to manage them better, colonial leaders often lumped disparate ethnic groups together into large tribes. This simplified running large colonies with small European staffs, and Africans soon realized that conforming to the tribal classifications eased their dealings with Europeans.¹⁴ However, like the state borders imposed by Europeans, the composition of tribes and the power accrued by their leaders created a situation ripe for conflict. This dysfunctional tribal system still existed when African nations gained their independence and was unsuited to the challenges of sovereign statehood. It was thus a ready scapegoat for the many failures of recently independent African states.

Despite the complicated past of Africa's ethnic groups and tribes, they remain a powerful force. That power is not necessarily a bad thing, but like any other means of political mobilization, ethnicity can be misused. Nevertheless, “in each country, different issues act as the primary point of mobilization. Nationalism, class, religion, and ideology are all favoured rallying cries gathering individuals together, enabling them to make their political demands to the state, and to society as a whole. So why should not ethnicity be a legitimate tool enabling groups to aggregate demands and mobilize politically?”¹⁵ Indeed, the Air Force should expect to see ethnicity and tribalism join these other tools as common focal points of political power. The fact that they are less common rallying points in Western culture will make discerning their impact even more challenging.

Language

Like the rest of the world, Africa is home to a dizzying array of local dialects often unintelligible to foreigners. Unlike much of the world, though, Africa's colonial experience brought several European languages to the continent, making communica-

tion somewhat easier. The Constitutive Act of the African Union (AU) reflected this by stating that “the working languages of the Union and all its institutions shall be, if possible, African languages, Arabic, English, French, and Portuguese.”¹⁶ A later amendment to the AU Constitutive Act replaced that provision with, “The official languages of the Union and all its institutions shall be Arabic, English, French, Portuguese, Spanish, Kiswahili and any other African language.”¹⁷ The specification of Kiswahili, the native language of the Swahili people of eastern Africa, is an example of the AU’s continuing interest in preserving indigenous African culture while retaining ties to its strongest outside influences.¹⁸ Such effort at consolidation, though, runs counter to Africa’s linguistic diversity.

Given the long history of humankind in Africa, such diversity is unsurprising. What is impressive though is the magnitude of it; Africa is home to 2,092 languages in active use.¹⁹ Northern Africa is dominated by the Arabic language brought by Muslim conquerors in the seventh and later centuries, while many descendants of indigenous Africans still use other members of the Afro-Asiatic language family, especially Berber. Like the sparse terrain of the Sahara, the relative uniformity of language in northern Africa changes dramatically when the Sahel is crossed traveling south. The vast majority of Africa’s linguistic diversity lies along a region straddled by 10° north latitude and the equator that runs through eastern, middle, and western Africa. The main language family in this area is Niger-Congo, which includes Swahili. South of the equator, including southern Africa and parts of middle and eastern Africa, language diversity lessens somewhat. In addition to the Niger-Congo family of languages, this area is home to the Khoisan family of languages.²⁰

Therefore, despite AU efforts to specify dominant languages in Africa in the name of improved communication, diversity of language will persist. Individual countries in Africa still designate their own official languages. In addition to policy influences on language in Africa, poor transportation and communication infrastructures will continue to restrict interaction between language groups. The effect is heightened by the lack of formal education offerings for many Africans. The Air Force can therefore expect a diverse linguistic environment in Africa, and it may have difficulty interacting directly with many in-

indigenous populations. The influence of colonization, though, means the language barrier, at least with ruling elites, is lower than in many other regions of the world. Together, these issues make efforts to operate along the breadth of African languages both difficult and of dubious value.

Religion

Africa's religious landscape is no less diverse than its linguistic one. Though some generalizations are possible, the same factors that drive many different ethnic and language groups also splinter Africa into numerous religious orientations. The three dominant religious categories, though, are indigenous, Christianity, and Islam. The following is a brief overview of each region:

- Eastern Africa—Predominantly Christian
- Middle Africa—A mix of indigenous and Christianity
- Northern Africa—Overwhelmingly Sunni Islam
- Southern Africa—Predominantly Christian
- Western Africa—Mostly Christian and Muslim²¹

Africa's indigenous belief system evolved long before the time of Christ. Its dominant feature is that native religion is not a separate aspect of life but rather along with "culture, politics, and society [it was] part of a seamless whole and no part of it could stand on its own." In fact, most African languages lack a word for religion; the closest linguistic concepts translate as "custom" or "tradition." This tradition believes that "the universe is characterized by order, not chaos. There are forces—religious, moral, mystical, and natural (in nature) that are observed to be at work. Between all that exists, there is an interconnectedness and a dynamic correspondence among these forces, whether visible or not."²² The holistic quality of indigenous African beliefs has suffused African Christianity and Islam with many aspects of continental tradition. This has the potential to create ideological conflict between African adherents to those religious imports and more orthodox adherents in the rest of the world. Such conflict may also play on a

global stage, as the African diaspora has taken many of their indigenous beliefs with them to foreign shores.²³

Christianity has gained tremendous influence in Africa in recent history. "During the twentieth century, the number of Christians in Africa rose from an estimated 10 million to 350 million, a dramatic increase from less than 10 percent to nearly 50 percent of the continent's population. It is likely that at some point during the twenty-first century, more Christians will be living in Africa than on any other continent."²⁴ This population growth has occurred largely outside northern Africa, although small communities descended from ancient Christianity still exist there. In the rest of Africa, the explosion of the faith is due largely to the experience of European colonization.²⁵ This identification with the detested memory of colonial rule could make the Christian community an easy target for political agitators.

Islam's strongest presence on the continent is in northern Africa. Beginning with the Muslim expansion of the seventh century, this area developed into an overwhelmingly Sunni enclave. Salafist doctrine later emerged in northern Africa in response to European cultural encroachment during colonization. Salafi movements such as the Muslim Brotherhood in Egypt and the Islamic Salvation Front in Algeria sought a return to doctrinal purity as a way to preserve its culture.²⁶ Though northern African states have adapted to the often-disruptive nature of these sects, western Africa seems particularly prone to their agitation, given the close proximity of extensive indigenous and Christian communities. Even where no interfaith conflict exists, revivalist Islam poses a challenge to traditional state sovereignty "in some African countries like the Sudan, Nigeria, and to a lesser extent South Africa."²⁷

Politics

Before widespread European colonization at the end of the nineteenth century, several large but nonhegemonic civilizations arose and disappeared in Africa. "Even when state formation did take place in Africa, the result was very different from what defines a state today. Pre-colonial Africa did not have permanent, precisely delineated boundaries. Power broadcast from the centre of a kingdom would dissipate the further a village

was from the capital, and would ebb and flow according to the fortunes of the central administration."²⁸ Thus, African history did not provide a firm tradition of state borders upon which to set the arbitrary lines of colonial demarcation.

The modern political landscape of Africa consists of several types of government. Forty-one countries have republican forms, six are democratic, and the remaining countries have other forms.²⁹ Unfortunately, this simple classification conceals the incredible complexity of African states. The dominant republic form admits many variations across the continent—from heavy Sunni Islam influence in northern Africa, to thinly concealed dictatorships, to genuine representative governments. In order to understand this diverse environment, strategists can use the simple constructs of the state, civil society, and external influences to understand African politics.³⁰

States are the embodiment of a country. They include the instruments of government power, the purpose of which is to exert authority over a delimited area. This concept sounds familiar to Western ears accustomed to hegemonic states that have evolved over centuries. In Africa though, the idea of modern states was a transplant of the colonial era. Like an ill-conceived organ transplant, once independence removed the life support provided by former European masters, the transplant ran into difficulty. The nonhegemonic tradition of Africa that underlay the tribal colonial construct simply could not support modern state structures. Thus, the African body politic rejected them like a mismatched organ. This has caused many African states to rely on either force or patronage, rather than legitimacy in the eyes of the people, as the source of their power.³¹

This rejection did not prevent African states from trying to exert control over their people. In the process, though, civil society was often alienated from the state, a condition that continues today across much of the continent.³² The flight of educated Africans from the region to join the burgeoning diaspora is evidence of this alienation. This civil society is vital to the long-term viability of African states and thus an important focus of American efforts to strengthen them. The introduction of American interests raises the issue of external interests with respect to Africa.

External interests are “foreign governments, international organizations and transnational corporations that interact with African states and civic organizations.”³³ Prominent examples in Africa include the UN, Red Cross, World Bank, and extensive political and economic organizations created by former colonizers, especially the British, French, and Portuguese. A familiar theme of both endogenous and exogenous African rhetoric is that external interests are to blame for the majority of Africa’s problems. This is understandable given the long history of European colonization of Africa, a history that still lives in the memories of many Africans. The power of living memory to affect current events should not be ignored, especially events as tumultuous as national liberation. Indeed, African leaders are quick to levy charges of neocolonialism on foreign actors when it suits their purpose. That purpose can range from sincere concern for the sovereignty of their state and the welfare of their people to a cynical application of a favorite lever of populist rhetoric to shore up their own legitimacy. In either case, any foreign power must be sensitive to this rallying point of resistance to its actions in Africa. At the tactical level, Air Force members operating in Africa can expect to interact with numerous national, supranational, and nongovernmental organizations—most of them with ends, ways, and means dramatically different from the USAF.

Notes

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

1. “Composition of Macro Geographical (Continental) Regions.” There are many other ways to classify different areas in Africa, but most systems have membership that is neither comprehensive nor mutually exclusive for all African states. Therefore, this study uses the United Nations’ system.
2. Distances and times are based on great-circle navigation, at the cruise airspeeds indicated, and include a 15-minute margin of error. See appendix A for a description of the purpose and methodology behind this study’s tables.
3. “C-17 Globemaster III”; and “C-130 Hercules.”
4. Omissi, *Air Power and Colonial Control*, 3.
5. “We Can’t Afford to Wait.”
6. “U.S. Imports by Country of Origin”; and “World Petroleum Consumption.”
7. US Geological Survey, *2005 Minerals Yearbook: Africa*, 1.1.

8. Examples include the modes 1, 2, and 3 transponder systems and the Traffic Collision Avoidance System.

9. Such nodes include other airfields, seaports, and population centers.

10. Watkins, *Human Development Report 2007/2008*, 221–27. The two nonstates are the Hong Kong Special Administrative Region of China and the Occupied Palestinian Territories. “The human development index (HDI) is a composite index that measures the average achievements in a country in three basic dimensions of human development: a long and healthy life; access to knowledge; and a decent standard of living. These basic dimensions are measured by life expectancy at birth, adult literacy and combined gross enrollment in primary, secondary, and tertiary education, and gross domestic product (GDP) per capita in Purchasing Power Parity in US dollars (PPP US\$), respectively.”

11. *Ibid.*, 229–32. Those three countries are Seychelles (no. 50), Libya (no. 56), and Mauritius (no. 65).

12. Manica, “Effect of Ancient Population Bottlenecks,” 346.

13. Thomson, *Introduction to African Politics*, 59.

14. *Ibid.*, 61–64.

15. *Ibid.*, 64.

16. *Constitutive Act of the African Union*, art. 25.

17. *Protocol on Amendments*, art. 11, 5.

18. Swahili is a result of the influence of early Arab traders in Eastern Africa. It is “based on a synthesis of Arabic and Bantu.” Juergensmeyer, *Oxford Handbook of Global Religions*, 532.

19. Gordon, *Ethnologue: Languages of the World*. This represents 30 percent of the 6,912 living languages in the world.

20. *Ibid.*

21. Adapted from Central Intelligence Agency, *2008 World Factbook*.

22. Juergensmeyer, *Oxford Handbook of Global Religions*, 537, 539.

23. *Ibid.*, 533.

24. *Ibid.*, 349.

25. *Ibid.*, 350.

26. *Ibid.*, 419–21.

27. *Ibid.*, 430.

28. Thomson, *Introduction to African Politics*, 8–10.

29. Adapted from Central Intelligence Agency, *2008 World Factbook*. The other forms include transitional governments in Eritrea and Somalia, monarchies in Morocco and Swaziland, Libya’s “state of the masses,” and the unresolved legal status of Western Sahara.

30. For definitions of the terms *state* and *civil society*, see the glossary.

31. Thomson, *Introduction to African Politics*, 4.

32. *Ibid.*, 2–8.

33. *Ibid.*, 6.

Chapter 2

Airpower in Africa Lessons from the Past

The scope of this study's historical survey is restricted to the French, British, and American experiences in Africa. Furthermore, it addresses only applications of military airpower outside large-scale conflict. Most notably, this eliminates both world wars, the Algerian War of Independence, and Israeli airpower exploits in Egypt from consideration. This choice was motivated for reasons beyond that of brevity. Specifically, the experiences of Great Britain, France, and the United States in Africa share similarities with future American involvement there: foreign powers located a great distance from Africa, pursuing national interests in Africa that are not immediately vital to their national survival, who saw airpower as a cost-effective means of accomplishing their desired ends. This brief survey thus rests on the premise that these historical accounts are valid analogies for future USAF operations in Africa.

Royal Air Force in Africa

The Royal Air Force (RAF) has strong historical ties to Africa, which began with Italian employment of military airplanes in northern Africa in 1911. That Italian experience was "the final factor in forcing the British government's hand in reorganizing the air service." The Royal Flying Corps (RFC), which together with the Royal Naval Air Service was the immediate predecessor to the RAF, was founded in 1912 in large part because "the efficiency of the aeroplane for purposes of military reconnaissance has been proved both in foreign manoeuvres and in actual warfare in Tripoli."¹

Given the influence African military aviation events had on the formation of the RFC and British colonial interests there, it is not surprising to find British airmen were engaged early in Africa. In 1914 Winston Churchill "commissioned a report on the possible use of aircraft in Somaliland," a use of airpower

that was delayed until after World War I. Airplanes were used by the British to exert power in Egypt from 1916 through 1921, where they “delivered mail, relieved remote garrisons, patrolled railway lines, and dropped proclamations.” The RAF saw this experience as proof that Britain needed a permanent airpower presence to control the large, thinly populated lands of British territories in Africa. It also served as a substitute for British troops south of Sudan, where the main ground instrument of control remained locally recruited personnel. Thus, “aircraft offered highly mobile, fast instruments of warning and retribution that were generally invulnerable to lightly armed opponents” and provided what the British governor-general of Sudan called “swift agents of government.”²

The idea of substituting airpower for land forces in colonial administration arose during WWI when the RAF’s chief of Air Staff advocated it as a means to release local African troops for service in the European theater in 1918.³ Britain first implemented this idea between 1919 and 1920 in both Sudan and British Somaliland. With WWI over and the need for ground troops reduced, the argument for substituting airpower for land forces was recast as a means of economizing financial, rather than human, resources.⁴ As a means of protecting the newly won independence of his RAF, Sir Hugh Trenchard, chief of the Air Staff, sought to use airpower alone in Somaliland, asking, “Why not leave the whole thing to us? This is exactly the type of operation which the R.A.F. can tackle on its own.”⁵ The operation was a resounding success and crushed the rebellion of the “Mad Mullah,” Sayyid Mohamed Abdille Hasan, in only three weeks.⁶ RAF thinking on the topic developed three terms for air activity throughout the empire in this time period:

- Air Policing—“The use of aircraft to uphold the internal security of a state.”
- Air Control—“Occurred when the Air Ministry assumed responsibility for the defence of a particular region of the Empire.”
- Air Substitution—“Occurred when aircraft replaced other forms of military force in imperial defence. The use of air-

craft instead of ground troops to police a territory was one form of substitution.”⁷

In another effort against Islamic fundamentalists, the RAF was active in Sudan from 1924 until 1927 and chafed under what it perceived as too much army influence on its operations there. Since the success of the Somaliland operation, after which Churchill and the British government as a whole supported the continued independence of the RAF, this resistance to reassuming a supporting role was understandable.⁸ Unfortunately, this interservice squabbling led to continued rivalry between the army and air force under the pressure of deepening national penury. Though this virulent form of rivalry dissipated somewhat during WWII, the RAF would face new challenges in Africa after that conflict.

While still dealing with a communist insurgency in Malaya, Great Britain faced a rebellion in Kenya. The aftermath of WWII, coupled with the Malayan operation, greatly reduced British strength in its African colony. This gave the Mau Mau organization an opportunity to strike in 1952. Britain had few ground troops in the country, and it rushed bombers and transports to Kenya to contain the rebellion, thus allowing time for ground reinforcements to arrive. This successful air effort was also aided by the Kenya Police Reserve Wing, an indigenous air unit that “evolved and developed to a formidable degree of usefulness from beginnings that were tiny, improvised, and amateurish.”⁹ Air functions during this counterinsurgency included ground attack, transport, and “sky shouting”—the practice of broadcasting psychological operation messages from low-flying airplanes. Airpower’s success in combating the Mau Mau is especially impressive given Britain’s weakened state, further burnishing aviation’s reputation as a substitute for other means in Africa.

After the wave of independence swept across the continent in the years following WWII, the RAF dramatically curtailed its involvement in Africa. This is not to say, however, that it has been totally absent from the continent. One example, Côte d’Ivoire in 2004, reflects the modern style of RAF involvement. That year, nationwide civil unrest led to conditions described as “state-sponsored terrorism against foreigners.”¹⁰ The British

government needed a rapid way to evacuate hundreds of British nationals, and RAF transports were the answer. Working in conjunction with British ground troops, the RAF mission was successful in saving lives and avoiding deeper involvement in a nasty civil war.

There are several lessons to be learned from RAF operations in Africa. The most important one is that airpower is a cost-effective means of pursuing national interests there. For example, Trenchard saw it as a way to guarantee the RAF's independence, while Churchill viewed it as a cheap way to maintain Britain's global presence. Today, airpower's role remains compelling. The vast distances and poor ground transportation networks of Africa have not changed much since 1914, so airpower retains much of its value for pursuing national interests there.

Next is the lesson of creativity in deploying airpower. The aircraft used in the successful 1920 campaign in British Somaliland were delivered to the area aboard the Royal Navy aircraft carrier *Ark Royal*, a wonderful example of the support other military services can provide to an air service.¹¹ Modern USAF planners may look askance at such ways of force deployment, given our global reach enabled by air refueling, but Operation Enduring Freedom showed the continued need for innovative thinking. Before the invasion of Afghanistan began, special operations forces sought a way to move numerous helicopters to the theater. The US Navy provided the answer by quickly refitting the amphibious assault ship USS *Peleliu* into a helicopter transport ship. This allowed the helicopters and their crews to move together, enhancing mission planning for the invasion, and freed air transports from the need to move them. Furthermore, using the ship avoided the complication of getting access to suitable airfields for air transports to deliver the helicopters. In the future, low-cost aircraft suited to long-term operations in Africa, one of the strategic means discussed in this study's concluding chapter, may once again hitch a ride to the fight onboard Navy ships.

Another British lesson dealt with the importance of air infrastructure. Although modern air infrastructure consists of many types of equipment, facilities, and procedures, in the early days it consisted almost exclusively of one class of facility—airfields. Churchill noted that well-chosen airfields “would enable these

air forces to operate in every part of the protectorate and to enforce control, now here, now there, without the need of maintaining long lines of communication.”¹²

To recap, key lessons from the British experience relevant to today’s USAF are that:

- Airpower is a cost-effective means of pursuing national interests in Africa.
- The remoteness and large size of Africa may require creative ways of getting airpower assets to the region.
- Airpower is fundamentally dependent on infrastructure.

French Air Force in Africa

Like their British counterparts, some French military leaders saw the potential of fixed-wing aircraft in Africa, though French aviation experience there was negligible until 1925 during the Rif War in Morocco.¹³ This war made French airmen “among the few aviators to gain valuable combat experience in the 1920s, heralding a new age for aerial warfare.”¹⁴ This new age spawned new ideas regarding the uses of military aviation and its proper relation to the other armed services. In the vast expanses of Morocco, the thinly manned ground positions encouraged innovative use of aircraft, including aeromedical evacuation, aerial resupply of garrisons, and the rapid shift of aircraft in response to the movement of widely spaced enemy forces.¹⁵

As the 1930s progressed, France realized that, despite her significant colonial holdings, the main threat was the German army. This threat caused French leaders to emphasize building military power on the European continent at the expense of the French empire. In 1935 the French war minister “insisted that sparse French military resources—mechanized weaponry, field artillery, antiaircraft batteries, and aircraft above all—could not be squandered across the empire when the decisive initial battle against the principal foe, Hitler’s Germany, was bound to take place in Europe.”¹⁶ In addition to the obvious threat next door, metropolitan France’s general lack of interest in the empire, despite its significant contributions during WWI, contributed

to limited military aviation action in Africa during the interwar years.¹⁷ That would change greatly in the years after 1945.

The late 1950s and early 1960s were a time of massive upheaval for France. The ascendance of Charles de Gaulle to the presidency in 1958, the loss of most overseas French possessions to the tide of colonial independence, and the end of the grueling Algerian War in 1962 all combined to bring massive changes to France's military. First, de Gaulle emphasized French independence from the United States and the North Atlantic Treaty Organization (NATO) to burnish French international standing. One means to that end was the development of an independent French nuclear force, which drew a large portion of the military budget.¹⁸ At the same time, France brought the majority of its colonial forces home as the new states sought to exert their sovereignty, with over 300,000 French soldiers leaving Africa between 1962 and 1964. However, this strategic retrenchment was driven by politics and economics more than military considerations.¹⁹ As later events would prove, France still saw the need to exert military power in her former colonies in a bid to maintain stability and influence there.

To respond to this major shift in military priorities, France reapportioned her forces into four major components, one of which was intervention forces specifically organized, trained, and equipped to operate beyond French soil.²⁰ Along with a new organizational component, France's intervention forces developed a new, three-tiered strategy. Tier one focused on what Americans now call security cooperation—training and equipping friendly partner-nation military capabilities and also building strong relationships. Tier two addressed what is currently known as the access challenge—securing and maintaining strategically located operating bases throughout French areas of interest. These bases also served as home to small-reaction forces able to deal with low-level instability in their area. Tier three relied on military forces designated as intervention forces and home-based on French soil.²¹ This strategy, similar in many ways to British colonial and modern American expeditionary operations, enabled a global, yet relatively inexpensive, French presence.

In 1962 France created its first large military-intervention organization, called the Joint Intervention Force. Due to the small

size of the French military relative to its global military commitments, all nonnuclear military forces and the national paramilitary forces were designated as overseas deployable. In addition to this blanket designation, though, "selected [French air force] (FAF) and army formations, constituted into mobile deployment 'cells,' were to be trained and organized specifically for overseas deployment, and placed under a special joint command."²² This expeditionary structure, to use modern parlance, operated numerous times in Africa with generally favorable results.

From 1962 until 1975, France was a major, overt participant in 15 events in nine different African countries: Cameroon, Chad, Congo (Brazzaville), Djibouti, Gabon, Ivory Coast, Mauritania, Niger, and Senegal.²³ These interventions were typically joint in character and followed a familiar pattern of airpower employment, even as technology improved. At the first sign of unrest, small air detachments, typically one KC-135 tanker and four fighter-bombers, would deploy from within Africa or France itself. If initial air operations failed to provide adequate support to French and allied ground forces, additional detachments deployed to augment the original force. French transports played an important role in positioning those ground forces in response to enemy activities. This joint cooperation was crucial to French air operations since airpower alone was unable to flush enemy forces from their sanctuaries.²⁴

Among these many military operation in Africa, Operation Manta, conducted in Chad from 1983 to 1984, illustrated the modern French use of airpower in Africa. Pres. François Mitterrand won election in May 1981 on a socialist platform that included harsh criticism of French involvement in Africa. However, soon after he took office, Libyan-sponsored rebels threatened the government of Chad, a longtime French colony and client-state. Seeking a way to intervene without arousing domestic condemnation while still searching for a political solution, Mitterrand sent French aircraft to nearby Togo and Gabon "undercover of two joint-combined exercises." Especially concerned about incurring French casualties but still wanting to maintain power in the area, Mitterrand directed an extremely cautious operation with strict rules of engagement. This greatly complicated operations for French fighter-bombers, while their airlift was hampered by frequent denial of overflight by Chad's neighbors.

A slow and uncertain buildup became, by 1984, “the largest French overseas military operation since the Algerian War and was becoming more and more of a political liability to Mitterrand.”²⁵ A temporary halt to the conflict allowed the French to withdraw quietly from Chad in 1984, but they would return a mere 15 months later to a situation little changed.²⁶

French proclivity for kinetic operations in Africa has waned since the 1980s, but the FAF is still active there. One recent example of this style of engagement came from Comoros in 2008. When a rebel leader resisted repeated UN calls to quit his claim to the presidency of one of the Comoran islands, the FAF brought African Union troops from Tanzania and Senegal to the capital of Comoros.²⁷ Those troops then conducted a successful AU amphibious assault on the rebel leader’s island position.²⁸

Like the British before them, the French learned that aviation “provided economy-of-force advantages” important due to budget restrictions and the global nature of their interests. They similarly appreciated “aviation’s rapid-response capability and long reach” in Africa. The FAF also observed that the old command-and-control model, under which airpower was distributed amongst and controlled by army commanders, was inappropriate for limited warfare against rebels.²⁹ While France learned many lessons already adopted by Britain, the French experience holds several additional ones relevant to the USAF today.

First, the similarity between French-intervention doctrine of the 1960s and current American-expeditionary doctrine is significant, making their experience especially instructive. This similarity comes from “a planning environment characterized by chronic resource constraints, [in which] the French have found that: *Specialization* (based on existing assets) is the key to the development of effective overseas intervention capabilities (emphasis in original).” The USAF’s air and space expeditionary force construct reflects the wisdom of the French lesson, but it lacks one important feature—significant and continuing airpower-projection experience in Africa. “The French excel at providing specialized training to their overseas deployment forces and believe it is a key component of their success.” That training was not only on French soil; “most French overseas deployment units routinely cycle through regional reception and staging bases for the purpose of familiarization with

and adjustment to the geography, climate, food, water, languages, and cultures of the area.”³⁰ This firsthand experience with Africa is sorely lacking among most parts of the USAF.

The other lesson of French airpower in Africa regards political constraints and restraints placed on military action. “The effectiveness of air power in peripheral conflicts is inevitably reduced by the political, economic, and diplomatic constraints that typify such conflicts. These constraints include restrictive rules of engagement, politically controlled targeting, enemy sanctuaries, and the requirement to reduce pilot and aircraft losses to the absolute minimum, and so forth. Such constraints must be anticipated to avoid corrosive effects on service morale and generating unrealistic expectations as to the effectiveness of air power.”³¹ Such chafing under onerous restrictions is not surprising, but future USAF operations in Africa will have similar guidance. That is because, notwithstanding the detrimental impact of such restrictions on military effectiveness, they are often necessary for achieving political success.

Pertinent lessons from the French experience in Africa include:

- In a resource-limited environment, home-based air assets still require extensive training in their area of responsibility if they are to be effective there during contingencies.
- The political environment may impose restrictions on the military that lessen its tactical and operational effectiveness. The military must anticipate this and be prepared to adapt as the political environment changes.

United States Air Force in Africa

The “Marines’ Hymn” celebration of victories over Berber pirates on “the shores of Tripoli” is a reminder of America’s long military involvement in Africa. American airpower engagement in Africa began long after the Marines’ exploits but is rich in history and meaning for future USAF operations there. A humanitarian mission began that history.

The Air Force has been to the Democratic Republic of the Congo (DRC) many times. The first visit came within a week of the DRC gaining its independence from Belgium on 30 June

1960. In Operation Safari, Pres. Dwight D. Eisenhower ordered Air Force transports to bring supplies into the country and evacuate American citizens as civil war broke out. The newly installed government of the DRC then asked the United Nations to send peacekeeping troops to the country to replace Belgian troops left there as part of the transition to independence. President Eisenhower directed USAF transports to support the UN effort and changed the operation's name to New Tape.³² Over four years, "Operation NEW TAPE surpassed even the vaunted Berlin Airlift" in terms of "duration and in ton-miles." The introduction of newer C-130 and C-135 transports as the operation continued was instrumental in surpassing that historical mark. In addition to the logistical successes, New Tape enabled the United Nations' goals of "preserving the country's unity, preventing a return to Belgian colonial rule, avoiding a Cold War confrontation in central Africa by preventing a unilateral Soviet intervention, and bringing some law and order in place of anarchy and chaos."³³

In late 1964, the USAF returned to the DRC in response to a new crisis. Rebels from the eastern province of Katanga were taking Westerners hostage and executing some of them. Though Pres. Lyndon B. Johnson was unwilling to commit US ground troops to a rescue, he did allow USAF transports to carry Belgian troops to the scene. Operation Dragon Rouge succeeded in freeing "more than 1,400 hostages, including dozens of Americans."³⁴ Though this accomplishment was marred by the execution of a number of hostages by the rebels, Dragon Rouge was generally considered a success.³⁵ One notable change from New Tape, enabled by the greater range of the C-130 and the limited amount of personnel and logistics being moved, was the reduction in numbers of support airfields needed for the airlift. During Dragon Rouge, the transports left Belgium with combat troops and then refueled at Morón AB, Spain, and Ascension Island before proceeding to the DRC.³⁶

In mid-1978, the USAF once again provided airlift for European troops to the Congo region, renamed Zaire by Pres. Mobuto Sese Seko. Using C-130 and C-141 aircraft, the Air Force moved French and Belgian troops into Zaire to protect almost 3,000 Western citizens at risk from rebels. Once again, these rebels arose from the Katanga region, renamed Shaba by President

Mobuto, and threatened widespread violence.³⁷ During Operation Zaire I, the USAF transported and supplied the European troops. During Zaire II, the Air Force helped return the European troops home and bring in troop replacements from African countries.³⁸ This move not only eased tensions within Zaire, it also “stifled propaganda from Communist nations that the operation was another example of white European oppression of black Africa.”³⁹

After focusing on air mobility missions for so long, the 1980s saw the USAF take on new roles in Africa. In one example, the USAF provided combat support to the French, as well as other regional allies, as they resisted Libyan aggression in Chad. After a Libyan plane bombed a Sudanese city on 18 March 1983, both Egypt and Sudan asked for American assistance in protecting their skies. The Air Force dispatched an E-3 Airborne Warning and Control System aircraft to Egypt to monitor the air picture in the region and provide warning of further Libyan attacks.⁴⁰ France wanted to shore up the Chadian government with its own troops but was leery of deploying them when the Libyan air threat was so high. To assuage French president Mitterand’s fears, the United States deployed two Navy carriers, the *Coral Sea* and *Eisenhower*, off the Libyan shore and a sizable Air Force contingent to Khartoum, Sudan. Two E-3s, eight F-15s, and several tankers provided aerial surveillance and a deterrent to further Libyan air attacks.⁴¹ The French then proceeded with their deployment of troops to the capital of Chad and helped end the Libyan drive. This operation ended peacefully for the USAF, but it would soon return to Africa to avenge terrorist attacks on America.

Operation El Dorado Canyon, conducted 12–15 April 1986, was a major departure from the USAF’s typically nonaggressive activities in Africa. In response to Libyan state sponsorship of terrorism, Pres. Ronald Reagan ordered air strikes on terrorist targets in Libya. The combined Navy–Air Force attack destroyed camps used to train terrorists and aircraft used to transport them. Though generally successful, the operation was marred by the loss of one Air Force F-111 and its two crewmembers and several errant bombs that landed near the French Embassy in Tripoli.⁴² In addition, many European states condemned the operation for most likely provoking further terrorist activities.

French and Spanish leaders acted on this sentiment by denying USAF aircraft the right to overfly their countries, thereby greatly extending the flight route from England to Libya and back. Such European resistance to American unilateral action, especially when it involves violent force, is a theme still current today.

It did not take long, though, for the USAF to return to its humanitarian form in Africa. An extensive famine, exacerbated by warring rival factions, killed as many as 350,000 people in Somalia in 1992. This disaster brought global attention, and, once again, Air Force air mobility assets were vital to the series of humanitarian and military missions that followed. Operation Provide Relief ran from August 1992 to February 1993 and involved C-141s bringing relief supplies to neighboring Kenya, from whence C-130s flew the supplies into the rough airfields of Somalia. When the initial cadre of UN peacekeepers from Pakistan proved insufficient to prevent clans from stealing the relief supplies, Operation Impressive Lift commenced in September. It involved the USAF transporting several hundred more Pakistani troops into Somalia as reinforcements. When this additional presence failed to resolve the problem of clan interference with food deliveries, Pres. George H. W. Bush offered American ground troops to augment the UN effort. This elicited Operation Restore Hope, which ran from December 1992 until May 1993, overlapping briefly with Provide Relief. Restore Hope "airlifted more than 32,000 U.S. and foreign troops to Somalia. Commercial airliners carried most of these, but U.S. military aircraft moved most of the 32,000 tons of cargo. KC-135 tankers flew more than 1,100 refueling missions, transferring more than 82 million pounds of fuel. The initial cargo went by air until ships could arrive. Once they did, sealift quickly surpassed airlift in terms of tonnage delivered."⁴³

When Restore Hope ended, the United States turned operational control over to the UN, though roughly 5,000 American troops stayed to support the UN under Operation Continue Hope. "The UN operation went beyond Restore Hope's clear mission of securing a safe environment for the distribution of humanitarian supplies. It attempted 'nation building,' or the construction of centralized political institutions in Somalia. This brought the United Nations into conflict with warlords, such as Mohammed Farrah Aidid."⁴⁴ Subsequent fighting left

two dozen Pakistani troops dead in June and culminated in the 3 October 1993 Battle of Mogadishu in which 18 American soldiers died. To provide security for a withdrawal of American forces from Somalia, Pres. Bill Clinton directed Operation Restore Hope II. Beginning on 5 October 1993, USAF mobility assets brought troops and heavy armor on 18-hour nonstop flights from the continental United States to Somalia. AC-130 gunships were also deployed to cover the operation from Kenya. On 25 March 1994, the last US troops left Mogadishu on an Air Force C-5.⁴⁵ The United States would return briefly, from 27 February to 3 March 1995, to facilitate the final withdrawal of UN troops from the country.⁴⁶

Not long after it left Somalia in March 1994, the Air Force was back in action in eastern Africa, this time in Rwanda and Burundi. This deployment lasted from April to September 1994 and focused on evacuating noncombatants from the United States and other countries. Wary of being drawn into another situation like Somalia, the US Congress barred the use of public funds “for U.S. military participation in or around Rwanda after October 7, 1994, except for any action necessary to protect U.S. citizens.”⁴⁷ This event displayed American reluctance to risk troops in Africa, a reluctance that was to endure until the events of 9/11. Chapter 3 will take up the narrative of US government and USAF involvement in Africa after 9/11.⁴⁸

The USAF’s numerous missions in Africa showed the value of airpower’s ability to respond quickly to a variety of situations. From New Tape to Restore Hope II, the service refined its airlift-control procedures and acquired new transport aircraft that significantly improved its ability to operate on the continent. It quickly learned that mobility advance teams should “precede the main airlift force to a crisis area and arrange base support, schedule aircraft movements, and note suitability of airfields.” Furthermore, these operations “taught the Air Force to expect contingencies in all parts of the world and to prepare for operations in regions lacking modern facilities or equipment.”⁴⁹ Operation Dragon Rouge showed the importance of friendly airfields within range of areas of interest in Africa.⁵⁰ Operation Zaire II demonstrated the political power of integrating indigenous African troops into operations to heighten legitimacy in the eyes of the African people.

In addition to the lessons from these largely successful humanitarian missions, the USAF experienced political restrictions on applying violent force in Africa. Operation El Dorado Canyon demonstrated the impact of overflight rights when trying to operate in Africa. The lack of political will to provide humanitarian relief to Rwanda showed there are limits to what the United States is willing to endure and the ease with which very different situations (i.e., Somalia and Rwanda) can be conflated in the political realm. Operations in Somalia once again highlighted the ability of the Air Force to respond quickly to events, but it also showed that an operation cannot ultimately be more successful than the strategy it supports. In other words, the Air Force must be prepared to excel operationally and tactically in the midst of strategic failure in Africa.

Beyond these lessons learned from success and failure, there is the larger lesson of the expanding scope of USAF operations in Africa. From its earliest days on the continent, the Air Force has supported external actors such as Belgium and France that seek to exert influence there. This trend will likely continue, and expand, as numerous nongovernmental organizations join former colonial powers in pursuing their agendas in Africa. The United States itself is dramatically expanding its operations in Africa, as discussed in chapter 4. All these trends point to increased calls for USAF support during peacetime, including the protection of the growing number of foreigners working in Africa from violence.

Significant lessons from the American experience in Africa can be summed up as follows:

- Airlift is the only means of rapidly delivering supplies and troops to Africa. This requires a complex command-and-control arrangement and will likely be supplemented by sealift for large operations of long duration.
- Political concerns, both internal to the United States and external to it, will shape military strategy in Africa. This will result in military operations not necessarily optimized for military effects.
- Airpower's unique capabilities in Africa, coupled with the trend of increasing external actor involvement in Africa, will

likely lead to more calls for USAF support. Though historically this has been air mobility, calls to protect external actors from violence may drive a more aggressive Air Force stance.

Notes

1. Paris, "First Air Wars," 107.
2. Killingray, "'Swift Agent of Government,'" 431.
3. Ibid., 433.
4. Ibid., 433–34.
5. Boyle, *Trenchard*, 366.
6. Killingray, "'Swift Agent of Government,'" 434.
7. Omissi, *Air Power and Colonial Control*, xv. Of note, "air control took place only in Palestine, Iraq, Transjordan, and the Aden Protectorate, although it was proposed for numerous other territories" (ibid.).
8. Killingray, "'Swift Agent of Government,'" 435–38.
9. Hoffman, *British Air Power in Peripheral Conflict*, 61.
10. "Foreigners Flee Ivory Coast amid Peace Talks."
11. Killingray, "'Swift Agent of Government,'" 434.
12. Hoffman, *British Air Power in Peripheral Conflict*, 10.
13. French military aviation in Africa, in the form of balloons, was first attempted by Napoleon in 1798 as part of his invasion of Egypt. The equipment was lost, however, aboard two French ships sunk by British admiral Horatio Nelson at the Battle of the Nile in August that year. See Christienne and Lissarrague, *History of French Military Aviation*, 40.
14. Cain, *Forgotten Air Force*, 16.
15. Ibid., 16–26.
16. Thomas, "At the Heart of Things?" 327.
17. Ibid., 329–30.
18. Lorell, *Airpower in Peripheral Conflict*, 2. This report is a product of RAND's Project Air Force, "Uses of Air Power in Peripheral Conflicts." *Peripheral conflict* is the term for "the whole range of conflict lower on the scale of violence than all-out central nonnuclear war" (ibid., 1).
19. Ibid., 2.
20. Ibid., 3. The four components were nuclear forces focused on strategic deterrence, maneuver forces focused on conventional battles in Europe, territorial defense forces, and the intervention forces. Many of the maneuver forces were dual-tasked with intervention responsibilities.
21. Ibid., 64.
22. Ibid., 6. The paramilitary force was the French gendarmerie.
23. Ibid., 4–6.
24. Ibid., 36.
25. Ibid., 40, 43–48.
26. Ibid., 48–51.
27. "AU Troops Arrive in the Comoros."
28. "France Flies Rebel out of Comoros."

29. Cain, *Forgotten Air Force*, 18–21.
30. Lorell, *Airpower in Peripheral Conflict*, 64–66.
31. Ibid., 72.
32. Warnock, *Short of War*, 24.
33. Ibid., 32.
34. Ibid., 60.
35. It was also the first time C–130 aircraft were exposed to hostile fire, which led to updates to tactical-airlift doctrine that were applied in Southeast Asia (ibid., 61).
36. Ibid., 57.
37. Ibid., 115–16.
38. Ibid., 120. The 416 troops came from Morocco, Côte D'Ivoire, Gabon, Senegal, and Togo. These operations are also referred to as Shaba I and Shaba II in the United States. See Matthews, Ofcansky, and Markus, *Military Airlift Command Operations*, 18.
39. Warnock, *Short of War*, 120.
40. Ploch, *Africa Command*, 26.
41. Lorell, *Airpower in Peripheral Conflict*, 44.
42. Warnock, *Short of War*, 145–55.
43. Ibid., 214.
44. Ibid., 215.
45. Ibid., 215–17.
46. Ploch, *Africa Command*, 27.
47. Ibid. For a sobering account of the Rwandan nightmare and the frustration felt at the lack of the world's involvement there, see Dallaire and Beardsley, *Shake Hands with the Devil*. Gen Roméo Dallaire commanded the UN mission in Rwanda to mitigate the crisis.
48. Like the sections on British and French airpower in Africa, many examples of American air operations on the continent are not covered herein. For more information, see Haulman, *United States Air Force and Humanitarian Airlift Operations*; and Ploch, *Africa Command*.
49. Warnock, *Short of War*, 29.
50. Ibid., 60.

Chapter 3

Current US Activities and Guidance

In the wake of 9/11, Africa regained the strategic importance lost when the Cold War ended and the continent was no longer a scene for proxy wars and superpower maneuvering. The following examines current US military and policy relationships with Africa.

Current US Military Activities in Africa

Presently, the two largest US military operations in Africa are Operation Enduring Freedom-Trans Sahara (OEF-TS) and Combined Joint Task Force-Horn of Africa (CJTF-HOA). Both began in response to the attacks of 9/11 to address Africa's role as a source of terrorist training and staging for global operations. OEF-TS is the military component of the Trans-Sahara Counterterrorism Partnership (TSCTP).¹ The TSCTP is a Department of State program working with countries in northern and western Africa "aimed at defeating terrorist organizations by strengthening regional counterterrorism capabilities, enhancing and institutionalizing cooperation among the region's security forces, promoting democratic governance, discrediting terrorist ideology, and reinforcing bilateral military ties with the United States."² CJTF-HOA is headquartered at Camp Lemonnier, Djibouti, and conducts security cooperation operations in eastern Africa.³

Individual branches of the US military also have programs in Africa. The Navy's Africa Partnership Station "visited 19 ports of call in 10 countries and trained over 1,500 maritime professionals in skills ranging from small boat handling, port security, and martial arts to noncommissioned officer leadership, damage control, and maritime law" during its first deployment.⁴ The National Guard State Partnership Program (SPP) "links US states with a partner country for the purpose of improving bilateral relations with the US. The program's goals reflect an evolving international affairs mission for the National Guard, to promote regional stability and civil-military relationships in

support of US policy objectives.” Current SPP partnerships in Africa include Tunisia-Wyoming, Morocco-Utah, Ghana-North Dakota, and South Africa-New York.⁵

Like other components in European Command (EUCOM), US Air Forces in Europe (USAFE) remains engaged with Africa. In addition to working with the Africa Center for Strategic Studies to interact with the air chiefs of African countries, USAFE leads the transition team for the reactivation of Seventeenth Air Force as the air component of AFRICOM.⁶ The focus of the interaction with African air forces has been air safety and security, often within a regional framework. In addition, those discussions have addressed:

- Search and rescue capability
- Cooperation at the national and regional levels
- Communications capability and information sharing
- Training and capacity building⁷

While security cooperation work has been expanding for the USAF in Africa, US Transportation Command (TRANSCOM) recently stopped one staple of global air-mobility operations on the continent. Channel routes—regularly scheduled airlift missions along defined routes to serve particular regions—ceased operations in Africa about two years ago. TRANSCOM cancelled them due to lack of cost efficiency, though AFRICOM is considering its airlift needs for the continent.⁸ Due to AFRICOM’s light force structure, USAFE assets will fill most of those needs.⁹ This will put airlift missions in Africa in conflict with the increase of missions conducted in eastern Europe following the expansion of the North Atlantic Treaty Organization (NATO).

US Strategic Guidance for Africa

Military strategy should flow smoothly from the guidance of political leaders. It should then trace a clear path from the decisions of military leaders to the actions of each military member. While the cost of creating and maintaining such alignment of strategic thought through every layer of the vast military hierarchy is high in terms of time and resources, it is, nonethe-

less, vital to mission success. In the context of an Air Force strategy for Africa, this alignment requires taking the abstract guidance of the president, secretary of defense, and chairman of the Joint Chiefs of Staff and creating a die with which to stamp an African strategy.

The National Security Strategy of the United States of America

The current *National Security Strategy* (NSS) was published in March 2006 and is the capstone document for all questions of security strategy in the United States. National strategy, especially for the military, attracted new attention following the terrorist attacks on the United States on 11 September 2001. That attention from the many competing stakeholders in national security drove the NSS to widen and deepen its perspective like never before. Such a change makes close analysis of the NSS especially important for the Air Force. Though analysis of such documents, in addition to the 2005 *National Defense Strategy* (NDS) and the June 2008 *National Military Strategy* (NMS), allows nothing more than an anticipatory glance at future courses of action, it affords the best glance possible. Of course, our new president will quickly produce a new NSS that bears his mark, but this framework of analysis will remain appropriate.

The current NSS voices the determination of the Bush administration to continue the strategic course laid out in the 2002 NSS. However, the same course comes with a new warning: “America now faces a choice between the path of fear and the path of confidence. The path of fear—isolation and protectionism, retreat and retrenchment—appeals to those who find our challenges too great and fail to see our opportunities. Yet history teaches that every time American leaders have taken this path, the challenges have only increased and the missed opportunities have left future generations less secure.” In order to meet the challenge of the future, Pres. George W. Bush advocated a national strategy that “is consistent with the great tradition of American foreign policy. Like the policies of Harry Truman and Ronald Reagan, our approach is idealistic about our national goals, and realistic about the means to achieve them.” Continuing this broad theme, the former president iden-

tified two “pillars” of the NSS: “promoting freedom, justice, and human dignity” and “confronting the challenges of our time by leading a growing community of democracies.”¹⁰

The 2006 NSS also treats Africa with much more detail than the previous edition, a clear sign of the continent’s increased strategic importance. The 2002 NSS’s focus on traditional security issues such as combating terrorism and security cooperation is maintained, but issues of economics, health, and education gain tremendous coverage. First, in addition to the African Growth and Opportunities Act, the United States is “pursuing an FTA [Free Trade Agreement] with the countries of the Southern African Customs Union: Botswana, Lesotho, Namibia, South Africa, and Swaziland.”¹¹ The Millennium Challenge Corporation (MCC) is another program mentioned in the NSS. Of the 16 existing grants from the MCC, “9 are with African countries, totaling about \$3.8 billion.”¹² With regard to health, Bush’s Emergency Plan for AIDS Relief; the Global Fund to Fight HIV/AIDS, Tuberculosis, and Malaria; and the Initiative to End Hunger in Africa are mentioned.¹³ Lastly, the budget for the Africa Education Initiative was tripled by the administration.¹⁴

The clearest evidence of Africa’s heightened importance in the eyes of the Bush administration is the section titled “Develop Agendas for Cooperative Action with the Other Main Centers of Global Power”:

Africa holds growing geo-strategic importance and is a high priority of this Administration. It is a place of promise and opportunity, linked to the United States by history, culture, commerce, and strategic significance. Our goal is an African continent that knows liberty, peace, stability, and increasing prosperity.

Africa’s potential has in the past been held hostage by the bitter legacy of colonial misrule and bad choices by some African leaders. The United States recognizes that our security depends upon partnering with Africans to strengthen fragile and failing states and bring ungoverned areas under the control of effective democracies.

Overcoming the challenges Africa faces requires partnership, not paternalism. Our strategy is to promote economic development and the expansion of effective, democratic governance so that African states can take the lead in addressing African challenges. Through improved governance, reduced corruption, and market reforms, African nations can lift themselves toward a better future. We are committed to working with African nations to strengthen their domestic capabilities and the

regional capacity of the AU to support post-conflict transformation, consolidate democratic transitions, and improve peacekeeping and disaster responses.¹⁵

In contrast to this extensive discussion of Africa, the corresponding section in the 2002 NSS never mentioned the continent.¹⁶

Analysis of America's Interests in Africa

Deep analysis of the NSS requires considering the US national interests it lays out. This step is important for the Air Force because national interests form the general, underlying guidance for the development of particular desired ends. Furthermore, analysis gains salience when its results can fall into a clear system of classification; the value of such classification increases when its underlying taxonomy delivers simple categories that aid argumentation. One such system follows:

- First-Order Interests—"Protection of the homeland and areas and issues directly affecting this interest. This may require total military mobilization and resource commitment—the nation's total effort. In homeland defense, this also may require a coordinated effort of all agencies of the government."
- Second-Order Interests—"These are areas and issues that do not directly affect America's survival or pose a threat to the homeland but in the long run have a high propensity for becoming First Order priorities."
- Third-Order Interests—"These are issues that do not critically affect First and Second Order interests yet cast some shadow over such interests. US efforts are focused on creating favorable conditions to preclude Third Order interests from developing into higher-order ones. Unfavorable Third Order interests serve as a warning to Second Order interests."
- Fourth-Order Interests—"All other interests are peripheral in that they are placed on a so-called watch list. This means there is no immediate impact on any order of interests, but matters must be watched in case events transform these

interests. In the meantime, peripheral interests require few, if any, U.S. resources.”¹⁷

Using a simple classification system to consider something as complex as foreign policy is, of course, subject to criticism as reductionist to the point of lacking utility. Fortunately, the authors of the system addressed this concern:

Categories of priorities such as these can be used not only as a framework for systematic assessment of national interests and nation security but also as a way to distinguish immediate from long-range security issues. Such a framework can provide a basis for rational and systematic debate within the national security establishment regarding U.S. national security posture and is useful in studying national security. However, today there is rarely a clear line between categories of interest. Many chances have expanded the concept of national interests to include several moral and humanitarian dimensions, among others. As some argue, where can the line be drawn among categories of interest?¹⁸

The question of drawing such a line falls to the strategist. In doing so, at least three questions arise:

- What are the national interests of the United States?
- Where do they fall in the above categories?
- What does that mean for the Air Force?

Answering the first question invites breezy appeals to lofty goals—the stuff of uncontroversial political rhetoric. The second question, since it implies prioritization of national resources in the pursuit of interests, draws much more scrutiny and debate. The final question is less contentious, though no less important for Airmen seeking to turn the president’s guidance into strategies for action in Africa. These questions will be addressed in turn, but considering national values is a valuable prequel activity.

To begin, the 2006 NSS contains many instances of *interest*, but the broad range of issues tagged with the word dilutes its meaning for a strategist. In addition, the word *vital* is used throughout the NSS, making careful classification a matter of judgment rather than simple interpretation. This also points to the problem of overextension since “too often, national security is used synonymously with any interest, suggesting that all interests are survival priorities.”¹⁹ To avoid a grasp that reaches

for everything and thus risks missing all, strategy must consider priorities if it is to be actionable. That thorny topic, posed by the second question on national interests, is addressed in table 8.

Table 8 is the list of “essentials tasks” listed in the NSS, along with a proposed categorization.²⁰ This proposition of categories is the strategist’s first point of entry into the argument over national interests. It invites an immediate supporting question of who gets to make the decision of categorization. The easy answer is that the president makes the determination, but the NSS lacks any clear categorization and Airmen would be foolish to expect such clarity in any case other than the most salient threat to national survival. That is not to say there exists a dearth of presumptive opinion on how national interests should be categorized, far from it. Many organizations and individuals voice their views on prioritizing national resources, and the military is no exception. Despite the often-heated debate on

Table 8. Relating NSS tasks to national interests

<i>NSS essential task</i>	<i>Proposed category of national interest</i>
1. Champion aspirations for human dignity	Second order
2. Strengthen alliances to defeat global terrorism and work to prevent attacks against us and our friends	First order
3. Work with others to defuse regional conflicts	Second order
4. Prevent our enemies from threatening us, our allies, and our friends with weapons of mass destruction (WMD)	First order
5. Ignite a new era of global economic growth through free markets and free trade	Third order
6. Expand the circle of development by opening societies and building the infrastructure of democracy	Third order
7. Develop agendas for cooperative action with other main centers of global power	Third order
8. Transform America’s national security institutions to meet the challenges and opportunities of the 21st century	Third order
9. Engage the opportunities and confront the challenges of globalization	Fourth order

Adapted from George W. Bush, The National Security Strategy of the United States of America (White House: Washington, DC, September 2002); and author’s original work.

this issue, a strategist should attempt a dispassionate categorization to guide his own thinking.

The final question—what does this all mean for the Air Force with regard to Africa—proceeds from the answers to the first two. For the sake of argument, the judgments reflected in table 8 are assumed to represent the former administration's views. The first-order interests, since they deal with the immediate life and livelihood of American and friendly-nation citizens, and in extreme cases the states themselves, will summon classic military responses. If threats to those interests are found in Africa, the Air Force can expect to deliver both kinetic and nonkinetic effects on the offending parties until they stop threatening those interests. If second- or third-order interests are at risk, the Air Force is likely to assume a supporting role to other elements of the US and friendly governments.

The National Defense Strategy of the United States of America

Published by the Department of Defense (DOD) in March 2005, the *NDS* is the next source of national guidance for the Air Force in Africa. It distills the *NSS* into areas of concern for the entire defense establishment, so it remains abstract from the point of view of the Air Force. Nevertheless, the tone of the *NDS* reflects the pragmatic outlook of the US military, an attribute reflected in its discussion of DOD ends, ways, and means.

The *NDS* uses the term *strategic objectives* to denote the ends it seeks. Those ends and the *NSS* essential tasks to which they correspond are to secure the United States from direct attack (numbers two and four), secure strategic access and retain global freedom of action (number seven), strengthen alliances and partnerships (numbers two and seven), and establish favorable security conditions (all nine).²¹ The first three ends are understandably focused on the DOD's internal audience, but the fourth makes the point of working with other US agencies to achieve national interests.

The *NDS* then moves on to describe "how we accomplish our objectives"—another term for the ways of strategy. Those ways include assuring allies and friends, dissuading potential adversaries, deterring aggression and countercoercion, and defeat-

ing adversaries. The *NDS* uses implementation guidelines to “structure our strategic planning and decision-making.” One of the guidelines, another strategic way, is the creation of an “active, layered defense” to keep danger at a distance through preventative measures such as security cooperation, humanitarian assistance, and peace operations.²² This guideline holds profound meaning for the Air Force in Africa; it explicitly calls for a long-term approach to national defense.

The *NDS* identifies four challenges to US security: traditional, irregular, catastrophic, and disruptive.²³ The category most applicable to Africa is irregular challenges that “aim to erode U.S. influence, patience, and political will. Irregular opponents often take a long-term approach, attempting to impose prohibitive human, material, financial, and political costs on the United States to compel strategic retreat from a key region or course of action.” This is the most common type of challenge the Air Force will face in Africa; therefore, its strategy should focus on it. Furthermore, the “rise of extremist ideologies and the absence of effective government” intensify the danger of irregular challenges.²⁴ Osama bin Laden’s activities in Sudan in the 1990s and the perennial collapse of Somali governments, two examples among many, show this danger is quite real in Africa.

Regarding means, the *NDS* stays at a high level of abstract detail, but from its list of desired capabilities, some characteristics of the means are discernable. Specifically, strong intelligence systems, a defensible collection of “critical bases of operation,” and the means to operate in space, international waters, the air, and cyberspace are detailed.²⁵ This implies the need for a military force structure of adequate size, skill, and equipment to meet the *NDS* ends, and a few specific characteristics of those means are mentioned.

First, the *NDS* calls for a military structured to conduct homeland defense and continuing operations in places like Europe, Korea, and the Middle East. It also calls for the military to “swiftly defeat adversaries in overlapping military campaigns while preserving for the President the option to call for a more decisive and enduring result in a single operation” and simultaneously conducting a “limited number of lesser contingencies.”²⁶ Unfortunately, this desire for providing many options is

a case of trying to do everything—and if the defense budget gets trimmed in the future, something must fall off the plate.

Second, the character of DOD forces is discussed. The area of particular interest in Africa, irregular challenges, leads to a long and informative list of aspects of successful means in any African strategy:

Challenges from terrorist extremist organizations and their state and non-state supporters will involve our forces in complex security problems for some time to come, redefining past conceptions of “general-purpose forces.”

Comprehensive defeat of terrorist extremists and other irregular forces may require operations over long periods, and using many elements of national power; such operations may require changes to the way we train, equip, and employ our forces, particularly for fighting terrorists and insurgents and conducting stability operations.

Working together with other elements of the U.S. Government, allies, and partners (including indigenous actors), we require the capabilities to identify, locate, track, and engage individual enemies and their networks. Doing so will require greater capabilities across a range of areas, particularly intelligence, surveillance, and communications.

In addition, we will need to train units for sustained stability operations. This will include developing ways to strengthen their language and civil-military affairs capabilities as required for specific deployments.²⁷

Chapter 1 introduced the dependence of airpower on aviation infrastructure. The *NDS* adds new terms to the discussion by classifying military-basing facilities according to their robustness. “To strengthen our capability for prompt global action and our flexibility to employ military forces where needed, we require the capacity to move swiftly into and through strategic pivot points and remote locations. The new global posture—using *main operating bases* (MOB), *forward operating sites* (FOS), and a diverse array of more austere *cooperative security locations* (CSL)—will support such needs” (emphasis in original). As the least resource-intensive of the three, CSLs “are intended for contingency access, logistical support, and rotational use by operational forces. CSLs generally will have little or no permanent U.S. personnel assigned.”²⁸ Given the small footprint proposed for AFRICOM in Africa, this CSL style of infrastructure will likely be the primary basing option the Air Force can expect. Of course, long-term bilateral or regional

agreements may secure FOSs for the Air Force, but due to the volatile political environment in even the most stable of African nations, CSLs should remain the focus of planning.

The National Military Strategy of the United States of America

The *NMS* further distills the *NSS* and *NDS* and “provides focus for military activities by defining a set of interrelated military objectives from which the Service Chiefs and combatant commanders identify desired capabilities and against which the CJCS assesses risk.”²⁹ Those objectives are to:

- Protect the United States against external attacks and aggression
- Prevent conflict and surprise attack
- Prevail against adversaries³⁰

In addition to fleshing out these military objectives, which could also be called military ends, the *NMS* makes an important reference to the way DOD develops its force-structure system. It does this by pointing to the joint operating concepts (JOC) that “support each objective and link specific tasks to programmatic actions as well as guide the development of plans and the execution of operations.”³¹ The current *NMS* lists four JOCs, all updated subsequent to the 2004 *NMS* publication and a new JOC, dealing with irregular warfare.³² The programmatic purpose of the JOC construct led to their refinement into joint functional areas and joint integrating concepts, but for strategic purposes, the JOC is the lowest level of interest. This programmatic focus, which drives military acquisition activities, has a direct impact on the means the nation will bring to bear in pursuit of its desired ends.

Like the *NDS*, the *NMS* contains few geographic particulars. It makes passing reference to an “arc of instability” that girdles the world but gives no further clues of regions of interest.³³ However, it does add incremental detail to the higher guidance. Such clarity finds grateful recipients amongst military practitioners uncomfortable with vague national interests, but that same virtue holds the seed of unintended consequences. In a

search for clarity, military strategists must avoid the temptation to discount those aspects of the situation that are inherently vague yet still have influence on their operations.

This marks the end of this study's analysis. It has shown that airpower has a long and fruitful history of operating in Africa and that it will continue to be an important means of pursuing US national interests on the continent. From this consideration of the past, the future of the USAF in Africa may now proceed with the synthesis of a strategy.

Notes

1. "AFRICOM Posture Statement."
2. "Country Reports on Terrorism 2007." The countries included are Mauritania, Mali, Chad, Niger, Nigeria, Senegal, Morocco, Algeria, and Tunisia.
3. "AFRICOM Posture Statement." CJTF-HOA currently operates in Kenya, Sudan, Djibouti, Yemen, Ethiopia, Uganda, Tanzania, Mauritius, and the Comoros Islands. It currently spans the operating areas of Central Command (CENTCOM), Pacific Command (PACOM), and European Command (EUCOM) and is in the process of transferring to AFRICOM control.
4. Goyak, "First Africa Partnership."
5. National Guard Bureau of International Affairs, "National Guard Bureau."
6. "African Air Chiefs Conference." Conference participants came from Algeria, Botswana, Cameroon, Gabon, Ghana, Mali, Namibia, Niger, Senegal, Rwanda, Tunisia, Uganda, and Zambia.
7. *Ibid.*, 26.
8. Numerous duty officers of US Transportation Command and Air Mobility Command, telephone interviews by the author, 22 April 2008. (Anonymous interviews were conducted in confidentiality, and the names of the interviewees are withheld by mutual agreement).
9. O'Connor, "USAFE Facing Multiple Challenges."
10. Bush, *National Security Strategy*, 2006, ii.
11. *Ibid.*, 28.
12. Millennium Challenge Corporation, "MCC and Africa." The countries include Benin, Cape Verde, Ghana, Lesotho, Madagascar, Mali, Morocco, Mozambique, and Tanzania. In addition to full-scale grants, the MCC has Threshold Programs "focused largely on fighting corruption and improving governance." There are currently 15 such programs, seven in Africa: Burkina Faso, Kenya, Malawi, São Tomé and Príncipe, Tanzania, Uganda, and Zambia.
13. Bush, *National Security Strategy*, 2006, 31–32.
14. *Ibid.*, 32.
15. *Ibid.*, 37–38.
16. Bush, *National Security Strategy*, 2002, 25–28.
17. Sarkesian, Williams, and Cimbala, *U.S. National Security*, 5–6. This book uses the words *vital*, *critical*, *serious*, and *peripheral* as synonyms for

first-, second-, third-, and fourth-order interests, respectively. Because of the vague and easily debatable definitions of those nonordinal terms and their repeated, equivocating usage in the NSS, this study will use the terms *first*, *second*, *third*, and *fourth*.

18. Ibid., 6.

19. Ibid., 16.

20. Bush, *National Security Strategy*, 2006, 1.

21. Rumsfeld, *National Defense Strategy*, i.

22. Ibid., i, 11–12. The other guidelines discuss continuous transformation, the capabilities-based approach, and risk management.

23. Ibid., 2–3.

24. Ibid., 3.

25. Ibid., 15–24.

26. Ibid., 20.

27. Ibid., 18.

28. Ibid., 23.

29. Joint Chiefs of Staff, *National Military Strategy*, viii.

30. Ibid.

31. Ibid., 9.

32. “Joint Operating Concepts.” The five current JOCs are irregular warfare; homeland security and civil support; major combat operations; military support to stabilization, transition, and reconstruction operations; and deterrence operations.

33. This is an oblique reference to a central theme in Barnett, *Pentagon’s New Map*.

Chapter 4

What Can Airmen Expect in Africa?

Any attempt to predict the future is bound to fail more often than succeed. Nonetheless, Airmen should endeavor to anticipate the environment they will find in Africa, if only to provide a basis of planning from which to depart when events dictate. This chapter briefly discusses four things the Air Force can expect in Africa: a large group of stakeholders at work, competition for Africa's resources, humanitarian crises, and diverse security challenges.

Many Stakeholders with Conflicting Interests

The first step to creating and implementing a successful USAF strategy in Africa is realizing that it cannot be considered in a vacuum. Military thinkers are familiar with the axiom that the enemy gets a vote in any conflict, but they tend to overlook the fact that friends get a vote as well. In this case, the USAF must pay close attention to the needs, interests, and capabilities of its joint, interagency, and international partners.

The first stakeholder the Air Force will encounter in Africa is AFRICOM itself. Interacting with a regional unified command is nothing new for the USAF, but AFRICOM's unique command structure will present new challenges. The command has taken the step of creating two deputies to the commander. One person, the deputy to the commander for military operations, is a two-star officer with Title 10 power to wield command authority when the commander is absent. The other position, the deputy to the commander for civil-military activities, is currently filled by an ambassador from the Department of State (DOS).¹ Current staff members from the US Agency for International Development (USAID), the US Treasury, and Coast Guard officers further the interagency character of AFRICOM. The command is also working to integrate personnel from the Departments of Commerce, Agriculture, and Energy, along with immigration and customs personnel. This diverse cast of players within the

AFRICOM command structure will require deft handling; for Airmen, it will require working with many new stakeholders.

AFRICOM has laid out its own strategy for Africa, which will lead the Air Force to a proactive engagement with the continent:

AFRICOM's theater strategy will be based on the principle of Active Security. Active Security is defined as a persistent and sustained level of effort oriented on security assistance programs that prevent conflict and foster continued dialogue and development. The goal of Active Security is to enable the work of Africans to marginalize the enemies of peace and prevent conflict, thereby enabling the growth of strong and just governments and legitimate institutions to support the development of civil societies. Societies require security to flourish, for security provides the foundation for political, diplomatic, and economic development, which is essential to building long-term stability. AFRICOM will contribute to this goal by employing a wide range of tools at its disposal—from conducting security cooperating activities to prosecuting combat operations—to promote security.²

AFRICOM's infrastructure in Africa is another element the Air Force must consider. The command's difficulty in finding an African country to host its headquarters highlights the sensitivity of African states to the basing of foreign troops on their soil. In the near term, the Air Force can expect only one FOS in Africa—Camp Lemonier in Djibouti. This location serves as the headquarters for CJTF-HOA and has proven valuable for operations in eastern Africa and its surrounding waters, but its peripheral location diminishes its value for air operations in the rest of Africa. Augmenting Camp Lemonier is a group of CSLs in or near Africa, the fruit of relationships with partner nations well-cultivated by the predecessors to AFRICOM. The complete list of CSLs is not in the public domain, though some have been mentioned. Those locations are

- Eastern Africa—Entebbe, Uganda
- Middle Africa—Libreville, Gabon
- Northern Africa—Morón AB, Spain; Lajes Field, Azores Islands
- Southern Africa—None listed
- Western Africa—Dakar, Senegal³

The use of CSLs presents two problems for the Air Force—they are typically in poor condition, with poor security, and their use is contingent on unpredictable local politics. For example, the condition of the bases in Senegal and Uganda in the early 2000s prohibited the use of C-9 medical transports at the former and overnight stays at the latter.⁴ Political trouble may result from conditions within the host nation, such as a new regime that is not friendly to the United States. It could also result from external influences that prevent US access to bases; examples may include AU condemnation of US action or pressure from a major economic partner like China to resist American presence.⁵

The organization of AFRICOM points to unprecedented cooperation with the DOS. Nevertheless, the DOS will retain its separate presence in African states with its system of embassies and country teams. This system, and its invaluable local experience born of protracted tours in African countries, can provide the Air Force with extensive intelligence and enable interactions with local governments.⁶ Added to this, the diplomatic perspective of State Department personnel can add a valuable point of view to the military's consideration of action in Africa.

Intimate cooperation between DOD and DOS currently extends beyond the structure of AFRICOM. The Defense Authorization Act of 2006 created a significant change in security-cooperation authorities in Section 1206, which allowed the use of DOD money for security cooperation programs that have historically been funded exclusively by the State Department.⁷ This authority is, however, set to expire at the end of fiscal year (FY) 2008, although many DOD and DOS members, including AFRICOM commander Gen William Ward, have petitioned Congress to make this authority permanent.⁸ Secretary of Defense Robert Gates had this to say in recent congressional testimony: “the Global Train-and-Equip Program—known as Section 1206—provides commanders a means to fill longstanding gaps in an effort to help other nations build and sustain capable military forces. It allows the Defense and State Departments to act in months, rather than years. The program focuses not on places where we are at war but on where there are both emerging threats and opportunities. It decreases the likelihood that troops will be used in the future.”⁹ This program, along with

other innovative responses to the needs of the global war on terror, has quickly shown good results, but its fate rests largely in the hands of the new president and the Congress.

In addition to external states acting in Africa, there are many nongovernmental organizations (NGO) and external supranational organizations with a significant presence there. The International Red Cross, the Red Crescent, Doctors without Borders, and the Gates Foundation are a few of the NGOs pursuing humanitarian ends in Africa. The UN, Organization of the Petroleum Exporting Countries, and the Arab League are also involved. Several former colonial powers maintain influence in Africa through political and economic organizations of varying degrees of formality. The European Union (EU) has taken a keen interest in Africa, the scene of "the first EU crisis management operation outside Europe," Operation Artemis in the DRC in 2003.¹⁰

A special class of influences, external to African states but internal to the continent, is the vibrant community of supranational African political and economic organizations. The most important of these is the AU, established in 2002 as successor to the Organization of African Unity (OAU). Whereas the OAU was often criticized as a clubhouse for African dictators, AU has built a reputation for increased interest in good governance and security for African states.¹¹ Most recently, AU has been active in the humanitarian disaster ongoing in the Darfur region of Sudan.¹² Africa is also home to numerous economic organizations. Regional economic communities (REC) have typically evolved along geographic lines, and their membership rosters have changed along with the political and economic environment. One REC, the Economic Committee of West African States (ECOWAS), has evolved into a particularly powerful organization. The ECOWAS even has a military force, the Economic Committee of West African States Monitoring Group (ECOMOG), "a non-standing military force consisting of land, sea and air component[s] that was set up by member states of the ECOWAS to deal with the security problem that followed the collapse of the formal state structure in the Republic of Liberia in 1990."¹³ The only thing of which Airmen can be certain when they sit down to the planning table is that many other people with an interest in Africa will likely join them.

Competition for African Resources

Chapter 1 discussed the importance of Africa's natural resources to both Africa and the United States. The recent rise in commodity prices around the world, however, means that other outside actors are growing increasingly interested in African resources. The biggest of these is China; that country's growing economy and thirst for oil has many US policy makers concerned. There is good reason for the concern, as some African states find China's pragmatic approach to economic ties more appealing than an American approach that is more idealistic.¹⁴

The increased value of natural resources has been a boon to African economies, but like any strong growth cycle, this will eventually end with a downturn in commodity prices. Such a downturn could cripple African states dependent on the revenue those commodities provide. The effects of this would rapidly spread from the economic to the political sector of many African states due to the system of patronage so prevalent there. With the inability to buy allegiance, central governments may find themselves besieged, isolated, and weak—a recipe for civil unrest, if not insurgency.

Even in the best of commodity markets, Airmen accustomed to the robust economies of Western democracies will see the “resource curse” at work in Africa.¹⁵ This curse, which affects many nations that draw their revenue from natural resources, creates local economies driven by foreign members of the resource-extraction industry. Better paid than local Africans, these foreigners tend to create rampant price inflation in their midst, further damaging local markets and increasing popular resentment. The resource curse also damages African governance, since revenue is based not on the productivity of indigenous laborers but the presence of large, external corporations eager to mine the resources and willing to pay fees to the government. Those fees, then, are the dominant source of revenue for central governments too weak to enforce widespread taxation on the populace. Thus, African states are more interested in keeping corporations happy than their own citizens. This could lead states to employ forms of coercion to their own people that will leave Airmen in difficult moral circumstances.

Humanitarian Crises

People pessimistic about the future of Africa can cite historical, economic, and political reasons for their lack of hope. One aspect of many humanitarian crises in Africa is particularly injurious to any prospect for optimism—the role of people in causing those crises. Humanity, rather than nature, is viewed as the culprit in disasters like the AIDS epidemic or violence in places like Liberia, Rwanda, and Darfur. This culpability has made outsiders reluctant to intervene in Africa in the past—witness the United States with respect to Rwanda in 1994—and that reluctance may continue into the future.

Such situations could leave the USAF in a very uncomfortable position. In line with the second-order national interest to champion aspirations for human dignity, Americans may push for US military action to relieve a humanitarian crisis in Africa. This is both noble and shrewd—while paying homage to the value of all humans regardless of their citizenship, such actions build America's reputation and power in the world. Such positive outcomes will give way to negativity if the military gets bogged down, as in Somalia, or the crisis appears to repeat continually, as in the DRC. This could lead to a slow erosion of domestic and foreign support for Air Force relief efforts. That erosion could turn into a landslide of outrage in the wake of another debacle like the Battle of Mogadishu. Either scenario would force the USAF to withdraw from the relief operation, an invitation to charges of misguided, wasted effort from a disillusioned public. The impact on service morale, as well as association with failure, would be bitter pills for the Air Force to swallow.

A Diverse Set of Security Challenges

Since no African state currently poses a direct threat to first-order American interests, there will likely be little incentive for the United States to seek the overthrow of any African regime. This is a marked change from the Cold War, when the stakes of superpower geopolitics were high enough to mitigate concerns over the sovereignty of African states. Instead, recent events in Afghanistan and Iraq have spurred US military thought beyond the Cold War mind-set toward irregular warfare (IW). That trend

will continue in Africa, where the Air Force can expect to be most active in IW, with particular attention paid to a subset of IW—counterterrorism (CT).

Air Force IW efforts in Africa will most often focus on serving the second-order national interests of working with others to defuse regional conflicts. Those efforts can be labeled with a variety of terms such as low-intensity conflict, military operations other than war, peripheral conflict, IW, war amongst the people, and counterinsurgency, to name a few. Each term has subtle differences of meaning that reflect its parent community's interests, but failing to come to terms is likely to stifle productive thought on the issue of conflict in Africa. Fortunately, Air Force Doctrine Document (AFDD) 2-3, *Irregular Warfare*, provides Airmen an excellent primer for the nontraditional missions they can expect in Africa.¹⁶ AFDD 2-6, *Air Mobility Operations*, contains similarly relevant information for the mobility missions that are likely to remain the bulk of Air Force operations in Africa. AFRICOM's commander highlighted the importance of air mobility in Africa, noting that "our ability to conduct [Theater Security Cooperation] and other activities on the African continent is directly tied to mobility. Vast distances, combined with very limited civilian rail, road, and air transportation infrastructure, constrain the full range of AFRICOM engagement and contingency activities."¹⁷

One subset of IW is worth close attention, since it targets the terrorist threat to first-order US national interests. As in other regions of the world, the terrorist threat of greatest interest in Africa comes from Islamic-fundamentalist groups. In addition to the obvious threat posed to African states by radical groups, the weak nature of many African states permits those groups to organize, train, and stage in areas lacking effective governance. This freedom of action for terrorists is the greatest threat to the United States in Africa in the near term. To illustrate, the State Department reported that in 2007 "Al-Qa'ida (AQ) operatives in East Africa and al-Shabaab militants in Somalia continued to pose the more serious threat to American and allied interests in [Africa]."¹⁸ This assessment reflects a historical trend, since eastern Africa has been the scene of "the most notable acts of international terrorism on the continent," such as

the al-Qaeda bombings of US embassies in Kenya and Tanzania in 1998.¹⁹

The terrorist threat elsewhere in Africa is lower than in eastern Africa but remains significant. Sudan remains on the DOS list of state sponsors of terrorism, despite increasing CT cooperation with the US government.²⁰ There is also a trend of African terrorist organizations merging with the global al-Qaeda network. Examples include the Salafist Group for Preaching and Combat joining al-Qaeda and renaming itself al-Qa'ida in the Islamic Maghreb (AQIM) in 2006–7 and the Libyan Islamic Fighting Group's (LIFG) merger with al-Qaeda in 2007.²¹ On a regional basis, those states identified in a recent Africa Center for Strategic Studies publication as having a significant threat from terrorism are

- Eastern Africa—Djibouti, Eritrea, Ethiopia, Kenya, Somalia
- Middle Africa—None
- Northern Africa—Algeria, Egypt, Morocco
- Southern Africa—None
- Western Africa—None²²

The security challenges of IW in general, and CT in particular, are by no means the only ones the Air Force may face in Africa. There is the possibility for all forms of security challenge on the continent, but making strategy requires setting priorities based on reasonable expectations—and the Air Force should expect IW and CT to dominate its African mission set in the near term.

Notes

1. Senate, *Statement of General William E. Ward*.
2. Ibid.
3. Hebert, "Presence, Not Permanence," 34–35.
4. Ibid., 39.
5. These examples of antiaccess challenges for the USAF in Africa are by no means exhaustive of all possibilities. Every stakeholder in Africa, be it internal or external to the continent, state or nonstate in form, has some capability to affect the USAF's ability to operate there.
6. Kwiatkowski, *Expeditionary Air Operations in Africa*, 38–42. This monograph provides an excellent, detailed treatment of USAF operations in Africa,

supplemented with information derived from surveys of aircrew and embassy personnel with experience in Africa.

7. Christoff, *Section 1206 Security Assistance Program*.

8. Senate, *Statement of General William E. Ward*.

9. House, *Secretary of Defense Robert M. Gates*, 1. In this testimony, Secretary Gates urges Congress to make sec. 1206 authority permanent and raise its funding to \$750 million. The original amount in FY 2006 was \$200 million. He also trumpets sec. 1207, which is similar, though led by the DOS to build partner-nation civilian capacity.

10. Artemis was a response to the humanitarian crisis in the DRC caused by years of civil war. Since UN action is often too slow to mitigate crises, the EU launched this operation, with UN approval, as a bridge to future international action. See Faria, *Crisis Management in Sub-Saharan Africa*.

11. The AU has plans to create the Africa Standby Force for "peace support missions and intervention." See *Protocol Relating to the Establishment of the Peace*, 18–21.

12. "Darfur Integrated Taskforce (DITF)." The DITF claims support from the EU, UN, NATO, the United States, Canada, Norway, and the Netherlands.

13. Khobe, "Evolution and Conduct of ECOMOG Operations."

14. One example of this ideologically driven approach is the Structured Adjustment Program of the World Bank. Many African states have chafed under its demands for increased transparency in finance and improved models of governance.

15. Ghazvinian, *Untapped*, 96, 102–3.

16. The key activities from AFDD 2-3 are shaping and deterring, counterterrorism, support to insurgency, counterinsurgency (COIN), and support to COIN. The key capabilities the USAF brings to the irregular fight are information operations, unconventional warfare, building partnership capacity, intelligence/counterintelligence operations, mobility, agile combat support, precision engagement, and command and control. AFDD 2-3, *Irregular Warfare*.

17. Senate, *Statement of General William E. Ward*.

18. Department of State, *Country Reports on Terrorism 2007*. See chap. 2, "Country Reports."

19. Le Sage, *African Counterterrorism Cooperation*, 78–79.

20. Department of State, *Country Reports on Terrorism 2007*.

21. Ibid. See chap. 1, "Strategic Assessment."

22. Le Sage, *African Counterterrorism Cooperation*, 17–32. Of note, this publication did not specify the criteria used to label a threat level as significant.

Chapter 5

How Should Airmen Think about Africa?

Attempting to prescribe one best way to think strategically about Africa would be perilous. The vast and expanding literature on strategy, replete with divergent ideas, makes this a topic that can never be mastered, only appreciated for its complexity. Nevertheless, a few schools of thought have particular relevance to an Air Force strategy for Africa: complex system analysis, dialectic strategy, and risk management.

Africa Is a Complex System

Like any large collection of people, Africa is a complex, adaptive system. “We are dealing with a system when (a) a set of units or elements is interconnected so that changes in some elements or their relations produce changes in other parts of the system, and (b) the entire system exhibits properties and behaviors that are different from those of the parts.”¹ Though unable to provide guaranteed predictive insight, this systematic thinking does allow a strategist to anticipate some outcomes on the continent.

The most important realization from the systems perspective is that every action the USAF takes in Africa will have multiple effects, a logical outcome of (a), above. Put another way, “we can never do merely one thing” in a system.² In the context of widespread American efforts in COIN campaigns, a RAND report warned that “policymakers must continually remind themselves that actions in one country or region are likely to have a ripple effect elsewhere and that no measures should be taken without first considering how actors and audiences elsewhere might receive them.”³ The common argument against such broad-ranging consideration of consequences is that it engenders “analysis paralysis,” but in irregular warfare, where first-order American interests are not at risk, such caution is the best option.

The second defining characteristic of systems, introduced in (b), is also known as *emergent properties*. Such properties belong to the system as a whole, rather than any particular element. “Reductionism—seeking to understand the system by looking only at the units and their relations with one another—is not appropriate.”⁴ This warning against reductionist thinking is important for airpower strategists, since a common approach to any military challenge is to begin by scoping the problem. For example, a major drought in Ethiopia may elicit an airlift of food and medicine, and an air planner would logically begin by looking at the affected area and the air infrastructure nearby. Planning would then naturally proceed to well-developed mobility templates created and refined by Air Mobility Command. This scoping is essential to timely, efficient handling of a situation but is also reductionist, leading to a form of strategic myopia. In this case, the rapid response of airpower to a humanitarian crisis could lead to a situation where “supply creates its own demand in what economists call the ‘moral hazard’ problem, as people who know that they will be helped if they are in need do not struggle as hard to avoid this outcome.”⁵ Furthermore, humanitarian assistance may destabilize a region, as occurred in the 1993–94 relief effort to Somalia. Although airlifting food seems a genuinely noble endeavor, it could have long-term effects that run counter to US interests.

Viewing Africa as a complex system will drive air strategists to approach the continent with caution and diligence. This view should also encourage them to think beyond the bounds of the Air Force to embrace other stakeholders. First, from the airpower perspective, they should remember that “as actions combine to constitute the environment in which actors are situated and actors in turn change as the environment alters, the language of dependent and independent variables becomes problematic.” Military professionals, accustomed to the gratifying experience of training for and executing battle-proven tactics, must become comfortable with strategic deliberations that are inherently “tentative and incomplete.” Second, beyond military considerations, the Air Force must be ready for considerable joint, interagency, and combined involvement in the creation of strategy. The open architecture of AFRICOM guarantees this condition of numerous organizations “having a vote” in the pro-

cess of developing strategy. Though directed at political leaders, the following quote speaks to the challenge of working with outside agents: "Like good linear social scientists, many statesmen see that their actions can produce a desired outcome, all other things being equal, and project into the future the maintenance of the conditions that their behavior will in fact undermine." Finally, the strategist must remember the old military adage about the enemy getting a vote. Keeping an open mind that embraces the burgeoning world of joint, interagency, and combined operations is crucial, but "it is hard to talk about a good or bad strategy in the abstract, divorced from the strategic beliefs of the target actor."⁶ Whether the target actor is an insurgent leader, a key regional organization, or the forces of nature that can bring human misery, the airpower challenge in Africa will remain complex.⁷

African Strategy Should Be Developed Dialectically

Dialectical development of strategy is adept at handling complex systems like Africa and implies an ongoing process of refinement in reaction to events. The goal of that refinement is an Air Force strategy balanced both internally and with the strategies of other elements of American power. That balance is found between the elements of ends, ways, and means.

A balanced strategy will address ends (which are merely a concrete statement of guidance from higher authorities), ways (an abstract view of process and organization, which is treated in detail by doctrine), and means (the capabilities employed by ways to attain ends). Bridging the gap between guidance from above and the doctrinal lessons evolving from below, strategy is the most important of the three since it "is not simply a plan describing what a nation or person will do, but it also accounts for what the end state will be, and what resources are required or available to attain the end state."⁸ To evaluate balance, strategists can measure along three dimensions: suitability, feasibility, and acceptability. When the ways employed are coherent with the ends sought, the strategy is suitable. When the means used can fully support the ways employed, the strategy is feasible.

When the cost of the means used is commensurate with the ends desired, the strategy is acceptable.⁹

These measures may be frustratingly vague for Airmen accustomed to evaluating performance by reviewing heads-up display footage and comparing it to shoot-and-kill criteria, but strategy often requires such ambiguity. Whereas weapon-system performance is tested to yield accurate rules of thumb for combat employment, strategic performance cannot be modeled on a computer or in a laboratory. The value of using terms such as *feasibility*, *acceptability*, and *suitability* lies not in their clearly defined meaning; instead their value comes from allowing the dialectic to proceed with a common set of concepts. Once participants in the dialectic agree, for the sake of the argument, on what the terms mean, discussion can focus on matters of substance rather than semantics.

Risks to Air Force Strategy in Africa

No strategy is complete without considering risks. One model of risks to military strategy lists three potential culprits: failure to anticipate, to adapt, and to learn.¹⁰ Fortunately, a strong culture of operational improvisation and recent advances in information technology mitigates the latter two risks.¹¹ A result of the unpredictable future, the greatest risk to Air Force strategy in Africa is failure to anticipate. One military response to this risk is the development of doctrine, which seeks to build upon historical lessons to guide future activities. Though a valuable effort, strategists must remember Sir Michael Howard's warning: "I am tempted to declare that whatever doctrine the Armed Forces are working on, they have got it wrong."¹² Accepting this warning from Howard, Airmen would do well to hazard a few guesses on the issue of risk in Africa.

First, the creation of a military-dominated organization focused on Africa has many risks. The coordination of all US instruments of power— diplomatic, information, military, and economic—is essential to the successful application of them. However, the unique nature of AFRICOM makes interagency conflict a very real threat. Current cooperation between the Departments of Defense and State is impressive but also likely to disappear should strong personality conflicts in those large bu-

reaucracies emerge. The large, diverse group of all actors in Africa further increases this risk of discord. Such disharmony may lead to political restrictions on military actions that threaten military resources and objectives; there is also the risk of long-term damage to US diplomatic, economic, and information interests.

Next, poor system analysis can result in a host of problems, ranging from myopic thinking focused only on direct effects to decisional paralysis as increasing orders of effects are considered. Unfortunately, “there is no simple way to say how far an analyst or actor should go in projecting expected effects.”¹³ This can easily lead to the case where “in the absence of reliable guidelines, people then are likely to carry the analysis to that point, but only to that point, at which [time] the conclusions support their preferences if not their prejudices.”¹³ This risk is especially high in Africa since it will continue to receive less political and military attention than Europe, the Middle East, and China, making it likely that leaders will attempt to apply mental models attuned to those regions and thus at odds with Africa’s unique context.

Another significant risk is looking for a fight where none exists. Approaching every engagement in Africa as a potential hot spot is likely to engender low levels of trust with the nations there, creating the very instability the USAF is seeking to avoid. In a sense, this approach can be viewed as the negation of the Weinberger-Powell Doctrine; instead of going into an engagement with *overwhelming* force, the USAF’s first reaction should be to use *underwhelming* force. This coheres with irregular warfare doctrine, where building partner-nation legitimacy in the eyes of the people is the focus of operations.

The final form of risk the USAF must consider is the failure to take risk. This may sound odd, but it points to the service’s tendency to eschew activities that resist easy quantification and measurement. The open-ended strategic ends discussed in this study have no classic end state when the Air Force can judge itself victorious and go home. This risk will become increasingly acute if Congress cuts defense budgets in coming years and lower-priority theaters like Africa suffer from neglect. Nevertheless, for all the problems in Africa, there is much promise. Only by accepting the risk of stepping beyond tactical

and operational thinking can the Air Force do great things for the poorest of continents.

Notes

1. Jervis, *System Effects*, 6.
2. Ibid., 10.
3. Vick, *Air Power in the New Counterinsurgency Era*, 25.
4. Jervis, *System Effects*, 12–13.
5. Ibid., 64.
6. Ibid., 55, 57–58, 253–54.
7. The forces of nature do not, of course, have strategic beliefs—they conform to the rules of physics. Whereas those rules are well known and their effects readily discernable, the beliefs of humans are more vague. Strategy must attempt to account for both.
8. Leonhard, “Dialectic Strategy,” 6.
9. US Naval War College, *Sound Military Decision*, 30–32.
10. Cohen and Gooch, *Military Misfortunes*. These are the same three risks identified in former USAF chief of staff Moseley’s white paper, *Nation’s Guardians*.
11. The risk of failing to learn is also addressed by modern professional military education programs and an increased respect for scholarly pursuits among officers.
12. Howard, “Military Science in the Age of Peace,” 7.
13. Jervis, *System Effects*, 72–73.

Chapter 6

Conclusion

A US Air Force Strategy for Africa

The United States Air Force, along with the other services and many nonmilitary government entities, stands at the beginning of a new era of American engagement with Africa. This era promises many rewards for the Air Force in its role as a servant of the nation's interests, but the attendant risks require the service to consider its African strategy carefully. The historical context in which airpower may be applied in Africa is rich, yielding many lessons for the Air Force. Existing national guidance points the way toward a strategy, but it is too vague for the service to take action. The need is for a new strategy that addresses ends, means, and ways.

Since they derive from the strategic guidance of higher echelons, Air Force ends in Africa are relatively easy to discern. They should provide superior strategies with the means and ways to pursue their own ends. The greater creative challenge thus lies in designing the USAF ways and means for Africa. In all this, "it will be essential to avoid a 'cookie-cutter' approach, an all-too-familiar pitfall from the Cold War era, when decision makers developed universalistic responses to communist revolution that misguidedly disregarded local contingencies."¹ Though the Cold War is over and the risk of communist revolution in Africa is slight, the danger of cookie-cutter thinking, divorced from local realities, is as relevant as ever.

Ends

The Air Force should focus on serving the first-order national interests introduced in chapter 3:

- Strengthen alliances to defeat global terrorism and work to prevent attacks against us and our friends
- Prevent our enemies from threatening us, our allies, and our friends with weapons of mass destruction

CONCLUSION

As time and resources allow, the Air Force can serve the ends of second-order national interests:

- Champion aspirations for human dignity
- Work with others to defuse regional conflicts

This structure points to the application of hard and soft power by the Air Force.

Ways

Though US Air Force strategy is the focus herein, a few words on general military ways of interest in Africa can help frame the specific, air-centric point of view that follows them.

General Military Ways in Africa

Contemporary US military thought on the ways of strategy gives due consideration to the guidance in Joint Publication (JP) 3.0, *Joint Operations*. The publication adds needed detail to traditional ideas of phases in military operations and is an example of military doctrine that adapts to changes in warfare.² Since its concepts have been forged in the heat of battle in Iraq and Afghanistan, they deserve the wide audience they enjoy. Unfortunately, *Joint Operations* suffers the constraint common to all doctrine—it cannot stray far from the historical trajectory from which it sprang. In this case, the history comes from Operations Iraqi Freedom and Enduring Freedom, so the doctrine is quite adept at addressing the context of those struggles. In Africa, though, a more theoretical approach to modern warfare should supplement this doctrine.

One approach comes from a British officer with extensive command experience in the post-Cold War world—Gen Sir Rupert Smith. General Smith puts forth four military functions that will dominate in the future:

- Ameliorate—“This function does not involve the use of military force in any way. Here the military delivers aid, puts up camps, provides communications, builds bridges and all other such constructive activities in aid of civilian life, or they train the soldiers of other armies, or they observe.”

- Contain—"This function involves a certain use of military force, since here the military prevents something from spreading or passing through a barrier. Typically such operations are those to prevent trade sanctions being broken, or arms to be supplied, or no-fly zones to prevent certain weapons from being used."
- Deter or Coerce—"This function involves a wider use of force, since here the military deploys to post a threat to some party or carry out a threat against a party, to change or form that party's intentions."
- Destroy—"This function involves the employment of military force, since here the military attacks the opposing force in order to destroy its ability to prevent the achievement of the political purpose."³

Smith's central proposition is that the age of industrial war began to wane at the end of World War II and that a paradigm shift to "war amongst the people" was complete with the end of the Cold War.⁴ This model of warfare rests upon the four functions introduced above. By rejecting the modern tendency to use the expression "paradigm shift" for almost any change, Smith harkens back to Thomas Kuhn's original definition of it in order to signify its truly revolutionary nature.⁵ Smith goes on to say that, with the rise of war amongst the people, unless countries reform their militaries to embrace this new model, their utility will diminish. Any of the functions is a possible response to future conditions in Africa; the question is, what should the Air Force expect to do most often?

Smith's last two missions are familiar, indeed comfortable, for the Air Force—most of its doctrine and training focus on them. They have also seen application in Africa: destruction of terrorist targets in Operation El Dorado Canyon and small-scale, recurring strikes in Somalia, as well as the coercive influence of US military power in motivating Libya to renounce its weapons-of-mass-destruction programs. It is the first two missions, though, that will predominate in Africa in the future. Ameliorate and contain missions will be common because they "can be put into play without knowing the desired political outcome, though it is preferable this be determined in advance."⁶

CONCLUSION

This makes these two missions particularly attractive for political leaders, since they are spared the need to provide clear political ends. This same aspect of the two mission types, though, may frustrate military personnel committed to activities with no clear purpose and therefore no clear military end. Moreover, in such situations Airmen are likely to operate with many more restraints on military power than constraints.⁷

Specific USAF Ways in Africa

To allow operating along the continuum of Smith's mission set in Africa, the Air Force needs to become adept at three ways of operating on the continent: assessment of the ground environment from ground level; ISR of the air, land, and surrounding seas from the air, space, and cyberspace domains; and operation of channel routes for air mobility missions. Of course, the missions of deter, coerce, and destroy may need to be executed, but they share enough similarity with similar operations in other regions of the world as to not require elaboration here.

First, regarding ground assessment, "there is no template for African countries, each is different."⁸ Whereas Airmen are likely to focus on airfields, condition of navigational aids, and force-protection needs, they should cast their vision wider. In Africa assessing the social networks of the operating area may be more important than physical infrastructure once a minimal level of flight safety is assured.⁹ Fortunately, the country team at the nearest US embassy can assist with details of local human geography, though the air operation knowledge of embassy personnel in Africa is often limited.¹⁰ Savvy Airmen can bring these disparate areas of expertise together to determine how best to accomplish desired ends in light of local conditions. Determining what localities should be the focus of such ground assessment will drive the Air Force into the more familiar domains of air, space, and cyberspace.

Next, USAF ISR missions in Africa will suffer from the same low prioritization of assets as air-refueling missions. This will require careful allocation of ISR assets to optimize their employment on the continent. Current intelligence activities are adequate to cue contain, deter, coerce, and destroy functions, though AFRICOM will understandably press for increased Air

Force support of those missions. The real leverage point for USAF ISR assets in Africa, though, could lift the ameliorate mission to high levels of success with few dedicated resources. From the air, USAF aircraft, either manned or unmanned, can determine where air mobility can best aid civilian life in Africa. By surveying the few lines of communication on the continent, aircraft can spot disruption to infrastructure (such as bridges washed out by floods or rail lines damaged by rebel forces) and trigger relief missions. Furthermore, airborne ISR in Africa would not necessarily require dedicated ISR assets—aircrew flying regular air-mobility missions in Africa, discussed below, could do much of the work and report it through Air Force and embassy channels.

The two new domains of Air Force operations, space and cyberspace, can also contribute to the African mission. Space ISR for Africa could rely on commercial and US government environmental satellites to highlight humanitarian crises before they grow unmanageable. Assessment of crop failure, long-term drought conditions, and deforestation trends are a few examples of issues that may impact African life and thus provide opportunities to ameliorate suffering. The slow pace of such events, and the large areas they will affect, means that the most capable reconnaissance satellites would not be needed often in Africa. Cyberspace is another domain that can provide valuable guidance for Air Force efforts, though the low penetration of the Internet in Africa will lessen its value somewhat. Nevertheless, since Africans represent only 3.61 percent of all Internet users in the world, this is a relatively small target set for Air Force cyberoperators to target.¹¹ Furthermore, use is likely to be concentrated among African ruling elites and members of civil society, the two most important populations to monitor and support.

Finally, the Air Force should resurrect standing air-mobility routes in Africa as soon as possible. Though uneconomical, they can be a powerful tool of policy in Africa. When a USAF transport lands at an African airfield, it brings not only supplies but also American presence. Recurring, nonaggressive displays of US airpower will increase Africans' comfort with such activity. To maximize the utility of this system, though, the USAF should integrate with other stakeholders like never

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before. Every time USAF transports move along African channel routes, they should carry personnel and cargo from US government organizations such as DOS and USAID. This is nothing new, but taking the additional step of moving NGO and African personnel and equipment on a regular basis would be a valuable evolution. The idea is not to compete with the struggling airline industry of Africa, but rather to put a joint, inter-agency, and international face on air-mobility operations there. This harkens back to the USAF experience in Operation Zaire II, but its permanent status is novel. This approach will serve two purposes: improve USAF cooperation with those stakeholders and increase the legitimacy of US actions on the continent. Channel routes will likely reduce the efficiency of USAF mobility missions due to increased force-protection concerns and the need to provide training to foreign personnel operating from air transports. This reduction in efficiency would, however, be more than offset by increased mission effectiveness, when evaluated in strategic terms.

Means

Now we've reviewed the ways. The following discusses the specifics about what is necessary to implement the Air Force strategy in Africa.

Access to African Airpower Infrastructure

The size and terrain of Africa, discussed in chapter 1, pose considerable challenges for Airmen. The acquisition and maintenance of a large tanker fleet is one possible answer to the scale of the continent, but AFRICOM is unlikely to receive a significant allocation of such aircraft. In addition, relying on a vast network of aerial refueling would be expensive and directly limit the Air Force's ability to respond to other crises around the world. One answer to this problem of projecting airpower into Africa is to rely on an approach validated by a century of aviation history—a network of airfields that covers the continent.

In the wake of airpower's modern success in projecting power over great distances, arguing for emphasis on land-based infrastructure in Africa might seem anachronistic. The ability to

operate large groups of aircraft at great range from their bases in Operations Desert Storm, Deliberate Force, Enduring Freedom, and Iraqi Freedom seems to obviate such a concern. However, the relatively low strategic priority of Africa means that AFRICOM will operate with far fewer tankers than its predecessors in the above campaigns. US Navy aircraft carriers can provide some capability, at least around the periphery of Africa, but they too would need USAF aerial tanker support to operate over much of the continent. Moreover, carrier air wings are optimized for strike operations rather than air mobility or ISR missions. Geography and limited tanker assets therefore lead to one conclusion—Air Force efforts in Africa need land bases to be effective over the long term.

One period in military aviation provides an analogy. During World War II, in the South Pacific, US Airmen had to contend with many of the same problems they will face in Africa. Great distances, few lines of communications capable of supporting large military operations, and a generally harsh operating environment all drove airpower strategy to adapt. Strangely, “many commentators have underemphasized the role geography and terrain play in air warfare.”¹² The USAF does not, however, enjoy the luxury of overlooking those two factors in Africa, since it is unlikely to commit the tanker assets needed to overcome them. Lessons pertaining to airfields also speak across the years:

At the strategic level the availability and relative location of air bases limit what targets the attacker is able to strike and how well defending forces can rise to oppose. At the operational level the location and sophistication of the air base have a great impact on the number of planes that can fly on any given day and be supported in the long run. Furthermore the base is the shelter for the men who fly and maintain the aircraft. Any warplane spends far more time on the ground than in the air. Thus the base is “home” for the men, and its makeup has great influence on morale.¹³

The obvious weakness of the South Pacific analogy for the Air Force in Africa is that it was a maritime, rather than terrestrial environment.¹⁴ Nevertheless, modern Africa shares many characteristics with that large, inhospitable region of 60 years ago. What is the Sahara if not a great sea of shifting sand dunes, incapable of supporting significant air infrastructure? The

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jungles of equatorial Africa are similarly inconvenient and hostile to Airmen who crash.

The air war in the South Pacific also provided an enduring lesson on the value of joint operations in support of air infrastructure:

Obviously a symbiotic relationship existed between the forces of sea, land, and air. Despite the tremendous importance of air transport in the South Pacific, most supplies and all amphibious assaults were sea-borne. Bases, because they occupy land, had to be seized and defended by ground forces. . . . Thus without land forces there would have been no air bases to begin with. Without sea power it was not possible to sustain the flow of supplies required to keep aircraft fighting and the garrisons supported. Without air cover, warships were in deadly peril, merchant ships could not operate, and armies could not survive. It is impossible to say that one type of war—land, sea, or air—was the most important. Trying to make a judgment would be like arguing whether the heart is more important than the lungs to the human body.¹⁵

Finding airfields for use in Africa engages products and processes familiar to air mobility planners. The *Airfield Suitability and Restrictions Report* is a good starting point and, when combined with ongoing assessments of airfields by embassy country teams, will yield a list of sites appropriate to the mission. However, given the political instability of many African states as well as the many stakeholders who may restrict USAF access to the continent, airfield selection must be flexible. It also needs to look beyond the shores of the African mainland to a series of non-African locations. Examples include Morón AB, Spain; Crete; and Ascension Island in the South Atlantic. These bases have the benefit of being controlled by NATO allies, but there is no equivalent offshore base covering eastern Africa, making Camp Lemonier vital to air operations there. Southern Africa is also far from any significant non-African airfields, making nonpermissive operations there difficult.

A New High-Low Mix Force Structure

In the 1970s, the USAF decided on a mixture of fighter aircraft to ensure air superiority in a showdown with the Warsaw Pact. Based on the need to replace a large number of F-4 Phantoms and the fiscal constraints of the post-Vietnam era, the high-low mix of F-15 Eagle and F-16 Fighting Falcon fighters was acquired to meet the challenge. The idea was to save money

by creating a division of labor between the two aircraft; the larger F-15 would take the air-superiority fight deep into enemy territory, while the smaller F-16 would provide local air superiority over allied airfields.¹⁶ This mix of responsibilities was a brilliant response to the military and economic environments of the day.

Today's military and economic environment points to the need for a new high-low mix. This mix is between the high-dollar strike and transport aircraft that currently dominate Air Force flight lines, and new aircraft especially suited to conflict that does not require the leading edge of aviation technology.¹⁷ This mixed force would allow the Air Force to remain dominant in major regional conflicts while fielding specialized forces for small regional conflicts (SRC). In the airpower context, an SRC is defined as a fight in which air superiority is largely assured, as is access to air bases close to the fight.

The division of labor of the high-low mix would benefit each end of the capability spectrum greatly. Traditional forces would be able to concentrate their acquisition and training on peer-level opponents. They might see action during initial military responses in Africa, but once they accomplished their missions, they could return to their home bases and resume preparing for the next big fight.¹⁸ Then, SRC forces could move into the region and take over.

The specifics of the SRC platforms are important but beyond the scope of this study. Whether they take the form of AT-6 Texan light attack aircraft and C-27J Spartan light transports, they must be capable, affordable, and exportable. They must also be used—in significant numbers—by the USAF in order to increase their marketability overseas and US ability to build partner air capacity with them. Ideally, partner nations would see the USAF flying robust, inexpensive strike and transport aircraft and want to operate the same equipment.¹⁹ This would eliminate the current problem of sending F-16 pilots to train Iraqi pilots to fly light aircraft in which they have little experience.

It is important to note, though, that SRC forces should be assigned to conventional force providers such as Air Combat Command or USAFE—they should not be considered foreign internal defense (FID) assets. That mission should remain within Air Force Special Operations Command (AFSOC). How-

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ever, SRC forces do have obvious ties to the FID mission and could create a large pool of experienced aviators from which to recruit AFSOC personnel. Taking advantage of that pool would require USAF personnel policies to allow for much more flexibility in aircrew assignments than currently exists. Specifically, the aircrew of light strike and transport aircraft must be able to shift between the conventional and AFSOC communities with more ease than is currently the case.

Airpower Organization

Applying airpower in Africa will also require the change of command and control organizations. This is already under way at the component numbered air force (C-NAF)-level, with the reactivation of Seventeenth Air Force. AFRICOM and USAFE are currently working to build Seventeenth Air Force to serve as the air component of AFRICOM.

Like the other C-NAFs, Seventeenth Air Force will combine the structure, personnel, and processes of Air Force forces for AFRICOM, as well as the capability to assume joint force air component commander responsibilities. This means it will contain a Falconer air and space operations center (AOC) as the AFRICOM commander's primary command and control node for airpower. The unique African context, however, calls for some innovation in the organization of the AOC. The character of AFRICOM's mission in Africa, with its focus on security cooperation rather than application of violent force, should drive the Seventeenth Air Force AOC to reflect its operational environment. Specifically, among the five divisions in the AOC, the Air Mobility Division (AMD) and the ISR Division (ISR-D) should be viewed as primary. The traditional, kinetically focused divisions should not be totally neglected, but in case of resource shortfalls, the priority must belong to the AMD and ISR-D.

Additionally, the remaining three divisions in the Seventeenth Air Force AOC (Strategy, Combat Plans, and Combat Operations) should be renamed. They should be called Future Plans, Future Operations, and Current Operations, respectively. This would serve two purposes. First, bringing Air Force planning terminology at the operational level of war in line with joint doctrine will reduce needless confusion in joint operations.²⁰ Second, re-

moving the word “combat” from division names is a way to avoid unintended connotations of violent force application. This may seem like petty massaging of terms, but in the interagency and international world of operating in Africa, many of the players will be uneasy about associating with combat activities.

Language Training for Airmen

A final note on means is appropriate, but it is a negative recommendation—the Air Force should not fund language training as part of its Africa strategy. Increased language training for officers is a trend in today’s US military. It has been included in professional military education; in the Air Force, some midcareer officers are identified as international affairs specialists and receive training to operate in and with other countries. Overall, this is an excellent, long-overdue program for the Air Force. Regarding Africa, though, it will be of limited value. Due to the huge number of local dialects in Africa, preparing Air Force personnel to converse in even a handful of them would be impossible.²¹ The continuing presence of European languages among the elites of Africa makes languages such as French and Portuguese useful but only where those people live and work—typically in the major cities. Since the Air Force will find itself operating in many austere locations with indigenous personnel lacking education in European languages, another source of language skill is needed. This is another area where US embassies can provide the means. The Air Force should ask US and allied embassies near current and projected FOSs and CSLs to build and maintain a roster of local interpreters who can communicate in the major local dialects.²² This outsourcing of communication skills may not fit the ideal of an Air Force able to roam Africa and operate independently, but it reflects the interagency interdependency that will already be present. It also reflects the limits of time and money available to train Airmen in a multitude of languages.

Strategy Review

This study has laid out a set of ends, ways, and means that can form the heart of a new USAF strategy for Africa. Highlights of this proposal include the following:

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- Ends—Protect the United States and its partners from attack in or from Africa, whether from classic terrorist tactics or the use of WMDs. When political will and capabilities permit, the Air Force will seek to better the life of Africans by helping secure them from conflict and the worst infringements of human dignity.
- Ways—Whether using JP 3.0 terms or those of writers such as General Smith, Air Force ways in Africa should focus on irregular warfare. Though it must retain the capability to destroy targets in Africa, that mission will likely be accomplished by assets from outside AFRICOM.
- Means—In descending order of difficulty and importance, the Air Force should pursue the following means for Africa: assured access to a network of airfields in and around Africa, a high-low mix of aircraft that encourages security cooperation, airpower organization tailored to the unique environment of the continent, and an educational focus on cultural aspects other than language for Airmen slated to serve there.

The viability of this strategy is contingent on several requirements, introduced in chapter 5. The complexity of Africa is addressed by the limited ends sought by the Air Force as well as by the low-key ways to be employed. This minimalist approach will prevent agitating African distrust of foreigners and, more importantly from the American point of view, keep the means employed relatively inexpensive. This low-cost approach will be acceptable for the limited ends sought and is feasible for low-key ways, which are themselves suitable for the limited ends the Air Force seeks. Finally, this strategy has accounted for various types of risk, with the ultimate goal of adequately anticipating the environment the Air Force will find in Africa.

Of course, hindsight is the only reliable judge of successful strategy, but the process must begin somewhere. This study has presented an analysis of Africa and synthesized an Air Force strategy for it. However, like all thought experiments, that strategy must yield to recurring, critical assessment to remain useful. Strategy must not remain static, for it “is a system of expedients. It is more than a discipline; it is the transfer

of knowledge to practical life, the continued development of the original leading thought in accordance with the constantly changing circumstances. It is the art of acting under the pressure of the most difficult conditions.”²³ Such difficult conditions will always confront USAF operations in Africa—that is one of only two guarantees in this paper. The other guarantee is that, given adequate means and encouraged to employ innovative ways, Airmen will deliver success in pursuing America’s national interests on the world’s poorest continent.

Notes

1. Vick, *Air Power in the New Counterinsurgency Era*, 25.
2. The new set of phases is 0-Deter, 1-Deter, 2-Seize Initiative, 3-Dominate, 4-Stabilize, 5-Enable Civil Authority. See JP 3.0, *Joint Operations*, IV-27–IV-30.
3. Smith, *Utility of Force*, 323–26.
4. Ibid., 4–5.
5. Ibid., 4. See Kuhn, *Structure of Scientific Revolutions*.
6. Smith, *Utility of Force*, 325.
7. This differentiation is based on the view that restraints are things that must not be done, while constraints are things that must be done.
8. Tom Meer (USAF Special Operations School), in discussion with the author, 20 December 2007.
9. Ibid.
10. Kwiatkowski, *Expeditionary Air Operations in Africa*, 41–42.
11. Central Intelligence Agency, *2008 World Factbook*.
12. Bergerud, *Fire in the Sky*, 1.
13. Ibid., 5–6.
14. Ibid., 6.
15. Ibid., 7–8.
16. Lorell, *U.S. Combat Aircraft Industry*, 84–91.
17. The IW joint operating capability mentioned in chap. 3 should drive the acquisition of such aircraft.
18. These missions would likely be the classic missions of assuring air superiority, destroying major ground and sea targets that threaten the joint/combined force, and assuring access to air infrastructure in-theater.
19. This has been the experience with other aircraft, such as the C-130, F-15, F-16, and F-15E.
20. JP 5.0. *Joint Operation Planning*, xvii.
21. If the Air Force wants to educate Airmen to operate in Africa, it “should focus on history, culture, and politics rather than language.” Meer, discussion.
22. Maj Jean-Phillipe Peltier (USAF Special Operations School), in discussion with the author, 20 December 2007.
23. von Moltke, *Moltke on the Art of War*, 47.

Appendix

Analysis Methodology

Tables 1–7 present information on various measures of infrastructure and economics pertinent to Air Force strategy for Africa. All tables were built with data from the sources listed using Microsoft Excel.

- Table 1 is a list of air routes relevant to operations in Africa. The routes not in Africa are included as a means of comparison with more familiar air movements in the United States and across the Atlantic Ocean.
- Tables 2 and 3 represent US Department of Energy figures as percentages of American consumption of oil and gas. This presentation of total consumption and import levels gives an indication of relative importance for various regions and countries. Of note, the data used to build these tables were a snapshot in time—trend analysis was not attempted.
- Tables 4–7 use percentages relative to a reference continent. Table 4 uses Africa as a whole as the reference to show the relative density of mineral facilities in the regions of Africa. Tables 5–7 use North America as the reference.

Abbreviations

AFDD	Air Force Doctrine Document
AFRICOM	Africa Command
AFSOC	Air Force Special Operations Center
AOC	air and space operations center
AU	African Union
CENTCOM	Central Command
CJTF-HOA	Combined Joint Task Force-Horn of Africa
COIN	counterinsurgency
CSL	cooperative security location
CT	counterterrorism
DOD	Department of Defense
DOS	Department of State
DRC	Democratic Republic of the Congo
ECOMOG	Economic Committee of West African States Monitoring Group
ECOWAS	Economic Committee of West African States
EU	European Union
EUCOM	European Command
FAF	French air force
FOS	forward operating site
FY	fiscal year
ICAO	International Civil Aviation Organization
ISR	intelligence, surveillance, and reconnaissance
IW	irregular warfare
JFACC	joint force air component commander
JOC	joint operating concept
KTAS	knots true air speed
MCC	Millennium Challenge Corporation
MCO	major combat operations
NATO	North Atlantic Treaty Organization
NDS	<i>National Defense Strategy</i>
NGO	nongovernmental organization
NM	nautical miles
NMS	<i>National Military Strategy</i>
NSS	<i>National Security Strategy</i>
OAU	Organization of African Union
OEF-TS	Operation Enduring Freedom-Trans Sahara
PACOM	Pacific Command

ABBREVIATIONS

RAF	Royal Air Force
REC	regional economic community
RFC	Royal Flying Corps
SPP	State Partnership Program
SRC	small regional conflict
TRANSCOM	Transportation Command
TSCTP	Trans-Sahara Counterterrorism Partnership
UN	United Nations
USAFE	United States Air Forces in Europe
USAID	United States Agency for International Development
WMD	weapon of mass destruction

Glossary

US Terms

African Contingency Operations Training Assistance (ACOTA)	Department of State program. The successor to the African Crisis Response Initiative. ¹
African Crisis Response Initiative (ACRI)	A program that “utilizes U.S. military personnel and private contractors to train various African militaries in peacekeeping and in humanitarian operations.” ²
Africa Center for Strategic Studies (ACSS)	One of five Department of Defense (DOD)–chartered regional centers designed to promote US security policy and interaction with partner nations around the world.
African Growth and Opportunities Act (AGOA)	“AGOA authorized a new U.S. trade and investment policy toward sub-Saharan Africa. It has transformed U.S.-sub-Saharan Africa trade relations by promoting increase trade, investment and economic cooperation between the United States and eligible countries in sub-Saharan Africa.” ³
Foreign Military Sales (FMS)	Managed by the DOD, Defense Security Cooperation Agency. See also <i>security assistance</i> .
Global Peace Operations Initiative (GPOI)	Introduced by the Bush administration at the 2004 G-8 Summit as a plan “to train peacekeepers for duty in Africa.” ⁴

GLOSSARY

International Military Education and Training (IMET)	(DOD) “Formal or informal instruction provided to foreign military students, units, and forces on a nonreimbursable (grant) basis by offices or employees of the United States, contract technicians, and contractors. Instruction may include correspondence courses; technical, educational, or informational publications; and media of all kinds.” ⁵
Joint Combined Exchange Training (JCET)	A joint exercise program utilized extensively by special operations forces (SOF). The JCET is a means by which SOF maintain their combat readiness and at the same time participate in the theater security cooperation strategy. ⁶
Millenium Challenge Corporation (MCC)	Created in January 2004 by legislation in the United States Congress. ⁷
National Defense University (NDU)	The parent organization of the ACSS.
Security Assistance (SA)	“Group of programs authorized by the Foreign Assistance Act of 1961, as amended, and the Arms Export Control Act of 1976, as amended, or other related statutes by which the United States provides defense articles, military training, and other defense-related services by grant, loan, credit, or cash sales in furtherance of national policies and objectives.” ⁸ “As a subset of security cooperation, Security Assistance (SA) encompasses a group of programs, authorized by law, through which the U.S. Department of Defense (DoD) or commercial contractors provide defense articles and services in support of national policies and objectives. SA programs allow the

transfer of defense articles and services to international organizations and friendly foreign Governments via sales, grants, leases, or loans to help friendly nations and allies deter and defend against aggression, promote the sharing of common defense burdens and help foster regional stability. SA includes such diverse efforts as the delivery of defense weapon systems to foreign governments, U.S. Service School training to international students, U.S. personnel advice to other governments on ways to improve their internal defense capabilities, and U.S. personnel guidance and assistance in establishing infrastructures and economic bases to achieve and maintain regional stability. When the U.S. assists other nations in meeting their defense requirements, it contributes to its own security. Foreign Military Sales (FMS), Foreign Military Financing (FMF) grants or loans, and International Military Education and Training (IMET) are key programs included within Security Assistance. IMET is conducted solely on a grant basis. FMS can be conducted using host nation funds, donor funds, or FMF.”⁹

Security Assistance
Organization (SAO)

All Department of Defense elements located in a foreign country with assigned responsibilities for carrying out security assistance management functions. It includes military assistance advisory groups, military missions and groups, offices of defense and military cooperation, liaison groups, and defense attaché personnel designated to perform security assistance functions.¹⁰

Security
Cooperation (SC)

“All Department of Defense interactions with foreign defense establishments to build defense relationships that promote specific US security interests, develop allied and friendly military capabilities for self-defense and multinational operations, and provide US forces with peacetime and contingency access to a host nation.”¹¹ “The Department of Defense (DoD) broadly defines Security Cooperation (SC) as those activities conducted with allies and friendly nations to:

- Build relationships that promote specified U.S. interests
- Build allied and friendly nation capabilities for self-defense and coalition operations
- Provide U.S. forces with peacetime and contingency access”¹²

United States
Southern
Command
(USSOUTHCOM)

“The United States Southern Command (SOUTHCOM), located in Miami, Florida, is one of ten unified Combatant Commands (COCOMs) in the Department of Defense. It is responsible for providing contingency planning, operations, and security cooperation for Central and South America, the Caribbean (except U.S. commonwealths, territories, and possessions), Cuba; as well as for the force protection of U.S. military resources at these locations. SOUTHCOM is also responsible for ensuring the defense of the Panama Canal and canal area.”¹³

*Unified Command
Plan (UCP)*

The classified document describing the roles and responsibilities of US unified commands.

United States Africa Command (USAFRICOM or AFRICOM)	The newest unified Combatant Command in the US Department of Defense, AFRICOM consolidates DOD interaction with all African states except Egypt. ¹⁴
United States Agency for International Development (USAID)	Created by Pres. John F. Kennedy in 1961. "USAID is an independent federal government agency that receives overall foreign policy guidance from the Secretary of State." ¹⁵

African Terms

African Economic Community (AEC)	The group of all African Union states committed to long-term economic development of the continent.
African Union (AU)	Supranational organization of all African states except Morocco. The AU succeeded the OAU in 2001. ¹⁶
Economic Community of West African States Monitoring Group (ECOMOG)	A multi-national military intervention group created by the member nations of the Economic Community of West Africa States. ¹⁷
Organization of African Unity (OAU)	Predecessor to the African Union.
Regional Economic Community (REC)	Eight of these form the "pillars" of the African Economic Community.

Other Terms

Africa	Though the creation of AFRICOM was the impetus for this study, its area of responsibility (AOR) excludes Egypt. This exclusion is understandable given that country's historical ties with the Middle East, but it can be confusing when discussing the US military with respect to Africa. Herein the term Africa refers to the entire continent, including Egypt. This serves to lessen confusion when citing statistics and making comparisons with other regions of the world. In the event Egypt is explicitly excluded from a point of discussion, the term <i>AFRICOM AOR</i> will be used.
Civil Society	"The organizations that arise out of voluntary association within society, found between the extended family and the state." ¹⁸
Ends	Ends constitute the set of conditions sought by policy. Ends may differ in scope and scale depending on the point of view from which they are considered. In this study, the most common viewpoints discussed are those of the United States and the USAF.
Ethnic Group	"A community of people who have the conviction that they have a common identity and common fate based on issues of origin, kinship ties, traditions, cultural uniqueness, a shared history and possibly a shared language. In this sense, an ethnic group is much like the 'imagined community' of the nation. Ethnicity, however, focuses more on

	sentiments or origin and descent, rather than the geographical considerations of a nation.” ¹⁹
Means	These are the resources, such as manpower, money, and time, committed in pursuit of ends.
Military Force	Given the broad range of military activities under the rubric of conducting irregular warfare, it is important to distinguish between violent and nonviolent application of military power. Under most circumstances in Africa, the Air Force will be involved in nonviolent force application (e.g., humanitarian airlift, building partner capacity, etc.); therefore, <i>military force</i> will denote its nonviolent use. In cases where violence is a primary feature of the force application, it will be stated explicitly.
Nation	“A collection of people bound together by common values and traditions, often sharing the same language, history and an affiliation to a geographical area.” ²⁰
Nationalism	“The desire that the nation should be housed in its own sovereign state.” ²¹
Risks	The aspects of a situation that threaten to nullify the pursuit of ends.
State	“A set of political institutions that govern within a delimited territory.” ²²

Strategy	Strategy is an important, yet vague, word. It can describe everything from global policy to the training needs of Marine corporals. Herein the term <i>strategy</i> refers to the roadmap of specific actions the Air Force can take to move from its current state of activity in Africa to its desired outcomes and the means and ways of conducting that journey. A strategy therefore consists of a system of related ends, means, and ways.
Ways	The methods by which means are employed in pursuit of ends.

Notes

1. US Africa Command, "Fact Sheet: Africa Contingency Operations."
2. House, *African Crisis Response Initiative*, 6.
3. Committee on Ways and Means, *2006 Comprehensive Report on U.S. Trade*, 8.
4. Bush, *National Security Strategy*, 2006, 16.
5. Joint Publication (JP) 1-02, *Department of Defense Dictionary*, 278.
6. JP 3-05, *Doctrine for Joint Special Operations*, appendix A: Special Operations Forces Education and Training.
7. Millenium Challenge Corporation. "MCC and Africa."
8. JP 1-02, *Department of Defense Dictionary*, 491.
9. Defense Security Cooperation Agency, "Frequently Asked Questions."
10. JP 1-02, *Department of Defense Dictionary*, 491.
11. Ibid., 492.
12. Defense Security Cooperation Agency, "Frequently Asked Questions."
13. US Southern Command, "About Us."
14. US Africa Command, "Fact Sheet: United States Africa Command."
15. US Agency for International Development, "About USAID."
16. *Wikipedia online*, s.v. "African Union," http://en.wikipedia.org/wiki/African_Union.
17. Ero, "ECOMOG: A Model for Africa?"
18. Thomson, *Introduction to African Politics*, 6.
19. Ibid., 60.
20. Ibid., 35.
21. Ibid., 35.
22. Ibid., 6.

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