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Summer 2010 Volume I, No. 2

Editorial

Open Letters to AFRICOM

Book Review

Ecology, Security, and Armed Conflicts in Africa

Like a disease . . . a damaged environment, particularly when combined with other stress factors, such as poverty, globalization, poor governance, inequality, and mass migration, can undermine societies and give rise to civil conflicts and failed states.

—William Mansfield, 2009

History shows many instances in which scarce resources and environmental degradation played a role in generating conflict, leading even to the collapse of societies and civilizations—some as early as the beginning of written history.[1] Examples include many peoples of Mesopotamia and parts of the Middle East, the Maya of Central America, the Khmer of Southeast Asia, and the Anasazi of the US Southwest, among others. As Mary Ellen O'Connell observes, "In the 1970s, Japanese leaders first argued that national security means more than being safe from traditional military threats. They made this argument at a time [when American] leaders were pressing the Japanese to spend more on security. Japanese leaders argued that sums spent on protecting the environment or food and energy sources should also count toward national security spending."[2] This nexus of environment, security, and armed conflicts typifies many African countries.

A complex relationship between ecology and conflict exists in Africa. A degraded environment can lessen the probabilities of a lasting peace and put people's future livelihood at risk. According to Peter Gleick, "Where water is scarce, competition for limited supplies can lead groups, communities, and even nations to see access to water as a matter of highest concern."[3] There is always a risk that resource depletion and environmental degradation can embroil a region in a vicious cycle of poverty, political instability, armed conflict, greater environmental degradation, and greater poverty.

In Africa, more often than not, social, economical, and ecological issues are tightly interlocked. Environmental degradation or resource scarcity is a potential trigger for violent conflict that might engulf and threaten the stability of an entire region. The Horn of Africa is one of numerous examples: "[It] is . . . a region devastated by environmental degradation in many forms: deforestation, soil erosion, soil salinization, desiccation, desertification, [and] loss of biodiversity. It is also a region of endemic conflict waged at many levels: state, region, nation, religion, tribe, and clan."[4] Another example is the Democratic Republic of Congo (DRC): "[The DRC] boasts an abundance of precious minerals, [but] the country has been ravaged by diamond-related violence, disease, starvation, and tribal warfare that have resulted in the deaths of over 5 million people. Since the 1990s, rebel armies in the

DRC have been exploiting small-scale diamond fields and funneling the profits toward insurgent activities."[5]

The question about the causes of violent conflicts in Africa has received a great deal of scholarly attention and has prompted considerable academic debate in recent years:

> The traditional assumption that violent conflicts in Africa emanate from ethnic, religious or cultural differences is seriously limited. Except for "old" conflicts, ethnic dichotomies appear to be rather a consequence than a cause of violent conflicts. However, ethnic, religious and cultural dichotomies are very potent as people's perceptions of conflict—perceptions held by many fighters on both sides of the conflict divide. The longer, however, a conflict persists, the more these ethnic, religious and cultural factors come into play. In an old conflict, when even the initial causes have petered out or died away, that "abstract," ideological ethnicity, becomes an active material and social force.[6]

In most cases, as in Sudan, Rwanda, and Somalia, ethnicity appears to be a cover for competition to control scarce resources in times of environmental degradation. The ecological issues become extremely political; in reality, the situation involves an elite struggle for control of the state. "Violent conflicts are among the greatest threats to human security in Africa. Wars in Africa have inflicted massive destruction upon the continent's infrastructure, displaced millions of people, disrupted livelihoods and seriously damaged the environment."[7] According to World Bank estimates, in the 1990s violent conflicts in Africa consistently led to a 2 percent net loss of economic growth annually.[8]

Most African states are now seriously trying to prevent violent conflicts in the continent. The African Union has taken steps to promote peace and security by establishing the Peace and Security Council, whose mandate includes serving as an "early-warning arrangement to facilitate timely and efficient response to conflict and crisis situations in Africa."[9]

United States Africa Command's (AFRICOM) efforts to bring sustainable development and human security to Africa should have the larger aim of "winning hearts and minds" in order to prevent support for Islamic extremism and terrorism. Just as scholars in the 1990s suggested that the North Atlantic Treaty Organization could "view environmental degradation in the same category as oil shortages, aggressive ideologies, or weapons proliferation," so could AFRICOM adopt this perspective.[10] AFRICOM should also give a high priority to two related challenges: education and Africa's children. In fact, "each year of education reduces the risk of conflict by around 20%."[11] Another factor that plagues the world, especially Africa, is the increasing use of young children as soldiers—one of the most deplorable developments in recent years. Already in 1996, the United Nations Children's Fund (UNICEF) estimated that during the last decade, child victims included

- 2 million killed;
- 4–5 million disabled;

- 12 million left homeless;
- more than 1 million orphaned or separated from their parents;
- some 10 million psychologically traumatized.[12]

In light of the sheer weight of suffering that these conflicts have inflicted upon children, it is difficult to remain dispassionate.

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Notes

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Letter No. 1 to AFRICOM

Environmental Security and Engagement in Africa

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Relations between the United States and Africa reached a defining moment with the activation of Africa Command (AFRICOM). The poignant question concerns whether the relationship represented by this command will focus on American security priorities or a broader range of security issues important to both the United States and African nations. To meet the latter objective, the new command must emphasize one thing critical to African nations—the environment. To assist AFRICOM, this letter and the following three letters spell out a range of policy and environmental issues and advance recommendations that will allow the command to pursue these goals.

In October 2008, AFRICOM officially became a separate combatant command within the United States' Department of Defense (DOD). Even before the official activation, many African officials and other commentators greeted this new organization with questions and concerns about what they perceived as the militarization of American-African relations.[1] Formation of this command came in the wake of the 2003 American-led invasion of Iraq and the spread of the American-led global war on terrorism to the African continent. At the same time, it reawakened the historical memory of the military's role in Africa during the colonial era as well as the postcolonial military regimes. Creation of a new command, thus, was bound to raise concerns, even if merely a bureaucratic reorganization within the American structure.

Since the majority of African states attained independence in the 1960s, American involvement on the continent has ranged from supporting Cold War allies to an ever-increasing variety of post–Cold War interventions. In the 1990s, the US military intervened in Somalia, assisted Rwandan refugees in the postgenocide months, carried out evacuations of US embassies in times of crisis, and performed humanitarian operations such as those in flood-ravaged Mozambique and Tanzania. These post–Cold War activities tended to be planned reactively, without evidence of a coherent, thought-out American policy in Africa. The only enduring strands seemed to be minimal security-assistance programs,

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occasional training deployments, and small medical-, dental-, or veterinarian-assistance missions.

AFRICOM is now an independent organization searching to define a coherent, long-term mission. In this regard, stressing environmental security as its mission would increase the probability of success because it would benefit both the United States and African nations. The AFRICOM mission statement itself makes a clear call for involvement in this area:

> United States Africa Command, in concert with other U.S. government agencies and international partners, conducts sustained security engagement through military-to-military programs, military-sponsored activities, and other military operations as directed to promote a stable and secure African environment in support of U.S. foreign policy.[2]

This mission calls for "sustained" engagement with the goal of creating a "stable and secure African environment." Although this use of the term *environment* does not relate directly to the natural world, one must consider that for the security situation to be stable, the US military and its partners in Africa must consider the natural world and its importance to the African partners. Focusing on the environment would help both sides achieve policy objectives and nurture growing relationships. AFRICOM must, at one level, focus on the generalities of a growing US-Africa relationship. Usually, Africa should not be treated as a single entity. Each of the 53 nations on the continent must be regarded independently. However, common positions shared by most African nations are important because they constitute the basis for clear, understandable justifications for the general public without getting bogged down in nation-specific issues.

Environmental Security

AFRICOM can organize its relationship with the African continent around the idea of environmental security. This concept is still evolving in its meaning and practical application, but, in general, it addresses the relationship among the environment, national security, and conflict. Issues related to environmental security that would provide an inroad for AFRICOM range from the consideration of conflict caused by competition over scarce natural resources to the global question of climate change and its impact on stability and national security.

Discussions of environmental security do not always concern breakdown and ensuing conflict. Indeed, many people see a positive correlation among cooperating on environmental matters, increasing bilateral confidence, and enhancing the potential for peace (i.e., environmental peacemaking).[3] Perhaps best symbolizing this growing attention on the links between the environment and peace is the 2004 Nobel Peace Prize awarded to Wangari Maathai and the Green Belt Movement in Kenya. This prize emphasized the contribution of a movement to producing conditions of democracy and easing conflict through reforestation. The movement recognizes that "peace on earth depends on our ability to secure our living environment."[4]

The potential of environmental security is very important for AFRICOM's relations with Africa. By adopting this as a guide to engagement with African nations, AFRICOM can generate a confluence of interests and positions in the United States and Africa. Environmental security creates a vortex for cooperation because of the criticality of the environment to African states, the majority of whose population depends directly on

the environment for life-sustaining essentials such as food, fuel, and drinking water. For example, over 57 percent of Africans are still employed in agriculture, with the percentages within individual countries varying widely from about 90 percent in Rwanda to only about 9 percent in South Africa.[5] Only by recognizing this criticality and integrating it with elements of US foreign policy can AFRICOM fulfill its mandate and truly help Africans find solutions to African problems.

American Justification for an Emphasis on Environmental Security

By employing environmental policy as a focus, AFRICOM would be in line with emerging American security policy, illustrated in a number of public statements from the US president on down. Environmental security is a relatively new, evolving concept and would not automatically find resonance with the American public. Thus, it is important for AFRICOM to fit the elements of environmental security and their application to relations with Africa within that public's general understanding of the evolving international security dilemma.

Since the end of the Cold War, the US government's primary focus on major armed aggression has been slowly evolving and expanding to include the consideration of homeland defense and emerging threats such as terrorism and cyber attack.[6] US policy documents are slowly catching up to this changing understanding, and environmental security is now in the policy lexicon and is considered important in policy considerations. However, these ideas are still emerging, and there is no common understanding of their meaning and application within the US government. Thus, AFRICOM has the unique opportunity to help define policy in this area.

The most recent US national security strategy, released in March 2006, discusses several areas closely related to environmental security. For example, the strategy describes conditions in Africa from the following perspective:

> 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. . . . We are committed to working with African nations to strengthen their domestic capabilities.[7]

Further on, the document emphasizes two relevant environmental challenges emerging from globalization:

- Public health challenges like pandemics. . . that recognize no borders. . . .
- Environmental destruction, whether caused by human behavior or cataclysmic mega-disasters.[8]

The first quotation emphasizes the US goal of partnership with African nations in order to promote economic development and address African challenges. The following two globalization challenges are very closely tied to the environment. Public health and the spread of disease are symptomatic of environmental conditions and are of particular concern in the mushrooming urban areas of Africa. Disaster relief provided by the US military has often met the problem of environmental destruction in the past. One of AFRICOM's challenges in this area is to turn its focus from "putting out fires" to building long-term partnerships which address the issues that provoke the fires.

This national security strategy originates with the past administration, but it

remains the official strategy until a new one comes out in 2010. However, when the Obama administration releases a new strategy, it will assuredly contain similar, if not stronger, statements dealing with US-African relationships and the environment. These policy themes currently in effect are fairly general and only set the stage for the rest of the government. With a sense of purpose and direction, AFRICOM can meaningfully bridge the gap between the general policy of 2006 and the emerging polices of a new administration in regard to environmental security.

Below the White House's strategy comes the DOD's attempt to translate the national security strategy into a strategy for the military. Secretary of Defense Robert Gates's national defense strategy, issued in June 2008, emphasized issues similar to those in the national security strategy, but in a context closer to the military:

> Over the next twenty years *physical pressures*—population, resource, energy, *climatic* and *environmental*—could combine with rapid social, cultural, technological and geopolitical change to create greater uncertainty. . . .
>
> Whenever possible, the Department will position itself both to respond to and *reduce uncertainty*. This means we must continue to improve our understanding of trends, their interaction, and the range of risks the Department may be called upon to respond to or manage. We should act to reduce risks by *shaping the development of trends* through the decisions we make regarding the equipment and capabilities we develop and the security cooperation, reassurance, dissuasion, deterrence, and operational activities we pursue.[9] (emphasis added)

In this document, Gates sees the pressures closely related to the environment and the sustainable use of its resources. He would like to position the DOD in a proactive position of shaping trends in order to avoid the riskier, potentially more expensive, and less effective method of reacting to those trends. The secretary does not specifically refer to Africa here, but this does leave AFRICOM the possibility of orienting the mission around Gates's concerns.

A refinement of Secretary Gates's position can be seen in Department of Defense Instruction (DODI) 3000.05, which discusses stability operations. This instruction places stability operations on par with combat operations as a core US military mission with the goal of establishing order—often with indigenous forces—that advances US interests and values. These operations "may range from small-scale, short-duration to large-scale, long-duration" with the goal to "establish civil security and civil control, restore essential services, repair and protect critical infrastructure, and deliver humanitarian assistance until such time as it is feasible to transition lead responsibility" to another American or foreign agency.[10] DODI 3000.05 helps to bring the strategy discussion down to the operational level and encourages the military to reorient its focus from purely traditional combat operations to a wider variety of tasks to proactively prevent armed conflict. The significance of this directive to AFRICOM is that a stability operation, which could include environmental security, is a valid type of military operation that the new command could adopt as its primary focus.

These three important documents, which call for sustained engagement with African countries with an emphasis on environmental issues, can help guide development of the US-African relationship through AFRICOM. Although this stress may change with President Obama's administration, all indications suggest that his interest in multilateral options and engagement with other nations will tend to make

any subsequent documents even more emphatically in favor of environmental security. The American emphasis on environmental security, however, is only half of the equation; the other half concerns the views of potential African partners.

Engaging an African Perspective

The evolving mission of AFRICOM must be able to justify American policies by seeing them from another perspective—that of potential partners in Africa. As mentioned previously, the specifics of bilateral and regional relationships are important, but it is equally critical to understand some of the general, publicly articulated continental views. The latter bolster an American environmental security strategy by showing the confluence of interests and positions in which all partners, American and African, can gain. In the evolving post–Cold War security landscape, African countries themselves often emphasize the importance of the environment within many of the programs of international organizations. Examples from the United Nations (UN) and the New Partnership for Africa's Development (NEPAD) follow. Similar themes emerge within the goals of other continental organizations or regional groupings such as the Economic Community of West African States (ECOWAS) or the Southern African Development Community (SADC).[11]

At the global level, under the umbrella of the UN, all nations of the world have formulated and endorsed the eight general UN millennium development goals. The UN bills this as a blueprint for action to be completed by 2015. Of significance here, African nations have pledged to work in cooperation with others in order to, inter alia,

- eradicate extreme poverty and hunger,
- reduce child mortality,
- combat HIV/AIDS, malaria, and other diseases, and
- ensure environmental sustainability.[12]

All of these goals have clear environmental connections to and implications for Africa. In rural areas, poverty and hunger usually relate closely to farming practices and use of the land, while in urban areas, poverty and hunger are generally concentrated in the expanding shanty towns with little infrastructure and few services. However, urban poverty and hunger stretch to the surrounding rural areas due to urban use of rural resources such as firewood and frequent travel back to families outside the cities. Environmental dangers such as unhealthy living conditions, malnutrition, and climatic conditions contribute to high child mortality, while diseases such as malaria and, to a lesser extent, AIDS tend to be associated with environmental conditions.

The UN has further defined the fourth millennium development goal of achieving environmental sustainability by listing four targets by which to measure progress:

> Target 1: Integrate the principles of sustainable development into country policies and programmes [*sic*] and reverse the loss of environmental resources
>
> Target 2: Reduce biodiversity loss, achieving, by 2010, a significant reduction in the rate of loss
>
> Target 3: Halve, by 2015, the proportion of the population without sustainable access to safe drinking water and basic sanitation
>
> Target 4: By 2020, to have achieved a significant improvement in the lives of at least 100 million slum dwellers[13]

Although the first goal will tend to be a prerogative of the national governments, AFRICOM could easily contribute to the attempts of African states to meet the other three objectives. The key here is that AFRICOM personnel must be willing to consider the goals of their African partners in setting up programs and be willing to devote themselves to these programs over the long term.

Moving from the global to the continental level, one can see an additional African perspective by looking at the NEPAD, an African initiative. This partnership, which has the general goal of reducing poverty and underdevelopment on the continent, states its four primary objectives as follows: "to eradicate poverty; to place African countries, both individually and collectively, on a path of sustainable growth and development; to halt the marginalization of Africa in the globalization process and enhance its full and beneficial integration into the global economy; [and] to accelerate the empowerment of women."[14]

The first two objectives of eradicating poverty (as in the UN program, above) and encouraging sustainable growth call for addressing environmental issues, especially given the large proportion of the African population dependent on the environment. Historically, African countries have been producers of primary resources rather than manufactured products. Globalization has reinforced this tendency, putting a large strain on the environment, whether through agricultural monocropping, unregulated production in mines, or the unsustainable exploitation of natural resources such as fisheries and forests. Lastly, female empowerment and the environment also are tightly intertwined since women tend to be farmers or family breadwinners and thus are hostage to agricultural production. The 2004 Nobel Peace Prize awarded to Wangari Maathai is significant in this regard since it connects empowerment, environment, and women's position of supporting their families.

These first two examples of the millennium development goals and NEPAD illustrate the positions of African national governments, which cover the political spectrum ranging from functioning, multiparty democracies to totalitarian states. Ideologically, the United States prefers to cooperate with democracies, but the American military often works with nations from across the spectrum. As such, it is important for the United States to consider the opinions of the African people themselves. American engagement with less-than-free nations can still bear fruit for American policies when the United States is pursuing not only the goals that the government supports, but also goals that the African people tend to find admirable.

One can identify the opinions of the African populations in many ways, such as examining the press, statements by African nongovernmental organizations, or positions of religious groups. However, if one wishes to see which issues African publics tend to consider important, the *Afrobarometer* provides insight. This series of public opinion polls, taken in a number of African countries since 2000, illustrates that the environment is important to the public—*not just the African governments* in international forums. The majority of African people responding to these polls see unemployment as the main problem in Africa. Health comes next in priority, followed by the fast-rising problems of poverty and hunger with the parallel problem of food security.[15] In the rural areas, as discussed above, unemployment, poverty, hunger, and food security are all intimately connected with the health and sustainability

of the environment since the majority of these rural residents are subsistence farmers. Rural unemployment often means that subsistence farming must be accompanied by family members holding jobs to earn cash—often connecting rural to urban areas.

Intersection of American Justification and the African Perspective

AFRICOM can use knowledge of the priorities of African leaders *and* African populations to help adjust its engagement programs. As the command evolves, it can get the most mileage out of its engagement dollars by investing wisely to solve African problems that not only are important to the people locally, but also further American democratic interests on the continent. The question then is, how can AFRICOM effectively marry the importance of environmental security as voiced in American strategy documents with the African perspective on the area's problems? The answer lies in two important areas—true interagency operations and devotion to a public diplomacy effort. On the one hand, AFRICOM must have the right mix of American experts who can effectively relate to their African partners and problems. It is crucial to show that the relationship is not purely a military venture. On the other hand, the command needs to work on a two-way communication process with African partners in order to truly understand how African governments *and* the continent's people perceive AFRICOM's actions. It then must be willing and able to adjust its programs, based on this feedback.

Since the first proposals to establish AFRICOM, the DOD has been looking at a "command plus" structure, incorporating a wide range of interagency players along with military personnel. In trying to do this, AFRICOM has experienced only a degree of success—partly due to budgetary problems and partly due to the reactions of potential interagency partners.[16] However, AFRICOM needs to think beyond the bounds of the usual interagency partners—Department of State, US Agency for International Development, Treasury Department, and so forth—to those who would provide additional synergy for emphasis on environmental security. AFRICOM should look towards the Department of Agriculture, the Forest Service, the Environmental Protection Agency, and other agencies involved directly in environmental issues. Not only would this pull in a wider range of government officials with different types of expertise, but also it would present a more coherent face to African partners relating security to environmental issues. AFRICOM must look at security as the US administration now views it: as a wide range of issues with the primary goal of *preventing* rather than *reacting* to problems.

Public diplomacy, the second way to integrate American policies with African perspectives, emphasizes communicating with African governments as well as with the various publics so they can understand American aims and, potentially, support American actions.[17] This is not just a one-way street; rather, it calls for the development of long-lasting relationships with key individuals, groups, and organizations. This conscientious development provides a means for long-term feedback to AFRICOM leaders, which will help the command adjust its activities over time to truly meet African needs. Furthermore, this adjustment will help the policies survive over the long term, showing America's commitment to its African partners as well as providing evidence to the American public

that the money being invested is well spent.[18] To effectively meet its goals of supporting an environmental security policy, AFRICOM needs to openly inform and engage African counterparts, seeking feedback and true collaboration.

Conclusion

Both American and African policy statements and opinions support the engagement of AFRICOM with African nations to help strengthen the continent's environmental security. With this as a background, the remaining letters turn to three potential areas of engagement. In the next letter, John Ackerman looks at the various dimensions of environmental degradation in Africa that can lead to conflict. He provides two short case studies illustrating the ends of the spectrum. The first, Sudan, shows how degradation can help provoke conflict, while Niger, on the other end of the spectrum, illustrates how projects that conserve the environment have lessened the potential for conflict. In the third letter, Rob Sands analyzes environmental security from an added dimension, describing the role of conservation zones as a mechanism for resolving and potentially preventing conflict. Finally, Linda Dennard and Eric Stilwell argue in the fourth letter that AFRICOM can leverage the stewardship of natural resources in Africa by using capacity building as a central element of peaceful, stable national and international relationships. Each author offers practical recommendations on how AFRICOM can engage with African partners in these areas of environmental security. ❑

Notes

1. US Government Accountability Office, *Defense Management: Actions Needed to Address Stakeholder Concerns, Improve Interagency Collaboration, and Determine Full Costs Associated with the U.S. Africa Command*, GAO-09-181 (Washington, DC: US Government Accountability Office, February 2009), 16ff, http://www.gao.gov/new.items/d09181.pdf (accessed 9 July 2009).

2. "U.S. Africa Command," http://www.africom.mil/AboutAFRICOM.asp (accessed 12 June 2009).

3. See Robert R. Sands, PhD, "Letter No. 3 to AFRICOM," p. 27 of this issue. Two collections of essays further discuss this topic: Ken Conca and Geoffrey D. Dabelko, eds., *Environmental Peacemaking* (Washington, DC: Woodrow Wilson Center Press, 2002); and Saleem H. Ali, ed., *Peace Parks: Conservation and Conflict Resolution* (Cambridge, MA: MIT Press, 2007).

4. "The Nobel Peace Prize 2004," *Nobelprize.org*, http://nobelprize.org/nobel_prizes/peace/laureates/2004/press.html (accessed 9 July 2009).

5. United Nations Environment Programme, *Africa: Atlas of Our Changing Environment* (Nairobi, Kenya: United Nations Environment Programme, 2008), x, http://www.unep.org/dewa/africa/AfricaAtlas/PDF/en/Africa_Atlas_Full_en.pdf (accessed 8 February 2010); and CIA, *The World Factbook*, 2009, https://www.cia.gov/library/publications/the-world-factbook/index.html (accessed 27 July 2009).

6. See, for example, Donald Rumsfeld, *Quadrennial Defense Review Report* (Washington, DC: Department of Defense, 6 February 2006), http://www.globalsecurity.org/military/library/policy/dod/qdr-2006-report.pdf (accessed 8 February 2010).

7. George Bush, *The National Security Strategy of the United States of America* (Washington, DC: The White House, March 2006), 37–38, http://www.strategicstudiesinstitute.army.mil/pdffiles/nss.pdf (accessed 8 February 2010).

8. Ibid., 47.

9. US Department of Defense, *National Defense Strategy* (Washington, DC: Department of Defense, June 2008), 4, 5, http://www.defense.gov/news2008%20National%20Defense%20Strategy.pdf (accessed 8 February 2010).

10. DODI 3000.05, *Military Support for Stability, Security, Transition, and Reconstruction (SSTR) Operations*, 16 September 2009, 2, http://www.dtic.mil/whs/directives/corres/pdf/300005p.pdf (accessed 19 Feburary 2010). Note that the forerunner to this instruction (i.e., Department of Defense Directive 3000.05) was actually released in 2005, before publication of the *National Defense Strategy*, but it certainly illustrates how the thinking within the DOD is evolving.

11. For example, the mission of ECOWAS "is to promote economic integration in all fields of economic activity, particularly industry, transport, telecommunications, energy, *agriculture*, [and] *natural resources*" (emphasis added). "Discover ECOWAS," http://www.comm.ecowas.int/sec/index.php?id=about_a&lang=en (accessed 19 February 2010). One of the important divisions within ECOWAS is the Office of the Commissioner of Agriculture, Environment, and Water Resources. See "The ECOWAS Commission," http://www.comm.ecowas.int/dept/index.php?id=p_p1_commission&lang=en (accessed 19 February 2010). In comparison, the "SADC vision is one of a common future, within a regional community that will ensure economic well-being, improvement of the standards of living and quality of life, freedom and social justice, peace and security for the peoples of Southern Africa." "SADC Profile," http://www.sadc.int/index/browse/page/52 (accessed 9 July 2009).

12. See United Nations, "Millennium Development Goals," http://www.un.org/millenniumgoals/ (accessed 31 July 2009).

13. United Nations, "Goal 7: Ensure Environmental Sustainability," http://www.un.org/millenniumgoals/environ.shtml (accessed 2 June 2009).

14. "New Partnership for African Development," http://www.nepad.org/AboutNepad/lang/en/sector_id/7 (accessed 31 July 2009).

15. Michael Bratton and Wonbin Cho, comps., *Where Is Africa Going? Views from Below: A Compendium of Trends in Public Opinion in 12 African Countries, 1999–2006*, Afrobarometer Working Paper no. 60 (Cape Town, South Africa: Institute for Democracy in South Africa, May 2006), http://www.afrobarometer.org/papers/AfropaperNo60-trends.pdf (accessed 9 February 2010).

16. US Government Accountability Office, *Defense Management*, 16ff.

17. The US military often refers to public diplomacy as strategic communications. The latter often takes the meaning of expanded public relations (i.e., a more nuanced approach to *informing* others about what the United States is attempting to do). Compare James G. Stavridis, "Strategic Communication and National Security," *Joint Force Quarterly*, issue 46, 3rd quarter (2007): 4–7, http://www.ndu.edu/inss/Press/jfq_pages/editions/i46/JFQ46.pdf (accessed 9 July 2009).

18. Joseph S. Nye Jr., "Public Diplomacy and Soft Power," *Annals of the American Academy of Political and Social Science* 616, no. 1 (March 2008): 94–109, http://ann.sagepub.com/cgi/reprint/616/1/94.pdf (accessed 9 July 2009).

Letter No. 2 to AFRICOM

Environmental Degradation and Conflict in Africa

JOHN T. ACKERMAN, PHD*

Environmental degradation is a global challenge. Several studies of the environmental impact of human activities on the planet have identified significant negative, unsustainable, and sometimes potentially irreversible trends.[1] In some regions, the quality of water, land, and air has become significantly degraded. Biodiversity, renewable natural resources, and ecosystem services such as climate regulation, flood control, soil formation, or water purification also have been deleteriously affected around the globe. Additionally, environmental degradation can generate serious repercussions for regional security. The security implications are most obvious on the African continent because a majority of Africans rely very heavily on subsistence farming/fishing, groundwater/precipitation, and hand processing of natural resources. Consequently, they are directly dependent on the natural environment for basic subsistence. The increasing dependency of a rapidly growing African population on a shrinking base of natural resources has created and continues to create conflict. For example, "environmental degradation can exacerbate conflict, which causes further environmental degradation, creating a vicious cycle of environmental decline, tense competition for diminishing resources, increased hostility, inter-communal fighting, and ultimately social and political breakdown."[2] Unfortunately, the linkages between environmental degradation and conflict are complex and underexamined. Nevertheless, the linkages should be a concern for the leaders of US Africa Command (AFRICOM).

AFRICOM's stated primary objective is "building African security capacity so our partners can prevent future conflict and address current or emerging security and stability challenges."[3] This mission will not be obtainable or sustainable unless AFRICOM personnel understand the criticality of natural resources to African security and take a proactive approach to helping

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Africans reduce environmental degradation, protect and sustain natural resources, and mitigate conflict over the environment. In conjunction with other US government agencies, AFRICOM can bring to bear the knowledge, expertise, and resources needed to make Africa more stable and secure by making the African environment more stable and secure.

Environmental Areas of Concern

One can explore environmental degradation in Africa from many different perspectives. The identification and exploration of five major areas of concern—land, water, climate, plants/animals, and people—provide a comprehensive picture of the problem.[4] One can examine each domain from the viewpoint of how degradation is or is not affecting it. Before proceeding, however, some background information about Africa and environmental degradation in Africa should help illuminate the key challenges.

Environmental degradation of land is created by processes that reduce the capacity of the land to produce food or resources.[5] Land degradation can include desertification, deforestation, soil erosion, and salinization, among other natural and anthropogenic processes. A comprehensive review of public information and peer-reviewed reports indicates that Africans in 32 countries consider land degradation a central environmental challenge.[6] Another environmental resource, water is often the focus of intense competition and conflict: "Changes in water quality and quantity—in freshwater environments (lakes and rivers) and in coastal and marine environments—rank among the most challenging environmental and social issues that Africa currently faces."[7] Specifically, several African states identified water pollution and water scarcity as critical environmental issues.[8] Land and water conditions are affected by ongoing changes in Africa's varied and unique climate zones. The recent and rapid increases in global average temperatures are driving a variety of transformations to Africa's climate, increasing environmental degradation. Rainfall patterns and growing seasons are changing, sea levels are rising, water stress is spreading, ecosystems are transforming, and the vector ranges of disease are altering.[9] Climate change and other environmental pressures are also deleteriously affecting Africa's plant and animal life.

At present, the rich African biodiversity is threatened by a confluence of climate change, habitat destruction, poaching, and surging populations.[10] The essential ecosystem services provided by Africa's biodiversity are particularly influenced by expanding African populations extremely dependent on natural capital for subsistence. Rapidly increasing populations are modifying land-use patterns, demanding more clean water, and stressing animal and plant communities throughout Africa. All of these environmental changes are occurring across an ecologically diverse continent populated by equally diverse people.

Second only to Asia in geographical size and population, Africa contains a vast variety of natural resources that includes approximately 30 percent of all of the earth's minerals.[11] Specifically, Africa has 40 percent of the world's gold, 60 percent of the cobalt, and 90 percent of the platinum.[12] The continent is also home to the world's longest river (the Nile), biggest desert (the Sahara), oldest desert (the Namib), and shortest coastline. We now offer more detailed information under the five areas of concern, mentioned above.

Land

The land or geography of Africa is quite interesting and diverse. African land is

mostly arid (60 percent), and most of it is degraded either naturally or anthropogenically (65 percent). In particular, 31 percent of African pasture lands and 19 percent of forests are degraded in some form or another. Only 10 percent of all African lands are considered prime farmland while another 25 percent is rated as having low to moderate potential for sustainable agriculture.[13] Overall, 20 percent of Africa's land area is forested, and much of that is threatened by deforestation. Every year, Africans lose an average of 40,000 square kilometers (0.6 percent) to deforestation.[14] In addition, the areas that are vulnerable to desertification—home to over 20 million Africans—are expanding.[15] As a result of these trends and increasing population, pressure on the land and natural resources is increasing. In fact, in 1950, the hypothetical individual share of the land was 13.5 hectares/person, and in 2005 it was 3.2 hectares/person; predictions call for 1.5 hectares/person in 2050.[16] In some areas of Africa, land degradation is obviously increasing, but in a few areas, land restoration efforts have been successful, thanks to thriving reforestation, soil enhancement, and erosion-control programs. The multifaceted pressures on land resources in Africa are also reflected in relation to the pressures on water resources.

Water

A critical resource for all humans, water is especially critical in Africa, the second driest continent after Australia. In fact, 75 percent of all Africans rely upon groundwater as their major source of drinking water.[17] Water resources are unevenly distributed in Africa, some areas having an abundance of water and others very little. Scientists estimate that out of Africa's almost 1 billion people, over 300 million face water scarcity and stress challenges.[18] Overall, Africa has approximately 3,930 cubic kilometers of renewable water resources, which represents less than 9 percent of the global total of renewable water, and per capita consumption of water is 31 cubic meters per year for all of its people.[19] Scientists also estimate that an additional 250 million Africans will face water scarcity challenges as a result of global climate change.[20] The increasing pressures on water are observable in specific areas of Africa. For example, Lake Chad in northern Africa has been shrinking as a result of changing climate and increasing agricultural demand.[21] In other areas, cooperation and water management processes are preserving vital watersheds. The Okavango Delta presents a spectacular case of how coordinated wetland-management institutions are protecting and preserving the world's largest inland delta.[22] African water resources are clearly threatened by a variety of human and environmental pressures, which have also been detected within the distinctive climate zones of Africa.

Climate

Africa is the second driest continent, again after Australia, but Africa is also the world's hottest continent, having six climatic zones: Tropical Wet, Tropical Summer Rainfall, Semiarid, Arid, Highland, and Mediterranean, some of them containing spectacular biodiversity.[23] The Fynbos region in the Cape Province of South Africa, for example, has the highest rate of general endemism in the world.[24] In addition, the seasonal and diurnal variation in some of Africa's climatic zones is amazing. For instance, the temperature variation seasonally in the Democratic Republic of the Congo is only 1.4 degrees Celsius while temperature swings

between the coldest and hottest month in the Sahara Desert can exceed 20 degrees.[25] Interestingly, Africa is the lightning center of the planet, having more flashes per square kilometer than anywhere else.[26] Africa's variation in climate also enables enormous continental biodiversity.

Plants/Animals

Africa's varied animals and plants are plentiful in some regions and endangered in others. The largest bird (ostrich) and largest land mammal (African elephant) in the world both reside in Africa. Large populations of mammals such as wildebeests and zebras migrate across African savannahs by the thousands. Additionally, 98 percent of Madagascar's land mammals, 92 percent of its reptiles, 68 percent of its plants, and 41 percent of its bird species are found only on this island.[27] Also, the forests of the Congo Basin are the world's second-largest area of intact rain forests, after those of the Amazon Basin. The rich African biodiversity is also reflected in the fact that eight of the world's 34 biodiversity hot spots are in Africa. Nevertheless, African biodiversity is declining steadily as over 120 plant species have become extinct and another 1,771 are threatened with extinction.[28] The critical factor in reversing the decline of biodiversity and environmental degradation in general is human activities.

People

Home to 965 million people, Africa is widely considered the birthplace of mankind. As the second most populous continent, it has a population density of 32.6 people per square kilometer. The population is unevenly distributed, with some areas in the Sahara, for example, having very few permanent towns or villages but others, such as those along the Nile River Delta, having extremely dense populations. In 2005 over 60 percent of Africans still lived in rural areas, but the number moving to urban areas is rapidly increasing.[29] Although approximately 57 percent of all Africans are still employed in agricultural activities, urban growth in Africa is the highest in the world.[30] In addition, Africa's growth rate of 2.32 percent annually leads the rest of the world; moreover, 20 of the world's 30 fastest-growing countries are African states. This rate is almost double the 1.24 percent growth rate of population globally.[31] This rapid rate places enormous pressure on agricultural industries to feed the growing populations and places even more pressure on natural habitats and environmental resources. Unfortunately, serious environmental degradation has occurred in some parts of Africa, and many of its other regions remain unprotected from the pressures of rising population.

The ways in which state and regional governmental organizations have reacted to growing environmental degradation vary throughout Africa. Some countries' inability to initiate collaborative processes to reduce conflict arising from environmental degradation has resulted in violence and insecurity. Other states, however, have been able to adapt to and mitigate environmental degradation, thus reducing conflict and insecurity. Below we present two contrasting cases involving the Sudan and Niger, whose state reactions to environmental degradation challenges are dissimilar; consequently, stability and security outcomes are also vastly different. Examination of these two cases can yield potential lessons learned for AFRICOM leaders that may help their efforts to increase the capacity of Africans to enhance their own stability and security in the future.

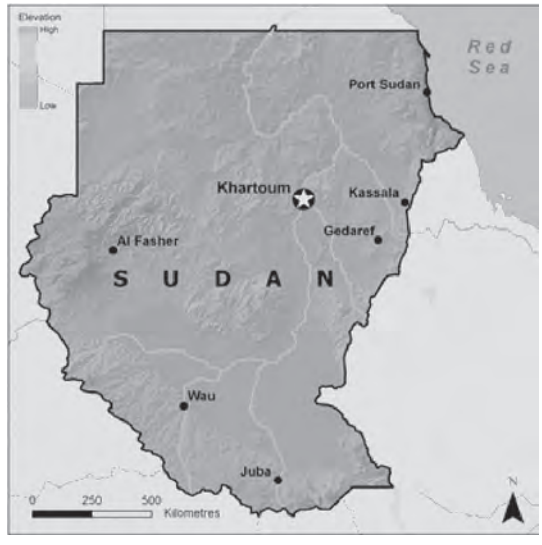
Case Studies: Degradation and Conflict

Conflict augmented by environmental degradation in Africa is often complex and multicausal. However, case studies of environmental degradation in the Sudan and Niger analyzed within the five domains described above reveal some of the specific pressures and challenges in action. The individual pressures and challenges previously discussed can then become focal points for AFRICOM efforts to help Africans help themselves.

Sudan

A case study of the Sudan by the United Nations Environment Programme (UNEP) identifies environmental degradation as a major factor contributing to violent conflict. In addition, the researchers conclude that years of ethnic conflict; population displacement; weak, corrupt, and biased governance; uncontrolled exploitation of natural resources; and little or no investment in sustainable development significantly contribute to instability and insecurity.[32] Particularly, in the Darfur region of Sudan, years of drought exacerbated by desertification and population growth led nomadic pastoralists to move herds of cattle and goats into land occupied primarily by subsistence farmers. Vicious conflict ensued, as many as 450,000 people were killed by fighting and disease, and approximately 2.4 million people were displaced from their homes.[33] According to the *Sudan Post-Conflict Assessment*,

> UNEP's analysis indicates that there is a very strong link between land degradation, desertification and conflict in Darfur. Northern Darfur—where exponential population growth and related environmental stress have created the conditions for conflicts to be triggered and sustained by political, tribal or ethnic differences—can be considered a tragic example of the social breakdown that can result from ecological collapse. Long-term peace in the region will not be possible unless these underlying and closely linked environmental and livelihood issues are resolved.[34]



(From UNEP, Africa: *Atlas of Our Changing Environment* [Nairobi, Kenya: Division of Early Warning and Assessment, UNEP, 2008], 306, http://www.unep.org/dewa/africa/AfricaAtlas/PDF/en/Africa_Atlas_Full_en.pdf.)

This conflict explicitly illuminates the five categories of environmental challenges present in all of Africa:

> Environmental issues have been and continue to be contributing causes of conflict. Competition over oil and gas reserves, Nile waters and timber, as well as land use issues related to agricultural land are important causative factors in the instigation and perpetuation of conflict in Sudan. Confrontations over rangeland and rain-fed agricultural land in the drier parts of the country are a particularly striking manifestation of the connection between natural resource

> scarcity and violent conflict. In all cases, however, environmental factors are intertwined with a range of other social, political and economic issues.[35]

Land degradation, competition for scarce water supplies, changing precipitation patterns contributing to drought and desertification, widespread destruction of forested ecosystems by refugees, and large, uncontrolled population movements all contributed to instability and insecurity in this troubled region. Although Sudan presents a clear example of environmental degradation intertwined in a circular relationship with violent conflict, Niger offers an opposing case study in which environmental degradation initiated innovative, proactive processes that improved ecological conditions and became a major contributor to enhanced security and stability.

Niger

During the 1970s, Niger was in the grip of an enormous drought. The Sahel, already characterized as an arid region of variable rainfall and low- fertility soils, is home to most of Niger's people. Threats of desertification and land degradation forced the rural farmers in this enormous dryland to change their relationships with the land and with each other. Systematic ecosystem-management processes, such as planting specific tree species, designed to restore environmental conditions and agricultural productivity, were adopted throughout the region. Specifically, famers used simple, low-cost environmental-management techniques that enabled natural regeneration of trees and shrubs. The techniques, collectively known as farmer-managed natural regeneration, also involved uncomplicated forest-, soil-, and water-conservation programs.[36] The results have been spectacular. US Geological Survey scientists compared aerial photographs from the 1970s to photos taken in 2005 and were astonished by the widespread environmental transformations. Over 5 million hectares of land in Niger now show regeneration of vegetation:

> Today, agricultural parklands replace the wind-swept fields of the 1970s. On-farm tree densities have increased ten to twenty-fold. Village sizes have also dramatically increased in the area, generally by a factor of three, a direct indicator of rural population growth. The changes were equally surprising on the rocky slopes and plateaus east of Tahoua. Almost totally denuded in 1975, a patchwork of terraces and rock bunds now extends throughout the regions that were constructed to stem soil erosion, trap precious rainfall, and create micro-catchments for planting and nurturing trees. As a result, trees now occur on most plateaus, and farmers have taken advantage of the new environment to plant fields of millet and sorghum between the ribbons of trees. Windbreaks of mature trees crisscross the wide Maggia Valley and its tributaries. Many of the valleys now have dikes and low dams to create ephemeral lakes. As their waters recede in the dry season, farmers plant vegetables. A vibrant dry season market gardening economy has developed. Large tracts of valley lands are now green with produce—including onions, lettuce, tomatoes, sweet potatoes, and peppers.
>
> . . . Many interviews with village informants at all sites confirm that there has been notable environmental improvement since the 1970s. Farmers point to the increase in woody cover, to the diversity of high-value trees, and to the rehabilitation of the productive capacity of tens of thousands of hectares of degraded land. The projects of the 1970s and 1980s demonstrated what could be done, giving villagers options. Since then, there has been a huge spread effect, particularly in farmer-managed natural regeneration—a significant change in

the way farmers maintain their fields, allowing high value trees to grow in their fields.[37]

(From UNEP, *Africa: Atlas of Our Changing Environment* [Nairobi, Kenya: Division of Early Warning and Assessment, UNEP, 2008], 262, http://www.unep.org/dewa/africa/AfricaAtlas/PDF/en/Africa_Atlas_Full_en.pdf.)

Changes in ecosystem management have improved the environment across all five domains in Niger. Degradation of the land has been markedly reduced, erosion has decreased, fertility has been enhanced, and agricultural productivity has dramatically improved. Even though rainfall levels are still below historical levels before the 1970s drought, farmers have learned to capture scarce rainfall, and groundwater levels have risen in some areas. Niger has been experiencing many of the climatic changes that affect the Sudan, yet Niger's farmers are adapting to the changing conditions without the violence and instability seen in the Sudan. In addition, the biodiversity of the area has been greatly increased by expansive terracing and planting of trees. Scientists assert that "farmers have reacted proactively to the large-scale land degradation that occurred during the droughts of the 1970s and 1980s, and have begun protecting their resources on a massive scale, encouraging natural regeneration, rebuilding their soils, and harvesting scarce rainfall."[38] Finally, even though the population of Niger has doubled since the 1970s, the country's rural farmers have decentralized control over natural resources, increased land/food security, and empowered local people to care for their own resources.[39] Importantly, "for other Sahelian countries facing the triple challenges of population growth, desertification, and climate change, [farmer-managed natural regeneration] also offers a cheap and effective model to improve farm productivity and reclaim precious land from the dunes."[40] Conflict still occurs over property rights and access to natural resources, but large-scale violence and population displacements have not been a consequence of environmental degradation and change in Niger.[41]

The dramatic differences in how people in the Sudan and Niger reacted to environmental degradation and change illustrate the need for more study into the intricate relationships between environmental degradation and conflict. The lessons learned from these two disparate outcomes also offer opportunities for AFRICOM to learn from the processes and measures applied, both successfully and unsuccessfully, and to provide focused, proactive, constructive assistance to Africans as they learn to help themselves.

Overall Recommendations

The case studies illustrate many specific issues that are continental challenges to peace and development. Many of the positive responses to the challenges apply

across most of Africa and have enhanced stability and security. AFRICOM has the potential to contribute significantly to stability and security in Africa by learning from these and other cases. By building positive relationships with African militaries and governments, AFRICOM personnel can boost African capacity to adapt to and mitigate environmental change. Recognizing that US and African militaries can be an exemplar, that the environment is a critical lifeline for Africans, that the environment is a complex source of meaning and relationships, and that stabilizing agreements may emerge from points of dialogue, we offer the following recommendations for AFRICOM's consideration:

1. "Help Africans operationalize their knowledge of the relationships between the environment and security. . . . Prepare and provide training/education material on environmental security."

Exemplified by the Sudan and Niger, environmental degradation is a threat to the environmental and national security of all African states. Degradation contributes to conflict, both violent and nonviolent, across Africa. With focused curricula on environmental security, AFRICOM can help individual African states and selected regions increase their awareness of the impending challenges that continued environmental degradation pose to stability and security.

AFRICOM should work toward establishing centers of excellence that address environmental security issues. These centers could prepare training in environmental security and educational curricula that investigate and provide responses to local, state, and regional linkages between environmental degradation and conflict.[42]

2. "Share environmental information/data with African states in a manner that is easily accessible."

African states on the whole lack access to up-to-date, advanced, and comprehensive environmental information/data. In Niger when simple, scientifically based ecosystem-management processes were implemented, stability and security increased. In the Sudan, where these processes and other good governance procedures were not applied, violence and instability erupted. Without accurate and current environmental information, African states cannot make informed security decisions for the future.

AFRICOM can either provide environmental information directly to selected states or assist them in the creation of environmental-information databases that are transparent, easily used, and accessible to as many citizens as possible. Additional environmental information can be obtained from "after action reports" from other agencies (the Department of State, United States Agency for International Development, World Food Program, Peace Corps, etc.) to see how they support environmental activities in Africa.[43] For example, reports from the US Geological Survey have been essential in determining what went right in Niger. Also, information can be acquired from allies who provide environmental support in Africa, such as Italy, the United Kingdom, and France.[44] Environmental information can also be garnered from commercial contractors who provide environmental support to customers in African countries.[45]

3. "Assist African militaries to facilitate, inculcate and disseminate an African environmental ethic (focus on mission, community, and environment). . . . They should understand [the importance of] ecosystem services and causal relationships [between those services and environmental security]."

US military forces are currently struggling to develop a comprehensive environmental ethic that extends to contingency and peacekeeping operations.[46] Progress is being made, and the US Army's environmental sustainability ethic of "mission, community, and environment" could provide a template upon which African states and AFRICOM can begin a dialogue with military professionals on the relationships among ecosystem services, environmental security, and conflict.[47] An African environmental ethic can prevent environmental degradation and augment environmental security. Perhaps funds from African Contingency Operations Training and Assistance could be used to help initiate the process of instilling an environmental ethic in interested African militaries.[48]

4. "Expand the use of US National Guard [personnel and State Partnership Programs (SPP)] to train African militaries for natural disaster and environmental mitigation responses."

Many SPP personnel and US National Guard units are experts at responding to natural and environmental disasters. African militaries can benefit from SPP and National Guard expertise and training on how to respond to such disasters as floods, droughts, and pandemic disease. With AFRICOM's assistance, SPP personnel and US guardsmen, who also understand the importance of environmental mitigation procedures, could share their extensive knowledge with African military professionals.

5. "Help African militaries purchase and utilize available environmental monitoring and early warning devices."

Many African states lack a proactive solution to the natural and environmental disasters that often weaken and disable state security. AFRICOM professionals can assist with the acquisition of early warning and natural-disaster monitoring devices by selected African militaries. If those militaries can increase their monitoring and response capabilities to natural and environmental disasters, they will enhance their security competencies, public image, and professionalism.

One concept to consider is "fractional ownership," whereby African states or regional organizations can partially own expensive environmental-monitoring equipment. "'Fractional ownership' . . . could be a concept explored by US Foreign Military Sales (FMS)" and/or international corporations, and the overall process "could foster growth of real African regional capability to respond to [environmental] cris[e]s and [disasters] even if [the process] started bilaterally [or unilaterally]."[49]

6. "Assist African environmental security specialists to train other Africans."

Establishing a core cadre of African environmental security specialists will have multiple benefits. These specialists can create targeted programs that address challenges and responses to African environmental security and help professionalize African militaries. AFRICOM can provide training, expertise, and curricula that will make this effort possible.

7. "Assist Africans [in efforts] to mitigate environmental degradation by migrants and refugees."

Environmental refugees and migrants fleeing environmental degradation and conflict challenge every African state's limited

security and economic resources. Mass movements of displaced individuals and families place a huge burden on the refugee camps and on the local environment. AFRICOM can help African militaries locate refugee camps in sustainable locations, construct camps that reduce environmental and security challenges, and proactively prevent environmental degradation from happening in the first place.

8. "Inform African militaries of US environmental security [expertise and] capabilities."

A specialized segment of US military and governmental professionals has extensive expertise in issues pertaining to environmental security, degradation, and mitigation. The in-depth and practical knowledge of these professionals can be used to reduce environmental degradation and conflict in Africa. AFRICOM should provide African military leaders with information on these capabilities and on the opportunities for US environmental security professionals to share their proficiencies with African military and environmental security professionals.

One method for such sharing could involve building "social networks" among AFRICOM staff members, African environmentalists, African environmental security experts, and other agencies, components, and even nongovernmental environmental agencies. An environmental-security social network could be used to enhance sustainable environmental practices and processes, as well as augment stability and security operations.[50] In addition, personal handheld communication devices, cell and satellite phones, or two-way radios could be used to improve the reliability of, speed of, and access to communications in all of Africa without an expensive supporting land infrastructure. As a tool for strategic environmental security communications, social networks and personal handheld devices would prove invaluable.[51] Nevertheless, we should not discount local environmental knowledge: simple "word-of-mouth" low-tech communication can be very effective, and inclusion of often marginalized groups (women and young men) should be a focal point of all strategies involving communication and environmental security.[52]

9. "AFRICOM should concentrate on those [environmental security] projects that provide visible results, measured against realistic milestones."

AFRICOM must hold engagement partners accountable and continually move those partners toward becoming self-sufficient contributors.[53] Various studies have shown that when individuals and groups become accountable and responsible for managing environmental assets and have the capacity to manage ecosystems effectively, then cooperation, ownership, and stewardship values and sustainability of the resources increase visibly.[54]

Conclusions

AFRICOM can become a positive, proactive force on the African continent, helping Africans help themselves. US military forces, environmental organizations, and government agencies have enormous expertise in and knowledge of environmental change and the challenges and opportunities it can create. AFRICOM must help Africans build environmental, economic, and social capital in order to assure stability and security.[55] The processes that AFRICOM supports should ensure that Africans are provided with expert, current, and relevant information about environmental management; gain secure and equitable control over their natural resources; and are empowered to make community-based deci-

sions concerning these resources. The frameworks and institutions that enable the supporting processes all have working antecedents in the United States and other developed states; AFRICOM can assist process adaption by Africans for Africans.[56] Information, expertise, secure resource ownership, frameworks, and institutions can give Africans the tools to protect the land, water, climate, biodiversity, and themselves from further environmental degradation and the added devastation of linked violent conflict. Consequently, the goals of these efforts are to help Africans reduce environmental degradation, protect and sustain natural resources, and mitigate conflict over the environment. AFRICOM's charge is to become a strategic, operational, and tactical enabler. ❑

Notes

1. See, for example, World Wildlife Fund International et al., *Living Planet Report 2008* (Switzerland: World Wildlife Fund International, 2008); and Millennium Ecosystem Assessment, *Ecosystems and Human Well-Being: Synthesis* (Washington, DC: Island Press, 2005).
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3. Senate, *Statement of General William E. Ward, USA, Commander, United States Africa Command, before the Senate Armed Services Committee*, 111th Cong., 1st sess., 17 March 2009, http://www.africom.mil/getArticle.asp?art=2816&lang=0.
4. UNEP, *Africa: Atlas of Our Changing Environment*, chap. 1, PowerPoint presentation, slide 5.
5. Ibid., 19.
6. Ibid., xii.
7. Ibid., 20.
8. Ibid., xii.
9. Ibid., 14; and Michel Boko et al., "Africa," in *Climate Change 2007: Impacts, Adaptation and Vulnerability: Contribution of Working Group II to the Fourth Assessment Report of the Intergovernmental Panel on Climate Change*, ed. Martin Parry et al. (Cambridge, UK: Cambridge University Press, 2007), 435, http://www.ipcc.ch/ipccreports/ar4-wg2.htm.
10. UNEP, *Africa: Atlas of Our Changing Environment*, xi.
11. Ibid., chap. 1, PowerPoint slide 4.
12. Ibid., x.
13. Ibid., xi.
14. Ibid.
15. Ibid., 19.
16. Ibid., 13.
17. Ibid., xi.
18. Ibid.
19. Ibid., 6.
20. Boko et al., "Africa," 435.
21. UNEP, *Africa: Atlas of Our Changing Environment*, 52–55.
22. Dan Henk, *The Botswana Defense Force in the Struggle for an African Environment* (New York: Palgrave Macmillan, 2007).
23. UNEP, *Africa: Atlas of Our Changing Environment*, 9.
24. Ibid., 11.
25. Ibid., 8.
26. Ibid., 29.
27. Ibid., 220.
28. Ibid., 23.
29. Ibid., 14.
30. Ibid., x.
31. Ibid., 13.
32. UNEP, *Sudan: Post-Conflict Environmental Assessment—Synthesis Report* (Nairobi, Kenya: UNEP, June 2007), 6, http://postconflict.unep.ch/publications/UNEP_Sudan_synthesis_E.pdf.
33. UNEP, *Africa: Atlas of Our Changing Environment*, 60.
34. UNEP, *Sudan: Post-Conflict Environmental Assessment—Synthesis Report*, 7.
35. Ibid., 6.
36. World Resources Institute (WRI), "Routes to Resilience: Case Studies," in *World Resources 2008: Roots of Resilience—Growing the Wealth of the Poor* (Washington, DC: WRI, 2008), 143–45, http://pdf.wri.org/world_resources_2008_roots_of_resilience.pdf.
37. UNEP, *Africa: Atlas of Our Changing Environment*, 16, 17; and Gray Tappan, "RE: Extent of Natural Regeneration in Niger," 12 July 2007, FRAME Web site post, FRAME Community, United States Agency for International Development, http://www .frameweb.org/CommunityBrowser.aspx.
38. UNEP, *Africa: Atlas of Our Changing Environment*, 17.
39. Ibid.
40. WRI, "Routes to Resilience," 155.
41. Ibid., 157.
42. Dr. Stephen F. Burgess, *Air Force Symposium 2009: US Africa Command (AFRICOM), 31 March–2 April 2009, Final Report* (Maxwell AFB, AL: Air University, Air War College,

2009), 6, http://www.au.af.mil/au/research/documents/AF%20AFRICOM%20Symposium%20Report%2030%20June%202009.pdf. For the nine recommendations offered here, see ibid., 8 (nos. 1–7), 9 (no. 8), and 5 (no. 9).

43. Ibid., 4.
44. Ibid.
45. Ibid.
46. David E. Mosher et al., *Green Warriors: Army Environmental Considerations for Contingency Operations from Planning through Post-Conflict* (Santa Monica, CA: RAND Corporation, 2008), http://www.rand.org/pubs/monographs/2008/RAND_MG632.pdf.
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48. Burgess, *Air Force Symposium 2009*, 5.
49. Ibid., 32.
50. Ibid., 28–29.
51. Ibid., 29.
52. WRI, "Routes to Resilience," 156.
53. Burgess, *Air Force Symposium 2009*, 5.
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55. WRI, "Routes to Resilience," 114.
56. Ibid., 111–57.

Letter No. 3 to AFRICOM

Transfrontier Conservation Areas and AFRICOM: Conflict Resolution and Environmental Sustainability

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Environmental security is a fundamental component of human security necessary for long-term stability and progress in Africa. It is essential in developing meaningful and lasting relationships among local indigenous peoples and between public and private sectors in fledging local and national governments. The development of Transfrontier Conservation Areas (TFCA) worldwide, but specifically in Africa, promotes environmental security and has offered a useful means to attenuate and resolve some conflicts while at the same time promote biodiversity and enhance environmental (and natural resources) management. Peace Parks (PP), a kind of TFCA that involves twin primary aims—conflict resolution and conservation/sustainment of biodiversity—are found primarily in regions of past conflict, postconflict, or potential conflict. Human and environmental security concerns, keenly shared by many African countries and individual Africans, represent a potential opportunity for building partnership capability in a way that could significantly increase the reach and influence of Africa Command (AFRICOM). The 2009 AFRICOM/Air University Symposium featured a track on environmental security, identifying ways that AFRICOM could engage in partnering for lasting and meaningful influence. One workshop featured discussion of TFCAs and PPs, offering several initiatives that constitute roles the command could play to promote environmental security in Africa.[1] This article explores the use of TFCAs in an African

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context, utilizing the initiatives promoted through the workshop that offer benefits to local populations as well as regional and national environmental/human sustainability.

Africa, Environmental Security, and the US Military/Africa Command

US military involvement in African environmental security has increased somewhat inconsistently over the last 20 years. This inconsistency can be traced to differing emphases on the environment and security in the previous presidential administrations of Bill Clinton and George W. Bush. The Clinton administration linked security to the environment in the national security strategy, but the two Bush administrations minimized such a link.

Dan Henk describes a three-pronged US approach to the administering of environmental foreign policy in southern Africa, featuring the Department of State, the US Agency for International Development (USAID), and the Department of Defense (DOD).[2] He details a dysfunctional, "stovepiped" US agency involvement in environmental security in the southern Africa countries of South Africa, Botswana, and Namibia, with funding meager compared to that of other foreign policy initiatives. In addition, the inability to define projects with a focus on environmental security and the absence of a clear conceptualization to unite regional efforts (because of lack of interagency coordination to a strategic whole) produced only modest results in developing partnerships and funding environmental security projects.[3] Henk suggests that southern Africa holds promise for exploring military partnerships in environmental issues; however, the only two organizations within the DOD that supported environmental security as of 2006 were European Command (at that time, one of the US combatant commands with jurisdiction in Africa) and a small environmental office within the Office of the Secretary of Defense, Deputy Undersecretary of Defense for Installations and Environment, that was minimally funded for more or less environmental-compliance projects on the continent.

Of the three countries, Botswana had received the lion's share of monies, most of it DOD related; however, funding for non-DOD projects occurred for all three countries through a variety of USAID programs between 1990 and 2005, including support for local and regional conservation efforts in the Okavango Basin Project and promotion of the Kavengo Zambesi (KAZA) initiative. Military funding went to the Botswana Defense Force for supplying equipment and training to support antipoaching activities.[4] Namibia also received both USAID and military funding, beginning in the early 1990s. USAID funding went to support a local Community-Based Natural Resources Management program, while military funding supported local environmental projects. This resource-management program produced a successful coordination between the Namibian and US governments, international nongovernmental organizations (NGO), and very cooperative local communities, in which significant improvement of biodiversity was encased within a primary goal of reducing rural poverty through improvement in people's quality of life.[5] As Henk chronicles with the Namibian and Botswana examples, the meager monies, compared to those for other US foreign policy initiatives and concern about this direction overall, signaled a lack of interest in this area of US foreign policy from the Department of

State, USAID, and the DOD during the last administration.

The Birth of Africa Command and the Existing/Potential Relationship to Environmental Security

The development of AFRICOM in 2007 grew out of the United States' desire to create a combatant command that sought to engineer a "whole of government approach" to effect positive influence through engaging collaborative relationships within the US government as well as with partner nations and other organizations across the African continent. "The creation of U.S. Africa Command enables DoD to better focus its resources to support and enhance existing U.S. initiatives that help African nations, the African Union, and the regional economic communities succeed. It also provides African nations and regional organizations an integrated DoD coordination point to help address security and related needs."[6] The leadership of ARFICOM features Department of State and DOD deputy commanders together with representation from USAID and other governmental agencies involved in Africa. AFRICOM will seek to engage partner nations and humanitarian organizations also involved in African issues and common concerns.

This paradigm shift in US military relations reflects the changing face of foreign relations in an increasingly "globalized" twenty-first century. The merits of theoretical discussions on globalization perhaps fall outside the scope of this effort. Nevertheless, the end result of US involvement in a continent as diverse as Africa, and with many countries still struggling from the aftermath of colonialism, points toward reconstruction and stability operations as a primary concern for US foreign policy and toward potential DOD opportunity in building partnerships with African nations. As Henk outlined, historic patterns of foreign policy initiatives in African environmental security include interagency dysfunction, and stovepiping would exist for all types of stability-operations projects within the traditional combatant command approach. However, AFRICOM exists as a means of harnessing the efforts and strengths of traditionally autonomous agencies to engage a range of programs, including military-to-military programs, for promoting a stable and secure African environment. In a continent such as Africa, where most nation-states are in their infancy and where quality of life is constrained by a host of a factors (e.g., little or no infrastructure; ethnic conflict; and environmental, man-made, and natural crises that result in the loss of natural resources, disease, and famine), the notion of security cannot be tied to the traditional concept of defense of national integrity. Rather, it should reflect a more human-centric perspective.

In essence, a prosperous and stable continent, across and within national borders, will develop and sustain elements that make up human security. The concept of human security originated through promulgation by the United Nations in the 1990s and beyond.[7] Considered radical when introduced, the notion of human security has redefined the idea of a secure state as one that places primary emphasis on the safety of individuals and the well-being of local communities, not one that involves a centralized government competing in an international arena through the use of threat and military force.[8] "Security should be 'people-centered,' rather than state-centered; its most basic components would be 'freedom from fear and freedom from want.' "[9]

Critical to the "operationalizing" of human security are the sustainment and, in some cases, the protection of the African environment from competing global and African national forces. This notion of environmental security would also include minimizing conflict generated by the constrained availability of natural resources, such as minerals, water, grazing lands, and timber. As AFRICOM moves from standing up as a functioning command to engagement with African nations and their people, the concept of human security—specifically, environmental security—should become a key component of engagement strategy through reconstruction and stability operations. Promoting, planning, and assisting in environmental security programs and projects—or even creating the conditions for awareness of environmental security—represent roles and possible avenues for funding/cooperation or coordination for AFRICOM with African partners.

The development and sustainment of such viable programs as TFCAs and PPs in which AFRICOM might engage could have immediate and long-lasting effects on African human security and could offer engagement channels to promote the operational, tactical, and strategic goals of AFRICOM: "conduct[ing] sustained security engagement through military-to-military programs, military-sponsored activities, and other military operations as directed to promote a stable and secure African environment in support of U.S. foreign policy."[10]

Transfrontier Conservation Areas

The development of ecological areas/conservation zones within and between nations to promote sustainability and stability has a long history. The birth of national parks and forests in the United States is just one example of the use of conservation zones. More recently, the use of such zones has been promoted as a means of conflict resolution as well as a way of providing an environment of sustaining peaceful relations among nations and promoting environmental sustainability while preserving access to natural resources. Since environmental stress rarely knows national boundaries, it may be beneficial for countries and regions to cooperate to alleviate similar or mutual problems.[11] Concentrating on environmental peacekeeping instead of the negative interface created by environmental problems, environmental security entails interactions that can become the building blocks for future cooperation.[12] Identified as a Protected Area, Transfrontier Protected Area, Transboundary Protected Area, or TFCA, conservation areas that straddle national or other regional boundaries have also been colloquially defined as PPs.[13] The most universally accepted definition of these conservation zones comes from the World Conservation Union (IUCN) publication *Transboundary Protected Areas for Peace and Co-operation.*[14]

This article uses the label "TFCA" to conceptualize the particular notion of an ecological/conservation area or zone. Generally, all definitions feature the development of ecological protected areas between international states that share a political boundary as well as engage in some regular communication and sharing of information between TFCA partners. A TFCA can encompass protected areas that may, or may not, have contiguous boundaries and that feature multiple-use land-use areas within the TFCA.[15] Development of these national and international conservation zones has been used to promote a variety of local, na-

tional, and international issues. In Africa the development of conservation zones has proven especially successful on many fronts, specifically facilitating the resolution of territorial conflict and promotion of environmental sustainability. TFCAs have "become prospects for new and innovative regional approaches to the interrelated problems of conflict resolution and appropriate stewardship of the resources base."[16] As such a protected area, a TFCA provides different outcomes to various groups.[17] For conservationists, the outcome is an enforceable means of protecting biodiversity; for a state military, an area absent of population encroachment; for rebel forces, a refuge area or staging platform for future attacks; for government-based, local indigenous groups or privately sponsored ecotourism companies, economic development; and for pharmaceutical companies or international NGOs interested in preserving agricultural biodiversity, a genetic "warehouse" of potential natural resources or information for present or future use in environmental change.

Importantly, TFCAs incorporate local communities and governmental organizations to manage the land for multiple purposes. To this author, they are based on the three general pillars of sustainability:

> a) sustainability of biodiversity through conservation (including conservation and management of natural resources which encompasses water [hydroelectric] and land resources such as forests and wildlife number and diversity) and preservation of the "commons" to reduce conflict over depletion of resources;
>
> b) sustainability and management of economic development both locally and regionally through the engine of ecotourism and community-based land use programs;
>
> c) the sustainability of regional peace and stability through conflict resolution, to include sustain[ment of] bilateral and multilateral relations among nations.[18]

TFCAs provide additional boundary protection to mitigate terrorism. Cooperation in managing conservation zones promotes the sustainability of "soft peace" between friendly neighbors. Such zones can also serve as an important tool for the development of "hard peace" (between adversarial neighbors) as a starting point in facilitating dialogue between adversaries; furthermore, they can offer a valuable exit strategy from intractable positions.[19]

Promoting, sustaining, and protecting biodiversity as well as maintaining access to natural resources for indigenous and local peoples are primary considerations of TFCAs. In addition, the engine of ecotourism drives both funding and livelihoods for those who live in and around the TFCA; it does so directly through park management and sustainment and indirectly through ecotourism dollars.[20] TFCAs such as the Great Limpopo Transfrontier Park that straddles Mozambique, South Africa, and Zimbabwe, and the Ngorongoro Conservation Area (NCA) offer indigenous populations residence within and adjacent to park boundaries. Even though limiting their traditional subsistence strategy of pastoralism for the Masai, for example, NCA park development and sustainment can offer employment, experience, and training/education.[21] The NCA is not unique in attempting to provide development to indigenous and local populations through both economic gain and local management. Members of the Northern Rangelands Trust, a community-organized and -led conservation initiative in northern Kenya, represent pastoralist communities whose traditional lifeways have become somewhat margin-

alized by the formal sector of the state. The trust was established by these local groups—along with other stakeholders interested in biodiversity conservation—to form "umbrella" local governance emphasizing conservation and sound environmental management to improve, diversify, and sustain pastoral livelihoods. Currently the Northern Rangelands Trust is composed of 15 local community conservancies in six districts.[22]

Peace Parks

PPs date back to 1932 and the development of the Waterton-Glacier International Peace Park that lies on the border between the United States and Canada.[23] Organizations such as the IUCN's World Commission on Protected Areas, World Wildlife Fund, and United Nations University for Peace have worked in some way to further the concept of building peace through building PPs. As is the case with TFCAs, there are slightly differing definitions of PPs.

According to the IUCN, a PP must promote "a clear biodiversity objective, a clear peace objective *and* co-operation between at least two countries or sub-national jurisdiction" (emphasis in original).[24] The United Nations University for Peace defines PPs as "protected areas where there is a significant conflictive past."[25] Trevor Sandwith and others define PPs as "transboundary protected areas that are formally dedicated to the protection and maintenance of biological diversity, and of natural and associated cultural resources, and to the promotion of peace and co-operation."[26] Saleem Ali has similarly defined PPs.[27] Clearly, a PP emphasizes an environment of sustaining peaceful relations among nations, promoting environmental sustainability, and preserving access to natural resources.

Instead of mitigating tension, PPs provide a collaborative alternate solution to barricaded borders that isolate and sustain. This development has been used successfully either in regional areas prone to conflict or in a postconflict situation (e.g., the border between Kuwait and Iraq).[28] The Korean demilitarized zone represents both a nature corridor untouched for 50 years and an opportunity for the North and South Korean governments to engage in a collaborative effort to maintain habitats and reintroduce species into the ecosystem, as well as offer a symbol of peace and novel, cooperative international relations.[29] The Siachen Glacier region, shared by both India and Pakistan, has been and continues to be a region of conflict between the two nations: "Their combat over a barren, uninhabited nether world of questionable strategic value is a forbidding symbol of their lingering irreconcilability."[30] Neal Kemkar poses the creation of a transboundary PP bilaterally managed by both India and Pakistan that would end the ongoing "low-intensity border war between the two nations."[31] A frontier PP that exists in the Mesopotamia marshlands between Iran and Iraq is in the preliminary stages, having the goal of bringing Shi'a and Sunnis together and restoring sensitive marshlands, necessary for biodiversity and agriculture, that have suffered damage by decades of conflict.[32] Moreover, boundary land between Afghanistan and Pakistan has been proposed for a series of TFCAs.[33]

In Africa the development of TFCAs in the early 1990s featured PPs.[34] These parks were promulgated through discussions of common interests, first between Anton Rupert, president of the South African World Wildlife Fund, and Joachim Chissano, president of Mozambique, in 1990 and later with the support of newly

elected South African president Nelson Mandela. The Peace Parks Foundation, established in 1997, was the collaboration of the national governments of Mozambique, Zimbabwe, and South Africa, as well as NGOs such as the World Wildlife Fund and the World Bank.

There are several successful PPs in southern Africa, including Great Limpopo Transfrontier Park, Kibira National Park, Virunga National Park, and the Volcanoes National Park, which make up the Great Lakes TFCAs of Burundi, Democratic Republic of the Congo, and Rwanda. The ambitious KAZA Peace Parks Initiative includes TFCAs in five African countries: South Africa, Botswana, Mozambique, Zimbabwe, and Angola.[35] Although KAZA has been in the planning stages for several years due to factors such as the political instability of some members, which led to internal conflict, the implementation of such an initiative only underscores the potential benefits of TFCAs to nations and their neighbors.

Another African example is the "W" International Peace Park in West Africa, a TFCA that covers three West African countries: Benin, Burkina Faso, and Niger, and over a million hectares. Parts of it were designated as a wildlife reserve in 1926 and went through various management administrations under colonial rule and after independences through the 1980s. This was accompanied by indigenous practices of first foragers, stockbreeders, and, lately, practitioners of pastoralism/transhumance managing the park's resources.[36] In 1986 the three countries entered into transboundary collaboration for park management, emphasizing sustainable management of the park's natural resources. Park management is economically driven by tourism and sports hunting, while peripheral populations border on abject poverty. The park still exists in a fragile ecological state; moreover, tourism and hunting programs are not mature, affecting park sustainability. Programs to integrate these populations into sustainable park management are ongoing, and strict conservation laws have given way to more "participatory" approaches to involve local indigenous populations as "comanagers" of the park through a series of obligations and rights.

The Downside of Transfrontier Conservation Areas and Peace Parks

Some scholars argue that the development of conservation zones such as TFCAs has not yielded those benefits that promote environmental or economic sustainability. Land adjacent to nature preserves, such as TFCAs, often yields to commercialization, and peace breaks out only in the designated conservancies.[37] In fact, the act of creating a bounded conservation zone, especially across national boundaries, may create its own set of conflict issues. In addition, Rosaleen Duffy points out that PPs can be considered a paradox of globalization.[38] PPs offer undeniable benefits, and, as discussed above, many of them relate to global forces such as ecotourism and the pressure exerted by international NGOs such as the World Wildlife Fund and the Nature Conservancy to sustain biodiversity. However, globalization, as an opportunity, also creates negative effects on the land, as well as nefarious subsistence and illegal practices. The fact that many TFCAs have permeable and porous borders weakly patrolled by state agencies makes illegal activities such as poaching, smuggling, and narcotic trafficking frequent, attracting powerful political interests. "Paradoxically, the creation of Peace Parks requires more, and

not less, state control of frontier zones, and raises significant issues for the management or control of globalising forces in weakly administered regions of the developing world."[39] In the case of the NCA, the indigenous population of Masai that lived within or adjacent to the TFCA borders found their traditional subsistence practices either curtailed or extremely limited by park activities. Cultural traditions and livelihoods are sacrificed, and even if the park employs local people, they are penalized by lack of education and find themselves occupying service positions or, even worse, resorting to entertaining tourists.[40]

From a different perspective, international conservation groups, although acknowledging that indigenous groups have rights to land and the use of that land, find that when taken out of traditional subsistence patterns and armed with modern technology, indigenous groups can often cause harm to the same biodiversity that they once managed while engaged in traditional cultural patterns of survival.[41] Conservationists such as Richard Leakey and Christof Schenke (of the Frankfurt Zoological Society) argue this very point. To Leakey, if indigenous peoples such as the Masai in the NCA want to improve their quality of life, and if this involves development of traditional lands (now parklands), and if this aspiration will eventually cause the destruction of the park, "you can't sustain a national park if modern housing and schools and so on are springing up."[42] Relocating some indigenous populations may be necessary to sustain the integrity of the conservation zone, and although they acknowledge that this will affect lifeways, conservationists still wish to push for sustaining biodiversity as the primary goal of conservation areas such as the NCA. Schenke believes that protecting lifeways is possible "as long as it [indigenous lifeways] doesn't conflict with conservation aims. . . . In order to protect biodiversity it's imperative to retain some human-impact-free areas in the world, so in protected areas, conservation must come first."[43]

It is clear that establishment and development of TFCAs and PPs can support the three goals outlined earlier in this article: conflict resolution, sustainment of biodiversity, and economic and social growth. It is also clear that there will be TFCAs and PPs in Africa that will affect, and most likely disrupt, traditional cultures: the traditions, lifeways, and patterns of meanings that have tied cultural members together for centuries, much as other facets of globalization have done and will continue to do. In fact, promoting TFCAs and PPs could actually promote conflict instead of attenuate it.

The concept of TFCAs has been embraced globally and has garnered considerable support from any number of governments, NGOs, and private corporations. However, with all the development of TFCAs, PPs, and other conservation zones, there is no clear mandate supportable by systematic and empirical studies that can actually promote the theoretical foundations and reasons explicated for the development and sustainment of these areas. Some individuals have made attempts to systematically measure the "effect" or "performance" of TFCAs. Anna Spenceley and Michael Schoon, for example, propose framing PPs as a social ecological system.[44] Using the Great Limpopo Transfrontier Park, they posit the use of transfrontier natural resources in nature-based tourism as a mechanism within this social ecological system to drive not just biodiversity but, perhaps more importantly, the effect on local economic development. Simply put, the growth of local economies becomes a performance yardstick. Anne Hammill and Charles Besancon take a different tack and

propose looking at TFCAs through the lens of conflict attenuation. Exploring the linkages between the context of the emergence of TFCAs, with respect to the history of peace and conflict in that area, they suggest looking at the interaction of those contexts with the "ability" of the TFCA to act "as arbitrators for peacemaking, but in regions currently experiencing conflict or those with a history of conflict, they can inadvertently exacerbate conflict."[45] Using a Peace and Conflict Impact Assessment (PCIA), developed in various forms by Kenneth Bush and Luc Reychler (Conflict Impact Assessment System [CIAS]) for more general peace and conflict-resolution projects, Hammill and Besancon preview using this tool to look at the Great Lakes TFCAs for the purpose of exploring the optimistic claims of agencies, governments, and groups regarding the success of TFCAs and PPs through one lens—one that promotes a "culture of peace and cooperation."[46]

To authors such as Duffy, the development of TFCAs is a paradox of globalization. The creation of TFCAs is itself a function of globalization, yet, as seen, there are implications of this genesis that are undermined by other activities "equally supported by the broader shift to globalisation."[47] The creation of TFCAs also raises the question that, within the framework of coordination and park governance, does one not also create a new form of transboundary state adding globalized "layers" of regulated governance and "extend[ing] state control over those landscapes and the resources and people contained within them"?[48]

Many stakeholders are featured prominently in the development and sustainment of TFCAs. The concept of these areas and, specifically, PPs stands intuitively as tenable to the dramatic and immediate effects of any number of disparities and conditions of a twenty-first-century planet—climate change, loss of biodiversity and habitat, depletion of natural resources, economic and sociocultural inequality—creating new forms of marginalization of indigenous populations or even creating new cultures out of traditionally marginalized populations: poachers, drug traffickers, and even pirates. PPs also act as a focus of establishing or reestablishing national, ethnic, or cultural identity in postconflict regions with failed infant nation-states in developing areas of the world, such as many newly independent African countries. It is necessary for the concept of TFCAs and the recent development of many of them globally to be successful in meeting those three goals and mitigating as much as possible the effects of environmental crises, globalization, and twenty-first-century conflict. All stakeholders should be intimately involved in agreeing to the programmatic goals of the TFCA and in developing and sustaining the TFCA. AFRICOM could be a crucial stakeholder in this process. Through collaborating and partnering with stakeholders and by providing funding, equipment/technology, environmental residential knowledge, and education/training, the command could make a substantial contribution to furthering stability operations in many African countries and regions.

Collaboration between Africa Command and Transfrontier Conservation Areas

Because a variety of stakeholders are involved in the development of TFCAs, specifically PPs, success depends upon the establishment of collaborative partnering between those stakeholders. Consequently, national militaries and police forces can provide and have provided en-

hanced security to maintain TFCA integrity through minimization of the exploitation of natural resources, including wildlife, minerals, and timber. For example, the development and implementation of the Botswana Defense Force as a necessary deterrent to boundary invasion and poaching are a benchmark of what can be accomplished through the development of conservation zones.[49] A robust development of national parks and international PPs can provide a means to model environmental, sustainable peace and economic prosperity for many African nations by slowing the environmental degradation and exploitation of natural resources and by enhancing environmental and national security.

AFRICOM contributes to a nascent cooperative environmental-security program with many African stakeholders. The DOD, through the Office of the Deputy Undersecretary of Defense for Installations and Environment, promotes a successful environmental-partnership program that provides mostly planning and compliance assistance on a very modest budget. These ongoing programs include providing workshops on developing response plans to chemical spills and programs such as management of hazardous and solid waste. Mitigation of environmental degradation caused by past and ongoing conflict and the lack of mature environmental-compliance programs that minimize human agency in many African countries is a fertile and necessary opportunity for engagement of AFRICOM's financial and human resources. At some point in the future, as AFRICOM increases its operational presence on the continent, environmental compliance will become important as well.

Beyond these existing initiatives, AFRICOM in general and the United States Air Force (USAF) in particular can partner with African governments and their militaries to sustain existing conservation zones and help develop planned projects, such as KAZA, and as yet unplanned projects by (1) transferring environmental knowledge and best practices and training for sustaining biodiversity and conserving natural resources; (2) applying airpower's capability for monitoring boundaries and borders, moving wildlife, mitigating poaching and terrorism, identifying environmental degradation within conservation zones, and transporting human resources and equipment for park management; and (3) assisting in the development of security capability through training and equipment. The following recommendations, generated from the Air University/AFRICOM symposium held from 31 March to 2 April 2009 at Maxwell AFB, Alabama, represent possible actions that AFRICOM might take.[50] The environmental-security track at the symposium brought a variety of skill sets and academic perspectives. These recommendations address potential contributions to the three general goals of TFCAs, as outlined earlier in this article.

Recommendations

1. "Provide environmental security [education/] training and regional co-operation training to African militaries."

USAF bases in the continental United States are both environmental managers as well as environmental stewards of federal lands. It is imperative that these bases work with a variety of governmental regulators and comply with environmental laws and regulations. Bases also are directed to consult with those federally recognized Native American tribes who claim historical association with the bases' environmental heritage. However, beyond

compliance, USAF bases must also develop partnerships with local communities and groups of concerned citizens, nature-based groups (such as the Nature Conservancy), as well as environmental-activist organizations (such as Defenders of Wildlife), to sustain and conserve environmental resources on the base, protect wildlife, sustain biodiversity, and mitigate the impact of base operations on the environment. This process of establishing partnerships with interested stakeholders having environmental concerns could help Africans develop and sustain their TFCAs and PPs. Indeed, the concept of PPs involves a process of sustaining the ethos of environmental stewardship necessary for all stakeholders concerned with developing partnerships in environmental security. A knowledge base of both management experience and lessons learned exists.

2. "Assist African governments and militaries in creating security for Trans Frontier Conservation Areas (TFCA). (Example: Botswana [Defense Force])."

3. "Assist with knowledge sharing related to piracy, poaching, trafficking and terrorism and other illicit trans-boundary activities."

Conservation zones incorporating more than one national border require a robust program to maintain security within the zones/parks for participating nations. Security involves many different applications, from protecting parks and nations from terrorism, to protecting residents, park employees, and ecotourists, as well local communities surrounding the TFCAs. Security is also integral for protection of the areas' biodiversity (including wildlife) and critical natural resources such as water and timber. USAF personnel can provide assistance in training and helping equip militaries to provide security. Capabilities such as aerial and satellite monitoring/surveillance, mapping by means of the global positioning system, interdiction training, transporting, and conflict training are just a few of the possible avenues of assistance. Botswana's national military (the Botswana Defense Force) would be a logical partner for sharing lessons learned, should it need or request assistance.

Similarly, the USAF could help the security forces of organizations such as the National Park Service, United States Forest Service, and Bureau of Land Management in the areas of training and equipping. Indeed, the USAF's expertise could prove equally valuable in sustaining a viable security program, such as the Botswana Defense Force.

4. "Assist with knowledge sharing to identify and maintain areas suitable for designation as a TFCA."

5. "Facilitate the TFCA programs with the assistance of DOD Environmental and Natural Resource Managers."

As indicated above, the DOD—specifically, the USAF—maintains robust environmental-management programs at all of its installations in the continental United States. Integrated into these programs are both natural and cultural resource managers who maintain active conservation programs aimed at protecting biodiversity (by complying with laws such as the Endangered Species Act) and cultural resources within the confines of the installation. These resource programs are staffed by environmental scientists and specialists experienced in developing and implementing resource programs as well as sustaining such programs in the face of changing mission requirements and land use. Maintaining successful programs requires engaging proactive, scientifically based programs focused on sus-

taining biodiversity, including wildlife habitats. This management experience would include the skill sets required to control invasive species, sustain wildlife through protection (as well as species rejuvenation), and mitigate the effect of natural events (such as fire and flooding) on the environment and other programs valuable to African TFCAs.

Furthermore, these same programs could provide resources to gather, analyze, and "empirically" test models such as the PCIA/CIAS or the social ecological systems model as to the success of TFCAs. Additionally, the environmental impact statement/assessment process used by all federal and state agencies, specifically the USAF, could be engaged in helping site TFCAs and predicting intended or unintended consequences of development.

6. "Assist Africans in environmental remediation programs to mitigate and return natural environments back to sustainability following human impact such as [post]demining [environmental mitigation]."

The DOD maintains mandated programs to address human effects on the environment, such as remediating Superfund sites, cleaning up toxic-chemical spill sites, maintaining a demining capability, and removing ordnance from inactive ranges. These programs provide a wide range of experience at addressing human impact on the environment that could prove helpful in examining conservation zones from current, recent, or distant past conflict, as well as other land uses.

7. "Provide cross-cultural education/training programs to all involved stakeholders. Develop program assessment measures to include short and long-term ethnographic studies to ensure that development and sustainment of conservation zones [are] both effective and sensitive to the local peoples and culture [in and] around the conservation zones."

The USAF Culture and Language Center has developed as foundational to both training and professional military education programs the concept of cross-cultural competence, which, at its core, is the presentation of general culture—domains of culture and applied skills such as cross-cultural communication, negotiation, and participant observation. Cross-cultural competence is important to both cultural interactions and sensitizing actions taken to support development and management within a local culture.

Summary

The development and sustainment of TFCAs and PPs represent a global phenomenon with a relatively short history for judging results across the spectrum of goals, including biodiversity improvement, sustainment of natural resources, increased economic and political independence (or at least improvement in one or both domains for indigenous and local populations), increased cooperation across national borders, and other direct or indirect benefits. As noted, Africa contains a number of TFCAs as well as intranational conservation zones. In light of the number and development of these zones, support through AFRICOM—especially the USAF—could promote foundational goals of building partnerships and providing capability that lead to a more stable Africa. ❑

Notes

1. See Dr. Stephen F. Burgess, *Air Force Symposium 2009: US Africa Command (AFRICOM), 31 March–2 April 2009, Final Report* (Maxwell AFB, AL: Air University, Air War College, 2009), http://www.au.af.mil/au/research/documents/AF%20AFRICOM%20Symposium%20Report%2030%20June%202009.pdf (accessed 16 February 2010).

2. Dan Henk, "The Environment, the US Military, and Southern Africa," *Parameters* 36, no. 2 (Summer 2006): 99.

3. Ibid., 111.

4. Dan Henk, *The Botswana Defense Force in the Struggle for an African Environment*, Initiatives in Strategic Studies—Issues and Policies (New York: Palgrave Macmillan, 2007).

5. Henk, "Environment,"109.

6. "U.S. Africa Command," http://www.africom.mil/AboutAFRICOM.asp (accessed 5 September 2009).

7. Initially, "human security" was defined in United Nations Development Programme, *Human Development Report* (New York: Oxford University Press, 1993), and, later, in Commission on Human Security, *Human Security Now: Protecting and Empowering People* (New York: Commission on Human Security, 2003).

8. Commission on Human Security, *Human Security Now*, 1.

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Letter No. 4 to AFRICOM

Sustainable Resources and Security in the African Context: Opportunities for Conflict and Cooperation

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On average, the continent of Africa is exemplified by large populations, economies supported by subsistence farming, and forced migration due to natural cycles. The renewable resources of land and water are crucial to livelihoods and the creative economic energy of a people. Nonrenewable resources of the continent such as minerals, metals, and some fossil fuels are in abundance, providing economic and political clout for individual states and economic opportunity for the region if they are legitimately and appropriately utilized. Transnational migration of people or animals and the interstate rivalry for minerals can create physical and political detritus that puts at risk the security of a region. For members of US Africa Command (AFRICOM) to operate effectively with other elements of US national power, multinational security forces, and regional security organizations, they must understand the inseparable natural, cultural, and political environments of Africa. A holistic understanding of the environment will provide no shortage of joint and coalition opportunities for AFRICOM to build capacity in Africa.

Many effective agreements and their attendant institutions related to sustainable resource management are currently in force or in development across Africa by Africans. Individual nations, ethnic groups, and regional nongovernmental organizations (NGO) already have working transnational relationships that monitor, control, or preserve African states' own interests and their common natural resources, such as transfrontier conserva-

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tion areas. Since resource exploitation can be for the common good of a region or can produce fractious engagements between states or nonstate actors, AFRICOM should engage to add value to existing arrangements and provide innovative energy for new cooperative agreements through its unique, broad-based organizational structure. Specifically, the US Air Force's Seventeenth Air Force should be instrumental to AFRICOM as a conduit, bringing to bear all the possibilities of air, space, and cyberspace to merge in collaboration with other elements of national power through policies and strategies that promote knowledge sharing, data flow, and cross-cultural military engagement in support of a sustainable resource environment.

Sustainable Resource Security and the Air Force Mission in Africa Command

Although it may not be immediately apparent how the mission of Seventeenth Air Force aligns with the goals of AFRICOM or how exploring the new horizon of environmental security serves the interests of the United States as defined in the past, there are good reasons to engage the dialogue in these areas, given the realities of Africa and the world in the twenty-first century. AFRICOM's position as an organization within the US Department of Defense and its unique command relationship with the US Department of State can assist in building the capacity of Africans to maintain peaceful, sustained natural and political environments within the core missions of the command's US Air Force component—Seventeenth Air Force. Efforts within each of the core missions of the US Air Force—air, space, and cyberspace—could assist African nations in creating and monitoring agreements, mitigating conflicts, and preventing armed struggles over resources. Moreover, Seventeenth Air Force could conduct such efforts in a manner that increases the capacity of Africans to create a sustainable future.

As a way of understanding Seventeenth Air Force's potential in helping Africans secure their resources and the peaceful relationships related to those resources, it may be helpful to make a distinction first between the conventional idea of sustained security and the concept of environmental sustainability. Important differences exist between the conventional military use of the word *sustained* and the term *sustainability* in the context of the wise and appropriate use of resources over time—that which also supports stable social relationships. Ultimately, sustainability also refers to the capacity of individuals, Africans in this case, not only to survive but also to govern their own affairs and resources, as well as recognize and support sustainable governance practices and regimes—those that ensure the long-term viability of resources and positive, peaceful relationships that in turn support economic and social health.

For example, in the military context, *sustained* usually refers to maintaining military logistics, supply, unity of effort, and long-term military operations.[1] In the context of AFRICOM, sustaining the force to complete the mission is important, but the mission must be considered not only in administrative terms but also in terms of its unique focus. Thus one should also consider the nuances of the word *stability*. In military terms, stability refers to a steady state.[2] Stability is generally a trigger event or point in time used by decision makers as a metric with which to draw down forces, reduce peacekeeping efforts, change strategy, or begin planning for the next phase.[3] But stability is

not the same as sustainability. For example, the conventional intervention formula calls for first keeping a sustained presence of US forces and then reducing those forces while training indigenous forces to maintain the status quo of equal and opposite power in a conflict. However, this scenario does not often result in creation of the longer-term sociopolitical and environmental *conditions* for sustainable security. It therefore does not necessarily protect US national interests in the long term.

This conventional view of stability is organized by the existence of conflict rather than more visionary scenarios. Therefore individual Africans are not often engaged in developing those networks of relationships, knowledge, and agreement that would both create and sustain a "normal" peaceful environment over time and across multiple generations. Rather, they are often trained to sustain only a military equilibrium within the parameters of a specific conflict. This strategy does not necessarily address the underlying conditions of conflict (in this case, the sustainability of resources) or make efforts to create alternative conditions—those that would allow the population to stabilize over time around more positive attractors than an uneasy peace. Again the concept of sustainability suggests that we must look beyond the conflict itself to those conditions that will reduce the potential for violence and the disruption of economic and social relationships from which true stability emerges.

Indeed, US Air Force doctrine and future force-acquisition documents have addressed the need for building more partnership capacity within the context of irregular warfare as a core mission function.[4] These changes indicate a greater emphasis on engagement and a longer view of security, stability, and, ultimately, a sustainable security strategy. AFRICOM's unique interagency focus and Seventeenth Air Force's new engagement focus can go a long way toward migrating current military stability operations into an integrated, "whole-of-government" strategy that will reduce resource conflict and prevent conflict, leading to sustainable security in Africa.

This broader concept of sustainable security may yet seem implausible within the military framework, or it may seem that it produces a kind of "mission creep" into areas that rightfully belong to the US interagency process among the US Agency for International Development and NGOs. However, the days seem to have passed when agencies of any government can act on their individual missions alone without seeing the bigger set of relationships to which they are all party. In this, the unique command structure of AFRICOM could effectively blend the national military strategy with an actionable national security strategy through the whole-of-government approach, engaging the different forms of national power including diplomatic, informational, military, economic, and cultural—and we would add here, environmental.

AFRICOM could incorporate military stability operations that manage the tenuous balance of equal and opposite forces into a longer-range view of sustainable security that is more human-centric, symbiotic, and collaborative, not merely with a whole-of-government approach but with citizens, to produce a self-sustaining future in Africa.[5] That is to say that preventing wars is as important as winning them.[6]

Sustainability and Security of Natural Resources

Security can be threatened by population change, human migrations, globalization of economies or policies, external factors, and resource or energy access. Both the existence and outcome of all these threats are influenced by the degradation of resources—both renewable and nonrenewable—and, depending upon how these conditions are addressed nationally and internationally, resources can tip the balance toward either conflict or cooperation.

The broad definition of resources used here reflects the complexity of the African continent and the presence and importance of multiple aspects of the environment in the day-to-day relationships of the African population. The definition includes the energy resources of fossil fuels and hydroelectric power for global and local energy needs; the geologic strata with resources that hold untold minerals for our modern quality of life; and, most importantly, the renewable and restorable resources of arable land and productive fishing waters that yield life-giving food commodities. The ultimate resource, the source of life itself—potable water—is used here to illustrate both the problems and potential of environmental security in Africa.

Subsistence Farming and Resource Conflict and Cooperation

Recent examples of resource conflict and cooperation across the geographic and historic expanse of Africa illustrate the potential of a new approach to sustainable security implicit in the AFRICOM mission related to capacity building and engagement of African citizens through a whole-of-government approach. In the Niger Delta, for example, oil takes center stage and generally feeds conflict by creating or exasperating economic disparities through the environmental destruction of arable land and productive fisheries or the displacement of populations. The Democratic Republic of the Congo (DRC) exemplifies how government policies in relation to a renewable, limitless, and clean resource of water such as the Congo River can cause resource conflict by forcing displacement of populations in order to build new hydroelectric-generation facilities. Also, the DRC hosts some of the richest geological caches of minerals that are in high demand in today's technology. This resource conflict of minerals has slowed the peace process following the DRC's long and bloody civil war in the eastern half of the country. Indigenous and foreign militias continue to battle over control of mines or mineral deposits to support their various belligerent actions against the population and the environment.

Each of these energy or mineral-resource conflicts ultimately destroys or limits access to the important resources of arable land and productive fisheries that provide life-sustaining food and life-giving potable water.[7] Water is as important or perhaps more so than minerals or oil because it supports not only life but also culture and established patterns of relationship and meaning that grow up around bodies of water.

For example, a majority of Africans are dependent on subsistence farming, a form of agriculture that predominantly supports the individual, family, or clan directly from a simple diet produced on arable land or fish harvested from productive waterways (fig. 1). By definition, subsistence farming means minimum production of food necessary for survival. Subsistence agriculture, however, is only one end of the potential spectrum of environmental dependency in Africa. There is a range of productive capacity from subsis-

tence to the production of excess commodities that can be marketed or bartered. But, for a majority of Africans, agriculture is production for pure survival. Conflict over resources has effects that extend beyond the particular conflict, which may result in the degradation of those resources and may limit access to arable land or fish habitats. The needs of survival then foster further conflict—or, as often, make starving or displaced populations vulnerable to oppression and manipulation.

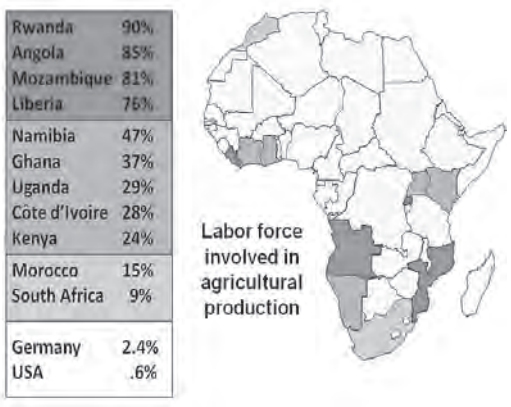

Figure 1. Subsistence agriculture in Africa. (Data from US Central Intelligence Agency, *CIA World Factbook*, https://www.cia.gov/library/publications/the-world-factbook/index.html [accessed 24 February 2010].)

Traditional commercial or family farms, not subsistence farmers, generally produce commodities or a variety of products beyond what is needed to support life. The products or renewable resources generated by the farmer are bartered for other products or sold for hard currency and thus provide a monetary income for the farmer and a diverse economy for the region. Although subsistence farming is becoming increasingly unsustainable with the depletion of arable lands, this commodity farming still holds potential for stabilizing populations and their relationships. But it is dependent on mature policies and practices related to the safeguarding and sustainable use of common resources.

A variety of conditions in Africa keep populations dependent on subsistence agriculture. These include forced population migration caused by environmental degradation resulting from natural causes, shortsighted government policy, or military action that reduces production. The result is the same, however—emergence of a marginal security environment for sustainable livelihood. The presence of environmental and resource degradation produces shorter time horizons for planning, storing, or exchanging the fruits of a population's labor. Poor policy also prevents ownership of the arable land or water access needed to generate a commodity. In many cases, public policy in Africa encourages large government or commercial resource-extraction operations to damage the surrounding environments with impunity and to reduce the resources of arable land and productive fisheries. An unenlightened security environment may also contribute to dependence on subsistence agriculture by permitting or creating ungoverned spaces where militias or even legitimate government security or police forces confiscate or damage the crops or limit access to land and water.

Of course, all subsistence agriculture is not caused by policy and human disorder. Weather is as much a cause of subsistence agriculture in Africa due to a lack of access to, or interpretation of, commonly available weather data. AFRICOM and Seventeenth Air Force can certainly assist Africans in the latter sustainment issues with data harvesting and distribution, along with the training necessary to interpret the geological and meteorological

data available. AFRICOM and the Department of State, its companion command functionary, also can reduce resource conflict by supporting good governance and resource-extraction policy through training, education, and knowledge sharing that support sustainable resource practices.

The Complex Nature of Resource Conflict: Water and Oil

There are ample instances of conflict related to water in Africa. For example, the Niger Delta region of Africa hosts one of the largest battles over energy resources on the continent. Even though the Sudan and Darfur may generate more notoriety and the conflict over oil in Angola is expected to continue into the future, Nigeria demonstrates the complexity and interrelated nature of resource conflict in the African continent.

Conflicts over fossil fuel resources dominate the news from Nigeria, but again such conflict produces collateral effects. NGOs closely track the damage and sources of damage from the oil conflict.[8] Some NGOs cite multinational companies as the villain, but others cite the government, and still others cite the national military establishment as the casus belli of any Nigerian conflict.[9] Resource conflict "Nigeria style" offers a good example of how complex the outcomes of conflict are when there is massive destruction of human life and/or the environment, as well as poor governance, an unprofessional military, and spillover strife from a number of other African frays that either contribute to resource conflict or are fueled, perpetuated, or augmented by the resource of oil. For example, environmental degradation that promotes injustice is enabled by the state that benefits from supporting multinationals and their unsustainable practices.[10]

By emphasizing resource sustainability as the issue rather than aligning itself with one side of the conflict or another, AFRICOM can do much to bring focus to and improve the conditions which lie at the foundation of many conflicts that are never purely about the commodity of the resource, but also about the sociopolitical relationships it supports. Ultimately, for example, the damage done in the name of oil or mineral extraction and its associated strife negatively affect the ability of individuals to farm, fish, or provide simple subsistence for their families. This extends the conflict from one over an economic commodity like oil to the production of life-sustaining commodities from arable land and productive waterways. According to Amnesty International, for example, oil conflict in the Niger Delta has damaged agricultural production, beyond subsistence, of yams, cassavas, cocoa, pumpkins, and various fruits. Fisheries, inland and shellfish beds, spawning grounds, and other living waterways have equally been destroyed or damaged beyond productive use.[11] Amnesty International also argues that the African Charter and international law bind the signatory countries to actions that protect and improve food sources.

AFRICOM, then, should not only consider the conflict over oil in Nigeria but also look at the "other end" of the conflict as a starting point for building the capacity of the population to govern in a more sustainable manner. Working to establish, monitor, and maintain regional agreements and international law that protect food sources will at least protect subsistence farming and potentially will then translate into excess food production, providing the fuel of trade and commerce for a sustainable security in the region. In

the DRC, there are also many nonrenewable mineral resources to spur conflict that have encouraged the development of mining codes and regulation of multinationals who supported rebel groups in order to manipulate mineral rights.[12]

More than Oil: The Congo River

Directly linked to this conflict over minerals in the DRC is the Congo River, which flows some 2,900 miles and drains approximately 1.3 million square miles of central Africa. From the capital of Kinshasa, the Congo River drops 280 meters to the Atlantic Ocean some 350 kilometers downstream.[13] The conflict in this case is not over a potable water resource for survival, which is in ample supply, but over the hydroelectric power generated near the mouth of the river—used primarily for extracting minerals in the east and for providing energy for certain sectors of the population in the west.

For example, the energy generated from the Congo River at the Inga Dam complex southwest of Kinshasa, although poorly maintained and poorly regulated, is a renewable, sustainable resource and relatively friendly to the environment. The electrical energy available and needed for the government-owned mines to extract nonrenewable mineral resources in the eastern DRC comes primarily from this complex, which consists of two dams with multiple turbines for power generation. The majority of the turbines for these dams are inoperative at any given time due to inadequate preventive maintenance and infrastructure, lack of funding, poor training, or government inaction. A power grid extends from this degraded hydroelectric complex to supply the state-owned mining industry that spans a country half the size of the United States. At the same time, only six percent of the country's population (those living in Kinshasa) can access electrical power.

To complicate matters, the World Energy Council is proposing a third dam to bring the energy output of the Inga Dam system up to 39 billion kilowatts, including distribution systems as far north as Europe.[14] Just the proposal itself has already threatened thousands of the indigenous population. In 2006, for example, nearly 8,000 people were ordered to move from their land to make way for this anticipated expansion of electrical capacity. With no recourse or even an offer of remuneration, these people have remained in place in an act of civil disobedience. Ironically, because of inadequate governance and inconsistent rule of law within the DRC, they are momentarily secure. However, the threat of involuntary displacement and population migration remains, therefore increasing the need for subsistence agriculture.

Poor governance and inadequate policy, along with the demand for resources in the east of the DRC, have been especially myopic. Viewing the Congo River, for example, as merely a conflicted commodity negates the opportunity to foster a thriving artery of commerce, trade, and cooperation, thus planting and indeed nurturing the seeds of environmental degradation leading to social instability. Further, these poor policies and governance practices are creating a cascading effect as environmental degradation and misuse, putting more pressure on already struggling subsistence farmers. For example, the hydroelectric power required for large governmental and commercial extraction industries leaves little for cooking, heating, or other productive uses. As a result, subsistence farmers have turned, once again, to charcoal manufacturing to generate currency and purchase

foods grown less and less frequently at the local level.[15]

Water: A Reason to Cooperate

Finally, water is certainly the most important resource for sustaining life, intimately woven into the daily habits and interactions of families and their communities. It is also a common resource that provokes the dialogue necessary for building positive relationships and governance capacity. That is, the resources of arable land, productive fisheries, and water are at least as much a source of agreement, cooperation, and treaty as they are a source of conflict. In part, this suggests that while looking to "fix" problems within the African sociopolitical landscape, AFRICOM may also want to look at what is already working as a starting point for how to engage the Africans.

For example, although many people believe that the next great battle will be over water rather than oil, the fact remains that more cooperation than conflict is fostered through water competition and its resolution between nations. Historically the most notorious conflicts over water occur within the borders of one country among multiple users. However, transnational water conflicts have been resolved with less violence while also building longer-term relationships and capacity for future agreement among partners. According to a study of worldwide water events in the last 50 years, for example, more than 70 percent were acts of cooperation.[16]

Africa, for instance, is already cooperating internationally about water. In an important example, Angola, Namibia, and Botswana have joined to protect the waters of the Okavango Delta and its environs in order to provide a sustainable livelihood for their joint populations through the Permanent Okavango River Basin Water Commission (OKACOM). This tristate agreement has roots in regional and international environmental accords.

For Angola, OKACOM makes that country responsible for protecting the primary supply of clean water for the catchment area of the Okavango basin (fig. 2). Southeastern Angola receives ample rain from the northern equatorial region, which fills hundreds of tributaries that flow south to the Okavango River and east to the Okavango Delta.[17] Angola's geography supplies much of the water for the Okavango Delta, but Namibia's desert clime contributes little. Before OKACOM, Namibia built aqueduct and underground networks of water collection and distribution to draw from the river and supply potable water to its growing population. Through OKACOM and other agreements, that country is committed to restrict use of the water from the Okavango River.

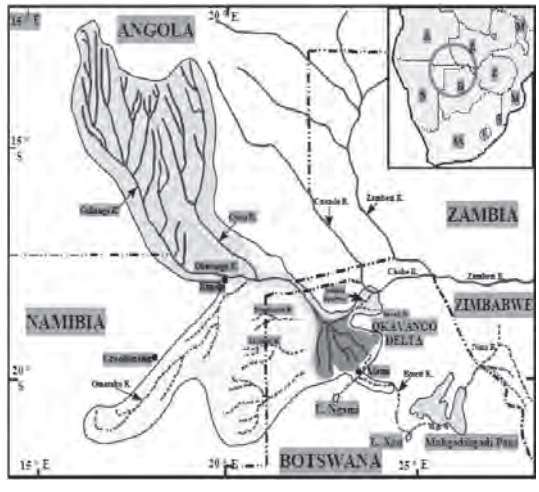

Figure 2. Okavango catchment. (From Melba Crawford, Amy Neuenschwander, and Susan Ringrose, "Investigations in the Okavango Delta Using EO-1 Data," in Goddard Space Flight Center, *Earth Observing-1: Preliminary Technology and Science Validation Report*, 2, http://eo1.gsfc.nasa.gov/new/validationReport/Technology/Documents/Tech.Val.Report/Science_Summary_Crawford .pdf.)

The agreement protects Botswana's right to use the resource of the Okavango Delta. The largest inland river delta in the world, the Okavango and its attendant biodiversity provide a significant portion of Botswana's national economy. Botswana brought the Okavango Delta to the attention of the global community by recognizing its vast economic value for tourism and biodiversity. For Botswana the protection of the water source from Angola and the guarantees of self-regulated use of the Okavango River by Namibia hold in the balance Botswana's future and economy, representing an essential national interest for the sovereignty of the state. For each of these self-disciplined nations, OKACOM represents cooperation over the most important natural resource for human security. The national security risk for Botswana, because of its dependence on the goodwill compliance with OKACOM by Angola and Namibia, can be addressed by increasing the capacity of these countries to protect the agreement and to continue to engage each other in civic dialogue. This discussion was already initiated by agreeing to the OKACOM accord and by providing information and opportunities to extend the beneficial effects of this agreement.

In this sense, OKACOM provides a possible framework for how the other regions can be managed in order to produce a sustainable livelihood for those who share water as a resource, therefore reducing the future conditions of conflict and instability in the region. These kinds of preexisting agreements may be positive touchstones for any AFRICOM effort to produce environmental security in the region. Again, the emerging relationships related to the already existing agreement are more important than any potential conflict because they provide a more generative platform for the continued development of beneficial relationships and resource sharing into the future. It is perhaps particularly important for AFRICOM to pay attention to these regional developments and, as opportunities arise at the request of our partners, help preserve and nourish these first steps in the prevention of war.

Further, the frictions involved in resource harvesting, mining, or distribution present similar opportunities for cooperation and stability through internal policies of a stable state government or transnational agreements amongst states such as the noteworthy efforts of the Peace Parks Foundation or the transinternational agreements such as the Kimberley Process, which regulates the sale of "blood diamonds."[18]

Recommendations

Recognizing that the military can be an exemplar (and that, because water and other natural resources are the lifeline of Africans, stabilizing agreements may emerge from complex sources of meaning, relationships, and points of dialogue), we make the following recommendations to US AFRICOM and Seventeenth Air Force:

Develop capacity-building skills among those who interact and train Africans by recognizing that the AFRICOM mission reflects a significant shift in the conventional model for engagement of individuals.

We therefore suggest that training of military personnel in capacity building be taken seriously as a component of the operation. Elements of capacity building include the following:

1. Learning to listen to and engage Africans not only about what they want but what they know.
2. Learning to recognize local resources and local problem-solving potential; learning how to activate local knowl-

edge about resources that may have been lost or marginalized by colonization, conflict, or displacement; and therefore developing a pragmatic approach to problem solving rather than merely a bureaucratic one.

3. Developing sensitivity for how one action can have multiple effects. Capacity building does not always need a program as much as it needs an individual aware of the opportunity to teach, engage, or provide an example that increases another's capacity for self-governance.
4. Recognizing and appreciating the cultural and historical context within which resources and their sociopolitical relationships exist.
5. Developing a pragmatic approach to engaging the possibilities and limitations of the dual legal systems in Africa—those based on cultural and traditional law of ethnic groups and clans at the local and regional level and those more Western models operating in the more formal state government.

Develop an Environmental Training and Capacity Building Exercise (ENVIROCAP) that provides an ongoing exchange of experience, training, information, technology, monitoring systems, and resource-sustainment practices.

This exercise would also actively support a fuller understanding of the cultural meanings of environmental resources and practices, those which help support stable social relationships. This could be similar to current initiatives such as the Medical Civic Action or Veterinarian Civic Action programs.[19] ENVIROCAP will provide a vehicle for sustaining the effort over time, rather than merely treating these opportunities for training and engagement as one-time or short-term phenomena. Instead, it will focus on building long-term, interactive relationships with Africans.

Develop sustainable technology transfer.

AFRICOM should share appropriate, sustainable technologies and training on their use, maintenance, and repair, using current innovations that are workable and maintainable in a local, rather than only national, context. We recommend that AFRICOM assist regional organizations and countries in identifying and developing sustainable practices around resource extraction, use, and renewal through various monitoring technologies—those that also provide opportunities for building citizen capacity for good governance by providing transparent, accessible, and usable data. For example, Seventeenth Air Force personnel could train in their core missions of air, space, and cyberspace while also working with African states or regional organizations on (1) maintenance and interpretation of fundamental weather prediction and dissemination; (2) cartographic and multispectral data interpretation and collection from open sources; and (3) use of the open-source Internet to transparently analyze and process environmental data while assisting in the training and development of secure cyber conduits.

Such systems should ensure that public resources can be transparently monitored and provide accurate, usable data, including information about cultural understanding, and should ensure that resources are available for the widest possible dissemination. These actions should generate a robust dialogue on sustainable resource governance and practices.

Conclusion

By understanding the meaning of the dialogue, AFRICOM, through the pioneering efforts of its interagency processes, can respond to African states' requests for security assistance with a transparent and objective—yet culturally palatable—framework. Translating and merging traditional legal systems of the local culture with the formal legal systems of organized states and regional security organs can avoid clashes of culture, history, and resource stewardship while reactivating local knowledge that has been marginalized or lost in conflict or colonization. AFRICOM can prove instrumental in the seamless integration of environmental data creation and knowledge sharing through regionally and globally recognized systems and legal frameworks that will not conflict with traditional resource usage. Transparent knowledge exchange assists Africans in reducing conflict and activating their knowledge of resource management and economy. With each military-to-military engagement, AFRICOM must be inextricably connected to the interagency processes and coordinated with all elements of national power to assist Africans in identifying and translating resource-management practices, within their cultural context, to reduce conflict and maintain the peace. ❑

Notes

1. Joint Publication (JP) 3.0, *Joint Operations*, 17 September 2006 (incorporating change 1, 13 February 2008), III-30 to III-36, http://www.dtic.mil/doctrine/new_pubs/jp3_0.pdf.

2. See ibid., V-5 to V-6, for the following description of stability operations:

> Joint force planning and operations conducted prior to commencement of hostilities should establish a sound foundation for operations in the "stabilize" and "enable civil authority" phases. [Joint force commanders] should anticipate and address how to fill the power vacuum created when sustained combat operations wind down. Accomplishing this task should ease the transition to operations in the "stabilize" phase and shorten the path to the national strategic end state and handover to another authority.
> Considerations include:
>
> (a) Limiting the damage to key infrastructure and services.
>
> (b) Establishing the intended disposition of captured leadership and demobilized military and paramilitary forces.
>
> (c) Providing for the availability of cash.
>
> (d) Identifying and managing potential "stabilize" phase enemies.
>
> (e) Determining the proper force mix (e.g., combat, military police, [Civil Affairs], engineer, medical, multinational).
>
> (f) Availability of [host nation] law enforcement and [human support services] resources.
>
> (g) Securing key infrastructure nodes and facilitating [host nation] law enforcement and first responder services.
>
> (h) Developing and disseminating [strategic communication] themes to suppress potential new enemies and promote new governmental authority.

3. "[Joint force commanders] must integrate and synchronize stability operations—missions, tasks, and activities to maintain or reestablish a safe and secure environment and provide essential governmental services, emergency infrastructure reconstruction, or humanitarian relief—with offensive and defensive operations within each major operation or campaign phase. Planning for stability operations should begin when joint operation planning is initiated." Ibid., xxi.

4. US Air Force, "Current Issues," PowerPoint presentation, Curtis E. LeMay Center for Doctrine Development and Education, Air University, Maxwell AFB, AL, 2009.

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8. Amnesty International, *Nigeria: Petroleum, Pollution and Poverty in the Niger Delta* (London: Amnesty International Publications, 2009), https://www-secure.amnesty.org/en/library/info/AFR44/017/2009/en.

9. Hugo Slim, "By What Authority? The Legitimacy and Accountability of Non-governmental Organisations" (International Council on Human Rights Policy International Meeting on Global Trends and Human Rights—before and after September 11, Geneva, Switzerland, 10–12 January 2002), http://www.jha.ac/articles/a082.htm.

10. Matthew Todd Bradley, "Civil Society and Democratic Progression in Postcolonial Nigeria: The Role of Non-Governmental Organizations," *Journal of Civil Society* 1, no. 1 (May 2005): 62.

11. Amnesty International, *Nigeria*, 28–30.

12. Kent Hughes Butts and Arthur L. Bradshaw Jr., eds., *Central African Security: Conflict in the Congo: Proceedings: September 18–19, 2001* (Carlisle, PA: Center for Strategic Leadership, US Army War College, 2002), http://handle.dtic.mil/100.2/ADA423517; and Chen-I Lin and Allison Schuster, "Hydroelectricity Investment in the Democratic Republic of the Congo—The Grand Inga" (Medford, MA: Tufts University, 2008), http://wikis.uit.tufts.edu/confluence/display/aquapedia/Hydroelectricty+Investment+in+the+Democratic+Republic+of+the+Congo+-+The+Grand+Inga.

13. "Evolution in a Vortex: An Inventory of the Fishes and Mollusks of the Lower Congo River Rapids," MUSSELL Project, National Science Foundation, 2006, http://bama.ua.edu/~musselp/m/news/supp/2006/congo.html.

14. Lin and Schuster, "Hydroelectricity Investment."

15. Integrated Regional Information Networks, UN Office for the Coordination of Humanitarian Affairs, "DRC: Charcoal Profits Fuel War in East," 28 July 2009, http://www.irinnews.org/Report.aspx?ReportId=85462.

16. Aaron T. Wolf et al., "Navigating Peace: Water Can Be a Pathway to Peace, Not War," no. 1 (Washington, DC: Woodrow Wilson International Center for Scholars, July 2006), 1–2, http://www.wilsoncenter.org/topics/pubs/NavigatingPeaceIssue1.pdf.

17. "Mine Action Country Portfolio—Angola," National Inter-Sectoral Commission for De-mining and Humanitarian Assistance (CNIDAH), African Development Information, http://www.afdevinfo.com/htmlreports/org/org_46637.html.

18. See Kimberley Process, http://www.kimberleyprocess.com/; and Peace Parks Foundation, http://www.peaceparks.org/Home.htm.

19. See JP 3.0, *Joint Operations*, VII-7:

> [Humanitarian and civic assistance (HCA)] programs are governed by Title 10, USC, Section 401. This assistance may be provided in conjunction with military operations and exercises, and must fulfill unit training requirements that incidentally create humanitarian benefit to the local populace. In contrast to emergency relief conducted under [foreign humanitarian assistance] operations, HCA programs generally encompass planned activities in the following categories.
>
> (a) Medical, dental, and veterinary care provided in rural or underserved areas of a country.
>
> (b) Construction and repair of basic surface transportation systems.
>
> (c) Well drilling and construction of basic sanitation facilities.
>
> (d) Rudimentary construction and repair of public facilities such as schools, health and welfare clinics, and other nongovernmental buildings.

Air Expeditionary Access

The African Connection

Col Brian K. Hall, USAF*

We cannot predict where the next Desert Shield will occur. It could easily be in a place where we have no troops and no infrastructure—no bases or support systems in place. We will have to take with us everything that we need, including shelter, maintenance facilities, hospitals, and food and water.

—Lt Gen Michael A. Nelson, USAF
"Aerospace Forces and Power Projetion"

Is the strategic access the United States attained in Africa during the 1980s possible today after more than a decade of foreign-policy neglect? Access remains somewhat constant or is increasing on four of the world's five major continents. The one region at highest risk from reduced US engagement is sub-Saharan Africa.[1] The United States has chosen to concentrate in other areas at Africa's expense. Not only was Operation Desert Shield successful and monumental at leveraging access in the Middle East, but also it validated US airpower doctrine and emerging joint-warfare concepts. Moreover, transformational concepts were reflected in the Air Force's new concept-of-operations initiative. The greatest lesson learned from Desert Shield is that no future crisis will be handled successfully without the continued access of the Air Force's expeditionary forces. The wide access enjoyed during that operation made possible the decisiveness of Operation Desert Storm. The Air Force has mastered most of the intricate facets of major expeditionary warfare; nevertheless, rapid-deployment operations in response to small-scale contingencies, humanitarian-assistance operations, and peace-support operations remain relatively ad hoc because they are more reactionary than deliberate. Much remains to be done to refine our nation's rapid-deployment capability in support of foreign-policy objectives.

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According to *The National Security Strategy* (NSS) of 2002, "The presence of American forces overseas is one of the most profound symbols of the U.S. commitment to allies and friends."[2] The NSS also emphasizes how US forces must prepare for more such deployments by developing assets and capabilities reflective of expeditionary forces. At the high end of conflict, regional combatant commanders will require forces to bring unique capabilities to the fight and will expect those forces to be combat ready upon arrival intheater. Operation Enduring Freedom (OEF) stands as an example of a nonstandard mix of air and ground assets joining the fight against terrorism without an abundance of doctrinal guidance—thus providing a lucid example of transformation. Henceforth, we will need this type of creativity and innovation to contend with strategic uncertainty and asymmetric engagement worldwide.

Africa may well serve as the proving ground for transformational concepts, methods, and capabilities. That continent provides a great challenge to the ability of the United States to project forces to a region often overlooked because of the magnitude of ongoing crises in the Balkans, Middle East, and Korean Peninsula. The American public has been subjected to unrelenting media attention towards those areas. But Africa has been overlooked as scarce national resources and advocacy were directed to areas of greater vital interest to the United States. Not until cataclysmic tragedy strikes, as occurred in Rwanda during the summer of 1994, does the US public turn its attention to Africa. Just one year earlier, the American media graphically filled television sets with the Somalia disaster, which undoubtedly reduced both subsequent coverage and US direct-assistance programs.

Over the last 10 years, experience has proven that air expeditionary deployment to Africa remains an immature science—one that follows a neglected foreign policy. Oftentimes, innovative Airmen applied artful solutions to contend with the unique challenges posed by what can still be considered the "Dark Continent." Oddly enough, due to the limited presence of US government agencies in Africa, Airmen became our nation's ambassadors of goodwill in areas cut off from normal diplomatic channels and limited activities of nongovernmental organizations (NGO). The necessity of perfecting air expeditions to contend with low-end conflicts will not diminish anytime soon. In fact, it is more likely that out-of-area-based forces will see more frequent expeditionary deployments as our nation contends with the pervasive global war on terrorism, a fight that may well take this nation and its allies deep into Africa. The sub-Saharan region has become a proverbial breeding ground of human suffering caused by pandemic HIV/AIDS; ethnic, religious, and political unrest; natural disasters; and failed states—all of which create an environment ripe for terrorist proliferation. Afghanistan and Somalia have shown that where anarchy and radicalism run rampant, so does terrorism. In order to counter the spread of these maladies, the United States must establish access with select, promising African nations.

This article concentrates on access as the enabler of the military, economic, and diplomatic elements of US power projection. It discusses the strategic importance of access as a means of demonstrating soft-power projection;[3] addresses how regional, operational strategies for cooperation create greater access, albeit not without significant challenges; and identifies emerging concepts of assuring access to

show how the United States can best prepare for future air expeditions into Africa.

The Strategic Importance of Global Access

> *In Africa, promise and opportunity sit side by side with disease, war, and desperate poverty. This threatens both a core value of the United States—preserving human dignity—and our strategic priority—combating global terror.*
>
> —*National Security Strategy*, 2002

The NSS notes that, "together with our European allies, we must help strengthen Africa's fragile states, help build indigenous capability to secure porous borders, and help build up the law enforcement and intelligence infrastructure to deny havens for terrorists."[4] We cannot realize these goals without significant power projection and sustainment to a continent of immense size and diversity. The US/African regional-security strategy must respect multilateral alliances while preparing bilateral engagements that build confidence and strengthen assured access.

The administration of Pres. George W. Bush clearly recognizes that it must focus its attention on South Africa, Nigeria, Kenya, and Ethiopia as anchor states for regional-security cooperation. Yet, other regional players also deserve recognition for maintaining good governance and implementing responsible, democratic political systems—namely Ghana, Gabon, Mali, and Senegal. The administration's policy towards regional-security cooperation recognizes these states, as it does the entire Sahel. Indeed, the Pan-Sahel Initiative is the most recent cooperative effort spun off from the global war on terrorism.[5] Budding democracies have granted US requests for access to counter emerging crises. We will need assured access to shore up rapid response once conflict flares, as it has recently in Liberia and numerous times in Africa over the last decade.

Striving to balance global power as it develops new national-security strategies, the United States finds itself in a unique hegemonic position. From a classic political perspective, this is not necessarily bad because if one nation dominates the international arena with overwhelming power, peace and stability reign since there is little point in declaring war against such a state. Political scientist Robert Gilpin has argued that "Pax Britannica and Pax Americana, like Pax Romana, ensured an international system of relative peace and security."[6] Unlike the Britain of the past, which controlled a global empire, America possesses a large, self-sustaining home economy and has the ability to project great soft power (the art of diplomacy, transparent military cooperation, and economic reform) to all corners of the globe. Thus, the United States is more apt to send food and medical supplies than a man-of-war to Africa.

Power projection and access go hand in hand. In this article, air expedition becomes the means of power projection, and access is its enabler. But one has to peel back the discussion of national power another layer or two to adequately portray the type of power best suited to project towards Africa. Of course, the United States must always be prepared to exercise both military and economic hard power to induce other parties to change their positions. Major force deployments and economic sanctions are two examples of the compelling projection of hard power, which is relatively easy to use when access is predictable and overseas presence extensive. A large, permanent US presence

and investment (military and economic) in Europe, the Pacific, and the Middle East demonstrate America's willingness to use hard power. But one can exercise power indirectly: that is, a country can obtain desired outcomes in world politics because other countries admire its values, emulate its example, aspire to its level of prosperity and openness, and therefore want to follow it.[7]

Soft power is more than persuasion or the ability to move people by argument.[8] The United States would be in dire straits if it lost the ability to shape the international landscape by credibly projecting hard and soft power. America's hegemony comes into play less often when its soft power is strong and associated with the tenets of benevolence and human dignity.

Africa is ripe for soft-power engagement. Great hard-power resources, such as those invested in the Middle East, Europe, and the Pacific, are not needed in Africa. Soft-power projection will go a long way towards securing vital American interests. Credible projectors of soft power include Canada, the Netherlands, Norway, and Sweden, each of which has political clout that vastly exceeds its military and economic weight. All four nations incorporate attractive soft implements such as economic aid and peacekeeping assets into their definition of national interests, thereby negating the necessity for costly hard power. Limited objectives allow for exclusive soft-power foreign policies.

Interestingly, governments are not the only wielders of soft power. US industries and NGOs develop their own soft power, which might either complement or compete with official foreign policy. But there is no room for friction between players when scarce resources are better applied by collaborative efforts that assure widespread access—a classic, symbiotic soft-power relationship. In Africa, competing unilateral efforts tend not to survive. From the onset, complementary private and public cooperation has a greater impact and longer-lasting effects. For that reason, the US military plays a substantial role in transporting, distributing, and supporting the wares of many NGOs and official government programs.

There are ways to assure that all US interests in Africa are safely supportable and, if necessary, introduced in-theater via expeditionary, global-mobility, and rapid-response task forces. Little difference exists in the planning, executing, and sustaining of air expeditionary task forces for other-than-major conflicts. Although their scope and character are vastly different, the strength of air expeditionary task forces lies in the transformational capabilities of each.

In Africa, the potential for rapid global mobility and agile combat support (ACS), reinforced with distributed command and control capabilities, is perfect for future area operations. Air expeditionary forces (most likely part of a joint task force) will rapidly move, position, and sustain these forces. Rapid global mobility demonstrates an improved ability to support operations with a smaller force and footprint while transiting distances in minimum time. ACS, which begins well before deployment, provides many capabilities crucial to successful beddown and sustainment, including readying the force; assessing, planning, and posturing for employment; tailoring and preparing for movement, deployment, and reception; employing effectively; and sustaining appropriate levels of support for theater operations.[9]

Although these concepts and capabilities sound promising, nonstate entities preparing for conflict with the United States will seek to capitalize on the great distances US forces must travel to engage

them. Those evasive enemies realize all too well the near-absolute reliance of the United States on unimpeded access to and use of airfields and bases in the potential theater of conflict.[10] In today's environment of crisis action, quickly getting in-theater is as important as what one does after forces arrive. The Bush administration's greatest concern for the projection of military power to Africa is establishing select sites that form the greatest foothold once the boots hit the ground.[11]

The Difficulties of African Access

> *For the Armed Forces, troubled states and transnational threats will probably occupy an increasing amount of their time in the future, further complicating existing OPTEMPO problems. The ethnic, tribal, and religious extremism revived by the end of the Cold War gives no indication of abating.*
>
> —Hans Binnendijk
> "A Strategic Assessment of the 21st Century"

Globalization is the child of US foreign policy. In the most rudimentary terms, globalization is a worldwide network of interdependence.[12] So intertwined is globalization with world economies, societies, environments, and defense that some members of the world community have become dependent upon the more endowed nations for vital sustenance. Africa is the norm rather than the exception insofar as it receives substantial percentages of official development assistance from developed nations: France (43 percent), Germany (28 percent), Italy (69 percent), United Kingdom (35 percent), and United States (15.4 percent).[13] As a percentage of total, worldwide foreign assistance, the US contribution is deceptive; actually, it represents more than $2.1 billion of committed funds in 2003.

The hub-and-spoke metaphor fits military globalism more closely than economic, environmental, or social globalism because American dominance is so much greater in that domain.[14] So globally entrenched is American military dominance that less capable nations lean on bilateral security agreements to fill their own defense gaps. In order to ensure viability, the United States negotiates assured access via these mutual agreements, a process that leads to every possible forward-basing option—from "fortress Europe" installations to remote stations in forgotten corners of the globe. Although significant US forces remain in Europe, the Middle East, and the Western Pacific, force drawdowns over the last 15 years have left significant gaps in overseas presence.

This unequal distribution of military hard and soft power in preindustrial and industrial parts of the world has taken its toll in very short order. What had been a modest US military-cooperation program in strategic locations such as Ethiopia, Kenya, Liberia, Somalia, Sudan, and Zaire was all but ended by the late 1980s. Over the last decade, US military presence was reduced to nothing more than limited airlift operations supporting diplomatic missions, minor exercises and exercise-related construction, port calls, and sparse special-forces training and familiarization (focused on the Horn of Africa).

As limited Navy and Marine assets become tied down with current and projected hot spots in the eastern Mediterranean, Persian Gulf, and Indian and Pacific littoral, the west, central, and southern parts of Africa become vulnerable due to a gap in rapid US military assistance tradi-

tionally performed by Marine expeditionary units afloat in the South Atlantic and Indian Oceans. Although strategic- and tactical-airlift assets of the US Air Force have flown extensively in Africa, these missions must contend with the danger of nonstandard operations, limited access, and degraded capabilities.

Today, OEF sets the stage for future deployments of air expeditionary forces. Lessons learned from the expeditionary methods and processes used to bed down air assets at Bagram and Kandahar, Afghanistan, and in Manas, Kyrgyzstan, provided the practical environment to test and standardize the laydown of air expeditionary forces.[15] The deliberate planning, task organization, and ACS necessary to ensure safe, supportable beddown should be captured as the standard for future air expeditions. Combining OEF lessons learned with years of flying air operations in Africa provides a baseline that should set the standard for the beddown and basing of air expeditionary forces in any corner of the globe.

Any contingency operation will entail an inherent amount of uncertainty. However, the fact that the future remains uncertain is no excuse for failing to make adequate preparations.[16] Any major operation begins with thorough strategic-campaign planning, which recognizes that success depends upon bedding down all the implements of warfare in optimal locations. Force beddown is the responsibility of the regional combatant commander, whose staff must account for the specific beddown requirements of its air component once the total number and type of aircraft are known. According to joint doctrine, each service component is responsible for its own deployment and sustainment. The combatant command must approve initial and subsequent beddown, if applicable, to ensure not only supportability and force protection, but also—and most importantly—the maximum attainable power projection in the least amount of time.

Of equal importance, access is a fundamental facet of combat-support planning because it is inextricably tied to logistics and force protection. If logistics is the lifeblood of airpower, then access to air bases is the skeleton and internal organs through which the blood flows.[17] The need for air bases to employ land-based airpower effectively has been essential since the beginning of forward air operations. Recently, expeditionary air operations have experienced growing pains, the first notable problems inevitably resulting from nonoptimal operations.

Aside from distance, preindustrial Africa is rife with other unique access challenges to the projection of air expeditionary forces. For example, among the 286 larger African airports or airfields currently included in Air Mobility Command's Airfield Suitability and Restrictions Report (ASRR) of May 2000, only 84 percent of major military-surveyed airports can support C-130 aircraft operations (the smallest US Air Force tactical transport).[18] The C-17, designed for better worldwide deployment with greater payload/range and requiring at least 4,000-foot improved runways, can land in less than 65 percent of ASRR-listed major African airfields.[19] The bulk of missions flown into Africa over the last 20 years used C-130 and C-141 airframes—not the strategically valuable C-17, 87 of which were delivered to the US Air Force for global movement of personnel and equipment.[20] In addition to the shortage of suitable runways, limitations concerning such factors as flight safety, available support and fuel on the ground, and airfield security compound to defeat the advantage of the C-17's capability to provide

worldwide response when that asset is already stretched to the limit supporting round-the-clock operations in the Middle East and Central Asia.

Ten significant expeditionary airlift operations have occurred in Africa over the last 10 years, including peacekeeping and enforcement operations, noncombatant evacuation operations, and humanitarian-assistance operations. All of them generated lessons learned that reflected the difficulties of planning for African operations, deployment and employment degradation, and ill-defined exit strategies. National political as well as joint military and service planning all warn of the inherent dangers associated with operating in proximity to or through adversary states and nonstate actors. These groups will use increasingly available weapons and subversion to affect our will and ability to conduct vital African military operations, leaving twenty-first-century Africa with conditions antithetical to US interests. Political unrest, ethnic and religious fighting, pandemic health disasters, and corruption make strategic cooperation tenuous at best. In a continent oozing with porous borders ideal for undetected, transnational terrorist movement, antiaccess operations are not only plausible, but also probable in today's emerging security lexicon.

Add to this volatility unpredictable support, erratic air-traffic control and communications (both ground and airborne), and questionable security, and it is no wonder that US commercial air carriers deliberately stay away from Africa. Nothing disturbs an aviator more than operating in an environment that lacks the staples taken for granted in the rest of the world. Air expeditionary planning, operations, logistics, support, and medical assumptions standard on the other four major continents have been hit-or-miss over the past decade or more in Africa.

Operation Guardian Assistance—the humanitarian-assistance operation conducted in 1996, two years after the atrocities in Rwanda—provides a representative example of problems that plagued US forces attempting to establish airhead operations. Because lack of fuel storage and mobile refuelers limited overall fuel throughput, strategic aircraft sucked so much fuel that the rate of consumption seriously affected other sequential locations along the fuel lines and often cascaded into adjacent countries. Airfield facilities, as well as navigational aids and procedures, did not meet US standards designed to assure flight safety. The lack of current and complete airfield surveys forced last-minute surveys that risked capturing incomplete, critical data that put aircrews, passengers, and cargo in peril. At times aircrews were restricted to daytime visual-flight conditions to conduct operations. Onboard inertial navigation and global positioning systems, as well as aviation-chart visual confirmation, became the directed methods to navigate the vast, blacked-out African distances.

Before undertaking the next inevitable air expedition to Africa, the United States must ensure that properly qualified personnel control the operations. When an attendant air and space operations center (AOC) is task-organized, depending upon the joint task force mission (in Africa most air expeditions are airlift oriented), it must have people with airlift expertise. AOC resident personnel in the air mobility division maintain the qualifications needed for most African missions, but dedicated load planners must be added to the joint manning document. Stripping load planners from overworked tanker airlift-control elements is not the solution.

The US Air Force faces a critical physical challenge—specifically, availability and operability—in basing expeditionary

forces. Availability, as applied to access, refers to using the best possible airfields for operating bases in the employment of airpower. Nations will grant the best physical access to US forces when it is in their best interests to do so, with economic return the predominant consideration and availability a secondary concern. If the price is right, availability becomes a moot point.

To the Airman, operability refers to using an airfield at peak efficiency in support of assigned aircraft. The airfields necessary to sustain modern aircraft employment require tremendous infrastructure to support today's technologically sophisticated weapon systems. The dilemma of modern airpower is that it tends to come with a very large footprint on the ground. Oftentimes, the forward airfield requires significant infrastructure improvements in order to accommodate long-term deployments. Then again, a Desert Storm combat beddown in Africa is unlikely. We are more apt to see force laydowns similar to the OEF model. Certainly cost will be a factor in establishing assured access according to US standards.

Availability and operability access became significant challenges at Ganci Air Base (AB) at the Manas Airport, Kyrgyzstan.[21] Here, need superseded cost as access to air bases in Central Asia became preeminent during the first weeks of OEF, and the physical challenge of availability and operability outweighed other limited options. Manas Airport required significant infrastructure improvements and additional major construction to handle a moderate strategic-airlift throughput (it had enough ramp space to park only four C-17 or C-5 transports).[22] The price of access is high at Manas: the US military is expected to pump more than $40 million annually into the weak local economy.[23]

We must not overlook opportunities for potential force beddowns and adequate basing in Africa. Understandably, this investment may come in many forms, often costing more than monetary reimbursement to a host nation. The political cost of opening contingency-base access can mark the beginning of a long-term relationship built on the foundation of negotiations. For example, in Turkey, the United States collocated operating-base employment at Incirlik AB, beginning in 1954. It started as a forward refueling and supply base in a remote location, very similar to places from which the United States has operated in Africa. That's 49 years of growing US presence from a single expeditionary base.

This is not to suggest that engagement with Africa should mature to a sub-Saharan Incirlik. But the time for action has arrived. Security cooperation in Africa comes at substantial savings compared to the situations in Europe and Central Asia. The scope of African initiatives is a fraction of those associated with OEF. Waiting until the beginning of hostilities or crisis response to initiate beddown actions will delay the full effectiveness of expeditionary airpower. Preemptive engagement can lead to assured access when we need rapid global-mobility beddown.

This discussion has concentrated on air expeditionary beddown; sustainment of those forces is crucial to prolonged operations. A network of efficient and effective in-theater distribution points must quickly link forward forces to the lifeline attached to the continental United States.[24] Generation and maintenance repair must be secured because they are key to sustained operations.

In a crisis situation, the time spent deploying forces and ACS is the mitigating factor in decision making with regard to basing. Deployment to a robust base significantly improves security options and missions spanning the spectrum of con-

flict. Beddown to an austere location hinders responsiveness because of conflicting resource requirements between making air base improvements and sustaining operations; such a scenario detracts from the expeditionary nature of the emerging global-mobility concept of operations.

Recommendations

> *Prepare for the location to which you are going, take the right people and equipment, get there early to oversee the establishment of base support, build rapport with host nation commanders, work within the theater command structure for personnel issues and sustainment of forces.*
>
> —Maj Gen Roger A. Brady, USAF
> "Building and Commanding Expeditionary Units"

Given a joint force commander's strategic appreciation of the political, economic, military, and social forces affecting access, and assuming that the strategic and operational objectives needed to accomplish the mission are understood by the components, one of the first considerations for concrete planning becomes beddown and basing.[25] Preparing force beddown involves conveying to the supported combatant commander the best estimate of the air-component planning requirements and future operational assessment. Accurately assessing support capabilities and infrastructure is critical to the US Air Force's agility because it allows planners to determine support requirements and properly tailor force packages.[26] Also, the strategy division of the air component's AOC must incorporate force beddown and basing information in its concept of operations. Having current data and preapproved expeditionary sites is the basis of US Air Forces in Europe's (USAFE) preapproved expeditionary deployment sites (PEDS) concept.[27]

The United States can ill afford to waste valuable deployment planning on extensive unilateral negotiations as in Central Asia and the Middle East. The need for preplanned, preapproved airfields for US aircraft was identified in the Government Audit Office's report on Kosovo air operations. Canceling of the collocated operating-base concept in the mid-1990s left a strategic gap in assured US access to potential hot spots in USAFE's area of responsibility (which includes 41 of the 54 African nations). USAFE had to come up with a concept to rectify the reduction from 25 to eight permanently accessible airfields in-theater—none of which are on the African continent.

The PEDS concept is based upon requirements. Thus, US European Command must use the recent NSS and follow-on foreign-policy guidance to define the soft-power projection requirements of selective sub-Saharan access. Ghana, Gabon, Mali, and Senegal are all credible PEDS candidates because they show relative political stability and an overt willingness to support the United States in the global war on terrorism. The strategic locations of these four nations amply fit the hub-and-spoke requirement for joint US air expeditionary operations.

Upon concept approval by US European Command and the Department of Defense, PEDS preliminary-agreement negotiations would set the ball in motion. Specifically, they would initiate host-nation concept approval for US beddown and operations of a specific airfield for specific types of aircraft and expeditionary support. After host-nation approval, negotiated agreements must include the following:

1. Status-of-forces-agreement permission for deployed US military and US contractors.
2. US contracting practices.
3. Tax relief.
4. Base facilities available for use by expeditionary forces.
5. Host-nation support.
6. US payment for facility use, repairs and upgrades, and services received.[28]

As we learned through OEF negotiations, standing arrangements—such as the memorandum of understanding (MOU) for potential airfield utilization—accelerate force beddown and, more importantly, can activate a host nation's force-protection plan well in advance of reception. This simple consideration hastens the employment of expeditionary forces.

Minimal resource allocation to improve a host nation's facility assures our access partner of US commitment that previously was just a signature on an MOU regarding the joint use of designated air bases. Seeing the implementation of MOU technical arrangements in such areas as personnel and equipment beddown in forward locations, initiation of local contract services, and facility improvement/new construction bolsters good relations that pay big dividends when forces arrive in the host country.

Enough cannot be said about paying attention to details in a noncrisis mode. Timely supply routes and methods can be activated and tested in advance of the deployment of expeditionary forces. In essence, this provides an opportunity for ACS to rehearse critical tasks. Most importantly, force protection can be assessed and deficiencies identified and corrected without risking loss of life or equipment.

Conclusion

This article has emphasized the transformation of the US Air Force from deploying cumbersome, large-footprint air packages (poorly synchronized with other services' power projection) to rapidly deployable expeditionary airpower tailored to meet overseas rapid response. The Air Force can learn much from the Marine Corps, which has long had a true appreciation for expeditionary-force employment and, indeed, embodies the word *expeditionary*. Marine combat doctrine directly addresses the concept of combined-arms integration to maximize the effects of an air and ground task force—the forebear of today's joint task force. Marine survival depends upon full integration of capabilities, as will the joint forces that join in tomorrow's security challenges.

Another point worth pondering involves taking advantage of time. Why deploy into austere locations if time is available and if robust major operating bases are accessible? Again, preemptive air expeditionary concepts, such as PEDS, provide significant capability to sustain protracted military operations. The decision to commit resources is difficult to recall once initiated. US planners and combatant commanders must realize that power projection is not easily reversible. We must implement the best options because the speed of decisive airpower employment will outrun the ability to reposition a poorly conceived concept of basing.

As Sebastian Mallaby remarked in the *Washington Post*, "The paradox of American power at the end of this millennium is that it is too great to be challenged by any other state, yet not great enough to solve problems such as global terrorism and nuclear proliferation."[29] Although he made this statement prior to 11 September 2001, it

still rings true. Unfortunately, the war against nonstate players will gravitate to a point where the advantage goes to the terrorist. Africa promises to be such a haven, for it overflows with widespread poverty and unemployment that create idle masses attracted to anything that promises financial gain and greater self-esteem. The unfamiliar landscape of sub-Saharan Africa can be bounded only by greater American presence—and that can occur only with assured access to well-planned and capable airfields that enable hub-and-spoke operations to remote areas ripe for subversion. The plan of access presented here is a step in the right direction. America's door to Africa will remain open as long as US interests remain focused and funded. Soft-power projection is the goal—air expeditionary access is the key. ❑

Notes

1. Henceforth, this article will refer to *sub-Saharan Africa* as *Africa*. North Africa, composed of the littoral Mediterranean nations, does not pose as great a challenge to air expeditionary operations because the United States has fostered long-lasting relations and access to collocated operating bases during contingencies; these bases receive periodic attention during binational and multinational exercises.

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Africa Contingency Operations Training Assistance

Developing Training Partnerships for the Future of Africa

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Africa is a continent of immense social diversity, rich in human and natural resources. Regrettably, its history has been marred by images of governmental corruption, failed states, and shattered economies. The collapse of apparent "bright spots" such as Côte d'Ivoire suggests the presence of only a very dim light at the end of the tunnel. As fledgling governments struggle to hold on to order and stability, various groups undoubtedly will continue to challenge their rule. Thus, the requirement for competent and capable peacekeeping and peace-enforcement forces remains strong.

How extensively should the United States involve itself in African peacekeeping? Since it has at least peripheral interest in ensuring that the continent doesn't disintegrate, should America directly participate in these operations or find ways to help Africans help themselves? The administration of Pres. George W. Bush clearly favors the latter option. Funding for direct US involvement in African peacekeeping is on the decline—from $31 million in fiscal year 2003 to a projected $9 million in 2004.[1] Conversely, forecasts for the Africa Contingency Operations Training Assistance (ACOTA) program call for funding to increase from $10 to $15 million over the same period.

Is the United States getting the most for its money from ACOTA? Evidence in-

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dicates that ACOTA has instituted some beneficial changes to its predecessor—the African Crisis Response Initiative (ACRI). This article argues that the United States should continue to support ACOTA, redouble its follow-up efforts to measure effectiveness, and initiate the formation of training partnerships with key African nations, beginning with South Africa. It briefly reviews ACRI's history, describes the Bush administration's design for ACOTA to improve upon ACRI's success, outlines the potential for US-African partnerships, and offers recommendations for implementation.

Background

The United States experienced few successes with its involvement in African peacekeeping operations during the early 1990s. Public perceptions of Rwanda and Somalia put the administration of Pres. Bill Clinton between a rock and a hard place with regard to the scope of US involvement on the continent. Prior to Somalia, the United States had taken a more active role in African peacekeeping, but American attitudes toward operations in Africa took a drastic turn for the worse on 3 October 1993—a fateful day for US forces. President Clinton's subsequent Presidential Decision Directive 25 made it very clear that the United States was not interested in an expanded role in African peacekeeping.[2] America's renewed timidity toward involvement in Africa undoubtedly contributed to the Clinton administration's reluctance to enter Rwanda in 1994. The absence of timely US support in the early stages of the genocide that occurred there lingers in the memories of many African leaders.

The looming crisis in Burundi in 1996 acted as a catalyst for the United States to engage more actively in African operations. In the aftermath of Rwanda, influential leaders on the continent and the international community sought ways for African nations to tackle their problems effectively without constantly requiring help from the United States or other Western nations.[3] Initially, America offered assistance by suggesting the creation of an African Crisis Response Force (ACRF)—an indigenous African military force, trained and equipped with the help of the US military, available for deployment to trouble spots on the continent. This concept seemed to offer a perfect way for the United States to help prevent a repeat of a Rwanda- or Somalia-type catastrophe while minimizing the number of US boots on the ground. Given the frequency of such contingencies and Africa's interest in more effectively handling its own problems, ACRF seemed a logical approach to avoiding the severity of future Rwanda-style scenarios.

Unfortunately, ACRF was not well received by most African nations. When Warren Christopher, then the US secretary of state, went to Africa in October 1996 to present the idea, many of the implementation details remained incomplete.[4] Additionally, African leaders were troubled that the United States had not consulted them, and the unsolicited offer of a US-trained standing military force may have created anxiety about the prospect of American "imperialism" reminiscent of recent European colonial history. Finally, many African leaders felt that ACRF did not appropriately recognize the burgeoning influence of regional agencies such as the Organization of African Unity.

Committed to salvaging the ACRF concept and resolving the objections to it, the United States formed an interagency working group in early 1997. Led by Marshall McCallie, former US ambassador, the group recommended softening the objec-

tives of the initiative, focusing on the long-term capability of African peacekeeping forces, and crafting a relationship with the United Nations (UN).[5] Consequently, ACRF evolved into ACRI, a plan that aimed to enhance the peacekeeping capability of military forces from a number of African nations, which would retain operational control of their units.[6] The facelift proved successful: by mid-1997, seven African countries had signed up for eight battalions to be trained under ACRI.[7]

After ACRI's inception, US military and contractor personnel trained nearly 9,000 troops from eight African nations under the program.[8] Their training entailed all aspects of tactical- and operational-level peacekeeping tasks, including interaction with a variety of nongovernmental organizations. Units with ACRI-trained soldiers participated in at least nine peacekeeping operations during the initiative's five-year history.[9] After conducting the initial training, US teams returned every six months to help develop indigenous sustainment capability within the host-nation units.[10] From the outset, America intended the program to serve a dual purpose—make a "present impact" on existing conflicts and build long-term capacity to engage in future crises.[11]

ACOTA: ACRI for the Twenty-first Century

The Bush administration's plan for building peacekeeping capacity in Africa closely resembles President Clinton's ACRI program. ACOTA, the new program, retains most of the components of ACRI. On the surface, the changes appear cosmetic, merely "de-Clintonizing" the program for the new administration by changing its name. A closer examination, however, reveals a few key distinctions between the two. The US Department of State fine-tuned ACOTA's objectives in several areas to capitalize upon lessons learned from its five-year experience with ACRI. Most notable were modifications instituted to resolve three key ACRI shortfalls: (1) lack of appropriately tailored packages, (2) perishable nature of the training, and (3) absence of peace-enforcement training.

ACOTA architects intend to add substantial specificity to their recipient nations' programs. Peacekeeping requirements vary greatly among African nations, so any training or equipment provided must be carefully planned to meet the recipient's needs. Initial ACRI training provided by US special forces was conducted using the same basic syllabus for each country. According to Theresa Whelan, director of the Office of African Affairs for the US Office of the Secretary of Defense, the existence of a "fixed curriculum" was a glaring ACRI deficiency.[12] Scott Fisher of the US Department of State Interagency Group on ACOTA acknowledged that the same basic program of instruction was used for all recipient nations, albeit "tweaked" by the on-scene battalion commander to meet individual requirements of each military.[13]

Greg Engle, director of the Office of Regional and Security Affairs at the US Department of State, contends that "tailoring of individualized programs is a key difference" between ACOTA and ACRI.[14] ACOTA's training packages are formalized and vetted during detailed planning conferences conducted prior to the first training event. Training is matched to the individual operational requirements of the recipient, and equipment delivered as part of the package is specifically adapted to a country's blueprint.[15] For example, ACOTA personnel spent two weeks in Ethiopia in February 2003 during the second meeting with that nation to lay the groundwork for a tailored program. Two planning conferences were

completed with Kenya in February and May 2003 to lay similar groundwork for that country's program, which began in June 2003. Clearly, ACOTA puts much more emphasis on training packages designed expressly for the customer.

The second area targeted for improvement under ACOTA involved the challenge of creating an enduring peacekeeping capacity in the recipient nations. Despite attempts to stress continuity, ACRI-trained troops remain a perishable asset. Although accurate statistics are elusive, a number of these troops were lost to HIV/AIDS and other infectious diseases. Additionally, according to US Embassy officials interviewed in Dakar, Senegal, unit effectiveness is diffused by a lack of unit cohesion—that is, soldiers trained under ACRI are often dispersed across a nation's military as a matter of numerical necessity, without regard to the impact on unit effectiveness.[16] When the time comes to deploy peacekeepers on short notice, the task becomes a pickup game that fails to inspire confidence in the quality of the soldiers who arrive for the operation.

ACOTA seeks to ensure the continuity of trained peacekeepers by strongly emphasizing the "train-the-trainer" concept. According to Engle, ACOTA takes an entirely different approach than ACRI, focusing on enhancing the country's ability to train its own troops.[17] Ghana's first ACOTA event concentrated almost exclusively on the development of Ghanaian training doctrine and strategy.[18] In their follow-on event, conducted from 13 January to 11 April 2003, US personnel trained Ghanaian instructors and then monitored the soldiers who taught peacekeeping skills to indigenous troops. The United States is also developing a methodology for certifying host instructors. Additionally, future training funding will be tied to the host nation's commitment to utilize the certified trainers. ACOTA planners are optimistic that this more aggressive train-the-trainer approach will effectively hold African nations' feet to the fire, propagating peacekeeper training and creating a more capable force.

The third major ACRI area addressed by ACOTA entailed a failure to provide training to cope with the full range of potential action likely to be encountered by the recipient nation's soldiers. ACRI training packages effectively addressed operations categorized under chapter 6 of the UN Charter as peacekeeping tasks but did not prepare troops for peace-enforcement operations—oftentimes the precise skill set needed on short notice to quell conflict on the continent. Introduction of ill-equipped and/or untrained units into this environment can be deadly and, ultimately, counterproductive. ACOTA training now includes a provision for peace-enforcement tasks such as light-infantry operations and small-unit tactics.[19] Additionally, each ACOTA package contains between just under $1 million to $2 million worth of equipment, including combat paraphernalia, that the recipient retains after the completion of training. Finally, although agreements for training involvement are made bilaterally, ACOTA puts increased emphasis on the participation and consultation of subregional organizations, such as the Economic Community of West African States and the Southern African Development Community.[20] These organizations play a critical role in initiating and/or legitimizing peace-enforcement operations on the continent insofar as their "buy-in" to ACOTA enables the multinational integration essential to the success of those operations.

Although ACOTA clearly addresses ACRI's three key deficiencies, it remains on a pure donor-to-recipient basis. Additionally, ACOTA contracts largely ex-

cluded states envisioned by the United States as key to its involvement on the continent. These states could prove especially influential and could facilitate—perhaps even improve upon—peacekeeping training in their regions. Thus, the possibility of establishing partnership arrangements with principal African states, beginning with South Africa, becomes especially important.

South Africa: First "Anchor" Peacekeeper-Training Partner?

Despite the best intentions of ACOTA to help Africans help themselves, the program has enjoyed only minimal involvement from America's so-called anchor states—namely South Africa, Nigeria, Ethiopia, and Kenya. According to Dr. Jendayi Frazer, the US National Security Council's director of African Affairs, US policy on the continent under the Bush administration is built around developing the capabilities and understanding the role of these four regional "pillars."[21] Despite this intent, Kenya is the only anchor state to participate in ACRI to date, and ACOTA planners are currently completing their first meeting to solidify Ethiopia's involvement. Additionally, all of the ACOTA proposals dealing with anchor states—including the proposed conference with South Africa—stress US training to the recipient nation, an approach that ignores involving anchor states in training other African nations' forces.

Perhaps the most intriguing potential ACOTA participant is South Africa, whose interest in effective regional peacekeeping is straightforward. An "island" of first world prosperity on a third world continent, South Africa is gravely affected by any instability in its region. The 1999 war in Angola had spillover effects on Namibia, showing how conflict in one state can influence its neighbors.[22] Indeed, southern Africa is fraught with weak and unstable regimes. Any conflict on South Africa's borders could have a devastating effect at a critical juncture in the development and transformation of such governments. Similarly, migration can have potentially catastrophic social and economic effects. For example, approximately eight million illegal immigrants reportedly crossed South Africa's borders in 1990 alone,[23] and the five million illegal entries to that country in 1994 cost it an estimated $2 billion. Clearly, instability on South Africa's borders is not in its best interest.

Since South Africa alone cannot successfully accomplish the daunting peacekeeping tasks required in southern Africa, it should help ensure that other African nations can successfully employ their military forces in a peacekeeping role. Regrettably, according to Gen Siphwe Nyanda, chief of the South African National Defense Force (SANDF), other African states expect more force projection on the continent from the SANDF,[24] which has deployed nearly 1,000 soldiers to four locations in Africa. General Nyanda contends that greater regional involvement from South Africa would become problematic, especially regarding sealift, airlift, and air defense. Virtually all military officials interviewed in March 2003 during a visit to Africa by students from the US Air War College agreed that getting the troops to the fight and sustaining them—by means of tactical lift—were among the most significant limiting factors in the SANDF's peacekeeping ability.[25]

Given these limiting factors and South Africa's vested interest in better regional-peacekeeping capabilities, would that country benefit from involvement with the United States in ACOTA training? Opinions on the utility of this type of as-

sistance within the country appear mixed. Henri Boshoff—a retired South African officer, veteran of several African peacekeeping operations, and senior analyst for the Institute for Security Studies in Pretoria—has participated in initial discussions regarding South African involvement in ACOTA. He argues that little need exists for direct US training of soldiers and staff in the country due to the SANDF's extensive, practical peacekeeping experience.[26] At the tactical level, Boshoff maintains that South African troops are perhaps better qualified than US personnel who would conduct the ACOTA training. The current manning of US ACOTA training teams may underscore this assertion: due to current operations-tempo realities, as of February 2003, no uniformed US military personnel are involved in ACOTA. The total instructor cadre consists of contractors.[27]

SANDF's official military position toward ACOTA is more positive, however. Mosioua Lekota, South Africa's defense minister, recently acknowledged his military's need for better trained troops and staff members.[28] He contends that other African countries routinely expect South Africa to play a leading role—diplomatically and militarily—when peacekeeping needs arise on the continent. Lekota asserts that this burden of regional leadership demands the ability to provide technical expertise to others, and he welcomes US assistance in this regard. Maj Gen Jan Lusse, chief of Joint Operations at Headquarters South African Joint Forces, agrees that current demand far exceeds capacity. He feels that ACOTA training would prove useful in South Africa's quest to build a more robust peacekeeping force.[29]

Persuading South Africa to step up to the table as a full ACOTA participant with the United States will not be easy. Formidable obstacles stand in the way of effective interaction. Because of US support to the former apartheid regime, relations with South Africa since 1994 have been strained. In September 2000, William Cohen, then the US secretary of defense, acknowledged that the process of building "a level of trust and mutual respect" would be a long-term endeavor.[30] Relations since then have remained cool and are currently extremely tense. During the Air War College visit mentioned above, members of the South African Parliament commented on a very clear rift that exists between US and South African positions on many issues, most notably the ongoing tensions with Iraq.[31] Senior South African officials strongly disagree with US policies on global engagement, preferring that individual nations—or, at most, regions—sort out their own difficulties.

Cooperating with South Africa to enhance peacekeeping training on the continent may well provide a "best of both worlds" answer to this issue. The United States wants to see an expanded, sustainable peacekeeping capacity on the African continent. South Africa has similar interests but clings to a deep-seated philosophy of internal, grassroots solutions to one's own problems, devoid of external influence. The compromise may lie in a US training partnership with anchor states, using South Africa as the template for developing combined peacekeeping-training teams that work together to train other nations' forces. In fact, the door may already be open for this initiative. South Africa is the first nation on the continent invited to participate in Operation Phoenix, a newly proposed US program designed to establish a direct liaison between the SANDF and a US reserve-component organization.[32] This is a tremendous engagement opportunity for the United States and South Africa, having the potential to better develop a mutual comprehension of

each other's interests and spearhead a better long-term relationship.

Recommendations and Conclusion

The United States has an ardent interest in stability on the African continent. The focus on counterterrorism following the events of 11 September 2001 underscores just one long-term consequence of weak and failed states in the region. President Bush's recently announced budget demonstrates his commitment to helping African nations tackle long-term issues such as HIV/AIDS. Projected spending for peacekeeping, however, implies that the administration is serious about Africans being prepared to conduct these operations themselves. Peacekeeping and peace enforcement may be analogous to "putting out fires," but they are bona fide requirements that will continue to emerge in Africa on extremely short notice. Neglecting this responsibility can have catastrophic human consequences.

US fiscal policies are sending a clear message to African governments to focus on building indigenous peacekeeping and peace-enforcement capability so they can help themselves when scenarios arise involving them or their neighbors—even though the United States stands ready to help. Like its predecessor, ACOTA is an effective bilateral tool to assist smaller African nations in developing this capability, but substantive participation from African anchor states has not been forthcoming. Several recommendations, however, could enhance the effectiveness of ACOTA.

First, the United States should continue to craft customized training packages for individual nations and strengthen the follow-up mechanism to ensure that these programs are appropriate and that the train-the-trainer concept is working. To accomplish this effectively, we must be willing to remain engaged with these states after training is completed. A train-and-forget mentality will perpetuate diffusion of qualified personnel throughout the recipient nation. To the maximum extent practical, the United States must include its uniformed military forces in these ACOTA training activities to uphold the program's legitimacy and avoid a perception of waning US interests.

Second, America must intensify its efforts to involve major regional powers (anchor states) in the program. The next planning conference with South Africa should initiate efforts to transform the present donor-recipient association to a full partnership. Creating a training partnership—beginning with bilateral skills development and later expanding to a US/South African training team that delivers training to other African nations—has tremendous potential. The United States must also ensure that the unit chosen to participate in Operation Phoenix is qualified to be a peacekeeping partner. If the United States and South Africa can traverse the diplomatic hurdles to make this happen, the continent will have better indigenous peacekeeping forces and enhanced regional commonality in doctrine and tactics; perhaps most importantly, relations between the United States and South Africa will improve.

Like its predecessor, ACOTA faces significant obstacles before it can become Africa's saving grace in terms of peacekeeping. Practically speaking, the primary hurdle may have less to do with training than with the physical capacity to execute. African states lack the tactical mobility and logistics infrastructure to independently conduct peace-enforcement and peacekeeping operations. Some blame may be cast upon the more developed nations, such as South Africa, which arguably is undergoing a period of strategic confusion regarding its optimal force

structure. Despite a desperate need for more tactical airlift and logistical infrastructure for peacekeeping and peace enforcement, the SANDF instead is buying guided-missile frigates, submarines, and third-generation tactical fighters. Hopefully, a partnership with the United States may serve to highlight some of this apparent force-structure mismatch. Regardless, the United States must face the reality that, for the foreseeable future, Africans will continue to need US assistance when crises emerge on their troubled continent. ❑

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Obama's "Eisenhower Moment"

American Strategic Choices and the Transatlantic Defense Relationship

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Fifty-six years to the day—Tuesday, 4 November 1952—on which determined American voters elected Dwight David Eisenhower the 34th president of the United States, an equally determined electorate chose Barack Hussein Obama as the nation's 44th chief executive. The coincidence of their election date and their Kansas roots are not all they have in common. Barack Obama came to the White House in January 2009 at an equally critical moment for the future of the United States and as leader of a party which has not been the dominant voice in shaping American foreign policy since Richard Nixon defeated Hubert Humphrey in the presidential election of 1968. One of Obama's principal tasks is to restore the Democratic Party's foreign policy consensus and demonstrate to the American public that Democrats have the ideas, leadership skills, and competence, particularly in the area of national security policy, to deal with the issues confronting the country.

Instilling confidence among Americans in his party's foreign policy competence and credibility requires that Obama articulate and implement diplomatic, military, and economic strategies, the ends of which attract broad-based support both at home and abroad, and the ways and means of which reflect the realities of a global economic crisis more profound than any since the 1930s. But 20 years after the end of the Cold War, defining a framework for Euro-Atlantic cooperation and implementing tasks to accomplish common purposes will be even more difficult than for leaders of the Atlantic alliance in the 1950s. The greatest difficulties, both conceptually and practically, will arise over strategies projecting, and possibly using, military force. Despite the departure of the Bush administration, it remains unclear whether there is a consensus within Europe on the desirability of cooperating with the United States on such strategies.

A Second "New Look"

President Obama is taking a "new look"—as did Eisenhower—at the defense

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policies of the previous administration. While every administration claims to do this, in fact, since 1953, none of them have—neither George H. W. Bush in 1989 nor Bill Clinton in 1993—despite the end of the Cold War and the collapse of the Soviet Union. American presidents have reshaped and refocused specific policies, strategies, departments, and decision-making processes over the years, but changed none of the basic national security legacy created by the Truman and Eisenhower administrations from 1945 to 1961. Obama's presidency is the first to do so, and in a context analogous in three ways to that of 1953.

First, Obama's presidency is the first transition in the White House from one party to the other since 9/11. The president faces the same situation as Eisenhower did in 1953: he cannot draw on the extensive experience of a wide variety of American administrations in dealing with the threats of today. His grand strategies and their implementation will be as critical to defining approaches to the war on terror in the twenty-first century as Eisenhower's were to the Cold War.

As a result, President Obama will have the same impact on the structures and policies he inherited from George Bush as Eisenhower did on Truman's, deciding what survives—and what does not. The Defense Department and other decision-making reorganizations that began with the 1947 National Security Act were also a work in progress in the early 1950s. It was not until Eisenhower's embrace of the alliances, aid programs, and structures established by the Truman administration (including the CIA, Joint Chiefs of Staff, and National Security Council) that their survival into the future became clear.

Finally, Obama is inheriting a transformed military force from George Bush, a transformation driven by the failures of the wars in Afghanistan and Iraq. As a result of the changes made since 2005 to American armed forces, today they bear little resemblance to the stereotype that still exists abroad. They are no longer a force highly skilled at major combat operations with maximum lethal force but lacking the will and capability for anything else. Their transformation rivals that of the years 1950–53 and in many ways surpasses it. Obama is commander in chief of a force that has a different attitude toward war, conflict, and the overall operational environment than it did in 2001, one that in 2009 is reforming its education and training to become, as stated in the foreword to Army Field Manual 3-24, *Counterinsurgency*, December 2006, an even more "flexible, adaptive force led by agile, well-informed, culturally astute leaders." The president's retention of Secretary of Defense Gates at the Pentagon suggests he recognizes that the transformation is desirable and well under way, but not yet complete.

The Three Ps: Prosperity, Presence, Partnership

Obama's Eisenhower moment in 2009 has the same three dimensions as did Ike's in 1953: prosperity, presence, and partnership. Eisenhower dealt with each dimension, and each has become part of the national security debate in every administration since Truman's: prosperity—to make possible the desired investment in defense; presence—the deployment of US forces overseas; and partnership—American defense cooperation with other countries. The context in which Obama will deal with presence and partnership is strikingly similar to that of 1953; but where prosperity is concerned, it is very different.

Unlike Eisenhower, President Obama on his inauguration day faced the greatest global economic crisis of any American president since Franklin Roosevelt in 1933. The immediate future of American prosperity is seriously in doubt and will have consequences for the administration's ability to maintain or expand short- and long-term expenditures on defense. Long-term expenditures may fare better since they may double as domestic investments in infrastructure (as did Eisenhower's national highway program in the 1950s) and manufacturing, but monies destined to be spent outside the United States where no American jobs are created are likely to be scarce. Obama will be faced with tough choices, akin to those that confronted the United Kingdom after World War I: like Britain then, the United States today has extensive global defense commitments, a shrinking domestic revenue base, indebtedness to foreign powers, and a competitor for global fiscal primacy with no such global commitments—the European Union.

In the economic boom of the 1950s, "guns and butter" were not mutually exclusive, and except for brief, passing moments, they never have been for the United States, until now. Obama is the first president whose defense priorities and national security commitments will of necessity reflect the twin pressures on the federal budget from declining revenues and expanding domestic job creation and social service programs. But how will the financial crisis affect American strategic choices? No one, least of all the president, can be sure; there is no reference point in American history to which he can turn. The last global economic crisis of this magnitude came when the United States embraced isolationism and was hardly one of the great military powers. The country then played an entirely different geostrategic role in the world.

If there is any parallel to the decision-making climate facing President Obama, it is not in the American past, but in mid-century Britain's. First, in the interwar years, and then more starkly after World War II, London faced the reality of a lack of economic means to meet its global defense commitments. The midcentury British analogy is not a happy one for the United States today, although there are doubtless skeptics of American foreign policy who feel otherwise. For them, declining American prosperity may seem the ideal solution to the "problem" of the United States' global role, whether they are American isolationists who feel that ungrateful foreigners have for decades exploited a surfeit of American power or critics overseas who feel exploited by a surfeit of American power. Any rejoicing at home or celebrating abroad is ill placed, however, particularly in Europe. Even under the most favorable economic circumstances, the Obama administration in its first year would have reviewed the state of presence and partnership—eight years after 9/11. In the context of the current economic crisis, the next Quadrennial Defense Review will raise questions about how and where to apply scarce US defense resources and, inevitably, about the relevance of Europe's defense resources, capabilities, and will.

American Presence, Regional Partnership

Since the end of the Cold War, and particularly since 9/11, the concept of American military presence as a catalyst for regional partnerships has emerged as a key element in the American approach to promoting stability and security in historically

unstable and insecure parts of the world—as Europe once was. Since 2005, support to SSTR—stability, security, transition, and reconstruction—has been a priority for the US military, but there is little evidence that these changes in the US armed forces now under the command of Barack Obama are appreciated—or known at all—in Europe.

The Obama administration expects a greater European military role in counterinsurgency (COIN) as well as SSTR missions in Afghanistan. Vice President Biden said at the Munich Security Conference in February 2009, "We will ask our allies to rethink some of their own approaches—including their willingness to use force when all else fails." Is such a greater European role likely? The prospects are not good, and American skepticism is not new: Eisenhower's secretary of state, John Foster Dulles, despaired of his European counterparts' approach to military force in 1953.

Today, although small pockets of European military experts recognize that the true "revolution in military affairs" in the United States is not the technological one of the 1990s but the human one that began in the past five years (with its emphasis on multilateral partnerships and support, rather than unilateral command, control, and execution), European political elites and public opinion do not want to recognize these changes. If they did, there would then be no reason to decline cooperation with Washington in developing a comprehensive strategy toward Afghanistan and, eventually, other countries. As he faces his Eisenhower moment, President Obama would be well advised to assume the absence of a robust transatlantic defense relationship in making American strategic choices in the months and years ahead. ❑

The New Children of War

Peter W. Singer, PhD*

As US forces advanced into Saddam Hussein's Iraq in April 2003, the fighting had turned out to be far more intense than planned. One of the unexpected holdups came in Karbala, a city of roughly 550,000 located 50 kilometers southeast of Baghdad. Karbala was expected to be an easier take than most cities since its population consisted largely of Shiites, who had long opposed the dictator. Indeed, Karbala was considered one of Shia Islam's most holy cities—the site of a historic battle in 680 AD, in which Husayn ibn Ali, the grandson of the Prophet Muhammad, and his entire family were killed.

Before the war, Vice President Cheney would famously repeat in many speeches the prediction made by historian Fouad Ajami that the American troops would be greeted with "kites and boom boxes." On that April afternoon, no kites were flying, and the booms filling the air certainly weren't from music. As they worked their way, street by street, through the residential neighborhoods of Karbala, the troops of the 101st Airborne Division—the famed "Screaming Eagles"—had been under intense fire from machine guns and rocket-propelled grenades (RPG) for the whole day. Gunfight followed gunfight, several troopers were wounded, and assorted vehicles, including a Bradley armored fighting vehicle, were knocked out of action.

In the midst of the fighting, a young boy scrambled from an alleyway. An American machine gunner saw that the boy, later found to be 10 years old, was carrying an RPG. In a nanosecond, in the midst of bullets flying at him, the 21-year-old Soldier had to make what would surely be the toughest decision of his life. " 'I took him out,' [he later] said. 'I laid down quite a few bursts.' " The boy fell dead.

After the battle ended, when there was time to think, the Soldier reflected on the episode. " 'Anybody that can shoot a little kid and not have a problem with it, there is something wrong with them,' he said, taking a drag off a cigarette. 'Of course I had a problem with it. [But] after being shot at all day, it didn't matter if you were a soldier or a kid; these RPGs are meant to hurt us. . . . I did what I had to do.' "[1]

The Short History of Children and War

When we think of warfare, children rarely come to mind. Indeed, we assume that war is a place for only the strong and willing, from which the young, the old,

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the infirm, and the innocent are not only excluded, but also supposedly afforded special protections.

This exclusion of children from warfare held true in almost every traditional culture. For example, in precolonial African armies, the general practice was that warriors typically joined three to four years after puberty. In the Zulu tribe, for instance, not until the ages of 18 to 20 were members eligible for "ukubuthwa" (the drafting or enrollment into the tribal regiments).[2] In the Kano region of West Africa, only married men were conscripted because the unmarried ones were considered too immature for such an important and honored task as war.[3] When children of lesser ages did serve in ancient armies, such as the enrollment of Spartan children into military training at ages seven through nine, they typically did not serve in combat. Instead, they carried out more menial chores, such as herding cattle or bearing shields and mats for the more senior warriors. In absolutely no cases were traditional tribes or ancient civilizations reliant on fighting forces made up of young boys or girls.

This exclusion of children from war was not simply a matter of principle but raw pragmatism. Adult strength and often lengthy training were needed to use premodern weapons and would continue to be needed well into the age of firearms. It also reflected the general importance of age in many political organizations. Most traditional cultures relied on a system of age grades for their ruling structures. These were social groupings determined by age cohorts, and they cut across ties created by kinship and common residence. Such a system enabled senior rulers and tribal elders to maintain command over their younger—and potentially unruly—subjects.

Although warfare has long been the domain of adults, there were times in military history when children did appear. Boy pages helped arm and maintain the knights of medieval Europe; drummer boys and "powder monkeys" (small boys who ran ammunition to cannon crews) were a requisite part of many an army and a navy in the seventeenth and eighteenth centuries. The key is that these boys fulfilled minor or ancillary support roles and were not considered true combatants. They neither dealt out death nor were considered legitimate targets. Indeed, Henry the Fifth was so angered at the breaking of this rule at the Battle of Agincourt (1415), where some of his army's boy pages were killed, that he, in turn, slaughtered all of his French prisoners.

Indeed, perhaps the most well-known use of supposed child soldiers in history, the famous "Children's Crusade," is something of a myth. The reality is that the "crusade" was actually a march of thousands of unarmed boys from northern France and western Germany who thought they could take back the Holy Land by the sheer power of their faith. Most never left Europe, and of those who did, all but a few were sold into slavery by unscrupulous ship captains.

The rule held that children were not to be soldiers, but there were some exceptions in the grand span of history. Small numbers of underage children certainly lied about their ages to join armies. In addition, a few states sent out children to fight in their last gasps of defeat. Perhaps the most notable instance in American history was the participation by Virginia Military Institute (VMI) cadets at the Battle of New Market during the Civil War. In May 1864, Union forces marched up the Shenandoah Valley, hoping to cut the Virginian Central railroad, a key supply line. Southern general John Breckenridge found himself with the

only Confederate force in the area, commanding just 1,500 men. So he ordered the corps of cadets from nearby VMI to join him. Two-hundred-forty-seven strong (roughly 25 were 16 years or younger), they waited out most of the battle until its final stages. Then, in a fairly dramatic charge, they overran a key Union artillery battery. Ten cadets were killed, and 45 were wounded. Ultimately, though, their role was for naught. Within the year, the Union would capture the Shenandoah and with it soon the rest of the Confederacy.[4]

Similarly, and most recently, the Hitler Jugend (Hitler Youth) consisted of young boys who had received quasi-military training as part of a political program to maintain Nazi rule through indoctrination. Through most of World War Two, the youths joined German military forces (including the SS, for which the Jugend was a feeder organization) only when they reached the age of maturity. However, when Allied forces invaded German territory in the final months of the war, Hitler's regime ordered these boys to fight as well. It was a desperate gambit to hold off the invasion until new "miracle" weapons (like the V-2 rocket and Me-262 jet fighter) could turn the tide. Lightly armed and mostly sent out in small ambush squads, scores of Hitler Youth were killed in futile, small-scale skirmishes, all occurring after the war had essentially been decided.[5]

However, these were the exceptions to what the rule used to be—that children had no place in war. Throughout the last 4,000 years of war as we know it, children were never an integral, essential part of any military force in history. Their use as soldiers was isolated in time, geographic space, and scope. No one rushed out to copy these examples, and they did not weigh greatly in how wars began, were fought, or ended. At best, they were footnotes in military history.

The Rise of Child Soldiers

The nature of armed conflict, though, has changed greatly in the past few years. Now the presence of children is the new rule of standard behavior in war, rather than the rarity that it used to be. The result is that war in the twenty-first century is not only more tragic but also more dangerous. With children's involvement, generals, warlords, terrorists, and rebel leaders alike are finding that conflicts are easier to start and harder to end.

The practice of using children, defined under international law as under the age of 18, as soldiers is far more widespread and more important than most people realize. There are as many as 300,000 children under the age of 18 presently serving as combatants around the globe (making them almost 10 percent of all global combatants). They serve in 40 percent of the world's armed forces, rebel groups, and terrorist organizations and fight in almost 75 percent of the world's conflicts; indeed, in the last five years, children have served as soldiers on every continent but Antarctica. Moreover, an additional half-million children serve in armed forces not presently at war.[6]

Some individuals try to quibble by raising questions of the cultural standards of maturity, that child soldiers are not actually children. The problem with this tack is that the 18-year cutoff is not simply a Western construct, as many warlords and apologists for child-soldier users would have it, but actually the international legal standard for childhood, agreed upon by over 190 states. It is also the age that almost every state in the world uses in its own legislation for awarding or withhold-

ing public rights and responsibilities such as when one can vote or when one receives free education or health care. Finally, it was also a standard for a range of premodern armies and modern armies (such as the 1813 regulations of the US Army).

More importantly, the youth in question cover a range that no sane person would deny is both underage and inappropriate for involvement in war. Eighty percent of those conflicts in which children are present include fighters under the age of 15; 18 percent of the world's armed organizations have used children 12 years and under. The average age of child soldiers found by two separate studies, one in Southeast Asia and one in Central Africa, was just under 13. The youngest-ever child soldier was an armed five-year-old in Uganda.

The mass presence of girls in many forces also distinguishes the present trend from any historic parallels. Although no girls served in groups like the powder monkeys or Hitler Youth, roughly 30 percent of armed forces that employ child soldiers also include girl soldiers; underage girls have been present in the armed forces in 55 countries. In 27 of these, girls were abducted to serve, and in 34 of these, they saw combat. These girl soldiers are often singled out for sexual abuse, sometimes by their own commanders, and have a hard time reintegrating into society when the wars end.

With the rise of this practice, Western forces have increasingly come into conflict with child-soldier forces. The first notable instance was the British Operation Barras in Sierra Leone in 2000. There, British Special Air Service (SAS) special forces fought a pitched battle against the "West Side Boys," a teen militia that had taken hostage a squad of British Army troops. As an observer noted, "You cannot resolve a situation like this with a laser-guided bomb from 30,000 feet."[7] Ultimately, a helicopter raid led by elite British SAS troops ended the hostage crisis. The hostages were rescued, but the subsequent battle was, as one observer put it, "brutal." One British soldier was killed, and 12 more were wounded. Estimates of dead among the West Side Boys ranged from 25 up to 150.

However, after 11 September 2001 (9/11) this issue became a pointed problem for Americans. Just as terrorism is the "weapon of the weak," so have the weakest of societies been pulled into this realm as well. Captured al-Qaeda training videos reveal young boys receiving instruction in the manufacture of bombs and the setting of explosive booby traps. Palestinian Islamic Jihad and Hamas have recruited children as young as 13 to be suicide bombers and children as young as 11 to smuggle explosives and weapons. At least 30 suicide bombing attacks have been carried out by youths since the fighting in Israel-Palestine sparked up again in 2000.[8] The most tragic example perhaps was a semiretarded 16-year-old who was convinced by Hamas to strap himself with explosives. Israeli police in the town of Nablus caught him just before he was to blow himself up at an army checkpoint.[9]

It is important to note, though, that neither terrorism nor children's roles in it are a uniquely Muslim or Middle Eastern phenomenon. For example, the youngest-ever reported terrorist was a nine-year-old boy in Colombia, sent by the National Liberation Army (ELN) rebel group to bomb a polling station in 1997.[10] Likewise, when Muslim groups began to use child suicide bombers, they were not actually breaking any new ground. Instead, they were following the lead of the Liberation Tigers of Tamil Eelam (LTTE), also known as the "Tamil Tigers," in Sri Lanka, which has consistently been one of the most in-

novative of terrorist groups. The LTTE—which utilized suicide bombers to kill both the Indian prime minister and the Sri Lankan president and pioneered the tactic of crashing planes into buildings, later repeated on 9/11—has even manufactured specialized denim jackets designed to conceal explosives, specially tailored in smaller sizes for child suicide bombers.[11]

Child Soldiers in the Western Hemisphere

In the Americas since the 1990s, child soldiers have served in fighting in Colombia, Ecuador, El Salvador, Guatemala, Mexico (in the Chiapas conflict), Nicaragua, Paraguay, and Peru. The most substantial numbers reported are in Colombia. There, as many as 11,000 children have been used as soldiers, meaning that one out of every four irregular combatants is underage. They serve in both the rebel side, in the Revolutionary Armed Forces of Colombia (FARC) and ELN organizations, and with rightist paramilitary groups (such as the United Self-Defense Forces). As many as two-thirds of these children fighters are under 15 years old, with the youngest recruited being seven years old.[12]

Child soldiers in Colombia have been nicknamed "little bells" by the military, which uses them as expendable sentries, and "little bees" by the FARC guerrillas because they "sting" their enemies before they know they are under attack. In urban militias, they are called "little carts" because they can sneak weapons through checkpoints without suspicion. Up to 30 percent of some guerrilla units are made up of children. Child guerrillas are used to collect intelligence, make and deploy mines, and serve as advance troops in ambush attacks against paramilitaries, soldiers, and police officers. For example, when the FARC attacked the Guatape hydroelectric facility in 1998, the employees of the power plant reported that some of the attackers were as young as eight years old. In 2001 the FARC even released a training video that showed boys as young as 11 working with missiles.[13] In turn, some government-linked paramilitary units are 85 percent children, with soldiers as young as eight seen patrolling.[14] There has also been crossborder spillover of the practice. The FARC reportedly recruits children from as far away as Venezuela, Panama, and Ecuador, some as young as 10.[15]

The experiences of these children are both brutal and heart rending. As told by one 15-year-old FARC fighter (who had been recruited at age 12),

> They bring the people they catch . . . to the training course. My squad had to kill three people. After the first one was killed, the commander told me that the next day I'd have to do the killing. I was stunned and appalled. I had to do it publicly, in front of the whole company, fifty people. I had to shoot him in the head. I was trembling. Afterwards, I couldn't eat. I'd see the person's blood. For weeks, I had a hard time sleeping. . . . They'd kill three or four people each day in the course. Different squads would take turns, would have to do it on different days. Some of the victims cried and screamed. The commanders told us we had to learn how to kill.[16]

The US Contact with Child Soldiers

With the global deployment of US forces after 9/11, from Afghanistan to the Philippines, child soldiers are present in every conflict zone in which US forces now operate. Indeed, the very first US Soldier casualty in the war on terrorism was a Green Beret killed by a 14-year-old sniper in Afghanistan. At least six

young boys between the ages of 13 and 16 were captured by US forces in Afghanistan in the initial fighting and taken to the detainee facility at Guantanamo Bay, Cuba.[17] They were housed in a special wing called "Camp Iguana." As the Pentagon took more than a year to figure out whether to prosecute or rehabilitate them, the kids spent their days in a house on the beach converted into a makeshift prison, watching DVDs and learning English and math.[18] In addition, several more who are 16–18 years old are thought to be held in the regular facility for adult detainees at "Camp X-Ray." US Soldiers continue to report facing child soldiers in Afghanistan to this day; the youngest on record is a 12-year-old boy captured in 2004 after being wounded during a Taliban ambush of a convoy.[19]

In Iraq the problem has quietly grown worse. Under Saddam's regime, Iraq built up an entire apparatus designed to pull children into the military realm and bolster his control of the populace. This included the Ashbal Saddam ("Saddam's Lion Cubs"), a paramilitary force of boys between the ages of 10 and 15 that acted as a feeder into the noted Saddam Fedayeen units. A paramilitary led by Saddam's son Uday, the Fedayeen proved more aggressive than the Iraqi army in fighting US invasion forces; the remnants of these units now make up one of the contending insurgent forces. During the invasion, American forces fought with Iraqi child soldiers from these groups in at least three cities (Nasiriya, Mosul, and Karbala).[20]

Beaten on the battlefield, rebel leaders then sought to mobilize this cohort of trained and indoctrinated young fighters for the insurgency. A typical incident took place in the contentious city of Mosul just after the invasion and provided a worrisome indicator of the threat to come. Here, in the same week that Pres. George W. Bush made his infamous "mission accomplished" aircraft-carrier landing, an Iraqi 12-year-old boy fired on US Marines with an AK-47 rifle.[21] Over the next weeks and months, incidents between US forces and armed Iraqi children began to grow, ranging from child snipers to a 15-year-old who tossed a grenade in an American truck, blowing off the leg of a US Army trooper.[22]

By the time fighting picked up intensity, starting in spring 2004, child soldiers served not only in Saddam loyalist forces but also in both radical Shia and Sunni rebel groups. Radical cleric Muqtada al-Sadr directed a revolt that consumed the primarily Shia area south of Iraq, with the fighting in the holy city of Najaf being particularly fierce. Observers noted multiple child soldiers serving in al-Sadr's "Mahdi" Army. One 12-year-old boy proudly proclaimed, "Last night I fired a rocket-propelled grenade against a tank. The Americans are weak. They fight for money and status and squeal like pigs when they die. But we will kill the unbelievers because faith is the most powerful weapon."[23] Indeed, Sheikh Ahmed al-Shebani, al-Sadr's spokesman, didn't try to deny the war crime of using children but publicly defended the practice: "This shows that the Mahdi is a popular resistance movement against the occupiers. The old men and the young men are on the same field of battle."[24]

Coalition forces also have increasingly faced child soldiers in the dangerous "Sunni Triangle." Marines fighting in the battle to retake Fallujah in November 2004 reported numerous instances of being fired upon by "children with assault rifles" and, just like the Soldier during the invasion, wrestled with the dilemmas it presented.

The overall numbers of Iraqi children presently involved in the fighting are not known. But the indicators are that they do play a significant and growing role in the insurgency. For example, at one point, some 107 Iraqi juveniles determined to be "high risk" security threats were held at the infamous Abu Ghraib prison.[25] US forces have faced particular problems with groups using children as spotters for ambushes and as cover for infiltration, such as having children sit in what troops call "VBIEDs" (vehicleborne improvised explosive devices). When children are present, such car bombs look less suspicious and are more likely to make it through checkpoints. A new development during the 2007 "surge" of forces is that Soldiers have reported that Shiite militias in Baghdad have organized gangs made up of more than 100 kids as young as six years old. The children throw rocks, bricks, and firebombs at convoys but are actually coordinated with snipers for the purpose of drawing any responding patrols into ambushes.

The Causes and Processes of Child Soldiers

The new presence of children on the twenty-first-century battlefield emerged from three intertwined forces. The first is how the dark side of globalization has led to a new pool of potential recruits. We are living through the most prosperous period in human history, but many are being left behind. Demographic changes, global social instability, and the legacy of multiple civil and sectarian conflicts entering their second and third generations all act to weaken states and undermine societal structures. Just as examples, more than 40 million African children will lose one or both of their parents to HIV/AIDS by 2010, while the Office of the UN High Commissioner for Refugees estimates that there are more than 25 million children uprooted from their homes by war.[26] Such orphans and refugees are particularly at risk for being pulled into war.

However, although there have always been dispossessed and disconnected children, it is changes in weapons technology that act as an enabler, allowing this pool to be tapped as a new source of military labor. In particular, the proliferation of light, simple, and cheap small arms has played a primary role. Such "child-portable" weapons as the AK-47 have become lighter, thanks to plastics; can be bought for the price of a goat or chicken in many countries; and are deceptively easy to learn to use. With just a half hour's worth of instruction, a 10-year-old can wield the firepower of an entire Civil War regiment.

Finally, context matters. We are living through an exceptional period of flux and breakdown of global order, especially with the spread of warlordism and failed states. This change has made possible a new mode of war. Wars are driven less by politics than things as simple as religious hate or personal profit through seizing diamond mines. From Foday Sankoh in Sierra Leone to Mullah Omar in Afghanistan, local warlord leaders now see the new possibility of (and, unfortunately, advantages in) converting vulnerable, disconnected children into low-cost and expendable troops who fight and die for their own causes. The groups pull in children through recruiting techniques that take advantage of children's desperation, and sometimes immaturity, or just through good, old-fashioned kidnapping and abduction.

Those of us living in stable, wealthy states have difficulty understanding how children can be convinced to join and

fight for an army, especially if they don't even understand or believe in the cause. But try to imagine yourself as an orphan, living on the street, not knowing where your next meal will come from. A group then offers you not only food and safety but also an identity, as well as the empowerment that comes from having a gun in your hand. Or imagine the temptation you might have if a group of older boys wearing natty uniforms and cool sunglasses were to show up at your school and force all the teachers to bow down to show who is "really in charge." They then invite you to join them, with the promise that you too can wield such influence. Or imagine what you would do if you experienced what happened to this seven-year-old boy in Liberia when a group of armed men showed up at his village. "The rebels told me to join them, but I said no," he later recalled. "Then they killed my smaller brother. I changed my mind."[27]

When children are brought into war, they are usually run through training programs that range from weeks of intense, adult-style boot camp to a few minutes' instruction in how to fire a gun. Indoctrination, political or religious, can include such "tests" as forcing the kids to kill animals or human prisoners, including even neighbors or fellow children, both to inure them to the sight of blood and death and disconnect them from their old identity. Many are forced to take drugs to further desensitize them. As Corinne Dufka of Human Rights Watch describes the practice in West Africa, "It seemed to be a very organized strategy of . . . breaking down their defenses and memory, and turning them into fighting machines that didn't have a sense of empathy and feeling for the civilian population."[28]

The result is that kids, even those who may have once been unwilling captives, can be turned into quite fierce and skilled fighters. A typical story is that of a young boy in Sierra Leone, who recounts, "I was attending primary school. The rebels came and attacked us. They killed my mother and father in front of my eyes. I was 10 years old. They took me with them. . . . They trained us to fight. The first time I killed someone, I got so sick, I thought I was going to die. But I got better. . . . My fighting name was Blood Never Dry."[29]

The Consequences of Children on the Battlefield

Beyond just the raw human tragedy, the ramifications of this "child soldier doctrine" for war itself are quite scary. First and foremost, it means that unpopular armies and rebel groups are able to field far greater forces than they would otherwise, through using children as a cheap and easy way to obtain recruits. Indeed, many groups little larger than gangs have proven able to sustain themselves as viable military threats through the use of child fighters. For example, the Lord's Resistance Army (LRA) in Uganda is led by Joseph Kony, who styles himself the reincarnation of the Christian Holy Spirit. Kony's own spin of the Ten Commandments, though, is that the Bible allows the ownership of sex slaves but declares that riding bicycles is a sin punishable by death. Effectively, he is a David Koresh–like figure who leads a cult with a core of just 200 adult members. But over the years, Kony and his LRA have abducted over 14,000 children, using them to fight a decade-long civil war against the Ugandan army, considered one of the better forces in Africa, leaving some 100,000 dead and 500,000 refugees.

Child soldiers also present great difficulties during battle itself. Experiences from around the globe demonstrate that

children do make effective soldiers and often operate with terrifying audacity, particularly when infused with religious or political fervor or when under the influence of narcotics. I once interviewed a former Green Beret who described a unit of child soldiers in Sudan as the best soldiers he had seen in Africa in his 18 years of experience there. He recounted how they once ambushed and shot down a Soviet-made Mi-24 attack helicopter, a feared weapon that has put many an adult unit to flight.

They also present a horrible dilemma for professional forces. No one wants to have to shoot a child, yet a bullet from a 14-year-old can kill you just as dead as one from a 40-year-old. Children carrying guns are legitimate targets, but that doesn't make it any easier on the Soldiers who have to fight them. Soldiers often experience morale and post-traumatic stress disorder after such incidents.[30]

Conflicts in which children are present tend to feature not only massive violations of the laws of war but also higher casualty totals, among both the local populace and child soldiers, in comparison to adult compatriots. These conflicts on average have higher levels of atrocities, and the children tend to be used as cannon fodder by their adult commanders. For example, in some places, rebel groups have taken to calling their child soldiers "mine detectors" because they will send them forward first to step on any hidden land mines.

Lastly, the effect of plunging children into a culture of war creates problems even after the war is over. For the individual children, long-term trauma can disrupt their psychological and moral development. For the wider society, the conversion of a generation of children into soldiers not only bodes future cycles of war within the country but also endangers regional stability. The case of Liberia is instructive. Throughout the 1990s, Liberia went through multiple rounds of civil war, during which children would switch armies without much thought. But even after the fighting ended there, many former child soldiers from Liberia could later be found fighting in Sierra Leone, Guinea, and Côte d'Ivoire. Some since have marched thousands of kilometers to find work as soldiers in the Democratic Republic of the Congo.

In sum, when children are present, warfare is not only more tragic, but the conflicts tend to be easier to start but harder to end, cost more lives, and lay the groundwork for recurrence in following generations.

We Must Respond

Action to end the terrible doctrine of child soldiers is thus a moral obligation as well as a strategic mandate. Although an international alliance of nongovernmental organizations (NGO)—the Coalition to Stop the Use of Child Soldiers—has brought increasing attention to the issue, governments now need to step up. Those seeking to end the practice must move beyond trying simply to persuade those who use children as soldiers, akin to trying to shame the shameless, and instead alter the underlying causes and motivations that enable its spread. Archbishop Desmond Tutu, winner of the Nobel Peace Prize, once said, "It is immoral that adults should want children to fight their wars for them. . . . There is simply no excuse, no acceptable argument for arming children."[31] There may be no moral excuse, but it is a dark reality of present-day war that we must face.

The key to stopping the practice of child soldiers is to shrink the recruiting pool and limit conflict groups' willingness and ability to access it. Remedies include

investing in heading off global disease and conflict outbreaks, offering greater aid to special at-risk groups like refugees and AIDS orphans, helping to curb the spread of illegal small arms to rebel and terrorist groups who bring children into the realm of war, criminalizing the doctrine by prosecuting those leaders who abuse children in this way, taking the profits out of the practice by sanctioning any firms or regimes who trade with child-soldier groups (including American firms like those that traded with the Liberian and Sudanese governments for private profit), and providing increased aid to programs that seek to demobilize and rehabilitate former child soldiers, thus ending the cycle. In each of these areas, unfortunately, US action has been lacking; certainly this is not the stance of a world leader.

In turn, the issue of children is often treated as a "soft" security matter, but it is now as hard a security problem as one can imagine. Political and military leaders must start to wrestle with the difficult dilemmas that our Soldiers now face in the field, rather than continuing to ignore them at greater costs. Child soldiers are now a regular feature of the modern battlefield. The only question is whether troops will be properly equipped, trained, and supported to deal with this dreadful change in contemporary warfare. The onus is on government and military leaders to do all that they can to reverse the doctrine's spread and end this terrible practice.

Preparing Soldiers to Confront Child Soldiers

With the rise of groups using child soldiers, military forces must prepare themselves for the thorniest of dilemmas. To put it simply, troops will find themselves in a situation in which they face real and serious threats from opponents whom they generally would prefer not to harm. They may be youngsters, but when equipped with the increasing simplicity and lethality of modern small arms, child soldiers often bring to bear a great deal of military threat. Therefore, mission commanders must prepare forces for the tough decisions they will face, in order to avoid any potentially lethal confusion over rules of engagement or split-second hesitations because of shock at the makeup of their foe or uncertainty about what to do. Historical experience has demonstrated a number of effective methods to handle situations when professional troops are confronted by child soldiers. These include the following:

Prepare and Utilize Intelligence

Rather than wishing the problem away, one should develop official policies and effective solutions to counter the dilemmas that child soldiers raise. Better to deal with them in training than make ad hoc decisions in the midst of crisis. At the same time, the intelligence apparatus must become attuned to the threat and ramifications of the child soldier. This is important in forecasting broad political and military events; moreover, knowledge of the makeup of the adversary is also a critical factor in determining the best response. Intelligence should be sensitive to two aspects in particular: the method of recruitment utilized by the opposition and the average child soldier's period of service. Child soldiers recruited by means of abduction techniques or those in recent cadres will be more prone to dissolving under shock than voluntary recruits or children who have been in service for many years.

Recognize the Threat

Whenever forces deploy into an area known to have child soldiers present, they must take added cautions to counter and keep the threat at a distance. All children are not threats and certainly should not be targeted as such, but force-protection measures must include the possibility—or even likelihood—of child soldiers and child terrorists. This includes changing practices of letting children mingle among pickets and even putting children through the same scrutiny as adults at checkpoints.

Use Fear to Supplement Firepower

When forces do face engagement with child-soldier forces, best practice has been to hold the threat at a distance and, where possible, initially fire for shock. The goal should be to maximize efficiency and prevent costly casualties (and the resulting negative side effects) by attempting to break up the child units, which often are not cohesive fighting forces. In a sense, this is the microlevel application of "effects-based warfare," just without the overwhelming dependence on high technology. Demonstrative artillery and mortar fires (including the use of smoke), rolling barrages (which give a sense of flow to the impending danger), and helicopter-gunship passes have proven especially effective in breaking up child-soldier forces.[32]

Target the Leader

When forced into close engagement, forces should prioritize the targeting and elimination of any adult leaders if at all possible. Experience has shown that their hold over the unit is often the center of gravity and that units will dissolve if the adult leader is taken out of a position of control. As forces seek to mop up resistance, they should focus their pursuit on the adult leaders who escape. Failure to do so allows their likely reconstitution of forces and return to conflict, as has become a recurrent theme in child-soldier-fueled conflicts like those in northern Uganda or Liberia.

Use Nonlethal Weaponry for More Options

An important realization is that total annihilation of the enemy in these instances may actually backfire. Thus, wherever possible, military commanders and policy makers should explore options for using nonlethal weapons (NLW) in situations that involve child soldiers. Armchair generals often ignorantly mock NLWs, overlooking the fact that they in no way eliminate a resort to deadly force. Rather, their availability provides troops in the field with added choices and options. NLWs frequently are a welcome alternative that not only may save lives on both sides but also may prove more effective in meeting mission goals. Unfortunately, development and distribution of such weaponry have fallen well behind pace. Indeed, out of the mere 60 NLW kits in the entire US military, only six were deployed to Iraq in the first year of operation there. Many international peacekeeping operations lack even one kit.

Employ Psychological Operations

Psychological operations (PSYOP) should always be integrated into overall efforts against local resistance and be specially designed for child-soldier units. They should seek to convince child soldiers to stop fighting, leave their units, and begin the process of rehabilitation and reintegration into society. At the same time, we should ensure that adversary leaders know

that their violation of the laws of war is being monitored and that they will face dire consequences for using this doctrine. PSYOP should also seek to undercut any support for the doctrine within local society by citing the great harms the practice is inflicting on the next generation, its contrast to local customs and norms, and the lack of honor in sending children out to fight adults' wars.

Ensure Success with Follow-Up

The defeat of a child-soldier-based opposition does not take place just on the battlefield, no matter how successful. A force must also take measures to welcome child-soldier escapees and prisoners of war quickly, so as to dispel any myths about retribution and induce others to leave the opposition as well. This also entails making certain preparations for securing child detainees, something for which US forces have had no doctrine or training, even down to not having proper-sized handcuffs. Once Soldiers have ensured that the child does not present a threat, they should meet any immediate needs of food, clothing, and/or shelter. Then, as soon as possible, the child should be turned over to health-care or NGO professionals. The business of imprisoning juveniles is not the mission of the military and is certainly not conducive to the health of the organization.

Protect Our Own

A force must also look to the health of its own personnel. Forces must be ready to deal with the psychosocial repercussions of engagements with child-soldier forces, for this is an added way that the use of child soldiers puts professional forces at a disadvantage. Units may require special postconflict treatment and even individual counseling; otherwise, the consequence of being forced to engage children may ultimately undermine unit cohesion and combat effectiveness.

Explain and Blame

Public-affairs specialists must be prepared beforehand for the unique repercussions of such engagements. In explaining the events and how children ended up being killed, they should stress the context under which such events occurred and the overall mission's importance. The public should be informed that everything possible is being done to avoid and limit child soldiers' becoming casualties (use of NLWs, PSYOP, firing for shock effect, etc.). At the same time, the public should be made aware that child soldiers, although they are children, are just as lethal behind an assault rifle as adults. Most importantly, they must seek to place blame where it should properly fall—on those leaders that not only illegally pull children into the military sphere but also send them out to do their dirty work.

At a broader level, governments that want to stay ahead of the issue should mobilize the United Nations, as well as local political leaders and religious experts, to condemn the practice for what it is—a clear violation of both international law and local cultural and religious norms.

As disturbing as this trend is, we can see one silver lining by looking back in the past. Countless doctrines and modes of warfare have come and gone over the long march of history. It was once thought that religion could be strengthened by calls to war. Now we look at those who call for crusades as extremists. Well into the Middle Ages, captured soldiers were considered not prisoners but personal property to be ransomed or sold as personal slaves. Little more than a century ago, it was considered an obligation, a so-called

white man's burden, to invade other lands to lift them up to "civilization" or, more honestly, to bring them into colonial domains.

Hopefully, the child-soldier doctrine will someday soon join these and the many other practices of war whose time has passed. Perhaps, history will look back upon this period as an aberration, a short phase when moral norms broke down but were quickly restored. But that will happen only if we match the will of those leaders who do such evil to children with the will to do well. ❑

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Sudan

A Critical Moment, a Comprehensive Approach

US Department of State

Sudan is at an important crossroads that can either lead to steady improvements in the lives of the Sudanese people or degenerate into even more violent conflict and state failure. Now is the time for the United States to act with a sense of urgency and purpose to protect civilians and work toward a comprehensive peace. The consequences are stark. Sudan's implosion could lead to widespread regional instability or new safe havens for international terrorists, significantly threatening US interests. The United States has a clear obligation to the Sudanese people—both in its role as witness to the Comprehensive Peace Agreement (CPA) and as the first country that unequivocally identified events in Darfur as genocide—to help lead an international effort.

The United States and its international partners face multiple challenges in Sudan. Six years after its initiation, the conflict in Darfur remains unresolved. In 2003 the ruling National Congress Party and government-supported militia, sometimes referred to as "Janjaweed," launched a genocidal campaign that targeted ethnic groups affiliated with a brewing Darfur rebellion, leading to the death of hundreds of thousands of people and displacing some 2.7 million people and more than 250,000 refugees. Unfulfilled cease-fire and peace agreements, the proliferation of rebel groups, and the involvement of regional states have prolonged the crisis and complicated international efforts to reach a peace agreement. Although the intensity of the violence has lessened since 2005, civilians continue to live in unacceptable insecurity. Without an active peace process; a commitment to addressing accountability for crimes committed against civilians; a fully deployed, equipped, and performing African Union–United Nations (AU-UN) peacekeeping force; and serious planning for regional recovery; the situation in Darfur will continue to fester, destabilizing the country and the region.

In a similar vein, delays in implementing key portions of the CPA—the agreement between the National Congress Party and the southern Sudanese People's Liberation Movement (SPLM) that ended more than two decades of conflict between northern and southern Sudan, which left more than 2 million people dead—represent a dangerous flash point for renewed conflict. According to the CPA, the south, where governing capacity is nascent, will vote in a referendum in 2011 on self-determination—whether to secede or remain part of a unified Sudanese state. The "Three Areas" are also flash points for renewed conflict: Abyei, Southern Kordofan, and Blue Nile will engage in a referendum and popular consultations on their status over the next 15 months. In the time remaining before the referenda and consultations, the United States is working to re-

invigorate international engagement in the CPA and to bolster the peace accord by supporting national elections in 2010, working to resolve outstanding border-demarcation disputes and ensuring that the parties live up to their obligations to prevent a return to war.

The international community has demonstrated its commitment to the Sudanese people by supporting deployment of the first hybrid AU-UN peacekeeping force in Darfur, sustaining the presence of some 10,000 UN peacekeepers in southern Sudan, and contributing more than $1 billion in humanitarian assistance to the country every year. Most recently, the International Criminal Court issued an arrest warrant for Sudanese president Omar al-Bashir in early 2009, charging him with having perpetrated war crimes and crimes against humanity in Darfur.

Despite these significant developments, sustained political will to address Sudan's tough challenges in the international community is sometimes lacking. American leadership is essential to a more effective multilateral approach. The United States is working to reconstitute, broaden, and strengthen the multilateral coalition that helped achieve the signing of the CPA and will work to more concretely transform widespread international concern about Darfur into serious multilateral commitments. This expanded coalition must meet our responsibility to promote security, justice, and development while broadening our leverage moving forward.

Critical Lessons Learned from Past Efforts

- The United States cannot succeed in achieving its policy goals by focusing exclusively on either Darfur or CPA implementation—it must address both seriously and simultaneously while also working to resolve and prevent conflict throughout Sudan.
- US policy must be agile enough to address discrete, emerging crises while maintaining a sustained focus on long-term stability.
- To advance peace and security in Sudan, we must engage with allies and with those with whom we disagree. US diplomacy must be both sustained and broad, encompassing not only the National Congress Party, SPLM, and major Darfuri rebel groups but also critical regional and international actors.
- Assessments of progress and decisions regarding incentives and disincentives must not be based on process-related accomplishments (i.e., the signing of a memorandum of understanding or the issuance of a set of visas) but on verifiable changes in conditions on the ground.
- Accountability for genocide and atrocities is necessary for reconciliation and lasting peace.
- It must be clear to all parties that Sudanese support for counterterrorism objectives is valued but cannot be used as a bargaining chip to evade assuming responsibilities in Darfur or implementing the CPA.

US Strategic Objectives

US strategy in Sudan must focus on ending the suffering in Darfur and building a lasting peace. The three principal US strategic priorities in Sudan include

1. definitively ending conflict, gross abuses of human rights, and genocide in Darfur;

2. implementing the North-South CPA, which results in either a peaceful post-2011 Sudan or an orderly path toward two separate and viable states at peace with each other; and
3. ensuring that Sudan does not provide a safe haven for international terrorists.

The United States will use all elements of influence to achieve its strategic objectives. The US special envoy for Sudan will play the leading role in pursuing our Sudan strategy. Fundamental to all US government efforts to bring about peace and security throughout Sudan is the holding of responsible parties accountable for creating conditions that can foster concrete and sustainable improvements in the lives of the Sudanese people. This includes frank dialogue with the government of Sudan about what needs to be accomplished, how the bilateral relationship can improve if conditions transform, and how the government will become even more isolated if conditions remain the same or worsen. The United States will seek to broaden and deepen the multilateral coalition that is actively working toward achieving peace in Darfur and to assure full implementation of the CPA so that backsliding by any party is met with credible, meaningful disincentives leveraged by the United States and the international community.

Each quarter the interagency at senior levels will assess a variety of indicators either of progress or of deepening crisis, and that assessment will include calibrated steps to bolster support for positive change and to discourage backsliding. Progress toward achievement of strategic objectives will trigger steps designed to strengthen the hands of those implementing the changes. Failure to improve conditions will trigger increased pressure on recalcitrant actors.

US policy will also acknowledge that the government of southern Sudan must abide by its responsibilities under the terms of the CPA, prioritizing conflict mitigation and resolution, capacity building, transparency and accountability, and delivery of service. Given the stakes and pace of events, the United States must ensure that its assistance initiatives in the south are both effective and efficient, reflecting these urgent priorities. The special envoy will continue to engage and consult broadly with the SPLM, Darfur rebel and civil society groups, and other actors to ensure that the United States can bring focused efforts to bear on key levers of influence at critical moments.

Key Implementation Elements

Strategic Objective 1: Definitively Ending Conflict, Gross Abuses of Human Rights, and Genocide in Darfur

Enhancing Civilian Protection. The United States will work to fortify the United Nations Mission in Darfur by (1) strengthening multilateral resolve to impose consequences on actors obstructing the mission's operations, access, and performance; (2) providing direct US funding and US diplomatic, logistical, and other support toward the provision of critically needed equipment (including helicopters); and (3) planning contingencies in Darfur by developing a scale of appropriate responses to worsening crises.

Promoting a Negotiated Solution to the Conflict. The special envoy will establish and maintain dialogue with armed movements in Darfur and solicit support for the peace process from Sudan's neighbors. The United States will support a political agreement that addresses the

underlying causes of conflict in Darfur by building on Qatar's peace-negotiation efforts, providing direct support to the joint AU-UN joint chief mediator for Darfur, and encouraging broad participation—including all diverse representations of civil society—in the peace process. The United States will seek to renew all parties' commitment to the 2005 Declaration of Principles that obligates the Sudanese government and all major Darfuri armed groups to seek a peaceful solution to their grievances in Darfur and to adhere to a 2004 humanitarian cease-fire.

Encouraging and Strengthening Initiatives for Ending Violent Conflict. The United States will support international efforts to achieve a cessation of hostilities in Darfur and, through a variety of means, will urge Sudan and Chad to cease support to rebel groups under their influence. The United States will seek to work with a broad array of partners on the ground to gather information on and fight sexual and gender-based violence in Sudan as a means of supporting the implementation of UN Security Council Resolution 1820.

Supporting Accountability. In addition to supporting international efforts to bring individuals responsible for genocide and war crimes in Darfur to justice, the United States will work with Darfuri civil society to endorse locally owned accountability and reconciliation mechanisms that can make peace more sustainable.

Improving the Humanitarian Situation. The United States will work with other donors and humanitarian organizations in the field to insist that the government of Sudan fulfill its obligations to its citizens by improving humanitarian access and coverage in Darfur. The United States will place a premium on core humanitarian principles and on the use of shared, concrete, and transparent humanitarian indicators to gauge the situation on the ground.

Strategic Objective 2: Implementing the North-South CPA, Which Results in Either a Peaceful Post-2011 Sudan or an Orderly Path toward Two Separate and Viable States at Peace with Each Other

Addressing Unimplemented Elements of the CPA. The United States will work with international partners to encourage the parties to implement necessary legislation and planning for the 2010 elections and the 2011 referenda. Among other issues, the United States will work with international partners by (1) providing assistance for census resolution, voter registration and education, political parties, administration of polling places, balloting mechanics, and the monitoring of international and local domestic elections and referenda, and (2) encouraging the parties to enact necessary legal reforms to create an environment more conducive to a credible election process and referendum, including enactment of a credible referendum law. The United States will assist the parties in resolving census and referendum disputes in accordance with the CPA. In addition, it will support efforts to push for the timely and transparent demarcation of the north-south border through the provision of technical expertise and will back international efforts to professionalize and equip the joint integrated units responsible for providing security in key areas.

Reinvigorating and Strengthening International Engagement on CPA Implementation. The special envoy has organized a "Forum for Supporters of the CPA" and has reinvigorated the "Troika" (the United States, United Kingdom, and Norway, all of whom act as CPA guarantors) to coordinate and rejuvenate international efforts to support implementation of the CPA. The United States will

also work to strengthen the role of the Assessment and Evaluation Committee, the primary forum charged with mediating disputes over CPA implementation between the two parties.

Defusing Tension in the Three Areas. In Abyei, Southern Kordofan, and Blue Nile, the United States will (1) assist in the development and/or reinvigoration of UN-assisted disarmament, demobilization, and reintegration programs; (2) restore and strengthen the operations of nongovernmental organizations that provide vital development assistance and conflict-prevention resources, and that offset the potential for conflict once new borders are drawn; and (3) provide direct technical support to local administrations, as appropriate.

Promoting the Development of Post-2011 Wealth-Sharing Mechanisms. The United States will work with international partners to support the parties in developing a post-2011 wealth-sharing agreement and resolve other post-2011 political and economic issues.

Promoting Improved Governing Capacity and Greater Transparency in Southern Sudan. The United States will work to improve security for the southern Sudanese people by supporting disarmament, demobilization, and reintegration, as well as conflict-prevention initiatives, and by strengthening the capacity of the security sector and criminal justice system. The United States will also work to improve economic conditions and outcomes. It will provide technical advisers to vital ministries and will work to strengthen entities such as the UN Development Program's Local Government Reform Program. The United States will work with international partners to implement the World Bank Multi-Donor Trust Fund South Strategy in a timely manner and to improve access to capital, particularly microfinancing, for agricultural enterprises and local private-sector ventures. It will support efforts and initiatives that assist in increasing trade between Sudan and its neighbors. Transparency in fiscal expenditures will be critical to attracting investment, and the United States will support the World Bank's anticorruption efforts in southern Sudan.

Strategic Objective 3: Ensuring That Sudan Does Not Provide a Safe Haven for International Terrorists

Preventing Terrorists from Developing a Foothold in Sudan. The United States has a strategic interest in preventing Sudan from providing safe haven for terrorist organizations. It will work with the international community to reduce the ability of terrorists and nonstate actors inimical to US interests from developing a foothold in Sudan.

Outreach and Consultation

The strong voices of committed advocates and members of Congress have been indispensable in elevating Sudan on the US policy agenda. These stakeholders are assets in US efforts to end the suffering of the Sudanese people and bring stability to the country. Consistent attempts to maintain a regular dialogue with these communities will strengthen US policy and prove vital to success. The special envoy will meet regularly with advocates and will maintain open lines of communication with Congress to ensure that serious and substantive consultations are a regular part of the policy-implementation process. ❑

Book Review

21st Century U.S. Air Power by Nicholas A. Veronico and Jim Dunn. MBI Publishing Company, 2004, 176 pp., $29.95.

What is airpower? According to a US Air Force pamphlet entitled *50 Questions Every Airman Can Answer* (1999), "airpower is the fundamental ability to use aircraft to create military and political effects. . . . It is 'military power that maneuvers through the air while performing its mission'" (p. 6). Although slightly dated, that basic definition still applies. Fortunately for airpower enthusiasts, many books focus on military aviation. Veronico and Dunn's *21st Century U.S. Air Power* appeared in the aftermath of the terrorist attacks of 9/11 and the need for improved homeland security in the air and elsewhere. The authors profile the various technologically advanced aircraft that protect US skies.

The book's main sections deal with the air arms of the Air Force, Navy/Marine Corps, Army, and Coast Guard. For good measure, it also throws in military demonstration teams. Three appendices cover bomb types, missiles, and aerial victory credits from 1981 to 2005. Even though the last appendix goes back almost two decades into the twentieth century, it helps support the case that US airpower remains the dominant force around.

Veronico and Dunn effectively describe the wide variety of military aircraft types by providing short histories, significant capabilities, and sidebar highlights (similar to what appears in the annual almanac issue of *Air Force Magazine*). They also list active, Guard, and Reserve units to which the aircraft are assigned and detail unit nicknames, tail numbers, and locations. Over 200 color photographs, some of them of exceptional quality, accompany the text.

In its attempt to cover the military gamut, the book makes a few notable errors and omits some information. For example, the authors state that the US Navy operates eight aircraft carriers and is constructing two more—all nuclear. However, they fail to mention the two conventionally powered carriers in the inventory. Furthermore, they state that the new V-22 Osprey tilt-rotor aircraft will soon replace most rotary-wing helicopters but do not include even one photograph of the "future of assault warfare" destined for the Navy, Marines, and special operations forces.

Overall, *21st Century U.S. Air Power* contains interesting facts and quality photos. For readers who can never get quite enough of military airpower, it complements a number of other works.

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"Freedom, Sancho, is one of the most precious gifts that heaven has bestowed upon men; no treasures that the earth holds buried or the sea conceals can compare with it; for freedom, as for honor, life may and should be ventured."

Miguel de Cervantès