

# Airlift in Africa: Building Operational Logistics Capability for the African Standby Force

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**D**uring the past decade, the increasing global competition for resources, access to energy, and terrorist attacks on U.S. embassies in Africa have spurred a renewed focus on U.S. policy toward Africa. The U.S. Africa Command (AFRICOM) was established to address U.S. strategic interests in Africa by building partnerships with African allies and the African Union (AU). The AU has attempted to address the security and stability issues that plague Africa, and in 2004, the AU formally established an African Standby Force

(ASF) to respond rapidly to conflicts and humanitarian emergencies.<sup>1</sup>

Unfortunately, the ASF has not yet reached operating capability, and as a result, various members of the international community have provided most of the logistics support for recent peacekeeping operations, including the AU missions to Sudan, Burundi, and Somalia.<sup>2</sup>

Operational-level logistics is the deployment and sustainment of forces across a theater of operations. That capacity is currently missing from the AU's operational

*Cameroon Minister of Defense Edgar Alain Mebe Ngo'o and Lieutenant Commander Bryan McRoberts shake hands at the start of the annual joint military exercise Africa Endeavor on 18 June 2012. Sponsored by U.S. Africa Command, Africa Endeavor is an annual exercise that focuses on the interoperability of equipment and information sharing among military representatives throughout the African Union. (Photo by SSG Michelle Gonzalez)*



<sup>1</sup> Mashood Issaka and Elijah Mushemeza, "Operationalizing the African Standby Force," meeting notes from an International Peace Institute retreat in Kigali, Rwanda, January 2010, p. 6.

<sup>2</sup> Cecilia Hull and Emma Svensson, "African Union Mission in Somalia (AMISOM) Exemplifying African Union Peacekeeping Challenges," Swedish Defence Research Agency, Stockholm, Sweden, October 2008, p. 4.

capability.<sup>3</sup> The heart of humanitarian and peacekeeping operations lies in the ability to conduct operational logistics to sustain assigned forces. Africa's austere environment presents difficult logistics challenges. Limited transportation infrastructure requires that airlift be present to augment ground and sea transportation assets responding to crises and conflict situations. The AU and most of its member states have very limited airlift capability and rely on external assistance to deploy and sustain AU forces.

Rather than simply continuing to be a provider of the AU's logistics capability, the United States is transforming its relationship with the AU. This transformation focuses on developing Africa's capacity to provide its own security and stability and increases emphasis on AFRICOM's partnerships with regional organizations such as the ASF. To foster progress toward preventing conflict through regional stability, AFRICOM should establish a joint initiative with the ASF brigades to assemble a regionally-based airlift capability to bridge the crucial gap in operational logistics.

### Partnership Challenges

A military-to-military partnership between the AU's burgeoning ASF and AFRICOM is a likely fit since both organizations share the mission of promoting stability in Africa. However, a number of African states mistrust U.S. involvement in African security affairs. They connect AFRICOM to memories of European colonialism and view the command as militarization of the U.S. relationship with Africa.

In addition, many Africans are cautious of U.S. intentions since its policy essentially abandoned Africa following the Cold War. They feel that only the threats of violent extremism and China's growing influence in the region have caused the United States to make Africa a policy priority.<sup>4</sup>

This skepticism is readily apparent in AFRICOM's struggle to find a permanent location on the continent. Although a few countries have offered to host the command, the United States has been unsuccessful in getting broad African support for basing the AFRICOM headquarters on the continent.<sup>5</sup> African leaders are also wary of AFRICOM's mixed military and diplomatic structure, fearing that the U.S. military will direct diplomatic efforts

to develop democracy and fight government corruption in Africa.<sup>6</sup>

Concerns about AFRICOM's intentions also influence U.S. funding and resources. The challenges of funding regional security organization are always significant, and the lack of financial support for the ASF regional brigades impedes their ability to build logistics and operations capability.<sup>7</sup>

The AU and its member states must be judicious in deciding which resources and capabilities will provide the most return on investment toward the goal of building an operational ASF. For example, organic military airlift is particularly expensive. The Airbus A400M, a medium airlifter being purchased by European Union (EU) militaries, costs about \$1.3 million.<sup>8</sup> The challenges of funding military transport aircraft procurement are shown by South Africa's 2009 decision to cancel its A400M program because of cost.<sup>9</sup>

The U.S. side of any AFRICOM-ASF partnership faces the same funding challenges. Current debates over U.S. Department of Defense (DOD) budgets will significantly affect ASF funding. Foreign aid is always a budget-cut target, especially in the current fiscal environment. Therefore, any program to develop ASF operational logistics will face intimidating funding challenges and must prove its merits unequivocally to all decisionmakers.

### The African Union Requirement

The arguments against building a long-term relationship with the ASF are valid but must be weighed against U.S. and AU interests in bolstering Africa's ability to address its own security and stability problems. The AU has taken assertive steps toward a regional security capability, and in 2003, the AU established the Peace and Security Council (PSC) to address conflict prevention and mitigation. The council's operational arm is the ASF, which has five standby brigades, one in each of Africa's five regions: central, southern, eastern, northern, and western.<sup>10</sup>

The primary function of a regional brigade is security crisis response under the umbrella of six mandates identified in the AU's common defense and security policy. The first three mandates call for observer missions. The second three involve escalating crises, and the brigade's response could range from deploying peacekeeping forces

<sup>3</sup> Milan Vego, *Joint Operational Warfare: Theory and Practice*, U.S. Naval War College, Newport, R.I., Vol. 3, 2009, p. 76.

<sup>4</sup> José de Arimatéia da Cruz and Laura K. Stephens, "The U.S. Africa Command (AFRICOM): Building Partnership or Neo-Colonialism," *Journal of Third World Studies*, Vol. 27, No. 2, Fall 2010, p. 204, <<http://www.proquest.com/>>, accessed 10 April 2011.

<sup>5</sup> Nico Colombant, "Battle Begins for Hosting U.S. Africa Command," *voanews.com*, 12 April 2011, <<http://www.voanews.com/english/news/africa/Battle-Begins-for-Hosting-U.S.-Africa-Command-119714109.html>>, accessed 14 April 2011.

<sup>6</sup> Michael Mihalka, Moussa Diop Mboup, and Douglas Lathrop, "Misguided Intentions: Resisting AFRICOM," *Military Review*, Vol. 89, No. 4, July–August 2009, p. 89, <<http://www.proquest.com/>>, accessed 10 April 2011.

<sup>7</sup> Issaka and Mushemeza, p. 2.

<sup>8</sup> *Airbus Military A400M*, Jane's All the World's Aircraft, <<http://search.janes.com/>>, accessed 10 April 2011.

<sup>9</sup> *South Africa - Air Force*, Jane's World Air Forces, <<http://search.janes.com/>>, accessed 10 April 2011.

<sup>10</sup> Jakkie Cilliers, "The African Standby Force: An Update on Progress," Institute for Security Studies Paper 160, Pretoria, South Africa, 2008, p. 2.

to directly intervening in a regional conflict.<sup>11</sup>

Each ASF brigade is made up of about 4,300 personnel, 175 vehicles, and 4 helicopters.<sup>12</sup> The brigade's size requires a significant logistics footprint and complex transportation plans for deployment and sustainment. The ASF is tasked to deploy forces rapidly to interdict or deter conflict as outlined in the AU mandate. The ASF rapid-response concept calls for deploying an initial response force of 1,000 personnel within 14 days and an additional 1,500 within 30 days.<sup>13</sup> This deployment timeline requires robust transportation to respond quickly in remote African regions.

Yet, in recent peacekeeping operations, the AU has been unable to achieve effective operational reach, which is defined by Professor Milan Vego as "the distance over which one's military power can be massed and employed decisively."<sup>14</sup> Extending ASF operational reach requires transportation capability. Because the austere nature of Africa places limits on the ASF's transportation options, airlift must be a primary player in the AU's plans to respond effectively to a security or humanitarian crisis.

Unfortunately, Africa's internal transportation infrastructure is very limited. Africa's logistics network comprises numerous seaports along the coastline, but options are limited in the massive interior of the continent that accounts for one-fifth of the earth's land.<sup>15</sup> Rail transport is available along a few corridors, but the railways are frequently out of service because of a lack of resources needed to keep them functioning properly or because the routes pass through unstable regions.

The rail network does not provide coverage across the continent because most routes were built during the colonial era to deliver resources to the coast for external trade rather than for intra-African trade.<sup>16</sup> In addition, railway distribution is unequal. Of an estimated 45,000 miles of track, 30 percent is located solely in South Africa while 12 African countries have no railway systems.<sup>17</sup>

The primary alternative to rail is trucking, which constitutes 90 percent of all interurban transport on the

continent. However, the road system is considered one of the worst in the world because of poor surface conditions and significant delays at border crossings.<sup>18</sup> Africa's slow, unreliable ground transportation network does not provide the responsive logistics capability that the ASF requires to meet its deployment and sustainment benchmarks for a successful mission.

Africa's air transportation infrastructure is limited, with airfields that suffer from deteriorating runways, outdated air traffic control equipment, and minimal cargo and passenger handling equipment. Even so, each country has at least one international airport and countless dirt strips, which can accommodate smaller airlifters to complement ground transport.<sup>19</sup>

## Peace Support Operations

African transportation limitations, combined with the AU's lack of logistics capability, have inhibited the operational effectiveness of AU peace support operations (PSOs). The AU has conducted three significant PSOs since its formation in 2002, and each operation faced major challenges to deploy, employ, and sustain forces effectively.<sup>20</sup>

The 2003 African Mission in Burundi (AMIB) deployed to enforce ceasefire agreements between the Burundi Government and rebel groups. AMIB eventually deployed more than 3,000 peacekeepers and stabilized Burundi enough for United Nations (UN) forces to take over.<sup>21</sup> However, the mission revealed significant deficiencies in the ability of AU member country to deploy and sustain PSOs.<sup>22</sup> This was noted by Kofi Annan, the UN Secretary-General, who reported, "The financial and logistic constraints under which the AMIB is operating prevents the force from fully implementing its mandate."<sup>23</sup>

The limited success of AMIB was only possible because the United States, EU, and UN provided resources to deploy and sustain the AMIB peacekeeping forces.<sup>24</sup> The well-documented AMIB logistics problems resulted in the development of the Burundi Model for PSOs that would

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<sup>11</sup> Theo Neethling, "Pursuing an Effective African Peace-keeping Capability: What Could be Learned from Burundi and Darfur," *Strategic Review for Southern Africa*, November 2007, p. 54, <<http://www.proquest.com/>>, accessed 10 April 2011.

<sup>12</sup> Cilliers, p. 11

<sup>13</sup> *Ibid.*, 10.

<sup>14</sup> Vego, Vol. 1, p. 78.

<sup>15</sup> "Africa," *Worldatlas.com*, <<http://www.worldatlas.com/webimage/countrys/af.htm>>, accessed 10 April 2011.

<sup>16</sup> Afeikhena Jerome, "Infrastructure in Africa: The Record," African Development Bank Economic Research Papers, 1999, No. 46, p. 29.

<sup>17</sup> *Ibid.*

<sup>18</sup> Anver Versi, "The Science and Art of Logistics in Africa," *African Business*, Issue 333, July 2007, pp. 17–18, <[http://findarticles.com/p/articles/mi\\_qa5327/is\\_333/ai\\_n29363012/](http://findarticles.com/p/articles/mi_qa5327/is_333/ai_n29363012/)>, accessed 10 April 2011.

<sup>19</sup> Jerome, p. 31.

<sup>20</sup> Hull and Svensson, p. 4.

<sup>21</sup> Emma Svensson, "The African Mission in Burundi, Lessons Learned from the African Union's First Peace Operation," Swedish Defence Research Agency, Stockholm, Sweden, p. 13.

<sup>22</sup> *Ibid.*, p. 4.

<sup>23</sup> Kofi Annan, "Report of the Secretary-General on Burundi. U.N. Security Council Report S/2004/210," United Nations, New York, 2004, p. 13.

<sup>24</sup> Svensson, p. 17.



*A U.S. Marine speaks to a Burundi National Defense Force soldier using an interpreter on 26 June 2012. U.S. Marines and Sailors trained with the Burundi soldiers to prepare the unit for deployment in support of the African Union Mission in Somalia. (Photo by LCpl Adwin Esters)*

require AU countries to provide their own logistics and sustainment.<sup>25</sup> This is a practical approach to the logistics problems since the AU does not have the organizational capacity to deploy or sustain PSOs. But the result of the Burundi Model has been that AU countries largely depend on logistics support from states and organizations outside Africa.

African dependence on external logistics assistance continued with the AU's second major PSO, the African Mission in Sudan (AMIS). AMIS was established to monitor the ceasefire agreement between North and South Sudan and bring security to the province of Darfur. AU peacekeeper deployments began in May 2005 and reached 7,000 by the middle of 2006—double the number in AMIB.<sup>26</sup> However, AMIS relied exclusively on NATO to provide airlift to deploy peacekeepers into Darfur because most contributing AU countries possessed few or no airlift assets.<sup>27</sup> The logistics limitations caused by the AU's lack of airlift negatively affected operations and decreased the

velocity of the AMIS response.<sup>28</sup>

The most recent major PSO led by AU peacekeeping forces was the African Union Mission in Somalia (AMISOM). Established in January 2007, it supports the Transitional Federal Government in Somalia to provide security for humanitarian assistance, stabilization, and reconstruction efforts. The original mandate from the AU PSC called for 8,000 troops, but the number actually deployed was closer to 3,000.<sup>29</sup> Although two brigades from Burundi were prepared to deploy, AMISOM was unable to move them because of insufficient transportation and sustainment capacity.

AMISOM logistics support was based on the Burundi Model, and thus the primary troop contributing countries relied on external sources to deploy and sustain their forces.<sup>30</sup> The consequence, in AMISOM as well as AMIB and AMIS, was that the lack of operational logistics capability altered the operational mission objectives.

The inherent risk to any AU plan based on the Burundi

<sup>25</sup> Hull and Svensson, p. 8.

<sup>26</sup> Neethling, p. 62.

<sup>27</sup> *Ibid.*, p. 61.

<sup>28</sup> Catherine Guicherd, "The AU in Sudan: Lessons for the African Standby Force," International Peace Academy, New York, 2007, p. 4.

<sup>29</sup> Hull and Svensson, p. 8.

<sup>30</sup> *Ibid.*, p. 29.



*Burundi National Defense Force soldiers hike up a hillside with alongside a U.S. Marine during a joint military exercise on 27 June 2012. U.S. Marines and Sailors trained with the Burundi soldiers to prepare the unit for deployment in support of the African Union Mission in Somalia. (Photo by LCpl Adwin Esters)*

Model is the over reliance on external sources to supply the initial critical airlift. Although these external sources may have the required airlift capacity, there is no guarantee that they will make resources available in a responsive manner. If the AU is truly to operationalize the ASF regional brigades, a dedicated, responsive, and robust airlift capability must be part of the solution to ASF operational logistics challenges.

### **U.S. Interests**

The AU and ASF ability to conduct peacekeeping and humanitarian operations is hampered by the lack of operational logistics, specifically airlift capability. The United States is capable of partnering with the ASF to mitigate this limitation, but the efforts to improve ASF operational reach must coincide with U.S. interests in Africa. In addition, the AU, ASF regional brigades, and individual African states must have compelling reasons to support an airlift partnership between AFRICOM and the ASF.

The early 1990s marked a U.S. exit from direct engagement on the African continent because U.S. policymakers assigned limited strategic value to Africa as the Cold War battle of ideologies ended.<sup>31</sup> This began to change in 1998

after attacks on U.S. embassies in Africa, and energy access competition, global trade agreements, armed conflict, and terrorism have renewed Africa as a U.S. strategic priority in the past decade.<sup>32</sup> This renewal prompted the establishment of AFRICOM and an increasingly vocal U.S. interest in Africa's long-term stability and prosperity.

The emphasis on African stability is a thread articulated at each level of executive authority in the U.S. Government. The 2010 National Security Strategy discusses strategic involvement to improve African security through external investment in regional capabilities.<sup>33</sup> The 2011 National Military Strategy identifies the U.S. commitment to develop AU regional partnerships and specifically ASF military capacity.<sup>34</sup> Finally, AFRICOM's posture statement highlights the combatant commander's intent to deter and resolve conflict through building African-led security capacity.<sup>35</sup>

The AU's desire to address security and humanitarian challenges is exemplified by the peace support operations in Burundi, Sudan, and Somalia. In addition, the AU's commitment to the ASF concept of a regional security force is further evidence that its members are committed to resolving Africa's internal conflicts with African solutions.

<sup>31</sup> Lauren Ploch, "Africa Command: U.S. Strategic Interests and the Role of the U.S. Military in Africa," Congressional Research Service, Washington, DC, April 2010, p. 14.

<sup>32</sup> *Ibid.*, p. 15.

<sup>33</sup> "The National Security Strategy of the United States," The White House, Washington, DC, May 2010, pp. 45–46.

<sup>34</sup> Chairman of the Joint Chiefs of Staff, "The National Military Strategy of the United States of America," Washington, DC, February 2011, p. 12.

<sup>35</sup> General Carter Ham, "United States Africa Command 2012 Posture Statement," Washington, DC, February 2012, p. 15.

Building the ASF into a self-sufficient security force requires external assistance, but Africans are justifiably suspicious of U.S. intentions. Most of the relationships between the United States and Africa have been bilateral engagements, but African leaders have clearly stated they would prefer AFRICOM to work primarily through the AU and regional organizations.<sup>36</sup>

The concerns are driven by the reluctance to accept U.S. military influence in planning, executing, and leading AU missions. Though vital to success in peacekeeping operations, logistics assistance generally does not impinge on the operational control and decisionmaking of a military mission. Rather, with a long-term goal of ASF logistics autonomy, building logistics capability will go a long way toward enabling the ASF to operate independently.

There is a distinct connection between the U.S. interest of promoting stability and security throughout Africa and a U.S. partnership to develop the ASF's airlift capability. The integration of responsive airlift with ground and sea transportation will enable continued access to areas of contention while sustaining humanitarian and peacekeeping forces.

Providing security and stability in order to enable energy resource production and trade requires a persistent presence in affected regions. In the same manner, regional conflicts require an approach that can provide extensive access to protect and sustain the civilian populations caught up in the fight. Access to areas of contention can also create conditions to defeat insurgent and terrorist groups by co-opting the population from which they draw sustainment and support.

### Airlift in Austere Environments

The mutual strategic interests and operational advantages of an AFRICOM-ASF partnership are supported by extensive U.S. experience in employing airlift in austere environments and training allies to conduct airlift. Relevant examples include extensive tactical airlift throughout South Vietnam, U.S. airlift in support of the 1960 UN Security Resolution to restore order to the Congo, and the ongoing effort to rebuild the Afghan Air Force (AAF). The common thread of these examples is the development and application of air transport in geographically challenging environments while working with partners who have significant resource limitations.

U.S. airlift in Southeast Asia during the Vietnam War was one of the first examples of air mobility being widely employed to support unconventional methods against

enemy guerillas. It gave the United States and South Vietnam a significant force multiplier that permitted rapid deployment and sustainment of operations in otherwise inaccessible remote areas.<sup>37</sup> An example of this unique capability was the resupply of U.S. special operations forces operating with the CIA's Civilian Irregular Defense Groups (CIDGs). These missions used short, unimproved airfields with minimal parking space. Many of the landing strips were less than 2,000 feet long and required rugged aircraft such as the C-7 Caribou because of its unique ability to land and launch in remote regions.<sup>38</sup>

These airlift aircraft in Vietnam defined a capability known as assault airlift, filling the gap between heavy-lift helicopters and larger fixed-wing airlifters. The lower-cost assault aircraft filled the requirement for access to remote airfields that were beyond helicopter range but too short for larger tactical airlifters.

By comparison, modern-day ASF logistics challenges are similar since the ASF mission requires the capability to project forces and support over moderate distances. Much of Africa is defined by an austere landscape with the same short-airfield characteristics encountered in Vietnam. Though not the single solution, Vietnam-style assault airlift should play an important part in plans to establish an ASF airlift capability.<sup>39</sup>

Although airlift operations in Vietnam were crucial to U.S. force sustainment in remote areas, the ability of the South Vietnamese to conduct air transport after U.S. withdrawal in 1973 was vital to their long-term ability to continue counterinsurgency operations and post war reconstruction.<sup>40</sup> In the early 1960s, the United States began an advisory program that provided training, personnel, and material resources to develop the South Vietnamese air transport force. The program provided training and instruction across multiple aspects of air transportation, including flight operations, maintenance, and aerial port operations (aircraft loading/unloading).

The core of the U.S. adviser program was a partnership to achieve autonomous South Vietnamese airlift operations. For example, the aerial port personnel program started with the direct training of the South Vietnamese in 1967. By 1970, a South Vietnamese-run school for aerial port operations was opened, which allowed U.S. forces to relinquish the instructor role.<sup>41</sup> Although it took the better part of a decade, the sustained partnership paid off because the airlift arm of the South Vietnamese Air Force was essentially self-sufficient by 1973.<sup>42</sup>

This partnership model is especially relevant to the

<sup>36</sup> Mihalka, Mboup, pp. 91–92.

<sup>37</sup> Ray Bowers, *Tactical Airlift*, Office of Air Force History and Museum Programs, Washington, DC, 1983, p. vii.

<sup>38</sup> *Ibid.*, p. 154.

<sup>39</sup> Robert Owen and Karl Mueller, "Airlift Capabilities for U.S. Counterinsurgency Operations: RAND Report MG-565-AF," RAND, Santa Monica, 2007, p. xii.

<sup>40</sup> Bowers, p. 581.

<sup>41</sup> *Ibid.*, p. 599.

<sup>42</sup> *Ibid.*, p. 581.

ASF's current inability to deploy and sustain its forces. An integrated approach to providing equipment and training across the continuum of operational logistics could maximize the effectiveness of an AFRICOM-ASF partnership.

During the same timeframe as the U.S. airlift efforts in Vietnam, the United States conducted significant airlift operations in the Congo to support a UN resolution to restore order. The Congo mission primarily used C-130s to deploy UN troops and evacuate U.S. citizens. The many remote regions in Africa required a complex network of staging and refueling bases that included 52 airfields in 33 countries to deploy 10,000 UN troops and provide for their sustainment.<sup>43</sup>

### Challenges of Peacekeeping Operations

Although today's U.S. and EU airlift capabilities could move similar loads within the continent more efficiently, the African airport infrastructure still does not permit large aircraft access to the vast interior regions. The Congo operations were of the largest airlift operations in Africa and revealed many challenges that the AU has also faced in recent peacekeeping operations.

First, self-sustainment of basic needs such as food, water, and fuel, is a mission requirement for military operations in Africa.<sup>44</sup> Airlift operations must be prepared to provide these needs throughout the duration of the operation.

Second, mission command of airlift operations necessitates a remote area communications capability.<sup>45</sup> ASF airlift programs must include training to manage and integrate airlift mission command with the related operational logistics needs of the mission.

Finally, austere or remote operations require aircraft dedicated to air transport operations.<sup>46</sup> Just as the United States has placed great emphasis on building and sustaining its airlift fleet over the years, the AU must view the development of a regional air transport capability as vital to operational reach in future AU and ASF missions.

Since 2002, the U.S. has been committed to developing the AAF, specifically its airlift arm. Afghanistan has many of the same remote geographical challenges as Africa, and feedback from the ongoing U.S. effort to build Afghan airlift capability is pertinent to efforts aimed at establishing an ASF air transport capability.

The first step of the U.S. effort in Afghanistan was an extensive planning and assessment phase to identify cur-

rent capabilities and define the future needs of the Afghan forces.<sup>47</sup> This planning phase was critical to presenting Afghan military leaders with an accurate picture of their situation so that they could make informed decisions about training and equipping Afghan forces to employ airlifters.

Another conclusion was that primary reliance on light (or assault) airlift capability was the correct match to support counterinsurgency efforts, given the limited resources and infrastructure throughout Afghanistan.<sup>48</sup> Finally, an effective program to build capability had to be resourced and sustained over the long term. The United States initially estimated a 6-year timetable to bring the AAF to self-sufficiency in 2012. However, funding and resource constraints plagued the effort and maintenance problems have grounded the older C-27A airlifters.<sup>49</sup>

The funding available for the AAF program has primarily come from the formerly titled Global War on Terrorism funds, but these funds were supplemental and not automatically renewed annually.<sup>50</sup> To support Africa's ASF, a steady funding source is needed for the extended time period that a program of this type requires.

### Recommendations: A Joint Solution

The framework for a successful effort to achieve regional ASF operational logistics self-sufficiency first requires trusted partnerships with the lead states in which the program is to be implemented. The next step is a comprehensive assessment to determine how to meet specific regional ASF needs within resource constraints. Finally, the implementation program must be a joint approach that addresses the full spectrum of transportation options. Airlift capability must be a part of this joint solution because it will enable the ASF to respond promptly to emerging crisis situations. However, airlift alone will not provide a cure-all to ASF logistics shortfalls. Rather, the solution requires a comprehensive approach that starts with airlift and integrates operational logistics efforts across all forms of transportation.

### Establish a Partnership in the Right Place

The five ASF regions are at different stages of progress toward an operational ASF capability. Initially developing a relationship with one ASF will establish a precedent of trust that can be a foundation on which to build partnerships in the other regions. The Economic Community

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<sup>43</sup> Gilles K. Van Nederveen, *USAF Airlift Into the Heart of Darkness, the Congo 1960-1978: Implications for Modern Air Mobility Planners*, Air University Press, Maxwell Air Force Base, 2001, p. 21.

<sup>44</sup> *Ibid.*, p. 57.

<sup>45</sup> *Ibid.*

<sup>46</sup> *Ibid.*

<sup>47</sup> Jennifer D. Moroney et al., "International Cooperation with Partner Air Forces: RAND Report MG-790-AF," RAND, Santa Monica, January 2009, p. 49.

<sup>48</sup> *Ibid.*, p. 50.

<sup>49</sup> Joshua Partlow, "Afghan Air Force Hobbled by Safety and Maintenance Problems," *Washington Post*, 3 July 2012.

<sup>50</sup> Moroney et al., p. 50.



*Burundi National Defense Forces soldiers walk down a dirt road to an assembly point in the countryside during a combined arms exercise on 26 June 2012. U.S. Marines and Sailors trained with the Burundi soldiers to prepare the unit for deployment in support of the African Union Mission in Somalia. (Photo by LCpl Adwin Esters)*

of West African States (ECOWAS) Standby Force is an example of the initial potential necessary to establish a program. AFRICOM is already working with ECOWAS and has established U.S.-taught logistics training classes under AFRICOM's Partnership for Integrated Logistics Operations and Tactics (PILOT) program.<sup>51</sup> Additionally, ECOWAS has plans to develop logistics capacity at the Kofi Annan International Peace Training Center in Accra, Ghana, and at one of the few functional African logistics depots in Freetown, Sierra Leone.<sup>52</sup>

### **Perform a Needs-Based Assessment**

Once a region has been selected, an assessment of operational logistics and transportation should be conducted to determine how to increase the ASF's capability to meet the mandate to deploy 1,000 personnel within 14 days to a regional location and sustain them. The assessment must account for all forms of transportation to determine how best to integrate multiple modes to meet deployment and sustainment timelines.

The U.S. Transportation Command (TRANSCOM) Joint Assessment Team (JAT) model could be employed to conduct this comprehensive assessment. The JAT comprises joint cross-functional experts in mobility, transportation, and logistics with the ability to assess

distribution network capability. Since its inception in 2006, the JAT has been successfully employed multiple times in the U.S. Central Command to assess mobility operations.

### **Choose Transportation Hardware**

Based on a capability assessment matched to requirements and resources available, identify the right types of transportation assets to procure. Although this decision is situational in nature, it is a good assumption that resource and funding constraints will not allow the purchase of military airlifters such as the C-27J Spartan, C-130J Hercules, or A400M, which range in cost from \$25 million to \$100 million each.<sup>53</sup> Rather, the choices for aircraft should be geared toward choosing the correct light or assault airlifter that can be efficiently integrated with ground transportation to meet deployment and sustainment requirements.

There are a number of off-the-shelf options for light airlifters. One example is the Basler BT-67, a converted DC-3 that can carry 36 passengers or 11,000 pounds of cargo over a range of 1,000 nautical miles and land on short airfields of less than 1,500 feet. Each BT-67 costs between \$7 million to \$10 million.<sup>54</sup> Purchasing 5 BT-67s, instead of a single C-130J, would exceed the

<sup>51</sup> "Fact Sheet: Partnership for Integrated Logistics Operations and Tactics (PILOT)," 20 February 2009, <<http://www.africom.mil/getArticle.asp?art=2696&lang=0>>, accessed 17 March 2011.

<sup>52</sup> Daniel Kolva, "The ASF and AFRICOM: Partnering for Peace in Africa," *Peace and Stability Operations Journal Online*, February 2011, p. 5, <<http://pksoi.army.mil/>>, accessed 10 April 2011.

<sup>53</sup> *Airbus Military A400M*, Jane's All the Worlds Aircraft, <<http://search.janes.com>>, accessed 10 April 2011

<sup>54</sup> *Boeing (Douglas) DC-3 Basler Turbo-67 (BT-67) Conversion*, Jane's Aircraft Upgrades, <<http://search.janes.com>>, accessed 10 April 2011.

ASF metric of 1,000 personnel in 14 days, estimating conservatively 3 to 5 aircraft running just 3 missions daily over 10 days.

### Implement Joint Logistics Training

Acquiring aircraft is only one aspect of developing an effective operational logistics program. Significant training and resources must be dedicated to crew training, mission command, aircraft maintenance, aerial port operations, airfield operations, ground and sea transport integration, and logistics management. Funding and resourcing for this training must be long-term and established in a program of record.

Programs such as PILOT and AFRICOM's Africa Partnership Flight leverage air logistics training capabilities in the U.S. Air Force's mobility support advisory squadrons.<sup>55</sup> They already have the expertise and capability to address many of these training issues, but they need to be resourced and integrated to support the goal of ASF logistics self-sufficiency.

A light airlift capability can transport personnel and basic sustainment commodities, but vehicles and oversized cargo must be transported by larger airlift or ground or sea transport. Thus, a joint integration plan for the ASF with U.S. Army, Navy and Air Force personnel could help improve the velocity and efficiency of deployment and sustainment efforts.

TRANSCOM's follow-on capability to the JAT, the Joint Task Force–Port Opening (JTF–PO) element, is also a relevant model for developing a training program for the ASF. JTF–PO comprises U.S. military personnel with the capacity to establish and conduct air, ground, and sea deployment operations. This specialized team reduces the seams between the change-over from air to ground or sea to ground transportation and vice versa.

This capability was proven in 2010 when the JTF–PO opened and operated the Port-au-Prince airport and seaport for the first 45 days following the massive earthquake in Haiti. The JTF–PO effectively managed logistics distribution nodes during one of the largest disaster relief responses in recent history.<sup>56</sup>

It has taken decades for the U.S. military to achieve effective joint operations. However, an ASF program that emphasizes a joint approach to operational logistics has the potential to allow the ASF to reap the benefits of joint operations much sooner, offering the AU a real chance at fielding a self-sufficient, self-sustaining security force.

The United States and the AU have shown a commitment to fostering security and stability on the Af-

rican continent through regional engagement. A fully functional ASF is an important step toward achieving that goal.

The primary ASF missions of crisis response, conflict resolution, and humanitarian assistance depend on the ASF's capability to deploy, sustain, and project logistics support. The lack of operational logistics and the resulting inadequate operational reach is the Achilles' heel that keeps the ASF from taking the next step to a becoming a fully functioning force. And the AU's regional security concept will lose momentum if the ASF cannot deploy or sustain its troops.

An innovative AFRICOM partnership with the ASF to develop airlift capability and improve integration of air, land, and sea transport can keep this momentum alive through judicious use of limited resources and funding. The implementation of an initial airlift program for the ASF will not solve all of its operational logistics challenges. However, AU member states will begin to have better control over their ability to respond to a regional crisis.

Success will be measured in years rather than weeks or months, but the process and the result will cultivate U.S. strategic partnerships in Africa and preserve access to an increasingly important region of the world.

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*Editor's Note: In cooperation with the Army Logistics University, Army Sustainment has implemented the practice of a double blind peer review policy for all articles appearing in its "Spectrum" section. The magazine's goal is to ensure that only well-researched, balanced, and thought-provoking articles are published. Peer review is an objective process at the heart of good scholarly publishing and is carried out by most reputable academic journals. As part of this process, our authors and reviewers both play vital roles in maintaining the high standards of Army Sustainment.*

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<sup>55</sup> Captain Brooke Brzozowska, "Week One of Africa Partnership Flight Wraps up," 23 May 2012, <<http://www.africom.mil/getArticle.asp?art=7729&lang=0>>, accessed 25 October 2012.

<sup>56</sup> Matthew Jones, "CRG Experience in Haiti," *Air Land Sea Bulletin*, January 2011, p. 5.