DISCLAIMER

The findings of this report are not to be construed as an official Department of the Army position, policy, or decision unless so designated by other official documentation. Comments or suggestions should be addressed to:

Director  
Center for Army Analysis  
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This effort provided support and analysis to a joint and interagency wargame on potential internal conflict in South Sudan. The analysis consisted of three parts: 1) Creating a database of violent incidents in South Sudan between 1997 and April 2011; 2) Creating and conducting a tabletop wargame to estimate the scale and cost of internal conflict in South Sudan; 3) Reporting the results of the wargame to an interagency conference on the “cost of conflict” in South Sudan.
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WARGAME SUPPORT TO USAFRICOM

SUMMARY

THE PROJECT PURPOSE

Determine the historical levels of violence of conflict within South Sudan to facilitate an assessment of potential contingency plans.

THE PROJECT SPONSOR

COL Stephen Mariano, G5, U.S. Army Africa.

THE PROJECT OBJECTIVES were to:

(1) Develop a database of historical violence in South Sudan between January 1997 and April 2011.

(2) Conduct a wargame using the violence database on a possible scenario for conflict in South Sudan in order to estimate the requirements for conflict prevention, conflict mitigation, and humanitarian assistance, based on the cost of conflict.

(3) Provide an input to an interagency conference on South Sudan, which was held at CAA in June 2011.

THE SCOPE OF THE PROJECT

The scope of the South Sudan Violence Database (SSVD) is a compilation of South Sudanese violent events caused by factors internal to South Sudan, such as elite political violence, intertribal violence, and violence due to criminal activity, between 1997 and April 2011.

THE MAIN ASSUMPTIONS

(1) Armed Conflict Location and Event Dataset (ACLED) database is sufficient for use as a basis for the South Sudan Violence Database and representative of the number of violent incidents in South Sudan.

(2) Most reliable reporting on violence in South Sudan will come from media and nongovernmental organization (NGO) reporting.

(3) The rainy season is from April-October, since there is a degree of variation in when these seasons occur.

THE PRINCIPAL FINDINGS are:

(1) Fighting between Sudan and South Sudan peaked in 2002; violence shifted to Darfur in Western Sudan beginning in 2003.
(2) Communal violence began to take root in 2004 and gradually increased through 2009. The year 2009 marked the return of Civil War-era violence levels.
(3) Based on insights from the wargame, a South Sudanese civil war caused by an elite pact breakup is projected to produce thousands of casualties and hundreds of thousands of displaced persons fleeing violence. The economic disruption would be severe, producing an international refugee crisis, as hunger would drive large numbers of South Sudanese to enter neighboring countries in search of food. Thus, the cost of conflict would be high.

THE PRINCIPAL RECOMMENDATIONS from the interagency conference on South Sudan held in June 2011 were:

(1) The U.S. Government should make advance preparations to mitigate the consequences of internal conflict in South Sudan.

(2) The US Government should assist South Sudan building military institutions in a way that will encourage the development of an ethnically diverse professional military

(3) The U.S. Government should inform South Sudanese elites of the dire situation that would follow an elite pact breakup.

THE PROJECT EFFORT was conducted by LTC Anthony Rush and Mr. Stuart T. Wilkes.

COMMENTS AND QUESTIONS may be sent to the Director, Center for Army Analysis, ATTN: CSCA-OA, 6001 Goethals Road, Suite 102, Fort Belvoir, VA 22060-5230.
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1 INTRODUCTION

1.1 Background

South Sudan is the world’s newest country. It has a land area of approximately 240,000 square miles, and its population is about 8.2 million people. Most if its people live by subsistence agriculture and herding. The main source of foreign exchange is oil exports.

In January 2011, South Sudan held a referendum on independence from Sudan, and voted overwhelmingly in favor. South Sudan declared independence from Sudan on 9 July 2011. South Sudan experiences continual low-level intertribal violence. During the Sudanese Civil War in the 1990s, the Sudanese Government successfully pitted one southern Sudanese tribe against others, provoking a major revolt in 1991. The UN mandate in South Sudan is coming to an end, though the Government of South Sudan desires a continued UN peacekeeping mission there.

There are formidable odds against successful governance:

(1) Ethnic division is marked. The majority Dinka tribe dominates the Government of South Sudan (GoSS). Nuer and Shilluk tribes resent Dinka dominance.

(2) The previous unifying “common enemy,” the Government of Sudan, has released its grip on South Sudan, and few unifying causes remain.

(3) GoSS revenue is derived from oil on Nuer lands.

(4) Administration education, communication, and transportation infrastructure is almost nonexistent.

(5) People live by subsistence agriculture and international assistance.

(6) The dominant terrain feature is the Nile River, and barge traffic is vital to the economy of South Sudan.

The Center for Army Analysis hosted an interagency conference on South Sudan in February 2011 to bring together the U.S. policy stakeholders in the military and interagency concerned with post-independence violence in South Sudan. The goal was to develop potential study objectives based on the needs of interagency decision makers and U.S. Army Africa.

1.2 Problem Statement

Create a database of the violent incidents in South Sudan between January 1997 and April 2011. Use that database to estimate the scale and cost of post-independence internal conflict. Determine how an internal conflict in South Sudan might manifest itself and what might be the magnitude of the human cost of that conflict.

1.3 Sponsor, Purpose, Objectives

This project was sponsored by COL Stephen Mariano, G5, U.S. Army Africa. The co-sponsor was CAPT Brian Whitten, U.S. Africa Command (AFRICOM).
The purpose was to determine the historical and post-independence levels of conflict in South Sudan to facilitate an assessment of potential contingency plans.

The objectives were to:

1. Develop a database of historical violence in South Sudan between January 1997 and April 2011.
2. Analyze historical trends to be able to project violence beyond July 2011.
3. Estimate the requirements for conflict prevention, conflict mitigation, and humanitarian assistance, based on the cost of conflict.

1.4 Literature Review/References

The first reference is the Sudan Human Security Baseline Assessment (HSBA) Project. The Human Security Baseline Assessment (HSBA) Project is an independent research project of the Graduate Institute of International and Development Studies to support disarmament, demobilization, and reintegration of combatants in South Sudan. It provides detailed reporting on armed conflict in South Sudan. The website is: [http://www.smallarmssurveyssudan.org](http://www.smallarmssurveyssudan.org).


1) Armed Conflict Location and Event Dataset (ACLED) is designed for conflict analysis and crisis mapping. It codes the dates and locations of violent events in over 50 developing countries, categorizing them by: Types of events (battles, civilian killings, riots, and other categories)

2) Actors (governments, rebels, militias, protestors, civilians)

3) Changes in territorial control

4) Fatalities.

1.5 Key Definitions

There are two definitions of importance to this project:

1) Communal violence: Defined as violence between tribes or other socioeconomic divisions, usually over resources or as part of a cycle of violence


1.6 Scope

The focus of the SSVD is on South Sudanese violence caused by factors internal to South Sudan, such as elite political violence, intertribal violence, and violence due to criminal activity between 1997 and April 2011. It will not examine violence caused by the Sudanese Civil War, attacks by
the Lord’s Resistance Army, or conflict caused by South Sudan’s neighbors either directly or by proxy.

For the wargame and interagency conference, the scope was to analyze the cost of a conflict arising from intra-elite conflict in South Sudan.

1.7 Assumptions

This project required the following assumptions:

1) The ACLED database is sufficient and representative of the number of violent incidents in South Sudan.
2) The most reliable reporting on violence in South Sudan will come from media and Non-governmental Organization (NGO) reports.
3) The rainy season is from April to October, though its actual beginning and ending will vary from year to year.

1.8 Project Process

The project was part of a process that helped the U.S. Government interagency group on South Sudan understand South Sudan’s security dynamics, so that they could better develop policy for South Sudan. As an outcome of an interagency meeting at CAA in February 2011, USAFRICOM requested an analysis on the “cost of conflict” in South Sudan. CAA first developed the SSVD to help CAA analysts understand the relationships and dynamics of conflict in South Sudan. These concepts were applied within the CAA tabletop wargame process to reflect those relationships and dynamics. The wargame run by Dr. Engelmann, Dr. North, and Mr. Wilkes in Stuttgart in May 2011 provided the participants in the June 2011 interagency conference with an illustrative example of a possible conflict in South Sudan, and the humanitarian impact of it.

To illustrate the development of the database, this report focuses on inter-elite conflict, since that had the most utility for the South Sudan wargame and interagency conference on South Sudan.

1.9 Essential Elements of Analysis (EEA)

1) What effect does violence have on population flows?
   a. Attacks leading to displacement.
   b. Lengths of time people are displaced.

2) What are the drivers of conflict in South Sudan?
   a. What conflicts are caused by competition for resources?
   b. What conflicts are caused by long-standing tribal animosity?
   c. What conflicts are caused by competition between elites?

3) Are South Sudan’s security forces sized and deployed to mitigate violence?
   a. What is the number of army forces required per 1,000 population?
   b. What is the number of police forces required per 1,000 population?
2 DATABASE CREATION AND OUTPUTS

2.1 South Sudan Violence Database Development Methodology

The South Sudan Violence Database comes from the ACLED database. After sorting out duplicate reporting as well as removing all incidents that occurred outside the borders of South Sudan, manual revisions were made.

The ACLED reports had to be manually corrected for location errors as well as capturing attrition data. In some cases, the report had to be confirmed by manually searching the internet and then cross-referencing the event using Google Earth in order to identify in which State the event occurred. Despite this effort, 162 events currently are not geolocated in a State due to inability to resolve the reporting.

Additional searching of events using Relief Web, a collection of NGO reporting, yielded additional events and corroborated or corrected ACLED entries. This required a manual search of relief Web reporting from 1997-2011. Over 20,000 reports were scanned using the keywords kill, wound, displace, and cattle.

Analysts used the ACLED as the initial basis for the SSVD, but many corrections and revisions were required to make the data suitable for use in the SSVD. Significant research was then conducted to correct and add to the event descriptions to make the database more accurate and comprehensive.

2.1 South Sudan Violence Database

The South Sudan Violence Database contains 1,244 recorded events spanning the time from January 1997 to April 2011 inclusive. It captures events from the Sudanese Civil War, the activities of the Lord’s Resistance Army, communal violence, and violence among elites. It contains the circumstances of 25,000 persons killed, 1.5 million persons displaced, and over 66,000 head of cattle stolen. It does not address deaths due to famine caused by displacement of other causes. The data is resolved to the State level to allow for geographical analysis.

Major actors include the Sudanese Armed Forces, the Sudanese People’s Liberation Army/Movement, tribes, elites, proxies, and illegal armed groups. A total of 204 entries were attributed to unidentified armed groups due to the imprecise nature of the reports.
2.2 Violence from 1997 – April 2011

Figure 1 Violence from 1997 — April 2011

Figure 1 shows the fluctuation in South Sudanese internal violence between 1997 and April 2011. This graph shows the sharp drop in violence after 2002 and before the increased intensity of the conflict in Darfur in 2003. The Comprehensive Peace Agreement (CPA) between the Sudanese Government in Khartoum and the breakaway South Sudanese Government in Juba began to be codified by the 2002 Machakos Protocol. This was the first of a series of agreements between Khartoum and Juba, culminating in the CPA in 2005.

- Chart depicts all recorded events that occurred in Southern Sudan from Jan 1997 – Apr 2011.
- Fighting between North and South peaked in 2002; violence shifts to Darfur beginning in 2003.
- Communal violence begins to take root in 2004 and gradually increases through 2009. 2009 marked the return of Civil War-era violence levels.
2.3 Attrition over Time

As Figure 2 shows, numbers of deaths and internally displaced persons (IDP) peaked in 2002, just as the number of violent incidents did.

Post-Machakos Protocol violence has fluctuated, but has remained at a low level compared to the pre-protocol period.

On an annual basis, there appears to be some periodic nature to the number of deaths in South Sudan in the post-CPA era.
2.4 Seasonality

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<th>Qtr2</th>
<th>Qtr3</th>
<th>Qtr4</th>
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<td></td>
<td></td>
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<td></td>
</tr>
</tbody>
</table>

Figure 3 Seasonal Variation in Violence

There is a distinct seasonal effect to historical violence in South Sudan. The time with the lowest violence is the end of the rainy season through the fourth quarter.

As one would expect of most human affairs, there is variation in these data. For example, the number of incidents was highest in the second quarter in only 6 of the 15 years shown. Also, in four of the years shown, the number of incidents was highest in the fourth quarter.
2.5 Geographical Distribution of Attrition

As shown in figure 4, the geographical distribution of the violence shows the distinction of various causes for violence.

The state of Jonglei contains the indistinct boundaries between many of the tribes of South Sudan, most importantly between the majority Dinka tribe and the Nuer. Elites from these tribes vie for control of the South Sudanese Government.

The lucrative oil fields of the Unity and Upper Nile states provide the financial asset on which the South Sudanese economy and government depend. Its distribution is continually a matter of conflict.

---

<table>
<thead>
<tr>
<th>State</th>
<th>Number of Events</th>
<th>Total Killed</th>
<th>Total Displaced</th>
<th>Cattle Stolen</th>
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<td>59032</td>
<td>1604</td>
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<td>East Equatoria</td>
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<td>3024</td>
<td>71222</td>
<td>3727</td>
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<tr>
<td>Jonglei</td>
<td>107</td>
<td>4654</td>
<td>93676</td>
<td>17743</td>
</tr>
<tr>
<td>Lakes</td>
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<td>24002</td>
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<td>8319</td>
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<tr>
<td>Unable to resolve</td>
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<td>3866</td>
<td>22402</td>
<td>387</td>
</tr>
<tr>
<td>Unity</td>
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<td>6906</td>
<td>471560</td>
<td>20008</td>
</tr>
<tr>
<td>Upper Nile</td>
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<td>33428</td>
<td>6381</td>
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<td>West Equatoria</td>
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<td>213600</td>
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<tr>
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<td>1244</td>
<td>25212</td>
<td>1512267</td>
<td>66277</td>
</tr>
</tbody>
</table>

- **Unity State** on a historical basis has been the most violent area in Southern Sudan due to fighting for control of the oil fields.
- **Jonglei State** is the next most violent area due to both communal fighting between tribal groups as well as extensive cattle raiding.

**Figure 4 Geographical Distribution of Attrition**

As shown in figure 4, the geographical distribution of the violence shows the distinction of various causes for violence.

The state of Jonglei contains the indistinct boundaries between many of the tribes of South Sudan, most importantly between the majority Dinka tribe and the Nuer. Elites from these tribes vie for control of the South Sudanese Government.

The lucrative oil fields of the Unity and Upper Nile states provide the financial asset on which the South Sudanese economy and government depend. Its distribution is continually a matter of conflict.
2.6 Attacks by Group

Figure 5 Attacks by Group between January 1997 and April 2011

This chart depicts the number of violence events attributable to major groups found in the South Sudan Violence Database. Military forces, armed tribes, and illegally armed groups account for the vast majority of violence events in South Sudan.
2.7 Distribution of Events by Classification

- 37% of all recorded events in Southern Sudan can be attributed to communal violence, fighting between elite factions, or other events in which violence occurred that was not related to the civil war, LRA, Darfur, Regional, and CPA Violations.

**Figure 6 Distribution of Events by Classification**

The most significant cause of violence between January 1997 and April 2011 in South Sudan not related to external causes such as the civil war or the Lord’s Resistance Army (LRA), is communal violence (25%), fighting between elite factions (6%) and other events (6%).
3 WARGAME SUPPORT TO INTERAGENCY DECISIONMAKING

3.1 SSVD and Wargaming Support for Interagency Conference

The SSVD has already contributed to one significant effort, an interagency conference on the “cost of conflict” in South Sudan. It provided an analytical basis for determining the number of displaced persons that a civil war resulting from an elite pact breakup would cause. This information gave the conference an understanding of the general scale of the humanitarian effort the international community would have to mount to deal with the consequences of such a war.

3.1 Wargame Methodology

**Figure 7 Wargame Methodology**

The wargame was set up and conducted in May 2011 at the USAFRICOM headquarters at Stuttgart, Germany by the team of Dr. Karsten Engelmann from CAA, Dr. James North from Center for Naval Analysis (CNA), and Mr. Stuart Wilkes of CAA.

The analysis as a whole assessed two scenarios; breakdown of elite pacts and communal violence. The wargame was used for the elite pact breakdown scenario to assess the impact of the violence on South Sudan, and to determine the international impact, which was substantial. The communal violence scenario was assessed by determining whether the South Sudanese security forces were numerically sufficient in each of South Sudan’s states to adequately police the regions they are assigned to, identifying the reasons they are not presently active in...
controlling communal conflicts over grazing land, cattle rustling, and other violent acts, and what additional training and enablers, such as communication and transportation assets, they would require to control communal violence.

3.2 Combat Resolution Tool

Figure 8 Combat Resolution Tool

The wargame was a simple tabletop game. Due to the vast distances in South Sudan, and the fact that the South Sudanese forces are mainly foot mobile, quarterly turns were used.

The Combat Resolution Tool is an Excel spreadsheet developed at the United States Army (USA) Command and General Staff College (CGSC), obtained from the United States Marine Corps (USMC) Command and Staff College in 2005-2006. It was used to determine the outcome of the battles, and the casualties each side suffered in them.

It produces “order of magnitude” results, suitable for course of action (COA) wargaming, and was adequate to develop a narrative for the purposes of the interagency discussion. It should not be used for more rigorous quantitative analytical purposes.

The tool uses menu selections to select the forces of the attacker and the defender, sums their respective combat power, adds a terrain effect, derives a force ratio, then generates the casualties and attacker advance rate for the day. The wargaming team used this tool to generate the casualty numbers for the battles of the war. These casualty numbers were then used to calculate the magnitude of the flow of refugees fleeing violence.

- History-based Excel tool developed by US Army Command and General Staff College and used for course of action Wargaming.
- Suitable for “order of magnitude” analysis in this case.
### 3.3 Elite Pact Breakdown

- Ethnic Pacts: SPLM/A policy to buy-off potential spoilers.
- SPLM/A viewed as Dinka-dominated organization.
- Breakup of SPLA as non-Dinka leaders seek ‘justice.’

- Anti-GoSS forces seize Unity oil fields and Malakal (Upper Nile).
- GoSS negotiates to isolate Nuer and Shilluk.
- South Sudanese Commando units decapitate Anti-GoSS leadership in Unity.
- Anti-GoSS disrupt oil production
- SPLA launches counter-offensives.

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**Figure 9 Elite Pact Breakdown Scenario**

The main scenario that was examined using the wargame was a civil war due to the breakdown in the Elite pact. A rebellion occurred based on the Nuer and Shilluk minorities strike to seize the oil fields in the state of Unity, and a critical city on the Nile, Malakal, the hub of the vital barge traffic. These actions are indicated by the red arrows.

The legend indicates the present violence level in each of the states, the cause of violence there, the present level of population to security forces, and the resultant number of security personnel per thousand population in the state named.

Initially, the government forces were surprised and overwhelmed, and their response was significantly delayed by their lack of mobility and supplies.

Subsequently, the remaining South Sudanese forces retook these areas in the counterattacks indicated by the green arrows.

The numbers in each province indicate, in order, the provincial population (in black), the number of security troops in the province that remain loyal to the Government of South Sudan (in green), the number of security troops in the province that rebel (in red), and the number of loyal security troops per thousand population in the province (in purple).
3.4 Total Cost of Conflict

In this scenario, the cost of the war was heavy, not so much due to the fighting itself, but for the social and economic disruption it caused. About 8,000 military casualties were inflicted, and nearly a quarter of a million people were forced from their homes by violence. The rebel capture of the internal port of Malakal disrupted barge traffic on the Nile River for about 3 months, strangling the South Sudanese river transportation network and causing masses of people to flee South Sudan looking for food because of the disruption of the river traffic.

The interagency group discussion covered measures the U.S. Government (USG) could take to discourage an elite pact breakdown (increased power-sharing, economic development to increase the size of the “pie”, and alternative methods of governance), and to prepare to respond to a major international refugee crisis.

3.5 Summary and Conclusions

S Sudan Internal Security Analysis

- Analytical results have been briefed to: CDR, DCMO/DCMA AFRICOM, and Director, CAA. All concurred with effort and results
- Emerging Findings:
  - Crisis-response to provide key support capabilities (ammunition and logistics) to SPLA in event of increased violence in S. Sudan
  - Deliberate assistance to build defense institutions in a way that will encourage development of a professional ethnically diverse military
- Identified USAID’s Conflict Assessment Framework as an alternative to the Joint Operation Planning Process (Ends, Ways and Means) that may be more appropriate for planning Phase 0 operations.
- Original Purpose:
  - It is important to understand:

  How the increased violence might manifest itself, impact it could have on the nascent country of S. Sudan, and Plans and activities the USG and other organizations should be prepared to implement to respond to and/or mitigate conflict.

Initial purpose of Analytical Effort has been achieved

USG has expressed interest in a combined wargame – pol/mil game to be conducted after independence

Figure 10 AFRICOM’s Summary of Analysis and Interagency Conference

CAA hosted and provided analytical support for an interagency discussion on measures the USG could take to respond to and mitigate violence in South Sudan. The SSVD provided informative relationships between persons killed and persons displaced, by different causes and types of violence. The U.S. Army CGSC combat resolution tool provided “order of magnitude”
casualties for an ‘elite pact breakup’ conflict. This CAA analysis led to a useful interagency discussion of violence in South Sudan and of the measures the USG could take to prevent or mitigate the outbreak of violence. This analysis was presented to the AFRICOM Commander and Deputy Commander for Military Operations to inform their decision making regarding South Sudan.

The SSVD and wargame efforts were a major contributor to the success of the July 2011 interagency conference on the “cost of conflict” in South Sudan. This conference included personnel from AFRICOM, the Army War College, the Department of State, the U.S. Agency for International Development, the Joint Staff J5, and the Marine Corps Combat Developments Command. They also provided insights into what additional USG activities would support conflict mitigation in South Sudan. They provided decision makers with analysis to support ongoing and planned activities. They helped build a common picture of South Sudan’s requirements amongst the USG interagency group.

Workshop members discussed different approaches to identifying drivers of conflict. US Africa Command briefed the US military joint doctrinal format of Ends-Ways-Means-Risk as a methodology for leader’s (both rebel and government) decision-making. USAID briefed its approach for Conflict Assessment. The latter approach involves identifying motives, means, and opportunities involving the entire population and key actors. Key to the mix of these factors are the resiliencies and grievances of the population which can be derived from a study of population identity, institutional performance and social patterns. Key actors within the population groups can then either mitigate or stoke violent actions. USAID suggest performing activities that might influence resiliencies and grievances by enhancing institutional performance and influencing attitudes of both the general population and key actors. There was some discussion among Africa Command and Joint Staff participants of the potential merits of the US military applying the USAID conflict assessment approach to support military planning for Phase 0 security operations. Day one concluded with US State Dept. and US Special Envoy to Sudan providing a summary of their goals and objectives (similar to Army lines of effort) for S. Sudan. There was not sufficient time for workshop participants to discuss the USAID goals and objectives in detail.

On the second day, workshop participants discussed a model for security sector reform and security force assistance that suggests an emphasis on aspects of defense institutional development to build a foundational defense management capacity, which will ultimately allow the building of defense force capability in individuals and units. The development of force capability is limited by the capacity of both defense institutions and the educational capacity of individual soldiers. Based on this and the findings from the game, the workshop suggested activities be divided into crisis and deliberate responses to internal conflict in South Sudan. For crisis responses or reactions to internal conflict, the collective workshop perspective was that the SPLA would need enabling support, mainly to provide logistics and mobility. Specifically, this would include provision of ammunition and other logistics to SPLA units involved in conflict, and provision of barge capability as a platform for moving logistics to SPLA units and as a platform for infantry units to secure the Nile River.

For more deliberate responses, the collective workshop perspective was that the Government of South Sudan’s defense institutions would need long-term assistance to build capacity to manage the SPLA, to provide basic education to soldiers, and to provide training in dual-purpose occupations/skills. Provision of basic education in math, reading, and writing will enhance the
ability of the SPLA soldiers to increase their professional capacity. Providing training in dual-purpose occupations/skills including engineering, medical, civil affairs, and military police has multiple benefits. First, this training would enhance the SPLA’s ability to show its usefulness to the local population by performing civic action projects or improving their coordination and assistance to the local population. Second, this training provides SPLA soldiers with useful skills in occupations following their military service. Finally, this training supports disarmament, demobilization, reintegration (DDR) efforts required for the SPLA. The benefits of enhancing defense institutions are to ensure civil control of a military that is adhering to the rule of law and becoming a professional force. Workshop participants assessed that various ethnic groups in S Sudan must receive or perceive ethnic equity to have any possibility of successful security sector reform.

The conference participants developed two recommendations for US policy regarding the prospects of internal conflict in South Sudan:

(4) The U.S. Government should make advance preparations to mitigate the consequences of internal conflict in South Sudan.

(5) The US Government should assist South Sudan building military institutions in a way that will encourage the development of an ethnically diverse professional military

(6) The U.S. Government should inform South Sudanese elites of the dire situation that would follow an elite pact breakup.
APPENDIX A  PROJECT CONTRIBUTORS

1. PROJECT TEAM

   a. Project Director:

      LTC Anthony Rush

   b. Team Members:

      Dr. Karsten Engelmann
      Mr. Stuart T. Wilkes

2. PRODUCT REVIEWERS

   Mr. Russell Pritchard, Quality Assurance
   Ms. Julie Allison

3. EXTERNAL CONTRIBUTORS (If any)

   Dr. James North, Center for Naval Analysis

   Representatives from USAFRICOM, the Office of the Secretary of Defense, the Department of State, the U.S. Agency for International Development, and the Central Intelligence Agency.
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APPENDIX B  REQUEST FOR ANALYTICAL SUPPORT

REQUEST FOR ANALYTICAL SUPPORT

Performing Division: OA
Account Number: 2011026
FY: 2011

Acronym: AFRICOM WG SPT
Start Date: 23-Oct-10
Est Compl Date: 30-Sep-11

Title: WARGAME SUPPORT TO USAFRICOM
Category: Analysis of insurgencies/Counterinsurgencies
Method: In-house

Sponsor (i.e., WCS-2) Name: USAFR
Office Symbol: USAFRICOM

Phone: (314) 634-5169  E-Mail: karen.caesar@maxwell.af.mil
POC: Dr. Karen Caesar

Resource Estimates:

a. Estimated PFM: $0.00

Models to be Used: None

Wargame Support

Description/Abstract:
CAA will provide outreach support and analysis to support a joint and interagency wargame of potential conflict in Southern Sudan post-July 2011. Analysis will consist of two parts: a) estimating scale and cost of intertribal conflict within South Sudan; b) table top wargame to support USARAF. Study will be co-sponsored by both USARAF and USAFRICOM.

Study Director/POC Signature: Phone: 703-806-5679
Study Director/POC: Mr. Stuart T Wilkins

PART 2

Background/Statement of Problem:
Sudan will complete a referendum in Jan 2011 which could lead to the secession of Southern Sudan. USARAF and AFRICOM have requested analytical support to inform them of the potential scale, scope, and current conflict in Southern Sudan post-referendum wargame participants will include USAFRICOM, USA, Joint Staff, Department of State, USAID, and other key interagency representatives.

Scope:
This study will examine the most likely scenario of conflict in South Sudan after the January 2011 referendum. The initial analysis and table top exercise will analyze conflict breaking out among major tribes and power brokers in southern Sudan. The scenario will allow the USAFRICOM and other organizations to verify existing contingency plans and prepare for unforeseen challenges.

Issue:

Milestones:
End of April 2011 - Conflict Mitigation Workshop and presentation of initial results
17 Jul 2011 - Table top wargame

Signature
CAA Division Chief Signature: COL Steven A. Stodard
CAA Division Chief Name
Sponsor Concurrence Signature: Date
Sponsor Name (COL/DADivChief/G0/SEI): COL Stephen Mariano

Print Date: 21-May-12
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## APPENDIX C  GLOSSARY

<table>
<thead>
<tr>
<th>Acronym</th>
<th>Definition</th>
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<tbody>
<tr>
<td>ACLED</td>
<td>Armed Conflict Location and Event Dataset</td>
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<tr>
<td>CAA</td>
<td>Center for Army Analysis</td>
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<tr>
<td>CGSC</td>
<td>United States Army Command and General Staff College</td>
</tr>
<tr>
<td>CNA</td>
<td>Center for Naval Analysis</td>
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<tr>
<td>COA</td>
<td>Course of Action</td>
</tr>
<tr>
<td>COIN</td>
<td>Counterinsurgency</td>
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<tr>
<td>CPA</td>
<td>Comprehensive Peace Agreement</td>
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<tr>
<td>DOD</td>
<td>United States Department of Defense</td>
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<tr>
<td>HSBA</td>
<td>Human Security Baseline Assessment</td>
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<tr>
<td>IW</td>
<td>Irregular Warfare</td>
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<td>GoSS</td>
<td>Government of South Sudan</td>
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<tr>
<td>LRA</td>
<td>Lord’s Resistance Army</td>
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<tr>
<td>NGO</td>
<td>Nongovernmental Organization</td>
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<tr>
<td>SPLA</td>
<td>Sudanese People’s Liberation Army</td>
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<tr>
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<td>Sudanese People’s Liberation Movement</td>
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<td>SSVD</td>
<td>South Sudan Violence Database</td>
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<td>USA</td>
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