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ENGAGEMENT OR MARRIAGE: THE CASE FOR AN EXPANDED MILITARY MEDICAL ROLE IN AFRICA

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Engagement Or Marriage: The Case For An Expanded Military Medical Role In Africa

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ABSTRACT

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This paper examines the role of health in achieving the national objectives of the United States, and the concept of medically engaging Africa to combat transnational disease, avert humanitarian disasters and build medical self-sufficiency. The case for engagement in Africa is also presented in the context of shared national interests - security, prosperity and democracy, and the evolution of these institutions as health enablers. An analysis of current U.S. health policy reveals a strategic imbalance of means for supporting program ends and ways. The contentious issue of Foreign Aid, central to health related programs, is discussed, as is the need for greater resources and innovation to ensure the health of an increasingly interdependent global society. A discussion of the U.S. Security Strategy of engagement, and the military strategies of shaping, responding and preparing, establish the context for employing military medicine as a supplementary means to offset the shortfall identified in the analysis. The U.S. European Command's medical engagement program, called MEDFLAG, provides a proven model for this concept. This work offers program revisions for the MEDFLAG to improve efficiency and effectiveness, including the selection of host countries, targeting of medical needs in Africa and the transition of the exercise from individual care to health care systems.

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PREFACE

As is the custom, my military family has borne the sacrifice for the completion of this work. Like the other missions that have taken me from my family, this project claimed a large measure of my time and energy. My lovely wife Katharina, whose love, support, understanding and infinite patience underpinned this endeavor, should be listed as coauthor. My sons Beren and Maximilian, and my new daughter, Anastasia, have taught me the value of balance and being a good Dad. My good friends, Lee and Wanda Staab, reminded me I had an Army family that cared through some tough days. My partner, Jim Powers, who somehow agreed to work with me on this project, renewed my faith in old colonels. My seminar mates, as varied as the Army itself, taught me more than any five SRPs, and they will always be at with me. Above all, I thank God for bringing me to this point of learning and service, so that I may lead well and serve my nation with honor.

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ENGAGEMENT OR MARRIAGE: THE CASE FOR AN EXPANDED MILITARY MEDICAL ROLE IN AFRICA

We live in an era of change. In this unprecedented age, everyone thinks themselves correct in their estimates, plans and prognostications. After all, nothing exists to prove or disprove the multiple hypotheses about the new role of the U.S., the state of the world or the new Global Community. The problem confronting us, however, is the lack of consensus in numerous crucial areas, such as foreign policy and aid, the role of military power and how we pursue our national interests. The resulting political paralysis and lack of decisiveness sends a potentially damaging message to the rest of the world - that the U.S. cannot or will not assume the leadership role required of it in the new Global Order. We appear consumed with the domestic agenda, reluctant allies, and spectators in the arena of international developments, grounded in the simple economics of self-enrichment. If we are to lead the world, we must establish an international agenda that rejects isolationism and embraces the opportunity to exert a profound, positive influence. A non-contentious issue, good human health, could provide a test case of U.S. leadership, and provide focus and relevance for today's military.

PURPOSE

This study examines current national policy and selected programs regarding health related engagement activities, in both the Department of Defense (DoD) and the Department of State (DoS) under Function 150 (Aid to Nations), International Affairs, to demonstrate a strategic imbalance in ends, ways and means, and advance the thesis that military medicine constitutes an immediate, effective supplementary asset for improved pursuit of our national security strategy, as well as our national health policy. This study will review national policy regarding health related foreign aid, the national strategy of engagement, and the military strategy of "Shaping" to build a context for this work, as we seek new relevance for military. A current medical engagement program, called MEDFLAG,[1] employed by the United States European Command (USEUCOM) in their African Area of Responsibility (AOR), serves as the base model for an expanded military medical role in pursuit of our national interests. This study will also discuss current and proposed capabilities of MEDFLAG, and why the African continent deserves a greater measure of medical engagement in the context of our vital national interests of security, prosperity and democracy[2], as well as supporting the national policy of protecting human health and slowing the spread of disease.[3]

By aggressively pursuing this policy - protecting human health and slowing the spread of disease in the world - all other American national interests become more attainable. World

health offers the U.S. an unsurpassed opportunity for international leadership in a crucial area, as well as demonstrating a use for military medical power that directly supports our national interests. Trained, ready and deployable, military medicine represents a powerful, proactive alternative for making long-term investments in peace. It's a safe bet the global agenda for the next millennium will be shaped largely by the imperative of responding to Third World crises. Why not consider health related issues as a priority in a proactive manner? Engage medically, particularly in Africa, where the threats of disease and epidemic are greatest - not only to the U.S., but the entire globe.

In the West, the tendency exists to try and forget Africa, as though it were an embarrassing romance. But the needs of the continent will not respect borders, nor quietly resolve themselves. The world has poured resources, effort and influence into the continent only to see more war, lessened economies and increasing numbers of brutalized civilians than ever before. Do we simply walk off? To do so would be at our own peril. Confused, contradictory, conflicted and ever changing, the current state of Africa defies simple descriptions. We don't relate to their history, culture, economy or politics, yet form a symbiotic health circle. Pummeling the forces of change in Africa will not mitigate the change. Instead, we need to gain a rudimentary appreciation for the continent and its peoples and seek an opportunity for lasting positive influence. Using the lowest human common denominator, health, an alternative to overt force or contentious policy, the U.S. may engender trust and lasting friendship with African nations despite political and economic evolution.

Realpolitik and its paradigms will not provide the answers needed in this case. New uses for the military, implying new roles and missions, and complimentary innovations in other forms of national power, will forerun our final definition of Globalism and what it means to the defense establishment. While the academic debate on our new grand strategy could take generations, the U.S. cannot wait. As General (Retired) Anthony Zinni, USMC, former Commander-in-Chief (CINC) of the U.S. Central Command, said in a recent Washington Post interview, "A million people are going to die in Africa this week, and nobody cares."[4] Hyperbole not withstanding, the U.S. must move to address the issue of African health. The habits of the Cold War, however, remain. In a recent article in ARMY magazine, entitled "Peace Through Cooperation," the author states, "security assistance is a major component of U.S. foreign policy, whose primary aim is world peace." The article focuses on training and equipping allies for war, and little else.[5] Preparing only to fight the next war exemplifies the need to rethink engagement in terms of what else we can do to maintain our relevance. Granted, while our National Military Strategy says our core competency is "to fight,"[6] our post-Cold War paradigm must demonstrate far greater

flexibility and applicability at the strategic level. This point has particular relevance in the search for increased means for health engagement.

Historically, the United States military concerns itself with product - victory in arms - over process. As we rethink the role of military power, perhaps an anecdotal exchange between then General Colin Powell and Secretary of State Madeline Albright portends the future of Armed Forces. Ms. Albright asked General Powell what good it did to have a first-class military if we didn't use it. From Powell's frame of reference, he "almost had an aneurysm"[7] at the question, but from Albright's, it seemed perfectly reasonable - use the military for more than war. Like General George C. Marshall after the Second World War, we will need a whole new skill set for this new age, where negotiations replace orders, consensus replaces commands and we learn cooperation with like-minded organizations rather than competition. In any case, we cannot simply watch and depend on our Cold War success in this new age, as relevance to globalism may greatly influence our form and function as a military.

NATIONAL SECURITY STRATEGY

The following discussion and analysis of national objectives, policy and programs will establish the context for the application of military medicine in support of overall national objectives. Before we can articulate the need for greater medical intervention in Africa specifically, we must examine the overall program. Resources for the health programs embedded in the Aid to Nations Program have proportionately gone the way of the program at large - down - and health does not appear a well developed or resourced vital U.S. interest.[8]

The 1999 National Security Strategy (NSS) establishes three core objectives that articulate our strategic direction for the new millennium. They are: enhancing America's security, bolstering our economic prosperity and promoting democracy and human rights abroad.[9] From a medical perspective, in each of these objectives one finds the underlying need for health and wellness, for without them, security crumbles, economies fail and democracy becomes irrelevant. The enabler to the achievement of objectives, health, comprises the basis upon which Mazlow built his hierarchy of needs. If not met, the physical or biological needs of man precede all other motivations. When people are hungry or ill, democracy or wealth have little meaning. Even security and safety yield to the power of physical needs. Knowing this, it is interesting to compare the acknowledgement of the impact of disease and epidemics, particularly AIDS, tuberculosis and malaria, which can " destroy human life on a scale as great as any war" and "undermine hard-won advances in economic and social development,"[10] with the low levels of funding and support health programs currently receive. In fact, health

programs continue to shrink as the threat grows. The NSS further declares that diseases and health risks can no longer be viewed solely as a domestic concern, and can profoundly affect our national security. This impression is shared by numerous national governments.[11]

Fortunately, the emerging realization that health matters constitute a threat to security, and not just a matter of public health, is borne out by a recent, incisive Parameters article by Paul J. Smith. His thesis, that disease can devastate an economy, reduce social stability and incite political collapse, directly supports this study. Smith additionally explains how transnational disease now represents a greater danger to some countries than the traditional state based, military threat.[12] Little active national debate has followed this concept, but the issue now confronts a larger audience. Intervention in other transnational threat areas, such as drugs and crime, has a great deal of historical precedence. The likelihood of military medical priorities remaining focused on peacetime health care as opposed to medical engagement remains great, unless a clear demonstration of value added occurs. This concept will require a reformation of the military medical paradigm, as well as national security policy.

NATIONAL POLICY ON HEALTH

The NSS identifies the health of Americans, and in fact the health of an increasingly interdependent global society, as a vital national interest, and clear national objective. The current national policy of protecting human health and reducing the spread of infectious diseases supports the attainment of this objective. Our policy serves to reduce the direct threat to Americans from diseases, while understanding healthy international populations provide an essential underpinning for economic development, democratization and political stability.[13]

A quick explanation of terms may be in order at this point. As previously stated, this study will demonstrate an imbalance of ends, ways and means in the pursuit of our national strategy of health. By this, we mean the ends, or program objectives, are pursued by various courses of action, called ways or strategies, using resources, or means, to achieve the end. Means can be any instrument, not just money or people, used to gain the desired end. Ways are simply the various techniques in which means are employed. In short, a strategy equals ends plus ways plus means. An imbalance of ends, ways and means occurs when any of the components of the strategy are missing or inadequate to accomplish the objective or end state.[14]

The NSS and U.S. Strategic Plan for International Affairs (IASP) provide clear insight to our policy, and a quick review of the implementing document, Guidance on the Definition and use of the Child Survival and Disease Programs Fund,[15] dated April 10, 2000, and the U.S.

Agency for International Development (USAID) Strategic Plan,[16] dated January 1999, indicates excellent continuity from policy to execution level. The USAID is the primary administrator of foreign aid to nations, and these documents articulate the ends, or objectives, and ways, or approaches, to achieve the goal.

STRATEGIES

Specifically, the strategies, or ways, employed by the nation to achieve the end of international health include:

- -Control epidemic and mortal diseases. Strengthen international health surveillance, early warning, and response networks. Promote and sponsor medical training and scientific research for new medical treatments through bilateral and multilateral organizations. Further scientific cooperation on health issues.

- -Increase international communication and cooperation to fight disease. Develop and coordinate a sustained effort to enlist support from other nations, international bodies, and the private sector to raise the level of priority accorded to HIV/AIDS and other infectious diseases. Launch diplomatic initiatives to increase foreign government commitment to combating HIV/AIDS and other infectious diseases.

- -Encourage investment in basic health in developing nations. Expand environmental health programs and strengthen public health infrastructure to combat new and reemerging diseases. Support NGO and PVO capacity to improve health delivery systems.

- -Emphasize maternal health and child survival in target countries, generally through programs closely linked to population and family planning.

- -Reduce the spread of animal diseases and pests that are risks to human health.[17]

MEANS

The programs and resources (means) provided for the strategies (ways) listed above are the Child Survival and Disease Program Fund, under Function 150, International Affairs, the Department of State (DoS), and two adjunct programs under the Development Assistance Program and the Development Fund for Africa. These three programs received $1.789 billion in FY 1999, and $1.848 billion in FY 2000. $2.1 billion has been requested for FY 2001. Child Survival and Diseases alone received $724 million in FY 2000 and will request $659 million in FY 2001.[18] Additionally, the new Infectious Disease Initiative received $54 million in FY 2000, and the Global Assistance Vaccine Initiative, also new for FY 2001, has $50 million requested.[19]

While no de jure threshold exists on the amount of resources the U.S. could contribute to international aid programs, the issue of the provision of health related aid to nations while many

Americans have needs unmet by our current health system creates instant friction. The de facto limits to health spending are remarkable by their annual reduction, due to inflation and program reductions. It appears the political aspects of world health are subordinate to domestic needs, or political paralysis. The question of investment in a world "health assurance" program that could potentially obviate epidemic and disease in the U.S. remains unanswered.

ANALYSIS

Does the current health policy strategy deliver efficient and effective, worldwide results? This question is problematic for a number of reasons. First, beyond dollars spent, few quantifiable metrics can be attached to programs. Note the requirement to develop indicators in one citation from the USAID Strategic Plan, 1999, which states:

> SS05 (Strategic Support Objective), which has the stated goal of reducing mortality by infectious diseases by 10% by the year 2007... requires developing a standard core of process and intermediate indicators.[20]

Second, subjective terms much as "Reduce," "Increase," "Develop," and "Improve" define goals rather than quantifiable expressions.[21] Because of this practice, hard data remains elusive in many assisted countries. Opposition to aid programs has little difficulty in portraying an inefficient expenditure if results can't be measured. This fact alone erodes public support for health programs. The British Medical Journal advocates advanced criteria and methods to evaluate success before aid program initiation; therefore, the metric problem appears worldwide.[22] Two notable exceptions to this situation exist. An improved global infant mortality rate, from 97 per 1000 births in 1985, to 77 per 1000 in 1995, and immunizations for childhood diseases from 37% in 1984 to "an estimated" 80% in the early 1990s, are directly attributable to USAID.[23]

Even with questionable metrics, our national investment in international health appears worthwhile, albeit under funded. In fact, the bulk of periodical literature surveyed speaks of a need for much greater investment (means) in health related foreign aid. For example, U.S. Representative Sonny Callahan (R-Al) wants more money for immunizations and HIV research and treatment.[24] Vice President Al Gore has spoken out for increased funding for HIV and infectious diseases,[25] while United Nations (UN) Secretary General Kofi Annan continues to chide the United States for its low levels of foreign aid.[26] It appears unlikely that a broad consensus, including the likes of Republicans, Vice President Gore and Kofi Annan, could occur on any issue, but health unites even these polar interests.

Perhaps this explains the problem. The means available to support the ends of protecting human health have, in real dollar terms, dropped 40% since the mid-80s, as has the total International Affairs budget.[27] Like so many other Cold War programs, aid to nations has floundered in the age of American sole superpower status, as we struggle to define both our leadership role and how to pursue our interests in the new world order. As we have seen, many voices call for expanded foreign aid; this in an age when our total commitment to international development comprises less than 1% of the Gross National Product (GNP), or $22.3 billion. This figure represents 17% of total world contributions. In 1991, developmental assistance provided by the major industrial countries reached its zenith at $70 billion.[28]

Here's a specific medical example. Feeling the pinch of inflation and the FY 2000 rescission of funds to USAID (0.38%), such central health engines as The American Schools and Hospitals Abroad (ASHA) program, which serves over 40 schools, hospitals and libraries in the Mediterranean and African region, loses spending power each year. The 40% loss in real dollar purchasing power since 1985, coupled with direct reductions in funding, has reduced both services and acquisitions, materially reducing the production of quality health care professionals for the region. The program is threatened due to dwindling support in Congress, and lack of a champion.[29]

Today, the world's advanced industrial democracies allocate less than 0.25% of their GNP to foreign assistance (all categories), or 50% less than they provided in the early 1990s. It appears our leadership is being followed. If one accepts disease and epidemic as a security threat, how does government rationalize the hundreds of billions spent on national defense and the $1.84 billion spent on international health? Ends, ways and means are out of balance. Death, disease and epidemic costs in the Third World alone require a tenfold increase in means.[30] If governments around the world increasingly consider public health problems a security challenge, does an exemplary $280:1.84 billion ratio in defense to international health spending by the U.S. demonstrate leadership and commitment? Absolutely not! Our strategic rhetoric does not match the means provided to address the health threat at the national level.

Some argue that the only way to end what has been called the "1% Solution" is to develop a new national consensus that sees the international affairs expenditures as part of the national security budget, because failure to build solid international partnerships to treat the causes of conflict and transnational disease will mean more costly interventions in the future. Remarkably, at a time of prosperity and surplus, why can't congress fund a non-military component of national security?[31] Apparently, few strategic leaders in the United States stand prepared to expend the political capital or other resources to reshape the governmental or

popular culture regarding health in other than crisis terms, particularly with regard to Africa. Simply stated, reduction of total aid programs will result in proportionately less means for health. Africa's share must, therefore, decline at what might appear a critical juncture. The current health crisis in the Democratic Republic of the Congo, where total health capacity threatens to collapse due to war and disease, hardly represents an exception to a persistent need for support;[32] nor do the American people oppose increased health related aid programs. Quite the contrary - fifty-nine percent of Americans favor foreign aid, and 8 of 10 want more funds spent on child health programs.[33] World consensus on the importance of health appears attainable with strategic leadership from the United States.

Americans understand the world state of health could decline even more, and the means to combat disease will become even more expensive. Supporting this supposition, drug-resistant strains of malaria and tuberculosis, already challenge an economically ravaged Africa, not to mention HIV, and its effects. Despite genome research and Western biotechnology advances, resulting Third World social, political and economic chaos could minimize use of medical advances for years, and pose a direct threat to world health every time an airplane leaves Africa. Looking through 21st century Western eyes, it will become easy to miss the 2 billion people still caught in 19th century health conditions, with 18th century civil infrastructure. Worse yet, terrorism and conflict among and between poverty-ridden nations becomes almost inevitable, as we will see in a later section of this study. We can either pull these nations forward, or they will pull us backward.

Yet another aspect of the current method of providing aid to nations for health programs deserves mention. The lack of a central, "umbrella" organization to oversee the various means allocated to the pursuit of aid demonstrates a structural flaw in the strategy. One of the main difficulties in mobilizing all available national means to achieve world health is the lack of centralized control of programs. Numerous mandates, programs and organizations involved in the process, with the best of intentions, act independently. Crises withstanding, proactive health programs at the national level have no synchronization agency.

GEOSTRATEGIC FACTORS

Why would the U.S. engage Africa? Beyond the current administration's strong commitment to African development, and the cultural ties with more than 15% of the American population, many very practical political, economic and military reasons exist to engage and shape the continent. Politically, African nations represent a strong voting block in the United Nations, and the success of democracy in many of the emerging nations could heavily influence

transnational threats such as narcotics trafficking, terrorism and environmental degradation. Economically, Africa represents an essentially untapped market of over 600 million people, potentially creating thousands of jobs in the United States. Rich in raw materials, human capital and agriculture, over 16% of U.S. oil imports come from Africa, and the potential exists for this number to surpass imports from the Persian Gulf by 2010. The overall trade balance for many countries expands at over 7% per annum.[34] Militarily, the continent's conflict prevention, management and resolution depend on apolitical, professional and accountable forces. African armies should obviate the need for international intervention and humanitarian assistance, a role which the Western powers have traditionally played and financed. Unhappily, the African military has, in numerous cases, been little more than a parasite, feeding off the civilian population, or an instrument of political terror.[35] Reforming the military could obviate the necessity for intervention, both humanitarian and economic, by creating stability and conditions for national growth and development. But the most compelling reason for our engagement in Africa trivializes the foregoing, and strikes at the very existence of our nation, as we know it-disease, epidemics and bio-terrorism.[36]

New and emerging infections such as drug resistant tuberculosis and the Ebola virus can move with the speed of jet travel, remain undetectable with current technology until out of incubation, and possibly destroy American populations as widely as the Black Plague epoch in Europe. At the writing of this paper, yet another outbreak of Ebola consumes more lives in Ghana.[37] Disease in Africa transcends a Westerner's ability to understand, such as the 150 million documented annual cases (12% of all patients presenting for care) of malaria, or 5,500 AIDS related deaths daily.[38] Fundamental American values, such as a respect for life and an aversion to human suffering, without regard for the importation of disease accidentally or as a terrorist act, demand action. President Clinton clearly states, "helping prevent nations from failing is far more effective than rebuilding them after an internal crisis."[39] By inference, prevention of catastrophic disease, domestically and internationally, is far more effective, and humane, than dealing with an epidemic in a reactionary manner. The need for a proactive, focused military medical supplement to national engagement, in conjunction with other Departments and programs appears axiomatic.

AFRICAN HEALTH

Looking specifically at health in Africa, the needs surpass imagination. In some countries, up to 50% of children under the age of five will die. The national average for death before five years is 16.3%. Life expectancy is 51 for the average citizen. Immunizations for children for

measles, diphtheria, pertussis and tetanus average about 55%. In measuring access to health, 15 of 48 countries can't provide the World Bank any data. Population per physician ranges from 53,986:1 in Niger, to 3556:1 in Guinea.[40] Most Western nations have eradicated polio, but 678 new cases have been documented on the African continent so far in 2000.[41] A social dimension exists which exacerbates the health problem. Much of the population has no concept of disease pathways, human behavior and infection. Eliminating standing pools of water alone could reduce malaria, but the people aren't trained or mobilized to attack the disease in this way. New approaches are needed to obviate this sort of threat. An entire health system, beginning with individual health and wellness through networked health delivery systems, requires establishment. In Africa, health is neither a social or personal value until it is lost.[42]

A recent African malaria summit held in Abuja, Nigeria, pronounced that over 1 million Africans die of malaria each year, with a resulting drop of annual economic growth of 1.3%. Jeffery Sachs, director of Harvard's Center for International Development, indicated that the $200-$300 million spent annually on malaria programs must be raised to at least $1 billion, particularly in light of new drug resistant strains of the disease that could be even more difficult to treat. While President Clinton has proposed $1 billion in tax credits for drug companies in the 2001 budget to encourage the development of vaccines, no strategy for distribution, storage or immunization exists, nor does funding for the medicine appear in the USAID budget or under any other program. Again, an imbalance of ends, ways and means exists to conquer malaria, a worldwide disease of incredible proportion. Sachs has proposed that the western democracies pledge to buy the malaria vaccine, once developed, for the 25 million African children born each year.[43]

U.S. Senator Patrick J. Leahy (D-Vt) has proposed legislation to nearly double the United States' contribution to public health through immunizations and improved distribution of vaccines. His hope is that American leadership in this area will inspire other nations to increase their commitment.[44] As presented earlier, it appears the world community follows our lead in aid to nations, and solutions to health challenges appear forthcoming. The formula seems illusively simple- according to Nils Daulaire of the Global Health Council, only eight conditions account for 80% of the difference in health in developing and undeveloped countries, and six of these are infectious diseases: AIDS, Tuberculosis, malaria, measles, pneumonia and diarrhea. The other two, family planning and safe pregnancy, contribute to Africa's high infant mortality rate. The eight conditions can be dealt with at a cost of about $15 per person per year in those countries.[45] Again, the possibility exists for drug resistant strains of malaria and tuberculosis to

emerge from undeveloped countries and ravage the United States. Military medicine, which excels at disease detection and control, could contribute immensely in this cause.

Africa's piecemeal approach to medical care, uneven distribution of capabilities, particularly between urban and rural citizens, lack of a genuine private sector and acute shortfall in primary care have caused crisis medicine to become routine. Many Africans rely on healers and homeopathic medicine men, and refuse to submit totally to Western style medicine, despite its displayed efficacy. Patient care systems are often nonexistent, and the international community often fails to coordinate their well-intentioned support with local providers and governments. The resulting loss of momentum has frustrated donor nations, but the absence of medical infrastructure will continue to confound relief efforts.[46] It would seem apparent that independent aid, applied in a vacuum and in the wrong mix, would fail. Why would anyone be surprised?

No discussion of the state of African health, and the need for greater resources to meet the needs of the population, has meaning without the discussion of war on the continent. The potential for war, conflict and insurgency continues to drain the available medical resources and, in some ways, medical capability represents a form of wealth between the haves and the have-nots. Political, tribal, ethnic and religious wars abound, and since independence, war has been a way of life. Often fought over the most fundamental issues, such as the land one farms (as Leakey reminds us)[47], the destruction of medical infrastructure and the exhaustion of supplies has elevated diarrhea to the status of "dread disease" because simple electrolyte replacement exceeds local capabilities. More importantly, it appears contemporary war has become an exclusively Third World phenomenon. Similar to Europe in the Age of Nationalism and the wars of unification, but without the national wealth to provide combat health support, Africa continues to annihilate itself.[48] There is no database to measure the impact of wars on the national health systems of Africa, but couple this destructive influence with the rampant diseases pandemic on the continent, and one wonders how the United States could allow the imbalance of means by the reduction of real dollars in the cause of world health in general, and African health and health systems in particular.

INNOVATION

New approaches are needed for the application of national power to protect human health, and the clarification of health issues as a priority. Beyond "exerting a leadership role to promote international cooperation on health issues,"[49] the attainment of security, prosperity and democracy seems to rely on the political, economic and military elements of national power

without a medical and health dimension. Periodic references to the interlocking nature of these interests fail to provide a clear health focus, while acknowledging the need for it. Consider, however, the possibilities in each element of power, when changing the paradigm to include a defined health objective. The Unified Command Plan (UCP) could direct the CINCs to expand existing military medical programs to achieve national health goals in their Area of Responsibility (AORs), such as immunizations and monitoring programs, by simple reorientation of resources and emphasis. The addition of a military medical advisor to country teams in underdeveloped nations would add a level of expertise in cases of extreme need, and send a clear message of our commitment to our stated policy. The potential redesignation or reprogramming of available Function 150, Aid to Nations funds, for increased health programs and infrastructure represents a powerful diplomatic initiative within the Department of State. Legislative leadership could enact tax credits for U.S. corporations that provide medical expertise, logistics or pharmaceuticals to either the Department of Defense or State for specified health programs could dramatically increase means for the cause of health internationally.

Another innovation, mentioned in the NSS but not directed or assigned, would establish synchronized, mutually supporting relationships, to include funding or support in-kind, such as air transport, between the U.S. Government and Non-Governmental and International Organizations (NGO/IO) providing medical relief in the various regions of the world.[50] Logistical, transport and security costs could be born by the government, with medical, professional and ancillary staff provided by the supported organization.

Finally, it all comes back to leadership. As the world's leading industrial and biotechnological power, the U.S. should undertake the task of building world consensus for the eradication of disease and stop waiting for the World Health Organization (WHO) and other well intentioned, albeit under-funded, organizations to do so. A political and diplomatic task, the executive branch owes this leadership to the world. A successful model for such a venture follows.

FOREIGN AID ALTERNATIVES

The contentious issue of Foreign aid has been and continues to be fertile ground for argument, both as a political and economic matter. For the purposes of this study, aid to health programs has a very direct bearing on the funding of any initiative. Increases in military funding for operations and maintenance remain unlikely, thus limits on the scope of military medicine appear probable. Some reallocations of funds, coupled with health specific national programs, offer a potentially higher return on investment for the services and the nation. A funding stream

for Joint medical initiatives would enable engagement in Africa. Military medicine could never supplant other agencies involved in the pursuit of world health, but provides a powerful supplement to any other government or international effort.

Foreign Aid reform efforts by the Clinton administration have had little impact, other than the continuing erosion discussed above, but several of the arguments in the current media bear mentioning. Some maintain we would do more for developing countries by abolishing Function 150 and foreign aid altogether, and open American markets to foreign goods, to allow the process of marketization to occur. Others believe the concept of aid warrants retention, but the process by which aid is administered requires revision. Yet a third group sees some form of cooperation among and between governments, NGOs and IOs, as the new aid paradigm.

Supporting the position for eliminating foreign aid, the reputation of incompetence held by the USAID and the negligible return on investment seen after years of effort, particularly in Africa, empowers opponents of the program. A Cold War institution, aid programs were believed to create prosperity, but we now know that statism does not create economic growth abroad any more than it does at home. Additionally, recent polling data by aid organizations reveal widespread skepticism about the efficacy of aid programs; the belief that such funds "go down a rat hole" is widely held by the public.[51] An equally interesting contemporary phenomenon -apathy- speaks to the basic indifference of Americans concerning international affairs.[52]

In a recent set of articles, authors such as James M. Lindsay and Sebastian Mallaby, contend Americans have lost much of their interest in the world around them. Further, regardless of the winner in November, a "wishy-washy foreign policy driven by the competing interests of the new elites," will result.[53] This apathetic internationalism will alienate our allies, distort policy and hinder the President's ability to lead, build consensus and engage. The authors call for strategic leadership to elevate foreign affairs beyond trifle status, particularly in light of systemic constraints and the recent diplomatic failures of the current administration in the Comprehensive Test Ban Treaty (CTBT) and emerging transnational threats. Bottom line- prosperity, complacency and apathy threaten the very existence of engagement and a proactive foreign policy.[54] In medical terms, this translates to lives lost.

The second view is best illustrated by William H. Luers, writing in Foreign Affairs, who maintains the reason many Americans reject engagement and foreign aid programs springs from the systems currently used. Specifically, Luers posits that the State Department should relinquish policy and budgetary relations with the World Health Organization (WHO) in favor of the Department of Health and Human Services (which already conducts extensive coordination

with WHO). Thus, respective governmental agencies, including the DoD in matters of military affairs, would work directly with their United Nations counterpart.[55] Over two thirds of Americans support the UN as the primary agent for development, and this approach appears more efficient. Recent polls show Americans aren't unilateralists, particularly regarding crises, and 72% believe we should always act in concert with allies internationally.[56] In other words, unilateral aid accomplishes less than aid administered in concert. While beyond the scope of this study, the concept of greater combined military medical engagement across the world deserves exploration, possibly following the MEDFLAG model.

The final, and most promising view represents the cooperative approach, across governmental, NGO, IO and private donor lines. Carol Lancaster, also writing in Foreign Affairs, acknowledges the lack of "umbrella" organizations to address transnational disease and improving Quality of Life (QOL) for poor and underdeveloped nations. She identifies the core problem in development as bad politics rather than a lack of resources, and numerous aid donors, competing rather than cooperating in administering aid. Her collaborative model illustrates what may constitute a successful prototypic technique for aid administration in the future. Starting with a vision of "Developing and disseminating vaccines to protect children from preventable disease," the Global Alliance for Vaccines and Immunizations enlisted the World Bank, the WHO, the UN Children's Fund, the Gates and Rockefeller Foundations, the International Federation of Pharmaceutical Manufacturers and many others in a common goal of immunizing children. The results, including the $50 million U.S. appropriation mentioned earlier, span all agencies and interests, with improved accountability and effectiveness.[57] The addition of regional CINCs would seem only logical, and the leveraging of national effort through synchronization could magnify success.

More fundamentally, the preservation of peace and democracy implies a measure of humanity. The erosion of commitment to nations, or the imbalance of means demonstrated to the end of protecting human health, regardless of strategy, begs the question of what we really stand for in the continuum of values. Should we care about disease in Tanzania, or a hundred other Third World countries? Does a "diplomacy of values" make sense? Should our nation be seen as one which values human life, promotes development, reduces poverty and provides relief in times of crisis, or indifferent to the state of mankind?[58]

Life, liberty and the pursuit of happiness constitute the most fundamental American values. In our Aid to Nations, a strategic imbalance may be seen as hypocrisy at worst, and irresponsibility at best. Thus, the mobilization of all appropriate national assets, especially those immediately available such as military medicine for health programs, appears indicated.

WHAT WORKS, REALLY?

The World Bank, in its recent report entitled Assessing Aid, offers clear evidence that it is possible to target aid to support greater opportunity for the least advantaged, and maintain accountability. First, foreign aid succeeds when it compliments domestically sound economic policies. In other words, it can help promote growth and expansion of human capital, opportunity and stabilization where policy ensures equity and fairness. Second, in such reform-oriented settings, aid and private investment are mutually supportive; there is no evidence aid crowds out the private sector. For example, infrastructure and institutional development benefits investors and citizens. Third, aid in the form of technical assistance can enhance the capability of state officials. In such areas as health care and education, professional and managerial expertise can vastly improve the effectiveness and efficiency of committed resources.[59]

In the targeting of aid, the World Bank indicates countries need a commitment not only to economic and social reform, but a concomitant desire to reach the least advantaged of their citizenry. In the past, the groups most in need of aid have received the least, such as the poor and girls. This example of aid distribution demonstrates the challenge of effective, efficient medical aid delivery. In Ghana, the richest 20% of households receive 45% of state subsidies for higher education, while the poorest 20% receive 6%. In Malawi the distribution is even worse, with the corresponding figures being 59% and 1%. With this insight, an expanded medical engagement strategy takes on even greater need for targeting programs.[60]

Direct medical support of emerging democracies in Africa, under a structured, targeted program, would meet all three "success" criteria presented by the World Bank. Medical technical support, expanded to include the development of systems, would compliment existing state and private programs, while enriching human capital assets and delivering care to those that need it most.

ENGAGEMENT

The Strategic Assessment, 1999, says it best - "The future is up for grabs."[61] Not even health can claim the distinction of world consensus. We continue to grapple with the opposing forces of integration and disintegration, globalism and emerging regional economic alliances and a new world order. The familiar discomfort of the bipolar, Cold War era seems a distant memory. A new, and in many ways unanticipated, future awaits the world's only remaining superpower. Had the end of the Cold War been only slightly more evolutionary, this unrehearsed, unprecedented world leadership role thrust on the United States might have

assumed a more consistent form. As the first post-Cold War decade comes to an end, we appear no closer to a definitive international course ensuring our objectives of security, prosperity and democracy, or a direction the world must take to ensure peace and stability. A contemporary journalist called the 1990s "a squandered opportunity," hallmarked by apathetic internationalism, preoccupation with domestic politics and neglect of foreign affairs.[62]

If we have learned anything in the past ten years, it's that military power alone solves few problems, and doesn't, of itself, bring peace, security, democracy or prosperity. Some even argue that with increasing globalism and the increasingly interdependent world economy, armies and wars have lost their relevance and become obsolete.[63] While a wonderful concept, the lessons of Iraq, Yugoslavia and North Korea compel the United States to maintain a strong military. Although no one likes to fight, someone needs to know how. Strength of arms remains crucial to our national existence. Yet many, including our national leadership, believe the current environment calls for a significantly smaller force, no less trained and ready, but more strategically agile and relevant. Additionally, in a period of peace, we must find ways to use the military to prolong the Pax Americana. Thus evolved the imperative of engagement.[64]

In 1997 and 1998, in an attempt to demonstrate our commitment to allies and our own electorate, the strategy of engagement emerged as a national priority. This concept implies a rejection of isolationism and the assumption of a leadership role abroad. President Clinton has stated, "The United States must lead abroad if we are to be secure at home." This strategy indicates our desire to cooperate with allies in the early identification and resolution of crises, while advancing our stated objectives of U.S. prosperity and democratic enlargement.[65] The Revolution in Military Affairs, addressed by authors such as Steven Metz and Thomas K. Adams, underscores the need to maintain an international military leadership role in an age of radical social, political and economic change, understanding the world remains dangerous.[66]

Just as the NSS provides grand strategy and overarching national goals and objectives, the National Military Strategy (NMS) describes how the capabilities of the Armed Forces are used to support National Security objectives. Our national strategy of engagement stresses the need to shape the international environment, respond to the full spectrum of conflict and prepare now for an uncertain future. Using all forms of national power, the United States endeavors to influence the actions of other states, exert global leadership and remain the security partner of choice for the community of states that share our interests. Militarily, the shape, respond, prepare strategy supports the National Military Objectives of promoting peace and stability, defeating adversaries, and using the Joint Force as the means to carry out the strategy.[67] Embedded in the Joint Force we find extraordinary military medical power.

Deterrence, exercises, military-to-military (Mil to Mil) contact, coalitions, contingency operations and global leadership - all the standard war fighting lexicon - pervade the NMS, and nothing in this study attempts to diminish the importance of a strong military. But the words are there- shape, respond, prepare- and the need to find new definitions and applications remain before us. Military medical power, underutilized in the strategic arena as a tool of shaping in engagement activities, presents an extraordinary opportunity to directly and simultaneously achieve the national objectives of security, prosperity and democracy and the military objective of promoting peace and stability.

SHAPING

Shaping involves three activities: 1) Promoting stability, integration and cooperation; 2) Preventing instability, geopolitical competition, coercion and conflict; and 3) Deterring aggressive behavior.[68] Secretary of Defense William Cohen, in a 3 February 1998 address to the Senate Armed Services Committee, took the concept of "shaping" to a new level when he indicated "the aim of becoming friends with selected nations" underpinned the program.[69] While "respond' and "prepare" have occupied the military lexicon for years, the concept of shaping presents new possibilities, especially in the context of this study. It also appears widely accepted that shaping is cheaper than responding. Military medicine, by this definition, certainly costs less than war or intervention, comprises the keystone of shaping, and meets all the stated.

Shaping, with integrated regional approaches (implying interagency cooperation) in such vital areas as security and economic development, appears a tenable answer to the contradictions and uncertainties of the future. Just as persistence constituted a central trait in Cold War strategy, patience, agility and cooperation among and between governmental agencies and allies hallmark our current efforts. How else can we pursue multiple goals in a world that seems less dangerous, albeit more complicated than before? Not clear, unfortunately, is the strategic leadership to build consensus, allocate resources and synchronize efforts worldwide.

In recent times the Commanders-in-Chief (CINCs) of the four U.S. Unified Commands provided this leadership. Dana Priest, of the Washington Post, asserts that the four geographic/regional CINCs have exerted more political influence in foreign affairs over the past three years than most diplomats. Relatively well funded for discretionary programs, semi-autonomous and reporting directly to the Secretary of Defense, the CINCs are relatively unscrutinized by Congress, and have broad latitude in shaping foreign relations policy. In the 1990s, President Clinton found it easier to get foreign policy initiatives completed through the

Pentagon than the Department of State. Already spending about $20 million on environment and health issues, with budgets twice that of the Cold War, the CINCs receive over $380 million annually in discretionary spending authority for their theaters, respectively.[70] These facts underscore the potential for increased military medical shaping throughout the world.

As the concept of shaping took form and leaders grappled with the intent, an illuminating article by Rhodes, et.al., appeared in the Naval War College Review.[71] Acknowledging political and military decision makers had no model for shaping and were relying on intuition and experience, the authors conducted a study of six historical peacetime examples, involving France, the United States and Britain, from the Nineteenth Century to virtually the present day. The applicability of their conclusions strikes an immediate chord.

The authors found that tailored forces, clear objectives, an appreciation of internal perceptions and politics, presence and commonality of aspirations between the great power and shaped nation improved the chances of mission success. The challenges in shaping included the national will to commit to long term programs, personal rather than impersonal interactions with indigenous peoples and the ability to shape internal actions and attitudes rather than simple, superficial compliance with influence.[72]

What do these findings suggest for American efforts to medically shape the international environment? Ultimately, if we assume the correct mix of medical power, influence and presence, shaping changes and/or reinforces how foreign leaders and ordinary citizens think about politics, both local and international, and their relationship with the United States and each other. If earlier medical engagement programs provide any precedent, uniformly positive results from medical deployments enhance our value as an ally and partner.[73] Certainly, these programs will not produce immediate results, nor will they always facilitate the enlargement of democracy or the growth of capitalism as we know it, but shaping represents an opportunity that holds immense potential for good.

APPLICATION

If the United States is to effectively engage, and subsequently shape nations, we must have a rudimentary understanding of their history, culture, political structure, economy and social systems. The extraordinary diversity of conditions and national experiences in Africa make generalizations difficult, and the utterances of personalities like George W. Bush, who maintains, "Africa doesn't fit into the national strategic interests,"[74] makes support for the continent more difficult. Perhaps the present situation in Africa has engendered despondency because we seem to have lost the capacity to understand it.

The USEUCOM has responsibility for engagement and shaping on most of the African continent. The U.S. Central Command shares this responsibility in the Horn of Africa region, and the U.S. Pacific Command for the island of Mologasi. But Africa isn't one country; it is many, composed of many more tribal, racial, linguistic and cultural groups. No cookbook answers exist when dealing with the area, and few, if any generalizations work. All the commands conduct numerous programs supporting national and DoD policy, but an umbrella structure to synchronize efforts among and between all the supporting players in the region does not exist. Thus, the task of engagement presents some of the greatest challenges in our complex and volatile world, and engenders lively discussions on the formulation of a Unified Command for Africa. While beyond the scope of this study, the partition of Africa under three CINCs, Central, European and Pacific Commands, deserves particular study, and possible Unified Command Plan revision. A unified continental or regional approach seems unlikely until the U.S. faces this challenge. Africa's ethnic, political and economic diversity and multiplicity of needs may require a prioritized, regional approach, targeting areas or regions instead of countries. This departure from the current Western approach to engagement could yield transnational results.

In the past, U.S. involvement in Africa centered on crisis response, such as Rwanda, Somalia and Uganda, particularly in the humanitarian and disaster relief arenas, with minimal proactive programs.[75] Why was this the case? From 1947 until 1957, American policy makers had attempted to rearrange the world and bring order to it by using the threat of a monolithic peril to civilization-communism- and create a state of permanent emergency. This caused the United States to lose focus, and any possible control, of Third World developments. By the early 1960s, our assets were spread so thin we couldn't deal with the Third World, and if we were defending civilization, how would we rationalize the diversion of means from that cause to the electorate?[76]

Actually, neither the U.S. nor the Soviet Union exercised any great influence over the newly independent African states in the early years of independence, although the Soviets sent over $86 million in arms to African states between 1959-1967. Ironically, the forty-year accumulation of doctrine and weapons amassed by the Cold War superpowers proved useless against Third World nationalism.[77]

The collapse of the colonial empires in the 1960s presaged the events that would follow the end of the Cold War. Numerous new states complicated the international order, many of them marginal, small, weak and vulnerable. Even in the early post-colonial years, these vulnerable states served as an invitation to political, economic and military penetrations by other

states or internal dissidents. This has led to a shift not only in the pattern of conflict, away from the great powers, but in the form of conflict as well, from high intensity conflict to low intensity wars. This influences the way wars ended, and the international order that followed.[78] Engagement and shaping in a mobile political and national landscape requires exquisite care. Clearly, the most fundamental strategy would offer the best hope of success. Health knows no politics, and may represent a superior option to traditional approaches of military engagement in this evolutionary landscape.

The potential for war, conflict, insurgency and continued victimization of mass populations continues even today. Regional and religious wars seem likely, despite recent initiatives in regional security such as the West African Peacekeeping Force (ECOMOG), leaving U.S. interests ill defined and evolutionary.[79] Uneven economic development, (1.9% of world trade in 1997), a crushing international debt to the IMF and World Bank, the legacy of corrupt regimes in the early years of independence, and lingering doubt about the capacity of the continent's ability to get past this period of transition.[80] One view is that the continent may find itself in a position analogous to an urban ghetto, but on a global scale: producing little of value to the outside, sustained by international welfare, ruled by corrupt strongmen, rife with crime and violence, and burdened by the despair of a generation born into economic hopelessness. The situation in many African countries has caused some observers to suggest that the Third World is splitting off a Fourth or even Fifth World, with the lower levels trapped in a quagmire of economic marginality. It becomes easy to understand the resistance to upgrading efforts on the continent, particularly when the funnel for aid to nations remains the suspect, patronage oriented, ruling elites.[81]

A QUESTION OF WAR

Can a strategy of engagement reduce the number and intensity of wars in Africa? The medical impact of conflict on both combatants and noncombatants has prompted numerous U.S interventions in the past ten years, so the question is both relevant and timely. Greg Cashman, in What Causes War, provides some insight. Cashman postulates that if a state is in turmoil, there is a low probability of peace.[82] The interaction of individuals, particularly leaders, groups and nation states in transition, create the conditions for conflict as well. Further, the individuals that gravitate toward positions of power in times of transition often carry strange backgrounds and rather unattractive personality traits, including their own sense of inevitability and ego. The maniacal dictator stereotype, so often seen in Africa, attempts to create a sense of injury or

threat of ethnic survival, or use a popular hate object for retribution to unite the people. These leaders seek war for purposes of remaining in power.[83]

Hans Morganthau states "Conflict between human beings is inevitable, as long as men and women have material and political interests which, in a world of scarce resources and limited positions of power, will bring them into competition with each other to regulate the balance of power and wealth." Conflicts may also develop because of social or economic changes, particularly increased demographic pressure, when economic or political expansion possesses limits.[84] Does this set of circumstances fit post-independence Africa? Perfectly.

Additionally, the revolutionary state, of which Africa abounds, has been shown by Moaz to increase the likelihood of war by its very existence. These states are seen as dangerous and threatening by their neighbors, not well received in the "legitimate" international order, and offer themselves as either victim or initiator of further conflict. The goals and ambitions of these states threaten the status quo, while frequently changing both leadership and direction, making normal diplomacy impossible.[85] This premise, validated by Cashman in an exhaustive analysis, provides a clue to the succession of governments in several African nations. When coupled with the internal components listed above, a rudimentary understanding of the war dynamic in Africa begins to emerge.[86] Thus, war among, between and within these states appears circular, as the history of Africa in the past 25 years has shown. This thought composes a central tenet of engagement- understanding how nations came to be where they are today, and how to take them forward to the next level. Clearly a mutual interest, our national objective of democracy demonstrates a reasonable solution to the causes of war so rife on the continent. Leader accountability, human rights and representation of plurality view could defuse potential conflict, and facilitate national development and infrastructure.

NATIONAL INTERESTS

Our vital interests remain security, prosperity and the promotion of democracy, but crafting an engagement strategy for a continent of 54 separate nations, all undergoing a fundamental transformation of its sociopolitical order, poses a daunting challenge. Will we see stability, expanding market ties and democracy, or instability fraught with humanitarian disaster? In these circumstances, an evaluation of each element of our vital interests, provided in the context of the African model and experience, will provide the framework for us to proceed. The evolution of political, economic and security environments are presented to demonstrate their direct link with the state of health and medicine in Africa today.

Threats to our objectives only become relevant when they are considered in light of some real interest, and the gravest challenge facing the U.S. from Africa is disease and epidemic. Extraordinarily, the failure to achieve our vital interests of security, prosperity and democracy before now seem at the heart of the failure of African states to provide adequate health care for their populations, and contributes materially to the disease threat. In examining the evolution of these institutions in Africa since independence, uneven economic growth, autocratic governments and constant conflict, precluded the development of any viable health systems. This fascinating case demonstrates several principles central to our purpose: 1) War and conflict consume capital needed for public works and infrastructure, and destroy the required tax base for development. 2) Economic regression impacts governments' ability to provide basic services, including health, and retards the development of private sector medicine. 3) Accountability in government includes the production of public welfare and works, and 4) Democracy and open markets offer the last best hope for African development.

While hardly a revelation, the ability to directly overlay our national objectives as a prescription for the multiple challenges of the African continent, and subsequently add the component of military medicine as a means for meeting the ends of security, prosperity and democracy, significantly elevates the importance of our concept strategically. These objectives provide the vision statement for engagement.

In the 20th Century, military power provided most of the answers to most questions of national interest.[87] Certainly, no military threat appears forthcoming from the continent now, or any near term future point. In this century, economic and diplomatic power may prove pre-eminent, blunting our penchant for military solutions to complex international questions. Certainly, military combat power does little to obviate the disease threat. Economic agility, diplomatic facility and restraint may hold the key to successful engagement in this new era, along with new applications, roles and missions for the military element of national power.

The NSS acknowledges that disease is the one transnational threat that can attack all our interests simultaneously.[88] Thus, exploitation of innovations in health related engagement programs appear both efficient and effective for our cause. As noble as this sounds, we must be mindful of certain attitudes within Africa, and internationally, of our motives in shaping and engagement. Some scholars have indicated that the U.S. government has tended to adopt the transnational corporations' definition of interests, facilitating the neo-colonialist exploitation of labor, raw materials and market access. This mercantile approach cared little for the standard of living or quality of life (QOL) of indigenous peoples, or socio-political change. It's never bothered American corporations, for example, that the reason African materials were cheaper

was due to forced labor.[89] Accurate or not, these widely held beliefs must be understood and considered, in seeking the commonality of aspiration presented earlier by Rhodes, et. al., for successful engagement with our counterparts.

SECURITY

The 1999 Strategic Assessment correctly points out that the danger of military confrontation between any African state and the U. S. borders on the nonexistent, and beyond the health implications outlined above, where do our security interests lie? Primarily, they are regional peace and stability.[90] Long considered a backwater of global security affairs, a number of recent developments, including the bombings of American embassies in Kenya and Tanzania, have given us pause to reassess our security policy.

The African Crisis Response Initiative (ACRI) exemplifies the manner in which the U.S. strives to maintain regional balance on the continent. Founded in 1996, the ACRI develops the abilities of African nations to keep the peace on the continent. While the program results are mixed, including the case of Cote d'Ivorie where trained soldiers staged a coup (hardly the intent of the training), one cannot miss the tacit message that U.S. intervention on the continent appears very unlikely. Funding for the initiative, set to run out in 2001, may experience difficulties in Congress when participant nations engage in such non-democratic behavior. As a recent Parameters article by Brower and Simons points out, why train countries to a capability if they are willing to misuse it?[91]

Even the emerging mission of peacekeeping in Africa lacks a constituency. After the U.S. experience in Somalia, American good will, and a willingness to place troops at risk in pursuit of security on the continent waned. Americans see simply too much unrest for direct involvement. As Brower and Simons state, "The ACRI represents the living, breathing embodiment of the American national ambivalence" toward Africa.[92] This use of surrogates leaves much to be desired in human terms, and begs the question of what better means we could use for the reduction of human suffering. Apparently, we will maintain a reactive, crisis driven approach to security on the continent.

ECONOMIC DEVELOPMENT

The United States' interest in prosperity and expanding markets appears the most direct link to an expanded relationship with Africa. Further, development seems the only remedy for many of the social and political ills of the continent, particularly the institutions of health and related infrastructure. A direct relationship between the development of self-sustaining health

systems and the economic condition of any given nation has long been recognized.[93] Having already discussed the market potential, population and ongoing trade relationships we have with the continent, one wonders why it didn't work to simply shift from the colonial model of an export –led economy to one balanced with manufacturing, agriculture and continued export. Such a simple question has no simple answer.

HISTORICAL PERSPECTIVE

During the colonial period, metropolitan nations efficiently and effectively engaged in very favorable trade relationships with the African colonies. African raw materials, generally undervalued on the world market, fueled European industry. Profits realized by the colonies were quickly used to purchase manufactured goods, generally overpriced relative to the value of their exports, from European merchants. For the metropolitan powers, a win-win situation, but the net effect on Africa was lose-lose; lost natural resources and lost capital, and virtually no infrastructural development.[94]

In the early 1960s, when the majority of African countries became independent, they faced a choice between two prevailing economic theories on how they should develop. The first approach was the modernization theory, advanced by Western development experts. This theory held that the new nations should continue to focus on the export of raw materials to industrialized countries, and using their comparative advantage, build up capital and invest in infrastructure and technology. These investments would lead to greater profits for use in developing other sectors of the economy. The second approach, inspired by the example of the Soviet Union in the 1930s, advocated rapid industrialization to create a modern manufacturing sector within a socialist model of centralized planning. In both cases, tariffs, subsidies and preferential treatment were needed to protect the infant industries, and the goal was to create an economic engine to move the nations forward. Without capital, government, health and public works languished.[95]

During the 1970s, this essentially Keynesian model of capital infusion, governmental activism and deficit spending met with limited success. Failing to deliver development, these theories fell out of favor, due to governmental corruption, patronage among elites, the seismic changes in the world of trade and the disruptions of war. Increased costs and decreased production across the spectrum of African commerce equaled little or no development.[96]

Governments pursued policies that hurt export production as well. Taxation, ostensively for development and infrastructure, supported a corrupt managerial class, and high currency values kept African goods noncompetitive in the world market. Declining terms of trade, such

as those seen in the late 1970s, witnessed almost 50% drops in the value of such staples as cotton and cocoa. Mineral exports, such as copper, were hit as hard as agriculture, dropping from $17,800 per ton in 1975, to $9,500 in 1980. What else could happen to stint growth, blunt initiative and increase the misery index in Africa? The answer, a tidy partnership of government and industry called the parastatial.[97]

In a parastatial arrangement, the government doesn't own the industry, but manages it, directs and controls operations and finances the business. In a young country like Zambia, in 1975, the government provided the educated citizens and organizational resources needed to operate the copper industry, including government bureaucrats. Transnational corporations wishing to do business with the company became de facto partners with government. Bribes and patronage replace initiative and efficiency. Lackadaisical work routines, rampant corruption and administrative confusion hallmarked the parastatials. Little surprise that only a handful of countries possessed an industrial and manufacturing sector greater than 20% of Gross Domestic Product (GDP) in 1980. Equally interesting, direct foreign investment tripled world wide from 1982 to 1992, everywhere but Africa.[98]

While Africa's economic performance between 1960 and 1980 was lackluster at best, it virtually collapsed in the 1980s. During the first two decades of independence, 1960-1979, the per capita GDP grew at an average rate of 1.6% per year for the continent as a whole. During the first five years of the 1980s, the per capita GDP fell at the rate of 4% per year, for a decline in of almost 20% in standard of living for the period. Elsewhere in the world, per capita GDPs generally increased despite economic hard times, even in less developed regions like South Asia and Latin America. The number of fast growing economies, as defined by the Atlas of World Economy, declined in Africa from 32 in 1975 to 14 in 1985. Link these facts with a steadily increasing appetite for manufactured goods, Africa's chief import, up as much as 14% in 1986, and the synergy of bad business, corrupt government, weather and destructive environmental practices, and one begins to understand why the United States claims no strategic interest in the region. Not even massive infusions of aid, up to 9% of aggregate African GDP in 1984, could salvage this economic train wreck, or infuse adequate capital for public programs.[99]

By the mid-1980s, most observers concluded governments were more a hindrance than help in development. African countries, like most less developed nations, borrowed heavily from commercial lenders in the 1970s, but found themselves increasingly strapped as the world economic climate and their own internal economic policies turned bad. By 1976, debt climbed from an average of $300 million per year to $2 billion for the new nations. Even aid programs,

direct infusions of cash and commodities, were funneled through the same governments that had borrowed the nations into bankruptcy. These practices gave rise to a series of Structural Adjustment Programs (SAP), directed by the International Monetary Fund (IMF), and the World Bank. Donors, including investors, called for stabilization, liberalization of trade and order. This series of programs attempted to improve the balance of trade, reduce loans to governments and end direct subsidies to consumers.[100]

Little more than austerity programs, these actions cut government spending and the few existing social programs, sparked riots, increased levels of malnutrition, and added to the misery of the common folk. One of the great accomplishments of the continent had been the reduction of illiteracy, from 62% in 1970 to less than 32% for males in 1999, and from 82% to 50% for females during the same period. Threatened by the SAP, education was, and is, seen by many as the ultimate hope for Africa. The relationship between educational attainment and economic growth (and ultimately democracy) was not a fixture of the early literature on economic development. In contrast, recent work has focused on human capital as "an engine of economic growth."[101] Worst of all, the SAP achieved uncertain gains at best. Between 1980 and 1990, two thirds of all banks in Africa failed, and half the IMF programs broke down.[102]

Even as this study is written, the most recent World Bank Report, 1997, shows an average of 6.0% of all Sub-Saharan African nation's GDP goes for interest on loans, ranging from 12.8% in the Congo to .03% in Kenya. All governments are in the deficit spending mode, averaging -6.4% of GDP (-4.4% if grants are considered), and an average of 20% of all government's budgets are for interest payments. This number tops 40% in the Democratic Republic of the Congo.[103] Discretionary income for such items as education and medical care will not compete favorably against defense and other programs in these circumstances.

The IMF and the World Bank did not originate the problems in Africa, and to date no economic alternative has been put forth. Interestingly, the inclusion of democratic reforms as a prerequisite for economic support reaped an unexpected benefit- the democratization of numerous African states. The future is not without some measure of optimism. A recent periodical indicates investment in Africa has increased over the last years, from $43.6 billion in 1990 to $252 billion in 1997.[104] Further, it is altogether possible that the official economic data on Africa may be wrong. To what degree, no one can tell, but a thriving illicit economy exists that is hidden from the predatory view of the state. Regional studies indicate a tremendous amount of economic activity goes unrecorded, of both goods, services and labor- some operations involving thousands of people and millions of dollars. The Korean "Black Market," illegal but tolerated because it presented goods the nation couldn't manufacture or procure,

immediately comes to mind. Governmental corruption and inefficiency may mask a sizeable segment of commerce with great legitimate potential.[105]

By 1995, with the resurgence of democracy and accountability in government, the continent has come full circle. A new, enabling environment for small business and farmers to grow, balanced budgets and reduced corruption and inefficiency empower the willing people of Africa. Development had long been regarded as a matter separate from politics, but by 1995, both Africans and donors accepted both politics and policy as important. Today, politics and democratic governance, has replaced policy and theory as the mode of intervention in development. The matriculation from centralized plans to decentralized administration, to local organizations, to an enabling environment, summarizes the last forty years of development. Progress has been made by the people, not for, of, or with, them.

Until recently, Africa's status in the world exemplified the "dependency theory," which holds that African states, and the lesser developed nations of the world, occupy a peripheral economic position and are doomed to perpetual servitude to the industrialized core countries. This theory has been challenged by the Pacific Rim experience of industrialization, which shows some countries can transition just as modernization theory predicted, but the variables in the African experience make direct comparisons impossible.[106] Clearly, the options for the future demonstrate extraordinary extremes. Becoming even more marginalized both politically and economically, there is a real danger that entire sections of the continent could collapse into a state of total anarchy and abject poverty, with human suffering on a scale unimaginable in modern terms. Equally possible, the second and third order effects of a market economy and global trade could enhance emerging democracies and portend a bright future.

ECONOMIC GLOBALIZATION YIELDS DEMOCRACY?

Much has been written on the positive aspects of globalization and open markets regarding African development. According to classic economic theory, the relationship between economic openness and growth is straightforward. Countries that adopt free trade policies and accept the division of labor implied by the principle of comparative advantage liberate the factors of production and enable them to work with greater efficiency. For Africa, this has even greater significance, because open trade would break the power of special interests and the ruling elites. Efforts to monopolize and cartelize national markets stifle the development of democracy, while localizing the potential wealth of emerging nations with the incumbents. Given appropriate national policy, democracy and the market may find globalism a close ally.[107]

Globalism comes at a price, however, in the form of short-term problems. Economic disruption, income inequality, job insecurity and social conflict, which can damage fledgling democracies, often precede sustained economic growth. The burden of containing these challenges falls squarely on government. Only with policies that develop efficient capital markets, including human capital, and the promotion of life choices for working people within the emerging economy can governments minimize the social and political adjustments inherent to this change. One of the most robust findings of recent large cross-country studies of the relationship between economic growth and democracy holds that growth strengthens democratic states. As Robert Barro maintains:

With respect to the effects of economic development on democracy, the analysis shows that improvements in the standard of living- measured by a country's real per capita GDP, infant mortality rate, and male and female primary school attainment – substantially raise the probability that the political institutions will become democratic over time. Hence, political freedom emerges as a sort of luxury good.[108]

The interrelationship between the economy and the government in Africa, as we have seen, leaves a great deal of room for improvement. Even the parastatial, or perhaps especially the parastatial, cannot transcend the limits of bad government policy. If the political economists have successfully linked policy to development, and the World Bank has qualified loans with democratic reforms, the inertia of autocratic governments may yet give way to accountability. Economic or democratic reforms constitute a chicken-or-the-egg argument- their interrelated aspects too enmeshed to separate. In any event, the wealth and development of Africa appears directly proportionate to her ability to govern herself well.

The Economic Community of Western African States (ECOWAS) represents a regional economic approach, similar in some ways to the ACRI for security. Led by Nigeria and several other economically advantaged nations, the ECOWAS exemplifies the U.S. approach to regional economic development using the "Key Country" approach, where cooperation among and between African states replaces colonial or industrial interests. A potential source for tariff and trade cooperation, and positive regional economic policy, this initiative and democratic reforms hold promise for both economic self-sufficiency and improved governance, the keystone to national health.[109]

DEMOCRACY

Our NSS articulates the promotion of democracy as a core objective. In the context of this study the democratic ideal takes on a health related component as well - that of equitable

accessibility to the basic needs of human health care, and the basic responsibility of governments to provide rudimentary access to care for their citizens. It is interesting that the NSS makes no mention of this fundamental need, yet articulates numerous other rights, including rights to political dissent, religious freedom, independent press and judiciary and civilian control of the military.[110] Ironically, the failures of early attempts at democracy in Africa appear pivotal in the failure of health systems, and responsible for the substandard level of care most Africans experience. Taking the longer view, the promotion of democracy in Africa may have an unexpected result: improved health for the people.

Many regard Africa as a continent of mixed governance, with a few states genuinely democratic, and many others that value democracy only as camouflage. In much of Africa, armed force still confers the basic right to rule, which is then ratified by elections. [111] Many political leaders have their own militia, and as recently as 1997, a dictator-turned-warlord ousted the legitimate government of Congo-Brazzaville. Africa leads the world in displaced persons, over 15 million, and in failed states. Fully half the nations in Africa teeter on the precipice. In most cases state collapse is associated with armed conflict, communal or ethnic violence and gross human rights violations. These states cannot be rebuilt without concomitant effort to rebuild civil society and integrate the two.[112] Democracy is the child of stability.

Add the epidemic diseases of AIDS, malaria and tuberculosis, and the forces that fracture Africa and forestall democratization seem insurmountable-but only if one views these issues as problems rather than challenges. Some contemporary authors see Africa as the region of the world where the future of democracy is the most open-ended. The current situation should not be counsel for despair, but an invitation to democratic forces to deepen their commitment.[113]

HISTORICAL BACKGROUND

The nations of Africa have gone through three general phases of political life since independence. The first phase, relatively brief in most cases, was a period of parliamentary democracy based on the institutions bequeathed by the departing colonial powers. The second, and to date the longest phase, was a period of authoritarian rule by governments ranging from strong presidents leading one party systems to maniacal dictators ruling through their military and secret police. The democratization movement dominates the third phase, which began in the late l98Os. By the 1990s, virtually every country on the continent had been influenced by the movement to some extent.[114]

The parliamentary phase appeared doomed to failure from the outset. Colonialism had ill prepared Africa for democracy. Colonial government presented a dictatorial example, with

authority emanating from afar with compliance oriented bureaucracies. The African people had little or no preparation for participation in democratic politics, with only a few referenda and opposition parties. In short, the experience taught the people how to oppose a government, not how to run one. More fundamentally, most of the people were illiterate, communications were rudimentary and the concept of nation escaped them. While perfectly capable of running their local affairs, leaders and communities were ill equipped to participate in national politics. Centralized government required a new skill set.[115]

The authoritarian regimes ranged from benign "strongmen" to ruthless dictatorships, with a variety of permutations. This period presents real difficulty in classification, as power, patronage, corruption, repression and murder/genocide changed the players and the governments frequently. Important to note through all the mayhem, however, is the constant recurrence of attempts to restore multiparty democracy. Throughout the 1970s and early 1980s, indications from Latin America and later from the former Soviet Bloc showed the success of movements from below - the people, not the government, demanding change. Unauthorized newspapers, strikes, riots and demonstrations punctuated the public's support of opposition figures and reform. The IMF and World Bank added to the momentum for democracy with conditions for democracy in structural adjustment loans.[116]

By the late 1980s, Africa struck a classic pre-revolutionary pose. Like France before the revolution in 1789, frustration with the governments' inability to improve quality of life and deliver promised improvements socially and economically created an explosive situation. Economic hard times were directly attributable to the corruption and mismanagement of the ruling class. Compounding this crisis, a burgeoning population, the new generation of Africans, demanded life and prosperity. Democracy appeared the only viable solution.[117]

While the completely successful transitions to democracy remain in the minority, the pressure for multiparty democracy remains strong. This so called "Third Wave of Democracy," has produced young and unconsolidated democracies that look to the future, to grow and prosper with American help.[118] The number of future transitions cannot be known, but this brief recapitulation of democratic development underscores the need for expanded engagement and shaping on the African continent, both ideologically and medically, to achieve our national objectives.

A uniquely African derivative of democracy, what several authors call "pseudodemocracy" or "virtual democracy" deserves mention at this point. This phenomenon accompanied the Third Wave and essentially represents the efforts of a growing number of African regimes' attempts to contrive the illusion of democracy to satisfy international norms in order to meet IMF

and World Bank requirements for loans and donor contributions to development. Edward Bever (1996), noted Africanist, asserts this practice will invariably lead to greater leverage for the opposition to force true change, or at least improved accountability, but others are less optimistic.[119] Writing in Foreign Affairs, Fareed Zakaria terms the practice of depriving citizens of their political rights and benefits to "attire" governments in this way "Illiberal Democracy," and an abomination.[120]

A quick comparison of those indicators presented in the NSS as crucial for democracy leaves little doubt as to the direction of shaping activities within the political and economic context. Health, the ever-present supporting component of democracy, presupposes all other activities. President Clinton has acknowledged that healthy populations provide the essential underpinning for economic development, democratization and political stability.[121] The current state of democracy in Africa is open to differing assessments, but little doubt exists as to the evolutionary nature of the ideology. As much as anything, Africa needs time to work with and become habituated to democratic institutions, to shape them to fit its particular culture and political circumstances, and allow them to sink deep roots of commitment among politicians and the public.

A CONTEMPORARY VIEW

How do Africans view the prospect of Democracy? In an illuminating study by Kpundeh (1995), a selected group of individuals from 32 tribes and ethnic groups across 4 provinces in Sierra Leone named democracy and democratization as the answer to widespread corruption in their country. Many held that decentralization of decisions from an autocratic group would reduce the level of corruption, which 83.8% of all citizens surveyed saw as one of the largest problems confronting their country, second only to rebel wars. Sierra Leone, like most African countries, depends heavily on the government for development, but the ruling elites keep stealing resources designated for crucial public projects, including health related programs. Corrupt leadership, coupled with some of the most regressive and repressive economic conditions in its history, provided a momentum for democracy ideologues can only envy- a practicum in accountability for the citizenry. Equally interesting aspects of this study reveal a level of optimism thoroughly unanticipated by the researcher. Over 84% of those surveyed believed life would be better in the next five years, while 91.4% thought the situation was worse in Sierra Leone five years ago.[122] Could democracy make that much difference?

National development imperatives, however, have a much stronger claim on Africa than the claims of democracy. After all, the expectation for European Democracy in underdeveloped

nations lacking the requisite preparation discussed earlier, as well as public and economic infrastructure, invites disappointment. Thus, democracy remains an experimental process in much of Africa, but self-realization such as that seen in Sierra Leone may portend the expansion of the Third Wave of Democracy. Expanding the influence of democracy to include the reduction of transnational threats such as disease, epidemics and environmental degradation clearly serves the United States' vital interests, and could forestall further humanitarian tragedies on the continent. Reiterating the message of Rhodes, et.al., [123]commonality of aspiration supports democratization in Africa, and the accountability this form of government brings, and the subsequent public benefits.

USEUCOM PEACETIME AFRICAN ENGAGEMENT ACTIVITIES

The 1997 EUCOM African engagement plan, directed by the Unified Command Plan (UCP), consists of an active approach consistent with DoD goals and U.S. interests. The DoD's stated goals of peace, democracy, humanitarian assistance and economic growth, and USEUCOM's objectives of stability and containing aggression translate to activities that promote the conditions for the growth of democracy and prosperity. USEUCOM also stands prepared to respond rapidly to humanitarian crises on the continent and assist in the development of a professional, apolitical military.[124]

The Active Engagement Strategy envisioned by the CINC, USEUCOM (USCINCEUR) is built around three country concepts -- anchor, transitional and problem. "Anchor countries" are those that demonstrate success in stability and democratic governance, and have the potential to influence struggling neighbor nations. "Transitional countries," or those with acute economic developmental problems, dysfunctional governments or fragile infrastructure, look to the anchor countries for positive assistance and modeling, and are the most vulnerable. "Problem countries" are those that threaten regional stability, endanger territorial integrity and adversely impact engagement. The USEUCOM plan conducts a campaign of active engagement at all levels with all players, but offers us a chance to identify the countries where targeted aid would do the most for national security. Lasting relationships and enduring institutions could result, obviating the need for crisis response.[125]

Some examples of traditional engagement tools used by EUCOM include Joint/Combined Exchange Training (JCET), demining operations and training, democracy seminars, Chaplains Exchange Program (CEP), Operations FLINTLOCK and SHARED ENDEAVOR, which involve interoperability and regional peacekeeping, International Military Education and Training (IMET),

the West African Training Cruise (WATC), and our target program, the MEDFLAG exercise. Each program directly supports our national interests.[126]

New engagement initiatives include the African Crisis Response Initiative, discussed earlier, the Organization of African Unity (OAU) Crisis Management Exercises (CME), interagency synchronization of humanitarian assistance, and the African Center for Security Studies (ACSS). Only one 1997-1998 initiative had a medical component, the Guinea Humanitarian Assistance Project, which offers training to the Local Emergency Management Authority (LEMA), in response techniques. A potential medically enhancing prototype, this program deserves expansion.[127]

The training and development of the Guinean Local Emergency Management Authority (LEMA) was undertaken to develop host country capacity to respond to natural disasters, receive and coordinate international relief resources and prepare the LEMA for more effective integration of local capabilities.[128] The Program of Instruction would be developed and presented by U.S. Civil Affairs forces, the United Nations Department for Humanitarian Assistance (UNDHA), and the Office of U.S. Foreign Disaster Assistance (OFDA). While not tied directly to other exercises, this project supports the engagement objectives of both the USCINCEUR and the Ambassador, demonstrates U.S. commitment to Africa and begins to address the larger issue of disaster preparedness across the continent.[129] This initiative gets to the heart of this project- to transition from individual, one - dimensional programs to the development of systems of, by and for the supported population.

THE MEDFLAG EXERCISE

Directed and funded by the Joint Chiefs of Staff (JCS), the USCINCEUR has organized and executed military medical exercises in Africa, termed MEDFLAG, since the 1980s. MEDFLAG is a joint and combined military exercise wherein the three USEUCOM military components form medical crisis response teams and deploy from Europe to selected African countries. Typically composed of 30-80 personnel, the MEDFLAG teams conduct a three-phased exercise lasting about ten days. The traditional MEDFLAG template includes: 1) training for mass casualties (MASCAL) or disasters; 2) simulated MASCAL/crisis response exercise; and 3) Medical Civic Action Programs (MEDCAP). These phases will be detailed later. Commanders may tailor the exercise to meet the training objectives of the Lead Unit and Host Country's needs, but the primary focus for these exercises is "to provide training and operational experience to U.S. personnel. All training and medical support to the Host Country remains secondary and is considered a collateral benefit."[130]

MEDFLAG training objectives for the U.S. Joint Medical Team include the following:

- Deploy/redeploy a U.S. Joint Medical Task Force (JMTF).
- Exercise long/short range deployment planning and execution of JMTF to accomplish specific medical tasks listed in the Universal Joint Task List (UJTL) and the unit's Joint Mission Essential Task List (JMETL).
- Exercise with other countries in areas of mutual medical interest.
- Enhance interoperability in combined and joint operations.[131]

During the fiscal year prior to execution, a working group composed of representatives from USEUCOM Directorates (J5 and J37), Components, Joint Staff, DoD and Department of State (DoS) select the MEDFLAG Host Country. The working group selects the country based on the Theater Engagement Plan (TEP) priorities derived from the Regional Working Group, Country Team Plan and the USEUCOM engagement strategies described in the Country and Regional Campaign Plan. The USEUCOM staff then contacts the U.S. Embassy of the supported country and ensures appropriate national officials and all other key medical players in the country attend the Initial/Site Survey, Main and Final planning conferences, and meets with the Site Survey Team. These conferences, normally conducted in the Host Country, provide the necessary insight to local issues, NGO/IO synchronization and U.S. Interagency coordination. The USEUCOM J4 will subsequently invite one medical guest from selected countries after coordinating with the Host Country. Past invitees have included: France, England, Germany, Belgium and South Africa.[132]

Additionally, the J4 develops the Exercise directive, which identifies the Lead Component, Lead Unit, Mission Commander, their responsibilities and authority. The Exercise Directive also specifies exercise objectives, JMETL tasks for training, the (MASCAL) scenario and AAR requirements. The JMTF is built around three requirements. First, the TF must be joint; second, it may be built around a unit or a uniquely tailored team, but members must be capable of both interoperability training and MEDCAP participation; and finally, the JMTF must be self-sustaining for many functions, including food, supply, communications, shelter and field equipment. As stated, the specific mission requirements for training, MASCAL exercise and MEDCAP will evolve from the interaction of all Host Country and U.S. players, but common specialties usually considered include:

- Preventive Medicine
- Dental Services
- Optometry Service
- Veterinary Service

- Physicians
- Pharmacists
- Nurses
- Laboratory Services
- Base Support and planning personnel
- Civil Affairs
- Contracting personnel

After the Initial Planning Conference and Site Survey, the actual mix of specialties will become obvious, and the JMTF will organize accordingly.[133]

The MEDFLAG is funded by Title 10, U.S. Code, Section 401.[134] Funds may be used for consumable medical/dental/veterinary supplies such as medications, vaccines, needles, etc., for use in the MEDCAP phase of the exercise. A typical amount for this phase ranges from $65,000 to $200,000. Section 2010 funds, called Developing Country Combined Exercise Program (DCCEP) funds, may be used to offset a developing country's expenses as a direct result of participation in the exercise, including the costs of the mass casualty event.[135] Expenditures normally range from $10,000 to $30,000. JCS Strategic Lift Funds pay for deployment and redeployment of the JMTF. Usually the JMTF is authorized either one C-5 or two C-141 sorties per exercise. The JCS provides funds to component Operation and Maintenance (O&M) budgets to offset exercise costs. Exercise Related Construction (ERC) Funds may provide some funding to pay for facility repairs or construction not covered by Section 401, such as wells or billets specifically required for the mission.[136]

MEDFLAG EXERCISE PHASES

The first phase of the MEDFLAG exercise involves the provision of didactic (lecture) medical training and interoperability and familiarization training designed to prepare the Host Nation to safely and effectively respond to a mass casualty / disaster event. Programs vary based on local needs identified during the site survey, but generally consist of two to three days of classes. The JMTF presents the training, utilizing the medical talent and specialization of the team members in the most efficient manner. The target audience includes nurses, doctors, midwives, dentists, paramedics or medically trained individuals. Classes usually consist of twenty five to fifty students. Topics for the training may include:

- Basic Lifesaver Instructor
- Emergency Medical Technician

- Cardio-Pulmonary Resuscitation Instructor
- Trauma Life Support
- Emergency Preparedness/ Disaster Response
- Emergency Room Triage
- Anesthesia Seminar
- Women's Health Seminar
- Preventive Medicine
- HIV and AIDS Prevention
- Combat Stress[137]

Phase two of the MEDFLAG, the mass casualty/Crisis Response exercise, is conducted bilaterally with the Host Country. Normally, NGOs, IOs, and civil authorities play in the exercise as well, while fire, police and military organizations respond as they would to an actual event, emphasizing triage, transport and treatment of casualties. Both U.S. and Host Nation participants learn from each other, gain specific insights as either a supporting or supported agency, and conduct a formal evaluation of the drill. The Americans learn the challenges of working with other nations under emergency conditions, serve as trainers and role models and leave the country better prepared to respond independently in the future, supporting the CINC's strategy. Some of the scenarios used in previous exercises include floods, earthquakes, volcanic eruptions, train wrecks, plane crashes and stadium collapse.

The third phase, the MEDCAP, comprises operation of remote health clinics for the indigenous population. Team members provide health care, in cooperation with their African colleagues when possible, via daily clinics to meet specific local needs identified either in the Site Survey or requested by the Host Nation. Past clinics have included medicine, immunizations, dental, pediatric, surgical consultation, dermatology, optometry or other predesignated care. The composition of the JMTF varies due to this national/local medical tailoring process. Approximately six to twelve MEDCAP exercises can be accomplished during the MEDFLAG, depending on access, transport and the clinics performed.[138] A MEDCAP can accommodate very large numbers of patients and immunizations, for example, and may involve extended time on station. Conversely, surgical consultations can be rapid and sparse.[139] This aspect of the MEDFLAG possesses exceptional potential for expansion.

THE MEDFLAG IN PERSPECTIVE

This study isn't the first to examine the MEDFLAG as a positive, productive engagement alternative for the African continent. Colonel C. William Fox, an Army physician who has had

extensive experience in U.S. medical activities in Africa over the past two decades, including command of MEDFLAG missions in 1994-1995, published a monograph entitled "Military Medical Operations in Sub-Saharan Africa: The DoD 'Point of the Spear' for a New Century," through the Strategic Studies Institute in 1997. Col Fox noted "the most prominent characteristic of the U.S. engagement in Sub-Saharan Africa in the mid-1990s is that it is diminishing."[140] This, at a time when African states are desperately seeking developmental strategies to overcome years of compounding problems, reiterates the issues presented in our earlier analysis.

The African challenges of disease, overpopulation, environmental degradation and illusory infrastructure makes the MEDFLAG a prescription for multiple ills, according to Fox.[141] Some of the evidence for this position we've already observed, including the flexible tailoring of the exercise, mutually beneficial training on Common and METL crisis response tasks, deployment experience and direct medical treatment for thousands of patients. Strategically, improved local crisis response capability obviates U.S. intervention, while accomplishing nationbuilding tasks. Additionally, new equipment trials and technological innovations such a Telemedicine could be field tested where infrastructure deficits challenge the delivery of care.[142] The MEDFLAG presented political, diplomatic and military advantages, while providing outstanding training to military medical personnel- a win-win proposition for U.S. national interests and objectives, as well as fledgling African governments, and engagement.

In his closing observations, Fox saw the MEDFLAG as a catalyst to initiate long term relationships and medical programs with Africa. The proof of our national interest in, and commitment to the continent, was portrayed in the most positive light- improved health for many, delivered in concert with local communities. We have the initiative, and should not lose it. He calls for the development of a coherent, long term, regional plan, including recurring visits to nations, an improved in-country crisis response and increased medical surveillance of disease across the continent to contain and eliminate transnational disease threats.[143] It is interesting to note the countries listed at Table x, and the observation of little recurrence of medical effort for any of the Host Nations, with the exception of Botswana and Cameroon, over the past twenty plus years. As a physician, Fox understands the medical imperative of continuity of care, and the disjointed benefit of one visit every decade or so.[144]

A quick review of the most recent MEDFLAG exercise, 00-01, to Garoua, Cameroon, 7-24 March, 00, with the 86th Airlift Wing, U.S. Air Force Europe (USAFE), as lead medical element, reinforces the views of Fox and the author of this study. An extraordinary medical success, MEDFLAG 00-01 served over 19,000 patients, administered 11,874 immunizations and

conducted interoperability training and MASCAL exercises to standard. The extensive After Action Review (AAR) documented numerous minor refinements for the next deployment, but two major themes important to this study emerged. First, coordination with local physicians and medical area studies were inadequate, resulting in lost time and effort by American providers, and an inadequate pharmaceutical packing list. Shortages of anti-malarials and topical fungus preparations caused difficulties. Second, local elites consistently moved to the head of treatment and service lines, often leaving the needy, who required care and service the most, unattended or unsupplied. The recurrent theme of patronage and position in Africa continues. More strikingly, many of those presenting for care had no real medical disease or condition, but couldn't resist a free medical visit. This is born out by the high number of non-specific musculoskeletal complaints for 17% of those patients seen. One instantly thinks the levels of personal health awareness and basic health education might require examination. Otherwise, the litany of success in ambassadorial, medical and political aims continued with this iteration of the exercise, as it has with virtually all others.[145]

The 1999 Strategic assessment tells us that in a period of reduced resources, targeted aid will be the most effective in Africa. Understanding this point, we must design apolitical, economically enhancing programs the population, government and informal leadership will support. Health programs, which convey little or no threat to the most aboriginal of peoples, conducted at local levels, in concert with indigenous systems, answer the challenge. A quick review of such comprehensive documents as "The World Health Report, 2000," provides encyclopedic background data for all African nations, by disease and condition, for determining priority of medical effort.[146]

RETHINKING MEDFLAG

Several key areas for improvement in the MEDFLAG concept deserve our attention, ranging from the scope of the exercise to the intent. As spectacular as they seem, the MEDFLAG exercises have little impact on sustaining the health of the Host Nation, given the infrequency of visits to respective countries and the individual orientation of the MEDCAP. Further, the concept of a strategically crucial medical engagement activity existing primarily for deployment experience leaves one wondering about the choice of exercise priorities. The EUCOM Directive (ED) 67-11, dated 8 July 2000, requires revision to clearly indicate the political, diplomatic and military priority of the program, and the actual impact of the effort. While the first two phases of the exercise address training of local medical and civil officials, the MEDCAP focus remains fixed on patient visits and individual attention. One might think 19,000

patient encounters significant, but not compared to 600 million. The transition from "eachs" to systems needs to occur in addressing respective clinical areas. For example, rather than conduct a MEDFLAG and leave, provide specific medical, medical support or ancillary service expertise to local activities and maintain consultant contact with the local providers. Bill Fox got it right - without follow-up, you lose the good will and initiative needed to build enduring programs and lasting institutions. The establishment of partnerships, similar to the NATO Partnership Program, between medical units and villages, towns and provinces in Africa, could provide continuity and build systems that last. Additionally, health awareness and wellness programs, incredibly powerful tools in the Third World, bear development potential, but are not "fire and forget" programs.

More basically, the selection of countries for MEDFLAG exercises appears to lack a scientific edge. Given the Interagency Process, one might think the selection process (unclassified) another political food fight, based more on politics and expediency than actual need. The current process requires the benefit of the Iterative Decisionmaking Process (IDM), co-developed by the author and Dr. Kenn Finstuen of the AMEDD Center and School[147] in 1982. In a hierarchy of needs, repetitive exercises to countries with the most urgent need certainly appear more reasonable than a role call approach to program execution, particularly in the age of reduced means. Simply stated, a triage of nations should precede Host Country selection to establish the most immediate world health threat, and the area or region where military medical intervention would accomplish the most. A quantitative methodology, capable of establishing priorities based on agreed upon criteria, such as national interests, risk and value added, should replace the current subjective system. Equally important, resources for sustainment of medical gains require prioritization. The IDM provides this capability. In the context of Africa's evolution, targeting has become more critical to success, as several authors have already shown, and the U.S. can't afford to miss any opportunity to maximize our African investment.

Finally, a decentralized approach to MEDFLAG execution appears most productive. We have already seen the role of national governments as disruptive and frequently counterproductive in matters of policy and governance. Elites still claim the spoils and the disadvantaged remain so. The MEDFLAG must be a supplement, not a substitute, for local and national programs. Observation of protocol at the national level remains important, but as the most recent exercise AAR points out, "We didn't work with the local clinicians."[148] We must not be perceived as out-of-towners, onsite to conduct an exercise and leave, while not bothering to coordinate and cooperate with the very systems and people we came to support. Site surveys

must do more than identify needs, but local capabilities and high pay off activities as well. Synchronization of external effort must compliment synchronization of local effort, or our targeting process will fail.

In short, the MEDFLAG needs refinement before expansion, unless an unexpected reallocation of funds occurs. Select countries and programs scientifically, build systems and sustain them and give medical engagement the priority it deserves. Understanding the historical background presented previously, and the current unwillingness of our political leaders to undertake the mission of protecting Africans from themselves, it remains likely our reactionary approach to the continent will remain. Thus, our targeting of limited capabilities must be precise.

EXPANSION CONCEPTS

Even though military medicine is presented as a supplement to existing programs, the military service is about people and money-and we need both to expand MEDFLAG capabilities and applications. Let's look at funding. Currently, the JCS funds the program. Recalling the article "The Proconsuls," a $350 million annual discretionary budget for the USCINCEUR presents possibilities, particularly in light of the average cost of a MEDFLAG (about $250,000).[149] Reallocation of the USAID budget, even in part, given the obvious benefit to the effected ambassador, seems reasonable. The JCS could also increase medical engagement funding at the national level. Partnership with the UN, WHO or other NGOs and IOs might present cost sharing opportunities for military medicine as well. Continuing AMEDD personnel shortages, particularly in the physician ranks, complicates the staffing of medical engagement, but the Reserve Components (RC) seem perfect for this role. Consider the possibilities of linking Annual Training deployments to African medical engagement programs. The RC provides ideal supplementation to the Active Component plan. Further, the numerous medical and dental scholarship students in the Health Professions Scholarship Program (HPSP) and the Uniformed Services University of the Health Sciences require at least one month per year in direct support of Service medicine. These individuals have already committed to military medicine.

Recalling the inventory of medical specialties listed for MEDFLAG use, the systems approach requires the addition of several new specialties, which are presented with a brief explanation of their use.

- Hospital Administrators: As discussed, the development of primary care clinics and measures of effectiveness within systems requires this expertise. Not only can

these individuals assist in the management of programs, they can provide the expertise to prioritize scarce resources and maximize capabilities

- Patient Administrators: The key to primary care remains patient history and documentation. In any clinic or hospital, records systems increase efficiency and effectiveness of providers, and ensure quality of care.
- Medical Logisticians: Providers without timely appropriate supply systems ultimately fail. Masters of both manual and automated supply procedures, the logisticians establish property and medical supply management systems
- Resource Managers: Solid business practices have become a medical services maxim. Cost accounting, budgeting and resource management ensures continuity of operation.
- Chief of Professional Services: A physician administrator, this skill set establishes standards, continuing medical education and professional recruitment for hospitals.

Each of these skill sets can be used at local, regional or state level, and harkening back to what works in the aid arena, expertise that shapes a specific technology has proven effective. One would hope the long-term regional strategy of USCINCEUR would include the establishment of these medical support systems, known for years to compose the basis of modern medicine. Interlocking logistical systems could, for example, find significant economy of scale in pharmaceutical purchases alone. The same can be said for administrative, financial and professional services. An additional system, that of blood banking and management, should be added to the laboratory task list. All HIV tainted blood must be identified and destroyed at the macro level to prevent further infection. The development of systems in preventive medicine and veterinary service, from local to national, must also become a priority. The transition from patients to populations will necessitate a relook of current utilization guidelines, and further revision of ED 67-11.

SUMMARY

We've seen the national policy on health and identified an ends-ways-means imbalance, examined the national interests of security, prosperity and democracy, discussed foreign aid and the strategies of engagement and shaping in the African context, and delved into the post-colonial economic and political evolution of the African continent. The USEUCOM Theater Engagement Plan, and the medical component, MEDFLAG, has been discussed and critiqued, and offered as an immediate supplementary tool to remedy the means shortfall in our

commitment to international health. It has been the purpose of this study to understand both the complexities of Africa and the imperatives of health throughout the world, and offer reasonable, attainable alternatives to meet the U.S. policy of protecting human health and reducing the spread of disease. While some readjustments within programs may be possible, the everlasting question of where new resources might be found, or reallocated, persists. All the good ideas, systems and dedicated people in the world cannot succeed unless they know how and where to apply their efforts for maximum effect. We have offered points of general departure for both of these issues, hoping to inspire thought and discourse, and help the reader understand the enigma that is Africa.

What we know about engagement in Africa in pursuit of our national interests is dwarfed by what we don't know. Several trends, however, seem to have emerged. Perhaps the "open mind theory," of suspension of assumptions about peoples and cultures of Africa, works best. Even the lowest common human denominator, health, takes on a distinctly African flavor. Homeopathic medicine and healers still wield plenty of clout. Africa has been used and abused, both internally and externally, for centuries. Exploited for gold, slaves and foodstuffs in the past, cast into independence and anarchy without preparation or support in recent years, and the one place on earth one could always find a war, cynicism and suspicion has become widespread. The secret to engagement is found at the local level, with like minded individuals and emergent democracies. Africa isn't governments and institutions, but people, who have the basic need of health to pursue their own interests. Health always works in Africa; non-threatening, apolitical and relevant, it is an underutilized form of national power.

Until the global market and democratization take hold across Africa, conflicts will continue. This appears inevitable. Recent advances in democracy and marketization will not level the economic playing field when 75% of the nation practices subsistence agriculture - the haves and the have-nots will continue to struggle with each other. A final trend involves the confused world's approach to Africa. Donor nations, frustrated and confused, seem less inclined to bestow largess on the continent than in previous years, except in crises. They also fail to understand the basic governmental unit in the Western world, the state, does not exist for many Africans. The U.S. appears not to be alone in a wider policy of reactive response to humanitarian, economic and political events in Africa. What little is done for the continent had better work well for the greatest number.

CONCLUSIONS

Transnational disease alone compels the U.S. to engage with Africa, despite poor governance, economic chaos and continued conflict. Africa has not, and probably will not in the near future, achieve any level of sustained development or stability. Our interests of security, prosperity and democracy are not served by permitting the forces of disease and epidemic to ravage the continent, and our own security, and that of our allies, is placed at risk. We have an appropriate policy for health, but an imbalance of ends, ways and means reduces our global impact. Decisive action is needed, and strategic leadership is required at the political, senior military and economic level. Mobilization of all available means to support the cause of health and disease prevention, including military medical capabilities, appears axiomatic. Program initiatives, including realignment of Department of State, Function 150, Aid to Nations health functions under the Department of Health and Human Services, changes in the Unified Command Plan to include health standards and aspects, and legislative action to enable tax relief for the medical industries involved in world health programs will also be needed. Ownership and unity of effort for world health also requires leadership and political capital- we must expend it. It remains very likely that the global agenda for the next century will be shaped in large part by responses to Third World crises- particularly in Africa. This said, a proactive approach to world health, and African health in particular, needs development. Immediate studies in a systems approach to world health must be directed, from the vision of a healthy world population to assured immunizations for all the world's children. The complexities of the African continent and uncertainties concerning the use of the Post Cold War military will drive changes in the current paradigms of military power, but active engagement embodies much more than training emerging nations to fight and win wars. We live in a period of transition and unprecedented power. We, as a nation, must see this as an opportunity rather than a threat, and boldly go into the new millennium prepared to transform not just equipment and doctrine but attitude and application as well. We would do well to heed the words of former President George Bush, who wrote:

> The present international scene, turbulent though it is, is about as much of a blank slate as history ever provides, and the importance of American engagement has never been higher. If the United States does not lead, there will be no leadership. It is our great challenge to learn from this bloodiest century in history. If we fail to live up to our responsibilities, if we shirk the role which only we can assume, if we retreat from our obligation to the world into indifference, we will, one day, pay the highest price once again for our neglect and shortsightedness.[150]

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