

African Coastal Security

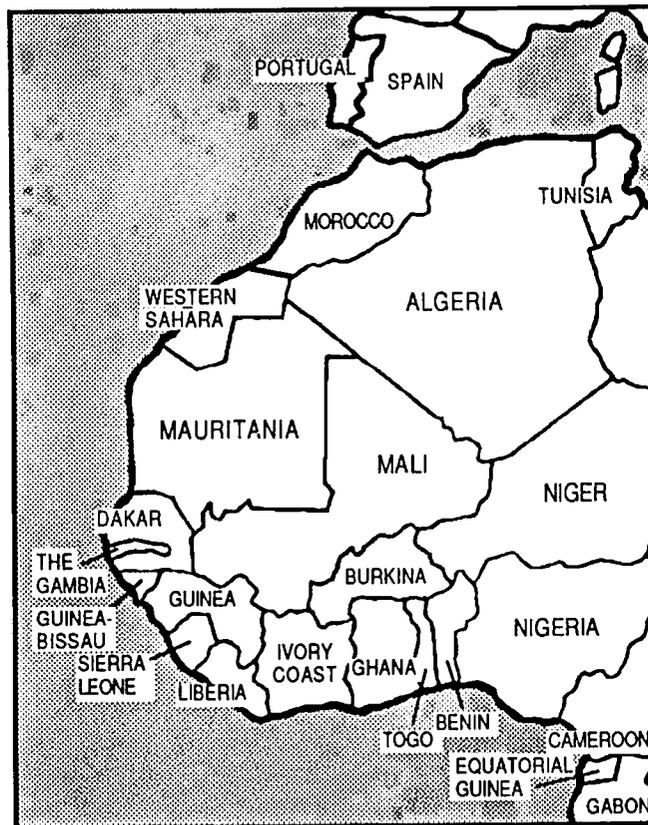
By

Robert W. Thorne
Commander, U. S. Coast Guard

Patrolling off the coast of West Africa in May 1987 near the rich fishing grounds of the Bay of Levrier, a Mauritanian naval vessel turned southwest to check out a large radar target. The captain, confident in the skills and knowledge his sailors had gained over the past week from a U.S. Coast Guard training team, directed his crew to intercept and board what was identified as a 250 foot foreign trawler. A thorough fisheries inspection conducted by his boarding team found several violations, including the use of undersized nets. The team immediately seized the vessel and directed it to the Mauritanian naval port of Nouadhibou.

Similar sightings, boardings, and seizures are frequently occurring along the West African coastline. As these coastal states become more alert to the growing threat to their fishery resources, they are inclined to beef up their navies' capabilities in fisheries protection. The trend to reduce exploitation by foreign fishing fleets is encouraging for the future economic success and nutritional self-sufficiency of these developing nations, and this also encourages their western friends and supporters.

West Africa



A special U.S. Military Assistance Program (MAP) introduced in 1985, called African Coastal Security (ACS), has been instrumental in increasing what previously had been sporadic maritime surveillance throughout the region. Its purpose is to assist selected coastal navies in West Africa to better control their waters, protect their marine resources, and increase revenues.

While progress made to date under ACS has been significant, there remains much to do. The volume of foreign fishing off West Africa is enormous, and the means to police it remains limited. ACS, together with other programs sponsored by the United Nations, World Bank, and other international agencies, is desperately needed to prevent the total elimination of economically valuable fish species from these waters.

FOREIGN FISHING

Some of the world's richest fishing grounds are found along the African coastline, notably off Somalia, Mozambique, Namibia, Angola, and the West African "hump" - Liberia to Morocco. Subjected to intense fishing pressure, many of the fish stocks in these waters are over-exploited and nearing the point of collapse. Distant water fleets from the Soviet Union and other East Bloc states, as well as South Korea, Japan, and Western Europe conduct sophisticated, around-the-clock trawling operations which account for nearly two-thirds of the fish harvested off West Africa; most of these fish are illegally caught through the use of undersized nets.

In 1985, the catch off the coast was reported to be nearly three million metric tons of fish. The actual catch is commonly estimated at two to three times the reported amount, for a value in excess of \$2 billion. As the stocks decline, fishing pressure on the stocks has increased; fisherman off Mauritania report that it now takes four times the effort to catch as much fish as required two years earlier. The lack of regulation of these fishing operations results in serious losses to the Africans both in terms of marine food resources and potential governmental and commercial revenues.

Consistent with their world-wide record of the abuse of fisheries, the Soviets are the most flagrant offenders in the region. Over a five to seven year period during the mid-to-late 1970s, for example, the Angolan government permitted the Soviets unrestrained fishing off Namibia and Angola in exchange for Cuban troop deployments and Soviet equipment. Last year, a group of Americans visiting Luanda, Angola's capital, reported that it was almost impossible to find seafood in the markets in a city where fish was once a staple. The populations of the fish stocks in the region have apparently been devastated.

THE CHALLENGE OF CONTROLLING FISHERIES EXPLOITATION

Since the late 1950s, when a wave of nationalism and independence swept the continent, African national pride has dictated that governments assert control over their natural resources, limiting exploitation to some degree, at least on land. In contrast, the protection and the control of marine resources have been superficial at best. Even when coastal states assumed resource "ownership" over vast ocean territories after the enactment of the United Nations' Law of the Sea Convention in 1982, they had neither the means nor the interest in protecting their waters. Today, the naval capability to monitor and control the security and productivity of their Exclusive Economic Zones (EEZ) is still inadequate, but the interest in doing so has increased markedly.

West African navies typically consist of undersized and marginally operational vessels which lack adequate infrastructure and maintenance support. Moreover, air surveillance is practically nonexistent. Only Mauritania and Senegal have aircraft dedicated to maritime patrols, but flights are infrequent. Guinea-Bissau, for example, has two 82 foot Chinese Shantou class patrol boats delivered (used) in 1983, several Soviet fast attack craft (delivered in 1977 or earlier) in disrepair, a

new Soviet patrol boat, a minimally trained 275-man force, and a Cessna twin engine surveillance plane not in flyable condition. Its EEZ is approximately three times its total country land area, covering nearly 40,000 square miles. Similarly, Sierra Leone recently acquired two well-used Chinese 120 foot patrol boats for its 50-man navy. Its ocean territory also approaches 40,000 square miles, but it has no surveillance aircraft and little money to operate its patrol boats.

Even the few West African navies with suitable assets for maritime law enforcement (MLE) suffer from limited operating budgets, weak national fishing regulations, and often a lack of the political will to seize and prosecute offenders. The difficulties in the region are further compounded by insidious corruption among some of the local bureaucrats who profit from deliberate fisheries mismanagement.

U.S. INVOLVEMENT

The U.S. Department of Defense interest in protecting West African fisheries dates back to the Fall of 1983, when former Principal Deputy Assistant Secretary of Defense, Noel Koch, and former Coast Guard Commandant, Admiral James Gracey, made simultaneous visits to the West African littoral. While there, they were alerted to the magnitude and devastation of illegal foreign fishing. Their meeting led to the convening soon thereafter of an interagency group in Washington to address this serious problem. Participants included officials from the State Department, DOD, U.S. Navy, Coast Guard, and National Marine Fisheries Service. Less than two years later, the ACS program was in operation.

Initially, the program's intent was to provide new patrol boats and surveillance aircraft to African navies. More recently, in reaction to fiscal pressures on the U.S. budget, the emphasis of ACS has shifted toward upgrading operational surveillance platforms, fixing those in disrepair, building and refurbishing shoreside support facilities, and improving the command, control, and communications capabilities of existing navies. Equally important has been the program's emphasis on providing Coast Guard MLE training to West African littoral states and programming their naval students for coastal security instruction in U.S. Navy and Coast Guard schools in the United States.

ACS MANAGEMENT

The ACS program is jointly directed by the Office of the Assistant Secretary of Defense for International Security Affairs and the State Department. The specific design and day-to-day management of the projects, however, are largely accomplished in the Africa Division, Logistics Directorate, Headquarters U.S. European Command, in Stuttgart, West Germany. The U.S. Pacific and Central Commands are now under consideration for inclusion in the ACS program since fish resources off East Africa and some of the island nations in the Indian Ocean are also being exploited by foreign powers without regard to conservation.

ACS projects are nominated by American Embassies to the unified commands. To start the process, survey teams composed typically of unified command, U.S. Navy, and Army Corps of Engineer representatives work with host nation navy representatives in respective countries to examine the feasibility of a project and advise U.S. Embassy personnel on ACS program planning. Once a project is proposed to the unified command, it is reviewed, prioritized, and then forwarded to the Office of International Security Affairs, Secretary of Defense for final review and approval in conjunction with the State Department. A joint annual State/Defense Department cable announces participating countries and associated ACS funding levels within the overall annual MAP appropriations account.

Once projects are approved and funded, several agencies play critical roles in their execution. The Defense Security Assistance Agency (DSAA) administers and manages ACS transactions related to program execution. The Naval Office for Technology Transfer and Security Assistance (NAVOTTSA) is responsible for equipment acquisition and delivery, while the Naval Education and Training Security Assistance Field Activity (NETSAFA) arranges for all ACS related training, including both Mobile Training Teams (MTTs) and CONUS based courses. The International Affairs Branch in Coast Guard Headquarters coordinates with the Navy on sending Coast Guard MTTs to Africa and also arranges training for African naval students in Coast Guard resident courses. The U.S. Army Corps of Engineers at Winchester, VA., manages all ACS construction projects in Africa, while the United States Army Security Affairs Command (USASAC) handles several aircraft repair cases.

ACS PROCESS

ACS projects have been provided to ten West African countries. These activities have been accomplished with a budget averaging between one and two million dollars per year, totalling over seven million dollars (U.S.) since 1985.

TABLE 1

**AFRICAN COASTAL SECURITY
COUNTRY PROGRAM ALLOCATIONS**
(in Thousands of U.S. Dollars)

<u>COUNTRY</u>	<u>FY85</u>	<u>FY86</u>	<u>FY87</u>	<u>FY88</u>	<u>TOTAL</u>
Mauritania	--	750	310	300	1,360
Senegal	1,450	--	500	300	2,250
Gambia	--	--	250	144	394
Guinea-Bissau	--	300	116	300	716
Guinea	--	--	--	500	500
Sierra Leone	--	885	308	--	1,213
Ivory Coast	350	--	--	--	350
Togo	--	--	--	125	125
Equatorial Guinea	--	--	--	116	116
Sao Tome & Principe	--	--	--	165	165

ACS accomplishments include:

- constructing a small naval base in southern Senegal;
- delivering communications, navigation, and/or radar equipment to the Ivory Coast, Mauritania, Senegal, the Gambia, and Guinea-Bissau;
- purchasing rigid inflatable boats for the Gambia and Mauritania;
- providing patrol boat engine parts to Mauritania, the Gambia, and Sao Tome and Principe;
- purchasing deck and safety equipment for Mauritania, the Gambia, and Guinea-Bissau;
- providing shore station construction materials to Guinea-Bissau, and the Gambia;

- funding for officer and enlisted courses in the United States for naval students from Mauritania, the Gambia, and Guinea-Bissau; and
- programming appropriate International Military Education and Training (IMET) courses for naval students throughout HQ USEUCOM's African area of responsibility.



Construction site of the Elinkine Naval Base in southern Senegal. Almost 2 million U.S. dollars in ACS funds are underwriting the cost of the base. The Senegalese Construction Battallon is performing the labor.

One of the most successful efforts under ACS has been the deployment of U.S. Coast Guard MLE training teams to West Africa. An MLE team spent several weeks each with the navies of Mauritania, the Gambia, and Senegal in April and May 1987. In June and July 1988, two additional MLE teams provided similar instruction to Liberia, Guinea, and Guinea-Bissau. The instruction focused on developing procedures for effective maritime interdiction operations, and included practice boardings of host nation fishing vessels. Specialized classroom and hands-on training in search and rescue basic seamanship, electronics and engineering preventive maintenance techniques, and shipboard damage control and fire fighting were also conducted upon request. In addition to instruction, the Coast Guard teams also typically performed repairs of electronic and engineering equipment aboard patrol boats and at shore stations. Prior to departure, these teams offered specific advice on how each nation could improve its fisheries protection, including changes to existing fisheries laws, recommendations on establishing an operations center, increasing air surveillance, etc.

Current ACS initiatives include:

- establishing a three-man technical assistance field team to support patrol boat operations and maintenance in West Africa;
- repairing Cessna surveillance aircraft in Guinea and Guinea Bissau;

- re-engining and upgrading a patrol boat in Sao Tome and Principe and providing, as an exception to policy, a 105 foot patrol boat to Sierra Leone;
- providing communications and radar equipment to Togo; and
- deploying a U.S. Coast Guard MLE training team to Cameroon, Equatorial Guinea, Gabon, and Sao Tome and Principe.



Sao Tome and Principe's 45-foot patrol boat in Sao Tome harbor awaits overhaul to be accomplished with ACS funds.

The ACS program also complements other U.S. security assistance programs aimed at improving the capabilities of West African navies. Cameroon, Guinea, and Equatorial Guinea have obtained patrol boats, through Military Assistance Program (MAP) grants or U.S. credits, to patrol their riverine and coastal waters. ACS teams have since visited these countries to assist in planning the better use of these craft, including providing training recommendations.

Regional Cooperation

An important dimension of the ACS program from the outset has been the encouragement of regional cooperation among African coastal states. The limited amount and marginal condition of their naval assets strongly favors adopting a cooperative strategy toward solving common coastal security problems in the region.

Despite inherent difficulties associated with international cooperation within West Africa (e.g., language barriers, traditional mistrust, etc.), significant cooperation has taken root among several coastal countries. Informal "hot pursuit" agreements between neighboring navies and the exchange of spare parts for shipyard services are two examples. Establishing naval communication links and conducting joint surveillance patrols would also be effective measures. These kinds of partnerships must continue and develop further if the region is to successfully counter the increasing threat to its fisheries.

Allied Cooperation

Another tenet of the ACS program is to encourage Western Allied participation in ACS. Since the former colonial powers, primarily France and England, have significant influence in West Africa, the U.S. State Department, Defense Department, and HQ USEUCOM have sought their cooperation in implementing certain projects under the ACS program. ACS activities have also been coordinated with other donor states and international agencies. Information is exchanged regularly with the Canadians on our complementary fisheries protection efforts in Senegal. In the Gambia, a US/UK cooperative project to upgrade a pier, construct a naval headquarters building, and refurbish a patrol boat is nearly completed. Fisheries data is informally shared between the United Nations Food and Agriculture (FAO) Division in Rome and HQ USEUCOM.



Gambian Marine Unit naval pier is being upgraded to accommodate fiberglass hull Gambian patrol boat. New pilings with wooden facing are being installed with ACS funds to strengthen the pier and soften the PB's impact. This is a cooperative project with the United Kingdom whose military representatives in the Gambia designed and manage the project.

CONCLUSION

Over the past three years, ACS has rapidly become a significant and promising U.S. program for West Africa. Through direct assistance and close consultation at a variety of levels, ACS has encouraged the coastal states to increase their navies' emphasis on maritime law enforcement. This emphasis has begun to make a difference, not only in the growing focus of host nation officials on the general problem of protecting their valuable fisheries resources, but also in the specific need to increase surveillance patrols and seizures of domestic and foreign fishing vessels found to be in violation. This has led several states to become disenchanted with exploitative foreign fishing partners, leading to canceling or renegotiating existing fishing treaties, under more favorable terms. Countries that heretofore kept American military representatives at arms length are no longer doing so to the same extent. For example, ACS projects in Guinea and Guinea-Bissau have promoted new and friendly relations with the U.S. military. Further, the morale of participating West African navies has improved. For the first time, they are optimistic about their future capability to protect their nations' marine resources and their coastlines.

However, the sheer magnitude of illegal fishing compared to the limited assets of the existing patrol forces means that progress will not be rapid. Effective deterrence against relentless foreign fishing along the West African coastline will require, along with other measures, a significant increase in joint aircraft and patrol boat surveillance operations. If this is to happen, the U.S. in particular, needs to press hard for continued Western encouragement, cooperation, and assistance, as well as even greater coordination among the African coastal states.



CDR Bob Thorne, USCG, Headquarters USEUCOM ACS program manager, presents a plaque to crewmembers of the Gambian 63ft Patrol Boat JATO on behalf of the Coast Guard Maritime Law Enforcement mobile training team that visited Banjul in April 1987. British advisor to the Gambian Marine Unit, Major David Fisher, Royal Transportation Corps, is at left.

On a continent whose natural resources have been ravaged and squandered, the ACS program represents a fleeting opportunity to assist in the rescue and preservation of one of these precious resources. In addition, it gives the U.S. a valuable opportunity to nurture international relationships while protecting these fisheries. This can be achieved with a comparatively small expenditure of money and effort with rewards which far exceed the investment.

ABOUT THE AUTHOR

Commander Robert W. Thorne, U.S. Coast Guard Commander Thorne is a graduate (1969) of the U.S. Coast Guard Academy and the U.S. Naval Postgraduate School (1979). Former Commanding Officer of a 95 foot patrol boat and a 180 foot seagoing buoy tender, he is the first Coast Guard officer assigned to Headquarters, U.S. European Command in Stuttgart, West Germany. His primary duty on the USEUCOM staff has been to design, manage, and implement the African Coastal Security program along the entire West African littoral. Involved in the ACS program since its inception in 1985, Commander Thorne has recently been reassigned to be the Commanding Officer, Training Center, Governors Island, N.Y.

Ask Professor Price

IF YOU HAVE ANY QUESTIONS FOR PROFESSOR PRICE, SEND THEM TO THE OFFICE OF THE DIRECTOR OF FINANCE AND ACCOUNTING, ATTN: SAFM-FAP-S, INDIANAPOLIS, INDIANA 46249-1046. YOUR QUESTIONS AND PROFESSOR PRICE'S RESPONSES WILL BE PUBLISHED TO HELP OTHERS TOO.

Question: Dear Professor: I typically price Army medical courses for foreign military trainees. However, I've been tasked to provide medical observer training. One of our hospitals is planning to provide this training during the break between other courses. In this way, the students won't have to sit around and do nothing while waiting for the next course to begin. In training, these students will accompany the doctors and nurses while they are performing their duties and the students will observe the practice of medical procedures. Now for my question: How do I price this medical observer training? **Signed: Jean**

Answer: Dear **Jean:** To price medical observer training you should use the course costing formula in chapter 7, DOD 7290.3-M, *FMS Financial Management Manual*. Depending on the category of customer (i.e., full cost, NATO, or incremental), the price will vary. For example, prices for NATO students exclude indirect costs and the asset use charge. However, these costs are included under the full cost pricing method. Some elements of cost included in the observer price are personnel services, materials or supplies, and asset use.

Instead of the course costing formula, you may use the authorized Department of the Army standard rates for most observer training. However, these may not be used if a cost accounting system generates actual cost.

Question: Dear Professor: I read your previous article in The DISAM Journal on pricing civilian labor and I think its great! While I now understand how to price civilian labor, I find that I could use some help in estimating prices for foreign military sales (FMS) cases involving military labor. In particular, I want to know if there is a rule for determining when to charge military labor. For some cases I'm told by my supervisor to estimate the cost, but for others the cost is waived. **Signed: Tom**

Answer: Dear **Tom:** The general rule is that military services under FMS cases must be priced to recover the full cost to the U.S. Government. However, there are two exceptions.

The first exception is when cases are totally financed with Military Assistance Program (MAP) funds. For these cases, military personnel costs will not be charged. However, if later the case is financed with other than MAP funds, it must be repriced and the purchaser charged at the full cost.

The second exception is permitted for FMS purchasers of training who are International Military Education and Training (IMET) recipients. These purchasers are charged military personnel costs only if training the foreign student causes an additional (incremental) cost to the U.S. Government.

Fully costed FMS funded military personnel services are priced using the annual composite standard rates in effect at the time the services are performed.

Military personnel labor cost is estimated in the same manner as civilian personnel labor cost, except for retirement which is included in the annual composite standard rates. Prices for military labor executed in a future year must be inflated appropriately. Also, partial years of effort must be computed, if applicable. Just like pricing civilian cost, the adjusted pay cost along with the leave and holiday cost becomes the basis for determining the other benefits cost. Unlike the factor for civilian labor, the leave/holidays acceleration factor is 14 percent (FY89). The additional accelerations applied to recover other benefits differ for officers and enlisted personnel. The rates for FY89 are:

Officers	6%
Enlisted personnel	18%

Together, these cost elements become the military labor cost. As equations, the elements look like this:

$$\text{Other Benefits} = (\text{Adjusted Pay} + \text{Leave/Holiday}) \times 6\% \text{ or } 18\%$$

$$\text{Military Labor} = \text{Adjusted Pay} + \text{Leave/Holiday} + \text{Other Benefits}$$

Now don't forget to add in an asset use charge (4%) and any temporary duty (TDY) cost, if applicable!

If you prefer estimating vertically rather than horizontally with equations, the following worksheet may be used:

1.	Composite Pay	_____
2.	Leave/holiday	_____
3.	Subtotal (1+2)	_____
4.	Other benefits	_____
5.	Subtotal (3+4)	_____
6.	Asset use charge	_____
7.	Temporary duty	_____
8.	Total (5+6+7)	_____

Question: Dear Professor: I am having difficulty in understanding how to price procurement funded Army RM sales (sale item replaced with an improved model) under the FMS Program for a secondary item. I understand the sale is RM because the stock number of the replacement item is different from the stock number of the sale item. Could you tell me how to price the sale?
Signed: Travis.

Answer: Dear Travis: The RM classification does not apply to secondary items. For pricing purposes, all secondary items sold under the FMS Program are considered sales from inventory (classified RS). These nonexcess secondary items are sold at the published catalog price plus a 10 percent replacement factor. RM sales come into play for major end item sales.