

STRATEGIC DISASTER MANAGEMENT

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ABSTRACT

The role and nature of the military in humanitarian assistance has been the subject of much recent debate. With the end of the Cold War, renewed emphasis has been placed on humanitarian assistance (disaster relief, refugee management, and humanitarian intervention/conflict) missions for military forces of all nations. The Federal Response Plan defines the roles of emergency medical services, civilian agencies and military resources in domestic disaster response. The ability to mount an effective global response to international disasters is linked to United States strategic planning. This article describes and broadens the understanding of the evolving concept of geographic and strategic disaster management and the potential role of the military, disaster medicine and emergency medical services. Two examples of strategic humanitarian relief operations are illustrated.

INTRODUCTION

Domestic disaster planning on local, state and national levels, requires a logistical response that is strongly linked to established emergency medical services systems. In the United States the lead agency for national, natural and man-made disasters, is the Federal Emergency Management Agency (FEMA). The Department of Defense is one of many Federal agency resources supporting FEMA.

Foreign countries may appeal for outside assistance in the aftermath of a natural disaster. The international response is varied and assessment dependent, with non-governmental (NGO's) and private voluntary organizations (PVO's) organized under host nation auspices. Historically, Department of Defense resources, primarily aircraft, participate in transporting relief workers, supplies and equipment. Success is often dependent on the existing infrastructure of the

government and the ability of the host nation to efficiently coordinate resources during the emergency, recovery and reconstruction phases of the disaster.¹

Complex humanitarian emergencies, often defined as catastrophic public health emergencies,²³ are the result of war, conflict or civil disturbance. They are void of political solution and require a coordinated response from United Nations agencies, the International Committee of the Red Cross (ICRC), humanitarian relief organizations (NGO's and PVO's) and coalition military forces.⁴ Coalition Military sponsored Civil-Military Operations Centers (CMOC), which evolved from experience in the Kurdish refugee relief and Somalia assistance efforts, coordinate security and humanitarian assistance requirements of the victims and frequently provide additional security, communications and transport assistance to relief workers.⁵ These large scale disasters frequently require immediate medical care, food, water, shelter, and provision of security for affected populations. This translates into a massive requirement for material, equipment and personnel. Currently, the only organization with airlift and logistical capacity to respond rapidly during the emergency phase is the Department of Defense.⁶

Attention given only to the emergency phase of disasters rarely results in long lasting results to the victims. Links between disasters and economic development have been identified and extensively discussed in recent years.⁷ Focusing on reducing the vulnerability of populations at risk and on promoting local preparedness can prevent the devastating effects of many disasters. Strategic disaster planning ideally involves the usage of peace time military resources (active and reserve) in a wide variety of programs, professional exchanges and training opportunities to mitigate the effects of disasters in foreign host nations. Designated to engage

a host nation through bilateral agreements or existing treaties, such strategic disaster planning allows for a rapid crisis response during the emergency phase of any disaster and addresses development needs through on going projects directed toward disaster mitigation. In all instances, strategic disaster planning initiatives provide for humanitarian assistance and disaster relief in a manner that supplements or complements the efforts of the host nation, civil authorities, or agencies that have the primary responsibility for providing assistance.⁵ The Department of Defense disaster response resources are limited. Using these resources in a manner that would create or at least promote regional stability, is the basis of strategic disaster planning.

In strategic disaster management, disaster medicine response requirements are on a large scale. Decision makers, for example, require that medical personnel, among other professional evaluators, have the capacity to rapidly assess the medical threat, be able to articulate operational needs and participate in initiating life-saving measures, when required, under cross-cultural auspices of both the host nation and international relief organizations. Medical teams must have expertise in various aspects of international health, to include knowledge of international health care systems, information management, public health and preventive medicine, emergency medical systems both civil and military, assessment skills and international humanitarian law, just to name a few.³ Militarily these teams must possess first hand knowledge of the various mobile medical systems and their personnel and equipment requirements.

STRATEGIC GEOGRAPHIC RESPONSIBILITY

United States military disaster relief and humanitarian assistance operations are conducted in support of a civilian agency, usually the Department of State or FEMA, and only at the

direction of the National Command Authority (NCA), its core consisting of the President of the United States and the Secretary of Defense. The Secretary of Defense directly tasks, through the Chairman of the Joint Chiefs of Staff (CJCS), Unified (Joint Army, Navy, Air Force, Marines) Commanders, with geographic areas of responsibility, to conduct humanitarian assistance operations when necessary. Unified Commands are the military's operational-level organization responsible, after strategic policy and mission guidance for a geographic region known in the military as a theater of operations.⁵ These regional Commanders, exercise control over all US military units operating within their designated areas as indicated in table 1. As such, there are pre-existing command, control and communications systems in place that are readily adapted to humanitarian assistance operations. During the Kurdish refugee relief (Operation Provide Comfort) the European Command was the Unified Command. During the assistance for the Bangladesh cyclone (Operation Sea Angel), it was Pacific Command, and in Somalia (Operation Restore Hope) Central Command provided the guidance, operational control, support and resources for the regional response.

PHASE I: DEPLOYMENT AND ASSESSMENT

Unified Commander-in-Chiefs, or "CINC's" as they are normally referred to, carry out humanitarian assistance and disaster relief operations by supporting the Department of State mission in a foreign country or FEMA in the case of Micronesia. The CINC establishes the operational objectives needed to transform national-level policy and guidance (strategy) into field level actions. The military support to strategic planning for foreign humanitarian assistance operations may include natural and man-made disaster relief, refugee protection and humanitarian assistance during conflict. Table 2 summarizes the sequence of operational events.

The assistance process begins with the host nation requesting assistance through the United States Ambassador or Chief of Mission. The Ambassador assisted by the Embassy Country team (professional staff with host country expertise), develops a recommendation for declaring a foreign disaster that is immediately communicated to the Department of State. The Ambassadors or Chiefs of Mission have funds, although limited, that may be immediately contributed to the host nation for disaster relief purposes.⁵

The Department of State is responsible for the actual declaration of the disaster and becomes the lead agency in determining the US policy for a particular relief effort. This is provided through its Agency for International Development (AID), and its coordinating Office of Foreign Disaster Assistance (OFDA). AID/OFDA has the following responsibilities: 1) organize and coordinate the total US Government disaster relief responses, 2) makes necessary procurement of supplies, services and transportation, and 3) coordinates assistance efforts with operational level NGO's and PVO's. OFDA is capable of deploying a Disaster Assistance Response Team (DART) into the geographic area of responsibility to coordinate the humanitarian relief effort. OFDA is the primary means for military and civilian operational level coordination, communicating directly, funding and requesting services from the Department of Defense (Assistant Secretary for Humanitarian and Refugee Affairs) and the regional CINC. Defense Department equipment, especially aircraft and other transportation resources, are a frequent immediate request. The Department of State has many bureaus that immediately begin to assist in formulating the disaster policy for the affected country or region (Table 3).^{5,8}

PHASE II: RESPONSES

Once the Department of Defense receives the request for international humanitarian

assistance from OFDA, the CJCS oversees the execution of the actual military logistical response to the crisis (Figure 1). After receiving the broader policy and actual mission definition, the regional unified CINC organizes, plans and initiates the relief operation. The most critical task for the Unified Command is to develop the humanitarian assistance mission statement and supporting specified and implied tasks, concept of operations, and alternative courses of action. Clarity and achievable results for a short duration are the aims of the mission statement.⁵ The key considerations in developing a mission statement are the role of the military in assisting international relief organizations, security aspects of the relief operation, and possible use of civil affairs units that focus on assistance in rebuilding and stabilizing governmental infrastructure. The mission statement for Operation Restore Hope is one example: "When directed by the National Command Authority, Central Command will conduct joint or combined (coalition) military operations in Somalia to secure the major airports and seaports, key installations, and food distribution points; to provide open and free passage of relief supplies; to provide security for convoys and relief organization operations; and to assist NGO's in providing humanitarian relief under UN auspices."⁹

The CINC has several options to expedite the relief operation.^{5,8} As was done in Somalia, the Kurdish refugee operation and the Bangladesh cyclone relief, the CINC may designate and dispatch a self-sustained Joint (all services) Task Force (JTF). The JTF Commander has resources necessary to conduct the relief mission at the site of the disaster. At the direction of the US Ambassador and when there is a recognized and stable host government, the JTF will focus on immediate life-saving support and emergency resources distribution through host nation and international relief organizations. The JTF routinely establishes

immediate liaison positions with the host nation, relief organizations and military of other nations.

Most crucial is the CINC's early deployment of a Humanitarian Assistance Survey team (HAST), which assesses mortality, injury and illness, dislocation and/or displacement of persons, disruption of the government and infrastructure destruction. The HAST must have communication capability and possess personnel able to assess medical, engineering, aviation and logistical requirements. As a survey and assessment team, the HAST accesses the classical assessment tools (maps, charts, geodetic information), medical threat assessment information and Embassy points of contact within the public health and civil administration structure of the host nation. Unified Command Medical Operations Staff provides medical teams with current host country health related data base information. In addition, the HAST is capable of beginning the humanitarian relief mission, even before the actual deployment of regional military personnel and equipment and before OFDA is capable of responding. Consequently, when authorized by the Ambassador, the HAST may supply immediate food and medical shipments in support of existing NGO's and PVO's. The HAST will support the OFDA deployed DART as it begins to assume coordination at the host nation level of US directed relief, rehabilitation and reconstruction efforts.^{5,8,10}

As in all emergencies, time-to-response is crucial. Requirements among strategic disaster plans call for the regional unified CINC's to determine, within two hours of Department of Defense notification, military support availability, to deploy a HAST within 12 hours, and provide direct relief operations at the affected area within 48 to 72 hours. This may prove to be earlier if the needed supplies are accessible within the region of the disaster.⁵

In both Somalia and Kurdistan relief efforts, the regional CINC's further established Humanitarian Assistance Coordination Centers (HACC) directed to assist with interagency planning and coordination. Staffing of the HACC serves the decision makers at all levels in ensuring optimal links with OFDA, NGO's, PVO's, UN, ICRC and any other agencies that might participate. The HACC has proved to be an invaluable advocate in coordinating the multiple civil and military participants, who often have diverse missions, characteristics, limitations and systems structures.^{5,9}

Soon after arriving at the disaster site, the JTF, in concert with the ambassador, begin to define the expected duration of the operation, the exact operation objectives, a plan for integration with the host nation and NGO's/PVO's, and a redeployment plan. Unless directed otherwise, Phase II is complete at the conclusion of the life-saving mission and when the host nation is capable of preventing further loss of life without JTF assistance. Experience indicates that Phase II includes emergency food, water, shelter, clothing, supplies, medical and engineering support, search and rescue, assessment, assistance with refugee operations, debris clearance, restoration of communications and assistance in evacuation of expatriate personnel and families.

PHASE III: TRANSITION AND REDEPLOYMENT

Military Phase III correlates with recognized recovery and rehabilitation phases of disaster management.¹ For military assistance under current strategic planning, the completion of the transition plan begun in Phase II marks the beginning of phase III. The JTF will return home. From this point on, relief and assistance continues under the direction of the Ambassador and on-site OFDA representatives, in coordination with the international agencies and the host

nation.^{5,8} Planning for transition requires measures of effectiveness (MOEs) in the four main areas of security, infrastructure, medical/public health and economic/agricultural. These MOEs are established from baseline data and are followed to assist in determining transition requirements, evaluation of effectiveness and outcome.¹¹ In practice, Phase III often reveals areas that may require further assistance, especially those associated with infrastructure stabilization and development, to ensure future preparedness and prevention.¹² Civil Affairs Teams with mission tasks related to rehabilitation and reconstruction of civil administration, may remain deployed with specific duties to rebuild, advise and train in a myriad of public health, transportation, communication, judicial and governmental tasks.¹³ To ensure interagency coordination and training of transition personnel especially among UN agencies, security assistance and bilateral post recovery exercises with the host nation, some of the Unified Command personnel may also remain in the recovery area. The US military can get involved in long-term humanitarian projects that lead to nation building, only under guidance and direction of the Department of State.

PACIFIC BASIN TERRITORIES

The Pacific Basin countries of the Federated States of Micronesia (FSM), the Republic of the Marshall Islands (RMI), and the Republic of Palau (RP) (the latter a UN Trusteeship administered by the US) provide a unique strategic disaster planning challenge. For disasters, they are considered "domestic", rather than foreign and therefore, FEMA, rather than the Department of State, assumes the lead agency role. FEMA tasks the Department of Defense to respond via the Federal Response Plan, common to the continental United States, Hawaii and Alaska. As such, Pacific Command resources begin only after a Presidential major disaster

declaration.¹⁴

In the Pacific Basin the existing infrastructure varies. Both the States of Hawaii and Alaska and the Territory of Guam possess extensive local relief organizations, infrastructure and National Guard capability that provide a core of relief response under the Federal Response Plan. The Commonwealth of Northern Marianas Islands, Federated States of Micronesia, the Territory of American Samoa, and the Republics of Palau and Marshall Islands have no National Guard and limited local relief capabilities. The geographic complexities and the large number of disasters occurring in this region make assistance responses one of the most likely missions for the Pacific Command.¹²

The Pacific Command response to the FSM, RMI, and RP in actuality, becomes a mixed domestic and international response. A cyclone that affects American Samoa, may also require assistance to Western Samoa, an independent nation (Table 4). Whatever the affected area may be, the requirements are similar. Assistance arrives by air or sea, the main resources of which belong to the Pacific Command. The military participation focuses on immediate and short-term actions to save lives, protect property and meet basic human needs. However, under the Federal Response Plan, the military may assist in recovery (Phase III) support activities such as public health, preventive medicine and temporary housing assistance programs.^{14,15}

STRATEGIC ASSISTANCE OPERATIONS:

Coalition military forces have gained considerable experience, in difficult times, with a multitude of humanitarian assistance and disaster relief missions in the past decade. The following two strategic operations illustrate the complexity of the assistance efforts.

KURDISH REFUGEE RELIEF

In April of 1991, between 500,000 to 700,000 refugees were found clinging to the snow-covered mountains on the Turkey-Iraq border. Operation Provide Comfort, the first international humanitarian relief operation sanctioned by the Security Council of the United Nations, brought together military forces of 13 nations and material and relief workers from 30 nations in a single coordinated humanitarian effort.^{4,16} Before finding refuge across the Turkey border, the killing of many adult males by Iraq Military resulted in a refugee population that was a disproportionate 20% adult males, 30% adult females and 50% children under the age of five. Over 10,000 would die, mostly the very young or elderly.¹⁶

Disaster relief response teams from the European Command arrived within 24 hours. Within 36 hours, refugees were receiving 27 tons of relief supplies by airdrop. The humanitarian relief operation under the auspices of European Command coordinated 50 international relief agencies and over 22,000 military personnel. Stabilization of the refugee population in 43 separate mountainous locations was achieved within 60 days. The primary objective, to cease the escalating mortality rates from exposure, malnutrition, and dehydration secondary to gastrointestinal disease, and provide a safe public health environment was achieved. A total of 17,000 tons of relief supplies was delivered by airdrop, helicopter and truck, in a logistical infrastructure that stretched over 83,000 square miles.¹⁵

The United Nations was operationally unable to meet the emergency requirements in this disaster. The Security Council directed the coalition forces to provide a response under existing strategic planning guidelines. Operation Provide Comfort was, then, the largest humanitarian assistance effort which demanded a cooperative coordination of a multitude of diverse agencies and organizations. Many in the NGO and PVO community were understandably wary of any

association with the military. New ground was broken; mistakes were made and many lessons were learned. The success of the operation, Minear claims, was due 1) to the military's ability to provide a firm point of reference for the international relief organizations, 2) the perception that the military was an ally in efforts to assist those in need, and 3) the competence and professionalism of the various agencies and military units.⁴

PACIFIC RIM: BANGLADESH CYCLONE

The Asia-Pacific region derives its importance from its sheer strategic dimensions that covers 52 percent of the earth's surface; with its wide diversity of peoples, cultures, religions and conflicts.⁹ Up to two-thirds of the world's natural and man-made disasters occur in this region (Table 4). The geographic responsibility for the Pacific Command embraces India, the Indian Ocean, Northeast and Southeast Asia, the South Pacific, and Oceania (Figure 2).

The first non-UN participating Joint humanitarian assistance operation under current strategic planning occurred, from May to June 1991, in response to Cyclone 02B that slammed into the Chittagong-Cox's Bazaar coast of Bangladesh on April 29 (Hawaii time). Over 138,000 lives were lost, 2.7 million people rendered homeless and 100,000 livestock killed. On May 9, there were indications that the US would be asked to participate in the assistance effort. Information from the affected area was sketchy; all voice communication with Bangladesh disrupted, the only communication being teletype by way of the US Embassy in Dhaka, the Capital of Bangladesh. Because of the many unknowns concerning the infrastructure of the affected area, and the status of host nation ability to support even an assessment effort, the Pacific Command Staff developed a "worst case" assessment and response package that. This included a survey and assessment response team, satellite communication capability, limited self-

sustaining transportation, and a reverse osmosis water purification capability.^{17,20}

On May 11 the newly elected civilian government of Bangladesh requested assistance through the US Ambassador. Upon approval of this request by the National Command Authority, the Chairman of the JCS tasked the Pacific Command to respond. On May 12 the twenty-eight personnel survey team arrived, and soon afterward, satellite communications, by way of a portable field system, were established between Bangladesh, the Pacific Command in Hawaii and regional Marine forces on Okinawa. The assessment determined that there was no local infrastructure capable of accepting and sustaining a technologically sophisticated military response. As a result, the operation became primarily seabased, with coalition military forces from the US, Britain, and Japan supporting the local government, the Bangladesh military and NGO's such as CARE and the Red Crescent Society.²⁰

A Civil-Military Crisis Action Team was formed by the Bangladesh government to work with the Joint Task Force. Assessment established that the primary problem was one of distribution of food and supplies from Dhaka to Chittagong and from there to outlying locations. As a result, Joint Military C-130 fixed wing aircraft and helicopters began delivery of supplies, while Air Force specialists were tasked to complete assessments to determine load bearing capabilities of remote airfield sites. The Crisis Action Team and NGO's developed a national level coordination committee to place priorities on the relief effort. In the first week of response immediate efforts were directed to stabilize life threatening situations. Twenty-eight helicopters handled the bulk of local distribution of food and medical supplies and sea based medical teams supported the fragile local health infrastructure. DART teams provided on-the-scene assessment to gauge the need for medical support in various locations and determined where reverse osmosis

water purification units would be placed.^{17,20}

In the second week (Phase II), efforts were directed at restoring the infrastructure in such a way as to allow the Bangladesh government to take full control of the relief efforts. By May 28 Phase III was reached, and military forces departed by June 13. Overall, 194 fixed wing and 2,101 helicopter aircraft sorties carried 2,430 and 1,850 tons of food and relief supplies respectively. Landing craft and surface craft vehicles delivered an additional 1,526 tons to outlying areas.

Lessons learned included recognition that the military's war fighting and operational skills must be augmented by the skills necessary to conduct effective humanitarian assistance and disaster relief operations. This was particularly true in the area of initial assessment where key skills areas were lacking in depth. The JTF had to be prepared to immediately overcome problems inherent to the host nation and NGO's. Bangladesh, as in the case of many developing countries, did not have a strong tradition of intergovernmental cooperation. The newly elected government was only a few months old and was on a tenuous footing, and the professional civil service historically did not respond rapidly in a crisis. The otherwise proficient national and international NGO's lacked transportation and communication capabilities. An immediate task of the JTF was to meet these needs and develop a plan for local and national coordination, an essential requirement for any relief process.²⁰

DISCUSSION

The survival of nations and their governments depends on their ability to endure through natural and man-made disasters. Earthquakes, floods, volcanic eruptions, typhoons, famine, drought, epidemics or pandemics, oil spills, radiological or chemical accidents, and the direct

consequences of conflict, take their toll on populations, resources and economies. Refugees or other dislocated persons are, with rare exceptions, a major consideration during any conflict or disaster. The phrase "humanitarian conflict" is frequently used to describe conflict in conjunction with humanitarian assistance,¹² such as the protection of Kurdish refugees. Collectively the US military response to these contingencies, at the direction of the US government, is termed humanitarian assistance.

US military resources have always been involved in foreign or domestic humanitarian assistance. The use of the military to perform these missions was an original intent of the Constitution and is clearly defined and authorized in Titles 10 and 32 of the US Code.²¹

The capability to respond rapidly to crises, and to bring a large number of resources (i.e., leadership, organization, equipment, discipline, specific skills) to bear at a given time and place, makes the military an attractive solution to a wide variety of problems.⁵ This includes humanitarian assistance, disaster relief, control of civil disturbance, nation assistance and other activities that are not directly or indirectly related to war fighting. The military provides for short-term technical-humanitarian services; the restoring of vital communications, the managing of complex relief logistics, the provision of emergency medical care and the delivery of high priority supplies. Military personnel adapt rapidly to difficult field conditions without becoming an immediate burden on the host nation.

Current strategic concepts and planning for disaster and humanitarian assistance resulted from many diverse factors: 1) the re-thinking of post Cold War priorities with emphasis on regional nation-state development, 2) UN Security Council cooperation on meeting UN sanctioned relief operations, 3) maturity of emergency services systems models and research in

North America, Europe, and Australia, and their influences on developing countries, and 4) the often difficult but evolving global experiences in complex humanitarian emergencies that have forced cooperative liaison between coalition military, UN, ICRC, and international NGO's and PVO's.

Current strategic planning, that involves geographic responsibility for Unified Commanders in both disaster relief and humanitarian assistance, is also forging new models of cooperative initiatives among developed and lesser developed countries. In the Pacific Basin shared concerns for the tragedies of natural disasters are uniting resources under cooperative agreements between the US, Australia, New Zealand, Japan and France.^{22,23}

Coalition humanitarian assistance procedures are rapidly evolving in the international arena. In complex humanitarian emergencies the catastrophic public health and infrastructure disruption is obvious. In many developing countries a natural disaster serves as a catalyst in exposing vulnerabilities by defining a poor state of public health. Studies indicate that many countries improve their capabilities following a disaster in which outside humanitarian intervention occurred.⁷ Bangladesh mitigated a subsequent international intervention by identifying and correcting numerous infrastructure, preparedness and response problems following the devastating cyclone of 1991.¹⁹

Disaster medicine has also begun to evolve to meet strategic planning requirements. More emphasis is now placed on public health and preventive medicine skills, epidemiologic assessments and surveys, and the application of emergency medical care to mitigate the effects of societal and political tragedies. There is need to improve the training of military personnel in internationally accepted assessment protocols, international law and conventions regarding

humanitarian assistance and improved networking and communications between and among coalition partners.²⁴

In a world where resources are limited and poorly distributed, professional information gained from domestic and international experiences is more crucial than ever. Disaster Management is an essential component of every emergency medical services system. Lesser developed countries have recognized the importance of EMS in development and look to the North American, European and Australian models for guidance.

Solutions will come from inventing new international capacities and strategies both civilian and military. Humanitarian interventions call for means to first reverse public health indicators of pending disaster, second ensure cost efficiency and accountability in the appropriate utilization of limited resources, and last, convince the donor nations that their contributions will ultimately lead to improved development and mitigation.

CONCLUSIONS

The concept of strategic disaster management is essential to understanding current US foreign disaster assistance. The US military Unified Commands are responsible for carrying out national-level policy strategies that include humanitarian assistance, disaster relief and nation building.

Table 1. Geographic responsibilities of the Regional Unified Commander

UNIFIED COMMANDERS	DESIGNATED COUNTRIES
Central Command	Middle East and Southwest Asia
Southern Command	Central and South America
Pacific Command	Pacific Basin and Rim Countries
Atlantic Command	Atlantic Ocean Countries
European Command	Europe and Africa
Forces Command (Army only)	Continental United States

Table 2. Sequence of operational events in foreign disasters

ORGANIZATION/AGENCY	ACTION
* Host Nation to Ambassador or Chief of Mission	<ul style="list-style-type: none"> * State of Disaster exists * Request for assistance to Department of State
* Secretary of State through USAID/OFDA	<ul style="list-style-type: none"> * Request to Department of Defense for Military Assistance
* Department of Defense-to- Unified Regional Commanders (CINCs)	<ul style="list-style-type: none"> * Determine availability of regional forces * Describe full conditions of disaster * Complete within 2 hours of notification
* Regional CINC Command Center	<ul style="list-style-type: none"> * Activate Disaster Response teams
* Humanitarian Assistance Survey team (HAST)	<ul style="list-style-type: none"> * Assess scope and extent of assistance * Within 12 hours
<ul style="list-style-type: none"> * Regional Unified CINC * Joint Task Force 	<ul style="list-style-type: none"> * Direct Relief/Operations * Carry out relief operations including support of other agencies * Within 48-72 hours

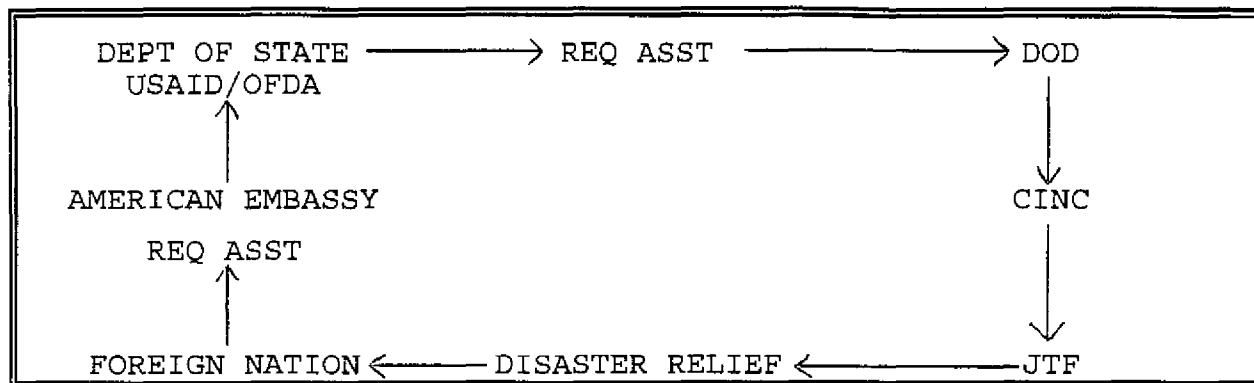
Table 3. Department of State assisting offices and bureaus

- * Office of Foreign Disaster Assistance
- * Office of International Affairs
- * Bureau of Food Humanitarian Affairs and Crisis
- * Bureau of International Organization Affairs
- * Bureau of Politico-Military Affairs
- * Bureau responsible for the Region receiving humanitarian assistance

Table 4. Recent Pacific Command disaster relief operations

FEB 90	CYCLONE OFA	WESTERN SAMOA
FEB 90	CYCLONE OFA	AMERICAN SAMOA
JUL 90	EARTHQUAKE	PHILIPPINES
NOV 90	TYPHOON MIKE	FED STATES OF MICRONESIA
NOV 90	TYPHOON RUSS	GUAM
DEC 90	TYPHOON OWEN	FED STATES OF MICRONESIA
MAY 91	SEA ANGEL (CYCLONE)	BANGLADESH
JUN 91	FIERY VIGIL (VOLCANO)	PHILIPPINES
NOV 91	TYPHOON YURI	GUAM
NOV 91	TYPHOON YURI	FED STATES OF MICRONESIA
NOV 91	TYPHOON ZELDA	REP OF MARSHALL ISLAND
DEC 91	CYCLONE VAL	WESTERN SAMOA
DEC 91	CYCLONE VAL	AMERICAN SAMOA
1992	PROVIDE COMFORT/ RESTORE HOPE	SOMALIA (SUPPORT CENTCOM)
AUG 92	TYPHOON OMAR	GUAM
SEP 92	HURRICANE INIKI	HAWAII

Figure 1. Initiating US military assistance for foreign disaster relief



Key: USAID/OFDA: US Agency for International Development
Office of Foreign Disaster Assistance

DOD: Department of Defense
CINC: Commander-in-Chief, Unified Regional Command
JTF: Joint Task Force

Figure 2. Map of Pacific Command's geographic responsibility

Figure 2. Map of Pacific Command's geographic responsibility

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