



Photograph courtesy of Col Kevin M. Kennedy, USMC (Ret)
Mission commander, Col Randolph A. Gangle, USMC, center, coordinates relief efforts with Bangladeshi navy Capt Anwar Haque, left, and LtCol Kevin M. Kennedy, USMC, commanding officer of 2d Battalion, 5th Marines, at the Chittagong forward headquarters.

through a multi-tiered chain of command. The MAG-50 representative reported directly to the mission commander as did representatives of the service support group and regimental landing team. Colonel West, who served as air mission commander, provided Gangle with technical advice in addition to tutoring members of the JTF staff as to the most effective ways of employing scarce helicopter resources.

By 1400, Colonel Gangle's staff was established and working within the JTF's operations center. The group's functions included manning the center around the clock, coordinating with host-country personnel and civilian workers, acting as a clearing house for information, tracking operations and evaluating their effectiveness, planning future operations, networking administrative and tactical radio traffic, handling public affairs, and escorting a myriad of important visitors. While these were typical command functions, they had to be adapted for non-combat humanitarian relief operations.

In addition to Colonel Gangle's staff, the Chittagong operations center included members of the JTF Forward detachment, Bangladesh government and military personnel, American embassy staff, and representatives of several non-government relief organizations. Although this centralized location provided for enhanced coordination and cooperation, smooth working relationships among the various participants took time to develop. Disagreements arose over the number of relief centers to be established, the use and location of ROWPUs, and movement of inappropriate relief supplies. Many of the non-government

organizations, such as CARE and the Red Crescent Society, had provided relief in Bangladesh for years and were accustomed to operating in their own ways, and all vied for a "piece of the action." Initially, American military and embassy personnel spent a considerable amount of time achieving a consensus among the competing organizations, training them in how to plan and organize a massive relief effort, and at the same time educating them as to the capabilities of the JTF.¹⁰⁴ In addition, because their logistical resources were more limited than those available to the JTF, task force and Marine brigade staff members found they needed to prod the non-government organizations to think on a grander scale--moving hundreds of tons of supplies per day instead of only 20 or 30. Mutual trust in each participant's competence and integrity, critical to the relief effort's success, developed among the various parties in the Chittagong center as all discovered a common goal.

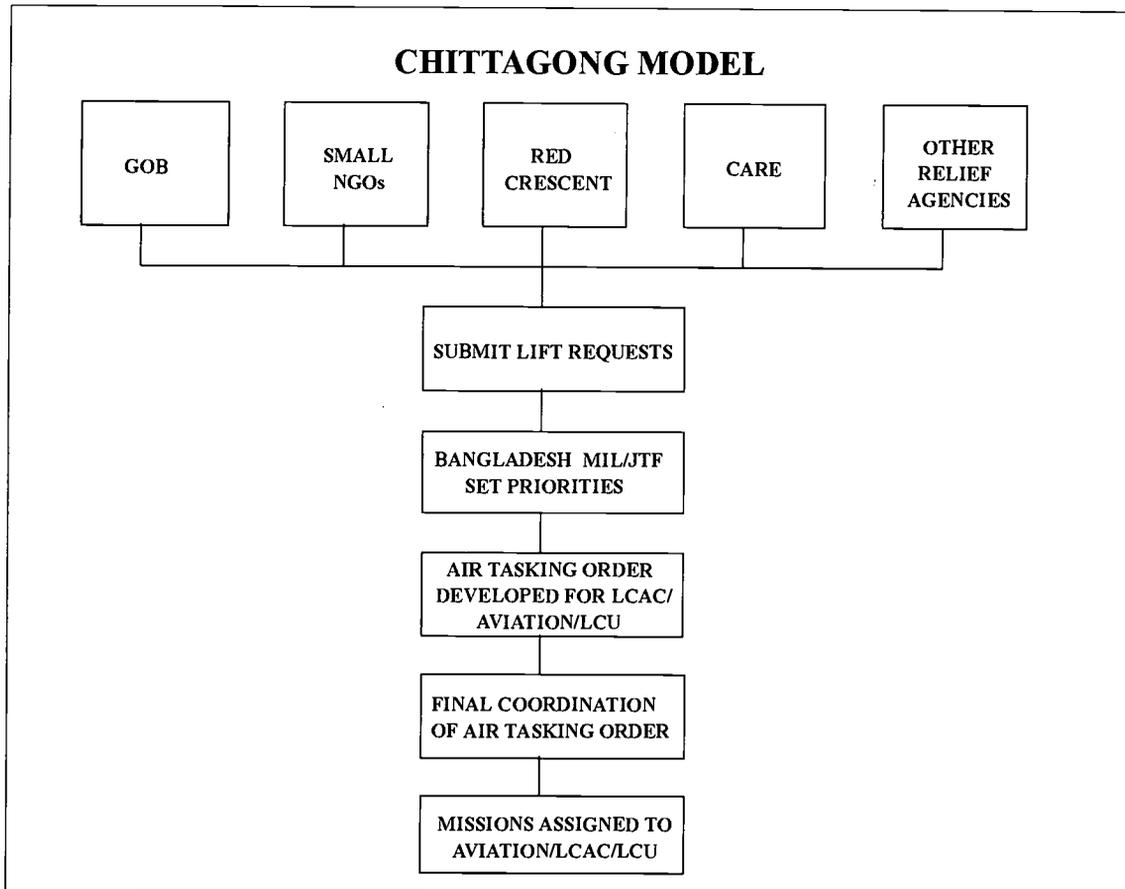
Angels from the Sea

The amphibious task force's tactical-logistical group was in full operation on the 16th. Initial relief efforts began when MAG-50's helicopters moved 259 passengers and delivered more than 89,000 pounds of relief supplies. The operational pattern established that first day remained in effect throughout the remainder of the task force's stay.

The movement and distribution chain began with non-government organizations submitting their distribution requirements to the Bangladesh government to ensure that the requirements were compatible with the government's overall relief plan. Each morning representatives from various government ministries and non-government organizations passed a list of the following day's relief requirements and the projected needs for the next 48 hours to the JTF in Dhaka. By early afternoon, the JTF staff would publish the following day's distribution schedule, enabling suppliers time to position their cargoes at the designated loading sites for airlift from Dhaka to Chittagong and elsewhere.

The following morning, local workmen stacked relief supplies, which in turn were loaded on board Special Forces and Air Force C-130 Hercules transports. The working conditions were primitive, wrote Air Force Lieutenant Colonel White. "We didn't have any forklifts, K-loaders, pallets, nets--you name it! We floor-loaded 150-pound sacks of rice, 200-pound bags of potatoes, medical supplies, tents, etc. We managed to fly six sorties per day with only the aircrews to upload and download 40,000 pounds of cargo per sortie." Aircrews and support personnel from the 374th Tactical Airlift Wing worked from 0400 to 2000 each day until additional help in the form of loadmasters arrived from the 8th Mobile Aerial Port Squadron stationed at Clark Air Base.¹⁰⁵

At Chittagong, each day began with a similar "requirements meeting." At 0730 representatives from the brigade liaison team, regimental landing team, aircraft group, amphibious task group, and Army and Air Force components met with members of the JTF staff, Bangladesh government, and the various non-



Photograph courtesy of 5th MEB
An Air Force C-130 Hercules off-loads relief supplies from Dhaka at Chittagong for further transport by air, sea, and ground to the cyclone victims.

government relief organizations to review the surface and air movement schedule for the day and determine whether there was a requirement for emergency lifts. When necessary, appropriate changes were made to the day's schedule.

The Chittagong coordinating cell scrutinized and then validated lift requirements for the following three days. Each government or non-government agency submitted its transport requirements for relief supplies, building materials, or personnel to the cell for validation. Once approved, the cell forwarded requests to the JTF operations section. This data was used to develop the daily air and surface movement schedule. The operations section would then match transportation requirements against available assets, either surface or air, based on the priority of the items, bulk, and destination. By 1600 each day, the JTF Forward staff provided each agency an air and surface schedule indicating arrival time, ramp location, quantity and type, and destination of the relief supplies. As happens in all disaster relief operations, the Marine and Army air contingents experienced a substantial number of rapid response requirements, schedule changes, and aircraft diversions during the first few days of the operation. These complications, however, diminished with time as each of the various parties gained experience in working together.¹⁰⁶

As mission commander, Colonel Gangle was responsible for the air and sea movement of relief supplies, carefully balancing centralized control and decentralized effectiveness. Centralized control of mission assignments normally allowed for the efficient and orderly execution of a mission, but the Bangladesh relief effort was not a normal mission. Employing air and sea assets in support of the JTF, Bangladesh government, and non-government organizations--three sometimes competing entities--required adaptability. On the other hand, the potential for confusion and disarray existed if any one of the three organizations or staff agencies within the Chittagong operations center was given tasking control. With this in mind, Gangle based the allocation of distribution missions among helicopters and boats on load size, delivery location, and time available. Boats could serve only Sandwip, Kutubdia, and Maheshkali Islands; large, heavy loads were suited to surface lift, an optimum LCAC load was 40 to 50 tons, and an LCU could carry up to 170 tons; and time-sensitive items, such as food and medical supplies, would be sent by helicopter. He also took into consideration the relative availability of the two different means of transport.

Colonel West coordinated movement of Marine aircraft in accord with the wishes of the JTF staff and the mission commander. To do this, MAG-50 sent a forward control element ashore. The element was composed of an operations and a logistics section and a team from Navy Tactical Air Control Squadron 11 (TACRON-11). Colonel Gangle wisely allowed the Marine aircraft group staff maximum latitude to accomplish its tasks, and Colonel West felt this was a key ingredient in successfully accomplishing the mission assigned to the group.¹⁰⁷

The operations section, located in the JTF operations center at the north end of Chittagong Airport, coordinated assigned aircraft to accomplish the day's missions. Each afternoon, the JTF announced its taskings for the following day. Using a dedicated satellite communications link with the flagship, the operations



Photograph courtesy of 5th MEB

The 5th MEB maintained a small command group ashore to control the flow of relief supplies.

section obtained from the tactical air control center afloat what aircraft would be available the next day. The tactical air control center on board the *Tarawa* scheduled, controlled, and monitored flights from ship to shore each morning and from shore to ship each evening. The fluid situation required maximum flexibility, so specific missions were not assigned until aircraft were actually airborne and on their way to the airfield at Chittagong. Aircraft were given new missions each time they returned to the airfield, instead of using scarce helicopter assets on multiple missions for prolonged periods that might require lengthy loiter time. In addition, missions were numbered and scheduled in order of priority, then assigned depending upon what aircraft were available during the day, therefore minimizing the disruptive impact of cancellations, change of priorities, bad weather, and mechanical problems. Flight paths and refueling times and places were left to the discretion of flight leaders and individual pilots. *Frederick* and *Barbour County*, the two amphibious tank landing ships anchored in shallow water 16 kilometers off Chittagong, served as refueling platforms. The two ships freed the aircraft from any dependence upon shore-based supplies while maintaining rapid turnaround times. A major responsibility of the operations section was to ensure all helicopters were released from their taskings in time to return to the *Tarawa* by their appointed recovery time.

The logistics section oversaw the activities of the arrival and departure airfield control groups which occupied the southern portion of the airfield from which the Marine helicopters operated. Effective communications between the operations and logistics sections kept the control groups, staffed by aircraft group logistics personnel, apprised of each inbound aircraft's assigned mission. This link also served as a backup communications system. The arrival and departure control groups also tightly managed the inventory of relief supplies, informing the JTF through the operations section of the need for replenishment. The two

groups had to maintain sufficient quantities of relief supplies on hand to load all aircraft, while ensuring that no supplies remained in the groups' areas when flight operations ended each day. Any supplies left behind would be lost, either to rain damage or pilferage.

A detachment from Tactical Air Control Squadron 11 augmented the Marine aviation element. The TACRON staff provided several key functions. After initial difficulties communicating with the tower, the squadron supplied a qualified air traffic controller equipped with a ultra-high frequency (UHF) radio to Chittagong airfield. This was critical because MAG-50's UH-1N helicopters were not equipped with very-high frequency, amplitude modulation, VHF (AM) radios, the only type of radio used by the tower.* It was also reassuring to have an English-speaking controller to work out language difficulties. He recorded 11 "saves" in an equal number of days standing tower watch.¹⁰⁸ The control group also passed on important weather, tasking, safety, flight, and navigational information. Initially, navigation proved a problem due to the unreliability of non-directional beacons, the absence of a shore-based tactical air navigation system, and the lack of long-range navigation chain coverage. Few local maps were available, but aircrews and relief parties improvised tactical pilotage charts by photocopying and taping together the 8-1/2 by 11-inch sheets to form useful mosaics.** Although originally intended for use by ground units, helicopter aircrews made use of the few available small, lightweight global positioning system receivers.

One of the 5th MEB's major contributions to the JTF was to augment it with the brigade's command element and service support group. Although equipment and logistics expertise was important, the most important support provided was communications. Neither the Bangladesh government nor the relief agencies had sufficient communications resources, due either to a lack of equipment or because existing equipment had been damaged or destroyed. As a result, Bangladesh government officials and military officers were unable to communicate with each other or with their units and offices in the disaster zone. Fifteen hundred non-government volunteer workers had come to Bangladesh, but their agencies could not transport them to the field or communicate with representatives already there.

* Prior to the arrival of the air traffic controller, HMLA-169 made an attempt to assign discrete ultra-high frequencies for the Chittagong tower, but the attempt proved futile as tower workers refused to monitor the UHF net. The refusal resulted in the squadron's UH-1Ns using the UHF guard normally assigned to aircraft with emergency problems. In addition, the squadron attempted to fly multi-plane formations with the lead aircraft equipped with one of two available ARC-182s, a radio providing VHF (AM), VHF (FM), and UHF (AM) capabilities within the same unit. This solution worked well until the squadron's aircraft were forced to operate separately for most missions.

** While enroute, the amphibious task group requested the appropriate support maps through CinCPacFlt and CinCPac from the Defense Mapping Agency. A partial fill of the order was received on 25 May, four days before the amphibious task force was to cease operations.

The Joint Task Force also experienced similar problems as promised supplemental communications personnel and equipment had not arrived.

The JTF's primary concern was a central command net tying together the JTF, CinCPac, and III MEF. It fell to the brigade's communications officer, Lieutenant Colonel William V. Cantu, and a detachment from the 5th SRISG to develop a communications plan and establish a communications net covering all aspects of air, ground, and seaborne operations. The net consisted of 10 to 12 communications sites using assets from the JTF, the 5th MEB, and flown-in equipment of the 7th Communications Battalion. Small detachments, each consisting of only two or three Marines, manned high-frequency radios at key government buildings, relief storehouses, and distribution points. These sites supported Bangladesh government and non-government relief agencies. Although only a temporary measure, the communications detachments doubled the amount of supplies reaching the Chittagong distribution center. Relying on Marine communications, the government was able to coordinate relief efforts and simultaneously rebuild its damaged commercial communications links to the disaster zone. Despite the very austere living conditions, reported Lieutenant Colonel Kevin M. Kennedy, commanding officer of Battalion Landing Team 2/5, "the teams really enjoyed the assignment."¹⁰⁹

Full-scale relief operations began on the morning of 17 May. The first day of operations set a pattern that remained in place throughout the operation. At first light, helicopters and landing craft carried personnel and equipment ashore. After unloading, personnel and transportation assets were directed to one of the five distribution points. As Air Force and Special Forces C-130s arrived at the designated C-130 ramp at Chittagong's Patenga Airport, regimental landing team forklifts off-loaded the cargo. The cargo and the considerable amount of relief supplies stockpiled at the airport by government and non-government agencies then were moved to the initial loading points: the northern ramp, from which the five Army UH-60 Blackhawk helicopters operated; the south ramp, where Marine RH-53 Sea Stallions and CH-46 Sea Knights were stationed; or the "J" ramp used by two Aerospatiale AS 365N Dauphin emergency medical service helicopters and a 50-man Japanese relief team. The amphibious task group located its LCAC ramp at the fuel jetty off the Karnaphuli River. The LCU ramp, located at the port's ferry landing, was used by utility landing craft. A ramp director controlled each loading site and organized the activities of the ramp in accordance with the daily mission schedule. At the end of the day, each director reported to the JTF the amount of relief supplies moved.

Once the relief supplies had been moved to their designated ramp, brigade material handling teams took over, loading the aircraft and unloading them at landing zones scattered throughout southeastern Bangladesh. Bangladesh civilian laborers loaded and unloaded the surface craft. The Americans provided muscle and lift assets, but they did not interfere with delivery priority or selection of distribution locations. When these missions were completed or as darkness fell, the handling teams on shore were picked up and returned to their respective ships.



Department of Defense Photo (USAF) DF-ST-92-06120

A Marine CH-46 Sea Knight helicopter lands as an Air Force 374th Tactical Air Wing C-130 Hercules prepares for take-off at Chittagong airfield.

Tracking the wide variety of missions spread across a 23,000-square kilometer area of operations was difficult. Close liaison between JTF, government representatives, and non-government relief workers was crucial if supplies were to reach those who most needed them. Careful planning was required to ensure the proper tools were being used, that supplies were being delivered where they were most needed, and to avoid redundant or useless missions. For aircraft this was accomplished by creating an air tasking order that matched available aircraft and their capabilities with mission needs. Navy representatives used similar schedules to plan landing craft missions.

The mission control centers resembled combat operations centers familiar to all Marines. Busy watch officers manned a bank of phones, scribbled messages, and answered questions. Area maps were dotted with colored pins and colored markers that showed unit locations. Constant updating of this information was imperative to keep decision makers abreast of the fluid situation and ever-changing requirements. Charts detailed air and surface craft missions, noting the scheduled time, date, location, delivery area, and load configuration--passengers, weight, or items. Other charts and maps indicated current status of assets, delivery priorities, planned routes, call signs and radio frequencies, alternate plans, escape and evasion routes, and rally points.

The distribution teams were manned primarily by the 5th Marines Surveillance and Target Acquisition Platoon, officers from the ground combat element, and other specialists as needed. These small detachments moved into the disaster area to replace or reinforce Special Forces disaster relief teams already in place. By doing this, the 5th MEB was able to triple the number of



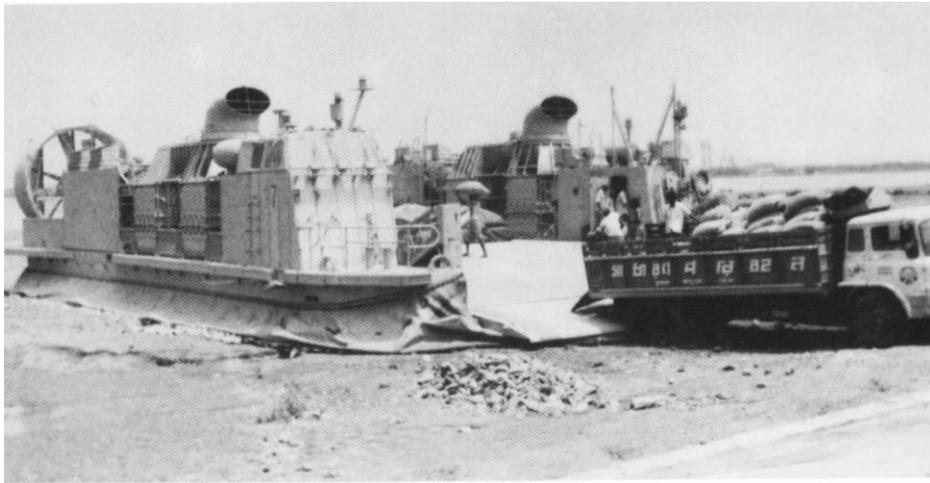
Department of Defense Photo (USAF) DF-ST-92-02634
Air Force, Marine and Army personnel coordinate supply deliveries from a communications site at Chittagong airfield.

receiving points in the hardest-hit areas. Once in place, they coordinated resupply efforts, radioed situation reports to the command center, and provided terminal guidance at the landing zones. Distribution points usually were manned by American or Bangladesh military personnel, a few relief workers, and at least one government representative. Marine engineers often set up water purification units at these sites, which also soon became favorite places to establish medical treatment centers.

Surface craft carried a large portion of the relief aid that was moved during the operation. They included LCACs, LCUs, rigid raiding craft, and inflatable boats.* The nature of the operations area made these craft ideal for distribution missions, however, the forces of nature put excellent seamanship at a premium. Winds reached velocities of up to 50 knots, there was a 12-foot tidal rise, and ever-shifting 12-knot currents swirled between the islands and the mainland.¹¹⁰

The Chittagong headquarters established landing beaches on Sandwip, Manpura, Kutubdia, Matabari, and Maheshkali Islands. Air-cushion landing craft soon became the stars of the show. The image of LCACs rushing over the water, kicking up a silvery spray as they made their runs to the shore while

* Commander Thomas J. Hirsch quickly determined that the amphibious task group's LCM-8s were unsuitable for the relief effort as they were not self-sustaining for personnel. They remained on board the *Tarawa* well to seaward throughout Sea Angel and did not participate in the relief operation.



Photograph courtesy of 5th MEB

An air-cushion landing craft being loaded with relief supplies for transport to one of the offshore islands.

carrying 30 to 40 tons at speeds up to 50 knots, became synonymous with the operation. Unfortunately, the LCACs were designed to carry rolling stock, not bulk cargo, so loading and unloading was less efficient than when carrying vehicles. Local delivery trucks were not transported because they lacked appropriate tie downs and were often loaded beyond axle capacity. The Bangladesh government hired laborers to load and unload the four LCACs. Military and police personnel provided security around the off-load ramps to restrain curiosity seekers who often numbered up to 10,000. The air-cushion landing craft returned to their ships each night, often carrying a load to be delivered the following morning.

Other craft provided yeoman service as well. Unlike the LCACs, the three LCUs required most of a day to load, depending upon the arrival time of the relief supplies. These boats remained overnight when loaded, delivered their cargo the next morning, and returned to their assigned ship that evening. Small rigid raiding craft manned by Navy SEALs and reconnaissance Marines proved ideal for moving supplies through the numerous waterways that crisscrossed the islands and coastal lowlands. These boats proved very useful for short hauls and their small loads were manageable for local laborers working without forklifts or motor transport.

Marine amphibious assault vehicles were launched but quickly encountered difficulties. Their top water speed was only about eight knots, so they could not be used in the face of 8- to 12-knot currents. In addition, the silt-laden water soon fouled their propulsion systems, leaving them to drift at the mercy of the



Photograph courtesy of 5th MEB
Local laborers unload food and construction materials from one of the three LCUs used during the relief operation.

prevailing currents and tides.* The vehicles were recovered and did not assist in the relief operation. Had the AAVs made it to shore, the treads of these 25-ton monsters would have damaged the fragile infrastructure and most probably ruptured the packed-dirt embankments that held the tides at bay.

The ships of PhibGru 3 provided splendid support throughout the operation. The "blue-green" Navy-Marine team had been improving sea-based logistics since the Vietnam War. This concept relied on ships of the fleet for combat service support rather than building logistics bases ashore. Sea-basing the 5th MEB had been pioneered by General Rowe's predecessor, Brigadier General William P. Eshelman. General Rowe refined the concept and used it to the fullest during the recent deployment to the Persian Gulf. The result was that PhibGru 3 and the 5th MEB were very familiar with the concept and implemented it easily in the Bay of Bengal.

One visible example of sea-basing was the use of the LSTs *Barbour County* and *Frederick* for aviation support. Both ships broke away from the task group and moved close to shore in order to facilitate the unloading of supplies. During the operation, they remained at anchor in less than 10 meters of water where they could act as forward replenishment platforms. A friendly rivalry between the two ships soon emerged when they vied to see which could service the most

* The three LCUs encountered similar problems with the silt-laden water, but with constant maintenance remained able to perform their assigned relief missions.

aircraft. Arriving helicopters were quickly refueled and their crews were given box lunches and cold sodas. Using the acronym "BoB" for Bay of Bengal, the *Barbour County* was soon tabbed "BoB's Service Station." The deck crew outfitted a cork mannequin with a cranial helmet, goggles, flotation vest, steel-toed boots, and work suit to play the role of friendly "Bob," the station manager. "Bob's arm was raised in a constant gesture of warm welcome or fond farewell, depending on whether you were landing or taking off." The *Barbour County* even offered free ship's baseball caps to the 100th customer in a spoof of American service station marketing strategies.¹¹¹

The general daily aviation plan was to use the Blackhawks, Sea Knights, and Sea Stallions, and the two Japanese Dauphin helicopters, to deliver working parties and move bulk cargo, such as large bags of rice, potatoes, lentils, dry molasses, flour, and wheat. They also carried Bangladesh officials, non-government relief workers, medical teams, water purification units, livestock, VIPs, and members of the media.^{112*} The preferred delivery method was to sling-load cargo whereby an entire load could be hooked up or dropped off in minutes, instead of the hours it might take to load and unload using stevedore labor. The main drawback to this method was that safe operating procedures dictated slings could not be used when helicopters were carrying passengers.

Colonel West used the aircraft group's light helicopters to deliver small loads directly to the disaster area, notably to the islets just off the north coast of Sandwip Island. Hueys, flown by skilled pilots, set down at minuscule landing zones such as roof tops or paddy dikes to deliver loads of up to 1,500 pounds. Bags of rice and lentils were emptied in minutes by hungry Bangladeshis who quickly got in line for their cup or double handful. Colonel West reported that on one such mission he saw the village chief clasping his hands together and nodding with tears in his eyes to acknowledge the first food and fresh water delivery since the cyclone struck. In a note later passed to West, the grateful village chief explained that a baby born that day had been named *Faresta*. It was done, he said, to serve as a reminder to the village of the *faresta*, or angels, sent by their American friends in their time of great need.¹¹³ "The words 'faresta, faresta, . . .' became frequently heard shouts from smiling and waving villagers as helos came in and out of landing zones, delivering badly needed food, water, and medical supplies."¹¹⁴

Ironically, the major supply problem was that there was too much on hand. Humanitarian relief was flooding into Bangladesh, but it could not be moved to the forward areas. This was particularly true for items too big or too delicate to be manhandled by Bangladeshi workers. Non-government relief workers and

* Early in the operation, CinCPac authorized the Joint Task Force to transport foreign nationals and members of the news media on American military aircraft. Initially, flight requests from the media came with little or no warning, and inadequate consolidation. However, with careful management, maximum use was made of every helicopter. When transporting the press or VIPs, any extra space was filled with rice or other relief supplies.



Photograph courtesy of 5th MEB

A Marine CH-46 Sea Knight helicopter is besieged by starving villagers as it delivers food and medical supplies to an outlying village.

government officials understood the problem, but were helpless to do much because they lacked the proper equipment; therefore, the assets the amphibious task force brought to Bangladesh became crucial to the operation's success.

Almost every Marine volunteered to go ashore, but not all could be sent at one time, so General Rowe instituted a rotation system to allow as many Marines as possible to get ashore and see what Operation Productive Effort was all about. Working parties of 50 to 100 Marines were organized every day to help move relief materials. The Americans and Bangladeshis soon were working side by side and from all outward signs, they worked together with efficiency, team spirit, and camaraderie. The sight of a robust Marine throwing a 50-pound sack of rice around with ease quickly awed the Bangladeshis. The ultimate status symbol for a Bangladeshi was to be invited on board one of the helicopters, and they soon began mirroring the American "bucket brigade" method of passing bags of food, building materials, and medical supplies from person to person. Within a few days it was common practice for the Bangladeshis to give the Marines a broad smile and a distinctive "thumbs up" sign when the work day ended.*

As the relief effort moved into high gear on the 17th, General Stackpole and his planning section in Dhaka made a number of final refinements and then

* For many Bangladeshis, the "thumbs up" sign is an obscene gesture. Obviously, this cultural prejudice temporarily faded with Operation Sea Angel.



Department of Defense Photo (USAF) DF-ST-92-02649
A common sight at numerous villages throughout southeastern Bangladesh was a Marine hurrying to unload sacks of rice and potatoes.

submitted the task force's completed campaign plan to CinCPac for approval. The plan was based on four assumptions: first, duration of the operation was approximately 30 days; second, the Government of Bangladesh would want the JTF to remain for the duration; third, the amphibious task group was to depart on 29 May; and fourth, the *St. Louis* and Marine Contingency Air-Group Task Force 2-91 would arrive on 29 May. The goal was to stabilize the situation in Bangladesh, allowing the government to assume full responsibility for long-term recovery, assisted by normal American foreign aid. The restoration of the infrastructure within the disaster region was to be the government's main focus, while the JTF would concentrate on assisting Bangladesh in stabilizing the situation until the country could recover from the initial effects of the cyclone and begin its own rebuilding program.

The campaign plan, as envisioned, encompassed three phases. The first was to "conduct humanitarian operations designed to immediately reduce mortality and stabilize the situation to begin recovery operations." The primary focus of the first phase would be on distribution. This phase was scheduled to last approximately 14 days. During phase two, the efforts of the JTF would be directed toward the delivery of supplies and equipment that would allow the residents of the affected areas to begin self-help recovery projects. General Stackpole estimated that phase two would require approximately 10 days to complete. In the final phase, which he estimated would take five days, the Bangladesh government would assume full control of the relief effort. The JTF would continue to provide technical advice and humanitarian assistance, and then withdraw. Pacific Command quickly approved the plan.¹¹⁵

General Stackpole realized that the transition from one phase to another would not be clear-cut and would vary from one area to another. To avoid offending local sensitivities, American forces would not be involved in the disposal of human or animal remains. Likewise, American and subordinate commanders were not to engage in open-ended activities or long-term projects that would go beyond the JTF's original charter of conducting life-sustaining operations. "We could not do that," Stackpole later noted, "nor did we have the heavy equipment" to rebuild embankments, clear more than 20 wrecks from the Karnaphuli River, restore power, or repair microwave communications towers. "We were not staying there forever," a point which General Stackpole continually stressed and which permeated all planning from the very beginning.¹¹⁶

At first, relief efforts were limited to the vicinity of Chittagong, however, operations rapidly expanded and soon included many outlying areas and offshore islands. On 19 May, Colonel Gangle ordered Lieutenant Colonel Donald R. Selvage, commanding officer of Battalion Landing Team 3/5, to move ashore from the *Vancouver* and to establish a second control center at Cox's Bazar, a small resort city located at the southern tip of the area of operations. Its 6,000-foot airfield and small boat harbor became the focal points for relief efforts on Kutubdia, Maheshkali, and several of the smaller islands in the vicinity.



Department of Defense Photo (USN) DN-ST-90-05402

The Vancouver transported LtCol Donald R. Selvage's 3d Battalion, 5th Marines, south to Cox's Bazar, where a second control center was established on 19 May.

Lieutenant Colonel Selvage followed the Chittagong model in organizing and conducting the relief activities at Cox's Bazar. The Deputy Zonal Relief Coordinator for Cox's Bazar and Deputy Commissioners for both Cox's Bazar and Naokhali districts provided Selvage's staff, located at the city's airport, with daily lift requirements. Based upon those requirements, the staff developed daily mission schedules.

Battalion Landing Team 3/5's efforts at Cox's Bazar received a welcome boost when Britain's Royal Navy and Royal Marines reported for duty with the JTF. Royal Fleet Auxiliary replenishment ship *Fort Grange* (A 385) arrived off the port city on 20 May after a short passage from Colombo in Sri Lanka.* The *Fort Grange* carried a 200-man crew and 20 Royal Marines from 539 Assault Squadron, four 846 Naval Air Squadron Westland HAS.5 Sea King commando medium-lift transport helicopters, six rigid raiding craft, and assorted inflatable boats.**

Following an air reconnaissance of the area to locate a secure operations base from which boats could operate at all tidal levels, the Royal Marines launched their relief effort on 22 May. A daily routine was established consisting of boat runs between Cox's Bazar and Dhalghata and Matabari Villages on the island of Matabari and Gorakghata Pier on Maheshkali Island. At last light, the Royal Marines flew back to the *Fort Grange*, leaving two behind to secure the base. While they enjoyed an "outstanding" working relationship with their American counterparts, they also shared a common problem--navigating an area choked

* The Royal Fleet Auxiliary is similar to the United States Military Sealift Command; both feature Navy-owned, civilian-manned, non-amphibious, combat support ships.

** The Westland HC.4 Sea King helicopter was the British commando assault version of the Sikorsky SH-3 Sea King helicopter used by the U.S. Navy; it could carry 28 personnel or 8,000 pounds of cargo.

with floating debris and fish traps and shifting channels and sand bars. The British soon found out that local navigational charts and maps were outdated.¹¹⁷

As Operation Productive Effort advanced it evolved from a joint, denoting inter-Service, into a combined or international, military humanitarian operation. British, Pakistani, and Japanese troops were integrated into the JTF and provided liaison personnel at Dhaka, Chittagong, and Cox's Bazar who accepted missions as assigned by the coordination cells. While the British concentrated on two major islands off Chittagong, the Japanese generally flew utility missions suited to their two small helicopters, as did the two Pakistani helicopters. The Indians and Chinese did not subordinate their helicopters to the joint effort, but did establish informal agreements with the JTF by which they would cover certain areas when allied assets could not assist or were otherwise employed.

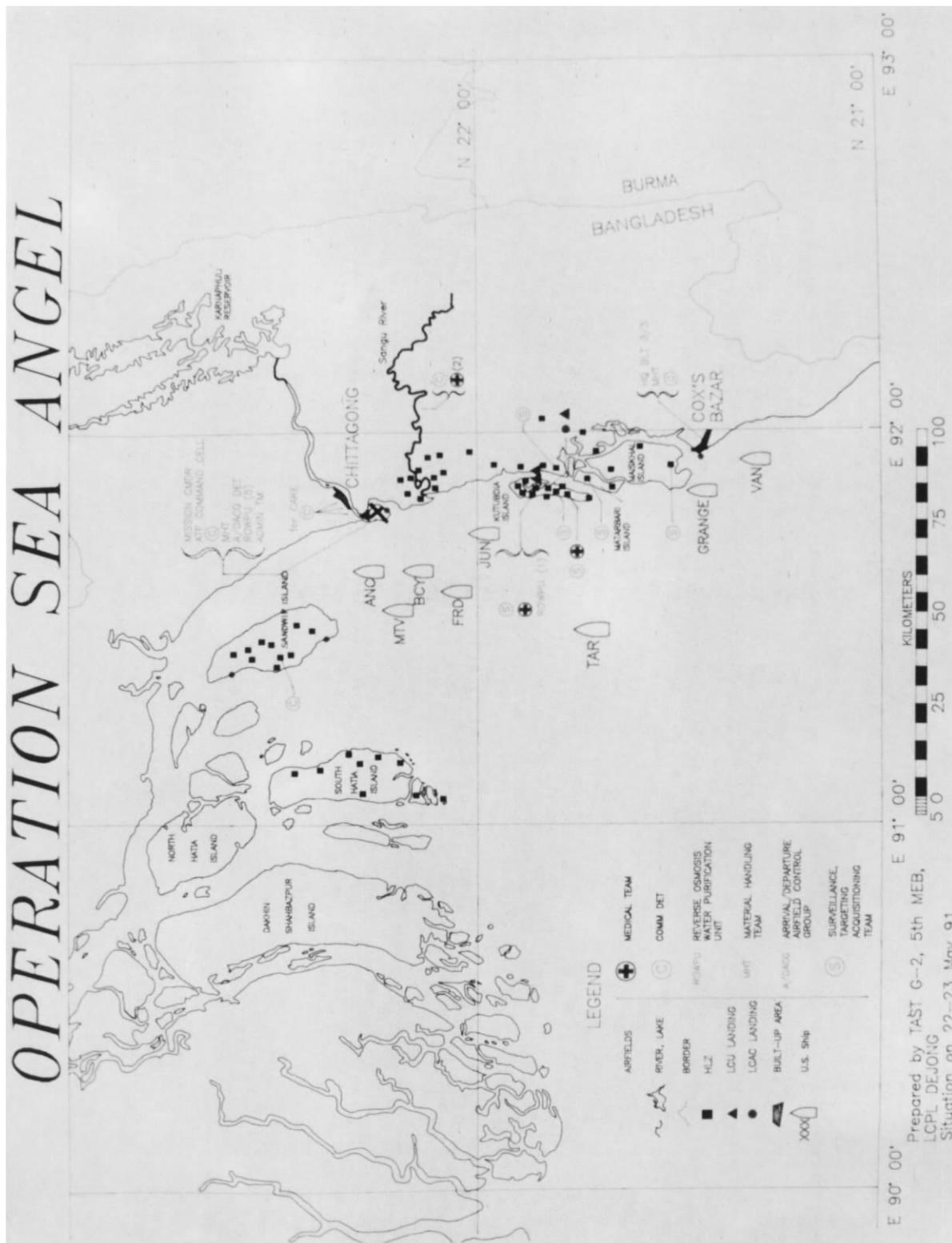
By the second week of the massive relief operation, the effort had settled into an efficient routine. Military Airlift Command Galaxies and Starlifters arrived at Zia International bringing in water purification units from Okinawa, communications packages and personnel from the Air Force's 4th Combat Communications Group on Guam, and C-130 aircraft maintenance packages from Yokota Air Base in Japan. Air Force C-130s, Marine and Army helicopters, and Navy surface craft hauled food and medical supplies. On the ground, Marine engineers set-up water purification units and Army Special Forces relief teams provided on-site assessment.

The relief effort soon was expanded to include the Sylhet region of north-



Department of Defense Photo (USN) DF-ST-90-06106

Mrs. Marilyn T. Quayle, wife of the Vice President, greets Marines upon her arrival at Chittagong.



eastern Bangladesh, hard hit by monsoonal flooding. Hercules C-130 transports flew three or four daily sorties between Dhaka and the city of Sylhet, carrying more than 25 tons of supplies each day. Chinese and Indian helicopters assisted with the local distribution of these supplies. In addition, Mrs. Marilyn T. Quayle, Chairman of the American Advisory Committee for Foreign Disaster Assistance and wife of Vice President J. Danforth Quayle, visited American forces and toured the disaster area. She and her small official party remained overnight on board the flagship *Tarawa*, where security, medical, and communications facilities were available. Among other visitors were ambassadors representing the nations involved and senior members of the Bangladesh government, including President Justice Shahabuddin Ahmed and Prime Minister Zia. The week also witnessed the signing of a formal status of forces agreement between Bangladesh and the United States which accorded JTF personnel status equivalent to that provided to members of the administrative and technical staff of the American Embassy in Bangladesh. American military personnel were also granted freedom of movement, exemption from local taxation and tariff charges, and immunity from the jurisdiction of local courts.¹¹⁸

During the second week, the operation and the JTF were renamed. "Well done to all involved in ongoing relief operations for the people of Bangladesh," read the message from the Chairman of the Joint Chiefs of Staff, General Colin L. Powell. He then quoted a recent news story describing U.S. relief forces as "angels from the sea." According to Powell, the quote "carries the true spirit of our work and inspired a change to the name of our operations. Effective immediately, Operation 'Productive Effort' will be called 'Sea Angel.'"¹¹⁹ As General Stackpole later commented: "it worked out extremely well because that indeed encapsulized and described the functions that we were carrying out."¹²⁰

One of the greatest threats to the success of Operation Sea Angel was the toll taken by infectious disease. Providing food and shelter was not enough. If proper medical care and clean water were not forthcoming, more people would perish from disease than would die from starvation or as a direct result of the cyclone. A medical management team headed by Captain John R. Downs, MC, USNR, and supported by Lieutenant Colonel Craig S. Matsuda, MC, USAF, and Lieutenant Commander Pete L. Godbey, MC, USN, oversaw the Joint Task Force's medical relief effort.

Arriving in Dhaka on 14 May, the team met with the appropriate government ministers and their secretaries who had jurisdiction over health care, water, and sanitation, as well as physicians at the International Center for Diarrheal Disease Research, Bangladesh; USAID personnel; and representatives of several non-government relief organizations. All agencies involved agreed that the primary concern was to ensure an adequate supply of safe drinking water. This would require the repair of existing tubewells, the placement of additional wells, the distribution of water purifying agents, and an engineering study of tubewells, water collection ponds, and embankments by Navy Mobile Construction Battalion personnel. The second priority was to ensure an adequate food supply and then the prompt treatment of diarrheal diseases. As oral rehydration solutions were



Photograph courtesy of PhibGru 3

Col Mike Ferguson, USAF, right, chief of staff of the forward headquarters, displays the new Combined Joint Task Force banner with draftsman Regaul Karim.

in short supply, one of the JTF's major efforts would be to provide the capability for treating diarrheal outbreaks with intravenous rehydration solutions and antibiotics. Mobile medical civic action program (MedCAP) teams would be deployed throughout the affected area to provide care, and lastly, the JTF would attempt to provide temporary shelter materials, such as plastic sheeting, and then building materials to repair destroyed homes.

With the establishment of the forward headquarters at Chittagong, Captain Downs and Lieutenant Commander Godbey, who was responsible for coordinating medical operations within the disaster area, supervised the opening of a small aid station. They also met with local medical officials. At the meeting, the district's chief surgeon told the JTF medical representatives that Sandwip Island and the hard-hit subdistrict of Banskhali, south of the city, had the highest priorities. As a result, NEPMU 6 was tasked with surveying Sandwip and Banskhali for a team site. Sandwip Island was finally chosen by the unit as the location for its quasi-health department. From this base, the unit carried out an epidemiology, entomology, preventive medicine, and microbiological assessment of the island. While not quantifiable, the findings would assist the inhabitants of Sandwip Island prepare for disease control during and after future disasters. In addition, the unit initiated a program of disease surveillance throughout the area's remaining subdistricts. A computer database was constructed and the data collected from all affected regions was analyzed to identify areas of greatest need.¹²¹

Following the arrival of the amphibious task group, Captain Downs flew out to the *Tarawa* where he met PhibGru 3 and 5th MEB medical staffs. He identified a reservoir of approximately eight medical civic action program teams formed from the brigade.* Practical and political considerations weighed toward using MedCAP teams to augment and work with local medical professionals. In addition to providing assistance and education, the teams could initiate programs and procedures that could be carried on by those who permanently served the population. Treatment without continuity was of little long-term value.

The JTF surgeon designated the *Tarawa* as the primary casualty receiving and treatment ship for American forces in the Chittagong area. A small ward and a seven-bed intensive care unit were also set aside at the combined military hospital in Dhaka. A similar arrangement was made with the Chittagong Comprehensive Military Hospital. These hospitals provided sufficient emergency care to treat and stabilize any injury or disease suffered by American personnel prior to being evacuated by air.

The JTF medical management team conducted an overland assessment of Patiya, Anwara, Banshkhali, Chakaria, and Maheskhali subdistricts. They ended their tour in Cox's Bazar. Medical civic action program sites were identified and assessed by Special Operations Forces disaster relief teams which, working in concert with local Bangladeshi Special Forces units, provided medical intelligence and other support information to Captain Downs and his staff. The subdistrict survey, and meetings with local medical personnel, resulted in the definition of district priorities--the highest being Sandwip and Hatia Islands and the coastal areas of Anwara and Banshkhali. In addition, the management team established a protocol for inserting the MedCAP teams. No team would be deployed without the presence of translators and local authorities. Coordination between local authorities, the Special Forces team, and the MedCAP team at each site was stressed. And initially, the teams would work at local subdistrict hospitals.¹²²

The first MedCAP team deployed to Kutubdia Island on the morning of 19 May. Later, additional teams were sent to Anwara and Patiya subdistricts and Matabari Island. By the 20th, six teams were rotating throughout the affected area. Each team consisted of a Navy doctor and four or five corpsmen. They were briefed at the Chittagong headquarters, given medical supplies, water, prepackaged meals, and background information on the selected site and surrounding area before deploying forward.

The experiences of the Kutubdia Island team typified MedCAP operations throughout the disaster area. Navy Reserve Lieutenant John E. Koella, battalion surgeon for the 2d Battalion, 11th Marines; four corpsmen; and a Reserve Marine sergeant from TOW Platoon, 23d Marines, who was a civilian nurse, arrived at the Kutubdia Health Complex from the *Anchorage* early on the 19th.

* The MedCAP teams were formed exclusively from 5th MEB personnel, as PhibGru 3 medical personnel had shipboard responsibilities that precluded them from going ashore.

The team was accompanied by a Bangladeshi medical researcher; a nurse and public health specialist from USAID, who was seconded full-time from Dhaka to assist the JTF public health effort; and a public health nurse with Project Concern. Funded by Bangladesh, American, and other non-government agencies, the Health Complex encompassed a small outpatient clinic, a 50-bed inpatient hospital, and a regional medical administration office. The sole permanent medical facility on the island, it served a population of more than 120,000 prior to the cyclone.¹²³

The complex was surrounded by standing water, mud, and sewage. The interior of the hospital, which held more than 80 patients, was worse, as Lieutenant Koella reported:

There was no electricity or running water. Potable water was obtained from a nearby tubewell. There were no hand-held urinals, bed pans, or bedside commodes, and few actual beds for inpatients. Most inpatients were either too weak or too ill-informed to try and use hospital toilets, and they defecated, vomited, and urinated onto the hospital floor. In the inpatient facility the majority of patients had no bed or mattress and they rested on the floor, which was awash in diarrhea, urine, and vomitus. There was a cloud of flies covering each patient. Ants covered IV bags as they infused fluids, and at night mosquitoes swarmed.¹²⁴

Lieutenant Koella's team assumed responsibility for all inpatient care from 0600 to 1800 each day, local staff managed care from 1800 to 0600. Local physicians staffed the outpatient clinic and referred the most serious cases to the team for screening and treatment. A constant stream of outpatients, regulated by a Bangladesh army disaster relief unit, sought the team's care after normal working hours.

The team initially augmented the local staff and Bangladesh army and navy medical relief teams. The arrival of additional civilian medical workers from the country's Postgraduate Medical Training Hospital in Dhaka relieved the local physicians and staff of their outpatient duties, allowing them to concentrate temporarily on administrative matters and remedying the facility's sanitation problems. Running water was restored, albeit intermittently, floors were cleaned and bleached, new mattresses obtained, and flies and ants controlled.

Inpatient admissions averaged 50 per day, with an average stay of 36 hours. Approximately 70 percent of those admitted suffered moderate to severe dehydration with watery diarrhea, assumed to be cholera, and 20 percent had abdominal cramps accompanied by bloody diarrhea, caused by the *Shigella* bacteria. A majority of the remaining 10 percent had infected soft tissue injuries directly attributable to the cyclone. The rest suffered from severe malnutrition, oral fungus infections, advanced bony and soft tissue tumors, bowel obstructions,



Department of Defense Photo (USAF) DF-ST-92-06131

Lt John Koella, a doctor with the 2d Battalion, 11th Marines, examines a patient at the Kutubdia Health Complex as Hospital Corpsman 1st Class Robert Andrews stands by.

persistent and intractable asthma, and eye infections. Outpatients numbered about 120 per day and generally suffered from minor or chronic orthopedic and dermatological problems.

After a five-day stay, during which the Health Complex staff was reinforced substantially by civilian physicians, Koella's team returned to the *Anchorage*.

Unfortunately, as the battalion surgeon later noted, the newly arrived physicians were not accompanied by a sufficient number of nurses or other health workers. "We did not need more doctors, we needed nurses," he reported. "Never before in my career has the importance of good nursing care been so vividly displayed." Koella continued: "Patients went unfed, uncleaned, uneducated, and uncared for; IVs ran out; meds were not passed reliably; and records were lost or mixed up. We cannot change ingrained Bengali attitudes overnight, but we must impress upon Bengali officials the need for more appreciation of the benefits of adequate nursing care."¹²⁵

By 21 May, reports from the six medical civic action teams indicated that the patient load of diarrheal diseases was stabilized in all areas. As the amount of medical supplies and the number of non-government health professionals airlifted into the area increased, so did the volume of evacuated patients. Based on the recommendations of the MedCAP teams, patients with tetanus, abdominal obstructions caused by worms, infected traumatic wounds, and all pediatric and infected multiple fracture cases, were flown to Chittagong. The patients were then transferred to the medical school of the city's hospital where they received appropriate care. One ethnic group was excluded--Muslim Burmese who had immigrated to Bangladesh. Because they were Burmese and not Bangladeshi, government officials did not designate this hard-hit group as a priority for relief aid. To avoid a political confrontation or inflaming ethnic sensitivities, Captain Downs arranged for the *Fort Grange* to provide food, medical supplies, and care to the Burmese.

On 25 May, with the medical conditions of most areas stabilized, the MedCAP teams were withdrawn and replaced by government and non-government medical personnel. While ashore, 5th MEB corpsmen and physicians saw and treated more than 15,000 patients, and supervised the distribution of 38 metric tons of medical supplies. "Their exposure to the disease, sanitation and population problems present in Bangladesh will have an impact on [all doctors and corpsmen] for the rest of their lives," reported General Stackpole, "they will be far better health practitioners because of their exposure." In addition, "many thousands of Bangladesh citizens were directly impacted because of the health care given by our MedCAP teams."¹²⁶ The contributions of the 5th MEB and JTF medical teams were not short-lived. The impact of educational programs, such as instruction provided to local health authorities in pediatric care, and the sharing of knowledge between health and medical professionals would outlast the short-term emergency assistance provided by the MedCAP teams.

To cover the cost of medical support and the numerous other types of assistance provided by the JTF, on 26 May President Bush, with the advice of the Departments of State and Defense, authorized "the furnishing of up to \$20 million of defense articles from the stocks of the Department of Defense and defense services of the Department of Defense," for Bangladesh disaster assistance.¹²⁷ This presidential determination, based on section 506 (a) (2) of the Foreign Assistance Act of 1961, as amended, would later cause some



Photograph courtesy of 5th MEB
A Marine RH-53, two CH-46s, and a UH-1N belonging to MAG-50, stage to receive relief supplies at Chittagong airfield.

confusion. Initially, it was assumed that it would cover the total cost of all JTF-provided goods such as food, medical supplies, and shelter materials, and services such as transportation, water purification, and basic engineering work. However, State Department and CinCPac legal staffs subsequently determined that it only applied to assistance provided for 120 days after the presidential determination was issued.^{128*} Following the termination of Operation Sea Angel, the American Embassy, through the defense attache's office, would use this presidential determination to upgrade the Bangladesh government's disaster relief network by providing Department of Defense-declared excess equipment, such as radios and other communications gear.

As the month of May came to a close, General Stackpole realized that the three phases of the campaign were culminating at different times in different regions. It was not possible to characterize the operation as entirely into any given phase at any given time. By 27 May, however, there was a consensus that

* The costs associated with Operation Sea Angel eventually were funded, with the assurance of later reimbursement, by each service component from its operations and maintenance budget, with the explanation that the operation offered a "tremendous training opportunity." The costs per service were: Marine Corps, \$514,000; Navy, \$2,968,000; Army, \$500,000; Air Force, \$2,241,000; and other defense agencies, \$127,000. Originally, the Department of Defense anticipated that the Department of State would reimburse the department for its disaster assistance efforts. However, it later was determined that each of the services' operations and maintenance budgets would be reimbursed with money drawn from the Defense Emergency Response Fund, established by Congress in 1990. (LtGen Henry C. Stackpole III, statement before House Armed Services Subcommittee on Readiness, 31Mar92). For a list of forms of assistance provided by the United States, see Appendix D.

all areas were stabilized and were ready for the transition back to a primarily Bangladeshi effort. Despite a decrease in donor and government relief supplies, the JTF's air and sealift campaign continued, lifting everything available and ensuring that the outlying storage and distribution facilities were stocked with the needed supplies.¹²⁹

As the allotted two-week deployment period of the amphibious task group came to an end on the 28th, Marine Aircraft Group 50 ended helicopter operations and closed its forward air centers at Chittagong and Dhaka. In addition, Battalion Landing Team 3/5 turned over coordination of the relief effort at the Cox's Bazar distribution center to a British liaison cell from the *Fort Grange*. At about 1900, with the retrograde of personnel and equipment to the ships of the amphibious task group complete, Colonel Gangle and his liaison team departed. That evening, American officers and their Bangladeshi military counterparts got together for a small farewell party. The Bangladeshis presented each American with the appropriate military rank insignia in Bangladesh forces. "As we stood beside you in Desert Storm," they said in thanks, "now you stand beside us in our nation's time of need."¹³⁰ The following day, the JTF released PhibGru 3 and the 5th MEB.¹³¹

In less than two weeks ashore, the amphibious task force delivered 2,148 short tons of food, emergency medical supplies, water, clothing, and building materials. Marine aircraft flew 1,167 helicopter sorties in 1,114 flight hours to deliver 5,485 passengers and more than 695 tons of relief supplies. The average flight time per aircraft was 50.5 hours, about four times the normal operating tempo. The amphibious group's surface craft delivered 1,450 tons of relief aid.¹³²

Much of what the amphibious task force accomplished ashore during Operation Sea Angel, however, was intangible. General Rowe felt that the Bangladesh relief effort was a visible demonstration of the effectiveness of democracy in action. Prime Minister Zia's government had been anxious to prove that a freely elected, responsible government could act swiftly and effectively in times of crisis. Sea Angel proved the ability of the Bangladesh government to take action, and showed how other world democracies were willing to provide immediate assistance in times of trouble. General Rowe also noted that the morning meetings and plenary sessions conducted by the command elements of the amphibious and joint task forces with civilian and military officials offered good role models and practical experience in democratic decision-making.¹³³

In addition, both General Rowe and Admiral Clarey viewed Operation Sea Angel as a testament to the flexibility and capabilities of a forward-deployed amphibious force. Seldom in history have warriors been called upon to turn their swords into plowshares so quickly. Rapid planning, sea-based logistics, and over-the-horizon movement to shore were among the latest innovations in amphibious doctrine. Each of these capabilities was demonstrated in the Bay of Bengal.¹³⁴ The amphibious task force, General Stackpole remarked, was "the living embodiment of the true meaning of the 'Navy-Marine Corps Team.'

Coming from the sea you didn't intrude or overwhelm You supported and aided under the coordination of the Bangladesh fledgling democracy."¹³⁵ When combined with traditional Navy and Marine Corps devotion to duty and the individual skills of both Regular and Reserve Marines and sailors, the result was a hard-earned "well done" from Bangladesh and American officials alike. As Ambassador Milam noted: "There is no way to calculate how many scores of thousands of lives have been saved by your selfless labor. Be assured that the people of Bangladesh will never forget you, and nor will we Americans here, whom you have made so proud."¹³⁶

Although the amphibious task force had been delayed on its return journey home, it appeared that not a single sailor or Marine resented this unexpected sojourn. Those who served on the shore were impressed by the tremendous resilience of the people of Bangladesh and the depth of the suffering they endured. None of these combat veterans remained unmoved by the forlorn look of starving and sick children, the plaintive cries of Bangladeshis who had lost family members, or the compassion of their comrades. General Rowe reported that all hands were visibly moved when poor Bangladeshis, most of whom had only two or three meager possessions, attempted to give one of them to the Americans as a gesture of gratitude.¹³⁷ Although the people of Bangladesh were unaware of it, the departing Marines had already been given the reward they wanted when they heard healthy children laughing or gazed at the smiles of thankful elders.¹³⁸ The sailors and Marines of the amphibious task force returned home with the self-satisfaction of knowing that when an unexpected call for help came, they were "good to go" and "made it happen."¹³⁹

On 29 May, the amphibious cargo ship *St. Louis*, with the embarked Contingency Marine Air-Ground Task Force 2-91, commanded by Lieutenant Colonel Larry A. Johnson, rendezvoused with the departing amphibious task group. During the 10-day voyage, CMAGTF 2-91 Marines and corpsmen participated in a wide variety of training. They held classes on field hygiene, heat stress and first aid, and ROWPU operations, in addition to normal shipboard drills. Upon arrival they were provided with a detailed brief by members of the JTF Forward headquarters and the Bangladesh area military coordinator. The initial mooring off Cox's Bazar, however, proved fruitless, as the sailors and Marines sent ashore could not locate suitable LCM-8 landing sites due to an insufficient shore gradient and surf conditions. The *St. Louis* then steamed up the coast toward Chittagong.

During its two-week stay, the amphibious task group had operated more than 11 kilometers off the coast because of shallow water and numerous uncharted wrecks and shoals. Operating from such a great distance was impractical for the *St. Louis* and her LCM-8 landing craft. To function efficiently and safely, the amphibious cargo ship needed to be as close to the mouth of the Karnaphuli River as possible. To accomplish this, anchor buoys and drag lines were fabricated and a channel was swept through the line of 10 wrecks by two LCM-8 boats, clearing the way for the ship to anchor less than two kilometers from the port of Chittagong. This close-in anchorage, however, was not ideal. Fine, silt-



Department of Defense Photo (USN) DN-SC-85-06060

With the departure of the Amphibious Task Force, Contingency Marine Air-Ground Task Force 2-91, embarked on board the St. Louis assumed the task of continuing the relief effort.

laden water eventually permeated the ship's salt water systems, forcing the ship's engineers to work overtime, often in blistering heat, to keep the systems operational.¹⁴⁰

Shortly after arriving off Chittagong, a CMAGTF 2-91 communications team and a small security element were sent ashore to support JTF operations. Offloading of the 28 reverse osmosis water purification units, Marine support teams, and their dispersal throughout the affected area began. As additional equipment and supplies were moved ashore to assist with the later retrograde of non-essential water purification units, floodlights, and generators, the ship's landing craft proceeded upriver to Chittagong where they delivered medical supplies, consisting of more than 600 cases of intravenous fluid, and 200 hot meals. Lieutenant Colonel Johnson, former operations officer of the 3d Force Service Support Group on Okinawa, also saw to it that members of CMAGTF 2-91 were rotated among the five water purification sites established by the task force's lead elements on Sandwip and Kutubdia Islands and at Chittagong.¹⁴¹

Despite a late start, "every Sailor and Marine aboard is happy to be here and they are ready for any tasking," reported Captain John W. Peterson, the *St. Louis's* commanding officer.* However, replacing the eight-ship amphibious task group with one ship would be no easy task.¹⁴² While some sailors performed routine duties on board the *St. Louis*, others shuttled medical supplies,

* Following the departure of the amphibious task group, Major General Stackpole designated Captain Peterson as the Naval Forces component commander and Lieutenant Colonel Johnson the Marine Forces component commander.

food, and equipment ashore and then returned with unneeded stores. The Marines and corpsmen of CMAGTF 2-91 were likewise tested. The Marines, in addition to delivering large amounts of food and medical supplies and producing and distributing thousands of gallons of potable water a day, provided satellite communications support, assuring the JTF a reliable form of communications when distance, topography, and weather affected all other means of communication. Officers and staff non-commissioned officers assisted with the basic support functions of the forward headquarters and U.S. Army and Air Force components, including the preparation of hot meals, routine health care, administrative support, insect control, and embarkation assistance. The attached corpsmen participated in a comprehensive assistance program, traveling to several impoverished villages and aiding those that were in need of medical attention. The contingency task force also established and operated arrival and departure airfield control groups at Zia International in Dhaka, which assured proper control of inbound supplies during the remaining days of the operation and coordination during the redeployment of JTF personnel and equipment.¹⁴³ With the arrival of the *St. Louis* and her "willing Sailors and the Marines of MAGTF 2-91, it gave us a balanced JTF as we ramp down and the Bangladeshi ramp up to take control of their destiny for the long haul."¹⁴⁴

Relief operations proceeded smoothly as the month of May came to a close. The first phase of the campaign plan was completed in all but a few isolated



Photography courtesy of PhibGru 3
Operating the remaining water purification units was the primary job of contingency task force Marines. Each unit could produce more than 600 gallons of potable water an hour.

areas, while the second and third phases were well underway. The available aircraft, Air Force C-130s, Army Blackhawks, Japanese Dauphins, British Sea Kings, and recently integrated Bangladesh air force helicopters, were considered adequate to meet the demands. As outside donations slowly declined, the JTF's lift capability soon exceeded the amount of supplies on hand.

With the Government of Bangladesh beginning to assume an increasing share of the control and coordination of the relief effort, the gradual drawdown of personnel and equipment began. Among the first to be redeployed was the Joint Special Operations Task Force, followed by Army's 84th Engineer Detachment, elements of the Navy's Environmental and Preventative Medicine Unit, and a portion of Joint Task Force staff. The two Japanese Dauphin helicopters and an accompanying relief team departed on the 31st. In 76 missions, the two small Japanese helicopters had transported more than 21 tons of relief supplies. The *Fort Grange*, with its four Sea King helicopters and small boats, was scheduled to leave on 3 June.

Remaining elements of the Joint Task Force concentrated on providing assistance in three areas: the movement of food stocks from Dhaka to Chittagong; the distribution of relief supplies from central collection points and former LCAC ramps to outlying areas on Sandwip Island; and providing sustainment to the hardest-hit regions along the coast south of Chittagong. Although daily thunderstorms previously had caused slight delays, the relief effort had to be halted on the morning of 2 June. Located less than 200 nautical miles south southwest of Chittagong with winds of 110 kilometers per hour gusting to 130, Tropical Cyclone 03B was forecast to make landfall near or just north of the southern port city the following day. As a precaution, the *St. Louis* recovered ROWPU crews from all remote sites and then she and the *Fort Grange* moved out to sea.* The 374th Tactical Airlift Wing canceled all C-130 flights to Chittagong, stockpiles of food and water were secured, the Blackhawks were flown to Dhaka, the communications liaison team at Cox's Bazar was withdrawn, and the Chittagong Autovon/Autodin service was terminated. While underway, personnel on board the *St. Louis* took time to clean the ship and flush the engineering systems with clear water.¹⁴⁵

The storm crossed the Patuakhali-Chittagong coast, northwest of the city, late on the 2d. Its measured wind speed of 100 kilometers per hour damaged crops and property along the coastal belt and off-shore islands. Low-lying areas again were inundated by a tidal surge measuring more than one meter. There were, however, no reported casualties.¹⁴⁶ "The Lord smiled on us today," noted General Stackpole, "as the anticipated new cyclone weakened on approach to

* While preparing to move to safer waters, the *Fort Grange* lost one of her four helicopters. All five crewmen were recovered safely, but several attempts by Bangladesh army and navy divers and the ship's mobile crane to salvage the aircraft were unsuccessful. (JTF-SA msg to USCinCPac, 021043ZJun91; *The New Nation*, Dhaka, 4Jun91).

landfall and had no significant impact on the already hard hit coastal and island area of southeast Bangladesh."¹⁴⁷

On the morning of the 3d, the JTF reactivated relief operations, but at a slower pace. The *St. Louis* anchored off Chittagong at 0630, then returned key Marine personnel to the remote ROWPU sites to begin preparing the equipment for transport back to the ship. In addition to conducting boat operations, a 25-man joint Navy-Marine Corps working party moved ashore to help with the distribution of relief supplies and assisted the Air Force's 4th Combat Communications Group to strike its base camp at Chittagong. As C-130 flight operations between Dhaka and Chittagong resumed, four of the five UH-60 Blackhawks returned to Chittagong and began the process of backloading ROWPUs, redistributing rice on Sandwip Island, and delivering medical supplies as needed. However, helicopter flight operations were limited to four hours per aircraft per day in order to keep all four aircraft functioning. Shortly before noon, the *Fort Grange* and her contingent of Royal Marines departed the waters off Chittagong enroute to Colombo. In 10 days, the British sailors and Marines had "shifted a total of 99 metric tonnes of food, medical and building supplies."¹⁴⁸

With conditions in the affected area gradually returning to normal and the Government of Bangladesh assuming an ever-greater role in the relief effort, the JTF continued to draw down. General Stackpole's redeployment plan called for the withdrawal of personnel and equipment from all outlying areas to Dhaka or the *St. Louis*, the departure of non-essential personnel and equipment by daily Military Airlift Command C-141 sustainment flights, and the termination of operations at Chittagong by 7 June. Between the 7th and the 13th all remaining JTF personnel and equipment would be withdrawn.¹⁴⁹

By 4 June, the remaining ROWPUs and their supporting equipment and personnel, except for one which supplied water to the forward headquarters at Chittagong, were extracted from Sandwip and Kutubdia Islands and transported by helicopter and then landing craft to the *St. Louis*. During more than three weeks of operation, the water purification units had produced and distributed more than 266,000 gallons of potable water. The retrograde of personnel and equipment, interspersed with a number of relief missions, continued the following day, despite strong isolated showers and thunderstorms.

On the 6th, all air relief operations came to an end when Army helicopters flew from Chittagong to Dhaka, and the 374th Tactical Airlift Wing completed its last C-130 mission, delivering more than 74 tons of rice for the Red Crescent Society to Chittagong. Both C-130s, along with the first increment of the 4th Combat Communications Group, departed on 8 June. They were followed two days later by the 25th Infantry Division's five UH-60 Blackhawk helicopters.¹⁵⁰ During three weeks of flying, the Army Blackhawks logged 805 sorties and carried more than 885 tons of relief supplies. Air Force HC-130 and C-130 aircraft flew 194 sorties, and transported 2,430 tons of supplies to Chittagong and the flood-ravaged Sylhet region of northeastern Bangladesh.¹⁵¹

On 7 June, with the withdrawal of personnel and equipment to Dhaka complete, the forward headquarters at Chittagong was closed. Later in the day, the JTF released the *St. Louis* and CMAGTF 2-91 from their duties as Naval and Marine Force components.¹⁵² However, because of monsoon rains, reduced visibility, and heavy traffic, the *St. Louis* was unable to get underway on the evening tide.

In his final report to General Stackpole the following morning, Lieutenant Colonel Johnson noted that "during the past two days I have had ample opportunity to reflect back on the past three weeks and to have considered our contributions. Without a doubt, each and every member of CMAGTF 2-91 is most pleased that he had an opportunity to participate in the relief operation and to have helped the citizens of Bangladesh. However," he continued, "we wish we could have provided even more support. I suppose this is natural given the average American's penchant for generosity. As we depart the AOR, and speaking for all of my Marines and Corpsmen, we leave behind new-found friends, many memories, and, most importantly, our prayers for the Bangladesh people. It was an honor to serve."¹⁵³

Early on the 8th, the *St. Louis* weighed anchor and steamed for Phuket, Thailand, where her crew was granted its first liberty in weeks. Four days later as the ship left Phuket, her tasking again was changed. On orders from Seventh Fleet, the *St. Louis* was to make the best possible speed to Subic Bay in the Philippines. There she and her embarked Marines would provide humanitarian assistance to the naval base and nearby Cubi Point Naval Air Station after the volcanic eruption of Mount Pinatubo, followed by several days of torrential rains and severe earthquakes.¹⁵⁴

With the departure of the *St. Louis*, General Stackpole declared the second phase of the campaign plan complete. It was, he reported to Pacific Command, a "superb effort by all involved [which] produced unprecedented relief. Safety was paramount; mission accomplished without any injury to U.S. personnel or loss of equipment."¹⁵⁵ During the next five days, the remaining 190 members of the JTF and their equipment were flown by Air Force C-141s and C-5As to their home stations on Hawaii, Okinawa, and Guam. Following a news conference at which Ambassador Milam and General Stackpole presided, the commander of the JTF boarded the last C-5A for the flight home to Okinawa. On 14 June, Pacific Command terminated Operation Sea Angel and formally deactivated the Joint Task Force.¹⁵⁶

"Words really can't convey the depth of our feeling here," noted Ambassador William Milam in his message to Admiral Charles Larson, "our gratitude and fond wishes to Major General Henry C. Stackpole, III, and all the officers and enlisted personnel comprising JTF Operation Sea Angel. All deserve the highest, strongest commendation for their superlative relief operation in Bangladesh." The Joint Task Force, he continued, "admirably fulfilled its mission of bringing food to the starving, medicine to the sick, and hope to the hopeless. But coincident to its mission, JTFSA also served the foreign interests of the United States by very visibly enabling a fledgling democracy to meet the most critical



Photograph courtesy of American Embassy, Dhaka
MajGen Stackpole and American Ambassador Milam brief reporters at the Dhaka embassy on the accomplishments of the relief effort.

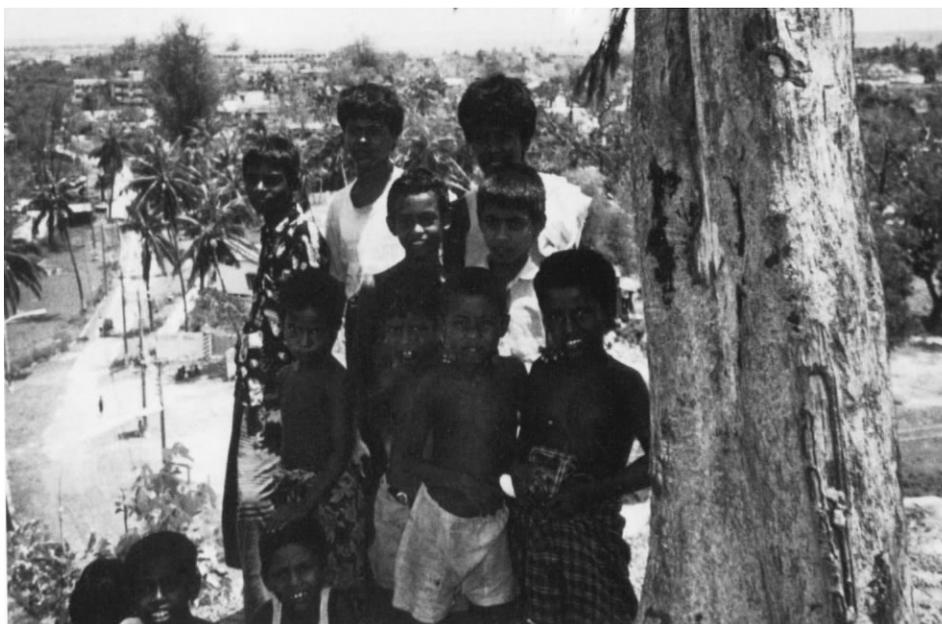
needs of a distressed population." While General Stackpole had become a legend in Bangladesh for his "leadership, sensitivity, and high intelligence," it was "the superior organization and efficiency of JTFSA, the unusual professional competence of its members, as well as their unfailingly sympathetic and benign behavior on foreign soil [that] brought great credit to their services, to themselves, to this mission, and to our country."¹⁵⁷ General Colin Powell echoed Ambassador Milam's words: "The magnificent performance of every Sailor, Marine, Soldier, Airman left an indelible mark on nearly two million people who will never forget 'The Angels From the Sea.' The end results of

'Sea Angel' are lives saved, the enhanced faith of a people in its democratic government, and 'a view of America as truly a friend in time of need.'¹⁵⁸

Praise also came from Bangladeshi officials, both civilian and military. Among the many tributes, the one written by Muhammad Omar Farooq, zonal relief coordinator for Cox's Bazar, expressed the sentiments of all:

Today, democracy in our country is reborn. It is young, hardly a few months old. But within these few months it has had its baptism of fire, with the fateful and devastating Cyclone and Tidal surge of 29 April 1991, which rocked our people to their roots and caused devastation on a scale hitherto unknown, and left them in a state of complete shock and bewilderment.

But our people are resilient, they are born in cyclones and tidal bores, and they grow and live with them. For them, cyclones and tidal bores are almost so to say a natural habitat. With fortitude, and indomitable courage our people withstood the scourge of the cyclone which was like a holocaust. Inspiration and unshakable assistance from friends like you helped to get us back on our feet sooner than later, and move boldly ahead. You and your sea angels, helped, facilitated and expedited the process of our recovery. For this, we will remain indebted. We have no words adequate to express our gratitude.¹⁵⁹



Photograph courtesy of RAdm Stephen S. Clarey, USN (Ret)
The smiling faces of young Bangladeshi villagers near Cox's Bazar was, as RAdm Stephen S. Clarey later said, a testament to the efforts of American Marines, seamen, airmen, and soldiers.

Operation Sea Angel, Stackpole later noted, "was a significant chapter in U.S. history because . . . it was the forerunner of what caused us to go to Somalia." If the Bangladesh relief operation had been a failure, "you would not see anywhere near the interested effort going on for these other rescue operations. But it became," he continued, "a model in the sense of how we construct the task force; a model in the sense of not having an . . . intrusive element with a large footprint because we come from the sea; a model in respect for sovereignty; and a model in campaign planning." A goal was set and "we achieved the goal," he concluded, "and we created the conditions in each phase necessary to move to the next phase."¹⁶⁰

Epilogue

At its peak, more than 7,500 American military personnel were involved in the relief effort. In slightly more than four weeks of operations almost 2,000 helicopter and C-130 sorties were flown, carrying 4,000 tons of supplies--more than 1,500 tons were delivered by surface craft. More than 1.7 million people were reached and aided in the affected area and thousands of lives were saved from the ravages of disease and starvation. "When we left Bangladesh," General Stackpole later noted, "the crops were growing and the trees had sprouted leaves, . . . and there was life in the area."¹⁶¹

Joint Task Force Sea Angel's legacy was more than healed bodies and full stomachs, it also left behind a reservoir of knowledge and recommendations. Elements of the task force produced harbor assessment and embankment engineering studies and updated local physicians in disease treatment and patient care. "The salutary effect of the Task Force effort," Stackpole reported, "has been a study by the Government of Bangladesh of our organization, structure, equipment and methodologies for adoption where possible for their own civil/military disaster plan." However, more needed to be done. In his last situation report to Pacific Command, Major General Stackpole noted that while much remained to be done in Bangladesh, he believed that the United States had a future training opportunity. He recommended that disaster relief ties be maintained with Bangladesh and that "technical help from [the United States] military in form of MTT's [mobile training teams] and medical expertise appears to be the way to go."¹⁶²

Disaster relief ties were maintained and would be tested in November 1992 as Tropical Cyclone Forest moved up the Bay of Bengal toward the offshore islands and coastal lowlands of southeastern Bangladesh, the same area devastated more than a year earlier. While the Bangladesh government alerted its citizenry and mobilized its armed forces, the American government also took action. Pacific Command was alerted that it, when directed by the President, would provide "support for relief operations to assist the Government of Bangladesh in recovering from tropical cyclone damage for a period of approximately 2 weeks."¹⁶³

Early on the morning of 20 November, CinCPac activated a crisis planning group and subsequently designated Major General Donald R. Gardner, General Stackpole's successor at III Marine Expeditionary Force, to be Commander, Joint Task Force Bangladesh Relief.¹⁶⁴ During the next 24 hours, III MEF activated a crisis action center and provided the Pacific Command estimates of the situation and of forces that would be needed.¹⁶⁵ As planning moved ahead and operation orders were written, Joint Task Force Bangladesh Relief was redesignated Joint Task Force Sea Angel II and Navy, Marine, Army, and Air Force units were assigned and alerted.¹⁶⁶ Despite the extensive planning and preparations, Joint Task Force Sea Angel II did not deploy because Tropical Cyclone Forest made landfall approximately 230 kilometers southeast of Chittagong in Burma. The damage in Bangladesh was much less than had been anticipated, so Ambassador William Milam did not expect any request for disaster relief because the Bangladesh government was better prepared this time around.¹⁶⁷ The seeds of Sea Angel bore fruit within the first year.

The disaster relief ties between Bangladesh and the United States did not end with Sea Angel II. In May 1992, CinCPac inaugurated the Joint/Combined Exchange Training Program and designated the Pacific Special Operations Command to be the executive agency for planning, coordinating, and conducting exercises and training for active and Reserve Army, Navy, Marine, Air Force, and Special Operations personnel throughout the Pacific. Two months after Tropical Cyclone Forest struck, American soldiers, sailors, and airmen were deployed to Bangladesh to share and improve upon combined American and Bangladesh disaster relief techniques. The Bangladesh Defense Forces handled most of the nation's disaster relief efforts, so the American teams were to train with Bangladeshi forces and provide instruction in aerial delivery, pathfinder operations, piloting techniques, underwater search and salvage, hydrographic survey, and underwater demolitions.¹⁶⁸

The "Balance Buffalo" series of exercises, two of which were conducted in 1993, continued. The training deployment of one Special Forces detachment from the 1st Battalion, 1st Special Forces Group (Airborne), one C-130 from the 374th Air Wing, and a four-man civil affairs direct support team from the 426th Civil Affairs Battalion in April 1994 proved fortuitous. Shortly after they arrived in Bangladesh, a major cyclone began moving toward the coast. The American Embassy indicated that if the devastation was similar to that of the April 1991 storm, they might again ask CinCPac for assistance. Without hesitation the American forces moved into action, dispatching the C-130 from the training site to Dhaka where a special forces team prepared to provide a secure communications link to the embassy, if required, for the coordination of the disaster relief effort. However, like Cyclone Forest, the 1994 storm veered south and crossed the coast near the border with Burma. The 374th Air Wing's C-130 provided overflight and reconnaissance to the ambassador and country team, assisting with the damage assessment. The devastation was relatively light, consisting primarily of property damage, and the embassy determined that no additional support would be required.¹⁶⁹

With ongoing training exercises like Balance Buffalo, the response of Bangladesh civilian agencies and armed forces will improve and combined relief efforts, in the event of a future disaster, will be easier. In addition, the USAID mission resident in Dhaka along with United Nations and other bilateral agencies have a continuous program with Bangladesh civilian agencies to strengthen both disaster preparedness and relief programs. Although Bangladesh, with its unique geography and climate, will continue to be battered by natural disasters, future disaster relief operations should result in less loss of life, livestock, and property than in the past as a result of the lessons learned during Operation Sea Angel.

Notes

Unless otherwise noted, the material in this monograph was derived from: 5th MEB After Action Report "The 5th MEB Deployment to SWA, 2 August 1990-29 May 1991," hereafter 5th MEB AAR; 5th MEB Staff interview by LtCol Ronald J. Brown conducted at 5th MEB HQ, Camp Pendleton, California, 25Jul91, hereafter 5th MEB intvw; 5th MEB Operations Brief, hereafter 5th MEB Ops Brief; MAG-50 ComdC, Mar-Jun91; MAG-50 Special Action Report, "Sea Angel: Case Study," hereafter MAG-50 SAR; LtGen Henry C. Stackpole III, "Angels from the Sea," *U.S. Naval Institute Proceedings*, May92, pp. 110-16, hereafter Stackpole, "Angels from the Sea"; BGen Peter J. Rowe, "Interview," *U.S. Naval Institute Proceedings*, May92, pp. 128-132; LtCol Donald R. Selvage, "Operation Sea Angel: Bangladesh Disaster Relief," *Marine Corps Gazette*, Nov91, pp. 89-97; and "Bangladesh--Cyclone," *OFDA Annual Report FY 1991*, pp. 18-24. Source materials used in the preparation of this volume are located in the "Sea Angel Files," Archives Section, Marine Corps Historical Center, Washington, D.C.

1. Vernon Loeb, "Again, calamity, familiar guest in an unlucky land," *Philadelphia Inquirer*, 5May91, hereafter Loeb, "Again, calamity."
2. Capt Shafiq-ur-Rahman, Bangladesh Navy, "Disaster in Bangladesh: A Multinational Relief Effort," *Naval War College Review*, Winter93, pp. 59-62.
3. Caritas Bangladesh, *Cyclone 1991*, 5May91, p. 3, in MajGen Henry C. Stackpole III, Final Report of Operation Sea Angel, 20Jun91, hereafter Stackpole, "Final Report," 20Jun91.
4. 5th MEB, "Angels From the Sea: A Case Study of 5th Marine Expeditionary Brigade's Humanitarian Assistance to Bangladesh, May 1991," undated, p. 1, hereafter 5th MEB, "Case Study."
5. Caritas Bangladesh, *Cyclone 1991: An Appeal*, 11May91, p. 5, in Stackpole, "Final Report," 20Jun91.
6. AmEmbassy, Dhaka msg to SecState, 301216ZApr91.
7. AmEmbassy, Dhaka msg to SecState, 010737ZMay91; SecState msg to AmEmbassy, Dhaka, 030503ZMay91.
8. Brig Ibrahim Ahmed and Col A. Md. Moazzem, "Disaster Preparedness In Bangladesh and Role of Bangladesh Army in Disaster Management," (Paper given at Military Operations and Law Conference, Honolulu, Hawaii, 16-19Sept91), pp. 18-19.
9. AmEmbassy, Dhaka msg to SecState, 030752ZMay91; AmEmbassy, Dhaka msg to SecState, 030948ZMay91.
10. USDAO, Dhaka msg to JCS/SecDef, 020736ZMay91.
11. AmEmbassy, Dhaka msg to SecState, 030948ZMay91.
12. Ibid.

13. USDAO, Dhaka msg to JCS/SecDef, 020736ZMay91.
14. Loeb, "Again, calamity."
15. U.S. President, *Public Papers of the Presidents of the United States* (Washington: Office of the *Federal Register*, National Archives, 1992), George Bush, 1991, v. 1, p. 463.
16. AmEmbassy, Dhaka msg to SecState, 041212ZMay91.
17. Ibid.
18. Caritas Bangladesh, *Cyclone 1991*, 5May91, p. 6, in Stackpole, "Final Report," 20Jun91.
19. AmEmbassy, Dhaka msg to SecState, 041212ZMay91.
20. SecState msg to AmEmbassy, Dhaka 040420ZMay91.
21. AmEmbassy, Dhaka msg to SecState, 041212ZMay91; AmEmbassy, Dhaka msg to SecState, 061123ZMay91.
22. USDAO, Dhaka msg to DIA, 220852ZJul91.
23. AmEmbassy, Dhaka msg to SecState, 061201ZMay91.
24. Ibid.; AmEmbassy, Dhaka msg to SecState, 051208ZMay91.
25. USDAO, Dhaka msg to USCinCPac, 060445ZMay91.
26. USDAO, Dhaka msg to USCinCPac, 060507ZMay91.
27. USDAO, Dhaka msg to DIA, 220852ZMay91.
28. 5th MEB, ComdC, 18Mar-30Jun91.
29. SecState msg to AmEmbassy, Dhaka, 080357ZMay91.
30. AmEmbassy, Dhaka msg to SecState, 081238ZMay91.
31. 5th MEB, AAR.
32. ComSeventhFlt msg to ComPhibGru 3, 5th MEB, and CTF 76, 080513ZMay91.
33. ComPhibGru 3 msg to ComSeventhFlt, 082001ZMay91.
34. CTF 76 msg to ComSeventhFlt, 081600ZMay91.
35. USCinCPac msg to USDAO, Dhaka, 090015ZMay91.

36. USDAO, Dhaka msg to USCinCPac, 060657ZMay91.
37. CJTF Sea Angel, "Final Report on Operation Sea Angel, 20Jun91; USDAO, Dhaka msg to USCinCPac, 080731ZMay91; USDAO, Dhaka msg to DIA, 22Jul91.
38. AmEmbassy, Dhaka msg to SecState, 091113ZMay91.
39. USDAO, Dhaka msg to USCinCPac, 091117ZMay91.
40. USCinCPac msg to AmEmbassy, Dhaka, 092345ZMay91.
41. LtCol Gary W. Anderson, USMC, "Operation Sea Angel; A Retrospective on the 1991 Humanitarian Relief Operation in Bangladesh," (Naval War College), Rpt 1-92, 15Jan92, pp. 5-6, hereafter Anderson, "Sea Angel."
42. Col Stephen E. Lindblom, Comments on draft ms, 20Apr95, hereafter Lindblom Comments.
43. AmEmbassy, Dhaka msg to SecState, 111220ZMay91.
44. USDAO, Dhaka msg to USCinCPac, 101340ZMay91.
45. *New York Times*, 12May91, p. 6.
46. Joint Staff memo to CJCS, 10May91.
47. DepSec memo to CJCS, 10May91.
48. Joint Staff msg to USCinCPac, 102323ZMay91.
49. USCinCPac msg to AmEmbassy, Dhaka, 110315ZMay91.
50. Stackpole, "Final Report," 20Jun91.
51. USCinCPac msg to AmEmbassy, Dhaka, 110315ZMay91; USCinCPac msg to Joint Staff, 110325ZMay91.
52. USCinCPac msg to USCinCPacFlt, 110315ZMay91.
53. *New York Times*, 12May91, pp. 1, 6.
54. CJCS msg to USCinCPac, 111315ZMay91.
55. Stackpole, "Angels from the Sea," p. 112; LtGen Henry C. Stackpole III, "Operation Sea Angel: Marine Corps Relief Operations in Bangladesh," MCHC Seminar, 30Jan92, hereafter Stackpole, "MCHC Sea Angel Seminar," 30Jan92.

56. JTF-PE msg to USDAO, Dhaka, 110724ZMay91.
57. USDAO, Dhaka msg to JTF-PE, 111211ZMay91.
58. Anderson, "Sea Angel," pp. 6-8; USCinCPac msg to CinCPacFlt, 111734ZMay91; ComSeventhFlt msg to CTG 76.6, 110930ZMay91.
59. Anderson, "Sea Angel," p. 8.
60. JTF-PE msg to USDAO, Dhaka, 110724ZMay91.
61. Anderson, "Sea Angel," p. 9; Stackpole, "MCHC Sea Angel Seminar," 30Jan92.
62. USDAO msg to JTF-PE, 111211ZMay91; JTF-PE msg to USCinCPac, 121739ZMay91.
63. Ibid.
64. USCinCPac msg to CdrUSAPac, 111204ZMay91; 353 SOW msg to COMSocPac, 121247ZMay91; JTF-PE msg to USCinCPac, 130814ZMay91; Anderson, "Sea Angel," pp. 11-12; Cdr 1/1SFGA msg to Cdr 4thSOSC, 110650ZJun91.
65. JTF-PE msg to USCinCPac, 130814ZMay91.
66. Stackpole, "MCHC Sea Angel Seminar," 30Jan92.
67. Stackpole, "Final Report," 20Jun91.
68. JTF-PE msg to USCinCPac, 130814ZMay91.
69. JTF-PE msg to USCinCPac, 130814ZMay91.
70. Ibid.
71. JTF-PE msg to USCinCPac, 141629ZMay91.
72. Stackpole, "MCHC Sea Angel Seminar," 30Jan92.
73. JTF-PE msg to USCinCPac, 141629ZMay91.
74. AmEmbassy, Dhaka msg to SecState, 131245ZMay91.
75. 374 AW Hist, Jan-Jun91, p. 44.
76. MOA, JTFSA and American Embassy, Dhaka, undated.
77. Amb William B. Milam, Comments on draft ms, 18Feb95.

78. JTF-PE msg to USCinCPac, 141629ZMay91; USDAO, Dhaka msg to DIA, 220852ZJul91; and LtCol Anderson, "Sea Angel," pp. 13-14.
79. JTF-PE msg to USCinCPac, 141629ZMay91.
80. JTF-PE msg to USCinCPac, 141640ZMay91.
81. USCinCPac msg to USCinCPacFlt, 130904ZMay91; USCinCPac msg to USCinCPacFlt, 140534ZMay91; USS *St Louis* (LKA 116) 1991 Command History, 23Mar91.
82. CG III MEF msg to CG 3d MarDiv, 160021ZMay91.
83. CMAGTF 2-91, ComdC 16May-8Jul91, dtd 3Jul91.
84. Stackpole, "MCHC Sea Angel Seminar," 30Jan92.
85. BGen Peter J. Rowe, Comments on draft ms, 23Feb95, hereafter Rowe Comments; Col Stephen E. Lindblom, Comments on draft ms, 20Apr95.
86. JTF-PE msg to USCinCPac, 152326ZMay91.
87. Stackpole, "Final Report," 20Jun91.
88. Ibid.
89. USCinCPac msg to USCinCPacFlt, 161152ZMay91.
90. 5th MEB Ops Brief.
91. Ibid.
92. Col Drake F. Trumpe, 5th MEB intvw.
93. 5th MEB intvw.
94. 5th MEB AAR.
95. MAG-50 SAR.
96. USS *Tarawa*, 1991 Command History, 3Apr92.
97. 5th MEB intvw.
98. Rowe Comments.
99. Stackpole, "MCHC Sea Angel Seminar," 30Jan92.

100. USS *Tarawa*, 1991 Command History, 3Apr92.
101. 5th MEB Ops Brief.
102. 5th MEB, "Case Study"; 5th MEB intvw.
103. Rowe Comments.
104. Rowe Comments.
105. 374 AW Hist, Jan-Jun91, p. 44.
106. Stackpole, "Final Report," 20Jun91.
107. MAG-50 SAR.
108. Ibid.
109. LtCol Kevin M. Kennedy ltr to authors, 4Aug93.
110. Stackpole, "MCHC Sea Angel Seminar," 30Jan92.
111. JO3 J. Vincent Dickens, USN, "Relief Helicopters Fill Up at 'Bob's,'" *Leatherneck*, Sep91, p. 17.
112. USCinCPac msg to AmEmbassy, Dhaka, 130804ZMay91.
113. CG, 5th MEB msg to ComSeventhFlt, 301535ZMay91; 2dLt J. W. Disney, "Sea Angels Dropped Food and Supplies," *Leatherneck*, Sep91, pp. 15-16.
114. BGen Randall L. West, Comments on draft ms, 10Apr95, hereafter West Comments.
115. JTF-SA msg to JTF-SA (FWD), 220353ZMay91.
116. Stackpole, "MCHC Sea Angel Seminar," 30Jan92.
117. 539 AS, Operation Manna, Post Operation Report, 10Jun91.
118. "Memorandum of Understanding Between the Government of the People's Republic of Bangladesh and the United States of America to Specify the Legal Status of the United States Pacific Command Disaster Relief Task Force," 20May91.
119. Joint Staff msg to USCinCPac, 17May91.
120. Stackpole, "MCHC Sea Angel Seminar," 30Jan92.
121. NEPMU 6, 1991 Command History, 26Feb92.

122. Dr. John R. Downs, "Historical Medical Perspective: Operation Sea Angel, Bangladesh Relief Effort," undated.
123. 2/11, ComdC, 18Mar-30Jun91.
124. 5th MEB, "Case Study."
125. Ibid.
126. Stackpole, "Final Report," 20Jun91.
127. U. S. President, *Public Papers of the Presidents of the United States* (Washington: Office of the Federal Register, National Archives, 1992), George Bush, 1991, v. 1, p. 574.
128. SecState msg to AmEmbassy, 1302217ZJun91; USCinCPac msg to SecDef, 180255ZJun91.
129. JTF-SA msg to USCinCPac, 281613ZMay91.
130. West Comments.
131. CG, 5thMEB msg to ComSeventhFlt, 301535ZMay91.
132. MAG-50, ComdC, 18Mar-30Jun91; Phibron 3, Command History, 1991, dtd Mar92.
133. 5th MEB intvw.
134. 5th MEB, ComdC, 18Mar-30Jun91.
135. JTF-SA msg to ComPhibGru 3, 281422ZMay91.
136. CG, 5thMEB msg to ComSeventhFlt, 301535ZMay91.
137. Rowe intvw, p. 131.
138. 2dLt James W. Disney, "MAG-50 Marines Finish the Rescue Missions," *Okinawa Marine*, 21Jun91, p. 8.
139. 5th MEB, ComdC, 18Mar-30Jun91.
140. USS *St Louis*, 1991 Command History, 23Mar91.
141. CTG 76.4 msg to JTF-SA, 301710ZMay91; CMAGTF 2-91 msg to JTF-SA, 010930Jun91.
142. CTG 76.4 msg to JTF-SA, 301710ZMay91.
143. CMAGTF 2-91, ComdC, 3Jul91.

144. JTF-SA msg to USCinCPac, 032330ZJun91.
145. USS *St Louis* msg to JTF-SA, 021710ZJun91.
146. USCinCPac msg to Joint Staff, 030154ZJun91.
147. JTF-SA msg to USCinCPac, 022215ZJun91.
148. Sgt P. J. Webb, "Operation Manna," *The Globe & Laurel: The Journal of the Royal Marines*, Jul/Aug91, p. 237.
149. USCinCPac msg to Joint Staff, 040134ZJun91.
150. JTF-SA msg to USCinCPac, 080843ZJun91.
151. JTF-SA msg to USCinCPac, 090903ZJun91.
152. JTF-SA msg to USS *St Louis*, 070800ZJun91.
153. CMAGTF 2-91 msg to JTF-SA, 081525ZJun91.
154. USS *St Louis*, 1991 Command History, 23Mar92; CMAGTF 2-91, ComdC, 3Jul91.
155. JTF-SA msg to USCinCPac, 080450ZJun91.
156. USCinCPac msg to CinCPacFlt, 140734ZJun91.
157. AmEmbassy, Dhaka msg to USCinCPac, 161158ZJun91.
158. CJCS msg to USCinCPac, 131005ZJun91.
159. Muhammad Omar Farooq ltr to MajGen Stackpole, 6Jun91.
160. LtGen Henry C. Stackpole, intvw, 29Apr93.
161. Stackpole, "MCHC Sea Angel Seminar," 30Jan92.
162. JTF-SA msg to USCinCPac, 131157ZMay91.
163. CJCS msg to USCinCPac, 192345ZNov92.
164. USCinCPac msg to CG, III MEF, 200430ZNov92.
165. CG, III MEF msg to USCinCPac, 200320ZNov92; CG, III MEF msg to USCinCPac, 201110ZNov92.
166. USCinCPac msg to COMMarForPac, 210610ZNov92.

167. USCinCPac msg to Joint Staff, 211730ZNov92.
168. ComSocPac msg to USCinCPac, 080113ZApr93; ComSocPac msg to USCinCPac, 080201ZJul93; Sgt Weston Ochse, USA, and Sgt Andrew Gudgel, USA, "Disaster Relief Crosstraining: Bangladesh 1993," *Asia-Pacific Defense Forum*, Sum93, pp. 37-41.
169. ComSocPac, "Background--Balance Buffalo 94-2," 4May94.

Appendix A

Chronology

29-30 April 1991--Tropical Cyclone 02B, Marian, devastates coastal region of Bangladesh. The port of Chittagong and the city of Cox's Bazar severely damaged and the islands of South Hatia, Sandwip, Kutubdia, and Manpura submerged. Water and power distribution systems, tubewells, housing, and transportation infrastructure badly damaged.

30 April--Bangladeshi Prime Minister Begum Khaleda Zia, after visiting the affected area, appeals to international community "to come forward in aid of humanity in distress." Thirty-two countries respond with some form of assistance.

U.S. Ambassador William B. Milam declares disaster in Bangladesh and provides \$25,000 for disaster relief and releases 5,500 pounds of Department of Defense (DOD) donated medical supplies.

1 May--Ambassador Milam visits affected area with other chiefs of mission.

2 May--Bangladeshi armed forces and military medical units deployed to affected districts.

U.S. Agency for International Development donates 727,000 water purification tablets to Bangladesh government and non-government agencies for distribution.

3 May--President George Bush informs Prime Minister Zia that the United States stands ready to assist. USAID Director and U.S. Defense Attache and military staff visit affected areas.

5 May--Bangladeshi naval vessels reach Sandwip, Manpura, and Kutubdia Islands after earlier attempts were thwarted by heavy seas.

6 May--Additional Bangladeshi military assets deployed to area.

Ambassador Milam queries Commander in Chief, Pacific (CinCPac) about the possible use of Navy and Marine Corps air and surface assets to assist in the relief effort.

8 May--Deployment of 15 U.S. Corps of Engineer personnel already in-country to Chittagong to assist in rehabilitation of airport.

9 May--III Marine Expeditionary Force (MEF) receives indications from Fleet Marine Force, Pacific (FMFPac) that the MEF was one candidate being considered as the nucleus for a proposed joint task force to assist in relief efforts. CG, III MEF, MajGen Henry C. Stackpole III, in Philippines attending Seventh Fleet planning conference. III MEF planning cell formed to follow situation and develop a series of options.

10 May--Air Force C-141 from Okinawa and C-5A from Southwest Asia arrive at Dhaka with DOD-donated relief supplies.

11 May--President George Bush announces decision to go beyond the financial support rendered by the U.S. Embassy and to dispatch a joint task force to Bangladesh. Commander in Chief, Pacific, Admiral Charles R. Larson, would exercise overall responsibility for the operation, codenamed Productive Effort, while MajGen Stackpole was designated Joint Task Force (JTF) commander. The relief effort was to be phased:

Phase I: Form and deploy JTF to assess situation and recommend concept of operations.

Phase II: Deploy command, control, and communications equipment and personnel, civil affairs and disaster assessment teams, medical personnel, and helicopters to facilitate assessment and provide immediate assistance.

Phase III: Employ Amphibious Group 3 (PhibGru 3) and embarked 5th Marine Expeditionary Brigade (MEB) to provide additional helicopters, water transport, communications, and support personnel and equipment.

PhibGru 3, enroute from Persian Gulf to West Coast, diverted to support relief operations.

2100, the 28-man Survey and Reconnaissance (Advance) Party, headed by MajGen Stackpole, departs Kadena AFB, Okinawa, on board a C-141 for Dhaka.

12 May--0700, JTF Advance Party arrives in Dhaka, is briefed by Ambassador Milam and staff, and sets up housekeeping in a rented house on the outskirts of the capital. Satellite communications established with CinCPac in Hawaii and III MEF on Okinawa.

Initial assessment was that distribution was the primary problem facing the relief effort. Food and supplies would have to be moved to Chittagong and then to outlying areas; water, food, and medical needs could be met within two weeks, but an additional two weeks would be needed to stabilize overall health crisis.

Elements of 1st Battalion, First Special Forces Group (Airborne), arrives from Okinawa on board two C-130s. The aircraft are committed to airlifting bulk supplies from Dhaka to Chittagong.

13 May--MajGen Stackpole and staff visit disaster area on board two Bangladeshi air force UH-1 helicopters, accompanied by several host country military officers, Ambassador Milam, the USAID Director, and the embassy public affairs officer. Assessment was that food supplies were adequate and that a combination of helicopters, landing craft, and air drops should be effective in distributing the food. Focus was on identifying and moving personnel and equipment into the area as quickly as possible.

JTF augmentation cell arrives from Hawaii. Cell included designated deputy, Col Edward G. Hoffman, USAF, who was also designated the Air Force Component Commander. Also included were five U.S. Army UH-60 Blackhawk helicopters, along with Seabee assets and an environmental medicine unit.

Commander, Joint Task Force (CJTF) decides to split staff between Dhaka and Chittagong. Col Stephen E. Lindholm, III MEF G-3, would remain in Dhaka as JTF Chief of Staff. Col Mike Ferguson, USAF, designated Chief of Staff at JTF (Forward) in Chittagong. Headquarters at Dhaka moved to unused Bangladeshi air force barracks at old airfield outside capital; initial building retained as press headquarters.

St. Louis ordered to Okinawa to load 28 ROWPUs (water purification units) and support personnel and to proceed to Bangladesh.

14 May--CJTF visits disaster sites with Ambassador, USAID Director, embassy PAO, and senior members of Bangladesh command staff.

15 May--JTF establishes forward headquarters and air detachment at Chittagong to coordinate relief efforts in the hardest hit areas.

First formal meeting of the Combined Relief Tasking Cell. Representatives from the JTF, U.S. Embassy, AID, CARE, Red Crescent, and Bangladeshi military, civil, and non-governmental assistance agencies attend. Daily meeting of Cell continued until 28 May when it was determined that adequate supplies had been delivered to Chittagong and that further meetings would be conducted as needed.

Disaster relief and communications teams and first relief supplies delivered to remote disaster sites.

PhibGru 3, composed of eight ships, commanded by RAdm Stephen S. Clarey, and 5th MEB under the command of BGen Peter J. Rowe, arrives off coast of Bangladesh.

16 May--PhibGru 3 and 5th MEB, augmented by a Japanese contingent, began full-scale relief efforts. Twenty-eight helicopters, in conjunction with four LCACs and three LCUs, handled the bulk of local distribution of food and medical supplies in the area of Chittagong, Sandwip, Kutubdia, and Moheshkheli.

17 May--Campaign plan approved and implemented:

Phase I: Immediate efforts to stabilize life-threatening situations (14 days).

Phase II: Delivery of supplies and equipment that would allow government and people to assume control of relief efforts (10 days).

Phase III: Preparation for U.S. withdrawal and the assumption of full control of relief efforts by the Government of Bangladesh (5 days).

18 May--Eight of a total of 36 ROWPUs arrive and are located at Chittagong. Two units became operational on Kutubdia Island on 20 May, while two units are shipped to Sandwip Island and are placed in service on the 24th.

19 May--First of six 5th MEB MedCap teams deployed.

Second control center established at Cox's Bazar by Marine Battalion Landing Team 3/5.

20 May--RFA *Fort Grange* arrives off Cox's Bazar with elements of 539 Assault Squadron, Royal Marines, on board.

21 May--Operations under campaign plan proceeding; phase one essentially complete despite daily thunderstorms and occasional tornadoes.

Mrs. Marilyn Quayle, wife of U.S. Vice President, arrives for three-day visit. During visit operational codename redesignated Sea Angel.

29 May--Phase II nears completion, transition back to a primarily Bangladeshi effort underway, and PhibGru 3 and 5th MEB depart.

St. Louis, with 28 ROWPUs embarked, arrives to act as interim platform during completion of Phase II. Marine Air-Ground Task Force 2-91, commanded by LtCol Larry A. Johnson, configured as a humanitarian relief unit on board to act as a partial replacement for the amphibious task force.

30 May--In-country force drawdown begins; all personnel to be out of country by 13 June.

2 June--Tropical Cyclone 03B comes ashore northwest of Chittagong, but causes no loss of life or serious damage.

4 June--All forces returned to forward locations and continue operations.

7 June--Emphasis changes to retrograde. Helicopter relief operations completed. All available government and non-government supplies delivered. Situation returning to normal with road networks, ferry boats, and local infrastructure being returned to pre-cyclone conditions.

St. Louis departs for Thailand. Last day of operations at Chittagong.

13 June--Redeployment of all personnel and equipment completed.

15 June--Operation Sea Angel terminated.

Appendix B

Command and Staff List

Joint Task Force Sea Angel, Bangladesh

Cdr: MajGen Henry C. Stackpole III, USMC
DepCdr: Col Edward G. Hoffman, USAF
CS: Col Stephen E. Lindblom, USMC
SgtMaj: SgtMaj Patrick W. McLane, USMC
J-1: LtCol James R. Morris, USMC
J-2: Cdr Joseph C. Levi, USN
J-3: LtCol Gary W. Anderson, USMC
J-4A: LtCol Christopher R. Mohr, USMC
J-6: LtCol Dan P. Houston, USMC
Surgeon: Capt John R. Downs MC, USNR
SJA: Maj Manuel E. Supervielle, USA
PA: LtCol James L. Vance, USMC

Joint Task Force Sea Angel (Forward), Chittagong

CS(Fwd): Col Mike Ferguson, USAF
J-1(Fwd): Maj D. C. Ward, USAF
J-2(Fwd): LtCol Alan H. Dank, USMC
J-3(Fwd): Capt Edward P. Anglim, USN
J-4: Col Russell F. Bailes, Jr., USMC
J-6(Fwd): Maj Charles E. Cooke, USMC

5th Marine Expeditionary Brigade

CG: BGen Peter J. Rowe
CS: Col Drake F. Trumpe
G-1: Maj Leslie E. Garrett
G-2: LtCol Malcolm Arnot
G-3: LtCol Thorys J. Stensrud
G-4: Col Eugene L. Gobeli
G-6: LtCol William J. Cantu

Regimental Landing Team 5

CO: Col Randolph A. Gangle
2d Bn, 5th Mar: LtCol Kevin M. Kennedy
3d Bn, 5th Mar: LtCol Donald R. Selvage
2d Bn, 11th Mar: LtCol Paul A. Gido

Marine Aircraft Group 50

CO: Col Randall L. West
HMLA-169: LtCol Theron D. Rogers
HMH-772: LtCol Thomas J. Miller
HMM-265: LtCol John D. Holdstein

VMA-513: Maj Eddie L. Holcomb
3d LAAD: Maj Gerald L. Troupe

Brigade Service Support Group 5

CO: Maj Robert G. Johnson

Appendix C

Task Organization

Command Element **MajGen Henry C. Stackpole, III, USMC**
Det III MEF
Deployable JTF Augmentation Cell
C-12 Det MCAS Iwakuni and MCAS Futenma
4th Combat Communications Group (-)
Contingency Operations Base 3
Contingency Operations Base 5
PAO Det
PAO Det, MCB Camp S. D. Butler
PAO Det, COMNAVFORJAPAN
PAO Det, COMUSFOR, Subic Bay, RP
Det 834th Air Logistics Division (ALD)
Det 364th Civil Affairs Brigade
Det 322d Civil Affairs Group
Det 351st Civil Affairs Command

Marine Forces (MARFOR)
5th Marine Expeditionary Brigade **BGen Peter J. Rowe, USMC**
Command Element
Headquarters Company
5th SRISG
Det 1st Radio Bn
Det Company A, 9th Comm Bn
Det 4th Force Recon Company
Det 4th Military Police Company
Det 31st ITT
Det 14th CIT
Det 4th SCAMP
Ground Combat Element
Regimental Landing Team 5
Headquarters, 5th Marines
TOW Platoon, HQ Company, 23d Marines
2d Bn, 5th Marines
3d Bn, 5th Marines
3d Bn, 11th Marines
Company B, 1st Reconnaissance Bn
Company A (Rein), 4th Tank Bn
Company A (Rein), 4th Assault Amphibian Bn
Company A (Rein), 4th Light Armored Infantry Bn
Company A, 4th Combat Engineer Bn
Company B, 1st Combat Engineer Bn
Company F, 2nd Bn, 25th Marines

Aviation Combat Element

Marine Aircraft Group 50

Det MASS-6

Det MWSS-372

HMM-265

HMLA-169

HMH-772, Det A

VMA-513, Det B

3d LAAD Bn

Combat Service Support Element**Brigade Service Support Group 5**

Headquarters

Det 1st Landing Support Bn

Det 7th Motor Transport Bn

Det 1st Medical Bn

Det 1st Dental Bn

Det 7th Engineer Support Bn

Det 1st Supply Bn

Det 1st Maintenance Bn

Det 7th Communications Bn

Contingency Marine Air-Ground

Task Force 2-91

LtCol Larry A. Johnson, USMC

Navy Forces (NAVFOR)**Task Group 76.6**USS *Tarawa* (LHA 1)USS *Vancouver* (LPD 2)USS *Juneau* (LPD 10)USS *Mount Vernon* (LSD 39)USS *Frederick* (LST 1184)USS *Barbour County*

(LST 1195)

USS *Anchorage* (LSD 36)USS *St. Louis* (LKA 116)**RAdm Stephen S. Clarey, USN**

Capt Wirt R. Fladd, USN

Capt Clarence W. Burck, USN

Capt Tom A. Fitzgibbons, USN

Cdr David E. Myers, USN

Cdr Thomas W. Thiesse, USN

Cdr Joseph B. Wilkinson, USN

Capt Terence P. Labrecque, USN

Capt John W. Peterson, USN

Environmental and Preventive Medicine

Unit-6

Cdr Kenneth R. Ockermann, MC, USN

Air Forces (AFFOR)**Col Edward G. Hoffman, USAF**

Det 374th Tactical Airlift Wing

21st Tactical Airlift Squadron (-)

345th Tactical Airlift Squadron (-)

Det 603d Airlift Control Squadron

Det 8th Mobile Aerial Port Squadron (MAPS)

Army Forces (ARFOR)

LtCol Thomas F. Elzey, USA

4-25 Aviation Battalion (-)
Det 84th Engineer Battalion

Special Operations Forces (SOF)

LtCol George W. Norwood, USAF

Joint Special Operations Task Force
1st Battalion, 1st Special Forces Group (Airborne) (USA)
17th Special Operations Squadron (USAF)
Det 2, 1723d Special Tactics Squadron (USAF)

Appendix D

United States Assistance Provided Cyclone Disaster Effort

OFDA Funding	Amount	Description
Grants to NGOs		
CARE	\$2,326,850	24 Relief Centers
Save the Children (USA)	\$280,739	9,000 families in urban Fund Chittagong and Sitakunda
The Asia Foundation	\$366,000	24,200 families in urban Chittagong and Sitakunda
Pathfinder Fund	\$294,000	7,000 families in urban Chittagong, Rawzan, and Fatikchari
World Vision	\$250,000	Relief in urban Chittagong and Bandarban
International Center for Diarrheal Disease Control, Bangladesh	\$75,000	Technical assistance to NGOs and BDG on water, sanitation, and diarrheal disease control
Helen Keller International	\$91,000	Distress monitoring in affected areas
Other OFDA-Funded Assistance		
Ambassador's Fund	\$25,000	Contributed to Prime Minister's Relief Fund
Disaster Relief Staff Support	\$12,850	Personal Service Contractor
ORS Production/ Supply Assessment	\$7,150	Consultant
4 Million Water Purification Tablets	\$512,000	Distributed to seven NGOs
ORS sachets and inputs	\$184,000	For local production and distribution of ORS

Infrastructure Damage Assessment (with World Bank)	\$295,000	Assessment of damage to roads, bridges, schools, BDG clinics, and utilities
Local Support Costs	\$15,000	
Additional NGO Grants	\$390,411	
OFDA Total	\$5,125,000	
Other USAID Funding		
Water Purification Tablets	\$14,000	Donated to BDG and NGOs
Up to 55,000 MT of Title II wheat	\$11,000,000	Replenish stocks used for emergency feeding
Rehabilitate Rural Electricity Board equipment	\$2,000,000	Reprogramming USAID Development Assistance funds
Department of Defense		
Medical Supplies	\$2,000,000	From pre-positioned stocks
Corps of Engineer Personnel	15 persons	Repair Chittagong Airport
Relief Commodities	\$26,000,000	Delivered by C-5s, C-141s, and C-130s
Joint Task Force Sea Angel	\$6,350,000	Helicopters, amphibious craft, personnel, water purification units, medical supplies, food, etc.
Non-OFDA Contributions	\$47,364,000	
Total Assistance	\$52,489,000	

Appendix E

Joint Meritorious Unit Award

Citation

to accompany the award of the
Joint Meritorious Unit Award
to the
Joint Task Force SEA ANGEL

Joint Task Force SEA ANGEL distinguished itself by exceptional meritorious service from 10 May 1991 to 13 June 1991. During this period, as one of the largest military disaster relief forces ever assembled, Joint Task Force SEA ANGEL established a record of accomplishments that also made it one of the most successful. In response to the Bangladesh Government's request for humanitarian disaster relief assistance, in the wake of a tropical cyclone and tidal surge that claimed in excess of 139,000 lives and left millions homeless, soldiers, sailors, airmen, and marines were notified and within hours deployed and rapidly formed into a cohesive, dedicated team. Displaying exceptional airmanship in all kinds of weather extremes, the Air Force component flew 194 missions moving 2,430 tons of relief materials. Concurrently, the Army's "Blackhawks" flew 805 sorties for distribution of 886 tons, while the Navy and Marine aviation assets from the 7th Fleet's Amphibious Ready Group flew 969 sorties, distributing 700 tons of food, medicine, and construction materials. Equally monumental was the surface lift effort of the Navy and Marine Team in the Bay of Bengal's treacherous currents and debris-filled, unmarked river channels, which resulted in remote areas receiving 1,487 tons of life-sustaining medicines and supplies and 266,000 gallons of potable water produced by the Reverse Osmosis Water Purification Crews. Simultaneously, 6 Medical Contact Teams provided a host of medical analyses, treated over 15,000 patients and orchestrated the distribution [of] 38 metric tons of medical supplies. As a result of these efforts, representatives of the United States Agency for International Development estimated that critical supplies and medicines reached in excess of one million people and likely saved from starvation and serious illness over 100,000 others. In addition, appraisals compiled by engineers and the Special Forces Disaster Assessment Teams will be invaluable to the future self-directed restoration and development of the Bangladesh coastal infrastructure. Furthermore, despite the hundreds of hours flown, the ever-changing weather extremes, the seaborne lift mission through some of the world's most treacherous waters, and thousand of individual efforts in every conceivable environment, Joint Task Force SEA ANGEL accomplished the mission without a single death, serious injury, accident, or incident. By their exemplary performance of duty, the members of Joint Task Force SEA ANGEL brought great credit upon themselves and to the Department of Defense.

Given under my hand this 15th day of January 1992

//Colin L. Powell
Chairman, Joint Chiefs of Staff

Index

- Ahmed, Brig Shafaat, 39
- Ahmed, President Justice Shahabuddin, 69
- Ahmed, Oli, 10
- Ahmed, SFC Farugue U., USA, 39
- aircraft types
 - Aerospatiale AS 365N Dauphin, 31, 57, 62, 75
 - Bell AH-1W Sea Cobra, 44
 - Bell UH-1N Huey, 44, 56, 62
 - Boeing CH-46E Sea Knight, 16-17, 23, 44, 57-58, 62-63, 75
 - Lockheed C-130 Hercules, 29-30, 35, 40, 52-53, 57-58, 67, 69, 80-81, 85-86
 - Lockheed C-5A Galaxy, 16, 22, 32, 82
 - Lockheed C-141 Starlifter, 19, 22, 26, 28, 81-82
 - Lockheed HC-130 Hercules, 28
 - McDonnell Douglas AV-8B Harrier, 44, 46-47
 - Boeing MV-22, 46
 - Sikorsky CH-53 Sea Stallion, 16
 - Sikorsky RH-53D Sea Stallion, 44, 46, 57, 62, 75
 - Sikorsky SH-3H Sea King, 44
 - Sikorsky SH-3 Sea King, 66
 - Sikorsky UH-60 Blackhawk, 25, 30, 32, 39-40, 42, 57, 62, 80-81
 - Westland HAS.5 Sea King, 66, 80
 - Westland HC.4 Sea King, 66
- Alameda Naval Air Station, 44
- Al Wafrah Forest, 42
- American Club, 28, 34
- American International School, 33
- Amphibious assault vehicles (AAV), 60-61
- Anchorage* (LSD 36), 41, 71, 73
- Anderson, LtCol Gary W., 27, 34
- Andrew, HC 1st Class Robert, USN, 73
- Anglim, Capt Edward P., USN, 34
- Anwara District, 71
- Anwara Subdistrict, 13
- Armed Forces Staff College, 7
- Arthur, VAdm Stanley R., USN, 22
- Atwood, Donald J., 24
- Autodin, 35, 80
- Autovon, 35, 80

- Bailes, Col Russell F., Jr., 40
- Baker Carriage II, 10
- Balance Buffalo, 86-87
- Bangladesh Armed Forces
 - Bangladesh Air Force, 6
 - Bangladesh Army, 6-7, 10, 23, 30, 38-40, 56, 59, 72, 76
 - 24th Bangladesh Army, 40
 - Bangladeshi naval ship *Umar Farooq*, 4

Bangladeshi Special Forces, 71
 Bangladesh Rifles, 14
 Bangladesh Ministry of Health, 6
 Bangladesh Ministry of Relief, 23
 Bangladesh Space Research and Remote Sensing Organization, 3
 Bangladesh Staff College, 7
 Banskhali Subdistrict, 13, 70-71
Barbour County (LST 1195), 41, 55, 61-62
 Bay of Bengal, 1, 2, 14, 45-46, 49, 61-62, 76, 85
 Betbunia, 12
 Bhola District, 9
 Bob's Service Station, 62
 Brahmaputra River, 1
 British Commands and Units
 539 Assault Squadron, 66, 81
 846 Naval Air Squadron, 66, 81
 Royal Fleet Auxiliary, 66
 Burma, 1, 27, 86
 Bush, President George W., 9, 26, 74

 Camp Courtney, 22, 26
 Camp Pendleton, 42-44
 Canada, 6
 Cantu, LtCol William V., 57
Cape Girardeau (T-AK 2039), 18
 CARE (Cooperative for American Relief Everywhere), 6, 20, 39, 52
 Caritas Bangladesh, 6
 Chakaria District, 71
Chars, 3
 China, 6
 China-Burma-India Theater, 9
 Chittagong, 4, 9-12, 15, 18-22, 27, 30-31, 34-36, 38-39, 46-50, 55, 65-67, 70-71, 74, 76-78, 80-81, 82, 86
 Chittagong Comprehensive Military Hospital, 71
 Chittagong coordinating cell, 40, 54
 Chittagong District, 9, 13
 Chittagong forward headquarters, 34, 39, 51, 54, 59, 77
 Chowkatalli Village, 12
 CinCPac, 13-14, 18-21, 24-28, 30-32, 34, 36, 39, 57, 62, 65, 75, 82, 85-86
 Clarey, RAdm Stephen S., USN, 41, 45, 47-48, 50, 76, 84
 Clark Air Force Base, 52
 Cobra Gold, 15, 28
 Colombo, 66
 Cox's Bazar, 11, 13, 36, 40, 48, 65-67, 71, 76-77, 80, 84
 Cox's Bazar Airfield, 39
 Cox's Bazar District, 9, 13, 66
 Cubi Point Naval Air Station, 82
 Cyclone Marian, 3-4

- Denver* (LPH 9), 18
 Department of Defense, 7, 13, 15-18, 22, 24, 74, 75
 Humanitarian Assistance Program, 6
 Department of State, 12-13, 15-17, 20-21, 24, 26, 74-75
 Desert Shield, 23
 Desert Storm, 23, 31
 Dhaka, 4-6, 10-11, 13, 16, 21-22, 24-28, 30, 32-35, 40, 52, 63, 67, 71, 76, 79-82, 87
 Dhalghata Village, 66
 Downs, Capt John R., MC, USNR, 39, 69-71, 74
 Dunn, LtCol James A., Jr., USA, 7, 9-10, 13-15, 19-21, 23-24, 27-28
- Eagleburger, Lawrence S., 24, 26
Elliott (DD 967), 41
 Elzy, LtCol Thomas F., USA, 32
 Emergency Response Fund, 75
 Ershad, President Hussain Muhammad, 5
 Eshelman, BGen William P., 61
 Ethiopia, 16-18, 44
 European Economic Community, 6
- Faresta*, 62
 Farooq, Muhammad Omar, 84
 Ferguson, Col Mike, USAF, 34, 70
First Lieutenant Jack Lummus (TAK 3011), 18-19, 36
 Fitzwater, Marlin, 9
Flickertail State (T-ACS 5), 18
 Foreign Assistance Act, 1961, 74
Fort Grange (A 385), 66, 74, 76, 80-81
Frederick (LST 1184), 41, 55, 61
- Ganges River, 1
 Gangle, Col Randolph A., 42, 47, 50-51, 54, 65, 76
 Gardner, MajGen Donald R., 86
Germantown (LSD 42), 18
 Godbey, LCdr Pete L., MC, USN, 69-70
 Guam, 67, 82
- Haque, Capt Anwar, 51
 Haque, M. Mokammel, 40
 Hawaii, 22, 24, 30, 34, 82
 Hirsch, Cdr Thomas J., USN, 50, 59
 Hoffman, Col Edward G., USAF, 32, 34
- Ice Cube, 42
 Ice Tray, 42
 India, 1, 6, 14-15, 49
 Indian Ocean, 14, 18
 International Center for Diarrheal Disease Research, Bangladesh, 69
 International Red Cross, 6

Iraq, 16, 44

Japan, 6, 16

Japanese relief team, 57

Johnson, LtCol Larry A., 77-78, 82

Johnson, Maj Robert G., 45, 50

Joint Chiefs of Staff, 20, 22-23, 26, 30

Joint Staff, 13, 23-25

Joint Task Force Bangladesh Relief, 86

Jones, TSgt K. L., USAF, 38

Juneau (LPD 10), 41

Kadena Air Force Base, 26-27

Karnaphuli River, 11, 36, 57, 65, 77

Kennedy, LtCol Kevin M., 51, 57

Khan, LtGen Muhammad Noor Uddin, 29, 31, 38

Khan, Luftur Rahman, 28

Kilgour, Mary C., 6, 9-10, 31

Koella, Lt John E., USNR, 71-74

Kohl, LtCol Richard T., 44

Kutubdia Health Complex, 71-74

Kutubdia Island, 9, 13-14, 31, 36, 48, 54, 59, 65, 71, 78, 81

Kutubdia Village, 9

Kuwait, 16, 42

Larson, Adm Charles R., USN, 13, 23-24, 28, 82

LCAC (air-cushion landing craft), 29-30, 54, 57-60, 80

LCM-8, 59, 77

LCU, 54, 57, 59-61

Lindblom, Col Stephen E., 22, 26, 34

Maheshkali District, 71

Maheshkali Island, 9, 31, 48, 54, 59, 65-66

Manpura Island, 14, 36, 48, 59

Marine Corps Commands and Units

Battalion Landing Team 2/5, 57

Battalion Landing Team 3/1, 18

Battalion Landing Team 3/5, 65-66, 76

Brigade Service Support Group 5, 42-45, 48, 50

Company A, 4th Assault Amphibian Battalion, 44

Company A, 4th Tank Battalion, 44

Company B, 1st Combat Engineer Battalion, 44

Company B, 1st Reconnaissance Battalion, 43-44

Company F, 2d Battalion, 23d Marines, 36, 38

Contingency Marine Air-Ground Task Force 2-91, 36, 65, 77, 78, 79, 82

Contingency Marine Air-Ground Task Force 4-90, 16

2d Battalion, 5th Marines, 43

3d Battalion, 5th Marines, 43

2d Battalion, 11th Marines, 43, 71

Detachment A, Marine Heavy Helicopter Squadron 772, 44
Detachment B, Marine Attack Squadron 513, 44
3d Force Service Support Group, 38, 78
3d Low Altitude Air Defense Battalion, 44
Fleet Marine Force, Pacific, 22
Headquarters and Service Battalion
 1st Force Service Support Group, 44-45
 4th Force Service Support Group, 45
Headquarters and Service Company, 5th MEB, 43
Headquarters Company, 5th Marines, 43
III Marine Expeditionary Force, 22, 25, 27, 36, 57, 86
I Marine Expeditionary Force, 42, 44
Landing Force Training Command, Pacific, 43
Marine Aircraft Group 50, 31, 42-44, 49-52, 54, 59, 76
Marine Air Support Squadron 6, 44
Marine Light Attack Helicopter Squadron 169, 44
Marine Medium Helicopter Squadron 265, 44
Marine Medium Helicopter Squadron 268, 18
Marine Service Support Group 11, 18
Marine Service Support Group 24, 44
Marine Wing Support Squadron 372, 44
Regimental Landing Team 5, 42-43, 48
TOW Platoon, 23d Marines, 71
1st Dental Battalion, 45
1st Force Service Support Group, 44
1st Landing Support Battalion, 45
1st Maintenance Battalion, 45
1st Marine Division, 42
1st Medical Battalion, 45
1st Radio Battalion, 43
1st Supply Battalion, 45
4th Force Reconnaissance Company, 43
4th Maintenance Battalion, 45
4th Supply Battalion, 45
5th Marine Expeditionary Brigade, 15-19, 24, 26, 31, 40, 42-43, 45-46, 48-49, 56-57, 58, 61, 71, 74, 76
5th Marines, 43
5th Surveillance, Reconnaissance and Intelligence Support Group, 43, 57-58
6th Communications Battalion, 45
6th Engineer Support Battalion, 45
6th Motor Transport Battalion, 45
7th Communications Battalion, 45
9th Communications Battalion, 43
9th Marine Expeditionary Brigade, 36
9th Marines, 38
11th Marine Expeditionary Unit, 17-18, 42, 43, 45
Maritime Prepositioning Force, 41
Matabari Island, 59, 66, 71
Matabari Village, 66

Matsuda, LtCol Craig S., MC, USAF, 69
McPherson, Col Warren R., 22
Meals Ready to Eat (MREs), 23, 34
Medical Civic Action Program, 45-46, 70-71, 74
Meghna Estuary, 4
Meghna River, 1
Milam, Ambassador William B., 6-7, 14-17, 21, 23-24, 28-31, 34, 38, 77, 82-83, 86
Mobile Area Assessment Teams, 38, 40
Mobile (LKA 115), 18
Mount Pinatubo, 82
Mount Vernon (LSD 39), 41
Mymensingh, 10

Naha, Okinawa, 36
Naokhali District, 9, 66
Naval Air Facility, Jubayl, Saudi Arabia, 44
Naval Officer Candidate School, 41
New Orleans (LPH 11), 18
North Hatia Island, 4, 36
Norwood, LtCol George W., USAF, 29

Office of Secretary of Defense, 13
Okinawa, 16, 19-20, 22, 26, 28, 34, 38, 67, 78, 82
Operation Desert Shield, 41
Operation Desert Storm, 17, 18
Operation Productive Effort, 25-69
Operation Provide Comfort, 27, 44
Operation Sea Angel, 69-85
Operation Sea Angel II, 86-87
oral rehydration salts, 7, 12, 13
OXFAM (Oxford Committee for Famine Relief), 6

Pacific Ocean Division, Corps of Engineers, 20
Pakistan, 1, 15, 67
Passumpsic (T-AO 107), 41
Patenga Airport, 34, 36, 39-40, 47, 54, 55-57
Patiya District, 71
Peoria (LST 1183), 18
Persian Gulf, 15, 17, 18, 42, 44, 45, 61
Peterson, Capt John W., USN, 36, 78
Philippines, 13, 16, 18-19, 20, 22, 26, 28
Phuket, Thailand, 82
Powell, Gen Colin L., USA, 24, 69, 83
Princeton University, 26
Project Concern, 72

Quayle, Marilyn T., 67, 69
Quayle, Vice President J. Danforth, 69

Red Crescent Society, 6, 39, 52, 81

Regaul Karim, 70

Rowe, BGen Peter J., 42, 45, 47-50, 61, 63, 76-77

ROWPU (reverse osmosis water purification unit), 19, 31, 36, 38, 50, 51, 77, 78, 79, 80, 81

Salam, MajGen Abdus, 28

San Bernardino (LST 1189), 18, 19

San Diego State University, 42

Sandwip Island, 9, 13, 14, 31, 36, 48, 54, 59, 62, 70, 78, 80-81

Saudi Arabia, 6, 16

Save the Children (USA), 20

Scowcroft, Brent, 26

Selvage, LtCol Donald R., 65-66

Silverman, 1stLt David, 9-10

Singapore, 14

Somalia, 85

South Hatia Island, 4, 31, 36, 48

St. Louis (LKA 116), 18-19, 36, 38, 65, 77-82

Stackpole, MajGen Henry C. III, 22, 24-32, 34-36, 38-39, 47-48, 63, 65, 69, 74-76, 78, 81-83, 85-86

Subic Bay, 19, 26, 36

Suffolk County (LST 1173), 41

Sylhet, 67-69, 81

Tarawa (LHA 1), 18, 23-24, 41, 44, 46, 49, 55, 59, 69, 71

Tezgaon Airport, 33

Thailand, 15, 28-29

The Asia Foundation, 20

Tripoli (LPH 10), 18

Tropical Cyclone Forest, 85-86

Tropical Cyclone O2B, 3

Tropical Cyclone O3B, 80

United Kingdom, 6

United Nations, 87

U.S. Air Force Commands and Units

Military Airlift Command, 19, 27, 81

Strategic Air Command, 24

1st Special Operations Squadron, 29

4th Combat Communications Group, 67, 81

8th Mobile Aerial Port Squadron, 52

17th Special Operations Squadron, 353d Special Operations Wing, 29

374th Tactical Airlift Wing, 33, 52, 80-81, 86

426th Civil Affairs Battalion, 86

1723d Special Tactics Squadron, 39

U.S. Army Commands and Units

Corps of Engineers, 39

Special Forces Operational Detachment Alpha, 29

- Special Forces Operational Detachment Bravo, 29
- Special Operations Command, 24
 - 1st Battalion, 1st Special Forces Group (Airborne), 28-29, 34-35, 39, 58-59, 71, 86
 - 2d Platoon, Company B, 84th Engineer Battalion, 9, 10, 20, 28, 80
 - 4th Battalion, 25th Aviation Regiment, 30, 81
 - 351st Civil Affairs Command, 39
- U.S. Navy Commands and Units
 - Amphibious Group 1, 17, 34
 - Amphibious Ready Group Bravo, 18
 - Amphibious Squadron 3 (PhibGru 3), 17-19, 22, 24, 26-27, 30, 40-41, 46, 48, 61, 71, 76
 - Destroyer Squadron 21, 41
 - Military Sealift Command, 18, 66, 67
 - Navy Environmental and Preventive Medicine Unit 6, 32, 46, 70, 80
 - Navy Mobile Construction Battalion, 69
 - Navy Seals, 60
 - Seventh Fleet, 18-19, 22, 36, 45, 82
 - Tactical Air Control Squadron 11, 54, 56
 - Task Force 73, 18
 - Task Force 76, 18-19, 36
 - U.S. Naval Forces, Central Command, 18
- USAID (United States Agency for International Development), 6-7, 9-10, 12-13, 16, 20-21, 23, 28, 39, 69, 72, 87
 - OFDA (Office of Foreign Disaster Assistance), 7, 12-13, 16, 20
- Utapao, Thailand, 27

- Vancouver* (LPD 2), 41, 47, 66
- Vietnam, 26, 41

- water purification tablets, 7, 12-13, 16, 19, 24
- West, Col Randall L., 42, 47, 50-51, 54, 62
- West Bengal Communist Party, 49
- White, LtCol James L., USAF, 33, 52
- Williams College, 41
- Wisconsin, 3
- World Health Organization, 6
- World Vision, 20
- World War II, 9

- Xavier University, 42

- Yangon flight information region, 27
- Yokota Air Base, Japan, 33, 67
- Yuma, Arizona, 44

- Zia International Airport, 28, 33, 39, 67, 79
- Zia, President Ziaur Rahman, 5
- Zia, Prime Minister Begum Khaleda, 5, 7, 9, 39, 69, 76

The device reproduced on the back cover is the oldest military insignia in continuous use in the United States. It first appeared, as shown here, on Marine Corps buttons adopted in 1804. With the stars changed to five points this device has continued on Marine Corps buttons to the present day.

