HISTORY OF THE SEABEES
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INTRODUCTION

The Seabees of the United States Navy were born in the dark days following Pearl Harbor when the task of building victory from defeat seemed almost insurmountable. The Seabees were created in answer to a crucial demand for builders who could fight.

Using sailors to build shore-based facilities; however, was not a new idea. Ancient Egyptians, Phoenicians, Greeks, and Romans did it. In more recent times, from the earliest days ofthe United States Navy, sailors who were handy with tools occasionally did minor construction chores at land bases.

THE FIRST "ADVANCED BASE"

American seamen were first employed in large numbers for major shore construction during the War of 1812. Early in 1813, the USS ESSEX, under the Command of Captain David Porter, USN, rounded Cape Horn and became the first Navy ship to carry the American flag into the Pacific Ocean. The ESSEX began operating in Pacific waters and captured a British commerce raider, several British merchantmen, and several large British whaling ships. While sailing near the Galapagos Islands in October, 1813, Captain Porter learned that a British naval squadron had entered the Pacific and was searching for him. Because he had been away from his home base for well over a year, Porter decided to prepare his small squadron for the expected battle. To do this, he needed a safe harbor in which to repair and re-equip the ESSEX and some of his prizes that had been converted into fighting ships. In the absence of secure facilities on South America's west coast, he decided to take his ships to the Marquesas Islands. After sailing through the Marquesas for a few days, he selected the shore of a bay on Nukuhiva Island as the best site for constructing the United States Navy's first advanced base.

Under Captain Porter's direction, nearly 300 skilled artisans from his ships undertook the building of the base. Approximately 4,000 friendly natives obtained the materials and worked side-by-side with the Navy builders. As a protection against unfriendly tribes, the men built a fort, which was duly christened Fort Madison with the ceremonious raising of the American flag. Other construction included a house for Porter, a house for the other officers, a cooper's shop, a sail loft, a bake shop, a guard house, a simple medical dispensary, a stores building, an open-shed shelter for the Marine sentries, a rudimentary dock, and ramps to haul the ships high onto the beach. While this construction was underway, some unfriendly natives occasionally attacked, and the Americans had to lay down their tools, take up their weapons, and defend what they were building.

Captain Porter's foster son, David Glasgow Farragut, a twelve year-old midshipman assigned to the ESSEX, was an interested observer and a participant in the construction of the base. When the Typee natives began to attack the base, young Farragut was ashore. Alarmed at the possible early demise of his foster son, Porter hustled him back aboard the ESSEX for safekeeping.

During lulls in the fighting and while construction was underway, Farragut was allowed to go ashore and participate in the operations. However, at the first signs of trouble with the unfriendly tribes, back to the ESSEX or the SIR ANDREW HAMMOND he went. Even after he became the United States Navy's first admiral some forty years later, Farragut was still bemoaning his ill luck in not being allowed to engage in active battle at Nukuhiva.

Upon its completion, the Navy's first base was named "Madison's Ville," and Nukuhiva Island was named "Madison Island," and the adjoining waters were named "Massachusetts Bay." Porter went so far as to claim the island as a United States possession. In the entire proceedings, he conveniently ignored Spanish and British claims going back respectively to the sixteenth and eighteenth centuries.

Even before construction of the base was completed, the ESSEX and ESSEX JUNIOR were hauled up the improvised ramps to the top

of the beach. The site selected for rehabilitating the ships was a small plain covered with shade-producing coconut trees. Re-outfitting and repair operations started toward the end of October 1813 and continued until the work was completed early in December. Meanwhile, the other ships were serviced while at anchor in the harbor. During the entire period, hostile natives frequently attacked the workers, who, although sometimes hard pressed, always managed to repel them.

Upon completion of the project in December 1813, Captain Porter immediately sailed with the ESSEX and ESSEX JUNIOR and eventually met the British squadron. His two ships were bottled up in Valparaiso Harbor, Chile, and attempts to break the blockade led to the capture of the American ships in March 1814. Porter and his men thus became prisoners of the British.

In the meantime, Lieutenant John M. Gamble of the U.S. Marine Corps was left behind at Nukuhiva Island to defend the advanced base and the remaining three prize ships. For this task, he had but 22 American officers and men and some sullen British prisoners. Gamble's assignment proved to be beyond the capabilities of his force. Several thousand native Typees began a series of attacks against Fort Madison and Madison's Ville, the British prisoners mutinied, and even four Americans deserted for the sake of native sweethearts. The gallant Marine officer and his men were about to be overwhelmed, and they knew it. Consequently, all hands were shifted to the most seaworthy prize, the SIR ANDREW HAMMOND. A final native attack was repelled with further casualties, and the ship got underway in May 1814, with no charts and a seven-man crew almost too feeble to sail. The United States Navy's first advanced base was thus abandoned through necessity, and certainly not because of the "construction force's" lack of fortitude and valor.

After a voyage of nearly 2,500 miles, Lieutenant Gamble and his surviving crew of three seamen and three Marines arrived in the Sandwich Islands. They landed and immediately discovered that their tribulations were not yet ended. HMS CHERUB was in the harbor, and the Americans fell into the hands of the British. Ironically, this was the same ship which had earlier captured Captain Porter and his men at Valparaiso.

Although they may seem remote from the Seabees of today, the Navy's operations in the Marquesas Islands really are pertinent because precedents were set. First, a requirement was established for an overseas naval construction force. Then skilled craftsmen of the fleet were selected in large numbers to man the force. The men built a U.S. Navy advanced base. Finally, the builders were attacked by hostile natives, and had to lay down their tools and take up arms to defend what they had built. Essentially, these same functions characterize today's Seabee builder-fighters.

TWELFTH REGIMENT (PUBLIC WORKS)

Skilled Navy craftsmen were not again employed in large numbers for naval shore construction activities until the period of the First World War. In 1917 the Twelfth Regiment (Public Works) was organized at the Naval Training Station, Great Lakes, Illinois. The development of the regiment was an evolutionary process under the direction of three successive Public Works Officers.

With the entry of the United States into the First World War in April 1917, an immediate requirement was established at Great Lakes for facilities to house, process, and train 20,000 naval recruits. By the end of 1917, the expansion of the war had increased the requirement, and facilities were needed to handle 50,000 recruits.

The naval officer responsible administrative and training operations at Great Lakes was the commandant of the station, Captain William Moffet, USN. When the initial requirement was levied, Captain Moffet did not have sufficient funds at hand to construct the facilities. He therefore went to Washington, D.C., and conferred with the Secretary of the Navy, Josephus Daniels, and with the Chief of the Bureau of Yards and Docks, Rear Admiral Frederic Harris, CEC, USN. These two officials, controllers of the immediate purse strings for naval construction activity, quickly agreed to release sufficient funds for the initial increment of construction. Admiral Harris, however, pointed out to Captain Moffet that a young officer of the line was in charge of the Public Works Department, and he suggested that a Navy Civil Engineer Corps officer should be

appointed to manage the department. Captain Moffet readily agreed to this proposal.

Accordingly, Lieutenant Norman M. Smith, CEC, USN, a graduate of the United States Naval Academy and a one-time officer of the line who had transferred to the Civil Engineer Corps, was appointed Public Works Officer at Great Lakes. He assumed the post on 18 June 1917. At this time, about 100 enlisted men already were assigned to the Public Works Department.

Although most of the major construction work was to be accomplished by civilian contractors, Lieutenant Smith foresaw that the department would have to be expanded. Skilled craftsmen, architects, draftsmen, designers, and other professional and technical people were needed. Because civilians with the requisite skills were difficult to find, he decided to screen incoming recruits to obtain skilled craftsmen. He found many, but not enough.

Lieutenant Smith then began recruiting among civilians outside of the installation, but because of commuting problems, qualified local craftsmen were unwilling to become civilian employees. As a patriotic duty, however, many were willing to join the Navy as petty officers with the understanding that qualified men could apply later for commissions. Captain Moffett approved this proviso, and it greatly facilitated recruiting.

As a result of recruit screening and civilian recruiting, nearly 600 men were obtained for the Public Works Department by July 1917. These men were organized into the Twelfth Regiment (Public Works). Essentially, the Public Works Regiment was the Public Works Department. Because in those days staff officers could not exercise military command, a young officer of the line, Lieutenant William C. Davis, USN, was appointed commanding officer of the regiment, and he served in that capacity throughout its existence. He exercised military control, but the Public Works Officers exercised technical control. Since Lieutenant Davis was, in fact, a subordinate of the respective Public Works Officers, there was never any real conflict between military and technical control.

The regiment was a training as well as a working organization. The purpose of the training was not necessarily to teach the artificer trades to "green" men. Rather it was to assemble artificers, discover the abilities of each, select the natural leaders, and teach them military drill and discipline. The intent was to have these men ready at all times for transfer to other naval stations or naval bases in the United States and abroad, and to fighting ships. The average time the men were retained at Great Lakes was from three to four months, during which period they were used effectively to perform public works functions.

Briefly, the Twelfth Regiment (Public Works) drew the plans for the Great Lakes wartime expansion, down to the minutest detail; and supervised all construction, whether done by civilian contractors or by enlisted men. It saw to the maintenance of buildings, grounds, roads, and railway; and operated the power house, heating systems, water supply, and sewage disposal. It also operated carpenter, machine, and paint shops. To accomplish the maintenance and minor construction, detachments from the regiment were assigned to all the camps at the Great Lakes Naval Training Station.

The construction of the numerous recruit training camps at Great Lakes was mainly done by contractors and their employees. Camp Paul Jones was, however, assigned to the Public Works Regiment, and the men of the regiment turned a temporary tent camp into a semipermanent facility. The major work at this regimental camp began in October 1917, and it was substantially completed by the end of the year.

On 30 December 1917 the regiment became "fully operational" at Camp Paul Jones with 1,500 men, organized into three battalions.

Meanwhile, in the summer of 1917, Commander George A. McKay, CEC, USN, became Public Works Officer at Great Lakes. Lieutenant Smith remained as his deputy for a few months, and upon being promoted to lieutenant commander, departed for an assignment as Public Works Officer at the Charleston Navy Yard in South Carolina.

On 30 January 1918 Commander McKay, in turn, was succeeded by Commander Walter Allen, CEC, USN. The new Public Works Officer

surveyed and analyzed his department and decided that the organization was too cumbersome. He, therefore, reorganized both the department and the Public Works Regiment, which by April 1918 consisted of 2,400 men in five battalions.

Throughout the latter part of 1917 and all of 1918, men were withdrawn from the regiment for assignment in the United States and abroad. In the spring of 1918, 100 men were given special training in mechanics and ordnance, and then sent to St. Nazaire in France to assemble the famous Naval Railway Batteries. They joined the operational gun-crews and performed combat duties along the railway lines in proximity to the German lines.

Another 350 skilled men from the Public Works Regiment were selected and sent to France. Landing at the ports of Le Havre and Cherbourg, they were retained in those areas to build and rehabilitate docks and wharves, lay railroad tracks, and build communication facilities. On one occasion, a team of men from this group went into Paris and converted the Eiffel Tower into an antenna for a "Marconi wireless transmitting station."

In the summer of 1918, Captain Allen selected another complement of 200 men, who went to France and constructed air bases along the coast.

During the autumn of 1918, training operations at the Great Lakes Naval Training Station reached a peak to satisfy the requirements of ships and bases in the United States and abroad. By the end of October more than 125,000 recruits had undergone training since the U.S. Navy build up began in March and April of 1917. This expansion of training and facilities, in turn, required a similar expansion in the strength of the Public Works Department and the Twelfth Regiment. The peak strength of the regiment was reached on 5 November 1918. Its comprised 55 officers and 6,211 enlisted men, formed into 11 battalions.

When the First World War ended on 11 November 1918, training and construction operations at Great Lakes ceased. The regiment gradually faded away by the end of 1918. The war was over but not the memories.

An important aspect of the Twelfth Regiment (Public Works) was its unofficial status. At no time was it considered an official U.S. Navy unit. It was merely the creature of the commandant of the Great Lakes Naval Training Station. It was organized and developed by three successive Public Works Officers, and owed its existence solely to the administrative, operational, and training needs of the Public Works Department. Efficiency was the keynote of its existence.

PLANNING BETWEEN THE TWO WORLD WARS

Although the Twelfth Regiment (Public Works) was dissolved in the general demobilization that followed the end of the First World War, the germ of the pioneering idea remained in the minds of many Navy Civil Engineers. Sometime during the early 1930s, for example, the planners of the Bureau of Yards and Docks began providing for "Navy Construction Battalions" in the bureau's contingency war plans. Unfortunately, the identity of the creator of the term went unrecorded. During the decade the successive heads of the bureau's War Plans Office were Captain George McKay, CEC, USN; Captain Carl Carlson, CEC, USN; and Captain Walter Allen, CEC, USN.

In 1934 Captain Carlson's version of the plans was circulated to the Navy Yards, and later the Chief of Naval Operations tentatively approved the concept of "Navy Construction Battalions". In 1935 Rear Admiral Norman Smith, CEC, USN, Chief of the Bureau of Yards and Docks, selected Captain Walter Allen, his War Plans Officer, to represent the bureau on the War Plans Board, the supreme agency for all aspects of national war planning. Captain Allen ably presented the bureau's concept of "Naval Construction Battalions" to the War Plans Board. The concept was subsequently adopted for inclusion in the national Rainbow war plans that were developed during the last half of the 1930s.

All this may sound more imposing than it really was. From the practical point of view, the plans actually contained only an idea and a name. Implementing details and procedures were inadequate and unworkable. The great weakness of the "Navy Construction Battalions" concept, indeed the fatal flaw, was the provision for dual

control of the battalions: military control to be exercised by Navy officers of the line, and construction control to be exercised by Navy Civil Engineer Corps officers. There were no provisions for good military organization and military training for the battalions, which were requisites necessary to create high morale, discipline, and cooperation among the men. Moreover, the original plans contemplated the formation of battalions to construct training stations throughout the United States, an obvious throwback to the Twelfth Regiment (Public Works). On completion of the training stations, the battalions would move to forward areas.

Moreover, the war plans provided only for construction battalions with limited operational duties; no other types of units or expanded duties were included. This oversight narrowed the scope of possible activities. Finally, no provisions were provided for recruiting, enlisting, training and developing training facilities for the enlisted personnel of the construction battalions.

When war finally came, most of the provisions of these plans would have to be shelved. Workable and more pertinent and practical procedures were developed in their place.

Meanwhile, Rear Admiral Ben Moreell, CEC, USN, became Chief of the Bureau of Yards and Docks in December 1937. It was a time of international crisis and rivalry in both Europe and Asia. In the late 1930s the tense international situation brought quick authorization from the United States Congress to expand naval shore activities. The new construction, started in the Caribbean and Central Pacific in 1939, followed the customary peacetime pattern: contracts were awarded to private construction firms that performed the work with civilian personnel, under the administrative direction of Navy Officers in Charge of Construction.

By the summer of 1941, large naval bases were under construction at Guam, Midway, Wake, Pearl Harbor, Iceland, Newfoundland, Bermuda, Trinidad, and at many other places. To facilitate the work, the Bureau of Yards and Docks decided to organize military Headquarters Construction Companies. Under the immediate control of the Officers in Charge of Construction at the bases, the men of the companies were to be utilized as draftsmen

and engineering aids and for administrative duties as inspectors and supervisors to oversee the work of the civilian construction contractors. The companies, each consisting of two officers and 99 enlisted men, were not to do any actual construction work.

On 31 October 1941 the Chief of the Bureau of Navigation, Rear Admiral Chester W. Nimitz, USN, authorized the establishment of the first Headquarters Construction Company and the enlistment of its men. The men were recruited in November. By the beginning of December 1941, the company was formed and the men were undergoing boot training at the Newport Naval Station in Rhode Island. On 16 December 1941, four additional companies were authorized. By then, however, events had outstripped planning, and all the men recruited under this authority would be used for loftier purposes.

FORMATION OF THE SEABEES

After the 7 December 1941 Japanese attack on Pearl Harbor and the United States entry into the war, the use of civilian labor in war zones became impractical. Under international law civilians were not permitted to resist enemy military attack. Resistance meant summary execution as guerrillas.

The need for a militarized Naval Construction Force to build advance bases in the war zone was self-evident. Therefore, Rear Admiral Ben Moreell determined to activate, organize, and man Navy construction units. On 28 December 1941, he requested specific authority to carry out this decision, and on 5 January 1942, he gained authority from the Bureau of Navigation to recruit men from the construction trades for assignment to a Naval Construction Regiment composed of three Naval Construction Battalions. This is the actual beginning of the renowned Seabees, who obtained their designation from the initial letters of Construction Battalion. Admiral Moreell personally furnished them with their official motto: Construimus, Batuimus -- "We Build, We Fight."

An urgent problem confronting the Bureau of Yards and Docks was who should command the construction battalions. By Navy regulations, military command of naval personnel was limited to line

officers. Yet it was deemed essential that the newly established construction battalions should be commanded by officers of the Civil Engineer Corps who were trained in the skills required for the performance of construction work. The bureau proposed that the necessary command authority should be bestowed on its Civil Engineer Corps officers. However, the Bureau of Naval Personnel (successor to the Bureau of Navigation) strongly objected to this proposal.

Despite this opposition, Admiral Moreell personally presented the question to the Secretary of the Navy. On 19 March 1942, after due deliberation, the Secretary gave authority for officers of the Civil Engineer Corps to exercise military authority over all officers and enlisted men assigned to construction units. The Secretary's decision, which was incorporated in Navy regulations, removed a major roadblock in the conduct of Seabee operations. Of equal importance, it constituted a very significant morale booster for Civil Engineer Corps officers because it provided a lawful command authority status that tied them intimately into combat operations, the primary reason for the existence of any military force. From all points of view, Admiral Moreell's success in achieving this end contributed ultimately to the great success and fame of the Seabees.

With authorization to establish construction battalions at hand and the question of who was to command the Seabees settled, the Bureau of Yards and Docks was confronted with the problem of recruiting, enlisting, and training Seabees, and then organizing the battalions and logistically supporting them in their operations. Plans for accomplishing these tasks were not available. Workable Plans were quickly developed, however, and because of the exigencies of the war much improvising was done.

The first Seabees were not raw recruits when they voluntarily enlisted. Emphasis in recruiting them was placed on experience and skill, so all they had to do was adapt their civilian construction skills to military needs. To obtain men with the necessary qualifications, physical standards were less rigid than in other branches of the armed forces. The age range for enlistment was 18-50, but after the formation of the initial battalions, it was discovered that several men past 60 had managed to join up, clearly an early manifestation of

Seabee ingenuity. During the early days of the war, the average age of Seabees was 37. After December 1942 voluntary enlistments were halted by orders of President Franklin D. Roosevelt, and men for the construction battalions had to be obtained through the Selective Service System. Henceforward, Seabees were on average much younger and came into the service with only rudimentary skills.

The first recruits were the men who had helped to build Boulder Dam, the national highways, and New York's skyscrapers; who had worked in the mines and quarries and dug the subway tunnels; who had worked in shipyards and built docks and wharfs and even ocean liners and aircraft carriers. By the end of the war, 325,000 such men had enlisted in the Seabees. They knew more than 60 skilled trades, not to mention the unofficial ones of souvenir making and "moonlight procurement." Nearly 11,400 officers joined the Civil Engineer Corps during the war, and 7,960 of them served with the Seabees.

At Naval Construction Training Centers and Advanced Base Depots established on the Atlantic and Pacific coasts, Seabees were taught military discipline and the use of light arms. Although technically support troops, Seabees at work, particularly during the early days of base development in the Pacific, frequently found themselves in conflict with the enemy.

After completing three weeks of boot training at Camp Allen, and later at its successor, Camp Peary, both in Virginia, the Seabees were formed into construction battalions or other types of construction units. Some of the very first battalions were sent overseas immediately upon completion of boot training because of the urgent need for naval construction. The usual procedure, however, was to ship the newly-formed battalion to an Advanced Base Depot at either Davisville, Rhode Island, or Port Hueneme, California. There the battalions, and later other units, underwent staging and outfitting. The Seabees received about six weeks of advanced military and technical training, underwent considerable unit training, and then were shipped to an overseas assignment. About 175,000 Seabees were staged directly through Port Hueneme during the war.

As the war proceeded, battle-weary construction battalions and other units in the Pacific were returned to the United States to the Construction Battalion Recuperation and Replacement Center at Camp Parks, Shoemaker, California. At Camp Parks, battalions were reformed and reorganized, or as was the case in several instances, the battalions were simply disestablished and the men assigned to other battalions. Seabees were given 30-day leaves and also plenty of time for rest and recuperation. Eligible men were frequently discharged at Camp Parks. On a much smaller scale, the Advance Base Receiving Barracks at Davisville, Rhode Island, performed similar functions for Atlantic battalions.

The construction battalion, the fundamental unit of the Seabee organization, comprised four companies that included the necessary construction skills for doing any job, plus a headquarters company consisting of medical and dental professionals and technicians, administrative personnel, storekeepers, cooks, and similar specialists. The complement of a standard battalion originally was set at 32 officers and 1,073 men, but from time to time the complement varied in number.

As the war progressed and construction projects became larger and more complex, more than one battalion frequently had to be assigned to a base. For efficient administrative control, these battalions were organized into a regiment, and when necessary, two or more regiments were organized into a brigade, and as required, two or more brigades were organized into a naval construction force. For example, 55,000 Seabees were assigned to Okinawa and the battalions were organized into 11 regiments and 4 brigades, which, in turn, were all under the command of the Commander, Construction Troops, who was a Navy Civil Engineer Corps officer, Commodore Andrew G. Bisset. Moreover, his command also included 45,000 United States Army engineers, aviation engineers, and a few British engineers. He therefore commanded 100,000 construction troops in all, the largest concentration of construction troops during the entire war.

Although the Seabees began with the formation of regular construction battalions only, the Bureau of Yards and Docks soon realized the need for special-purpose units. While the battalion itself

was versatile enough to handle almost any project, it would have been a wasteful use of men to assign a full battalion to a project that could be done equally well by a smaller group of specialists.

The first departure from the standard battalion was the special construction battalion, or as it was commonly known, the Seabee Special. These special battalions were composed of stevedores and longshoremen who were badly needed to break a bottleneck in the unloading of ships in combat zones. Their officers, drawn largely from the Merchant Marine and personnel of stevedoring companies, were commissioned in the Civil Engineer Corps. The enlisted men were trained practically from scratch, and the efficiency of their training was demonstrated by the fact that cargo handling in combat zones compared favorably to that in the most efficient ports in the United States.

Another smaller, specialized unit within the Seabee organization was the construction battalion maintenance unit, which was about one-quarter the size of a regular construction battalion. It was organized to take over the maintenance of a base after a regular battalion had completed construction and moved on to its next assignment.

Still another specialized Seabee unit was the construction battalion detachment, ranging in size from 6 to 600 men, depending on the specialized nature of its function. These detachments did everything from operating tire-repair shops to dredges. A principal use for them, however, was the handling, assembling, launching, and placing of pontoon causeways.

Additional specialized units were the motor trucking battalions, the pontoon assembly detachments that manufactured pontoons in forward areas, and petroleum detachments comprised of experts in the installation of pipelines and petroleum facilities.

In the Second World War, the Seabees were organized into 151 In October Seabees ran their pontoon structures ashore again and set up another operating port at Wonsan. When the strenuous harbor construction and camp operations ceased to fill their days, they branched into the unusual tasks of inspecting North Korean

armament on an abandoned mine-layer, clearing mined tunnels, and performing repair work on nearby ships.

When the Chinese Communists joined the retreating North Koreans to launch another full scale invasion of South Korea, the Seabees were compelled to redouble their efforts -- this time to help the retreating U.N. forces. At Hungwan, Wonsan, and Inchon, where Seabees had been instrumental in putting U.N. forces ashore, Seabee pontoon causeways were now loaded with troops and equipment going the other way.

By February, however, the tide turned once again and the Seabees returned to Inchon for another landing. They found their previously constructed harbor facilities in a state of ruin, but, miraculously enough, some of their sturdy pontoon structures were still in place. After a rapid repair job, men and equipment streamed ashore again.

Seabee participation in the Korean War was certainly not limited to amphibious operations. Another of their outstanding contributions was in that specialty of their World War II predecessors -- airfield construction. Seabees could be found throughout the war zone constructing, repairing, and servicing the K-fields of the various Marine Air Groups. The Seabees were broken up into numerous detachments and each was assigned to an airfield designated with a "K" number, such as K-3 at Pohang, K-18 at Kimbo, and K-2 at Taegu.

Keeping the planes flying was an arduous and often dangerous task. At one small airstrip on the 36th Parallel, chuck holes were opening up in the failing concrete faster than they could be repaired. As it was absolutely vital that the field remain open, the undaunted Seabees graded, poured, and patched one side of the runway while bomb-laden aircraft continued to fly off the other side.

Seabee relations with the Marine Corps were further cemented by a group of nine Seabees who kept a 21-mile stretch of road open between an isolated Marine intercept squadron and its source of supplies. They worked round-the-clock in five-below-zero temperatures to successfully fulfill their promise to rebuild any damaged bridge within six hours.

One of the most incredible Seabee feats of the war took place on the small island of Yo in the Bay of Wonsan. In communist hands again in 1952, Wonsan was a key supply and transportation center for the enemy. As such, carrier-based aircraft strikes against Wonsan and points deeper in the interior were numerous and constant. Planes were hit by enemy fire daily leaving their pilots with the unhappy choice of either ditching at sea or attempting to land in enemy-held territory. The need for an emergency airstrip was critical and, under the code name Operation "Crippled Chick," a detachment of Seabees came to the rescue. Put ashore on Yo Island, they were given 35 days to construct a runway. Working under constant artillery bombardment from neighboring enemy positions, they managed to complete the 2,400-foot airstrip in only 16 days. By a prearranged signal, "Steak is Ready," the Seabees signaled that the job was done, and nine damaged aircraft landed on the new field that same day.

The rapid demobilization that followed the Second World War In October Seabees ran their pontoon structures ashore again and set up another operating port at Wonsan. When the strenuous harbor construction and camp operations ceased to fill their days, they branched into the unusual tasks of inspecting North Korean armament on an abandoned mine-layer, clearing mined tunnels, and performing repair work on nearby ships.

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The rapid demobilization that followed the Second World War was not repeated after the signing of the Korean Armistice in July 1953. Crises in Berlin, Cuba, Africa, South America, and especially in Southeast Asia created the necessity to maintain military strength and preparedness. Seabee Reservists had helped meet the Korean crisis, but the onset of the Cold War had indicated the need for a basic reorganization of Seabee capabilities as well as for increased Seabee numbers. Between 1949 and 1953, 13 battalions of two distinct types were accordingly established. The new establishments signified a gain in greater battalion mobility and specialization. The first type, the new Amphibious Construction Battalions, were landing and docking units. An integral part of the Fleet Amphibious Forces, their mission was to place causeways and ship-to-shore fuel lines, construct pontoon docks, and perform other functions necessary for the expeditious landing of men, equipment, and supplies. Naval Mobile Construction Battalions constituted the second type. They were responsible for land construction of a wide variety, including camps, roads, tank farms, airstrips, permanent waterfront structures, and many other base facilities.

BETWEEN THE KOREAN WAR AND THE VIETNAM WAR

Wide diversity marked the activity of the reorganized battalions during the decades following the Korean Armistice. The tasks of the Seabees were the tasks of a watchful peacetime. Wide-ranging, of tremendous variety, many were pioneering and experimental as well. They were a part of the developing roles -- in defense and in science -- of the U.S. Navy. In this decade, Seabee builders were again on six continents.

More building and less fighting became the keynote of Seabee activities and their peacetime achievements were no less impressive than those of wartime. On Okinawa, for example, the Seabees built a Marine Corps Air Facility using concrete precasting methods that earned the admiration of contractors throughout the Pacific area. Elsewhere, a small detachment of Seabees supervised and instructed Ecuadorans in modern construction methods while building a new Ecuadoran Naval Academy.

Beginning in 1955 Seabees began deploying yearly to the continent of Antarctica. As participants in Operation "Deep Freeze," their mission was to build and expand scientific bases located on the frozen continent. The first "wintering over" party included 200 Seabees who distinguished themselves by constructing a 6,000-foot ice runway on McMurdo Sound. Despite a blizzard which once destroyed the entire project, the airstrip was completed in time for the advance party of Deep Freeze II to become the first men to arrive at the South Pole by plane. The Seabees next assignment was to build a permanent scientific base on the continent. Over the following years, and under the most adverse conditions, Seabees added to their list of accomplishments such things as snow-compacted roads, underground storage, laboratories, and living areas. One of the most notable achievements took place in 1962 when the Navy's builders constructed the continent's first nuclear power plant at McMurdo Station.

By far the largest and most impressive project tackled by the Seabees in the 1950s was the construction of Cubi Point Naval Air Station in the Philippines. Civilian contractors, after taking one look at the forbidding Zombales Mountains and the maze of jungle at Cubi Point, claimed it could not be done. Nevertheless, the Seabees proceeded to do it! Begun in 1951 at the height of the Korean War, it took five years and an estimated 20-million man-hours to build this new, major Navy base. At Cubi Point Seabees cut a mountain in half to make way for a nearly two-mile long runway. They blasted coral to fill a section of Subic Bay, filled swampland, moved trees as much as a hundred and fifty feet tall and six to eight feet in diameter, and even relocated a native fishing village. The result was an air station, and an adjacent pier that was capable of docking the Navy's largest carriers. Undoubtedly as important as the finished project, however, was the indispensable leadership and construction experience gained by the postwar generation of Seabees. The construction of Cubi Point Naval Air Station was a mammoth learning experience as well as a superb job well done.

The Seabee Reserve organization began a series of important changes in 1960. Following the Korean War the reserve grew to 242 divisions, each with 4 officers and 50 enlisted men. In July 1960 the

Chief of Naval Operations granted authority for the establishment of 18 reserve battalions. These battalions were to be formed from the reserve divisions. In July 1961 battalion active duty training was initiated. In July 1967 the Chief of Naval Operations approved the establishment of four regimental staffs, later an additional four staffs were approved. This process of evolution finally culminated in the establishment of the 1st Reserve Naval Construction Brigade in September 1969. The brigade exercised overall control of the Reserve Naval Construction Force.

In 1961 the Seabees assembled a huge floating dry dock at Holy Loch, Scotland, for the service and repair of the Polaris missile submarines which cruised beneath the waters off Northern Europe. The dry dock, with a submarine tender anchored alongside, gave the vital submarines a base that ended long trans-ocean cruises for the purpose of repair and resupply.

In 1962 Project "Judy" brought the Seabees to the historic Greek plain of Marathon. Living in a tent camp in a rural community, they built a Naval Communication Station from scratch. When the job was completed in 1965, the Seabees had fabricated and erected more than 100 major antennas and created a base with all the comforts of home.

Seabees participated in building missile ranges in the Atlantic and Pacific. They were also constructed housing and apartment complexes for U.S. servicemen and their families.

As indicated by the above-cited construction projects, Seabees during this period could be found everywhere. Construction battalions regularly deployed to Guam, Okinawa, Midway, the Philippines, Cuba, Newfoundland, and Spain. Seabee detachments could also be found at dozens of lesser U.S. naval facilities throughout the world. The Seabees' primary mission was base expansion and maintenance. Their assignments included building and paving roads, laying sewer lines and water mains, building airfield and harbor facilities, restoring and converting old structures for new uses, wiring buildings, and erecting power lines. Such duty kept the battalions in a high state of readiness for the eventuality of advanced base building and amphibious support when war came again. The

Cold War era was not without crises. In 1958, when dissidents threatened to overthrow the government of Lebanon and United States assistance was requested, Seabees brought the Marines ashore over their pontoon causeways. In addition to participating in the landing, the Seabees there were divided into Beach Salvage Teams to recover swamped equipment, improve beaches, and build roads.

Seabees were once again poised for action and on the scene in 1962 when, following the successful conclusion of the Cuban Missile Crisis, it was felt that Fidel Castro's regime might retaliate against the U.S. Naval Base at Guantanamo Bay, Cuba. Under the constant threat of imminent ground attack or sniper fire, Seabees worked with speed and skill to fortify the base perimeter.

During this period Seabees assumed yet another new role -- that of an operationally-ready disaster relief force. Trained to build and fight, Seabees proved equally capable of quickly rebuilding ruins and combatting peril. When the Greek island of Cephalonia was devastated by an earthquake in 1953, Seabees took part in emergency relief operations. In mid-January 1961 Seabees, with typical ingenuity, used pontoons to save a California beach community threatened by tremendous tides. Seabees restored power and rebuilt damaged structures when Typhoon "Karen" destroyed much of Guam in 1962. Later, in 1964, Seabees were on the scene restoring utilities and building roads in a matter of hours after Alaska was struck by a devastating earthquake and tidal wave. When yet another typhoon ravaged an island in the Azores, Seabees arrived quickly with prefabricated housing units to lend vital assistance to the homeless. On several occasions, Seabees manned their equipment to successfully battle forest and brush fires in the United States.

In the late 1950s and early 1960s, Seabee Teams, another proud addition to the Seabee family, were born. This era marked the first use of these small detachments for local military aid and socioeconomic projects in underdeveloped countries. By 1963 this vital aid program had been refined in both organization and aims, and had become a regular feature of Seabee activity abroad. The Seabee Team usually consisted of thirteen carefully selected, experienced men -- one junior Civil Engineer Corps officer, eleven

construction men, and a hospital corpsman. Such teams proved exceptionally effective in rural development programs and for teaching construction skills to people in such diverse locations as Africa, Central and South America, Southeast Asia, and later in the Trust Territories of the Pacific Islands. For instance, in 1962 a Seabee Team arrived in the Republic of Haiti to restore a collapsing municipal pier that was vital to the national economy. The following year Spanish-speaking Seabees built and staffed a technical school in Santo Domingo. A Seabee Team in Costa Rica protected the imperiled city of Cartago from a disastrous mud-flow by building dams and dikes. In other far-flung locations Seabee Teams constructed roads, schools, orphanages, public utilities, and many other community structures.

However, much more important than the actual construction work they accomplished were the skills team members imparted to the local residents. Their true success was in enabling the local populous to continue old projects and initiate new ones long after the Seabees have left the region. There is no doubt that the "Can Do" Seabee Teams have more than earned their additional measure of recognition as the "Navy's Peace Corps."

It was during the summer of 1964 that the Seabees first went to work for the State Department. The program was initiated following the discovery of electronic surveillance devices planted throughout the U.S. Embassy in Moscow. To prevent future incidents of this nature, Seabees were used to perform all construction and renovation in security sensitive areas of Foreign Service facilities abroad. In addition, they were tasked with the supervision of private contractors assigned to do construction work in non-sensitive areas. Despite its beginnings in 1964, it was not until 1966 that the Naval Support Unit, State Department, was officially established to administer Seabees assigned to support the Foreign Service. Because of the superb on-the-job performance of these Seabees, the State Department happily made them a permanent part of its operations.

Thus, a peacetime pattern of battalion training and deployment took shape in the years following the Korean War. This pattern, however, was drastically altered in 1965. The war in Vietnam brought American military intervention on a large scale and effected

major changes in Seabee activity worldwide. In the spring of 1965, there were 9,400 Seabees on active duty at various sea and shore locations; most of these Seabees were assigned to ten, reduced-strength Naval Mobile Construction Battalions. These relatively few Seabees, however, were fully prepared to write a new chapter in the history of the builder-fighters.

THE SEABEES IN SOUTHEAST ASIA

Beginning in 1964 the United States military buildup in South Vietnam interrupted the normal peacetime deployment pattern of the Naval Construction Force. The Seabees were slated to play an important and historic role in the growing Southeast Asian conflict. By autumn of 1968, when Vietnamese requirements reached their peak, world-wide Seabee strength had grown to more than 26,000 men, serving in 21 full-strength Naval Mobile Construction Battalions, 2 Construction Battalion Maintenance Units, and 2 Amphibious Construction Battalions.

U.S. Navy and Seabee activity in Southeast Asia, however, long predated the Vietnam War. In fact, the first U.S. Navy involvement in Vietnam took place as early as May 1846. In that year, the USS CONSTITUTION, while on a world cruise, anchored in Danang Bay to take on water and foodstuffs. While there, Captain John Percival, USN, the CONSTITUTION's skipper, received a request for assistance from Bishop Dominique Lefevre who had been imprisoned and condemned to death by Thieu Tri, Emperor of Cochin China.

In response to the bishop's plea for help, Captain Percival led a rescue party of 80 sailors and marines ashore. After seizing three Mandarins as hostages, he quickly dispatched a letter to the Emperor demanding the release of Lefevre. The message either went unheeded or undelivered, because a reply was never received. Deciding on an alternative course of action, Percival released the three Mandarins when they steadfastly promised that they would personally seek Lefevre's release. Still later, after hearing no more from the Mandarins and fearing that he had been tricked, Captain Percival set sail for Macao, where, nine days later, he apprised the French authorities of Lefevre's plight. A warship was promptly

dispatched and, as a result, Bishop Lefevre was finally rescued. Thus, the story of the first United States intervention in Vietnam ended happily.

The second instance of significant of U.S. Naval activity in Vietnam took place 108 years later and, this time, the Seabees were prominent participants. The 1954 Geneva agreements, which recognized the North Vietnamese communist government of Ho Chi Minh, also contained a provision which gave the Vietnamese populace an opportunity to choose whether they would live in the north or the south of a country newly divided roughly at the 17th parallel. Prior to 18 May 1955, the expiration date of this provision, nearly 800,000 Vietnamese emigrated from north to south. Their exodus, in which four nations participated, has since come to be known as the "Passage to Freedom." During the mass migration, the South Vietnamese government built reception centers and provided basic amenities, the French supplied ships and planes, and the British provided an aircraft carrier. For its part, the United States organized Navy Task Force 90, comprising more than 50 ships. Through the concerted effort of these four governments, 310,000 refugees were evacuated from North Vietnam. In addition, 68,857 tons of military equipment and 8,135 military vehicles which, furnished to France under the Mutual Defense Assistance Program, were kept from North Vietnamese hands.

As members of Task Force 90, Amphibious Construction Battalions One and Two took part in the "Passage to Freedom." In Danang, where the USS CONSTITUTION had stopped more than a century before, a detachment from Amphibious Construction Battalion One built and operated a recreation facility for U.S. personnel involved in the ferrying operation. Another detachment from the same battalion constructed a refugee tent camp and accompanying water and power supply facilities at the mouth of the Saigon River. This Seabee-built camp served as a reserve living area for the overflow of refugees from Saigon. Since the Geneva accord specifically prohibited the landing of foreign military units or the establishment of foreign military installations in French Indo-China, the Seabees of this detachment were required to wear civilian clothes and to remove all U.S. markings from their equipment. Nevertheless, as a result of their humanitarian efforts, the Seabees of Amphibious Construction

Battalion One were awarded the Vietnamese Presidential Unit Citation. Detachments from Amphibious Construction Battalion Two were originally scheduled to build a causeway across the beaches adjacent to the North Vietnamese city of Haiphong. Over this causeway military equipment and refugees were to be transferred to the many ships lying offshore. The plan, however, was soon abandoned because of French opposition and the later discovery that the previously selected beaches were unsuitable for such a causeway. Instead, all loading operations were carried out from the Haiphong waterfront, and the Seabees were diverted to the south to help their comrades with the construction of the massive refugee camp. The Seabees labored for about one month in Vietnam and, before being relieved, made an important contribution to the success of this historic "Passage to Freedom."

Two years later, Seabees were to visit Vietnam one more time before the conflagration of the 1960s. During the summer of 1956, a team from a Seabee construction battalion was sent to the newly-established Republic of Vietnam to conduct a survey of some 1,800 miles of existing and proposed roads. Two solid months of seven-day-a-week labor in extremely rough territory yielded valuable results. When the Seabees returned almost ten years later, these results helped them build many of the roads that were then crucial to the conduct of the war.

As tension continued to mount in Southeast Asia during the 1960s, the Seabees first returned in the form of thirteen-man Seabee Teams, capable of performing a great variety of tasks. Although small in size, these units possessed unique capabilities never before assembled in such compact but highly effective and versatile packages.

In 1963 Seabee Teams were sent to Thailand to assist in the Royal Thai Government's Accelerated Rural Development Program. In the northern provinces these diversified units taught and advised local Thais in an effort to help them form the cadre of essential rural public works organizations. Three years of diligent work in this region was finally concluded in May 1966.

In early November 1966, the Seabee Team program in Thailand shifted from rural development to the Thai Border Patrol Police Program for the development of remote area security. The program's underlying aim was to win village support for the government in regions continually plagued by communist insurgency. Before the termination of all Seabee Team efforts in Thailand in 1969, these skilled units had made significant progress toward the attainment of this national aim.

Also in 1963, two years before the first full Seabee battalion arrived, Seabee Teams were laboring in South Vietnam. They constructed small support points throughout the interior of South Vietnam to counter Viet Cong political influence in the villages. The teams built U.S. Army Special Forces camps, performed civic action tasks, and conducted military engineering projects under the Civil Irregular Defense Group Program.

Seabee Team activity in South Vietnam continued to grow. Generally working in remote rural areas, away from large population centers, the Seabees served throughout twenty-two provinces scattered from the Mekong Delta, along the Cambodian border and the Central highlands, to the North Vietnamese border.

In the early years, only two teams at a time were employed in these regions, but by 1969 the number of teams in-country had grown to 17.

Seabee Team accomplishments were many and varied. The U.S. Army Special Forces, who were engaged in training and advising Vietnamese Strike Forces and the Civilian Irregular Defense Group in anti-guerilla fighting and defense tactics, required fortified camps in advance areas able to withstand recurring ground and mortar attacks. Besides constructing these special camps, Seabee Teams were called upon to build access roads and nearby tactical airstrips. Further, in South Vietnamese hamlets and villages, teams carried out numerous civic action projects. From training local inhabitants in basic construction skills to providing desperately needed medical assistance, the Seabees made a significant impact on the Vietnamese populace.

While they were primarily builders and instructors, Seabee Team members were sometimes directly involved in battle. Perhaps the most famous such battle occurred in June 1965 at Dong Xoai, 55 miles northeast of Saigon. When Viet Cong troops overran a Special Forces Camp containing 400 South Vietnamese and allied Asian troops, 11 men of a U.S. Army Special Forces team and nine men of Seabee Team 1104, seven of the Seabees were wounded and two killed. One of the dead was Construction Mechanic 3rd Class Marvin G. Shields, USN, who was posthumously awarded the Medal of Honor for conspicuous gallantry in carrying a critically wounded man to safety and in destroying a Viet Cong machine gun emplacement at the cost of his life. Not only was Marvin Shields the first Seabee to win the nation's highest award, but he was also the first Navy man to be so decorated for action in Vietnam.

Beginning in 1970 Seabee Teams departed from South Vietnam without relief. This initiated a phase-down program which corresponded to United States troop withdrawals. Finally, on 18 April 1972, the last Seabee Team site located in Ham Tan, Binh Tuy Province, was closed. Although these unique units were physically gone, the common people of Vietnam continued to reap the benefits of their many civic action projects.

In 1965 the steadily increasing insurgency of the National Liberation Army (Viet Cong), made the large scale commitment of U.S. troops a necessity. Although Seabee Teams had been active in the Republic of Vietnam since 1963, it was not until 1965 that larger Seabee units were deployed to aid in the Vietnamese struggle. Not since the Second World War had the need for the Seabees been so great and not since Korea had Seabees worked under enemy fire. The first full Seabee battalion arrived in Vietnam on 7 May 1965 to build an expeditionary airfield for the Marines at Chu Lai. Others soon followed. From 1965 until 1969 the Seabee commitment in Southeast Asia rapidly increased, necessitating first the transfer of Atlantic Fleet battalions to the Pacific through a change of home port, then the deployment to Vietnam of Atlantic Fleet battalions, and later, the reestablishment of nine additional battalions. This effort culminated in the recall to active duty of two reserve battalions in May 1968, bringing to 21 the number of battalions rotating to

Vietnam at one time or another. In addition, there were two Amphibious Construction Battalions lending support to the Vietnam effort. During the same time period, to meet a requirement for Seabees to support such installations as the Naval Support Activities at Danang and Saigon, the two Construction Battalion Maintenance Units, the two deployed Naval Construction Regiments, and the deployed Third Naval Construction Brigade rapidly increased their size.

During the war the total Seabee community grew from 9,400 in mid-1965 to 14,000 in mid-1966, to 20,000 in mid-1967 and, finally, to more than 26,000 in 1968 and 1969. To help meet the great need for personnel, the Navy recruited skilled construction workers at advanced pay grades. The Direct Procurement Petty Officer Program, reminiscent of early World War II recruiting efforts, proved highly effective both in terms of total numbers recruited (more than 13,000) and quality of input.

Seabee accomplishments in Vietnam were impressive. They built roads, airfields, cantonments, warehouses, hospitals, storage facilities, bunkers and other facilities which were critically needed to support the combatant forces. The mobile "search and destroy" strategy adopted by the United States during the first years of the war shaped the two-fold mission of the Seabees in Vietnam. In addition to the many Seabee Team activities in remote locations, construction battalions built large coastal strongholds in the I Corps Tactical Zone which embraced the northernmost provinces of Quang Tri, Thua Thien, Quang Nam, Quang In, and Quang Ngai.

In 1965 the Seabee portion of the Vietnam Construction Program was concentrated at three northern coastal points, the ports of Danang, Chu Lai, and Phu Bai. The first six construction battalions sent to Vietnam were deployed to these three points and, by 1966, as the construction program gathered momentum, eight battalions were at work simultaneously in the I Corps Area.

At Danang the Seabees built three badly needed cantonments. Temporary facilities which included strongback tents, mess halls, shops, sheds, bathroom facilities, and a water distribution system

were the first to be completed. In addition, Seabees repaired the important Danang River Bridge, rendered technical aid to South Vietnamese troops who were building ramps for tank landing ships and small boats, and constructed warehouses and petroleum storage tanks. Fortification of the cantonments was also essential because of frequent enemy attacks. Despite Seabee-built machine gun positions and bunkers for perimeter defense, one such attack succeeded in destroying the newly built advance base hospital, killing two Seabees and wounding over ninety. In true Seabee tradition, the men rapidly rebuilt the entire hospital complex.

At Phu Bai, near the ancient imperial capital of Hue, the Seabees developed yet another coastal point into an advance base. There, the construction men built a fleet logistic support unit cantonment. Besides camp construction, the project entailed raising, widening, and surfacing a low peninsula which jutted 1,500 feet out into the South China Sea. The causeway served as an unloading ramp for cargo-laden landing ships. In addition, the Seabees built a large antenna field which substantially modernized communication systems in the war-torn northern provinces. Two smaller cantonments, one for a medical battalion, were also constructed.

As U.S. Marines based at Danang pushed search and destroy operations into the interior of the I Corps Area, the need arose for increased air cover and, thus, an additional air strike facility. It was decided that the Seabees would build a 3,500-foot expeditionary airfield at Chu Lai, 50 miles south of Danang. Since the Viet Cong controlled the surrounding mountains and there were no nearby port facilities, the Seabees landed on the beaches of Chu Lai in the first major U.S. Navy amphibious operation since the Lebanon crisis of 1958. Matching the feats of their fabled Second World War predecessors, the Vietnam-era Seabees laid the last aluminum plank on the airfield only 23 days after coming ashore. The very next day planes began operations against the Viet Cong from the newly-built airstrip. The Seabees continued their work at Chu Lai by adding a parallel taxiway, four cross taxiways, and parking aprons. Before their task was completed, the Seabees had rapidly erected two cantonments, warehouses, hangars, and a host of other vital facilities.

By the end of 1965, Seabees had pioneered and laid the ground-work for three major advance bases in the northern provinces of the Republic of Vietnam. From these bases, combatant forces received the critical support necessary for increasing attacks into the interior. In the words of Secretary of the Navy Paul H. Nitze, the Seabees had "contributed mightily to constructing the vast infrastructure necessary for a major war in a primitive, remote area." The bastions built on the upper coast of South Vietnam demonstrated their worth in 1966 and 1967 when Allied forces, supplied from these points, crushed major North Vietnamese offensives through the Demilitarized Zone and Laos.

During 1966 the Seabees continued to build at Danang, Phu Bai and Chu Lai, expanding these bases and erecting more permanent structures for the men and equipment assigned to them. At the same time, Seabees entered the troubled, northern-most province of Quang Tri to build a hill-top fort of concrete bunkers at Lang Vei. This vital outpost overlooked a feeder line of the Ho Chi Minh Trail. They also built facilities at the Marine base at Dong Ha and the Army artillery post at Comm To.

Among the numerous construction projects completed in 1967 was an alternate airfield at Dong Ha and the famed Liberty Bridge, 80 miles southwest of Danang. Even though the northeast monsoon season had already begun, the airstrip was completed in only 38 days. The Liberty Bridge, which spanned the Thu Bon River, was one of the most impressive undertakings of the war. Built to withstand the incredible expansion of the river during the monsoon season, the completed bridge was 2,040 feet long and towered 32 feet above the low water level. While construction of such a bridge would have been difficult under normal circumstances, the Seabees were required to work in a remote area of Vietnam known to contain large concentrations of enemy forces. Despite tremendous difficulties, the bridge was finished in only five months.

During the bitter struggle of the Tet offensive in February of 1968, Seabees built and fought in direct support of the Marine Corps and Army. While the battle for Hue raged at fever pitch, Seabees from Phu Bai were summoned to rebuild and repair two vitally needed concrete bridges. When enemy snipers drove the Seabees

from their work, they organized their own combat teams which silenced the snipers and let them complete their important task. In the spring, the Seabees went to work on the Danang to Hue railroad and put it quickly back into service. Constant enemy harassment had suspended service on this line since 1965.

Naval Construction Force strength reached its peak shortly after the beginning of the 1968 Tet Offensive. During that and the following year there were more than 11,000 Seabees serving in South Vietnam. Although the Navy's construction men continued to labor in the northern provinces, building city-like cantonments and upgrading previously constructed facilities, the priorities of the war also began to demand more and more of their skills in the south.

After responsibility for conducting the war was turned over to the South Vietnamese and American military operations in the north were significantly reduced, the Seabees labored to prepare the Vietnamese for the ultimate withdrawal of all American combatant troops. In the Mekong Delta they built a string of coastal bases and radar sites which would allow the Vietnamese Navy to completely take over coastal surveillance in this area of "brown water" warfare. As thousands of American troops were returning home, Seabees continued to build. Only now, however, they built hospitals at Danang, Chu Lai, Phu Bai, Quang Tri and many other towns and villages throughout the country.

When in 1970, Seabee activity drew to a close and the withdrawal of the last units commenced, the Navy's builder-fighters had made a lasting contribution to the people of South Vietnam. In a war where winning the hearts of the people was an important part of the total effort, Seabee construction skills and medical assistance proved powerful weapons in the Vietnam "civic action" war. The recitation of events and the quoting of statistics fail to reveal the true nature of the Seabees' involvement during the Vietnam years. True, they supported the Marines at Chu Lai and Khe Sanh, reopened the railroad line between Hue and Danang, struggled with the logistics problems of the Mekong Delta, constructed a new naval base on a sand pad floating on paddy mud, and built staggering quantities of warehouses, aircraft support facilities, roads, and bridges. But they also hauled and dumped numerous tons of rock and paving on

roads that provided access to farms and markets, supplied fresh water to countless numbers of Vietnamese through hundreds of Seabee-dug wells, provided medical treatment to thousands of villagers, and opened up new opportunities and hope for generations to come through Seabee-built schools, hospitals, utilities systems, roads and other community facilities. Seabees also worked with, and taught construction skills to the Vietnamese people, helping them to help themselves and proving that the Seabees really are "builders for peace."

AFTER VIETNAM

When the de-escalation of United States activity in Southeast Asia got underway, Seabee strength was once again reduced. By September 1970, the naval mobile construction battalions were down to the planned post-Vietnam level of ten full-sized battalions. Because of the reduction of the Naval Construction Force in Vietnam, on 8 December 1969, the headquarters of the 30th Naval Construction Regiment was moved from Vietnam to Okinawa in the Ryukyu Islands, and on 1 May 1971 the headquarters of the 32nd Naval Construction Regiment was moved from Vietnam to Roosevelt Roads, Puerto Rico. By the end of 1971 most Seabees were employed outside of Southeast Asia. Thus, on 9 November 1971, the 3rd Naval Construction Brigade was disestablished.

As the Seabees entered the post-Vietnam era, they found themselves employed on major peacetime projects which had been deferred or neglected because of wartime priorities. Alert battalions were reestablished in the Atlantic and Pacific Fleets at Roosevelt Roads, Puerto Rico; and on Okinawa, in the Ryukyu Islands. The men of the Naval Construction Force found themselves employed outside their home port fleet areas. No geographical limitations existed as battalions and details were deployed to satisfy the current and ever-increasing demand for Seabee expertise. For example, after the reestablishment of the alert battalions, one battalion, Naval Mobile Construction Battalion Four, served first in 1970 as the Pacific alert battalion, and then in 1972 as the Atlantic alert battalion.

The post-Vietnam Seabees were involved in new construction frontiers: the Indian Ocean, the Trust Territory of the Pacific Islands,

Europe, on the ocean floor itself, and in most of the oceans of the globe. Though younger and fewer in number than their World War II predecessors, Seabees continued to demonstrate the same old "Can Do" spirit.

DIEGO GARCIA

One of the major projects for the Naval Facilities Engineering Command and the major project for the Seabees in the 1970s and early 1980s was the construction of a naval complex on the atoll of Diego Garcia, part of the British Indian Ocean Territory. Diego Garcia, one of the 52 coral atolls of the Chagos Archipelago, was located in the Indian Ocean 960 miles south of India and 7 miles south of the equator. The 6,700 acre, heavily vegetated atoll was horseshoe-shaped with a perimeter of approximately 40 miles and average elevations of 3 to 7 feet. The annual rainfall was approximately 100 inches.

On 24 October 1972 the U.S. and British governments signed an agreement concerning the construction of a U.S. Naval Communication station on Diego Garcia. The purpose of the facility was to provide a necessary link in the U.S. defense communications network and furnish improved communications support in the Indian Ocean for ships and aircraft of both governments. The U.S. was to build the facility using Naval Construction Force personnel.

The Diego Garcia base was initially planned as an austere communication station with all necessary supporting facilities, including an airstrip. On 23 January 1971 a nine-man reconnaissance party from landed on the atoll to confirm planning information and carry out a preliminary survey of the beach landing areas. In early March a 50-man party from the same battalion and from Amphibious Construction Battalion 2 as well as other specialist personnel arrived by LST, and was followed by an advance party of 160 men from Naval Mobile Construction Battalion 40. These men were to construct a temporary Seabee camp, water and electrical distribution systems, a dining hall, laundry, refrigeration and storage facilities. Finally, they were to build an interim 3,500-foot airstrip.

In October and November, Detachment CHAGOS of NMCB 71 and the whole of NMCB 1 arrived, marking the beginning of large-scale construction. NMCB 1 built the transmitter and receiver buildings and placed the base course for the permanent runway and parking apron. In July 1972 NMCB 62 relieved NMCB-1 and took over the departing battalion's projects. On 25 December the first C-141J transport landed on the newly completed 6,000 foot runway with the Bob Hope Christmas Troupe. The full 8,000 foot permanent runway with adjoining taxiway and parking apron was completed by March 1973; and on 20 March, exactly two years after construction began, the U.S. Naval Communication Station, Diego Garcia, was officially established.

Worked commenced on the second construction increment, a $6.1 million project which involved the construction of a ship channel and turning basin in the lagoon. This project, however, was contracted to a Taiwanese firm. Seabees, however, continued to work on support and personnel facilities in the cantonment area at the northern tip of the atoll. The second major area of construction was the airfield and its supporting facilities. Revised requirements called for the extension of the original 8,000-foot runway to 12,000 feet and additions were made to the parking apron and taxiways. New hangars and other support facilities were also built. In addition, construction of extensive petroleum, oil and lubricant storage facilities was initiated. The Navy required 480,000 barrels of storage to support ship and aircraft needs and the Air Force required an additional 160,000 barrels. During 1973 and 1974 Seabee units worked on all these projects. Because the final mission of Diego Garcia was still evolving, it was clear that still more construction would take place in the years to come.

In 1975 and 1976 Congress authorized $28.6 million to expand the Diego Garcia facilities to provide minimal logistics support for U.S. task groups operating in the Indian Ocean. This mission expansion called for construction of a fuel pier, airfield expansion, and more petroleum, oil and lubricant storage, and personnel support facilities. Additional projects were undertaken in 1978. Construction was accomplished by both Seabees and private contractor personnel and it was anticipated that the Diego Garcia project would finally be completed in 1980. World events in 1979 and 1980, however, forced

a reevaluation of the U.S. defense posture in the Indian Ocean Area which indicated the need for pre-positioned materials to support a rapid deployment force and a more active U.S. presence in the area. It was decided to further expand the facilities at Diego Garcia in order to provide support for several pre-positioned ships, loaded with critical supplies. By the end of 1980 the Naval Facilities Engineering Command had advertised a $100 million contract for initial dredging at Diego Garcia to expand the berthing facilities.

In the early 1980s the construction effort at Diego Garcia rapidly shifted from Seabees to private contractors. The last full Seabee battalion, NMCB 62, departed the atoll in July 1982. While Seabees remained in detachments, contractor personnel took over the projects yet to be accomplished on Diego Garcia. Thus, what began as simply a communication station on a remote atoll became a major fleet and U.S. armed forces support base by the 1980s. By 1983 the only Seabee unit remaining on Diego Garcia was a detachment of NMCB 62. The departure of this detachment in September 1983 ended twelve years of priority effort on the island that included some 220 projects for the Navy and Air Force, valued in excess of $200 million. The work the Seabees completed on Diego Garcia since 1971 represented the largest peacetime construction effort in their history. Diego Garcia was the major Seabee construction effort of the 1970s and they acquitted themselves well under the difficult and isolated conditions that exist there. When the Seabees arrived they lived in tent camps, when they departed they left a fully-developed, modern military facility, capable of supporting thousands of U.S. personnel.

SEABEE ACTIVITY AROUND THE WORLD

Other projects on which Seabees worked in the early 1970s included the upgrading of recreational and living facilities at the Naval Communication Station, Makri, Greece. There they built a radio facility; improved the base swimming pool; built tennis courts, and a softball field; and an addition to the enlisted men's club; and remodeled the barracks. At the Naval Facility, Souda Bay, on the island of Crete, Seabees built an open storage facility, a pipe and canvas enclosure, and a helicopter pad. In Sigonella (Sicily), Italy, at the Naval Air Facility they installed diesel units and "no break"

generators, and remodeled barracks and the general mess, built an air-frame repair shop, power-check pad, ordnance magazine, enlisted man/chief petty officer club, handball court and theater. At the Fleet Support Office, La Maddalena, Italy, Seabees built a gymnasium and a playing field unit.

In Spain Seabees worked on a number of projects at the Rota Naval Station. These projects included remodeling barracks and the enlisted men's club and building additions to the base telephone exchange and warehouse. Seabees also installed a new fender system on Pier #2 and built a causeway connection. They also reconstructed the Rota Seabees Camp which had deteriorated because it had been vacant from 1965 until 1971. In London, England, Seabees remodeled a Marine barracks; in Greenock, Scotland, they built a bowling alley; in Holy Loch, Scotland, they renovated the public works department garage and the hobby shop facility; at the Naval Security Group Activity, Todendorf, Germany, they built an addition to an operations building and installed a new emergency generator.

Meanwhile, in the Pacific, the major efforts of the Seabees were centered on Okinawa in the Ryukyu Islands, and on Guam in the Mariana Islands. On Okinawa they performed many different and challenging assignments. The jobs included new structures at Camp Kinser, a new water pipeline, a modern underground electrical distribution system and a major land grading project at the Marine Corps Air Facility at Futema. On Guam Seabees built a Seabees Camp. The camp, dedicated to William Lee Covington, a young Civil Engineer Corps officer killed in Vietnam, included approximately 39 pre-engineered buildings, housing facilities, offices, shops, a galley, living quarters, a chapel, and utilities. Other projects completed during the 1970s included a major swimming pool complex at the Naval Hospital, a culvert and earthmoving project at the Naval Magazine, a chief petty officer club, community center and teen center at the Naval Communication Station, and four steel buildings at the Polaris Point submarine facility.

In 1972 the Chief of Naval Operations announced that female naval personnel would be granted entry into all Navy ratings. That same year the a woman sailor had her request to cross-rate

approved and subsequently became the first female Seabee. Many more would follow her, and by the 1990s women had become common in the ranks of the Seabees.

Seabees in Taiwan worked on the rehabilitation of barracks and on the construction of duplex cabins; at Iwakuni, Japan they worked on a Marine Corps confinement facility, an exchange warehouse, and a water line. In the Philippines they constructed an aircraft rinse rack and runway support facilities.

In Puerto Rico Seabees renovated roads during the 1970s, built a commissary and new buildings at Camp Moscrip, and carried out numerous civic action projects. During 1977 Seabees carried out a beach-erosion preventive project in Argentia, Newfoundland; and rehabilitated housing at Guantanamo Bay, Cuba.

The Seabees were also active in Antarctica, both during and after the Vietnamese War. As part of Operation "Deepfreeze," they provided logistic support for the scientific research programs that were conducted by seventy American universities, government agencies, and industrial firms. The return of Naval Mobile Construction Battalion 71 from Antarctica in 1974 marked the end of Seabee participation in Operation "Deepfreeze." The National Science Foundation, which oversaw the program, accomplished all remaining construction by contract.

In addition to the work performed by the mobile construction battalions, the amphibious construction battalions were extensively employed. Both amphibious battalions engaged primarily in fleet exercises and other training operations. Additionally, amphibious Seabees in the Pacific Fleet found time to accomplish earthwork for a canoe lagoon and a camping area at Imperial Beach, California, to place and remove concrete obstacles in South Bay for underwater demolition teams and Sealab training, and to complete the first increment of a sheet pile bulkhead project. Meanwhile, Seabees of the Atlantic Fleet constructed a boat marina at the Little Creek Amphibious Base.

Detachments of the amphibious Seabees also served in the Mediterranean and Caribbean. These were detachments of the

amphibious ready groups that were prepared for amphibious assaults whenever necessary.

In June 1969 the first Seabee Team to be employed in the Trust Territory of the Pacific Islands landed at Moen Island in the Truk District. While the concept of civic action was not new to the Seabees, the Micronesian environment was totally different from that of Thailand and Vietnam, where the thirteen-man Seabee teams had proven so successful. The Trust Territory was a United Nations strategic trust administered by the United States under a 1947 agreement. While the area was not war torn or threatened as were Vietnam and Thailand, the Trust Territory was in an embryonic stage of political and economic development.

Under an agreement between the Secretaries of the Interior and Defense, and at the specific request of the native people at each location, Seabee teams were provided to assist the Micronesians in constructing facilities, roads, and utilities needed to enhance the economic development and improve the health of the people of the Trust Territory. While construction of such facilities provided tangible evidence of Seabee accomplishments in Micronesia, the major emphasis and greatest potential benefit was the valuable training in construction skills that was made available to the people of Micronesia. This training enabled them to accomplish essential construction themselves.

Seabee Teams in the Trust Territory served on the islands of Ponape, Truk, Palau, Kusaie, and Yap. The teams built roads, dispensaries, water tanks, bridges, and public buildings. The response of the Micronesian people to the civic action program was highly favorable in all districts. The tangible benefits were readily apparent in the improved roads, utilities and new facilities.

In the summer of 1972 a Seabee Team, with assistance from an amphibious construction battalion, assembled an Ammi pontoon hospital barge on Lake Titicaca high in the central plateau of Bolivia. The project was sponsored by the Bolivian Navy with assistance from the United States government. The barge was a 90 by 28-foot Ammi pontoon with a prefabricated Lewis building superstructure that served as a dispensary. It was powered by two diesel outboard

motors and contained all the basic medical and dental facilities of a small hospital.

In the mid-1960s increased interest in exploiting the ocean for defense purposes spotlighted a need to establish an underwater construction capability within the Navy. A team of Seabee divers was formed during 1968 to launch, implant, and recover the Tektite I habitat in the Caribbean. The success of this operation led to additional Seabee underwater construction assignments. It also led to the establishment of two Seabee underwater construction teams: Underwater Construction Team One under the cognizance of the Twenty- first Naval Construction Regiment at Davisville, Rhode Island; and Underwater Construction Team Two under the cognizance of the Thirty-first Naval Construction Regiment at Port Hueneme, California. After their formation, both teams performed successfully in numerous operations, including the installation, maintenance, and repair of submarine cables and pipelines; the implanting and recovery of moorings and acoustic and magnetic systems; underwater surveys; and harbor and dry dock inspections. The teams demonstrated a capability to perform, and they added dimension to Naval Construction Force capabilities, previously generally restricted to efforts on land.

In 1970 the Chief of Naval Operations, in his concern for improving the quality of life ashore for Navy personnel and their families, established a new program for improving shore establishment habitability. He committed the Seabees to lead and direct his Self-Help and Shore Establishment Habitability Improvement Programs.

Under this program active and reserve fleet Seabees and construction battalion units participated in improvements to personnel support facilities. The construction battalion units consisted of approximately forty or fifty men and were established to provide more effective and worthwhile duty for Seabees while stationed ashore. In addition to training on construction projects and continuing the Seabees' combat and disaster recovery readiness, the units guided and supervised the efforts of other Navy ratings in improving the sailor's living conditions ashore under the self-help concept.

Examples of the projects to improve living conditions ashore range from very simple bus shelters to large hobby shop complexes. Other typical examples included improvements to living facilities, temporary lodgings, parking garages, on-base parking, mobile home parks, and locker and recreation clubs. In 1981 sixteen construction battalion units were actively engaged in executing such projects in the United States.

In addition to performing their regular construction functions, Seabees participated in humanitarian and disaster recovery assignments in the wake of several natural disasters and political upheavals. One such political upheaval was the collapse of the Republic of Vietnam in 1975. Following this event, Seabees provided support to the Vietnamese refugee program, Operation "New Life."

OPERATION "NEW LIFE"

On 29 April 1975 the government of the Republic of Vietnam surrendered to the North Vietnamese as North Vietnamese regulars and Viet Cong closed in on Saigon. Before the surrender, President Gerald Ford ordered a mass evacuation of Americans and Vietnamese from the capital. For the latter who were political refugees, it meant the beginning of a long journey to a "new life" in the United States. In addition to the evacuation by air, many thousands of Vietnamese chose to flee the country in ships, and even small boats. The first stop for many on this journey was Grande Island, located at the entrance of Subic Bay, Republic of the Philippines. Here, Seabees, assisted by Marines and civilian employees from the Navy Public Works Center built a tent camp for the refugees. From Grande these refugees moved to the larger camps which had been built on Guam in the Marianas.

On 23 April 1975 the 30th Naval Construction Regiment directed all Seabees on Guam to halt their normal construction projects and mount an around-the-clock effort to prepare facilities to house the approximately 50,000 refugees who were even then fleeing South Vietnam. Seabees first rehabilitated the abandoned Naval Hospital Annex at Asan Point. The Seabees worked around the clock and by

Friday, 25 April, the camp received the first arriving refugees and quickly filled to its 10,000-person capacity. On 24 April Seabees began construction of a huge, 50,000 person tent camp at Orote Point. This was a monumental undertaking as it involved clearing the jungle from more than 50 acres of land. Once again, the Seabees worked 24-hours a day and the camp received its first refugees on 26 April. Not only did construction ratings work, but the battalions also pressed their support personnel into action. Supply clerks, mess cooks, and yeoman all pitched in and worked around the clock to get the job done. Construction continued and in about a week, Seabees erected 2,000 tents with no end in sight. Support utilities were also provided: messing facilities and kitchens, thousands of feet of water mains to supply showers and washing facilities, as well as the necessary sanitary facilities.

As refugees were processed and flown to the U.S., the camp population gradually dropped. Then, the first ships carrying refugees arrived and the camp population swelled once again. A peak camp population of 50,233 was reached on 14 May, after that the pace gradually slackened as the flow of refugees to the states outran the influx of new refugees. By 26 June the camp population had dropped to 10,138 and Operation "New Life" began to wind down.

DISASTER RELIEF

In January 1975 a Seabee salvage team was sent to Managua, Nicaragua, following a major earthquake which heavily damaged that city. After completing its primary mission of salvage at the U.S. Embassy, the team then salvaged badly-needed hospital equipment for the El Ritiro Hospital in Managua.

In December 1975 Seabees of Construction Battalion Unit 417 engaged in flood control operations at Mt. Vernon, Washington, when the Skagit River overflowed and threatened the town. In February 1976 Naval Mobile Construction Battalion 40 sent a detachment to Guatemala City to provide disaster relief following an earthquake which caused extensive damage to that city. In May 1977 Naval Mobile Construction Battalion 3 performed recovery and reconstruction work of all types on Guam in the wake of Typhoon

"Pamela." In February 1980 Seabees from the 31st Naval Construction Regiment at the Naval Construction Battalion Center, Port Hueneme, California, battled a devastating flood at the nearby Pacific Missile Test Center, Point Mugu. Finally, Seabees went to the islands of Jamaica and Dominica in 1980 to help repair the extensive damage caused by Hurricane "David" in December 1979.

SEABEES KILLED IN ACTION IN WAR AND PEACE

Since the outbreak of World War II, 22 Civil Engineer Corps officers and 353 Seabees have been killed in action during wartime. During the last few decades, however, a new peacetime threat has emerged. Various disaffected groups in the world have increasingly made use of terrorism as a weapon. Three Civil Engineer Corps officers and one Seabee are numbered among their victims.

At mid-morning on 3 February 1975 on the northeastern edge of the U.S. Naval Base at Subic Bay in the Philippines, Captain Thomas J. Mitchell, CEC, USN, Commander of the 30th Naval Construction Regiment, Commander Leland R. Dobler, CEC, USN, Commanding Officer of Naval Mobile Construction Battalion 133, and Lieutenant Charles H. Jeffries, CEC, USN, Officer in Charge of Detachment WALLABY of that battalion, were riding in a jeep on an inspection tour of a section of perimeter road which was being worked on by Lieutenant Jeffries's detachment. The three officers were driving in an isolated area approximately seven miles from base headquarters in deep jungle along the boundary between the base and Bataan Province when unidentified terrorists ambushed them, cutting the three men down in a hail of fire. Seabees from Detachment WALLABY, who were working about half a mile away, heard the shooting, rushed to the ambush scene, and notified base headquarters. Medical personnel were immediately flown to the scene, but the three men were dead when they arrived. U.S. Marines and Philippine Constables immediately moved into area to locate the attackers, but they were unsuccessful and the attackers were never positively identified. To this day, the three officers remain the victims of anonymous terrorists.

The latest incident of a Seabee falling victim to terrorist activity took place on 15 June 1985. Following completion of a routine repair

project at a base in Greece, Steelworker 2nd Class Robert D. Stethem, USN, and four other members of Underwater Construction Team 2 were returning to the United States aboard TWA Flight 847 when Shiite Muslim terrorists hijacked the flight and diverted it to Beirut, Lebanon. The terrorists singled out Stethem and another Seabee for physical abuse. While the aircraft sat at the Beirut airport, the terrorists beat Stethem over a prolonged period, and finally killed him with a bullet to the head. After lengthy negotiations, the remaining passengers were finally freed. The four terrorists made good their escape into Beirut, but one was later apprehended in Germany and convicted of air piracy and murder.

THE SEABEE ORGANIZATION IN THE 1970'S AND 1980'S

Following the Vietnam War, the pressure to reduce the size of the Armed Forces made it necessary for the Seabees to rely more on the reserve force to offset the reductions in the active force. During the 1970s reserve Seabees experienced a closer association with their active counterparts than in the past.

Efforts were made to elevate the readiness posture of the reserve Seabee force through a variety of programs. One such program involved the establishment of Permanent Drill Sites for the reserve battalions at military installations within their respective geographical areas. Readiness Support Allowances were positioned At these sites. These allowances consisted of essentially a ten percent cross-section of the Advanced Base Functional Component for a Seabee battalion. This allowed the reserve battalions to develop year-round training programs. To effectively care for and utilize this readiness allowance, active-duty support personnel were assigned to each reserve battalion. Because of such measures, the mobilization readiness level of the Reserve Naval Construction Force substantially improved by the mid-1970s.

In late 1973, as part of the Navy's effort to realign the naval shore establishment, the mission of the Naval Construction Battalion Center, Davisville, Rhode Island, was revised. The center was reduced to providing storage and preservation facilities for advance base and mobilization stocks, and mobilization facilities to support the Naval Construction Force.

At the peak of the Vietnam War, the Davisville Center had supported six full-strength battalions. However, by 1973, the center was home port for only three battalions of peacetime strength and one underwater construction team. In addition, the 21st Naval Construction Regiment was located there. On 30 June 1974, Naval Mobile Construction Battalion 71 was transferred to the Naval Construction Battalion Center, Gulfport, Mississippi; Naval Mobile Construction Battalion 40 was transferred to the Naval Construction Battalion Center, Port Hueneme, California; and Underwater Construction Team 1 was transferred to the Naval Amphibious Base, Little Creek, Virginia. Later in the year, on 27 November 1973, Naval Mobile Construction Battalion 1 was also transferred to the Gulfport Center. The last unit of the Naval Construction Force at Davisville, the 21st Naval Construction Regiment, was disestablished on 15 January 1975.

At the beginning of 1975 there were three regiments, ten mobile construction battalions, two amphibious construction battalions, two underwater construction teams, and one construction battalion maintenance unit on active duty.

The 31st Naval Construction Regiment at Port Hueneme, California, was responsible for the operational control of the battalions that made Port Hueneme their home port. These battalions were Naval Mobile Construction Battalions 3, 4, 5, 10, and 40. The regiment was also responsible for Underwater Construction Team 2.

The 20th Naval Construction Regiment at Gulfport, Mississippi, was responsible for the operational control of the battalions that made their home port in Gulfport. These battalions were Naval Mobile Construction Battalions 1, 62, 71, 74, and 133.

Amphibious Construction Battalion 2 and Underwater Construction Team 1 were located at the Naval Amphibious Base, Little Creek, Virginia; and Amphibious Construction Battalion 1 had its home port at the Naval Amphibious Base, Coronado, California.

Construction Battalion Maintenance Unit 302 was permanently assigned to the Public Works Department of the Naval Base at Subic Bay, the Philippine.

Finally, the 30th Naval Construction Regiment had its headquarters on Guam in the Mariana Islands. This regiment was responsible for the operations of the construction battalions while they were employed in the Western Pacific Ocean area, and the Seabee Teams employed in the Trust Territory of the Pacific Islands.

Before the end of 1975 a change in the planned peacetime strength of the Seabees led to a further reduction in the number of construction battalions. On 30 June 1975 Naval Mobile Construction Battalion 71 was disestablished. The following year saw the demise of yet another battalion when Naval Mobile Construction Battalion 10 was disestablished on 30 June 1976. The number of Naval Mobile Construction Battalions remained at eight during the remainder of the 1970s.

SECURITY ACTIVITY IN THE 1980'S AND 1990'S

Because the United States was faced with continuing threats to its national security during the 1970s and early 1980s, the nation had to make the most efficient use of its defense resources. In this context, the Seabees faced imposing challenges.

In the early 1980s political upheavals in the Caribbean and Central America resulted in U.S. military action which included participation by the Seabees. Detachments from Amphibious Construction Battalion 1 and 2 participated in Operation "Urgent Fury," the U.S. invasion of Grenada. Later, a handpicked detail of 100 Seabees from NMCB 74 sailed from CBC Gulfport for Central America and participated in the joint-services exercise, Operation "Big Pine II."

During 1981 Seabees based at the Naval Construction Center, Port Hueneme, performed a construction task of some interest. They constructed military and Secret Service support facilities at then President Ronald Reagan's ranch near Santa Barbara, California.

During a subsequent "thank you" barbecue for the men involved, President Reagan was made an honorary Seabee.

On 11 November 1983, Naval Mobile Construction Battalion 1, then deployed at Rota, Spain, was alerted of a potential tasking in support of the U.S. Marines who were part of the Multinational Peacekeeping Force in Beirut, Lebanon. The tasking consisted of improving the living conditions of the Marines located at the Beirut International Airport. On 14 November NMCB 1 sent a survey team to Beirut; and on 24 November, Thanksgiving Day, Detail Bravo Lima, consisting of 1 CEC officer and 38 Seabees departed the battalion main body for Beirut. In January 1984 the tasking was expanded; and on 5 January a second increment, consisting of an additional CEC officer and 39 Seabees was sent to Beirut. The battalion also shipped 61 pieces of equipment to Beirut in support of Detail Bravo Lima. The tasking was completed and the first increment returned on 17 February 1984; the second increment and the 61 pieces of equipment returned on 1 March 1984. This was the first involvement of Seabees under combat conditions since the Vietnam conflict.

On 15 August 1984 the 30th Naval Construction Regiment was disestablished on Guam. From this date, the Commander, Construction Battalions, Pacific Fleet, at Pearl Harbor, assumed responsibility for operational control of Naval Construction Force units in the Western Pacific Ocean Area.

On 1 July 1985, as part of the military expansion during the first term of the Reagan presidency, a new active-duty Seabee battalion, Naval Mobile Construction Battalion 7, was established at the Naval Construction Battalion Center, Gulfport, Mississippi. There were now a total of nine active-duty mobile construction battalions.

During the 1980s the Seabees provided support for the Fleet Hospital program. These Fleet Hospitals were rapidly deployable systems of expandable shelters, pre-positioned worldwide, and assembled/erected by Seabees. Of the 23 hospitals required, 8 would be built and supported by active-duty Seabees, 8 by Reserve Seabees, and the remainder programmed for future years. The Reserve Naval Construction Force participated in a field test of a

partial hospital in Operation "Golden Shield" during 1986. The active-duty Seabees supported a follow-on test and evaluation of a complete 200-bed hospital in April and May 1987.

Amphibious Construction Battalion 2 became the first Seabee unit ever awarded the Joint Meritorious Unit Service Award. Secretary of Defense Caspar Weinberger signed the award on 2 October 1986. The award recognized ACB 2's unsurpassed operational tempo, including support of the Multinational Peacekeeping Force in Lebanon, and Operation "Urgent Fury" in Grenada, Teamwork 84 in Northern Europe, Ocean Venture 84 in the Caribbean, and Joint Logistics Over the Shore Test II. Over 100 members of Amphibious Construction Battalion 1 were also eligible for the award, since they were assigned to Amphibious Construction Battalion 2 on temporary duty during Joint Logistics Over the Shore Test II.

During 1987 and 1988 Seabees participated in the West African Training Cruise. Civic action detachments were embarked on the USS SUMPTER which made port calls in Abidjan, Ivory Coast; Accra, Ghana; and Lome, Togo. These detachments received high praise from all concerned for their numerous civic action projects. In 1989 civic action detachments were embarked on the USS HARLAN COUNTY which made port calls in Guinea, Sierra Leon, Liberia, and Gabon. The same high praise was received.

As part of a reduction in forces, Naval Mobile Construction Battalion 62 was disestablished at the Naval Construction Battalion Center, Gulfport, Mississippi, on 31 July 1989.

On 22 September 1989 Hurricane "Hugo" struck the Charleston, South Carolina, area, killing 26 people and causing $5.9 billion of damage. Seabees from Naval Mobile Construction Battalion 5 and 133, home-ported at the Naval Construction Battalion Center, Gulfport, Mississippi; and Construction Battalion Unit 412 at Charleston immediately moved to provide disaster relief to both the military and civilian communities.

At 5:00 pm on 17 October 1989 an earthquake of 7.1 magnitude shook the San Francisco Bay Area. Both the civilian communities and Navy facilities in the area suffered heavy damage. Seabees from

Construction Battalion Unit 416 at the Naval Air Station, Alameda; and Construction Battalion Unit 421 from Mare Island began providing immediate disaster relief. The following day Naval Mobile Construction Battalion 3's Air Detachment arrived on the scene, and convoys of men and equipment from Construction Battalion Unit 406 at the Naval Air Station, Lemoore; and Amphibious Construction Battalion 1 in San Diego, set out to bring relief to the bay area. Disaster relief was provided to both damaged naval and civilian facilities in the area. The latter effort included helping to outfit Federal Emergency Management Administration offices and bringing warehouses in San Francisco up to habitable standards for those left homeless by the earthquake.

A Seabee Mobile Training Team (MTT) was deployed to Madagascar during 1989. The team consisted of a chief petty officer and 6 enlisted personnel. An MTT's primary function is to provide training for U.S. or local military or civilian personnel on specific equipment or trades. This team provided training for the Malagasy Army on the repair/maintenance/operation of $3.5 million worth of heavy construction equipment.

In 1990 the Seabees participated in two SOUTH PAC cruises. Both Naval Mobile Construction Battalion 7 and Underwater Construction Team 2 embarked civic action detachments on the USS SCHENECTADY and USS FLORIKAN. Port calls were made in the Marshall, Gilbert, Solomon, and Cook islands, and at Papua, New Guinea; Tuvalu, and Tonga. Naval Mobile Construction Battalion 1 participated in the West African Training Cruise (WATC). The battalion embarked civic action detachments on the USS BARNSTABLE COUNTY which made port calls at Cape Verde, Senegal, Gambia, and Guinea-Bissau. High praise was received from all recipients.

When Hurricane "Ofa" struck American Samoa in February 1990, Seabees from Naval Mobile Construction Battalion 40 and 133 were quickly on the job providing disaster relief and clean-up on the island of Tutuila.

Devastating floods struck central Tunisia in late January 1990, displacing families and destroying railroad lines and bridges. As part

of Exercise "Atlas Rail," Naval Mobile Construction Battalion 3's Air Detachment worked jointly with Tunisian army engineers to repair flood-damaged rail lines. Later, this battalion's Sigonella detail performed civic action work in Morocco as part of Exercise "African Hammer."

OPERATION "DESERT SHIELD/DESERT STORM"

On 2 August 1990 the armed forces of Iraq began the invasion and subsequent conquest of the Emirate of Kuwait. Under United Nations' auspices, the United States and other member nations responded by deploying military forces to Saudi Arabia. The immediate goal was to forestall further Iraqi aggression; the long-range goal was to compel Iraq to withdraw from Kuwait. The initial allied military undertaking to protect Saudi Arabia was dubbed Operation "Desert Shield."

Among the U.S. forces deployed to the region was the First Marine Expeditionary Force. Seabees were to provide construction support for this force. On 7 August the Seabees began preparations to deploy four battalions to the region: Naval Mobile Construction Battalion 4, 5, 7, and 40. On 13 August the first Seabees arrived in Saudi Arabia, an element of Amphibious Construction Battalion 1, comprising 210 personnel. These men immediately went to work unloading Marine Corps equipment and supplies from Maritime Pre-positioned Force ships.

During the period 10-20 August, 100 Seabees of Amphibious Construction Battalion 2 departed Norfolk, Virginia, on amphibious ships bound for the Persian Gulf. While in the gulf these Seabees participated in numerous exercises with the Marines to prepare for an amphibious assault in the region.

The second wave of Seabees to arrive were personnel from Construction Battalion Units 411 and 415; they erected and maintained Fleet Hospital Five, a 500-bed hospital facility at Al Jubail, Saudi Arabia. Both units had female Officers in Charge, marking a first for the Seabees.

By 14 September the Air Detachments of the four deploying Seabee battalions had arrived. Each comprised 89 men and could operate for 30 days with out resupply. On 27 September NMCB 40's main body arrived in country from Camp Covington, Guam. By 18 October all the battalion main bodies had reached Southwest Asia. NMCB 5 arrived from its home port at the Naval Construction Battalion Center, Port Hueneme, California; and NMCB 4 redeployed from Camp Moscrip, Puerto Rico. NMCB 7 redeployed from Camp Shields on Okinawa, and, unlike the other three battalions, was sent to Bahrain. In December NMCB 24, a reserve unit called to active duty, relieved NMCB 4. That same month, NMCB 5 and 40 were joined by Details 15 and 16 of NMCB 1 which was deployed at Rota, Spain. The 3rd Naval Construction Regiment, a reserve regiment, was mobilized to provide command and control over the deployed battalions. By early February 1991, 2,800 Seabees and 1,375 pieces of equipments had been deployed to the region in support of Operation "Desert Shield."

Upon their arrival in Saudi Arabia, the Seabees built critically needed facilities at the four airfields where the Marine Air Combat Element had deployed. This entailed construction of parking aprons, as well as base camps to house the Marines pouring into the area. Next, the Seabees built ammunition supply points for the large amounts of ordnance being transported to the region. Once these needs were met, the Seabees shifted emphasis to improving living conditions in the Marine camps.

Base camps were built for the 3rd Marine Air Wing, Marine Air Groups 11, 13, 16 and 26, and the 1st and 2nd Marine Division. In Bahrain, NMCB 7 supported the Army and Air Force, as well as the Marines. The battalion built strongback tents, an aviation storage facility, a munitions transfer road, and a 60,000 square foot aircraft parking apron. In December, NMCB 74 relieved NMCB 7 in Bahrain, and the latter battalion moved 200 miles north to Ras Al Mishab in Saudi Arabia.

Among major projects completed during Operation "Desert Shield" were a headquarters complex for the First Marine Expeditionary Force and a 15,000 man camp for the Second Marine Expeditionary Force. The latter project was the largest wartime

multi-battalion Seabee project since the Vietnam War. NMCB 1, 4, 5 (project lead), 7, 24, 40 and 74 worked on the project. Construction began in late November. The camp comprised six modules, each capable of housing 2,500 men. Each module contained berthing, office space, showers, toilet facilities, a galley, roads, and parking areas. The completed camp complex was dubbed "Wally World."

Completing these projects required the Seabees to work seven days a week, two twelve hour shifts a day. The only days off during the whole period of Seabee involvement in the Gulf were Thanksgiving and Christmas. The Gulf environment provided an added challenge for the Seabees. When the first wave of Seabees arrived in August, the heat was intense, often reaching 1200 F. By the time most of the Seabee units had arrived in December, the heat had mitigated, daytime temperatures in the 70's dropping to the 30's at night. The other major problem was sand: it got into everything and was particularly hard on equipment.

Operation "Desert Storm," the expulsion of Iraqi forces from Kuwait began in early 1991. On 16 January 1991 the Allies initiated a massive air campaign against Iraq. Before it was over, Allied aircraft flew more than 40,000 sorties against Iraqi targets. At this time planning went forward for the 3rd Naval Construction Regiment to move into Kuwait in the wake of advancing Allied forces to open roads and airfields and provide immediate battle-damage repair.

In January 1991 the Marines began to move north in preparation for the expected ground assault on the Iraqis. In support of this, the Seabees began to concentrate on building and maintaining roads to serve as the main supply routes throughout northern Saudi Arabia.

After months of constructing millions of square feet of aircraft aprons, camps for tens of thousands of Marines, and hundreds of acres of ammunition and supply points, the Seabees prepared to support the ground assault into Kuwait. NMCB 5 moved half its strength to Al-Kabrit, 30 miles from the Kuwaiti border, and began construction of a Naval Construction Force Logistics Support Base from which the Seabees could provide the First Marine Expeditionary Force the construction support needed during the upcoming assault into Kuwait. The top construction priorities during this period were

water, roads, and facilities for the Marine division assembly areas. Water was obtained by exploiting already-existing wells, and the Seabees built galley facilities for the 30,000 Marines of the 1st and 2nd Marine Divisions. A 40,000 man capacity enemy prisoner of war camp was also built.

The most formidable task facing the Seabees was the road network required by General Schwarzkopf's "End Run" attack strategy. Spanning more than 30 miles of desert from Al-Mishab to Al-Kabrit, the "End Run" strategy ultimately required more than 200 miles of roads west and north of the Kuwaiti border. Because of the need to deceive the Iraqis, much of the construction necessary had to be done at the last minute. Working in the wettest weather seen in Saudi Arabia in years, Seabees completed the necessary construction in approximately two weeks. Thousands of trucks moved million of gallons of water and fuel, and tons of supplies, ammunition and spare parts on this road network to support the two Marine divisions making the assault. By the time the assault was launched, Seabees were maintaining approximately 200 miles of roads near the Kuwaiti border. One of these roads was an east-west corridor from Ras Al Mishab through Al Kabrit, continuing past Al Qaraah for a total distance of almost 100 miles. This six-lane road was traversed daily by more than 500 heavy haulers and thousands of tactical vehicles.

NMCB 5 and 40 relocated to the north and west. From this area, roads to the border, another well, and a 1,500-foot Remote Piloted Vehicle runway were built. On the day before the ground assault, Seabees dug in the 1st Marine Division command element on the border as the division moved into its attack positions.

On G Day, 25 February 1991, the Allies launched a massive ground assault against the Iraqis. The next day, an advance party from NMCB 5 and 24 entered Kuwait to prepare positions for the First Marine Expeditionary Force command element, and to repair airfields, maintain roads, and build more enemy prisoner of war camps. As the Seabees labored at these tasks, the smoke from hundred of burning oil wells turned day into dark. On 28 February, the Iraqi, devastated by the Allied attack, accepted a cease fire and the conflict ended. Construction ceased, and the Seabees returned to

their units just south of the Kuwaiti border. Thus, ended the largest Seabee military action since the close of the Vietnam War.

The Gulf War demonstrated the ability of the Naval Construction Force, both active and reserve, to meet the exigencies of a large-scale military operation. Not all of the action, however, was in the Persian Gulf. Approximately 60 percent of the Seabee reserve units called to active duty were sent to other parts of the world to replace active-duty units sent to the Gulf early in the conflict.

OPERATION "PROVIDE COMFORT"

The Seabees, however, were not finished in Southwest Asia. Following the Iraqi defeat, the Kurdish minority living in northwestern Iraq rebelled in an attempt to win independence. The Iraqi government responded harshly and a gigantic refugee problem developed as hundreds of thousands of Kurds fled their villages into the mountains. The United Nations intervened to protect the Kurds and an Allied-occupied, protected enclave was established around Zakho, Iraq. A relief operation, Operation "Provide Comfort," was launched to provide facilities for the refugees until they could return to their villages.

On 11 April 1991, Naval Mobile Construction Battalion 133, deployed at Rota, Spain, was ordered to send its Air Detachment to Zakho. This was followed on 22 April with orders for the battalion to recall all its details and to redeploy its main body to Zakho. While in Iraq, NMCB 133 was under the tactical command of the U.S. Army 18th Construction Brigade, consisting of the U.S. Army 94th Heavy Engineer Battalion, a British Army engineer squadron, a Dutch engineer battalion, and several smaller U.S. Army logistical units. NMCB 133's camp was established in a walled compound which was also the headquarters of the 24th Marine Expeditionary Unit and the 18th Engineer Brigade. The Seabees were immediately over-tasked and went to a 12-hour day schedule, providing support to the refugee camps in the area. Work consisted of latrine construction, electrical and water-well support, road grading, forklift support, berm construction, and wash-rack construction. In general, the work could best be described as emergency service relief work.

It was originally anticipated that the Seabees would remain at Zakho for three months. It turned out, however, that they were able to leave after only eight weeks because during that period upwards of 300,000 Kurds were convinced that it was safe to return to their homes. The displaced persons camps near Zakho which had held as many as 60,000 Kurds at the midpoint of the deployment, saw this number drop to less than 15,000 by the time NMCB 133 departed.

In December 1990 a reserve unit, Naval Mobile Construction Battalion 23, which had been recalled to active duty on Guam to replace an active-duty battalion sent to the Gulf War, provided disaster relief in the wake of a severe hurricane, one of the strongest to hit Guam in recent years.

OPERATION "FIERY VIGIL"

On 15 June 1991 Mt. Pinatubo in the Philippines erupted and poured more than two cubic kilometers of ash and sand over a 30-mile radius. This eruption was characterized as one of the most violent of this century. Within the radius of the eruption was the Subic Bay U.S. Naval Complex and Clarke Air Force Base. The eruption was followed by Typhoon "Diding" whose torrential rains saturated the ash and sand, creating dangerous roof loads and many other problems. Thus began Operation "Fiery Vigil." Seabees from Naval Mobile Construction Battalion 3, and Construction Battalion Maintenance Unit 302, and Public Works Center civilians provided disaster relief in the form of temporary shelter for those rendered homeless on the base. They also provided temporary power and emergency water supplies, and cleared roadways, and aircraft runways. A ship returning from Operation "Desert Storm" with Seabee equipment was diverted to Subic Bay and provided much needed equipment. A pre-positioned ship, carrying equipment for a Marine Air Ground Task Force, was also brought in. The damage was so severe that 20,000 dependents at Subic Bay and Clarke Air Force Base were evacuated from the area in the days following the eruption. Some 400 Seabees from Naval Mobile Construction Battalion 4 on Okinawa were sent to Subic Bay to help with the cleanup. Within 100 days, the Seabees demolished more than 50 heavily-damaged structures and, removed 250,000 tons of ash, cleared 900,000 square yards of aircraft paving and 75 miles of

roads, restored 35 miles of overhead power distribution lines, cleaned and restored 750 air conditioning and refrigeration units, and erected 25 replacement buildings. Working with Public Works Center employees, the Seabees played a critical role in the rapid recovery of the Subic Bay naval complex.

SEABEE REORGANIZATION

Since the establishment of the Seabee Reserve after World War II, active and reserve Seabees, while frequently serving together, were part of two separate organizational structures. In July 1992 this changed when active and reserve Seabee units were integrated into two Naval Construction Brigades, under the operational control of the Commanders in Chief of the Atlantic and Pacific Fleets.

The Commander, Naval Construction Battalions, U.S. Atlantic Fleet; the Commander, Naval Construction Battalions, U.S. Pacific Fleet, and the 1st Reserve Naval Construction Brigade were disestablished. In their place were established the 2nd and 3rd Naval Construction Brigades. In addition, two new regiments were established: the 22nd Naval Construction Regiment under the 2nd brigade and 30th Naval Construction Regiment under the 3rd brigade. Thus, each brigade had two active regiments and six reserve regiments. The 2nd Naval Construction Brigade assumed operational control of three regiments, eight battalions, one Naval Construction Force Support Unit, and one Construction Battalion Maintenance Unit. In like fashion, the 3rd Naval Construction Brigade assumed operational control of three regiments, seven battalions, two support units, and one maintenance unit. When U.S. forces departed the Philippines in late 1992, Construction Battalion Maintenance Unit 302 was relocated to Camp Covington on Guam. It was disestablished there on 20 July 1994.

OPERATION "RESTORE HOPE"

In 1992 famine struck Somalia. The country had been beset by a long period of civil war which left the central government fragmented and weak. By late 1992 almost 1,000 individuals, many of them children, were dying of starvation daily. Although relief supplies were pouring into Somalia, they did little to help. Armed

gangs divided the capital and controlled the road system. The food was stolen or misdirected before it could reach those for whom it was destined. The U.N. decided to send in a military force to restore order. U.S. military units formed part of this coalition force and embarked upon Operation "Restore Hope." The Seabees went ashore to provide construction support to the U.S. contingent. The primary Seabee tasking was to provide vertical construction support to U.S. and coalition forces establishing base camps at each of the humanitarian relief sites. This including building heads, showers, tent decks, strongback tents, and kitchens. Seabees were also to repair and improve the main supply routes, which included bridge repairs and shoulder grading to widen roads. Wells were drilled and a seven- room school house was also constructed. The largest project was at the Baidoa airstrip which deteriorated as C-130 relief flights increased in the early part of the operation. This project involved removing 300,000 square feet of asphalt surface, pulverizing and mixing it with portland cement, and then grading and compacting the mixture. More than 600,000 square feet of AM2 matting was also laid for aircraft turnarounds, parking aprons and helopads.

On 10 December 1992 Amphibious Construction Battalion 1 arrived at Mogadishu as part of the Naval Support Element in Somalia. Within a short time ACB 1 unloaded five of the U.S. Marines' Maritime Pre-positioning Force ships, refurbished the port, and provided fuel and water for military forces in Somalia.

Naval Mobile Construction Battalion 1 and 40 began deploying to Somalia on 10 December. Within 30 days both battalion main bodies had arrived. The 30th Naval Construction Regiment (Operational) was activated to provide command and control for the two deployed battalions. By the end of December, Seabees from NMCB 1 were convoying personnel and equipment to Baledogle, Bardera, and Baidoa to effect airfield repairs and improvements and construct base camp facilities for the deploying U.N. coalition forces. The Seabees arrived in Baledogle on 31 December and joined forces with Marines from Marine Support Wing Squadron 372 to establish landing and staging areas for CH-53 helicopters and a taxiway and turnaround pad for C-130 aircraft. The Seabees used 240,000 square feet of AM2 metal matting to construct the facility. Near Bardera, Seabees from NMCB 1 restored a water source to a refugee camp by

installing a new pump on the bank of the Jubba River. Seabees from NMCB 40 completed Operation "Clean Sweep" in Mogadishu, which consisted of removing debris (trash and car hulks) from critical areas of the city. They also prepared a site for a 300-bed Army evacuation hospital and installed 90,000 square feet of airfield at the Mogadishu airport. NMCB 40 participated in the amphibious landing at the Port of Kismayo. They quickly completed repairs to the Kismayo airfield, which allowed the rapid deployment of follow-on coalition forces to that city. Finally, the Seabees provided construction support for President George Bush's visit to Somalia on 1 January. In addition to their tasking in support of the coalition forces, the Seabees carried out numerous civic action projects in support of the Somali people during the course of Operation "Restore Hope."

By the end of March 1993, the Seabees had successfully completed their support of Operation "Restore Hope" and returned to their previous deployment sites or their home ports.

OTHER SEABEE ACTIVITIES IN THE EARLY 1990'S

The Seabees celebrated their 50th anniversary in 1992. Special celebrations and ceremonies in Washington, DC, and at the construction battalion centers, and other Seabee activities marked the year. There was an especially large number of Seabee unit reunions that year which brought together veterans from all the wars in which the Seabees had served since their inception. In addition to the celebration, the Seabees continued to perform their normal duties, among which was disaster relief.

Hurricane "Andrew" struck Dade County, Florida, on the morning of 24 August 1992 inflicting extensive damage. There were few deaths, but more than 100,000 people were left homeless. More than 800 Seabees from Naval Mobile Construction Battalion 1, 4, 14, Amphibious Construction Battalion 2, and Construction Battalion Unit 410, 412, 419, and 420 provided disaster relief by repairing government buildings and approximately 270 schools.

In 1993 the Seabees participated in a number of events. The 2nd Naval Construction Brigade was involved in the planning process for potential peacekeeping operations in the former Yugoslavia. The

2nd brigade and an air detachment from Naval Mobile Construction Battalion 7 were involved in the United Nations mission in Haiti that year. Seabees from Naval Mobile Construction Battalion 4, 5, and 7 played a major role in the counter-narcotics program in South America. Finally, Naval Mobile Construction Battalion 3 participated in disaster recovery efforts on Guam in the wake of an 8.1 earthquake.

In 1994 Seabees provided a wide variety of support including work for the United Nations field hospital in Zagreb, Croatia; water well drilling teams to Morocco and Honduras; and nation-building and joint training exercise support to Surinam and the Dominican Republic. Seabees also participated in the incursion into Haiti. Specifically, Amphibious Construction Battalion 2 supported U.S. forces deployed to Port-au-Prince. At the Naval Station, Guam, Seabees carried out extensive repairs to the Victor Wharf, which had been damaged badly during the earthquake of the previous year.

In September and October 1995, during the most active hurricane season in history, Naval Mobile Construction Battalion 5 carried out disaster relief assistance to the stricken islands of Antigua, St. Thomas, and St. John, after Hurricanes "Luis" and "Marilyn" savaged the eastern Caribbean. That same year, Naval Mobile Construction Battalion 7 sent a disaster relief team to Kobe, Japan, after an earthquake struck that city. The Seabees set up tents and cots at seven different sites, providing shelter for victims of this tragedy.

HAITIAN AND CUBAN REFUGEE SUPPORT

The highest profile effort of the Seabees in 1994, however, was the support provided to Haitian and Cuban refugee efforts. This support grew in scope and extended into 1995. At first, 40 Seabees of Naval Mobile Construction Battalion 74 (deployed to Puerto Rico) were sent to the U.S. Naval Station, Guantanamo Bay, Cuba, to augment the public works department there. The evacuation of civilian employees from Guantanamo and the increased support required by Joint Task Force 160 that had been established there to oversee the refugee operation necessitated this movement. Next, a Seabee air detachment was dispatched from Puerto Rico to construct

refugee camps at Guantanamo. Another air detachment was deployed from Puerto Rico to Grand Turk for the purpose of constructing additional refugee camps and subsequently was redeployed to Guantanamo Bay to assist with the growing tasking. Additionally, Seabees supported Operation Safe Haven by constructing Cuban refugee camps in Panama.

The main effort in Cuba was Operation "Sea Signal" during which Joint Task Force 160 constructed facilities to improve the quality of life of Cuban migrants at Guantanamo. By order of the 2nd Naval Construction Brigade, the 22nd Naval Construction Regiment (Forward Element) deployed to Guantanamo in December 1994 with Naval Mobile Construction Battalion 4 and an air detachment from Naval Mobile Construction Battalion 7. As directed by the U.S. Atlantic Command, the senior leadership of the 22nd Naval Construction Regiment (Forward Element) met with engineers from the Naval Facilities Engineering Command's Atlantic Division to develop preliminary designs for the $35 million Quality of Life Improvement Program for 20,000 Cuban migrants.

The original plan called for the construction of 37 migrant villages arranged in 11 village clusters at two locations: Radio Range and McCalla Field, approximately seven miles apart. Migrant riots in Panama led to a decision to return 7,000 refugees to Guantanamo Bay; this resulted in both an accelerated construction schedule and an enlargement of project scope for the Seabees. A detachment from the Air Force's 820th Red Horse construction unit was mobilized from Nellis Air Force Base to assist the Seabees. When the project concluded the two tent cities constructed were capable of housing almost 20,000 people. This multi-national, joint-service work-force completed an astonishing 100,000 man-days of construction effort in a harsh environment while scheduling their construction projects around the migrants and their daily operations.

All engineering assets of Joint Task Force 160, including 358 Seabees from Naval Mobile Construction Battalion 4, 70 Seabees from Naval Mobile Construction Battalion 7, 85 Air Force engineers from the 820th Red Horse Squadron, 65 Army engineers, 24 Marine Corps engineers, 93 reserve Seabees on Active Duty for Special Work, 45 active-duty augment Seabees, and 500 Cuban workers reported to

the 22nd Naval Construction Regiment (Forward Element). The Seabees operated in a joint-command environment: they berthed and messed in an Air Force camp, reported to an Army command, the Joint Logistics Support Group, and served under a Marine brigadier general who was joint task force commander.

After numerous scope changes, the final product consisted of two cities on separate 125 and 150 acre sites. Work in place included the erection of 1,341 strongback tents, 67 concrete block buildings, installation of over 17 miles of underground piping and 53 miles of electrical cable, batching and placing 11,700 cubic yards of concrete, and the operation of 311 pieces of Civil Engineer Support Equipment in excess of 72,000 hours and 390,000 miles.

In July 1995 Naval Mobile Construction Battalion 5 relieved Naval Mobile Construction Battalion 4 at Guantanamo. Naval Mobile Construction Battalion 5 completed 23,000 man-days of total effort, finishing the $1.6 million, 30,000-meal per day, migrant galley in only 29 days and designing and constructing a 5,200 square foot stage for a televised MTV concert. Naval Mobile Construction 5 oversaw the Naval Construction Force withdrawal from Guantanamo, transporting $13 million worth of construction equipment and supplies off the island.

BOSNIA SUPPORT

Throughout 1995 the 2nd Naval Construction Brigade maintained a high state of alert for potential Seabee involvement in Bosnia. As part of the relief operations in the former Yugoslavian republics, the 2nd Naval Construction Brigade provided an officer to augment the United Nations High Commissioner for Refugees staff. This officer functioned as Engineering and Infrastructure Officer and served in a strictly non-military capacity assisting humanitarian relief operations.

In support of Joint Task Force "Provide Promise," in March 1995 a 35-person team from Naval Mobile Construction Battalion 3 successfully brought to a close the Navy s turn at providing public works maintenance and operations functions at the Joint Fleet Hospital in Zagreb, Croatia.

In October the brigade sent a staff officer to the headquarters of Allied Forces, South, in Naples, Italy, to help finalize the NATO operations plan for Bosnia. Liaison Officers from Naval Mobile Construction Battalion 133 were dispatched to the 26th Marine Expeditionary Unit aboard the USS WASP and to several locations in Bosnia, Croatia, Hungary, and Germany. By the end of 1995, Naval Mobile Construction Battalion 133 had deployed a 172-person detail to the Sava River crossing at Zupanja, Croatia, to construct the first and highest priority tent camp of the entire Operation "Joint Endeavor" Implementation Force (IFOR). The deployment into Croatia made history as the largest Seabee airlift in recent times and also marked the first deployment in which Seabees utilized the Air Force s new C-17 aircraft. In Bosnia Seabee detachment personnel constructed a number of tent camps in support of U.S. Army, 1st Armored Division units. The construction consisted of building tents and floors, dining facility tents, showers, lighting, and latrines. Upon completion of all assigned taskings at the end of February 1996, the Seabee detachment returned to it parent unit at Rota, Spain.

The Seabee deployment to the former Yugoslavia was characteristic of the period. With the Cold War over, by the mid-1990s the U.S. military was routinely involved in providing support to various United Nations undertakings. No matter what the international situation, however, you can be sure of one thing: when the toughest, dirtiest, meanest, most impossible construction jobs in the world come up, the Seabees will be sent because they "Can Do!" was not repeated after the signing of the Korean Armistice in July 1953. Crises in Berlin, Cuba, Africa, South America, and especially in Southeast Asia created the necessity to maintain military strength and preparedness. Seabee Reservists had helped meet the Korean crisis, but the onset of the Cold War had indicated the need for a basic reorganization of Seabee capabilities as well as for increased Seabee numbers. Between 1949 and 1953, 13 battalions of two distinct types were accordingly established. The new establishments signified a gain in greater battalion mobility and specialization. The first type, the new Amphibious Construction Battalions, were landing and docking units. An integral part of the Fleet Amphibious Forces, their mission was to place causeways and ship-to-shore fuel lines, construct pontoon docks, and perform other functions necessary for

the expeditious landing of men, equipment, and supplies. Naval Mobile Construction Battalions constituted the second type. They were responsible for land construction of a

wide variety, including camps, roads, tank farms, airstrips, permanent waterfront structures, and many other base facilities.

BETWEEN THE KOREAN WAR AND THE VIETNAM WAR

Wide diversity marked the activity of the reorganized battalions during the decades following the Korean Armistice. The tasks of the Seabees were the tasks of a watchful peacetime. Wide-ranging, of tremendous variety, many were pioneering and experimental as well. They were a part of the developing roles -- in defense and in science -- of the U.S. Navy. In this decade, Seabee builders were again on six continents.

More building and less fighting became the keynote of Seabee activities and their peacetime achievements were no less impressive than those of wartime. On Okinawa, for example, the Seabees built a Marine Corps Air Facility using concrete precasting methods that earned the admiration of contractors throughout the Pacific area. Elsewhere, a small detachment of Seabees supervised and instructed Ecuadorans in modern construction methods while building a new Ecuadoran Naval Academy.

Beginning in 1955 Seabees began deploying yearly to the continent of Antarctica. As participants in Operation "Deep Freeze," their mission was to build and expand scientific bases located on the frozen continent. The first "wintering over" party included 200 Seabees who distinguished themselves by constructing a 6,000-foot ice runway on McMurdo Sound. Despite a blizzard which once destroyed the entire project, the airstrip was completed in time for the advance party of Deep Freeze II to become the first men to arrive at the South Pole by plane. The Seabees next assignment was to build a permanent scientific base on the continent. Over the following years, and under the most adverse conditions, Seabees added to their list of accomplishments such things as snow-compacted roads, underground storage, laboratories, and living areas. One of the most notable achievements took place in 1962 when the

Navy's builders constructed the continent's first nuclear power plant at McMurdo Station.

By far the largest and most impressive project tackled by the Seabees in the 1950s was the construction of Cubi Point Naval Air Station in the Philippines. Civilian contractors, after taking one look at the forbidding Zombales Mountains and the maze of jungle at Cubi Point, claimed it could not be done. Nevertheless, the Seabees proceeded to do it! Begun in 1951 at the height of the Korean War, it took five years and an estimated 20-million man-hours to build this new, major Navy base. At Cubi Point Seabees cut a mountain in half to make way for a nearly two-mile long runway. They blasted coral to fill a section of Subic Bay, filled swampland, moved trees as much as a hundred and fifty feet tall and six to eight feet in diameter, and even relocated a native fishing village. The result was an air station, and an adjacent pier that was capable of docking the Navy's largest carriers. Undoubtedly as important as the finished project, however, was the indispensable leadership and construction experience gained by the postwar generation of Seabees. The construction of Cubi Point Naval Air Station was a mammoth learning experience as well as a superb job well done.

The Seabee Reserve organization began a series of important changes in 1960. Following the Korean War the reserve grew to 242 divisions, each with 4 officers and 50 enlisted men. In July 1960 the Chief of Naval Operations granted authority for the establishment of 18 reserve battalions. These battalions were to be formed from the reserve divisions. In July 1961 battalion active duty training was initiated. In July 1967 the Chief of Naval Operations approved the establishment of four regimental staffs, later an additional four staffs were approved. This process of evolution finally culminated in the establishment of the 1st Reserve Naval Construction Brigade in September 1969. The brigade exercised overall control of the Reserve Naval Construction Force.

In 1961 the Seabees assembled a huge floating dry dock at Holy Loch, Scotland, for the service and repair of the Polaris missile submarines which cruised beneath the waters off Northern Europe. The dry dock, with a submarine tender anchored alongside, gave the

vital submarines a base that ended long trans-ocean cruises for the purpose of repair and resupply.

In 1962 Project "Judy" brought the Seabees to the historic Greek plain of Marathon. Living in a tent camp in a rural community, they built a Naval Communication Station from scratch. When the job was completed in 1965, the Seabees had fabricated and erected more than 100 major antennas and created a base with all the comforts of home.

Seabees participated in building missile ranges in the Atlantic and Pacific. They were also constructed housing and apartment complexes for U.S. servicemen and their families.

As indicated by the above-cited construction projects, Seabees during this period could be found everywhere. Construction battalions regularly deployed to Guam, Okinawa, Midway, the Philippines, Cuba, Newfoundland, and Spain. Seabee detachments could also be found at dozens of lesser U.S. naval facilities throughout the world. The Seabees' primary mission was base expansion and maintenance. Their assignments included building and paving roads, laying sewer lines and water mains, building airfield and harbor facilities, restoring and converting old structures for new uses, wiring buildings, and erecting power lines. Such duty kept the battalions in a high state of readiness for the eventuality of advanced base building and amphibious support when war came again. The Cold War era was not without crises. In 1958, when dissidents threatened to overthrow the government of Lebanon and United States assistance was requested, Seabees brought the Marines ashore over their pontoon causeways. In addition to participating in the landing, the Seabees there were divided into Beach Salvage Teams to recover swamped equipment, improve beaches, and build roads.

Seabees were once again poised for action and on the scene in 1962 when, following the successful conclusion of the Cuban Missile Crisis, it was felt that Fidel Castro's regime might retaliate against the U.S. Naval Base at Guantanamo Bay, Cuba. Under the constant threat of imminent ground attack or sniper fire, Seabees worked with speed and skill to fortify the base perimeter.

During this period Seabees assumed yet another new role -- that of an operationally-ready disaster relief force. Trained to build and fight, Seabees proved equally capable of quickly rebuilding ruins and combatting peril. When the Greek island of Cephalonia was devastated by an earthquake in 1953, Seabees took part in emergency relief operations. In mid-January 1961 Seabees, with typical ingenuity, used pontoons to save a California beach community threatened by tremendous tides. Seabees restored power and rebuilt damaged structures when Typhoon "Karen" destroyed much of Guam in 1962. Later, in 1964, Seabees were on the scene restoring utilities and building roads in a matter of hours after Alaska was struck by a devastating earthquake and tidal wave. When yet another typhoon ravaged an island in the Azores, Seabees arrived quickly with prefabricated housing units to lend vital assistance to the homeless. On several occasions, Seabees manned their equipment to successfully battle forest and brush fires in the United States.

In the late 1950s and early 1960s, Seabee Teams, another proud addition to the Seabee family, were born. This era marked the first use of these small detachments for local military aid and socioeconomic projects in underdeveloped countries. By 1963 this vital aid program had been refined in both organization and aims, and had become a regular feature of Seabee activity abroad. The Seabee Team usually consisted of thirteen carefully selected, experienced men -- one junior Civil Engineer Corps officer, eleven construction men, and a hospital corpsman. Such teams proved exceptionally effective in rural development programs and for teaching construction skills to people in such diverse locations as Africa, Central and South America, Southeast Asia, and later in the Trust Territories of the Pacific Islands. For instance, in 1962 a Seabee Team arrived in the Republic of Haiti to restore a collapsing municipal pier that was vital to the national economy. The following year Spanish-speaking Seabees built and staffed a technical school in Santo Domingo. A Seabee Team in Costa Rica protected the imperiled city of Cartago from a disastrous mud-flow by building dams and dikes. In other far-flung locations Seabee Teams constructed roads, schools, orphanages, public utilities, and many other community structures.

However, much more important than the actual construction work they accomplished were the skills team members imparted to the local residents. Their true success was in enabling the local populous to continue old projects and initiate new ones long after the Seabees have left the region. There is no doubt that the "Can Do" Seabee Teams have more than earned their additional measure of recognition as the "Navy's Peace Corps."

It was during the summer of 1964 that the Seabees first went to work for the State Department. The program was initiated following the discovery of electronic surveillance devices planted throughout the U.S. Embassy in Moscow. To prevent future incidents of this nature, Seabees were used to perform all construction and renovation in security sensitive areas of Foreign Service facilities abroad. In addition, they were tasked with the supervision of private contractors assigned to do construction work in non-sensitive areas. Despite its beginnings in 1964, it was not until 1966 that the Naval Support Unit, State Department, was officially established to administer Seabees assigned to support the Foreign Service. Because of the superb on-the-job performance of these Seabees, the State Department happily made them a permanent part of its operations.

Thus, a peacetime pattern of battalion training and deployment took shape in the years following the Korean War. This pattern, however, was drastically altered in 1965. The war in Vietnam brought American military intervention on a large scale and effected major changes in Seabee activity worldwide. In the spring of 1965, there were 9,400 Seabees on active duty at various sea and shore locations; most of these Seabees were assigned to ten, reduced-strength Naval Mobile Construction Battalions. These relatively few Seabees, however, were fully prepared to write a new chapter in the history of the builder-fighters.

THE SEABEES IN SOUTHEAST ASIA

Beginning in 1964 the United States military buildup in South Vietnam interrupted the normal peacetime deployment pattern of the Naval Construction Force. The Seabees were slated to play an important and historic role in the growing Southeast Asian conflict. By autumn of 1968, when Vietnamese requirements reached their

peak, world-wide Seabee strength had grown to more than 26,000 men, serving in 21 full-strength Naval Mobile Construction Battalions, 2 Construction Battalion Maintenance Units, and 2 Amphibious Construction Battalions.

U.S. Navy and Seabee activity in Southeast Asia, however, long predated the Vietnam War. In fact, the first U.S. Navy involvement in Vietnam took place as early as May 1846. In that year, the USS CONSTITUTION, while on a world cruise, anchored in Danang Bay to take on water and foodstuffs. While there, Captain John Percival, USN, the CONSTITUTION's skipper, received a request for assistance from Bishop Dominique Lefevre who had been imprisoned and condemned to death by Thieu Tri, Emperor of Cochin China.

In response to the bishop's plea for help, Captain Percival led a rescue party of 80 sailors and marines ashore. After seizing three Mandarins as hostages, he quickly dispatched a letter to the Emperor demanding the release of Lefevre. The message either went unheeded or undelivered, because a reply was never received. Deciding on an alternative course of action, Percival released the three Mandarins when they steadfastly promised that they would personally seek Lefevre's release. Still later, after hearing no more from the Mandarins and fearing that he had been tricked, Captain Percival set sail for Macao, where, nine days later, he apprised the French authorities of Lefevre's plight. A warship was promptly dispatched and, as a result, Bishop Lefevre was finally rescued. Thus, the story of the first United States intervention in Vietnam ended happily.

The second instance of significant of U.S. Naval activity in Vietnam took place 108 years later and, this time, the Seabees were prominent participants. The 1954 Geneva agreements, which recognized the North Vietnamese communist government of Ho Chi Minh, also contained a provision which gave the Vietnamese populace an opportunity to choose whether they would live in the north or the south of a country newly divided roughly at the 17th parallel. Prior to 18 May 1955, the expiration date of this provision, nearly 800,000 Vietnamese emigrated from north to south. Their exodus, in which four nations participated, has since come to be known as the "Passage to Freedom." During the mass migration, the

South Vietnamese government built reception centers and provided basic amenities, the French supplied ships and planes, and the British provided an aircraft carrier. For its part, the United States organized Navy Task Force 90, comprising more than 50 ships. Through the concerted effort of these four governments, 310,000 refugees were evacuated from North Vietnam. In addition, 68,857 tons of military equipment and 8,135 military vehicles which, furnished to France under the Mutual Defense Assistance Program, were kept from North Vietnamese hands.

As members of Task Force 90, Amphibious Construction Battalions One and Two took part in the "Passage to Freedom." In Danang, where the USS CONSTITUTION had stopped more than a century before, a detachment from Amphibious Construction Battalion One built and operated a recreation facility for U.S. personnel involved in the ferrying operation. Another detachment from the same battalion constructed a refugee tent camp and accompanying water and power supply facilities at the mouth of the Saigon River. This Seabee-built camp served as a reserve living area for the overflow of refugees from Saigon. Since the Geneva accord specifically prohibited the landing of foreign military units or the establishment of foreign military installations in French Indo-China, the Seabees of this detachment were required to wear civilian clothes and to remove all U.S. markings from their equipment. Nevertheless, as a result of their humanitarian efforts, the Seabees of Amphibious Construction Battalion One were awarded the Vietnamese Presidential Unit Citation. Detachments from Amphibious Construction Battalion Two were originally scheduled to build a causeway across the beaches adjacent to the North Vietnamese city of Haiphong. Over this causeway military equipment and refugees were to be transferred to the many ships lying offshore. The plan, however, was soon abandoned because of French opposition and the later discovery that the previously selected beaches were unsuitable for such a causeway. Instead, all loading operations were carried out from the Haiphong waterfront, and the Seabees were diverted to the south to help their comrades with the construction of the massive refugee camp. The Seabees labored for about one month in Vietnam and, before being relieved, made an important contribution to the success of this historic "Passage to Freedom."

Two years later, Seabees were to visit Vietnam one more time before the conflagration of the 1960s. During the summer of 1956, a team from a Seabee construction battalion was sent to the newly-established Republic of Vietnam to conduct a survey of some 1,800 miles of existing and proposed roads. Two solid months of seven-day-a-week labor in extremely rough territory yielded valuable results. When the Seabees returned almost ten years later, these results helped them build many of the roads that were then crucial to the conduct of the war.

As tension continued to mount in Southeast Asia during the 1960s, the Seabees first returned in the form of thirteen-man Seabee Teams, capable of performing a great variety of tasks. Although small in size, these units possessed unique capabilities never before assembled in such compact but highly effective and versatile packages.

In 1963 Seabee Teams were sent to Thailand to assist in the Royal Thai Government's Accelerated Rural Development Program. In the northern provinces these diversified units taught and advised local Thais in an effort to help them form the cadre of essential rural public works organizations. Three years of diligent work in this region was finally concluded in May 1966.

In early November 1966, the Seabee Team program in Thailand shifted from rural development to the Thai Border Patrol Police Program for the development of remote area security. The program's underlying aim was to win village support for the government in regions continually plagued by communist insurgency. Before the termination of all Seabee Team efforts in Thailand in 1969, these skilled units had made significant progress toward the attainment of this national aim.

Also in 1963, two years before the first full Seabee battalion arrived, Seabee Teams were laboring in South Vietnam. They constructed small support points throughout the interior of South Vietnam to counter Viet Cong political influence in the villages. The teams built U.S. Army Special Forces camps, performed civic action tasks, and conducted military engineering projects under the Civil Irregular Defense Group Program.

Seabee Team activity in South Vietnam continued to grow. Generally working in remote rural areas, away from large population centers, the Seabees served throughout twenty-two provinces scattered from the Mekong Delta, along the Cambodian border and the Central highlands, to the North Vietnamese border.

In the early years, only two teams at a time were employed in these regions, but by 1969 the number of teams in-country had grown to 17.

Seabee Team accomplishments were many and varied. The U.S. Army Special Forces, who were engaged in training and advising Vietnamese Strike Forces and the Civilian Irregular Defense Group in anti-guerilla fighting and defense tactics, required fortified camps in advance areas able to withstand recurring ground and mortar attacks. Besides constructing these special camps, Seabee Teams were called upon to build access roads and nearby tactical airstrips. Further, in South Vietnamese hamlets and villages, teams carried out numerous civic action projects. From training local inhabitants in basic construction skills to providing desperately needed medical assistance, the Seabees made a significant impact on the Vietnamese populace.

While they were primarily builders and instructors, Seabee Team members were sometimes directly involved in battle. Perhaps the most famous such battle occurred in June 1965 at Dong Xoai, 55 miles northeast of Saigon. When Viet Cong troops overran a Special Forces Camp containing 400 South Vietnamese and allied Asian troops, 11 men of a U.S. Army Special Forces team and nine men of Seabee Team 1104, seven of the Seabees were wounded and two killed. One of the dead was Construction Mechanic 3rd Class Marvin G. Shields, USN, who was posthumously awarded the Medal of Honor for conspicuous gallantry in carrying a critically wounded man to safety and in destroying a Viet Cong machine gun emplacement at the cost of his life. Not only was Marvin Shields the first Seabee to win the nation's highest award, but he was also the first Navy man to be so decorated for action in Vietnam.

Beginning in 1970 Seabee Teams departed from South Vietnam without relief. This initiated a phase-down program which corresponded to United States troop withdrawals. Finally, on 18 April 1972, the last Seabee Team site located in Ham Tan, Binh Tuy Province, was closed. Although these unique units were physically gone, the common people of Vietnam continued to reap the benefits of their many civic action projects.

In 1965 the steadily increasing insurgency of the National Liberation Army (Viet Cong), made the large scale commitment of U.S. troops a necessity. Although Seabee Teams had been active in the Republic of Vietnam since 1963, it was not until 1965 that larger Seabee units were deployed to aid in the Vietnamese struggle. Not since the Second World War had the need for the Seabees been so great and not since Korea had Seabees worked under enemy fire. The first full Seabee battalion arrived in Vietnam on 7 May 1965 to build an expeditionary airfield for the Marines at Chu Lai. Others soon followed. From 1965 until 1969 the Seabee commitment in Southeast Asia rapidly increased, necessitating first the transfer of Atlantic Fleet battalions to the Pacific through a change of home port, then the deployment to Vietnam of Atlantic Fleet battalions, and later, the reestablishment of nine additional battalions. This effort culminated in the recall to active duty of two reserve battalions in May 1968, bringing to 21 the number of battalions rotating to Vietnam at one time or another. In addition, there were two Amphibious Construction Battalions lending support to the Vietnam effort. During the same time period, to meet a requirement for Seabees to support such installations as the Naval Support Activities at Danang and Saigon, the two Construction Battalion Maintenance Units, the two deployed Naval Construction Regiments, and the deployed Third Naval Construction Brigade rapidly increased their size.

During the war the total Seabee community grew from 9,400 in mid-1965 to 14,000 in mid-1966, to 20,000 in mid-1967 and, finally, to more than 26,000 in 1968 and 1969. To help meet the great need for personnel, the Navy recruited skilled construction workers at advanced pay grades. The Direct Procurement Petty Officer Program, reminiscent of early World War II recruiting efforts, proved highly

effective both in terms of total numbers recruited (more than 13,000) and quality of input.

Seabee accomplishments in Vietnam were impressive. They built roads, airfields, cantonments, warehouses, hospitals, storage facilities, bunkers and other facilities which were critically needed to support the combatant forces. The mobile "search and destroy" strategy adopted by the United States during the first years of the war shaped the two-fold mission of the Seabees in Vietnam. In addition to the many Seabee Team activities in remote locations, construction battalions built large coastal strongholds in the I Corps Tactical Zone which embraced the northernmost provinces of Quang Tri, Thua Thien, Quang Nam, Quang In, and Quang Ngai.

In 1965 the Seabee portion of the Vietnam Construction Program was concentrated at three northern coastal points, the ports of Danang, Chu Lai, and Phu Bai. The first six construction battalions sent to Vietnam were deployed to these three points and, by 1966, as the construction program gathered momentum, eight battalions were at work simultaneously in the I Corps Area.

At Danang the Seabees built three badly needed cantonments. Temporary facilities which included strongback tents, mess halls, shops, sheds, bathroom facilities, and a water distribution system were the first to be completed. In addition, Seabees repaired the important Danang River Bridge, rendered technical aid to South Vietnamese troops who were building ramps for tank landing ships and small boats, and constructed warehouses and petroleum storage tanks. Fortification of the cantonments was also essential because of frequent enemy attacks. Despite Seabee-built machine gun positions and bunkers for perimeter defense, one such attack succeeded in destroying the newly built advance base hospital, killing two Seabees and wounding over ninety. In true Seabee tradition, the men rapidly rebuilt the entire hospital complex.

At Phu Bai, near the ancient imperial capital of Hue, the Seabees developed yet another coastal point into an advance base. There, the construction men built a fleet logistic support unit cantonment. Besides camp construction, the project entailed raising, widening, and

surfacing a low peninsula which jutted 1,500 feet out into the South China Sea. The causeway served as an unloading ramp for cargo-laden landing ships. In addition, the Seabees built a large antenna field which substantially modernized communication systems in the war-torn northern provinces. Two smaller cantonments, one for a medical battalion, were also constructed.

As U.S. Marines based at Danang pushed search and destroy operations into the interior of the I Corps Area, the need arose for increased air cover and, thus, an additional air strike facility. It was decided that the Seabees would build a 3,500-foot expeditionary airfield at Chu Lai, 50 miles south of Danang. Since the Viet Cong controlled the surrounding mountains and there were no nearby port facilities, the Seabees landed on the beaches of Chu Lai in the first major U.S. Navy amphibious operation since the Lebanon crisis of 1958. Matching the feats of their fabled Second World War predecessors, the Vietnam-era Seabees laid the last aluminum plank on the airfield only 23 days after coming ashore. The very next day planes began operations against the Viet Cong from the newly-built airstrip. The Seabees continued their work at Chu Lai by adding a parallel taxiway, four cross taxiways, and parking aprons. Before their task was completed, the Seabees had rapidly erected two cantonments, warehouses, hangars, and a host of other vital facilities.

By the end of 1965, Seabees had pioneered and laid the ground-work for three major advance bases in the northern provinces of the Republic of Vietnam. From these bases, combatant forces received the critical support necessary for increasing attacks into the interior. In the words of Secretary of the Navy Paul H. Nitze, the Seabees had "contributed mightily to constructing the vast infrastructure necessary for a major war in a primitive, remote area." The bastions built on the upper coast of South Vietnam demonstrated their worth in 1966 and 1967 when Allied forces, supplied from these points, crushed major North Vietnamese offensives through the Demilitarized Zone and Laos.

During 1966 the Seabees continued to build at Danang, Phu Bai and Chu Lai, expanding these bases and erecting more permanent structures for the men and equipment assigned to them. At the same time, Seabees entered the troubled, northern-most province of

Quang Tri to build a hill-top fort of concrete bunkers at Lang Vei. This vital outpost overlooked a feeder line of the Ho Chi Minh Trail. They also built facilities at the Marine base at Dong Ha and the Army artillery post at Comm To.

Among the numerous construction projects completed in 1967 was an alternate airfield at Dong Ha and the famed Liberty Bridge, 80 miles southwest of Danang. Even though the northeast monsoon season had already begun, the airstrip was completed in only 38 days. The Liberty Bridge, which spanned the Thu Bon River, was one of the most impressive undertakings of the war. Built to withstand the incredible expansion of the river during the monsoon season, the completed bridge was 2,040 feet long and towered 32 feet above the low water level. While construction of such a bridge would have been difficult under normal circumstances, the Seabees were required to work in a remote area of Vietnam known to contain large concentrations of enemy forces. Despite tremendous difficulties, the bridge was finished in only five months.

During the bitter struggle of the Tet offensive in February of 1968, Seabees built and fought in direct support of the Marine Corps and Army. While the battle for Hue raged at fever pitch, Seabees from Phu Bai were summoned to rebuild and repair two vitally needed concrete bridges. When enemy snipers drove the Seabees from their work, they organized their own combat teams which silenced the snipers and let them complete their important task. In the spring, the Seabees went to work on the Danang to Hue railroad and put it quickly back into service. Constant enemy harassment had suspended service on this line since 1965.

Naval Construction Force strength reached its peak shortly after the beginning of the 1968 Tet Offensive. During that and the following year there were more than 11,000 Seabees serving in South Vietnam. Although the Navy's construction men continued to labor in the northern provinces, building city-like cantonments and upgrading previously constructed facilities, the priorities of the war also began to demand more and more of their skills in the south.

After responsibility for conducting the war was turned over to the South Vietnamese and American military operations in the north

were significantly reduced, the Seabees labored to prepare the Vietnamese for the ultimate withdrawal of all American combatant troops. In the Mekong Delta they built a string of coastal bases and radar sites which would allow the Vietnamese Navy to completely take over coastal surveillance in this area of "brown water" warfare. As thousands of American troops were returning home, Seabees continued to build. Only now, however, they built hospitals at Danang, Chu Lai, Phu Bai, Quang Tri and many other towns and villages throughout the country.

When in 1970, Seabee activity drew to a close and the withdrawal of the last units commenced, the Navy's builder-fighters had made a lasting contribution to the people of South Vietnam. In a war where winning the hearts of the people was an important part of the total effort, Seabee construction skills and medical assistance proved powerful weapons in the Vietnam "civic action" war. The recitation of events and the quoting of statistics fail to reveal the true nature of the Seabees' involvement during the Vietnam years. True, they supported the Marines at Chu Lai and Khe Sanh, reopened the railroad line between Hue and Danang, struggled with the logistics problems of the Mekong Delta, constructed a new naval base on a sand pad floating on paddy mud, and built staggering quantities of warehouses, aircraft support facilities, roads, and bridges. But they also hauled and dumped numerous tons of rock and paving on roads that provided access to farms and markets, supplied fresh water to countless numbers of Vietnamese through hundreds of Seabee-dug wells, provided medical treatment to thousands of villagers, and opened up new opportunities and hope for generations to come through Seabee-built schools, hospitals, utilities systems, roads and other community facilities. Seabees also worked with, and taught construction skills to the Vietnamese people, helping them to help themselves and proving that the Seabees really are "builders for peace."

AFTER VIETNAM

When the de-escalation of United States activity in Southeast Asia got underway, Seabee strength was once again reduced. By September 1970, the naval mobile construction battalions were down to the planned post-Vietnam level of ten full-sized battalions.

Because of the reduction of the Naval Construction Force in Vietnam, on 8 December 1969, the headquarters of the 30th Naval Construction Regiment was moved from Vietnam to Okinawa in the Ryukyu Islands, and on 1 May 1971 the headquarters of the 32nd Naval Construction Regiment was moved from Vietnam to Roosevelt Roads, Puerto Rico. By the end of 1971 most Seabees were employed outside of Southeast Asia. Thus, on 9 November 1971, the 3rd Naval Construction Brigade was disestablished.

As the Seabees entered the post-Vietnam era, they found themselves employed on major peacetime projects which had been deferred or neglected because of wartime priorities. Alert battalions were reestablished in the Atlantic and Pacific Fleets at Roosevelt Roads, Puerto Rico; and on Okinawa, in the Ryukyu Islands. The men of the Naval Construction Force found themselves employed outside their home port fleet areas. No geographical limitations existed as battalions and details were deployed to satisfy the current and ever-increasing demand for Seabee expertise. For example, after the reestablishment of the alert battalions, one battalion, Naval Mobile Construction Battalion Four, served first in 1970 as the Pacific alert battalion, and then in 1972 as the Atlantic alert battalion.

The post-Vietnam Seabees were involved in new construction frontiers: the Indian Ocean, the Trust Territory of the Pacific Islands, Europe, on the ocean floor itself, and in most of the oceans of the globe. Though younger and fewer in number than their World War II predecessors, Seabees continued to demonstrate the same old "Can Do" spirit.

DIEGO GARCIA

One of the major projects for the Naval Facilities Engineering Command and the major project for the Seabees in the 1970s and early 1980s was the construction of a naval complex on the atoll of Diego Garcia, part of the British Indian Ocean Territory. Diego Garcia, one of the 52 coral atolls of the Chagos Archipelago, was located in the Indian Ocean 960 miles south of India and 7 miles south of the equator. The 6,700 acre, heavily vegetated atoll was horseshoe-shaped with a perimeter of approximately 40 miles and average

elevations of 3 to 7 feet. The annual rainfall was approximately 100 inches.

On 24 October 1972 the U.S. and British governments signed an agreement concerning the construction of a U.S. Naval Communication station on Diego Garcia. The purpose of the facility was to provide a necessary link in the U.S. defense communications network and furnish improved communications support in the Indian Ocean for ships and aircraft of both governments. The U.S. was to build the facility using Naval Construction Force personnel.

The Diego Garcia base was initially planned as an austere communication station with all necessary supporting facilities, including an airstrip. On 23 January 1971 a nine-man reconnaissance party from landed on the atoll to confirm planning information and carry out a preliminary survey of the beach landing areas. In early March a 50-man party from the same battalion and from Amphibious Construction Battalion 2 as well as other specialist personnel arrived by LST, and was followed by an advance party of 160 men from Naval Mobile Construction Battalion 40. These men were to construct a temporary Seabee camp, water and electrical distribution systems, a dining hall, laundry, refrigeration and storage facilities. Finally, they were to build an interim 3,500-foot airstrip.

In October and November, Detachment CHAGOS of NMCB 71 and the whole of NMCB 1 arrived, marking the beginning of large-scale construction. NMCB 1 built the transmitter and receiver buildings and placed the base course for the permanent runway and parking apron. In July 1972 NMCB 62 relieved NMCB-1 and took over the departing battalion's projects. On 25 December the first C-141J transport landed on the newly completed 6,000 foot runway with the Bob Hope Christmas Troupe. The full 8,000 foot permanent runway with adjoining taxiway and parking apron was completed by March 1973; and on 20 March, exactly two years after construction began, the U.S. Naval Communication Station, Diego Garcia, was officially established.

Worked commenced on the second construction increment, a $6.1 million project which involved the construction of a ship channel and turning basin in the lagoon. This project, however, was contracted to

a Taiwanese firm. Seabees, however, continued to work on support and personnel facilities in the cantonment area at the northern tip of the atoll. The second major area of construction was the airfield and its supporting facilities. Revised requirements called for the extension of the original 8,000-foot runway to 12,000 feet and additions were made to the parking apron and taxiways. New hangars and other support facilities were also built. In addition, construction of extensive petroleum, oil and lubricant storage facilities was initiated. The Navy required 480,000 barrels of storage to support ship and aircraft needs and the Air Force required an additional 160,000 barrels. During 1973 and 1974 Seabee units worked on all these projects. Because the final mission of Diego Garcia was still evolving, it was clear that still more construction would take place in the years to come.

In 1975 and 1976 Congress authorized $28.6 million to expand the Diego Garcia facilities to provide minimal logistics support for U.S. task groups operating in the Indian Ocean. This mission expansion called for construction of a fuel pier, airfield expansion, and more petroleum, oil and lubricant storage, and personnel support facilities. Additional projects were undertaken in 1978. Construction was accomplished by both Seabees and private contractor personnel and it was anticipated that the Diego Garcia project would finally be completed in 1980. World events in 1979 and 1980, however, forced a reevaluation of the U.S. defense posture in the Indian Ocean Area which indicated the need for pre-positioned materials to support a rapid deployment force and a more active U.S. presence in the area. It was decided to further expand the facilities at Diego Garcia in order to provide support for several pre-positioned ships, loaded with critical supplies. By the end of 1980 the Naval Facilities Engineering Command had advertised a $100 million contract for initial dredging at Diego Garcia to expand the berthing facilities.

In the early 1980s the construction effort at Diego Garcia rapidly shifted from Seabees to private contractors. The last full Seabee battalion, NMCB 62, departed the atoll in July 1982. While Seabees remained in detachments, contractor personnel took over the projects yet to be accomplished on Diego Garcia. Thus, what began as simply a communication station on a remote atoll became a major fleet and U.S. armed forces support base by the 1980s. By 1983 the

only Seabee unit remaining on Diego Garcia was a detachment of NMCB 62. The departure of this detachment in September 1983 ended twelve years of priority effort on the island that included some 220 projects for the Navy and Air Force, valued in excess of $200 million. The work the Seabees completed on Diego Garcia since 1971 represented the largest peacetime construction effort in their history. Diego Garcia was the major Seabee construction effort of the 1970s and they acquitted themselves well under the difficult and isolated conditions that exist there. When the Seabees arrived they lived in tent camps, when they departed they left a fully-developed, modern military facility, capable of supporting thousands of U.S. personnel.

SEABEE ACTIVITY AROUND THE WORLD

Other projects on which Seabees worked in the early 1970s included the upgrading of recreational and living facilities at the Naval Communication Station, Makri, Greece. There they built a radio facility; improved the base swimming pool; built tennis courts, and a softball field; and an addition to the enlisted men's club; and remodeled the barracks. At the Naval Facility, Souda Bay, on the island of Crete, Seabees built an open storage facility, a pipe and canvas enclosure, and a helicopter pad. In Sigonella (Sicily), Italy, at the Naval Air Facility they installed diesel units and "no break" generators, and remodeled barracks and the general mess, built an air-frame repair shop, power-check pad, ordnance magazine, enlisted man/chief petty officer club, handball court and theater. At the Fleet Support Office, La Maddalena, Italy, Seabees built a gymnasium and a playing field unit.

In Spain Seabees worked on a number of projects at the Rota Naval Station. These projects included remodeling barracks and the enlisted men's club and building additions to the base telephone exchange and warehouse. Seabees also installed a new fender system on Pier #2 and built a causeway connection. They also reconstructed the Rota Seabees Camp which had deteriorated because it had been vacant from 1965 until 1971. In London, England, Seabees remodeled a Marine barracks; in Greenock, Scotland, they built a bowling alley; in Holy Loch, Scotland, they renovated the public works department garage and the hobby shop

facility; at the Naval Security Group Activity, Todendorf, Germany, they built an addition to an operations building and installed a new emergency generator.

Meanwhile, in the Pacific, the major efforts of the Seabees were centered on Okinawa in the Ryukyu Islands, and on Guam in the Mariana Islands. On Okinawa they performed many different and challenging assignments. The jobs included new structures at Camp Kinser, a new water pipeline, a modern underground electrical distribution system and a major land grading project at the Marine Corps Air Facility at Futema. On Guam Seabees built a Seabees Camp. The camp, dedicated to William Lee Covington, a young Civil Engineer Corps officer killed in Vietnam, included approximately 39 pre-engineered buildings, housing facilities, offices, shops, a galley, living quarters, a chapel, and utilities. Other projects completed during the 1970s included a major swimming pool complex at the Naval Hospital, a culvert and earthmoving project at the Naval Magazine, a chief petty officer club, community center and teen center at the Naval Communication Station, and four steel buildings at the Polaris Point submarine facility.

In 1972 the Chief of Naval Operations announced that female naval personnel would be granted entry into all Navy ratings. That same year the a woman sailor had her request to cross-rate approved and subsequently became the first female Seabee. Many more would follow her, and by the 1990s women had become common in the ranks of the Seabees.

Seabees in Taiwan worked on the rehabilitation of barracks and on the construction of duplex cabins; at Iwakuni, Japan they worked on a Marine Corps confinement facility, an exchange warehouse, and a water line. In the Philippines they constructed an aircraft rinse rack and runway support facilities.

In Puerto Rico Seabees renovated roads during the 1970s, built a commissary and new buildings at Camp Moscrip, and carried out numerous civic action projects. During 1977 Seabees carried out a beach-erosion preventive project in Argentia, Newfoundland; and rehabilitated housing at Guantanamo Bay, Cuba.

The Seabees were also active in Antarctica, both during and after the Vietnamese War. As part of Operation "Deepfreeze," they provided logistic support for the scientific research programs that were conducted by seventy American universities, government agencies, and industrial firms. The return of Naval Mobile Construction Battalion 71 from Antarctica in 1974 marked the end of Seabee participation in Operation "Deepfreeze." The National Science Foundation, which oversaw the program, accomplished all remaining construction by contract.

In addition to the work performed by the mobile construction battalions, the amphibious construction battalions were extensively employed. Both amphibious battalions engaged primarily in fleet exercises and other training operations. Additionally, amphibious Seabees in the Pacific Fleet found time to accomplish earthwork for a canoe lagoon and a camping area at Imperial Beach, California, to place and remove concrete obstacles in South Bay for underwater demolition teams and Sealab training, and to complete the first increment of a sheet pile bulkhead project. Meanwhile, Seabees of the Atlantic Fleet constructed a boat marina at the Little Creek Amphibious Base.

Detachments of the amphibious Seabees also served in the Mediterranean and Caribbean. These were detachments of the amphibious ready groups that were prepared for amphibious assaults whenever necessary.

In June 1969 the first Seabee Team to be employed in the Trust Territory of the Pacific Islands landed at Moen Island in the Truk District. While the concept of civic action was not new to the Seabees, the Micronesian environment was totally different from that of Thailand and Vietnam, where the thirteen-man Seabee teams had proven so successful. The Trust Territory was a United Nations strategic trust administered by the United States under a 1947 agreement. While the area was not war torn or threatened as were Vietnam and Thailand, the Trust Territory was in an embryonic stage of political and economic development.

Under an agreement between the Secretaries of the Interior and Defense, and at the specific request of the native people at each

location, Seabee teams were provided to assist the Micronesians in constructing facilities, roads, and utilities needed to enhance the economic development and improve the health of the people of the Trust Territory. While construction of such facilities provided tangible evidence of Seabee accomplishments in Micronesia, the major emphasis and greatest potential benefit was the valuable training in construction skills that was made available to the people of Micronesia. This training enabled them to accomplish essential construction themselves.

Seabee Teams in the Trust Territory served on the islands of Ponape, Truk, Palau, Kusaie, and Yap. The teams built roads, dispensaries, water tanks, bridges, and public buildings. The response of the Micronesian people to the civic action program was highly favorable in all districts. The tangible benefits were readily apparent in the improved roads, utilities and new facilities.

In the summer of 1972 a Seabee Team, with assistance from an amphibious construction battalion, assembled an Ammi pontoon hospital barge on Lake Titicaca high in the central plateau of Bolivia. The project was sponsored by the Bolivian Navy with assistance from the United States government. The barge was a 90 by 28-foot Ammi pontoon with a prefabricated Lewis building superstructure that served as a dispensary. It was powered by two diesel outboard motors and contained all the basic medical and dental facilities of a small hospital.

In the mid-1960s increased interest in exploiting the ocean for defense purposes spotlighted a need to establish an underwater construction capability within the Navy. A team of Seabee divers was formed during 1968 to launch, implant, and recover the Tektite I habitat in the Caribbean. The success of this operation led to additional Seabee underwater construction assignments. It also led to the establishment of two Seabee underwater construction teams: Underwater Construction Team One under the cognizance of the Twenty- first Naval Construction Regiment at Davisville, Rhode Island; and Underwater Construction Team Two under the cognizance of the Thirty-first Naval Construction Regiment at Port Hueneme, California. After their formation, both teams performed successfully

in numerous operations, including the installation, maintenance, and repair of submarine cables and pipelines; the implanting and recovery of moorings and acoustic and magnetic systems; underwater surveys; and harbor and dry dock inspections. The teams demonstrated a capability to perform, and they added dimension to Naval Construction Force capabilities, previously generally restricted to efforts on land.

In 1970 the Chief of Naval Operations, in his concern for improving the quality of life ashore for Navy personnel and their families, established a new program for improving shore establishment habitability. He committed the Seabees to lead and direct his Self-Help and Shore Establishment Habitability Improvement Programs.

Under this program active and reserve fleet Seabees and construction battalion units participated in improvements to personnel support facilities. The construction battalion units consisted of approximately forty or fifty men and were established to provide more effective and worthwhile duty for Seabees while stationed ashore. In addition to training on construction projects and continuing the Seabees' combat and disaster recovery readiness, the units guided and supervised the efforts of other Navy ratings in improving the sailor's living conditions ashore under the self-help concept.

Examples of the projects to improve living conditions ashore range from very simple bus shelters to large hobby shop complexes. Other typical examples included improvements to living facilities, temporary lodgings, parking garages, on-base parking, mobile home parks, and locker and recreation clubs. In 1981 sixteen construction battalion units were actively engaged in executing such projects in the United States.

In addition to performing their regular construction functions, Seabees participated in humanitarian and disaster recovery assignments in the wake of several natural disasters and political upheavals. One such political upheaval was the collapse of the

Republic of Vietnam in 1975. Following this event, Seabees provided support to the Vietnamese refugee program, Operation "New Life."

OPERATION "NEW LIFE"

On 29 April 1975 the government of the Republic of Vietnam surrendered to the North Vietnamese as North Vietnamese regulars and Viet Cong closed in on Saigon. Before the surrender, President Gerald Ford ordered a mass evacuation of Americans and Vietnamese from the capital. For the latter who were political refugees, it meant the beginning of a long journey to a "new life" in the United States. In addition to the evacuation by air, many thousands of Vietnamese chose to flee the country in ships, and even small boats. The first stop for many on this journey was Grande Island, located at the entrance of Subic Bay, Republic of the Philippines. Here, Seabees, assisted by Marines and civilian employees from the Navy Public Works Center built a tent camp for the refugees. From Grande these refugees moved to the larger camps which had been built on Guam in the Marianas.

On 23 April 1975 the 30th Naval Construction Regiment directed all Seabees on Guam to halt their normal construction projects and mount an around-the-clock effort to prepare facilities to house the approximately 50,000 refugees who were even then fleeing South Vietnam. Seabees first rehabilitated the abandoned Naval Hospital Annex at Asan Point. The Seabees worked around the clock and by Friday, 25 April, the camp received the first arriving refugees and quickly filled to its 10,000-person capacity. On 24 April Seabees began construction of a huge, 50,000 person tent camp at Orote Point. This was a monumental undertaking as it involved clearing the jungle from more than 50 acres of land. Once again, the Seabees worked 24-hours a day and the camp received its first refugees on 26 April. Not only did construction ratings work, but the battalions also pressed their support personnel into action. Supply clerks, mess cooks, and yeoman all pitched in and worked around the clock to get the job done. Construction continued and in about a week, Seabees erected 2,000 tents with no end in sight. Support utilities were also provided: messing facilities and kitchens, thousands of feet of water mains to supply showers and washing facilities, as well as the necessary sanitary facilities.

As refugees were processed and flown to the U.S., the camp population gradually dropped. Then, the first ships carrying refugees arrived and the camp population swelled once again. A peak camp population of 50,233 was reached on 14 May, after that the pace gradually slackened as the flow of refugees to the states outran the influx of new refugees. By 26 June the camp population had dropped to 10,138 and Operation "New Life" began to wind down.

DISASTER RELIEF

In January 1975 a Seabee salvage team was sent to Managua, Nicaragua, following a major earthquake which heavily damaged that city. After completing its primary mission of salvage at the U.S. Embassy, the team then salvaged badly-needed hospital equipment for the El Ritiro Hospital in Managua.

In December 1975 Seabees of Construction Battalion Unit 417 engaged in flood control operations at Mt. Vernon, Washington, when the Skagit River overflowed and threatened the town. In February 1976 Naval Mobile Construction Battalion 40 sent a detachment to Guatemala City to provide disaster relief following an earthquake which caused extensive damage to that city. In May 1977 Naval Mobile Construction Battalion 3 performed recovery and reconstruction work of all types on Guam in the wake of Typhoon "Pamela." In February 1980 Seabees from the 31st Naval Construction Regiment at the Naval Construction Battalion Center, Port Hueneme, California, battled a devastating flood at the nearby Pacific Missile Test Center, Point Mugu. Finally, Seabees went to the islands of Jamaica and Dominica in 1980 to help repair the extensive damage caused by Hurricane "David" in December 1979.

SEABEES KILLED IN ACTION IN WAR AND PEACE

Since the outbreak of World War II, 22 Civil Engineer Corps officers and 353 Seabees have been killed in action during wartime. During the last few decades, however, a new peacetime threat has emerged. Various disaffected groups in the world have increasingly

made use of terrorism as a weapon. Three Civil Engineer Corps officers and one Seabee are numbered among their victims.

At mid-morning on 3 February 1975 on the northeastern edge of the U.S. Naval Base at Subic Bay in the Philippines, Captain Thomas J. Mitchell, CEC, USN, Commander of the 30th Naval Construction Regiment, Commander Leland R. Dobler, CEC, USN, Commanding Officer of Naval Mobile Construction Battalion 133, and Lieutenant Charles H. Jeffries, CEC, USN, Officer in Charge of Detachment WALLABY of that battalion, were riding in a jeep on an inspection tour of a section of perimeter road which was being worked on by Lieutenant Jeffries's detachment. The three officers were driving in an isolated area approximately seven miles from base headquarters in deep jungle along the boundary between the base and Bataan Province when unidentified terrorists ambushed them, cutting the three men down in a hail of fire. Seabees from Detachment WALLABY, who were working about half a mile away, heard the shooting, rushed to the ambush scene, and notified base headquarters. Medical personnel were immediately flown to the scene, but the three men were dead when they arrived. U.S. Marines and Philippine Constables immediately moved into area to locate the attackers, but they were unsuccessful and the attackers were never positively identified. To this day, the three officers remain the victims of anonymous terrorists.

The latest incident of a Seabee falling victim to terrorist activity took place on 15 June 1985. Following completion of a routine repair project at a base in Greece, Steelworker 2nd Class Robert D. Stethem, USN, and four other members of Underwater Construction Team 2 were returning to the United States aboard TWA Flight 847 when Shiite Muslim terrorists hijacked the flight and diverted it to Beirut, Lebanon. The terrorists singled out Stethem and another Seabee for physical abuse. While the aircraft sat at the Beirut airport, the terrorists beat Stethem over a prolonged period, and finally killed him with a bullet to the head. After lengthy negotiations, the remaining passengers were finally freed. The four terrorists made good their escape into Beirut, but one was later apprehended in Germany and convicted of air piracy and murder.

THE SEABEE ORGANIZATION IN THE 1970'S AND 1980'S

Following the Vietnam War, the pressure to reduce the size of the Armed Forces made it necessary for the Seabees to rely more on the reserve force to offset the reductions in the active force. During the 1970s reserve Seabees experienced a closer association with their active counterparts than in the past.

Efforts were made to elevate the readiness posture of the reserve Seabee force through a variety of programs. One such program involved the establishment of Permanent Drill Sites for the reserve battalions at military installations within their respective geographical areas. Readiness Support Allowances were positioned At these sites. These allowances consisted of essentially a ten percent cross-section of the Advanced Base Functional Component for a Seabee battalion. This allowed the reserve battalions to develop year-round training programs. To effectively care for and utilize this readiness allowance, active-duty support personnel were assigned to each reserve battalion. Because of such measures, the mobilization readiness level of the Reserve Naval Construction Force substantially improved by the mid-1970s.

In late 1973, as part of the Navy's effort to realign the naval shore establishment, the mission of the Naval Construction Battalion Center, Davisville, Rhode Island, was revised. The center was reduced to providing storage and preservation facilities for advance base and mobilization stocks, and mobilization facilities to support the Naval Construction Force.

At the peak of the Vietnam War, the Davisville Center had supported six full-strength battalions. However, by 1973, the center was home port for only three battalions of peacetime strength and one underwater construction team. In addition, the 21st Naval Construction Regiment was located there. On 30 June 1974, Naval Mobile Construction Battalion 71 was transferred to the Naval Construction Battalion Center, Gulfport, Mississippi; Naval Mobile Construction Battalion 40 was transferred to the Naval Construction Battalion Center, Port Hueneme, California; and Underwater Construction Team 1 was transferred to the Naval Amphibious Base,

Little Creek, Virginia. Later in the year, on 27 November 1973, Naval Mobile Construction Battalion 1 was also transferred to the Gulfport Center. The last unit of the Naval Construction Force at Davisville, the 21st Naval Construction Regiment, was disestablished on 15 January 1975.

At the beginning of 1975 there were three regiments, ten mobile construction battalions, two amphibious construction battalions, two underwater construction teams, and one construction battalion maintenance unit on active duty.

The 31st Naval Construction Regiment at Port Hueneme, California, was responsible for the operational control of the battalions that made Port Hueneme their home port. These battalions were Naval Mobile Construction Battalions 3, 4, 5, 10, and 40. The regiment was also responsible for Underwater Construction Team 2.

The 20th Naval Construction Regiment at Gulfport, Mississippi, was responsible for the operational control of the battalions that made their home port in Gulfport. These battalions were Naval Mobile Construction Battalions 1, 62, 71, 74, and 133.

Amphibious Construction Battalion 2 and Underwater Construction Team 1 were located at the Naval Amphibious Base, Little Creek, Virginia; and Amphibious Construction Battalion 1 had its home port at the Naval Amphibious Base, Coronado, California.

Construction Battalion Maintenance Unit 302 was permanently assigned to the Public Works Department of the Naval Base at Subic Bay, the Philippine.

Finally, the 30th Naval Construction Regiment had its headquarters on Guam in the Mariana Islands. This regiment was responsible for the operations of the construction battalions while they were employed in the Western Pacific Ocean area, and the Seabee Teams employed in the Trust Territory of the Pacific Islands.

Before the end of 1975 a change in the planned peacetime strength of the Seabees led to a further reduction in the number of construction battalions. On 30 June 1975 Naval Mobile Construction Battalion 71 was disestablished. The following year saw the demise of yet another battalion when Naval Mobile Construction Battalion 10 was disestablished on 30 June 1976. The number of Naval Mobile Construction Battalions remained at eight during the remainder of the 1970s.

SECURITY ACTIVITY IN THE 1980'S AND 1990'S

Because the United States was faced with continuing threats to its national security during the 1970s and early 1980s, the nation had to make the most efficient use of its defense resources. In this context, the Seabees faced imposing challenges.

In the early 1980s political upheavals in the Caribbean and Central America resulted in U.S. military action which included participation by the Seabees. Detachments from Amphibious Construction Battalion 1 and 2 participated in Operation "Urgent Fury," the U.S. invasion of Grenada. Later, a handpicked detail of 100 Seabees from NMCB 74 sailed from CBC Gulfport for Central America and participated in the joint-services exercise, Operation "Big Pine II."

During 1981 Seabees based at the Naval Construction Center, Port Hueneme, performed a construction task of some interest. They constructed military and Secret Service support facilities at then President Ronald Reagan's ranch near Santa Barbara, California. During a subsequent "thank you" barbecue for the men involved, President Reagan was made an honorary Seabee.

On 11 November 1983, Naval Mobile Construction Battalion 1, then deployed at Rota, Spain, was alerted of a potential tasking in support of the U.S. Marines who were part of the Multinational Peacekeeping Force in Beirut, Lebanon. The tasking consisted of improving the living conditions of the Marines located at the Beirut International Airport. On 14 November NMCB 1 sent a survey team to Beirut; and on 24 November, Thanksgiving Day, Detail Bravo Lima, consisting of 1 CEC officer and 38 Seabees departed the battalion

main body for Beirut. In January 1984 the tasking was expanded; and on 5 January a second increment, consisting of an additional CEC officer and 39 Seabees was sent to Beirut. The battalion also shipped 61 pieces of equipment to Beirut in support of Detail Bravo Lima. The tasking was completed and the first increment returned on 17 February 1984; the second increment and the 61 pieces of equipment returned on 1 March 1984. This was the first involvement of Seabees under combat conditions since the Vietnam conflict.

On 15 August 1984 the 30th Naval Construction Regiment was disestablished on Guam. From this date, the Commander, Construction Battalions, Pacific Fleet, at Pearl Harbor, assumed responsibility for operational control of Naval Construction Force units in the Western Pacific Ocean Area.

On 1 July 1985, as part of the military expansion during the first term of the Reagan presidency, a new active-duty Seabee battalion, Naval Mobile Construction Battalion 7, was established at the Naval Construction Battalion Center, Gulfport, Mississippi. There were now a total of nine active-duty mobile construction battalions.

During the 1980s the Seabees provided support for the Fleet Hospital program. These Fleet Hospitals were rapidly deployable systems of expandable shelters, pre-positioned worldwide, and assembled/erected by Seabees. Of the 23 hospitals required, 8 would be built and supported by active-duty Seabees, 8 by Reserve Seabees, and the remainder programmed for future years. The Reserve Naval Construction Force participated in a field test of a partial hospital in Operation "Golden Shield" during 1986. The active-duty Seabees supported a follow-on test and evaluation of a complete 200-bed hospital in April and May 1987.

Amphibious Construction Battalion 2 became the first Seabee unit ever awarded the Joint Meritorious Unit Service Award. Secretary of Defense Caspar Weinberger signed the award on 2 October 1986. The award recognized ACB 2's unsurpassed operational tempo, including support of the Multinational Peacekeeping Force in Lebanon, and Operation "Urgent Fury" in Grenada, Teamwork 84 in Northern Europe, Ocean Venture 84 in the Caribbean, and Joint

Logistics Over the Shore Test II. Over 100 members of Amphibious Construction Battalion 1 were also eligible for the award, since they were assigned to Amphibious Construction Battalion 2 on temporary duty during Joint Logistics Over the Shore Test II.

During 1987 and 1988 Seabees participated in the West African Training Cruise. Civic action detachments were embarked on the USS SUMPTER which made port calls in Abidjan, Ivory Coast; Accra, Ghana; and Lome, Togo. These detachments received high praise from all concerned for their numerous civic action projects. In 1989 civic action detachments were embarked on the USS HARLAN COUNTY which made port calls in Guinea, Sierra Leon, Liberia, and Gabon. The same high praise was received.

As part of a reduction in forces, Naval Mobile Construction Battalion 62 was disestablished at the Naval Construction Battalion Center, Gulfport, Mississippi, on 31 July 1989.

On 22 September 1989 Hurricane "Hugo" struck the Charleston, South Carolina, area, killing 26 people and causing $5.9 billion of damage. Seabees from Naval Mobile Construction Battalion 5 and 133, home-ported at the Naval Construction Battalion Center, Gulfport, Mississippi; and Construction Battalion Unit 412 at Charleston immediately moved to provide disaster relief to both the military and civilian communities.

At 5:00 pm on 17 October 1989 an earthquake of 7.1 magnitude shook the San Francisco Bay Area. Both the civilian communities and Navy facilities in the area suffered heavy damage. Seabees from Construction Battalion Unit 416 at the Naval Air Station, Alameda; and Construction Battalion Unit 421 from Mare Island began providing immediate disaster relief. The following day Naval Mobile Construction Battalion 3's Air Detachment arrived on the scene, and convoys of men and equipment from Construction Battalion Unit 406 at the Naval Air Station, Lemoore; and Amphibious Construction Battalion 1 in San Diego, set out to bring relief to the bay area. Disaster relief was provided to both damaged naval and civilian facilities in the area. The latter effort included helping to outfit Federal Emergency Management Administration offices and bringing

warehouses in San Francisco up to habitable standards for those left homeless by the earthquake.

A Seabee Mobile Training Team (MTT) was deployed to Madagascar during 1989. The team consisted of a chief petty officer and 6 enlisted personnel. An MTT's primary function is to provide training for U.S. or local military or civilian personnel on specific equipment or trades. This team provided training for the Malagasy Army on the repair/maintenance/operation of $3.5 million worth of heavy construction equipment.

In 1990 the Seabees participated in two SOUTH PAC cruises. Both Naval Mobile Construction Battalion 7 and Underwater Construction Team 2 embarked civic action detachments on the USS SCHENECTADY and USS FLORIKAN. Port calls were made in the Marshall, Gilbert, Solomon, and Cook islands, and at Papua, New Guinea; Tuvalu, and Tonga. Naval Mobile Construction Battalion 1 participated in the West African Training Cruise (WATC). The battalion embarked civic action detachments on the USS BARNSTABLE COUNTY which made port calls at Cape Verde, Senegal, Gambia, and Guinea-Bissau. High praise was received from all recipients.

When Hurricane "Ofa" struck American Samoa in February 1990, Seabees from Naval Mobile Construction Battalion 40 and 133 were quickly on the job providing disaster relief and clean-up on the island of Tutuila.

Devastating floods struck central Tunisia in late January 1990, displacing families and destroying railroad lines and bridges. As part of Exercise "Atlas Rail," Naval Mobile Construction Battalion 3's Air Detachment worked jointly with Tunisian army engineers to repair flood-damaged rail lines. Later, this battalion's Sigonella detail performed civic action work in Morocco as part of Exercise "African Hammer."

OPERATION "DESERT SHIELD/DESERT STORM"

On 2 August 1990 the armed forces of Iraq began the invasion and subsequent conquest of the Emirate of Kuwait. Under United

Nations' auspices, the United States and other member nations responded by deploying military forces to Saudi Arabia. The immediate goal was to forestall further Iraqi aggression; the long-range goal was to compel Iraq to withdraw from Kuwait. The initial allied military undertaking to protect Saudi Arabia was dubbed Operation "Desert Shield."

Among the U.S. forces deployed to the region was the First Marine Expeditionary Force. Seabees were to provide construction support for this force. On 7 August the Seabees began preparations to deploy four battalions to the region: Naval Mobile Construction Battalion 4, 5, 7, and 40. On 13 August the first Seabees arrived in Saudi Arabia, an element of Amphibious Construction Battalion 1, comprising 210 personnel. These men immediately went to work unloading Marine Corps equipment and supplies from Maritime Pre-positioned Force ships.

During the period 10-20 August, 100 Seabees of Amphibious Construction Battalion 2 departed Norfolk, Virginia, on amphibious ships bound for the Persian Gulf. While in the gulf these Seabees participated in numerous exercises with the Marines to prepare for an amphibious assault in the region.

The second wave of Seabees to arrive were personnel from Construction Battalion Units 411 and 415; they erected and maintained Fleet Hospital Five, a 500-bed hospital facility at Al Jubail, Saudi Arabia. Both units had female Officers in Charge, marking a first for the Seabees.

By 14 September the Air Detachments of the four deploying Seabee battalions had arrived. Each comprised 89 men and could operate for 30 days with out resupply. On 27 September NMCB 40's main body arrived in country from Camp Covington, Guam. By 18 October all the battalion main bodies had reached Southwest Asia. NMCB 5 arrived from its home port at the Naval Construction Battalion Center, Port Hueneme, California; and NMCB 4 redeployed from Camp Moscrip, Puerto Rico. NMCB 7 redeployed from Camp Shields on Okinawa, and, unlike the other three battalions, was sent to Bahrain. In December NMCB 24, a reserve unit called to active duty, relieved NMCB 4. That same month, NMCB 5 and 40 were

joined by Details 15 and 16 of NMCB 1 which was deployed at Rota, Spain. The 3rd Naval Construction Regiment, a reserve regiment, was mobilized to provide command and control over the deployed battalions. By early February 1991, 2,800 Seabees and 1,375 pieces of equipments had been deployed to the region in support of Operation "Desert Shield."

Upon their arrival in Saudi Arabia, the Seabees built critically needed facilities at the four airfields where the Marine Air Combat Element had deployed. This entailed construction of parking aprons, as well as base camps to house the Marines pouring into the area. Next, the Seabees built ammunition supply points for the large amounts of ordnance being transported to the region. Once these needs were met, the Seabees shifted emphasis to improving living conditions in the Marine camps.

Base camps were built for the 3rd Marine Air Wing, Marine Air Groups 11, 13, 16 and 26, and the 1st and 2nd Marine Division. In Bahrain, NMCB 7 supported the Army and Air Force, as well as the Marines. The battalion built strongback tents, an aviation storage facility, a munitions transfer road, and a 60,000 square foot aircraft parking apron. In December, NMCB 74 relieved NMCB 7 in Bahrain, and the latter battalion moved 200 miles north to Ras Al Mishab in Saudi Arabia.

Among major projects completed during Operation "Desert Shield" were a headquarters complex for the First Marine Expeditionary Force and a 15,000 man camp for the Second Marine Expeditionary Force. The latter project was the largest wartime multi-battalion Seabee project since the Vietnam War. NMCB 1, 4, 5 (project lead), 7, 24, 40 and 74 worked on the project. Construction began in late November. The camp comprised six modules, each capable of housing 2,500 men. Each module contained berthing, office space, showers, toilet facilities, a galley, roads, and parking areas. The completed camp complex was dubbed "Wally World."

Completing these projects required the Seabees to work seven days a week, two twelve hour shifts a day. The only days off during the whole period of Seabee involvement in the Gulf were Thanksgiving and Christmas. The Gulf environment provided an

added challenge for the Seabees. When the first wave of Seabees arrived in August, the heat was intense, often reaching 1200 F. By the time most of the Seabee units had arrived in December, the heat had mitigated, daytime temperatures in the 70's dropping to the 30's at night. The other major problem was sand: it got into everything and was particularly hard on equipment.

Operation "Desert Storm," the expulsion of Iraqi forces from Kuwait began in early 1991. On 16 January 1991 the Allies initiated a massive air campaign against Iraq. Before it was over, Allied aircraft flew more than 40,000 sorties against Iraqi targets. At this time planning went forward for the 3rd Naval Construction Regiment to move into Kuwait in the wake of advancing Allied forces to open roads and airfields and provide immediate battle-damage repair.

In January 1991 the Marines began to move north in preparation for the expected ground assault on the Iraqis. In support of this, the Seabees began to concentrate on building and maintaining roads to serve as the main supply routes throughout northern Saudi Arabia.

After months of constructing millions of square feet of aircraft aprons, camps for tens of thousands of Marines, and hundreds of acres of ammunition and supply points, the Seabees prepared to support the ground assault into Kuwait. NMCB 5 moved half its strength to Al-Kabrit, 30 miles from the Kuwaiti border, and began construction of a Naval Construction Force Logistics Support Base from which the Seabees could provide the First Marine Expeditionary Force the construction support needed during the upcoming assault into Kuwait. The top construction priorities during this period were water, roads, and facilities for the Marine division assembly areas. Water was obtained by exploiting already-existing wells, and the Seabees built galley facilities for the 30,000 Marines of the 1st and 2nd Marine Divisions. A 40,000 man capacity enemy prisoner of war camp was
also built.

The most formidable task facing the Seabees was the road network required by General Schwarzkopf's "End Run" attack strategy. Spanning more than 30 miles of desert from Al-Mishab to Al-Kabrit, the "End Run" strategy ultimately required more than 200

miles of roads west and north of the Kuwaiti border. Because of the need to deceive the Iraqis, much of the construction necessary had to be done at the last minute. Working in the wettest weather seen in Saudi Arabia in years, Seabees completed the necessary construction in approximately two weeks. Thousands of trucks moved million of gallons of water and fuel, and tons of supplies, ammunition and spare parts on this road network to support the two Marine divisions making the assault. By the time the assault was launched, Seabees were maintaining approximately 200 miles of roads near the Kuwaiti border. One of these roads was an east-west corridor from Ras Al Mishab through Al Kabrit, continuing past Al Qaraah for a total distance of almost 100 miles. This six-lane road was traversed daily by more than 500 heavy haulers and thousands of tactical vehicles.

NMCB 5 and 40 relocated to the north and west. From this area, roads to the border, another well, and a 1,500-foot Remote Piloted Vehicle runway were built. On the day before the ground assault, Seabees dug in the 1st Marine Division command element on the border as the division moved into its attack positions.

On G Day, 25 February 1991, the Allies launched a massive ground assault against the Iraqis. The next day, an advance party from NMCB 5 and 24 entered Kuwait to prepare positions for the First Marine Expeditionary Force command element, and to repair airfields, maintain roads, and build more enemy prisoner of war camps. As the Seabees labored at these tasks, the smoke from hundred of burning oil wells turned day into dark. On 28 February, the Iraqi, devastated by the Allied attack, accepted a cease fire and the conflict ended. Construction ceased, and the Seabees returned to their units just south of the Kuwaiti border. Thus, ended the largest Seabee military action since the close of the Vietnam War.

The Gulf War demonstrated the ability of the Naval Construction Force, both active and reserve, to meet the exigencies of a large-scale military operation. Not all of the action, however, was in the Persian Gulf. Approximately 60 percent of the Seabee reserve units called to active duty were sent to other parts of the world to replace active-duty units sent to the Gulf early in the conflict.

OPERATION "PROVIDE COMFORT"

The Seabees, however, were not finished in Southwest Asia. Following the Iraqi defeat, the Kurdish minority living in northwestern Iraq rebelled in an attempt to win independence. The Iraqi government responded harshly and a gigantic refugee problem developed as hundreds of thousands of Kurds fled their villages into the mountains. The United Nations intervened to protect the Kurds and an Allied-occupied, protected enclave was established around Zakho, Iraq. A relief operation, Operation "Provide Comfort," was launched to provide facilities for the refugees until they could return to their villages.

On 11 April 1991, Naval Mobile Construction Battalion 133, deployed at Rota, Spain, was ordered to send its Air Detachment to Zakho. This was followed on 22 April with orders for the battalion to recall all its details and to redeploy its main body to Zakho. While in Iraq, NMCB 133 was under the tactical command of the U.S. Army 18th Construction Brigade, consisting of the U.S. Army 94th Heavy Engineer Battalion, a British Army engineer squadron, a Dutch engineer battalion, and several smaller U.S. Army logistical units. NMCB 133's camp was established in a walled compound which was also the headquarters of the 24th Marine Expeditionary Unit and the 18th Engineer Brigade. The Seabees were immediately over-tasked and went to a 12-hour day schedule, providing support to the refugee camps in the area. Work consisted of latrine construction, electrical and water-well support, road grading, forklift support, berm construction, and wash-rack construction. In general, the work could best be described as emergency service relief work.

It was originally anticipated that the Seabees would remain at Zakho for three months. It turned out, however, that they were able to leave after only eight weeks because during that period upwards of 300,000 Kurds were convinced that it was safe to return to their homes. The displaced persons camps near Zakho which had held as many as 60,000 Kurds at the midpoint of the deployment, saw this number drop to less than 15,000 by the time NMCB 133 departed.

In December 1990 a reserve unit, Naval Mobile Construction Battalion 23, which had been recalled to active duty on Guam to

replace an active-duty battalion sent to the Gulf War, provided disaster relief in the wake of a severe hurricane, one of the strongest to hit Guam in recent years.

OPERATION "FIERY VIGIL"

On 15 June 1991 Mt. Pinatubo in the Philippines erupted and poured more than two cubic kilometers of ash and sand over a 30-mile radius. This eruption was characterized as one of the most violent of this century. Within the radius of the eruption was the Subic Bay U.S. Naval Complex and Clarke Air Force Base. The eruption was followed by Typhoon "Diding" whose torrential rains saturated the ash and sand, creating dangerous roof loads and many other problems. Thus began Operation "Fiery Vigil." Seabees from Naval Mobile Construction Battalion 3, and Construction Battalion Maintenance Unit 302, and Public Works Center civilians provided disaster relief in the form of temporary shelter for those rendered homeless on the base. They also provided temporary power and emergency water supplies, and cleared roadways, and aircraft runways. A ship returning from Operation "Desert Storm" with Seabee equipment was diverted to Subic Bay and provided much needed equipment. A pre-positioned ship, carrying equipment for a Marine Air Ground Task Force, was also brought in. The damage was so severe that 20,000 dependents at Subic Bay and Clarke Air Force Base were evacuated from the area in the days following the eruption. Some 400 Seabees from Naval Mobile Construction Battalion 4 on Okinawa were sent to Subic Bay to help with the cleanup. Within 100 days, the Seabees demolished more than 50 heavily-damaged structures and, removed 250,000 tons of ash, cleared 900,000 square yards of aircraft paving and 75 miles of roads, restored 35 miles of overhead power distribution lines, cleaned and restored 750 air conditioning and refrigeration units, and erected 25 replacement buildings. Working with Public Works Center employees, the Seabees played a critical role in the rapid recovery of the Subic Bay naval complex.

SEABEE REORGANIZATION

Since the establishment of the Seabee Reserve after World War II, active and reserve Seabees, while frequently serving together,

were part of two separate organizational structures. In July 1992 this changed when active and reserve Seabee units were integrated into two Naval Construction Brigades, under the operational control of the Commanders in Chief of the Atlantic and Pacific Fleets.

The Commander, Naval Construction Battalions, U.S. Atlantic Fleet; the Commander, Naval Construction Battalions, U.S. Pacific Fleet, and the 1st Reserve Naval Construction Brigade were disestablished. In their place were established the 2nd and 3rd Naval Construction Brigades. In addition, two new regiments were established: the 22nd Naval Construction Regiment under the 2nd brigade and 30th Naval Construction Regiment under the 3rd brigade. Thus, each brigade had two active regiments and six reserve regiments. The 2nd Naval Construction Brigade assumed operational control of three regiments, eight battalions, one Naval Construction Force Support Unit, and one Construction Battalion Maintenance Unit. In like fashion, the 3rd Naval Construction Brigade assumed operational control of three regiments, seven battalions, two support units, and one maintenance unit. When U.S. forces departed the Philippines in late 1992, Construction Battalion Maintenance Unit 302 was relocated to Camp Covington on Guam. It was disestablished there on 20 July 1994.

OPERATION "RESTORE HOPE"

In 1992 famine struck Somalia. The country had been beset by a long period of civil war which left the central government fragmented and weak. By late 1992 almost 1,000 individuals, many of them children, were dying of starvation daily. Although relief supplies were pouring into Somalia, they did little to help. Armed gangs divided the capital and controlled the road system. The food was stolen or misdirected before it could reach those for whom it was destined. The U.N. decided to send in a military force to restore order. U.S. military units formed part of this coalition force and embarked upon Operation "Restore Hope." The Seabees went ashore to provide construction support to the U.S. contingent. The primary Seabee tasking was to provide vertical construction support to U.S. and coalition forces establishing base camps at each of the humanitarian relief sites. This including building heads, showers, tent decks, strongback tents, and kitchens. Seabees were also to

repair and improve the main supply routes, which included bridge repairs and shoulder grading to widen roads. Wells were drilled and a seven- room school house was also constructed. The largest project was at the Baidoa airstrip which deteriorated as C-130 relief flights increased in the early part of the operation. This project involved removing 300,000 square feet of asphalt surface, pulverizing and mixing it with portland cement, and then grading and compacting the mixture. More than 600,000 square feet of AM2 matting was also laid for aircraft turnarounds, parking aprons and helopads.

On 10 December 1992 Amphibious Construction Battalion 1 arrived at Mogadishu as part of the Naval Support Element in Somalia. Within a short time ACB 1 unloaded five of the U.S. Marines' Maritime Pre-positioning Force ships, refurbished the port, and provided fuel and water for military forces in Somalia.

Naval Mobile Construction Battalion 1 and 40 began deploying to Somalia on 10 December. Within 30 days both battalion main bodies had arrived. The 30th Naval Construction Regiment (Operational) was activated to provide command and control for the two deployed battalions. By the end of December, Seabees from NMCB 1 were convoying personnel and equipment to Baledogle, Bardera, and Baidoa to effect airfield repairs and improvements and construct base camp facilities for the deploying U.N. coalition forces. The Seabees arrived in Baledogle on 31 December and joined forces with Marines from Marine Support Wing Squadron 372 to establish landing and staging areas for CH-53 helicopters and a taxiway and turnaround pad for C-130 aircraft. The Seabees used 240,000 square feet of AM2 metal matting to construct the facility. Near Bardera, Seabees from NMCB 1 restored a water source to a refugee camp by installing a new pump on the bank of the Jubba River. Seabees from NMCB 40 completed Operation "Clean Sweep" in Mogadishu, which consisted of removing debris (trash and car hulks) from critical areas of the city. They also prepared a site for a 300-bed Army evacuation hospital and installed 90,000 square feet of airfield at the Mogadishu airport. NMCB 40 participated in the amphibious landing at the Port of Kismayo. They quickly completed repairs to the Kismayo airfield, which allowed the rapid deployment of follow-on coalition forces to that city. Finally, the Seabees provided construction support for President George Bush's visit to Somalia on 1 January. In addition to

their tasking in support of the coalition forces, the Seabees carried out numerous civic action projects in support of the Somali people during the course of Operation "Restore Hope."

By the end of March 1993, the Seabees had successfully completed their support of Operation "Restore Hope" and returned to their previous deployment sites or their home ports.

OTHER SEABEE ACTIVITIES IN THE EARLY 1990'S

The Seabees celebrated their 50th anniversary in 1992. Special celebrations and ceremonies in Washington, DC, and at the construction battalion centers, and other Seabee activities marked the year. There was an especially large number of Seabee unit reunions that year which brought together veterans from all the wars in which the Seabees had served since their inception. In addition to the celebration, the Seabees continued to perform their normal duties, among which was disaster relief.

Hurricane "Andrew" struck Dade County, Florida, on the morning of 24 August 1992 inflicting extensive damage. There were few deaths, but more than 100,000 people were left homeless. More than 800 Seabees from Naval Mobile Construction Battalion 1, 4, 14, Amphibious Construction Battalion 2, and Construction Battalion Unit 410, 412, 419, and 420 provided disaster relief by repairing government buildings and approximately 270 schools.

In 1993 the Seabees participated in a number of events. The 2nd Naval Construction Brigade was involved in the planning process for potential peacekeeping operations in the former Yugoslavia. The 2nd brigade and an air detachment from Naval Mobile Construction Battalion 7 were involved in the United Nations mission in Haiti that year. Seabees from Naval Mobile Construction Battalion 4, 5, and 7 played a major role in the counter-narcotics program in South America. Finally, Naval Mobile Construction Battalion 3 participated in disaster recovery efforts on Guam in the wake of an 8.1 earthquake.

In 1994 Seabees provided a wide variety of support including work for the United Nations field hospital in Zagreb, Croatia; water

well drilling teams to Morocco and Honduras; and nation-building and joint training exercise support to Surinam and the Dominican Republic. Seabees also participated in the incursion into Haiti. Specifically, Amphibious Construction Battalion 2 supported U.S. forces deployed to Port-au-Prince. At the Naval Station, Guam, Seabees carried out extensive repairs to the Victor Wharf, which had been damaged badly during the earthquake of the previous year.

In September and October 1995, during the most active hurricane season in history, Naval Mobile Construction Battalion 5 carried out disaster relief assistance to the stricken islands of Antigua, St. Thomas, and St. John, after Hurricanes "Luis" and "Marilyn" savaged the eastern Caribbean. That same year, Naval Mobile Construction Battalion 7 sent a disaster relief team to Kobe, Japan, after an earthquake struck that city. The Seabees set up tents and cots at seven different sites, providing shelter for victims of this tragedy.

HAITIAN AND CUBAN REFUGEE SUPPORT

The highest profile effort of the Seabees in 1994, however, was the support provided to Haitian and Cuban refugee efforts. This support grew in scope and extended into 1995. At first, 40 Seabees of Naval Mobile Construction Battalion 74 (deployed to Puerto Rico) were sent to the U.S. Naval Station, Guantanamo Bay, Cuba, to augment the public works department there. The evacuation of civilian employees from Guantanamo and the increased support required by Joint Task Force 160 that had been established there to oversee the refugee operation necessitated this movement. Next, a Seabee air detachment was dispatched from Puerto Rico to construct refugee camps at Guantanamo. Another air detachment was deployed from Puerto Rico to Grand Turk for the purpose of constructing additional refugee camps and subsequently was redeployed to Guantanamo Bay to assist with the growing tasking. Additionally, Seabees supported Operation Safe Haven by constructing Cuban refugee camps in Panama.

The main effort in Cuba was Operation "Sea Signal" during which Joint Task Force 160 constructed facilities to improve the quality of life of Cuban migrants at Guantanamo. By order of the 2nd Naval

Construction Brigade, the 22nd Naval Construction Regiment (Forward Element) deployed to Guantanamo in December 1994 with Naval Mobile Construction Battalion 4 and an air detachment from Naval Mobile Construction Battalion 7. As directed by the U.S. Atlantic Command, the senior leadership of the 22nd Naval Construction Regiment (Forward Element) met with engineers from the Naval Facilities Engineering Command's Atlantic Division to develop preliminary designs for the $35 million Quality of Life Improvement Program for 20,000 Cuban migrants.

The original plan called for the construction of 37 migrant villages arranged in 11 village clusters at two locations: Radio Range and McCalla Field, approximately seven miles apart. Migrant riots in Panama led to a decision to return 7,000 refugees to Guantanamo Bay; this resulted in both an accelerated construction schedule and an enlargement of project scope for the Seabees. A detachment from the Air Force's 820th Red Horse construction unit was mobilized from Nellis Air Force Base to assist the Seabees. When the project concluded the two tent cities constructed were capable of housing almost 20,000 people. This multi-national, joint-service work-force completed an astonishing 100,000 man-days of construction effort in a harsh environment while scheduling their construction projects around the migrants and their daily operations.

All engineering assets of Joint Task Force 160, including 358 Seabees from Naval Mobile Construction Battalion 4, 70 Seabees from Naval Mobile Construction Battalion 7, 85 Air Force engineers from the 820th Red Horse Squadron, 65 Army engineers, 24 Marine Corps engineers, 93 reserve Seabees on Active Duty for Special Work, 45 active-duty augment Seabees, and 500 Cuban workers reported to the 22nd Naval Construction Regiment (Forward Element). The Seabees operated in a joint-command environment: they berthed and messed in an Air Force camp, reported to an Army command, the Joint Logistics Support Group, and served under a Marine brigadier general who was joint task force commander.

After numerous scope changes, the final product consisted of two cities on separate 125 and 150 acre sites. Work in place included the erection of 1,341 strongback tents, 67 concrete block buildings, installation of over 17 miles of underground piping and 53 miles of

electrical cable, batching and placing 11,700 cubic yards of concrete, and the operation of 311 pieces of Civil Engineer Support Equipment in excess of 72,000 hours and 390,000 miles.

In July 1995 Naval Mobile Construction Battalion 5 relieved Naval Mobile Construction Battalion 4 at Guantanamo. Naval Mobile Construction Battalion 5 completed 23,000 man-days of total effort, finishing the $1.6 million, 30,000-meal per day, migrant galley in only 29 days and designing and constructing a 5,200 square foot stage for a televised MTV concert. Naval Mobile Construction 5 oversaw the Naval Construction Force withdrawal from Guantanamo, transporting $13 million worth of construction equipment and supplies off the island.

BOSNIA SUPPORT

Throughout 1995 the 2nd Naval Construction Brigade maintained a high state of alert for potential Seabee involvement in Bosnia. As part of the relief operations in the former Yugoslavian republics, the 2nd Naval Construction Brigade provided an officer to augment the United Nations High Commissioner for Refugees staff. This officer functioned as Engineering and Infrastructure Officer and served in a strictly non-military capacity assisting humanitarian relief operations.

In support of Joint Task Force "Provide Promise," in March 1995 a 35-person team from Naval Mobile Construction Battalion 3 successfully brought to a close the Navy s turn at providing public works maintenance and operations functions at the Joint Fleet Hospital in Zagreb, Croatia.

In October the brigade sent a staff officer to the headquarters of Allied Forces, South, in Naples, Italy, to help finalize the NATO operations plan for Bosnia. Liaison Officers from Naval Mobile Construction Battalion 133 were dispatched to the 26th Marine Expeditionary Unit aboard the USS WASP and to several locations in Bosnia, Croatia, Hungary, and Germany. By the end of 1995, Naval Mobile Construction Battalion 133 had deployed a 172-person detail to the Sava River crossing at Zupanja, Croatia, to construct the first and highest priority tent camp of the entire Operation "Joint

Endeavor" Implementation Force (IFOR). The deployment into Croatia made history as the largest Seabee airlift in recent times and also marked the first deployment in which Seabees utilized the Air Force s new C-17 aircraft. In Bosnia Seabee detachment personnel constructed a number of tent camps in support of U.S. Army, 1st Armored Division units. The construction consisted of building tents and floors, dining facility tents, showers, lighting, and latrines. Upon completion of all assigned taskings at the end of February 1996, the Seabee detachment returned to it parent unit at Rota, Spain.

The Seabee deployment to the former Yugoslavia was characteristic of the period. With the Cold War over, by the mid-1990s the U.S. military was routinely involved in providing support to various United Nations undertakings. No matter what the international situation, however, you can be sure of one thing: when the toughest, dirtiest, meanest, most impossible construction jobs in the world come up, the Seabees will be sent because they "Can Do!" regular construction battalions, 39 special construction battalions, 164 construction battalion detachments, 136 construction battalion maintenance units, 5 pontoon assembly detachments, 54 regiments, 12 brigades, and under various designations, 5 naval construction forces.

SEABEE ROADS TO VICTORY IN THE SECOND WORLD WAR

During the Second World War, the Seabees performed now legendary deeds in both the Atlantic and Pacific Theaters of Operation. At a cost of nearly $11 billion and many casualties, they constructed over 400 advanced bases along five figurative roads to victory which all had their beginnings in the continental United States. The South Atlantic road wound through the Caribbean Sea to Africa, Sicily, and up the Italian peninsula. The North Atlantic road passed through Newfoundland to Iceland, Great Britain, France, and Germany. The North Pacific road passed through Alaska and along the Aleutian island chain. The Central Pacific road passed through the Hawaiian, Marshall, Gilbert, Mariana, and Ryukyu Islands. The South Pacific road went through the South Sea islands to Samoa, the Solomons, New Guinea, and the Philippine's. All the Pacific roads converged on Japan and the Asiatic mainland.

SEABEES IN THE ATLANTIC THEATER OF OPERATIONS

Along the Atlantic front, the Seabees helped forge two roads to victory. From tropical Caribbean climes to the ultimate destination of Germany, they played a crucial role in initially opening and later maintaining bases of critical importance to the war effort.

On the South Atlantic road to victory, Seabee contributions in the Caribbean, Central America, and South America were the first of many milestones. When the United States found itself enmeshed in a two ocean war, the Panama Canal suddenly became the most strategic point on the globe. The convergence of naval and merchant fleet traffic at this point offered German U-boats a vital and tempting target. As a result, it became necessary to ring the canal's ocean approaches with protective bases.

Agreements with the governments of Caribbean, Central American, and South American countries made it possible to secure sites for new bases throughout the area. The Lend Lease Agreement, consummated with Great Britain in September of 1940, yielded still other possible bases in this crucial locale.

Not only were new base sites rapidly acquired, but United States bases already in existence were enlarged. Under the Greenslade Program of 1940, the three pre-1939 naval installations located in Puerto Rico, Cuba, and the Panama Canal Zone were all expanded. The construction program undertaken in Puerto Rico was perhaps the most ambitious. The Naval Station at Roosevelt Roads, seat of the Tenth Naval District, was developed into an installation of major proportions. It was so enlarged that it became known as the "Pearl Harbor of the Caribbean."

Most of the construction on existing, as well as on the newly established Caribbean, Central American, and South American bases, was carried out by civilian contractors. By late 1943, however, the Seabees had arrived in these southern reaches to complete unfinished construction jobs and keep this vast, naval network in smooth, technical operation. Along the Atlantic coastal regions, these bases formed a barrier from Bermuda to beyond the Brazilian bulge.

On the Pacific side of the Americas, United States bases stretched from Honduras to Ecuador. Seaplanes, patrol bombers, blimps, and surface craft operating out of the new and enlarged harbors and airfields hunted down and destroyed roving enemy submarines.

At the big Carlsen airfield on Trinidad, Naval Construction Battalion 80 paved runways and built a giant blimp hangar. Naval Construction Battalion 83 helped cut an eight-mile, S-curved highway up Trinidad's jungled mountain slopes. Beginning at the sea level town of Port of Spain and climbing to a height of 1,300 feet, the construction of this road required that the Seabees move one million cubic yards of earth and rock.

On the Galapagos Islands off Ecuador, Naval Construction Battalion Detachment 1012 outfitted a seaplane base with tank farms, pontoon piers, and a water system. Once this mission had been successfully accomplished, the detachment moved to Salinas on the Ecuadorian main- land. There they completed the southernmost seaplane base of the crucial Pacific sea patrol arc.

More often than not, however, the construction battalions, detachments, and maintenance units that served in these areas manned bases already completed. Although far from the receding fronts of war, their tours of duty were, nonetheless, exacting and important.

From the Caribbean and the Americas, the South Atlantic victory road led to North Africa where the Seabees faced combat for the first time in the Atlantic Theater of Operations. After landing with American assault forces on 7 November 1942, they proceeded to rapidly construct military facilities at Oran, Casablanca, Safi and Fedala. Later, while the Allied armies moved toward Tunisia and their final showdown with the Afrika Korps, the Seabees built a string of staging and training areas along the northern coast. Also active on the west coast of Africa, they constructed a huge naval air station at Port Lyautey, Morocco.

After the Allies had driven the Axis forces out of Tunisia, the Seabees began a large scale buildup at their new base in Bizerte. There they prepared a new weapon of war, the steel pontoon, that

was to be used for the first time on the invasion beaches of Sicily. Actually, pontoons were not new to naval warfare. Xerxes had used such devices to cross the Hellespont when he invaded Greece in the 5th Century B.C. The Seabees, however, had added some new innovations and cleverly adapted them to the requirements of modern amphibious warfare. The classic pontoons were standardized in size and fitted with special tackle so that they could be quickly assembled to form causeways, piers, and other structures. As a result, these versatile "magic boxes" could be used to meet the exigencies of any number of situations.

The beaches of Sicily had previously been considered by both the Allies and Axis as an impossible site for a major amphibious landing. Nevertheless, with help of the Seabees and their new pontoons, the Allies were able to carry off a surprise attack on the weakly defended Sicilian beaches. The enemy was quickly outflanked and overpowered as large numbers of men and huge amounts of equipment poured ashore over pontoon causeways with a minimum of casualties and delay. Thus, the Seabees were

instrumental in spelling the beginning of the end for the southern stronghold of the Axis.

These same landing techniques were later used at Salerno and Anzio on the Italian mainland. Unfortunately, the Germans had learned their lesson from the Sicilian debacle, and this time they were lying in wait. It was in the face of fierce resistance and heavy bombardment that the Allies suffered heavy casualties as they stormed ashore at both Salerno and Anzio, and the Seabees absorbed their share of the casualties. At Anzio the situation was particularly desperate. Anzio had been a diversionary landing behind enemy lines and, when the Germans staged a massive counterattack, the defenders were in critical danger of being pushed back into the sea. It was the Seabees' task to keep essential supplies and ammunition moving across their pontoon causeways to the struggling forces on their precarious beachhead. Only with their vital assistance were the Allies able to turn the tide of battle and push inland in the wake of the slowly retreating Germans. For many months, however, the Seabees remained at Anzio and, under continuous German bombardment, built cargo handling facilities, unloaded tank landing

ships, and kept supplies moving to the front. German resistance in Southern Italy finally collapsed and Rome was taken on 4 June 1943. Even so, the Seabees had one more task in the Mediterranean, the invasion of Southern France through Toulon. While this was a relatively important job, it was eclipsed by the much bigger assignment they were handed on the North Atlantic road to victory, the Normandy invasion.

Although Seabee accomplishments on the North Atlantic road eventually culminated in the Normandy invasion, operations in that area had begun as early as March of 1942.

The Seabees were first used on construction projects in Iceland, Newfoundland, and Greenland at bases previously acquired by treaty from Great Britain. Seabees in Newfoundland helped construct a huge naval air station and naval base at Argentia. >From these installations, aircraft and surface ships set forth to protect the many Allied convoys sailing the western sector of the North Atlantic.

To complete the huge arc of bases stretching across the North Atlantic, even more Seabees were sent to the British Isles. At Londonderry, Northern Ireland, they constructed a huge, deep water facility for naval craft and a naval air station that was capable of handling the largest aircraft. Lough Erne, Loch Ryan, and Rosneath in Scotland were transformed into huge storage depots, tank farms, industrial areas, and seaplane bases. Only with the firm establishment of the Navy's control of the seas, and the logistic battle of the North Atlantic under control, did the Seabees move to the southwest coast of England to prepare for the great invasion. From Milford Haven on the northwest coast of Wales down to Plymouth and over to Exeter, the Seabees built invasion bases which teemed with activity. There they prepared for their most critical and multifaceted role in the Atlantic Theater of Operations.

During D-Day of the Normandy invasion, 6 June 1944, the Seabees were among the first to go ashore as members of naval combat demolition units. Working with U.S. Army Engineers, their crucial task was to destroy the steel and concrete barriers that the Germans had built in the water and on the beaches to forestall any amphibious landings. When dawn betrayed their presence, they

came under murderous German fire. Whole teams were wiped out when shells prematurely detonated their explosives. Heedless of the danger, the survivors continued to work until all their explosive charges were planted. As a result of their heroic actions, the charges went off on schedule and huge holes were blown in the enemy's defenses.

The arduous assignment of the combat demolition units was only the beginning of the Seabees' work on Normandy's beaches. After the invasion fleet had arrived off the coast, The approximately 10,000 Seabees of Naval Construction Regiment 25 began manhandling their pontoon causeways onto the beach. It was over these causeways that the infantry charged ashore. Under constant German fire, directed at slowing or stopping the landings, the Seabees succeeded in placing large numbers of these pontoon causeways. Allied troops and tanks subsequently swept ashore in ever greater numbers and pushed the German defenders inland.

The Seabee contribution to the success of the invasion was not restricted to assembling and placing pontoon causeways. They also manned the large ferries known as Rhinos that carried men and supplies from the larger ships to the beaches. These ferries were actually little more than floating pontoon structures powered by giant outboard motors. Huge amounts of much needed equipment were hauled ashore on Rhinos during the first few days of the invasion.

The Seabees also built offshore cargo and docking facilities, piers, and breakwaters. These were constructed out of old cargo ships, special prefabricated concrete structures that were floated over from England, and the ubiquitous steel pontoons. The huge port area that was formed out of this odd combination of materials became known as Mulberry A. Even after the artificial harbor was partially destroyed in a severe storm, the Seabees landed hundreds of thousands of tons of war material daily. In addition to these massive amounts of supplies, by July 4, only 28 days after D-day, they had helped land more than a million Allied fighting men.

The liberation of Cherbourg and Le Havre led to the next big Seabee project. Mulberry A, for all its impressiveness, was only a

temporary facility, and the established harbors of these two cities were desperately needed by the Allies. Knowing of this need, the Germans had cleverly devastated the harbors of Cherbourg and Le Havre before retreating. It thus fell to the Seabees to put these harbors quickly back into service. On the heels of the liberating armies, the Seabees entered Cherbourg and Le Havre. At Cherbourg the first cargoes were landed within 11 days and within a month the harbor was capable of handling 14 ships simultaneously. Seabee accomplishments at Le Havre were equally impressive.

As the front continued to move inland, other ports along the northern and western coasts of France were restored. At Brest, Lorient, and St. Nazaire, the Seabees rapidly cleared and rebuilt harbors to handle additional vital shipments of cargo.

The final great Seabee effort in the European Theater took place during the crossing of the Rhine River in March 1945. Many times during the Second World War the Seabees had been called upon to do odd jobs of an urgent nature, but this particular odd job was of special significance. The U.S. Army, concerned about the Rhine River's swift and tricky currents, called upon the Seabees to operate many of the landing craft that were to be used in breaking Germany's Rhine River barrier. The Seabees' first successful probe across the treacherous river was at Bad Neuenahr near Remagen. Further crossings followed in rapid succession as the Seabees made their task appear to be little more difficult than a sightseeing cruise.

On 22 March 1945, General George S. Patton, with Seabee assistance, put his armored forces across the Rhine at Oppenheim in a frontal assault which swept away the German defenders. To support Patton's advancing army, the Seabees built pontoon ferries similar to the Rhinos of D-day fame and used them to transport Patton's tanks across the river.

In all, the Seabees operated more than 300 craft which shuttled thousands of troops into the heart of Germany. One Seabee crew even had the honor of ferrying Prime Minister Winston Churchill across the Rhine on an inspection tour.

The 69th Naval Construction Battalion had the distinction of being the only complete battalion to serve in Germany. Arriving at Bremen on 27 April 1945, the Seabees of this battalion set up camp just outside the city. They immediately began the re-roofing of damaged buildings, installing plumbing and lighting, setting up shops and offices, and installing power lines. A detachment also repaired facilities at the nearby port of Bremerhaven.

Later, a large detachment from the 69th battalion was sent to Frankfurt-am-Main, which had been designated as the headquarters of the U.S. Navy for the occupation of Germany. There the detachment refurbished several buildings and performed considerable maintenance work. In August 1945 the men of this detachment completed their work and withdrew to Great Britain.

For the Seabees, the completion of this task marked the end of the North Atlantic road to victory. They had reached their goal. Their building and fighting exploits along the road had been noteworthy and valorous.

SEABEES IN THE PACIFIC THEATER OF 0PERATIONS

Seabees in the Pacific Theater of Operations earned the gratitude of all Allied fighting men who served with them or followed in their wake. Their deeds were unparalleled in the history of wartime construction. With eighty percent of the Naval Construction Force concentrated on the three Pacific roads, they literally built and fought their way to victory.

In the North, Central, South and Southwest Pacific areas, the Seabees built 111 major airstrips, 441 piers, 2,558 ammunition magazines, 700 square blocks of warehouses, hospitals to serve 70,000 patients, tanks for the storage of 100,000,000 gallons of gasoline, and housing for 1,500,000 men. In construction and fighting operations, the Pacific Seabees suffered more than 200 combat deaths and earned more than 2,000 Purple Hearts. They served on four continents and on more than 300 islands.

Of the three Pacific roads to victory, perhaps the least significant was the one which wound through the North Pacific. At the outset of

hostilities, however, this region, which included Alaska and the Aleutian Islands, had been a Japanese target. The Japanese campaign of 1942 that succeeded in seizing the Aleutian islands of Attu and Kiska was partly a feint, partly a serious probe of American defenses, and partly a move to prevent the United States from invading the Japanese homeland through the Aleutian and Kurile Islands. Many of the first Seabees were sent to the North Pacific to help forestall what appeared at the time to be a major Japanese offensive.

By late June 1942 Seabees had landed in Alaska and had begun building advanced bases on Adak, Amchitka, and other key islands in the Aleutian chain. In 1943 these new bases were used to stage the joint Army-Navy task force that recaptured Attu and Kiska. While subsequent activity in the North Pacific was minimal, the long, flanking arm of Seabee-built bases pointing toward the Japanese home islands served as a substantial threat to the Japanese throughout the remainder of the war. Even as action in the Central, South, and Southwest Pacific areas became the major focus of attention, the Japanese continued to look northward in fear.

Of the remaining two Pacific roads, the one through the steaming jungles of the South and Southwest Pacific had the Philippines as one of its principal destinations. The Seabees' first stop along this road was in the Society Islands.

The First Naval Construction Battalion (later redesignated the 1st Construction Battalion Detachment because of its small size) left the United States in January of 1942 and, one month later, landed on Bora Bora in the Society Islands. The men of this battalion called themselves the "Bobcats" after the code name BOBCAT, given to the island of Bora Bora. The Bobcats were actually the advance party of the more than 325,000 men who were to serve in the Naval Construction Force during the Second World War. The Bobcats' mission was to construct a fueling station that would service the many ships and planes necessary to defend and keep open the sea lanes to Australia. Shortly after landing on their tropical paradise, the Bobcats discovered that the island had many climatic and hygienic disadvantages. Continual rainfall, 50 varieties of dysentery, skin disease, and the dreaded elephantiasis all combined to make life

miserable for the construction men. To make their task even more difficult, the island, far from the regular trade routes, had no piers from which to unload the supply-laden ships. Despite these almost overwhelming problems, the Bobcats immediately set about accomplishing their crucial objective. After devising a method of bringing supplies ashore aboard pontoon barges, they swiftly constructed the necessary fueling facilities. Their strenuous efforts were later rewarded when the island's tank farms supplied the ships and planes that fought the historic Battle of the Coral Sea.

While the Bobcats labored on Bora Bora, two additional groups of Navy construction men were organized into the 2nd and 3rd Construction Battalion Detachments. Less than five months after the Bobcats arrived on Bora Bora, the Second Detachment was sent to Tongatabu in the Tonga Islands and the Third Detachment to Efate in the New Hebrides.

These two islands were also on the supply route to Australia and were being used as a staging area for a counterthrust by the Allies against Japanese forces in the Southwest Pacific. On these islands the Seabees constructed fuel tank farms, airfields, supply depots, and other facilities to support military action in the Coral Sea and Solomon Islands.

The island of Espiritu Santo in the New Hebrides was closest in proximity to Japanese-held Guadalcanal and, thus, rapidly assumed major importance. Guadalcanal was the very tip of the Japanese thrust down the Solomon chain toward the Allied southern communications route. The need to destroy the big Japanese airfields nearing completion on Guadalcanal was imperative. The Seabees of the 3rd Construction Battalion Detachment were rushed from Efate to Espiritu Santo and instructed to build a countermanding Allied bomber strip as rapidly as possible. Within an incredible 20 days the detachment had carved a 6,000 foot airstrip from virgin jungle. As a result of this tremendous feat, the Allies were able to mount large scale air attacks against Guadalcanal and destroy the dangerous Japanese air base under construction there.

When the Marines finally invaded nearby Guadalcanal, the men of the 6th Naval Construction Battalion followed them ashore and thus became the first Seabees to build under combat conditions. They immediately began the arduous task of repairing the airfield, now named Henderson Field that they had earlier helped to destroy. This became a never-ending job, because as fast as the builders leveled the strip and put down Marston matting, the Japanese would send bombers overhead to drop high explosives on their work. Nevertheless, in the midst of battle, the Seabees were able to repair shell and bomb holes faster than the Japanese could make them. The Allied pilots desperately needed the use of Henderson Field, so the Seabees kept this precious airstrip in almost continuous operation.

The first decorated Seabee hero of the war, Seaman 2nd Class Lawrence C. "Bucky" Meyer, USNR, was among the Seabees of the 6th battalion who worked on Henderson Field. In his off-time, he salvaged and repaired an abandoned machine gun, which, on 3 October 1942, he used to shoot down a Japanese Zero fighter making a strafing run. For this exploit, he was awarded the Silver Star. It was, however, a posthumous award, for 13 days after shooting down the plane, "Bucky" Myer was killed in action when the gasoline barge on which he was working was struck by Japanese naval gunfire.

On the same day Guadalcanal was invaded, Marines landed on Tulagi Island, a short distance across the Sealark Channel. Once again the Seabees also came ashore, but this time to construct an important torpedo patrol boat and repair base for the U.S. Fleet. The base played a strategic role during the savage sea battles in the "slot," the narrow channel between the islands of Tulagi, Savo, and Guadalcanal. Patrol boats darted from the Seabee-built advanced base to scout Japanese offensive moves, and crippled American ships limped in to receive temporary Seabee repairs.

As the Allies continued to island hop up the Solomon chain, the Russells, Rendova, New Georgia, and Bougainville also became centers of a frenzied construction effort by Seabee units. At the same time, Seabees in the Southwest Pacific were driving northward from Australia to New Guinea and the Philippines.

It was during the landing on Treasury Island in the Solomons, on 28 November 1943, that Fireman 1st Class Aurelio Tassone, USNR, of the 87th Naval Construction Battalion created that legendary figure of the Seabee astride his bulldozer rolling over enemy positions. Tassone was driving his bulldozer ashore during the landing when Lieutenant Charles E. Turnbull, CEC, USNR, told him a Japanese pillbox was holding up the advance from the beach. Tassone drove his dozer toward the pillbox, using the blade as a shield, while Lieutenant Turnbull provided covering fire with his carbine. Under continuous heavy fire, Tassone crushed the pillbox with the dozer blade, killing all 12 of its occupants. For this act Tassone was awarded the Silver Star.

Although Seabees were only supposed to fight to defend what they built, such acts of heroism were numerous. In all, Seabees earned 33 Silver Stars and 5 Navy Crosses during World War II. But they also paid a price: 272 enlisted men and 18 officers killed in action. In addition to deaths sustained as a result of enemy action, more than 500 Seabees died in accidents, for construction is essentially a hazardous business.

Another milestone in Seabee history was in the making in 1943 -- but the location was Hollywood rather than the South Pacific. Made in 1943 and released in early 1944, the motion picture The Fighting Seabees, starring John Wayne and Susan Hayward, made "Seabee" a household word during the latter part of the war. This picture also began a relationship between John Wayne and the Seabees which was to last more than three decades. In fact, John Wayne's last motion picture was Home for the Seabees, a Navy documentary filmed in 1977 at the Naval Construction Battalion Center, Port Hueneme, California. This was most appropriate, since the exteriors of The Fighting Seabees, had been filmed in and around the same base during World War II.

While Hollywood made films, however, the grim reality of the war continued. Initially, the Seabees in the Southwest Pacific busied themselves enlarging and constructing new, vital staging and supply ports at several Australian coastal points. By mid- 1943, however, Merauke, on the underbelly of New Guinea, resounded with the roar of battle and the clatter of Seabee hammers and bulldozers. After

building an important bomber strip that helped fend off Japanese air attacks, they constructed a communications station at Port Moresby.

Finally, on 26 December 1943, the Seabees joined the First Marine Division in an assault on Japanese-held Cape Gloucester, New Britain. During the battle, Seabees bulldozed paths to the Japanese lines so that American tanks could attack the hostile positions. By New Year's Day, the Japanese airstrips were captured and the American flag flew over the entire Cape.

The Admiralty Islands atop the Bismark Sea became the key to the isolation of Rabaul and the final neutralization of enemy forces on New Britain. When the Allies seized Manus Island and the adjacent smaller Los Negros Island, enemy supply and communication lines from all points north and east were cut. In the busy months following the capture of the Admiralties, the Seabees transformed Manus and Los Negros into the largest U.S. naval and air base in the Southwest Pacific. By 1944 the new base had become the primary location for service, supply, and repair of the Seventh U.S. Fleet. During the same month, the capture of Emirau Island in the Saint Matthias group completed the encirclement of Rabaul. There the Seabees built a strategic, two-field air base, huge storage and fuel dumps, a floating dry dock, miles of roads, and a base for torpedo patrol boats.

Leapfrogging ahead with General Douglas MacArthur's forces, the Seabees reached Hollandia and turned it into a major forward base that was later instrumental in the liberation of the Philippines. In fact, the Seabees of the Third Naval Construction Brigade were still with General MacArthur when the South and Southwest Pacific roads to victory converged on the Philippine Island of Leyte in October 1944. Naval Construction Battalions operated the pontoon barges and causeway units that brought the Allied Forces ashore and fulfilled General MacArthur's famous promise to one day return.

These Seabees were soon joined by those of the Second and Seventh Naval Construction Brigades, units that had been organized and staged in the Hawaiian Islands. This vast Naval Construction Force of 37,000 men spread out into the adjoining major islands and began building the facilities that were needed to make the

Philippines a great forward base in the Pacific, indeed one of the last steps on the way to the invasion of the Japanese home islands.

The Seabees of this force built U.S. Navy and Army airfields, supply depots, staging areas for men and materials, training areas and camp-sites. Seventh Fleet headquarters was moved to the Philippines and Seabees built the facilities that this enormous fleet required: fleet anchorages, submarine bases, ships repair facilities, fast torpedo boat bases. By the summer of 1945, U.S. military forces were prepared and poised for that last step on the South Pacific road to victory.

While the Seabees in the South and Southwest Pacific were hacking their way through vermin-infested jungles toward the Philippines, their comrades to the north were striking across the Central Pacific island chains straight at the heart of the Japanese Empire. It was on this extremely hazardous road to victory that the Seabees perhaps made their greatest contributions toward winning the war. They continually played a major role in the savage fighting which characterized the island- hopping campaign in the Central Pacific. One after the other, the Gilberts, Marshalls, Carolines, and Marianas were seized. After landing in the initial Marine assaults, Seabee battalions built on these islands the advanced bases from which the U.S. Pacific Fleet, the Marines, and the Army moved inexorably toward the Japanese homeland.

Tarawa Atoll in the Gilberts was one of the toughest of them all. Only after savage fighting at a cost of nearly 1,000 American dead were the Japanese defenders overwhelmed. On Tarawa, the Seabees landed with the Marines and in a mere fifteen hours put a shell-pocked airfield back into operation.

On the atolls of Kwajalein, Eniwetok, and Majuro in the Marshalls, the Seabees rendered further assistance in the destruction of Japan's eastern defense perimeter. Seabees converted the idyllic atoll of Majuro into one of the major fleet anchorages in the Pacific, and similarly transformed Kwajalein Atoll into a major aviation facility. The Carolines were the third stepping-stone on the Central Pacific road to Tokyo. Combat and construction in this island chain served

yet another purpose. When the fleet and air facilities in the western Carolines were made operable by the Seabees, the islands were used as bases to support the coming liberation of the Philippines.

The seizure of the Marianas spelled the beginning of the end for the Japanese. The loss of the islands cut the Japanese line of defense and, even more important, gave the United States an airbase from which bombers could strike at the very heart of the Japanese Empire, the homeland. It was during Operation "Forager," as the Marianas Campaign was named, that the Seabees made one of their most significant contributions in the Pacific Theater of Operations.

Seabees and Marines landed together on the beaches of first Saipan, then Guam, and finally Tinian. The very same day the Marines captured Aslito, the main Japanese airfield on Saipan, the Seabees went to work repairing its bomb-damaged runways. Stopping only to fend off Japanese counterattacks, they succeeded in making the airstrip operational within four days. During the three week battle for Guam, the Seabees participated by unloading ships and performing vital construction jobs directed at eventually turning the island into the advanced headquarters for the United States Pacific Fleet, an airbase for Japan-bound B-29s, and a huge center of war supply. The invasion of Tinian called for yet another exhibition of Seabee ingenuity. Because its narrow beaches were covered with low coral cliffs, Seabees devised and operated special movable ramps which made the landings possible. Once ashore, and even as the battle raged, their bulldozers accomplished prodigious feats of construction on the damaged and unfinished Japanese airfield.

What was needed after the successful Marianas campaign was an emergency landing field much closer to the Japanese homeland that would service crippled bombers returning from raids and enable shorter- ranged fighter planes to accompany the giant bombers to their targets. The island chosen for this purpose was Iwo Jima, scene of some of the most savage fighting of the war. On 19 February 1945, the Fifth Amphibious Corps, which included the 133rd Naval Construction Battalion and elements of the 31st Naval Construction Battalion, hit the beaches. During the assault, the 133rd Naval Construction Battalion had the dubious honor of suffering more men killed or wounded than any other Seabee battalion in any previous

or subsequent engagement. Although only minor construction was accomplished during the first ten days of the operation, the Seabees later built one crucial emergency landing field and fighter airstrips so desperately needed by the Allies.

The Seabees also played a key role in the last big operation of the island war, the seizure of Okinawa. The main invasion forces landed on Okinawa's west coast Hagushi beaches on Easter Sunday, 1 April 1945. Off the amphibious landing craft and over pontoons placed by the 130th Naval Construction Battalion went the 24th Army Corps and Third Amphibious Corps. Right beside them were the 58th, 71st and 145th Naval Construction Battalions. A few days later, two additional Naval Construction Battalions, the 44th and 130th, landed. The fighting was heavy and prolonged, and organized resistance did not cease until 21 June 1945.

The Seabees' task on Okinawa was truly immense. On this agrarian island, whose physical facilities a fierce bombardment had all but destroyed, they built ocean ports, a grid of roads, bomber and fighter fields, a seaplane base, quonset villages, tank farms, storage dumps, hospitals, and ship repair facilities.

Nearly 55,000 Seabees, organized into four brigades, participated in Okinawa construction operations. By the beginning of August 1945, sufficient facilities, supplies, and manpower were at hand to mount an invasion of the Japanese home islands.

While the Allied forces in the Philippines and on Okinawa were readying themselves for the final battles that would get them to Tokyo and complete the roads to victory, decisive events were taking place elsewhere, on the island of Tinian in the Marianas. During the summer of 1945, the USS INDIANAPOLIS arrived at Tinian from the Naval Weapons Center at Port Chicago, California. Seabees of the Sixth Naval Construction Brigade helped with the unloading of the components of a newly-developed weapon. The Seabees then stored the elements in a shed built by themselves, and organized a detachment to guard the shed and its mysterious contents. Scientists assembled the weapon in the shed with several Seabees assisting as handymen.

On 6 August 1945 the new weapon was loaded into a U.S. Army Air Force B-29 bomber, named the Enola Gay. A short time later, the Enola Gay took off with its secret load from Tinian's North Field, which the Seabees had built, and started on her mission to Japan. Later in the day, the mission ended with the dropping of the first atomic bomb on Hiroshima.

This historic event sealed the fate of Japan. Realizing that the war was lost, the Japanese government negotiated a cease fire that went into effect on 16 August. On 2 September 1945 Japan formally surrendered, and Allied forces occupied the Japanese home islands in a peaceful manner. Thus, the Pacific roads to victory reached their final destination.

BETWEEN THE SECOND WORLD WAR AND THE KOREAN WAR

Following the victories in Europe and Asia, the U.S. Armed Forces rapidly demobilized. The Seabees were part of this demobilization, and by June 1946 their number had fallen from a peak strength of more than 250,000 men to approximately 20,000. In the continental United States, the web of training bases and depots dissolved, and all Seabee activity was concentrated at the Naval Construction Battalion Center, Port Hueneme, California. As Seabee ranks continued to thin, the early postwar years saw only a few battalions and small construction battalion detachments scattered at naval bases and stations abroad.

Despite the diminished strength of the force, Seabee peacetime activities took on a unique and diversified character. Besides maintaining advanced bases built during the war, they were confronted with many unprecedented construction assignments.

What could be more unusual than Seabees building a fleet weather station on Russian soil? Yet in September 1945, Seabees of the 114th Naval Construction Battalion, stationed in the Aleutian Islands, were ordered to Russia's Kamchatka Peninsula to accomplish just such a project. They perhaps have the distinction of being the only Americans invited to do construction work in the Union of Soviet Socialist Republics. Also in 1945 and 1946, six battalions of Seabees performed a variety of tasks on mainland China at

Shanghai, Tsingtao, Tangku, and other cities. Primary among them was the construction of harbors and airfields to be used for the evacuation of the defeated Japanese troops and the importation of supplies for the war-torn Chinese nation.

China was not the only nation to receive Seabee assistance after the guns fell silent. As part of the occupation force, 13 construction battalions and 3 special battalions were sent to Japan to aid U.S. naval forces at Hiroshima, Kabayana, Yokosuka, Omura, Nagasaki, Sasebo, and Kure. Out of the postwar rubble, they rebuilt all types of facilities including airstrips, docks, houses, electric and telephone systems, bridges, roads, recreation areas, and hospitals.

In mid-1946 Seabees were assigned the task of constructing facilities on Bikini Atoll in preparation for the historic atomic bomb tests there. That same year Operation "High Jump" brought Seabees to Antarctica for the first time. An initial detachment of 173 men accompanied Admiral Richard Byrd to Little America to build new facilities and unload supplies and equipment.

When Vieques Island, off the coast of Puerto Rico, was chosen as the site for an interservice war exercise, code named Operation "Portrex," Seabees performed a dual function. They were on the scene prior to the "invasion" to reclaim the island's abandoned wartime defense facilities. They then returned as participants in the exercise and successfully built a pontoon causeway which brought the invading army units ashore.

During World War II the Seabees were a Naval Reserve organization, created specifically for that war. Most Seabees were "USNR" and served "for the duration plus six months." After the war, however, it was clear that the Seabees, having more than proved their worth, would be a valuable new addition to the regular Navy. Thus, in 1947, the Seabees became part of the regular, peacetime Navy. In December 1947 a Seabee Reserve Organization was established to augment active-duty Seabees during national emergencies. Many of these first Seabee reservists were Seabee veterans of World War II who wished to continue to serve the nation. The first reserve Seabees were organized into a number of divisions in each Naval District. Each Seabee Reserve Division

initially consisted of 5 officers and 40 enlisted men. Although by 1949 the number of active duty Seabees had dwindled to 3,300, the Reserve Organization served as a ready force for expansion in the coming emergency in Korea.

SEABEES IN THE KOREAN WAR

In June 1950, following the invasion of South Korea by the armies of communist North Korea, the Seabees found themselves at war again. As part of the United States contingent of the United Nations force, they rose to the challenge in the tradition of their "Can Do" predecessors. By a calling-up reservists, their active-duty force was expanded to more than 14,000.

On 15 September 1950 U.S. troops landed at Inchon in what has come to be known as one of the most brilliant amphibious assaults in history. Seabees achieved renown as the men who made it possible. Battling enormous thirty-foot tides and a swift current while under continuous enemy fire, they positioned pontoon causeways within hours of the first beach assault. Following the landing, the incident known as the "Great Seabee Train Robbery" took place. The need to break the equipment bottleneck at the harbor inspired a group of Seabees to steal behind enemy lines and capture some abandoned locomotives. Despite enemy mortar fire, they brought the engines back intact and turned them over to the Army Transportation Corps.

In October Seabees ran their pontoon structures ashore again and set up another operating port at Wonsan. When the strenuous harbor construction and camp operations ceased to fill their days, they branched into the unusual tasks of inspecting North Korean armament on an abandoned mine-layer, clearing mined tunnels, and performing repair work on nearby ships.

When the Chinese Communists joined the retreating North Koreans to launch another full scale invasion of South Korea, the Seabees were compelled to redouble their efforts -- this time to help the retreating U.N. forces. At Hungwan, Wonsan, and Inchon, where Seabees had been instrumental in putting U.N. forces ashore, Seabee pontoon causeways were now loaded with troops and equipment going the other way.

By February, however, the tide turned once again and the Seabees returned to Inchon for another landing. They found their previously constructed harbor facilities in a state of ruin, but, miraculously enough, some of their sturdy pontoon structures were still in place. After a rapid repair job, men and equipment streamed ashore again.

Seabee participation in the Korean War was certainly not limited to amphibious operations. Another of their outstanding contributions was in that specialty of their World War II predecessors -- airfield construction. Seabees could be found throughout the war zone constructing, repairing, and servicing the K-fields of the various Marine Air Groups. The Seabees were broken up into numerous detachments and each was assigned to an airfield designated with a "K" number, such as K-3 at Pohang, K-18 at Kimbo, and K-2 at Taegu.

Keeping the planes flying was an arduous and often dangerous task. At one small airstrip on the 36th Parallel, chuck holes were opening up in the failing concrete faster than they could be repaired. As it was absolutely vital that the field remain open, the undaunted Seabees graded, poured, and patched one side of the runway while bomb-laden aircraft continued to fly off the other side.

Seabee relations with the Marine Corps were further cemented by a group of nine Seabees who kept a 21-mile stretch of road open between an isolated Marine intercept squadron and its source of supplies. They worked round-the-clock in five-below-zero temperatures to successfully fulfill their promise to rebuild any damaged bridge within six hours.

One of the most incredible Seabee feats of the war took place on the small island of Yo in the Bay of Wonsan. In communist hands again in 1952, Wonsan was a key supply and transportation center for the enemy. As such, carrier-based aircraft strikes against Wonsan and points deeper in the interior were numerous and constant. Planes were hit by enemy fire daily leaving their pilots with the unhappy choice of either ditching at sea or attempting to land in enemy-held territory. The need for an emergency airstrip was critical and, under the code name Operation "Crippled Chick," a

detachment of Seabees came to the rescue. Put ashore on Yo Island, they were given 35 days to construct a runway. Working under constant artillery bombardment from neighboring enemy positions, they managed to complete the 2,400-foot airstrip in only 16 days. By a prearranged signal, "Steak is Ready," the Seabees signaled that the job was done, and nine damaged aircraft landed on the new field that same day.

The rapid demobilization that followed the Second World War was not repeated after the signing of the Korean Armistice in July 1953. Crises in Berlin, Cuba, Africa, South America, and especially in Southeast Asia created the necessity to maintain military strength and preparedness. Seabee Reservists had helped meet the Korean crisis, but the onset of the Cold War had indicated the need for a basic reorganization of Seabee capabilities as well as for increased Seabee numbers. Between 1949 and 1953, 13 battalions of two distinct types were accordingly established. The new establishments signified a gain in greater battalion mobility and specialization. The first type, the new Amphibious Construction Battalions, were landing and docking units. An integral part of the Fleet Amphibious Forces, their mission was to place causeways and ship-to-shore fuel lines, construct pontoon docks, and perform other functions necessary for the expeditious landing of men, equipment, and supplies. Naval Mobile Construction Battalions constituted the second type. They were responsible for land construction of a wide variety, including camps, roads, tank farms, airstrips, permanent waterfront structures, and many other base facilities.

BETWEEN THE KOREAN WAR AND THE VIETNAM WAR

Wide diversity marked the activity of the reorganized battalions during the decades following the Korean Armistice. The tasks of the Seabees were the tasks of a watchful peacetime. Wide-ranging, of tremendous variety, many were pioneering and experimental as well. They were a part of the developing roles -- in defense and in science -- of the U.S. Navy. In this decade, Seabee builders were again on six continents.

More building and less fighting became the keynote of Seabee activities and their peacetime achievements were no less impressive

than those of wartime. On Okinawa, for example, the Seabees built a Marine Corps Air Facility using concrete precasting methods that earned the admiration of contractors throughout the Pacific area. Elsewhere, a small detachment of Seabees supervised and instructed Ecuadorans in modern construction methods while building a new Ecuadoran Naval Academy.

Beginning in 1955 Seabees began deploying yearly to the continent of Antarctica. As participants in Operation "Deep Freeze," their mission was to build and expand scientific bases located on the frozen continent. The first "wintering over" party included 200 Seabees who distinguished themselves by constructing a 6,000-foot ice runway on McMurdo Sound. Despite a blizzard which once destroyed the entire project, the airstrip was completed in time for the advance party of Deep Freeze II to become the first men to arrive at the South Pole by plane. The Seabees next assignment was to build a permanent scientific base on the continent. Over the following years, and under the most adverse conditions, Seabees added to their list of accomplishments such things as snow-compacted roads, underground storage, laboratories, and living areas. One of the most notable achievements took place in 1962 when the Navy's builders constructed the continent's first nuclear power plant at McMurdo Station.

By far the largest and most impressive project tackled by the Seabees in the 1950s was the construction of Cubi Point Naval Air Station in the Philippines. Civilian contractors, after taking one look at the forbidding Zombales Mountains and the maze of jungle at Cubi Point, claimed it could not be done. Nevertheless, the Seabees proceeded to do it! Begun in 1951 at the height of the Korean War, it took five years and an estimated 20-million man-hours to build this new, major Navy base. At Cubi Point Seabees cut a mountain in half to make way for a nearly two-mile long runway. They blasted coral to fill a section of Subic Bay, filled swampland, moved trees as much as a hundred and fifty feet tall and six to eight feet in diameter, and even relocated a native fishing village. The result was an air station, and an adjacent pier that was capable of docking the Navy's largest carriers. Undoubtedly as important as the finished project, however, was the indispensable leadership and construction experience gained by the postwar generation of Seabees. The construction of Cubi Point

Naval Air Station was a mammoth learning experience as well as a superb job well done.

The Seabee Reserve organization began a series of important changes in 1960. Following the Korean War the reserve grew to 242 divisions, each with 4 officers and 50 enlisted men. In July 1960 the Chief of Naval Operations granted authority for the establishment of 18 reserve battalions. These battalions were to be formed from the reserve divisions. In July 1961 battalion active duty training was initiated. In July 1967 the Chief of Naval Operations approved the establishment of four regimental staffs, later an additional four staffs were approved. This process of evolution finally culminated in the establishment of the 1st Reserve Naval Construction Brigade in September 1969. The brigade exercised overall control of the Reserve Naval Construction Force.

In 1961 the Seabees assembled a huge floating dry dock at Holy Loch, Scotland, for the service and repair of the Polaris missile submarines which cruised beneath the waters off Northern Europe. The dry dock, with a submarine tender anchored alongside, gave the vital submarines a base that ended long trans-ocean cruises for the purpose of repair and resupply.

In 1962 Project "Judy" brought the Seabees to the historic Greek plain of Marathon. Living in a tent camp in a rural community, they built a Naval Communication Station from scratch. When the job was completed in 1965, the Seabees had fabricated and erected more than 100 major antennas and created a base with all the comforts of home.

Seabees participated in building missile ranges in the Atlantic and Pacific. They were also constructed housing and apartment complexes for U.S. servicemen and their families.

As indicated by the above-cited construction projects, Seabees during this period could be found everywhere. Construction battalions regularly deployed to Guam, Okinawa, Midway, the Philippines, Cuba, Newfoundland, and Spain. Seabee detachments could also be found at dozens of lesser U.S. naval facilities throughout the world. The Seabees' primary mission was base expansion and

maintenance. Their assignments included building and paving roads, laying sewer lines and water mains, building airfield and harbor facilities, restoring and converting old structures for new uses, wiring buildings, and erecting power lines. Such duty kept the battalions in a high state of readiness for the eventuality of advanced base building and amphibious support when war came again. The Cold War era was not without crises. In 1958, when dissidents threatened to overthrow the government of Lebanon and United States assistance was requested, Seabees brought the Marines ashore over their pontoon causeways. In addition to participating in the landing, the Seabees there were divided into Beach Salvage Teams to recover swamped equipment, improve beaches, and build roads.

Seabees were once again poised for action and on the scene in 1962 when, following the successful conclusion of the Cuban Missile Crisis, it was felt that Fidel Castro's regime might retaliate against the U.S. Naval Base at Guantanamo Bay, Cuba. Under the constant threat of imminent ground attack or sniper fire, Seabees worked with speed and skill to fortify the base perimeter.

During this period Seabees assumed yet another new role -- that of an operationally-ready disaster relief force. Trained to build and fight, Seabees proved equally capable of quickly rebuilding ruins and combatting peril. When the Greek island of Cephalonia was devastated by an earthquake in 1953, Seabees took part in emergency relief operations. In mid-January 1961 Seabees, with typical ingenuity, used pontoons to save a California beach community threatened by tremendous tides. Seabees restored power and rebuilt damaged structures when Typhoon "Karen" destroyed much of Guam in 1962. Later, in 1964, Seabees were on the scene restoring utilities and building roads in a matter of hours after Alaska was struck by a devastating earthquake and tidal wave. When yet another typhoon ravaged an island in the Azores, Seabees arrived quickly with prefabricated housing units to lend vital assistance to the homeless. On several occasions, Seabees manned their equipment to successfully battle forest and brush fires in the United States.

In the late 1950s and early 1960s, Seabee Teams, another proud addition to the Seabee family, were born. This era marked the first

use of these small detachments for local military aid and socioeconomic projects in underdeveloped countries. By 1963 this vital aid program had been refined in both organization and aims, and had become a regular feature of Seabee activity abroad. The Seabee Team usually consisted of thirteen carefully selected, experienced men -- one junior Civil Engineer Corps officer, eleven construction men, and a hospital corpsman. Such teams proved exceptionally effective in rural development programs and for teaching construction skills to people in such diverse locations as Africa, Central and South America, Southeast Asia, and later in the Trust Territories of the Pacific Islands. For instance, in 1962 a Seabee Team arrived in the Republic of Haiti to restore a collapsing municipal pier that was vital to the national economy. The following year Spanish-speaking Seabees built and staffed a technical school in Santo Domingo. A Seabee Team in Costa Rica protected the imperiled city of Cartago from a disastrous mud-flow by building dams and dikes. In other far-flung locations Seabee Teams constructed roads, schools, orphanages, public utilities, and many other community structures.

However, much more important than the actual construction work they accomplished were the skills team members imparted to the local residents. Their true success was in enabling the local populous to continue old projects and initiate new ones long after the Seabees have left the region. There is no doubt that the "Can Do" Seabee Teams have more than earned their additional measure of recognition as the "Navy's Peace Corps."

It was during the summer of 1964 that the Seabees first went to work for the State Department. The program was initiated following the discovery of electronic surveillance devices planted throughout the U.S. Embassy in Moscow. To prevent future incidents of this nature, Seabees were used to perform all construction and renovation in security sensitive areas of Foreign Service facilities abroad. In addition, they were tasked with the supervision of private contractors assigned to do construction work in non-sensitive areas. Despite its beginnings in 1964, it was not until 1966 that the Naval Support Unit, State Department, was officially established to administer Seabees assigned to support the Foreign Service. Because

of the superb on-the-job performance of these Seabees, the State Department happily made them a permanent part of its operations.

Thus, a peacetime pattern of battalion training and deployment took shape in the years following the Korean War. This pattern, however, was drastically altered in 1965. The war in Vietnam brought American military intervention on a large scale and effected major changes in Seabee activity worldwide. In the spring of 1965, there were 9,400 Seabees on active duty at various sea and shore locations; most of these Seabees were assigned to ten, reduced-strength Naval Mobile Construction Battalions. These relatively few Seabees, however, were fully prepared to write a new chapter in the history of the builder-fighters.

THE SEABEES IN SOUTHEAST ASIA

Beginning in 1964 the United States military buildup in South Vietnam interrupted the normal peacetime deployment pattern of the Naval Construction Force. The Seabees were slated to play an important and historic role in the growing Southeast Asian conflict. By autumn of 1968, when Vietnamese requirements reached their peak, world-wide Seabee strength had grown to more than 26,000 men, serving in 21 full-strength Naval Mobile Construction Battalions, 2 Construction Battalion Maintenance Units, and 2 Amphibious Construction Battalions.

U.S. Navy and Seabee activity in Southeast Asia, however, long predated the Vietnam War. In fact, the first U.S. Navy involvement in Vietnam took place as early as May 1846. In that year, the USS CONSTITUTION, while on a world cruise, anchored in Danang Bay to take on water and foodstuffs. While there, Captain John Percival, USN, the CONSTITUTION's skipper, received a request for assistance from Bishop Dominique Lefevre who had been imprisoned and condemned to death by Thieu Tri, Emperor of Cochin China.

In response to the bishop's plea for help, Captain Percival led a rescue party of 80 sailors and marines ashore. After seizing three Mandarins as hostages, he quickly dispatched a letter to the Emperor demanding the release of Lefevre. The message either went unheeded or undelivered, because a reply was never received.

Deciding on an alternative course of action, Percival released the three Mandarins when they steadfastly promised that they would personally seek Lefevre's release. Still later, after hearing no more from the Mandarins and fearing that he had been tricked, Captain Percival set sail for Macao, where, nine days later, he apprised the French authorities of Lefevre's plight. A warship was promptly dispatched and, as a result, Bishop Lefevre was finally rescued. Thus, the story of the first United States intervention in Vietnam ended happily.

The second instance of significant of U.S. Naval activity in Vietnam took place 108 years later and, this time, the Seabees were prominent participants. The 1954 Geneva agreements, which recognized the North Vietnamese communist government of Ho Chi Minh, also contained a provision which gave the Vietnamese populace an opportunity to choose whether they would live in the north or the south of a country newly divided roughly at the 17th parallel. Prior to 18 May 1955, the expiration date of this provision, nearly 800,000 Vietnamese emigrated from north to south. Their exodus, in which four nations participated, has since come to be known as the "Passage to Freedom." During the mass migration, the South Vietnamese government built reception centers and provided basic amenities, the French supplied ships and planes, and the British provided an aircraft carrier. For its part, the United States organized Navy Task Force 90, comprising more than 50 ships. Through the concerted effort of these four governments, 310,000 refugees were evacuated from North Vietnam. In addition, 68,857 tons of military equipment and 8,135 military vehicles which, furnished to France under the Mutual Defense Assistance Program, were kept from North Vietnamese hands.

As members of Task Force 90, Amphibious Construction Battalions One and Two took part in the "Passage to Freedom." In Danang, where the USS CONSTITUTION had stopped more than a century before, a detachment from Amphibious Construction Battalion One built and operated a recreation facility for U.S. personnel involved in the ferrying operation. Another detachment from the same battalion constructed a refugee tent camp and accompanying water and power supply facilities at the mouth of the Saigon River. This Seabee-built camp served as a reserve living area for the overflow of refugees

from Saigon. Since the Geneva accord specifically prohibited the landing of foreign military units or the establishment of foreign military installations in French Indo-China, the Seabees of this detachment were required to wear civilian clothes and to remove all U.S. markings from their equipment. Nevertheless, as a result of their humanitarian efforts, the Seabees of Amphibious Construction Battalion One were awarded the Vietnamese Presidential Unit Citation. Detachments from Amphibious Construction Battalion Two were originally scheduled to build a causeway across the beaches adjacent to the North Vietnamese city of Haiphong. Over this causeway military equipment and refugees were to be transferred to the many ships lying offshore. The plan, however, was soon abandoned because of French opposition and the later discovery that the previously selected beaches were unsuitable for such a causeway. Instead, all loading operations were carried out from the Haiphong waterfront, and the Seabees were diverted to the south to help their comrades with the construction of the massive refugee camp. The Seabees labored for about one month in Vietnam and, before being relieved, made an important contribution to the success of this historic "Passage to Freedom."

Two years later, Seabees were to visit Vietnam one more time before the conflagration of the 1960s. During the summer of 1956, a team from a Seabee construction battalion was sent to the newly-established Republic of Vietnam to conduct a survey of some 1,800 miles of existing and proposed roads. Two solid months of seven-day-a-week labor in extremely rough territory yielded valuable results. When the Seabees returned almost ten years later, these results helped them build many of the roads that were then crucial to the conduct of the war.

As tension continued to mount in Southeast Asia during the 1960s, the Seabees first returned in the form of thirteen-man Seabee Teams, capable of performing a great variety of tasks. Although small in size, these units possessed unique capabilities never before assembled in such compact but highly effective and versatile packages.

In 1963 Seabee Teams were sent to Thailand to assist in the Royal Thai Government's Accelerated Rural Development Program.

In the northern provinces these diversified units taught and advised local Thais in an effort to help them form the cadre of essential rural public works organizations. Three years of diligent work in this region was finally concluded in May 1966.

In early November 1966, the Seabee Team program in Thailand shifted from rural development to the Thai Border Patrol Police Program for the development of remote area security. The program's underlying aim was to win village support for the government in regions continually plagued by communist insurgency. Before the termination of all Seabee Team efforts in Thailand in 1969, these skilled units had made significant progress toward the attainment of this national aim.

Also in 1963, two years before the first full Seabee battalion arrived, Seabee Teams were laboring in South Vietnam. They constructed small support points throughout the interior of South Vietnam to counter Viet Cong political influence in the villages. The teams built U.S. Army Special Forces camps, performed civic action tasks, and conducted military engineering projects under the Civil Irregular Defense Group Program.

Seabee Team activity in South Vietnam continued to grow. Generally working in remote rural areas, away from large population centers, the Seabees served throughout twenty-two provinces scattered from the Mekong Delta, along the Cambodian border and the Central highlands, to the North Vietnamese border.

In the early years, only two teams at a time were employed in these regions, but by 1969 the number of teams in-country had grown to 17.

Seabee Team accomplishments were many and varied. The U.S. Army Special Forces, who were engaged in training and advising Vietnamese Strike Forces and the Civilian Irregular Defense Group in anti-guerilla fighting and defense tactics, required fortified camps in advance areas able to withstand recurring ground and mortar attacks. Besides constructing these special camps, Seabee Teams were called upon to build access roads and nearby tactical airstrips.

Further, in South Vietnamese hamlets and villages, teams carried out numerous civic action projects. From training local inhabitants in basic construction skills to providing desperately needed medical assistance, the Seabees made a significant impact on the Vietnamese populace.

While they were primarily builders and instructors, Seabee Team members were sometimes directly involved in battle. Perhaps the most famous such battle occurred in June 1965 at Dong Xoai, 55 miles northeast of Saigon. When Viet Cong troops overran a Special Forces Camp containing 400 South Vietnamese and allied Asian troops, 11 men of a U.S. Army Special Forces team and nine men of Seabee Team 1104, seven of the Seabees were wounded and two killed. One of the dead was Construction Mechanic 3rd Class Marvin G. Shields, USN, who was posthumously awarded the Medal of Honor for conspicuous gallantry in carrying a critically wounded man to safety and in destroying a Viet Cong machine gun emplacement at the cost of his life. Not only was Marvin Shields the first Seabee to win the nation's highest award, but he was also the first Navy man to be so decorated for action in Vietnam.

Beginning in 1970 Seabee Teams departed from South Vietnam without relief. This initiated a phase-down program which corresponded to United States troop withdrawals. Finally, on 18 April 1972, the last Seabee Team site located in Ham Tan, Binh Tuy Province, was closed. Although these unique units were physically gone, the common people of Vietnam continued to reap the benefits of their many civic action projects.

In 1965 the steadily increasing insurgency of the National Liberation Army (Viet Cong), made the large scale commitment of U.S. troops a necessity. Although Seabee Teams had been active in the Republic of Vietnam since 1963, it was not until 1965 that larger Seabee units were deployed to aid in the Vietnamese struggle. Not since the Second World War had the need for the Seabees been so great and not since Korea had Seabees worked under enemy fire. The first full Seabee battalion arrived in Vietnam on 7 May 1965 to build an expeditionary airfield for the Marines at Chu Lai. Others soon followed. From 1965 until 1969 the Seabee commitment in Southeast Asia rapidly increased, necessitating first the transfer of

Atlantic Fleet battalions to the Pacific through a change of home port, then the deployment to Vietnam of Atlantic Fleet battalions, and later, the reestablishment of nine additional battalions. This effort culminated in the recall to active duty of two reserve battalions in May 1968, bringing to 21 the number of battalions rotating to Vietnam at one time or another. In addition, there were two Amphibious Construction Battalions lending support to the Vietnam effort. During the same time period, to meet a requirement for Seabees to support such installations as the Naval Support Activities at Danang and Saigon, the two Construction Battalion Maintenance Units, the two deployed Naval Construction Regiments, and the deployed Third Naval Construction Brigade rapidly increased their size.

During the war the total Seabee community grew from 9,400 in mid-1965 to 14,000 in mid-1966, to 20,000 in mid-1967 and, finally, to more than 26,000 in 1968 and 1969. To help meet the great need for personnel, the Navy recruited skilled construction workers at advanced pay grades. The Direct Procurement Petty Officer Program, reminiscent of early World War II recruiting efforts, proved highly effective both in terms of total numbers recruited (more than 13,000) and quality of input.

Seabee accomplishments in Vietnam were impressive. They built roads, airfields, cantonments, warehouses, hospitals, storage facilities, bunkers and other facilities which were critically needed to support the combatant forces. The mobile "search and destroy" strategy adopted by the United States during the first years of the war shaped the two-fold mission of the Seabees in Vietnam. In addition to the many Seabee Team activities in remote locations, construction battalions built large coastal strongholds in the I Corps Tactical Zone which embraced the northernmost provinces of Quang Tri, Thua Thien, Quang Nam, Quang In, and Quang Ngai.

In 1965 the Seabee portion of the Vietnam Construction Program was concentrated at three northern coastal points, the ports of Danang, Chu Lai, and Phu Bai. The first six construction battalions sent to Vietnam were deployed to these three points and, by 1966,

as the construction program gathered momentum, eight battalions were at work simultaneously in the I Corps Area.

At Danang the Seabees built three badly needed cantonments. Temporary facilities which included strongback tents, mess halls, shops, sheds, bathroom facilities, and a water distribution system were the first to be completed. In addition, Seabees repaired the important Danang River Bridge, rendered technical aid to South Vietnamese troops who were building ramps for tank landing ships and small boats, and constructed warehouses and petroleum storage tanks. Fortification of the cantonments was also essential because of frequent enemy attacks. Despite Seabee-built machine gun positions and bunkers for perimeter defense, one such attack succeeded in destroying the newly built advance base hospital, killing two Seabees and wounding over ninety. In true Seabee tradition, the men rapidly rebuilt the entire hospital complex.

At Phu Bai, near the ancient imperial capital of Hue, the Seabees developed yet another coastal point into an advance base. There, the construction men built a fleet logistic support unit cantonment. Besides camp construction, the project entailed raising, widening, and surfacing a low peninsula which jutted 1,500 feet out into the South China Sea. The causeway served as an unloading ramp for cargo-laden landing ships. In addition, the Seabees built a large antenna field which substantially modernized communication systems in the war-torn northern provinces. Two smaller cantonments, one for a medical battalion,
were also constructed.

As U.S. Marines based at Danang pushed search and destroy operations into the interior of the I Corps Area, the need arose for increased air cover and, thus, an additional air strike facility. It was decided that the Seabees would build a 3,500-foot expeditionary airfield at Chu Lai, 50 miles south of Danang. Since the Viet Cong controlled the surrounding mountains and there were no nearby port facilities, the Seabees landed on the beaches of Chu Lai in the first major U.S. Navy amphibious operation since the Lebanon crisis of 1958. Matching the feats of their fabled Second World War predecessors, the Vietnam-era Seabees laid the last aluminum plank

on the airfield only 23 days after coming ashore. The very next day planes began operations against the Viet Cong from the newly-built airstrip. The Seabees continued their work at Chu Lai by adding a parallel taxiway, four cross taxiways, and parking aprons. Before their task was completed, the Seabees had rapidly erected two cantonments, warehouses, hangars, and a host of other vital facilities.

By the end of 1965, Seabees had pioneered and laid the ground-work for three major advance bases in the northern provinces of the Republic of Vietnam. From these bases, combatant forces received the critical support necessary for increasing attacks into the interior. In the words of Secretary of the Navy Paul H. Nitze, the Seabees had "contributed mightily to constructing the vast infrastructure necessary for a major war in a primitive, remote area." The bastions built on the upper coast of South Vietnam demonstrated their worth in 1966 and 1967 when Allied forces, supplied from these points, crushed major North Vietnamese offensives through the Demilitarized Zone and Laos.

During 1966 the Seabees continued to build at Danang, Phu Bai and Chu Lai, expanding these bases and erecting more permanent structures for the men and equipment assigned to them. At the same time, Seabees entered the troubled, northern-most province of Quang Tri to build a hill-top fort of concrete bunkers at Lang Vei. This vital outpost overlooked a feeder line of the Ho Chi Minh Trail. They also built facilities at the Marine base at Dong Ha and the Army artillery post at Comm To.

Among the numerous construction projects completed in 1967 was an alternate airfield at Dong Ha and the famed Liberty Bridge, 80 miles southwest of Danang. Even though the northeast monsoon season had already begun, the airstrip was completed in only 38 days. The Liberty Bridge, which spanned the Thu Bon River, was one of the most impressive undertakings of the war. Built to withstand the incredible expansion of the river during the monsoon season, the completed bridge was 2,040 feet long and towered 32 feet above the low water level. While construction of such a bridge would have been difficult under normal circumstances, the Seabees were required to work in a remote area of Vietnam known to contain large

concentrations of enemy forces. Despite tremendous difficulties, the bridge was finished in only five months.

During the bitter struggle of the Tet offensive in February of 1968, Seabees built and fought in direct support of the Marine Corps and Army. While the battle for Hue raged at fever pitch, Seabees from Phu Bai were summoned to rebuild and repair two vitally needed concrete bridges. When enemy snipers drove the Seabees from their work, they organized their own combat teams which silenced the snipers and let them complete their important task. In the spring, the Seabees went to work on the Danang to Hue railroad and put it quickly back into service. Constant enemy harassment had suspended service on this line since 1965.

Naval Construction Force strength reached its peak shortly after the beginning of the 1968 Tet Offensive. During that and the following year there were more than 11,000 Seabees serving in South Vietnam. Although the Navy's construction men continued to labor in the northern provinces, building city-like cantonments and upgrading previously constructed facilities, the priorities of the war also began to demand more and more of their skills in the south.

After responsibility for conducting the war was turned over to the South Vietnamese and American military operations in the north were significantly reduced, the Seabees labored to prepare the Vietnamese for the ultimate withdrawal of all American combatant troops. In the Mekong Delta they built a string of coastal bases and radar sites which would allow the Vietnamese Navy to completely take over coastal surveillance in this area of "brown water" warfare. As thousands of American troops were returning home, Seabees continued to build. Only now, however, they built hospitals at Danang, Chu Lai, Phu Bai, Quang Tri and many other towns and villages throughout the country.

When in 1970, Seabee activity drew to a close and the withdrawal of the last units commenced, the Navy's builder-fighters had made a lasting contribution to the people of South Vietnam. In a war where winning the hearts of the people was an important part of the total effort, Seabee construction skills and medical assistance proved powerful weapons in the Vietnam "civic action" war. The

recitation of events and the quoting of statistics fail to reveal the true nature of the Seabees' involvement during the Vietnam years. True, they supported the Marines at Chu Lai and Khe Sanh, reopened the railroad line between Hue and Danang, struggled with the logistics problems of the Mekong Delta, constructed a new naval base on a sand pad floating on paddy mud, and built staggering quantities of warehouses, aircraft support facilities, roads, and bridges. But they also hauled and dumped numerous tons of rock and paving on roads that provided access to farms and markets, supplied fresh water to countless numbers of Vietnamese through hundreds of Seabee-dug wells, provided medical treatment to thousands of villagers, and opened up new opportunities and hope for generations to come through Seabee-built schools, hospitals, utilities systems, roads and other community facilities. Seabees also worked with, and taught construction skills to the Vietnamese people, helping them to help themselves and proving that the Seabees really are "builders for peace."

AFTER VIETNAM

When the de-escalation of United States activity in Southeast Asia got underway, Seabee strength was once again reduced. By September 1970, the naval mobile construction battalions were down to the planned post-Vietnam level of ten full-sized battalions. Because of the reduction of the Naval Construction Force in Vietnam, on 8 December 1969, the headquarters of the 30th Naval Construction Regiment was moved from Vietnam to Okinawa in the Ryukyu Islands, and on 1 May 1971 the headquarters of the 32nd Naval Construction Regiment was moved from Vietnam to Roosevelt Roads, Puerto Rico. By the end of 1971 most Seabees were employed outside of Southeast Asia. Thus, on 9 November 1971, the 3rd Naval Construction Brigade was disestablished.

As the Seabees entered the post-Vietnam era, they found themselves employed on major peacetime projects which had been deferred or neglected because of wartime priorities. Alert battalions were reestablished in the Atlantic and Pacific Fleets at Roosevelt Roads, Puerto Rico; and on Okinawa, in the Ryukyu Islands. The men of the Naval Construction Force found themselves employed outside their home port fleet areas. No geographical limitations existed as

battalions and details were deployed to satisfy the current and ever-increasing demand for Seabee expertise. For example, after the reestablishment of the alert battalions, one battalion, Naval Mobile Construction Battalion Four, served first in 1970 as the Pacific alert battalion, and then in 1972 as the Atlantic alert battalion.

The post-Vietnam Seabees were involved in new construction frontiers: the Indian Ocean, the Trust Territory of the Pacific Islands, Europe, on the ocean floor itself, and in most of the oceans of the globe. Though younger and fewer in number than their World War II predecessors, Seabees continued to demonstrate the same old "Can Do" spirit.

DIEGO GARCIA

One of the major projects for the Naval Facilities Engineering Command and the major project for the Seabees in the 1970s and early 1980s was the construction of a naval complex on the atoll of Diego Garcia, part of the British Indian Ocean Territory. Diego Garcia, one of the 52 coral atolls of the Chagos Archipelago, was located in the Indian Ocean 960 miles south of India and 7 miles south of the equator. The 6,700 acre, heavily vegetated atoll was horseshoe-shaped with a perimeter of approximately 40 miles and average elevations of 3 to 7 feet. The annual rainfall was approximately 100 inches.

On 24 October 1972 the U.S. and British governments signed an agreement concerning the construction of a U.S. Naval Communication station on Diego Garcia. The purpose of the facility was to provide a necessary link in the U.S. defense communications network and furnish improved communications support in the Indian Ocean for ships and aircraft of both governments. The U.S. was to build the facility using Naval Construction Force personnel.

The Diego Garcia base was initially planned as an austere communication station with all necessary supporting facilities, including an airstrip. On 23 January 1971 a nine-man reconnaissance party from landed on the atoll to confirm planning information and carry out a preliminary survey of the beach landing areas. In early March a 50-man party from the same battalion and

from Amphibious Construction Battalion 2 as well as other specialist personnel arrived by LST, and was followed by an advance party of 160 men from Naval Mobile Construction Battalion 40. These men were to construct a temporary Seabee camp, water and electrical distribution systems, a dining hall, laundry, refrigeration and storage facilities. Finally, they were to build an interim 3,500-foot airstrip.

In October and November, Detachment CHAGOS of NMCB 71 and the whole of NMCB 1 arrived, marking the beginning of large-scale construction. NMCB 1 built the transmitter and receiver buildings and placed the base course for the permanent runway and parking apron. In July 1972 NMCB 62 relieved NMCB-1 and took over the departing battalion's projects. On 25 December the first C-141J transport landed on the newly completed 6,000 foot runway with the Bob Hope Christmas Troupe. The full 8,000 foot permanent runway with adjoining taxiway and parking apron was completed by March 1973; and on 20 March, exactly two years after construction began, the U.S. Naval Communication Station, Diego Garcia, was officially established.

Worked commenced on the second construction increment, a $6.1 million project which involved the construction of a ship channel and turning basin in the lagoon. This project, however, was contracted to a Taiwanese firm. Seabees, however, continued to work on support and personnel facilities in the cantonment area at the northern tip of the atoll. The second major area of construction was the airfield and its supporting facilities. Revised requirements called for the extension of the original 8,000-foot runway to 12,000 feet and additions were made to the parking apron and taxiways. New hangars and other support facilities were also built. In addition, construction of extensive petroleum, oil and lubricant storage facilities was initiated. The Navy required 480,000 barrels of storage to support ship and aircraft needs and the Air Force required an additional 160,000 barrels. During 1973 and 1974 Seabee units worked on all these projects. Because the final mission of Diego Garcia was still evolving, it was clear that still more construction would take place in the years to come.

In 1975 and 1976 Congress authorized $28.6 million to expand the Diego Garcia facilities to provide minimal logistics support for U.S.

task groups operating in the Indian Ocean. This mission expansion called for construction of a fuel pier, airfield expansion, and more petroleum, oil and lubricant storage, and personnel support facilities. Additional projects were undertaken in 1978. Construction was accomplished by both Seabees and private contractor personnel and it was anticipated that the Diego Garcia project would finally be completed in 1980. World events in 1979 and 1980, however, forced a reevaluation of the U.S. defense posture in the Indian Ocean Area which indicated the need for pre-positioned materials to support a rapid deployment force and a more active U.S. presence in the area. It was decided to further expand the facilities at Diego Garcia in order to provide support for several pre-positioned ships, loaded with critical supplies. By the end of 1980 the Naval Facilities Engineering Command had advertised a $100 million contract for initial dredging at Diego Garcia to expand the berthing facilities.

In the early 1980s the construction effort at Diego Garcia rapidly shifted from Seabees to private contractors. The last full Seabee battalion, NMCB 62, departed the atoll in July 1982. While Seabees remained in detachments, contractor personnel took over the projects yet to be accomplished on Diego Garcia. Thus, what began as simply a communication station on a remote atoll became a major fleet and U.S. armed forces support base by the 1980s. By 1983 the only Seabee unit remaining on Diego Garcia was a detachment of NMCB 62. The departure of this detachment in September 1983 ended twelve years of priority effort on the island that included some 220 projects for the Navy and Air Force, valued in excess of $200 million. The work the Seabees completed on Diego Garcia since 1971 represented the largest peacetime construction effort in their history. Diego Garcia was the major Seabee construction effort of the 1970s and they acquitted themselves well under the difficult and isolated conditions that exist there. When the Seabees arrived they lived in tent camps, when they departed they left a fully-developed, modern military facility, capable of supporting thousands of U.S. personnel.

SEABEE ACTIVITY AROUND THE WORLD

Other projects on which Seabees worked in the early 1970s included the upgrading of recreational and living facilities at the

Naval Communication Station, Makri, Greece. There they built a radio facility; improved the base swimming pool; built tennis courts, and a softball field; and an addition to the enlisted men's club; and remodeled the barracks. At the Naval Facility, Souda Bay, on the island of Crete, Seabees built an open storage facility, a pipe and canvas enclosure, and a helicopter pad. In Sigonella (Sicily), Italy, at the Naval Air Facility they installed diesel units and "no break" generators, and remodeled barracks and the general mess, built an air-frame repair shop, power-check pad, ordnance magazine, enlisted man/chief petty officer club, handball court and theater. At the Fleet Support Office, La Maddalena, Italy, Seabees built a gymnasium and a playing field unit.

In Spain Seabees worked on a number of projects at the Rota Naval Station. These projects included remodeling barracks and the enlisted men's club and building additions to the base telephone exchange and warehouse. Seabees also installed a new fender system on Pier #2 and built a causeway connection. They also reconstructed the Rota Seabees Camp which had deteriorated because it had been vacant from 1965 until 1971. In London, England, Seabees remodeled a Marine barracks; in Greenock, Scotland, they built a bowling alley; in Holy Loch, Scotland, they renovated the public works department garage and the hobby shop facility; at the Naval Security Group Activity, Todendorf, Germany, they built an addition to an operations building and installed a new emergency generator.

Meanwhile, in the Pacific, the major efforts of the Seabees were centered on Okinawa in the Ryukyu Islands, and on Guam in the Mariana Islands. On Okinawa they performed many different and challenging assignments. The jobs included new structures at Camp Kinser, a new water pipeline, a modern underground electrical distribution system and a major land grading project at the Marine Corps Air Facility at Futema. On Guam Seabees built a Seabees Camp. The camp, dedicated to William Lee Covington, a young Civil Engineer Corps officer killed in Vietnam, included approximately 39 pre-engineered buildings, housing facilities, offices, shops, a galley, living quarters, a chapel, and utilities. Other projects completed during the 1970s included a major swimming pool complex at the Naval Hospital, a culvert and earthmoving project at the Naval Magazine, a

chief petty officer club, community center and teen center at the Naval Communication Station, and four steel buildings at the Polaris Point submarine facility.

In 1972 the Chief of Naval Operations announced that female naval personnel would be granted entry into all Navy ratings. That same year the a woman sailor had her request to cross-rate approved and subsequently became the first female Seabee. Many more would follow her, and by the 1990s women had become common in the ranks of the Seabees.

Seabees in Taiwan worked on the rehabilitation of barracks and on the construction of duplex cabins; at Iwakuni, Japan they worked on a Marine Corps confinement facility, an exchange warehouse, and a water line. In the Philippines they constructed an aircraft rinse rack and runway support facilities.

In Puerto Rico Seabees renovated roads during the 1970s, built a commissary and new buildings at Camp Moscrip, and carried out numerous civic action projects. During 1977 Seabees carried out a beach-erosion preventive project in Argentia, Newfoundland; and rehabilitated housing at Guantanamo Bay, Cuba.

The Seabees were also active in Antarctica, both during and after the Vietnamese War. As part of Operation "Deepfreeze," they provided logistic support for the scientific research programs that were conducted by seventy American universities, government agencies, and industrial firms. The return of Naval Mobile Construction Battalion 71 from Antarctica in 1974 marked the end of Seabee participation in Operation "Deepfreeze." The National Science Foundation, which oversaw the program, accomplished all remaining construction by contract.

In addition to the work performed by the mobile construction battalions, the amphibious construction battalions were extensively employed. Both amphibious battalions engaged primarily in fleet exercises and other training operations. Additionally, amphibious Seabees in the Pacific Fleet found time to accomplish earthwork for a canoe lagoon and a camping area at Imperial Beach, California, to place and remove concrete obstacles in South Bay for underwater

demolition teams and Sealab training, and to complete the first increment of a sheet pile bulkhead project. Meanwhile, Seabees of the Atlantic Fleet constructed a boat marina at the Little Creek Amphibious Base.

Detachments of the amphibious Seabees also served in the Mediterranean and Caribbean. These were detachments of the amphibious ready groups that were prepared for amphibious assaults whenever necessary.

In June 1969 the first Seabee Team to be employed in the Trust Territory of the Pacific Islands landed at Moen Island in the Truk District. While the concept of civic action was not new to the Seabees, the Micronesian environment was totally different from that of Thailand and Vietnam, where the thirteen-man Seabee teams had proven so successful. The Trust Territory was a United Nations strategic trust administered by the United States under a 1947 agreement. While the area was not war torn or threatened as were Vietnam and Thailand, the Trust Territory was in an embryonic stage of political and economic development.

Under an agreement between the Secretaries of the Interior and Defense, and at the specific request of the native people at each location, Seabee teams were provided to assist the Micronesians in constructing facilities, roads, and utilities needed to enhance the economic development and improve the health of the people of the Trust Territory. While construction of such facilities provided tangible evidence of Seabee accomplishments in Micronesia, the major emphasis and greatest potential benefit was the valuable training in construction skills that was made available to the people of Micronesia. This training enabled them to accomplish essential construction themselves.

Seabee Teams in the Trust Territory served on the islands of Ponape, Truk, Palau, Kusaie, and Yap. The teams built roads, dispensaries, water tanks, bridges, and public buildings. The response of the Micronesian people to the civic action program was highly favorable in all districts. The tangible benefits were readily apparent in the improved roads, utilities and new facilities.

In the summer of 1972 a Seabee Team, with assistance from an amphibious construction battalion, assembled an Ammi pontoon hospital barge on Lake Titicaca high in the central plateau of Bolivia. The project was sponsored by the Bolivian Navy with assistance from the United States government. The barge was a 90 by 28-foot Ammi pontoon with a prefabricated Lewis building superstructure that served as a dispensary. It was powered by two diesel outboard motors and contained all the basic medical and dental facilities of a small hospital.

In the mid-1960s increased interest in exploiting the ocean for defense purposes spotlighted a need to establish an underwater construction capability within the Navy. A team of Seabee divers was formed during 1968 to launch, implant, and recover the Tektite I habitat in the Caribbean. The success of this operation led to additional Seabee underwater construction assignments. It also led to the establishment of two Seabee underwater construction teams: Underwater Construction Team One under the cognizance of the Twenty- first Naval Construction Regiment at Davisville, Rhode Island; and Underwater Construction Team Two under the cognizance of the Thirty-first Naval Construction Regiment at Port Hueneme, California. After their formation, both teams performed successfully in numerous operations, including the installation, maintenance, and repair of submarine cables and pipelines; the implanting and recovery of moorings and acoustic and magnetic systems; underwater surveys; and harbor and dry dock inspections. The teams demonstrated a capability to perform, and they added dimension to Naval Construction Force capabilities, previously generally restricted to efforts on land.

In 1970 the Chief of Naval Operations, in his concern for improving the quality of life ashore for Navy personnel and their families, established a new program for improving shore establishment habitability. He committed the Seabees to lead and direct his Self-Help and Shore Establishment Habitability Improvement Programs.

Under this program active and reserve fleet Seabees and construction battalion units participated in improvements to personnel support facilities. The construction battalion units

consisted of approximately forty or fifty men and were established to provide more effective and worthwhile duty for Seabees while stationed ashore. In addition to training on construction projects and continuing the Seabees' combat and disaster recovery readiness, the units guided and supervised the efforts of other Navy ratings in improving the sailor's living conditions ashore under the self-help concept.

Examples of the projects to improve living conditions ashore range from very simple bus shelters to large hobby shop complexes. Other typical examples included improvements to living facilities, temporary lodgings, parking garages, on-base parking, mobile home parks, and locker and recreation clubs. In 1981 sixteen construction battalion units were actively engaged in executing such projects in the United States.

In addition to performing their regular construction functions, Seabees participated in humanitarian and disaster recovery assignments in the wake of several natural disasters and political upheavals. One such political upheaval was the collapse of the Republic of Vietnam in 1975. Following this event, Seabees provided support to the Vietnamese refugee program, Operation "New Life."

OPERATION "NEW LIFE"

On 29 April 1975 the government of the Republic of Vietnam surrendered to the North Vietnamese as North Vietnamese regulars and Viet Cong closed in on Saigon. Before the surrender, President Gerald Ford ordered a mass evacuation of Americans and Vietnamese from the capital. For the latter who were political refugees, it meant the beginning of a long journey to a "new life" in the United States. In addition to the evacuation by air, many thousands of Vietnamese chose to flee the country in ships, and even small boats. The first stop for many on this journey was Grande Island, located at the entrance of Subic Bay, Republic of the Philippines. Here, Seabees, assisted by Marines and civilian employees from the Navy Public Works Center built a tent camp for the refugees. From Grande these refugees moved to the larger camps which had been built on Guam in the Marianas.

On 23 April 1975 the 30th Naval Construction Regiment directed all Seabees on Guam to halt their normal construction projects and mount an around-the-clock effort to prepare facilities to house the approximately 50,000 refugees who were even then fleeing South Vietnam. Seabees first rehabilitated the abandoned Naval Hospital Annex at Asan Point. The Seabees worked around the clock and by Friday, 25 April, the camp received the first arriving refugees and quickly filled to its 10,000-person capacity. On 24 April Seabees began construction of a huge, 50,000 person tent camp at Orote Point. This was a monumental undertaking as it involved clearing the jungle from more than 50 acres of land. Once again, the Seabees worked 24-hours a day and the camp received its first refugees on 26 April. Not only did construction ratings work, but the battalions also pressed their support personnel into action. Supply clerks, mess cooks, and yeoman all pitched in and worked around the clock to get the job done. Construction continued and in about a week, Seabees erected 2,000 tents with no end in sight. Support utilities were also provided: messing facilities and kitchens, thousands of feet of water mains to supply showers and washing facilities, as well as the necessary sanitary facilities.

As refugees were processed and flown to the U.S., the camp population gradually dropped. Then, the first ships carrying refugees arrived and the camp population swelled once again. A peak camp population of 50,233 was reached on 14 May, after that the pace gradually slackened as the flow of refugees to the states outran the influx of new refugees. By 26 June the camp population had dropped to 10,138 and Operation "New Life" began to wind down.

DISASTER RELIEF

In January 1975 a Seabee salvage team was sent to Managua, Nicaragua, following a major earthquake which heavily damaged that city. After completing its primary mission of salvage at the U.S. Embassy, the team then salvaged badly-needed hospital equipment for the El Ritiro Hospital in Managua.

In December 1975 Seabees of Construction Battalion Unit 417 engaged in flood control operations at Mt. Vernon, Washington, when the Skagit River overflowed and threatened the town. In February 1976 Naval Mobile Construction Battalion 40 sent a detachment to Guatemala City to provide disaster relief following an earthquake which caused extensive damage to that city. In May 1977 Naval Mobile Construction Battalion 3 performed recovery and reconstruction work of all types on Guam in the wake of Typhoon "Pamela." In February 1980 Seabees from the 31st Naval Construction Regiment at the Naval Construction Battalion Center, Port Hueneme, California, battled a devastating flood at the nearby Pacific Missile Test Center, Point Mugu. Finally, Seabees went to the islands of Jamaica and Dominica in 1980 to help repair the extensive damage caused by Hurricane "David" in December 1979.

SEABEES KILLED IN ACTION IN WAR AND PEACE

Since the outbreak of World War II, 22 Civil Engineer Corps officers and 353 Seabees have been killed in action during wartime. During the last few decades, however, a new peacetime threat has emerged. Various disaffected groups in the world have increasingly made use of terrorism as a weapon. Three Civil Engineer Corps officers and one Seabee are numbered among their victims.

At mid-morning on 3 February 1975 on the northeastern edge of the U.S. Naval Base at Subic Bay in the Philippines, Captain Thomas J. Mitchell, CEC, USN, Commander of the 30th Naval Construction Regiment, Commander Leland R. Dobler, CEC, USN, Commanding Officer of Naval Mobile Construction Battalion 133, and Lieutenant Charles H. Jeffries, CEC, USN, Officer in Charge of Detachment WALLABY of that battalion, were riding in a jeep on an inspection tour of a section of perimeter road which was being worked on by Lieutenant Jeffries's detachment. The three officers were driving in an isolated area approximately seven miles from base headquarters in deep jungle along the boundary between the base and Bataan Province when unidentified terrorists ambushed them, cutting the three men down in a hail of fire. Seabees from Detachment WALLABY, who were working about half a mile away, heard the shooting, rushed to the ambush scene, and notified base headquarters. Medical personnel were immediately flown to the

scene, but the three men were dead when they arrived. U.S. Marines and Philippine Constables immediately moved into area to locate the attackers, but they were unsuccessful and the attackers were never positively identified. To this day, the three officers remain the victims of anonymous terrorists.

The latest incident of a Seabee falling victim to terrorist activity took place on 15 June 1985. Following completion of a routine repair project at a base in Greece, Steelworker 2nd Class Robert D. Stethem, USN, and four other members of Underwater Construction Team 2 were returning to the United States aboard TWA Flight 847 when Shiite Muslim terrorists hijacked the flight and diverted it to Beirut, Lebanon. The terrorists singled out Stethem and another Seabee for physical abuse. While the aircraft sat at the Beirut airport, the terrorists beat Stethem over a prolonged period, and finally killed him with a bullet to the head. After lengthy negotiations, the remaining passengers were finally freed. The four terrorists made good their escape into Beirut, but one was later apprehended in Germany and convicted of air piracy and murder.

THE SEABEE ORGANIZATION IN THE 1970'S AND 1980'S

Following the Vietnam War, the pressure to reduce the size of the Armed Forces made it necessary for the Seabees to rely more on the reserve force to offset the reductions in the active force. During the 1970s reserve Seabees experienced a closer association with their active counterparts than in the past.

Efforts were made to elevate the readiness posture of the reserve Seabee force through a variety of programs. One such program involved the establishment of Permanent Drill Sites for the reserve battalions at military installations within their respective geographical areas. Readiness Support Allowances were positioned At these sites. These allowances consisted of essentially a ten percent cross-section of the Advanced Base Functional Component for a Seabee battalion. This allowed the reserve battalions to develop year-round training programs. To effectively care for and utilize this readiness allowance, active-duty support personnel were assigned to each reserve battalion. Because of such measures, the mobilization

readiness level of the Reserve Naval Construction Force substantially improved by the mid-1970s.

In late 1973, as part of the Navy's effort to realign the naval shore establishment, the mission of the Naval Construction Battalion Center, Davisville, Rhode Island, was revised. The center was reduced to providing storage and preservation facilities for advance base and mobilization stocks, and mobilization facilities to support the Naval Construction Force.

At the peak of the Vietnam War, the Davisville Center had supported six full-strength battalions. However, by 1973, the center was home port for only three battalions of peacetime strength and one underwater construction team. In addition, the 21st Naval Construction Regiment was located there. On 30 June 1974, Naval Mobile Construction Battalion 71 was transferred to the Naval Construction Battalion Center, Gulfport, Mississippi; Naval Mobile Construction Battalion 40 was transferred to the Naval Construction Battalion Center, Port Hueneme, California; and Underwater Construction Team 1 was transferred to the Naval Amphibious Base, Little Creek, Virginia. Later in the year, on 27 November 1973, Naval Mobile Construction Battalion 1 was also transferred to the Gulfport Center. The last unit of the Naval Construction Force at Davisville, the 21st Naval Construction Regiment, was disestablished on 15 January 1975.

At the beginning of 1975 there were three regiments, ten mobile construction battalions, two amphibious construction battalions, two underwater construction teams, and one construction battalion maintenance unit on active duty.

The 31st Naval Construction Regiment at Port Hueneme, California, was responsible for the operational control of the battalions that made Port Hueneme their home port. These battalions were Naval Mobile Construction Battalions 3, 4, 5, 10, and 40. The regiment was also responsible for Underwater Construction Team 2.

The 20th Naval Construction Regiment at Gulfport, Mississippi, was responsible for the operational control of the battalions that

made their home port in Gulfport. These battalions were Naval Mobile Construction Battalions 1, 62, 71, 74, and 133.

Amphibious Construction Battalion 2 and Underwater Construction Team 1 were located at the Naval Amphibious Base, Little Creek, Virginia; and Amphibious Construction Battalion 1 had its home port at the Naval Amphibious Base, Coronado, California.

Construction Battalion Maintenance Unit 302 was permanently assigned to the Public Works Department of the Naval Base at Subic Bay, the Philippine.

Finally, the 30th Naval Construction Regiment had its headquarters on Guam in the Mariana Islands. This regiment was responsible for the operations of the construction battalions while they were employed in the Western Pacific Ocean area, and the Seabee Teams employed in the Trust Territory of the Pacific Islands.

Before the end of 1975 a change in the planned peacetime strength of the Seabees led to a further reduction in the number of construction battalions. On 30 June 1975 Naval Mobile Construction Battalion 71 was disestablished. The following year saw the demise of yet another battalion when Naval Mobile Construction Battalion 10 was disestablished on 30 June 1976. The number of Naval Mobile Construction Battalions remained at eight during the remainder of the 1970s.

SECURITY ACTIVITY IN THE 1980'S AND 1990'S

Because the United States was faced with continuing threats to its national security during the 1970s and early 1980s, the nation had to make the most efficient use of its defense resources. In this context, the Seabees faced imposing challenges.

In the early 1980s political upheavals in the Caribbean and Central America resulted in U.S. military action which included participation by the Seabees. Detachments from Amphibious Construction Battalion 1 and 2 participated in Operation "Urgent Fury," the U.S. invasion of Grenada. Later, a handpicked detail of 100 Seabees from NMCB 74 sailed from CBC Gulfport for Central

America and participated in the joint-services exercise, Operation "Big Pine II."

During 1981 Seabees based at the Naval Construction Center, Port Hueneme, performed a construction task of some interest. They constructed military and Secret Service support facilities at then President Ronald Reagan's ranch near Santa Barbara, California. During a subsequent "thank you" barbecue for the men involved, President Reagan was made an honorary Seabee.

On 11 November 1983, Naval Mobile Construction Battalion 1, then deployed at Rota, Spain, was alerted of a potential tasking in support of the U.S. Marines who were part of the Multinational Peacekeeping Force in Beirut, Lebanon. The tasking consisted of improving the living conditions of the Marines located at the Beirut International Airport. On 14 November NMCB 1 sent a survey team to Beirut; and on 24 November, Thanksgiving Day, Detail Bravo Lima, consisting of 1 CEC officer and 38 Seabees departed the battalion main body for Beirut. In January 1984 the tasking was expanded; and on 5 January a second increment, consisting of an additional CEC officer and 39 Seabees was sent to Beirut. The battalion also shipped 61 pieces of equipment to Beirut in support of Detail Bravo Lima. The tasking was completed and the first increment returned on 17 February 1984; the second increment and the 61 pieces of equipment returned on 1 March 1984. This was the first involvement of Seabees under combat conditions since the Vietnam conflict.

On 15 August 1984 the 30th Naval Construction Regiment was disestablished on Guam. From this date, the Commander, Construction Battalions, Pacific Fleet, at Pearl Harbor, assumed responsibility for operational control of Naval Construction Force units in the Western Pacific Ocean Area.

On 1 July 1985, as part of the military expansion during the first term of the Reagan presidency, a new active-duty Seabee battalion, Naval Mobile Construction Battalion 7, was established at the Naval Construction Battalion Center, Gulfport, Mississippi. There were now a total of nine active-duty mobile construction battalions.

During the 1980s the Seabees provided support for the Fleet Hospital program. These Fleet Hospitals were rapidly deployable systems of expandable shelters, pre-positioned worldwide, and assembled/erected by Seabees. Of the 23 hospitals required, 8 would be built and supported by active-duty Seabees, 8 by Reserve Seabees, and the remainder programmed for future years. The Reserve Naval Construction Force participated in a field test of a partial hospital in Operation "Golden Shield" during 1986. The active-duty Seabees supported a follow-on test and evaluation of a complete 200-bed hospital in April and May 1987.

Amphibious Construction Battalion 2 became the first Seabee unit ever awarded the Joint Meritorious Unit Service Award. Secretary of Defense Caspar Weinberger signed the award on 2 October 1986. The award recognized ACB 2's unsurpassed operational tempo, including support of the Multinational Peacekeeping Force in Lebanon, and Operation "Urgent Fury" in Grenada, Teamwork 84 in Northern Europe, Ocean Venture 84 in the Caribbean, and Joint Logistics Over the Shore Test II. Over 100 members of Amphibious Construction Battalion 1 were also eligible for the award, since they were assigned to Amphibious Construction Battalion 2 on temporary duty during Joint Logistics Over the Shore Test II.

During 1987 and 1988 Seabees participated in the West African Training Cruise. Civic action detachments were embarked on the USS SUMPTER which made port calls in Abidjan, Ivory Coast; Accra, Ghana; and Lome, Togo. These detachments received high praise from all concerned for their numerous civic action projects. In 1989 civic action detachments were embarked on the USS HARLAN COUNTY which made port calls in Guinea, Sierra Leon, Liberia, and Gabon. The same high praise was received.

As part of a reduction in forces, Naval Mobile Construction Battalion 62 was disestablished at the Naval Construction Battalion Center, Gulfport, Mississippi, on 31 July 1989.

On 22 September 1989 Hurricane "Hugo" struck the Charleston, South Carolina, area, killing 26 people and causing $5.9 billion of damage. Seabees from Naval Mobile Construction Battalion 5 and 133, home-ported at the Naval Construction Battalion Center,

Gulfport, Mississippi; and Construction Battalion Unit 412 at Charleston immediately moved to provide disaster relief to both the military and civilian communities.

At 5:00 pm on 17 October 1989 an earthquake of 7.1 magnitude shook the San Francisco Bay Area. Both the civilian communities and Navy facilities in the area suffered heavy damage. Seabees from Construction Battalion Unit 416 at the Naval Air Station, Alameda; and Construction Battalion Unit 421 from Mare Island began providing immediate disaster relief. The following day Naval Mobile Construction Battalion 3's Air Detachment arrived on the scene, and convoys of men and equipment from Construction Battalion Unit 406 at the Naval Air Station, Lemoore; and Amphibious Construction Battalion 1 in San Diego, set out to bring relief to the bay area. Disaster relief was provided to both damaged naval and civilian facilities in the area. The latter effort included helping to outfit Federal Emergency Management Administration offices and bringing warehouses in San Francisco up to habitable standards for those left homeless by the earthquake.

A Seabee Mobile Training Team (MTT) was deployed to Madagascar during 1989. The team consisted of a chief petty officer and 6 enlisted personnel. An MTT's primary function is to provide training for U.S. or local military or civilian personnel on specific equipment or trades. This team provided training for the Malagasy Army on the repair/maintenance/operation of $3.5 million worth of heavy construction equipment.

In 1990 the Seabees participated in two SOUTH PAC cruises. Both Naval Mobile Construction Battalion 7 and Underwater Construction Team 2 embarked civic action detachments on the USS SCHENECTADY and USS FLORIKAN. Port calls were made in the Marshall, Gilbert, Solomon, and Cook islands, and at Papua, New Guinea; Tuvalu, and Tonga. Naval Mobile Construction Battalion 1 participated in the West African Training Cruise (WATC). The battalion embarked civic action detachments on the USS BARNSTABLE COUNTY which made port calls at Cape Verde, Senegal, Gambia, and Guinea-Bissau. High praise was received from all recipients.

When Hurricane "Ofa" struck American Samoa in February 1990, Seabees from Naval Mobile Construction Battalion 40 and 133 were quickly on the job providing disaster relief and clean-up on the island of Tutuila.

Devastating floods struck central Tunisia in late January 1990, displacing families and destroying railroad lines and bridges. As part of Exercise "Atlas Rail," Naval Mobile Construction Battalion 3's Air Detachment worked jointly with Tunisian army engineers to repair flood-damaged rail lines. Later, this battalion's Sigonella detail performed civic action work in Morocco as part of Exercise "African Hammer."

OPERATION "DESERT SHIELD/DESERT STORM"

On 2 August 1990 the armed forces of Iraq began the invasion and subsequent conquest of the Emirate of Kuwait. Under United Nations' auspices, the United States and other member nations responded by deploying military forces to Saudi Arabia. The immediate goal was to forestall further Iraqi aggression; the long-range goal was to compel Iraq to withdraw from Kuwait. The initial allied military undertaking to protect Saudi Arabia was dubbed Operation "Desert Shield."

Among the U.S. forces deployed to the region was the First Marine Expeditionary Force. Seabees were to provide construction support for this force. On 7 August the Seabees began preparations to deploy four battalions to the region: Naval Mobile Construction Battalion 4, 5, 7, and 40. On 13 August the first Seabees arrived in Saudi Arabia, an element of Amphibious Construction Battalion 1, comprising 210 personnel. These men immediately went to work unloading Marine Corps equipment and supplies from Maritime Pre-positioned Force ships.

During the period 10-20 August, 100 Seabees of Amphibious Construction Battalion 2 departed Norfolk, Virginia, on amphibious ships bound for the Persian Gulf. While in the gulf these Seabees participated in numerous exercises with the Marines to prepare for an amphibious assault in the region.

The second wave of Seabees to arrive were personnel from Construction Battalion Units 411 and 415; they erected and maintained Fleet Hospital Five, a 500-bed hospital facility at Al Jubail, Saudi Arabia. Both units had female Officers in Charge, marking a first for the Seabees.

By 14 September the Air Detachments of the four deploying Seabee battalions had arrived. Each comprised 89 men and could operate for 30 days with out resupply. On 27 September NMCB 40's main body arrived in country from Camp Covington, Guam. By 18 October all the battalion main bodies had reached Southwest Asia. NMCB 5 arrived from its home port at the Naval Construction Battalion Center, Port Hueneme, California; and NMCB 4 redeployed from Camp Moscrip, Puerto Rico. NMCB 7 redeployed from Camp Shields on Okinawa, and, unlike the other three battalions, was sent to Bahrain. In December NMCB 24, a reserve unit called to active duty, relieved NMCB 4. That same month, NMCB 5 and 40 were joined by Details 15 and 16 of NMCB 1 which was deployed at Rota, Spain. The 3rd Naval Construction Regiment, a reserve regiment, was mobilized to provide command and control over the deployed battalions. By early February 1991, 2,800 Seabees and 1,375 pieces of equipments had been deployed to the region in support of Operation "Desert Shield."

Upon their arrival in Saudi Arabia, the Seabees built critically needed facilities at the four airfields where the Marine Air Combat Element had deployed. This entailed construction of parking aprons, as well as base camps to house the Marines pouring into the area. Next, the Seabees built ammunition supply points for the large amounts of ordnance being transported to the region. Once these needs were met, the Seabees shifted emphasis to improving living conditions in the Marine camps.

Base camps were built for the 3rd Marine Air Wing, Marine Air Groups 11, 13, 16 and 26, and the 1st and 2nd Marine Division. In Bahrain, NMCB 7 supported the Army and Air Force, as well as the Marines. The battalion built strongback tents, an aviation storage facility, a munitions transfer road, and a 60,000 square foot aircraft parking apron. In December, NMCB 74 relieved NMCB 7 in Bahrain,

and the latter battalion moved 200 miles north to Ras Al Mishab in Saudi Arabia.

Among major projects completed during Operation "Desert Shield" were a headquarters complex for the First Marine Expeditionary Force and a 15,000 man camp for the Second Marine Expeditionary Force. The latter project was the largest wartime multi-battalion Seabee project since the Vietnam War. NMCB 1, 4, 5 (project lead), 7, 24, 40 and 74 worked on the project. Construction began in late November. The camp comprised six modules, each capable of housing 2,500 men. Each module contained berthing, office space, showers, toilet facilities, a galley, roads, and parking areas. The completed camp complex was dubbed "Wally World."

Completing these projects required the Seabees to work seven days a week, two twelve hour shifts a day. The only days off during the whole period of Seabee involvement in the Gulf were Thanksgiving and Christmas. The Gulf environment provided an added challenge for the Seabees. When the first wave of Seabees arrived in August, the heat was intense, often reaching 1200 F. By the time most of the Seabee units had arrived in December, the heat had mitigated, daytime temperatures in the 70's dropping to the 30's at night. The other major problem was sand: it got into everything and was particularly hard on equipment.

Operation "Desert Storm," the expulsion of Iraqi forces from Kuwait began in early 1991. On 16 January 1991 the Allies initiated a massive air campaign against Iraq. Before it was over, Allied aircraft flew more than 40,000 sorties against Iraqi targets. At this time planning went forward for the 3rd Naval Construction Regiment to move into Kuwait in the wake of advancing Allied forces to open roads and airfields and provide immediate battle-damage repair.

In January 1991 the Marines began to move north in preparation for the expected ground assault on the Iraqis. In support of this, the Seabees began to concentrate on building and maintaining roads to serve as the main supply routes throughout northern Saudi Arabia.

After months of constructing millions of square feet of aircraft aprons, camps for tens of thousands of Marines, and hundreds of

acres of ammunition and supply points, the Seabees prepared to support the ground assault into Kuwait. NMCB 5 moved half its strength to Al-Kabrit, 30 miles from the Kuwaiti border, and began construction of a Naval Construction Force Logistics Support Base from which the Seabees could provide the First Marine Expeditionary Force the construction support needed during the upcoming assault into Kuwait. The top construction priorities during this period were water, roads, and facilities for the Marine division assembly areas. Water was obtained by exploiting already-existing wells, and the Seabees built galley facilities for the 30,000 Marines of the 1st and 2nd Marine Divisions. A 40,000 man capacity enemy prisoner of war camp was also built.

The most formidable task facing the Seabees was the road network required by General Schwarzkopf's "End Run" attack strategy. Spanning more than 30 miles of desert from Al-Mishab to Al-Kabrit, the "End Run" strategy ultimately required more than 200 miles of roads west and north of the Kuwaiti border. Because of the need to deceive the Iraqis, much of the construction necessary had to be done at the last minute. Working in the wettest weather seen in Saudi Arabia in years, Seabees completed the necessary construction in approximately two weeks. Thousands of trucks moved million of gallons of water and fuel, and tons of supplies, ammunition and spare parts on this road network to support the two Marine divisions making the assault. By the time the assault was launched, Seabees were maintaining approximately 200 miles of roads near the Kuwaiti border. One of these roads was an east-west corridor from Ras Al Mishab through Al Kabrit, continuing past Al Qaraah for a total distance of almost 100 miles. This six-lane road was traversed daily by more than 500 heavy haulers and thousands of tactical vehicles.

NMCB 5 and 40 relocated to the north and west. From this area, roads to the border, another well, and a 1,500-foot Remote Piloted Vehicle runway were built. On the day before the ground assault, Seabees dug in the 1st Marine Division command element on the border as the division moved into its attack positions.

On G Day, 25 February 1991, the Allies launched a massive ground assault against the Iraqis. The next day, an advance party from NMCB 5 and 24 entered Kuwait to prepare positions for the First Marine Expeditionary Force command element, and to repair airfields, maintain roads, and build more enemy prisoner of war camps. As the Seabees labored at these tasks, the smoke from hundred of burning oil wells turned day into dark. On 28 February, the Iraqi, devastated by the Allied attack, accepted a cease fire and the conflict ended. Construction ceased, and the Seabees returned to their units just south of the Kuwaiti border. Thus, ended the largest Seabee military action since the close of the Vietnam War.

The Gulf War demonstrated the ability of the Naval Construction Force, both active and reserve, to meet the exigencies of a large-scale military operation. Not all of the action, however, was in the Persian Gulf. Approximately 60 percent of the Seabee reserve units called to active duty were sent to other parts of the world to replace active-duty units sent to the Gulf early in the conflict.

OPERATION "PROVIDE COMFORT"

The Seabees, however, were not finished in Southwest Asia. Following the Iraqi defeat, the Kurdish minority living in northwestern Iraq rebelled in an attempt to win independence. The Iraqi government responded harshly and a gigantic refugee problem developed as hundreds of thousands of Kurds fled their villages into the mountains. The United Nations intervened to protect the Kurds and an Allied-occupied, protected enclave was established around Zakho, Iraq. A relief operation, Operation "Provide Comfort," was launched to provide facilities for the refugees until they could return to their villages.

On 11 April 1991, Naval Mobile Construction Battalion 133, deployed at Rota, Spain, was ordered to send its Air Detachment to Zakho. This was followed on 22 April with orders for the battalion to recall all its details and to redeploy its main body to Zakho. While in Iraq, NMCB 133 was under the tactical command of the U.S. Army 18th Construction Brigade, consisting of the U.S. Army 94th Heavy Engineer Battalion, a British Army engineer squadron, a Dutch

engineer battalion, and several smaller U.S. Army logistical units. NMCB 133's camp was established in a walled compound which was also the headquarters of the 24th Marine Expeditionary Unit and the 18th Engineer Brigade. The Seabees were immediately over-tasked and went to a 12-hour day schedule, providing support to the refugee camps in the area. Work consisted of latrine construction, electrical and water-well support, road grading, forklift support, berm construction, and wash-rack construction. In general, the work could best be described as emergency service relief work.

It was originally anticipated that the Seabees would remain at Zakho for three months. It turned out, however, that they were able to leave after only eight weeks because during that period upwards of 300,000 Kurds were convinced that it was safe to return to their homes. The displaced persons camps near Zakho which had held as many as 60,000 Kurds at the midpoint of the deployment, saw this number drop to less than 15,000 by the time NMCB 133 departed.

In December 1990 a reserve unit, Naval Mobile Construction Battalion 23, which had been recalled to active duty on Guam to replace an active-duty battalion sent to the Gulf War, provided disaster relief in the wake of a severe hurricane, one of the strongest to hit Guam in recent years.

OPERATION "FIERY VIGIL"

On 15 June 1991 Mt. Pinatubo in the Philippines erupted and poured more than two cubic kilometers of ash and sand over a 30-mile radius. This eruption was characterized as one of the most violent of this century. Within the radius of the eruption was the Subic Bay U.S. Naval Complex and Clarke Air Force Base. The eruption was followed by Typhoon "Diding" whose torrential rains saturated the ash and sand, creating dangerous roof loads and many other problems. Thus began Operation "Fiery Vigil." Seabees from Naval Mobile Construction Battalion 3, and Construction Battalion Maintenance Unit 302, and Public Works Center civilians provided disaster relief in the form of temporary shelter for those rendered homeless on the base. They also provided temporary power and emergency water supplies, and cleared roadways, and aircraft

runways. A ship returning from Operation "Desert Storm" with Seabee equipment was diverted to Subic Bay and provided much needed equipment. A pre-positioned ship, carrying equipment for a Marine Air Ground Task Force, was also brought in. The damage was so severe that 20,000 dependents at Subic Bay and Clarke Air Force Base were evacuated from the area in the days following the eruption. Some 400 Seabees from Naval Mobile Construction Battalion 4 on Okinawa were sent to Subic Bay to help with the cleanup. Within 100 days, the Seabees demolished more than 50 heavily-damaged structures and, removed 250,000 tons of ash, cleared 900,000 square yards of aircraft paving and 75 miles of roads, restored 35 miles of overhead power distribution lines, cleaned and restored 750 air conditioning and refrigeration units, and erected 25 replacement buildings. Working with Public Works Center employees, the Seabees played a critical role in the rapid recovery of the Subic Bay naval complex.

SEABEE REORGANIZATION

Since the establishment of the Seabee Reserve after World War II, active and reserve Seabees, while frequently serving together, were part of two separate organizational structures. In July 1992 this changed when active and reserve Seabee units were integrated into two Naval Construction Brigades, under the operational control of the Commanders in Chief of the Atlantic and Pacific Fleets.

The Commander, Naval Construction Battalions, U.S. Atlantic Fleet; the Commander, Naval Construction Battalions, U.S. Pacific Fleet, and the 1st Reserve Naval Construction Brigade were disestablished. In their place were established the 2nd and 3rd Naval Construction Brigades. In addition, two new regiments were established: the 22nd Naval Construction Regiment under the 2nd brigade and 30th Naval Construction Regiment under the 3rd brigade. Thus, each brigade had two active regiments and six reserve regiments. The 2nd Naval Construction Brigade assumed operational control of three regiments, eight battalions, one Naval Construction Force Support Unit, and one Construction Battalion Maintenance Unit. In like fashion, the 3rd Naval Construction Brigade assumed operational control of three regiments, seven battalions, two support units, and

one maintenance unit. When U.S. forces departed the Philippines in late 1992, Construction Battalion Maintenance Unit 302 was relocated to Camp Covington on Guam. It was disestablished there on 20 July 1994.

OPERATION "RESTORE HOPE"

In 1992 famine struck Somalia. The country had been beset by a long period of civil war which left the central government fragmented and weak. By late 1992 almost 1,000 individuals, many of them children, were dying of starvation daily. Although relief supplies were pouring into Somalia, they did little to help. Armed gangs divided the capital and controlled the road system. The food was stolen or misdirected before it could reach those for whom it was destined. The U.N. decided to send in a military force to restore order. U.S. military units formed part of this coalition force and embarked upon Operation "Restore Hope." The Seabees went ashore to provide construction support to the U.S. contingent. The primary Seabee tasking was to provide vertical construction support to U.S. and coalition forces establishing base camps at each of the humanitarian relief sites. This including building heads, showers, tent decks, strongback tents, and kitchens. Seabees were also to repair and improve the main supply routes, which included bridge repairs and shoulder grading to widen roads. Wells were drilled and a seven- room school house was also constructed. The largest project was at the Baidoa airstrip which deteriorated as C-130 relief flights increased in the early part of the operation. This project involved removing 300,000 square feet of asphalt surface, pulverizing and mixing it with portland cement, and then grading and compacting the mixture. More than 600,000 square feet of AM2 matting was also laid for aircraft turnarounds, parking aprons and helopads.

On 10 December 1992 Amphibious Construction Battalion 1 arrived at Mogadishu as part of the Naval Support Element in Somalia. Within a short time ACB 1 unloaded five of the U.S. Marines' Maritime Pre-positioning Force ships, refurbished the port, and provided fuel and water for military forces in Somalia.

Naval Mobile Construction Battalion 1 and 40 began deploying to Somalia on 10 December. Within 30 days both battalion main bodies

had arrived. The 30th Naval Construction Regiment (Operational) was activated to provide command and control for the two deployed battalions. By the end of December, Seabees from NMCB 1 were convoying personnel and equipment to Baledogle, Bardera, and Baidoa to effect airfield repairs and improvements and construct base camp facilities for the deploying U.N. coalition forces. The Seabees arrived in Baledogle on 31 December and joined forces with Marines from Marine Support Wing Squadron 372 to establish landing and staging areas for CH-53 helicopters and a taxiway and turnaround pad for C-130 aircraft. The Seabees used 240,000 square feet of AM2 metal matting to construct the facility. Near Bardera, Seabees from NMCB 1 restored a water source to a refugee camp by installing a new pump on the bank of the Jubba River. Seabees from NMCB 40 completed Operation "Clean Sweep" in Mogadishu, which consisted of removing debris (trash and car hulks) from critical areas of the city. They also prepared a site for a 300-bed Army evacuation hospital and installed 90,000 square feet of airfield at the Mogadishu airport. NMCB 40 participated in the amphibious landing at the Port of Kismayo. They quickly completed repairs to the Kismayo airfield, which allowed the rapid deployment of follow-on coalition forces to that city. Finally, the Seabees provided construction support for President George Bush's visit to Somalia on 1 January. In addition to their tasking in support of the coalition forces, the Seabees carried out numerous civic action projects in support of the Somali people during the course of Operation "Restore Hope."

By the end of March 1993, the Seabees had successfully completed their support of Operation "Restore Hope" and returned to their previous deployment sites or their home ports.

OTHER SEABEE ACTIVITIES IN THE EARLY 1990'S

The Seabees celebrated their 50th anniversary in 1992. Special celebrations and ceremonies in Washington, DC, and at the construction battalion centers, and other Seabee activities marked the year. There was an especially large number of Seabee unit reunions that year which brought together veterans from all the wars in which the Seabees had served since their inception. In addition to the celebration, the Seabees continued to perform their normal duties, among which was disaster relief.

Hurricane "Andrew" struck Dade County, Florida, on the morning of 24 August 1992 inflicting extensive damage. There were few deaths, but more than 100,000 people were left homeless. More than 800 Seabees from Naval Mobile Construction Battalion 1, 4, 14, Amphibious Construction Battalion 2, and Construction Battalion Unit 410, 412, 419, and 420 provided disaster relief by repairing government buildings and approximately 270 schools.

In 1993 the Seabees participated in a number of events. The 2nd Naval Construction Brigade was involved in the planning process for potential peacekeeping operations in the former Yugoslavia. The 2nd brigade and an air detachment from Naval Mobile Construction Battalion 7 were involved in the United Nations mission in Haiti that year. Seabees from Naval Mobile Construction Battalion 4, 5, and 7 played a major role in the counter-narcotics program in South America. Finally, Naval Mobile Construction Battalion 3 participated in disaster recovery efforts on Guam in the wake of an 8.1 earthquake.

In 1994 Seabees provided a wide variety of support including work for the United Nations field hospital in Zagreb, Croatia; water well drilling teams to Morocco and Honduras; and nation-building and joint training exercise support to Surinam and the Dominican Republic. Seabees also participated in the incursion into Haiti. Specifically, Amphibious Construction Battalion 2 supported U.S. forces deployed to Port-au-Prince. At the Naval Station, Guam, Seabees carried out extensive repairs to the Victor Wharf, which had been damaged badly during the earthquake of the previous year.

In September and October 1995, during the most active hurricane season in history, Naval Mobile Construction Battalion 5 carried out disaster relief assistance to the stricken islands of Antigua, St. Thomas, and St. John, after Hurricanes "Luis" and "Marilyn" savaged the eastern Caribbean. That same year, Naval Mobile Construction Battalion 7 sent a disaster relief team to Kobe, Japan, after an earthquake struck that city. The Seabees set up tents and cots at seven different sites, providing shelter for victims of this tragedy.

HAITIAN AND CUBAN REFUGEE SUPPORT

The highest profile effort of the Seabees in 1994, however, was the support provided to Haitian and Cuban refugee efforts. This support grew in scope and extended into 1995. At first, 40 Seabees of Naval Mobile Construction Battalion 74 (deployed to Puerto Rico) were sent to the U.S. Naval Station, Guantanamo Bay, Cuba, to augment the public works department there. The evacuation of civilian employees from Guantanamo and the increased support required by Joint Task Force 160 that had been established there to oversee the refugee operation necessitated this movement. Next, a Seabee air detachment was dispatched from Puerto Rico to construct refugee camps at Guantanamo. Another air detachment was deployed from Puerto Rico to Grand Turk for the purpose of constructing additional refugee camps and subsequently was redeployed to Guantanamo Bay to assist with the growing tasking. Additionally, Seabees supported Operation Safe Haven by constructing Cuban refugee camps in Panama.

The main effort in Cuba was Operation "Sea Signal" during which Joint Task Force 160 constructed facilities to improve the quality of life of Cuban migrants at Guantanamo. By order of the 2nd Naval Construction Brigade, the 22nd Naval Construction Regiment (Forward Element) deployed to Guantanamo in December 1994 with Naval Mobile Construction Battalion 4 and an air detachment from Naval Mobile Construction Battalion 7. As directed by the U.S. Atlantic Command, the senior leadership of the 22nd Naval Construction Regiment (Forward Element) met with engineers from the Naval Facilities Engineering Command's Atlantic Division to develop preliminary designs for the $35 million Quality of Life Improvement Program for 20,000 Cuban migrants.

The original plan called for the construction of 37 migrant villages arranged in 11 village clusters at two locations: Radio Range and McCalla Field, approximately seven miles apart. Migrant riots in Panama led to a decision to return 7,000 refugees to Guantanamo Bay; this resulted in both an accelerated construction schedule and an enlargement of project scope for the Seabees. A detachment from the Air Force's 820th Red Horse construction unit was mobilized from Nellis Air Force Base to assist the Seabees. When the project

concluded the two tent cities constructed were capable of housing almost 20,000 people. This multi-national, joint-service work-force completed an astonishing 100,000 man-days of construction effort in a harsh environment while scheduling their construction projects around the migrants and their daily operations.

All engineering assets of Joint Task Force 160, including 358 Seabees from Naval Mobile Construction Battalion 4, 70 Seabees from Naval Mobile Construction Battalion 7, 85 Air Force engineers from the 820th Red Horse Squadron, 65 Army engineers, 24 Marine Corps engineers, 93 reserve Seabees on Active Duty for Special Work, 45 active-duty augment Seabees, and 500 Cuban workers reported to the 22nd Naval Construction Regiment (Forward Element). The Seabees operated in a joint-command environment: they berthed and messed in an Air Force camp, reported to an Army command, the Joint Logistics Support Group, and served under a Marine brigadier general who was joint task force commander.

After numerous scope changes, the final product consisted of two cities on separate 125 and 150 acre sites. Work in place included the erection of 1,341 strongback tents, 67 concrete block buildings, installation of over 17 miles of underground piping and 53 miles of electrical cable, batching and placing 11,700 cubic yards of concrete, and the operation of 311 pieces of Civil Engineer Support Equipment in excess of 72,000 hours and 390,000 miles.

In July 1995 Naval Mobile Construction Battalion 5 relieved Naval Mobile Construction Battalion 4 at Guantanamo. Naval Mobile Construction Battalion 5 completed 23,000 man-days of total effort, finishing the $1.6 million, 30,000-meal per day, migrant galley in only 29 days and designing and constructing a 5,200 square foot stage for a televised MTV concert. Naval Mobile Construction 5 oversaw the Naval Construction Force withdrawal from Guantanamo, transporting $13 million worth of construction equipment and supplies off the island.

BOSNIA SUPPORT

Throughout 1995 the 2nd Naval Construction Brigade maintained a high state of alert for potential Seabee involvement in Bosnia. As

part of the relief operations in the former Yugoslavian republics, the 2nd Naval Construction Brigade provided an officer to augment the United Nations High Commissioner for Refugees staff. This officer functioned as Engineering and Infrastructure Officer and served in a strictly non-military capacity assisting humanitarian relief operations.

In support of Joint Task Force "Provide Promise," in March 1995 a 35-person team from Naval Mobile Construction Battalion 3 successfully brought to a close the Navy s turn at providing public works maintenance and operations functions at the Joint Fleet Hospital in Zagreb, Croatia.

In October the brigade sent a staff officer to the headquarters of Allied Forces, South, in Naples, Italy, to help finalize the NATO operations plan for Bosnia. Liaison Officers from Naval Mobile Construction Battalion 133 were dispatched to the 26th Marine Expeditionary Unit aboard the USS WASP and to several locations in Bosnia, Croatia, Hungary, and Germany. By the end of 1995, Naval Mobile Construction Battalion 133 had deployed a 172-person detail to the Sava River crossing at Zupanja, Croatia, to construct the first and highest priority tent camp of the entire Operation "Joint Endeavor" Implementation Force (IFOR). The deployment into Croatia made history as the largest Seabee airlift in recent times and also marked the first deployment in which Seabees utilized the Air Force s new C-17 aircraft. In Bosnia Seabee detachment personnel constructed a number of tent camps in support of U.S. Army, 1st Armored Division units. The construction consisted of building tents and floors, dining facility tents, showers, lighting, and latrines. Upon completion of all assigned taskings at the end of February 1996, the Seabee detachment returned to it parent unit at Rota, Spain.

The Seabee deployment to the former Yugoslavia was characteristic of the period. With the Cold War over, by the mid-1990s the U.S. military was routinely involved in providing support to various United Nations undertakings. No matter what the international situation, however, you can be sure of one thing: when the toughest, dirtiest, meanest, most impossible construction jobs in the world come up, the Seabees will be sent because they "Can Do!"