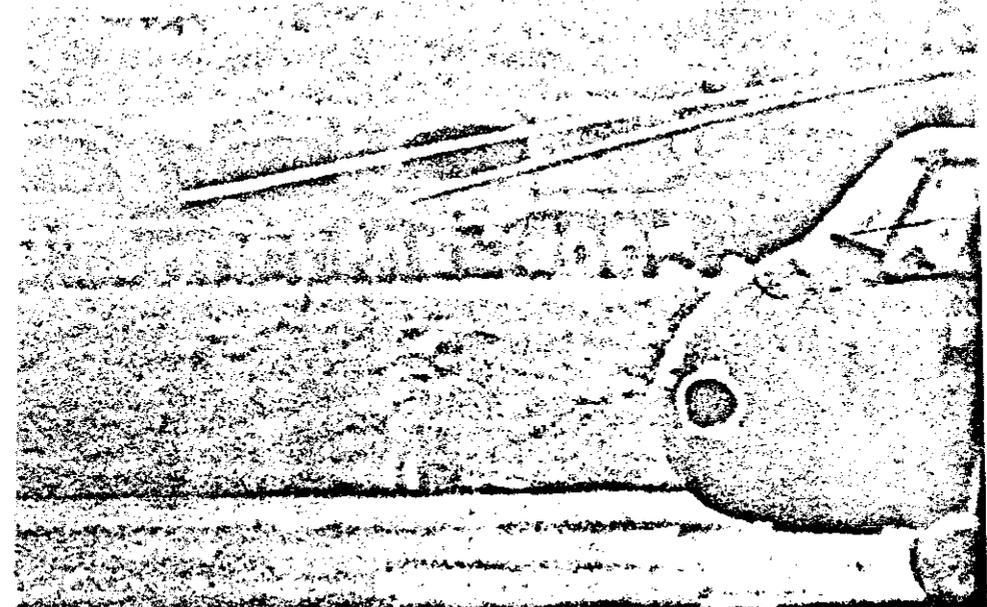


W
FILE / SUBJ.
DATE / SUB-CAT.
8/67



Seabees In Vietnam

The Expeditionary Airfield at Chu Lai was built in 56 days in the summer of 1965 by these and other members of the new generation of Seabees, who reunited with the Navy-Marine Corps team in an environment reminiscent of the days of the Pacific War—blistering temperatures, shifting sands, and a hidden, resolute enemy.

by Commander W. D. Middleton,
C.E.C., U. S. Navy



In the matter-of-fact language of naval communications, Commander John M. Bannister, CEC, U. S. Navy, Commanding Officer of the U. S. Naval Mobile Construction Battalion TEN, sent the following message from Chu Lai, Vietnam, and opened an important new chapter in the history of the Navy's Seabees: "MCB 10 SITREP ONE AS OF 081200 . . . ALL TIMES LOCAL. COMMENCED OFF-LOADING EQUIPMENT AND PERSONNEL 070800 . . ." For the 7 May 1965 amphibious landing of NMCB-10 at Chu Lai was the first large-scale employment of Seabees in direct support of Navy and Marine Corps forces under wartime conditions since World War II. More, it set in motion a still-continuing build-up of the Navy's military construction arm that has raised the strength of the Naval Construction Forces to a level unequalled since World War II.

Landing with more than 3,500 Marines of the 4th Marine Regimental Landing Team, the 600-odd officers and men of NMCB-10 faced a most demanding task in support of the rapidly growing Marine Corps involvement in the Vietnam war. Using Marine Corps-developed SATS (Short Airfield for Tactical Support) AM-2 aluminum matting, as yet untried under combat conditions, the immediate Seabee mission at Chu Lai was the construction, "as soon as possible," of a jet-capable expeditionary airfield with an 8,000-foot runway and associated taxiways, parking aprons, and other supporting facilities.

Within 24 hours of the commencement of their landing, the Seabees of NMCB-10 had begun construction of their base camp and the haul roads required for airfield construction, and by D+2 excavation work for the runway had started on an around-the-clock basis. Only 23 days after the Seabees landed, eight A-4 Skyhawks of VMA-225 and VMA-311, both MAG-12 squadrons, touched down on the

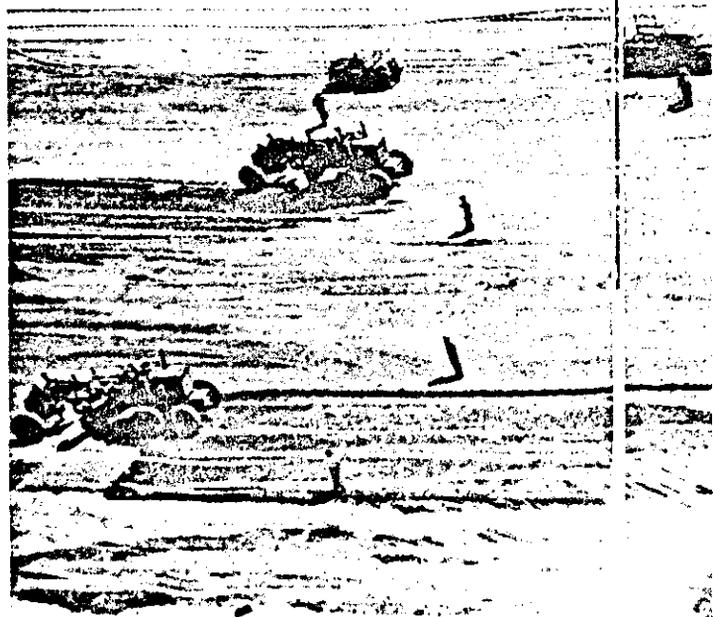
Chu Lai strip, by then completed to a length of 3,500 feet. Within hours, four armed A-4s had been launched on their first strikes against the Viet Cong from Chu Lai. Air operations from the field continued without interruption thereafter, using JATO and mobile arresting gear (MOREST) until completion of the entire 8,000-foot runway on 3 July, by which time MAG-12 strength had reached a planned initial level of two full attack squadrons.

Even as work continued on the airfield, the Seabees of NMCB-10 began construction of the myriad other facilities required to support the growing Marine Corps force at Chu Lai. Further north, at Da Nang, additional Seabees were arriving in support of the rapidly expanding base of operations there. By the end of May, NMCB-3, previously positioned on Guam as the Pacific "Back Up" Battalion, was operating from a base camp at the foot of Hill 327, and by the end of June, NMCB-9 had deployed from Port Huenehue, California, to the Da Nang East peninsula.

Co-ordinating the operations of this Seabee force in Vietnam was the 30th Naval Construction Regiment at Da Nang, under the command of a veteran Seabee officer, Captain Harold F. Liberty, CEC, U. S. Naval Reserve. Recommissioned in May 1965, the 30th was the first construction regiment to be activated since the completion of construction by the Seabees of the Cubi Point Naval Air Station in the Philippines, a decade earlier.

From this initial strength of three bat-

That aircraft could land on the 3,500-foot Chu Lai strip only 23 days after the Seabees of NMCB-10 landed was the result of the kind of co-ordinated effort seen at right. Graders spread the "laterite" earth base over the sand and, behind them, came the men placing the AM-2 aluminum matting.



talions, the Seabee force under the 30th NCR steadily grew in size to support the mounting construction needs of the 3rd Marine Amphibious Force in the I Corps (northern) area of the Republic. In-country strength reached four battalions by September 1965 with the arrival at Da Nang of NMCB-8, an Atlantic Fleet battalion transferred to the Pacific. By the beginning of 1966, all five Atlantic Fleet battalions, along with the same number of Pacific Fleet battalions, had been committed to Vietnam deployments. Further augmenting Seabee construction capability in Vietnam, each of the existing battalions was substantially increased in officer and enlisted strength, and in January, the Navy Department announced the commissioning of four additional battalions by August 1966.

To provide home port support and training for the growing Naval Construction Force, three new construction regiments, the 31st, 21st, and 20th NCRs were activated during April and May 1966 at the Port Hueneme, California, Davisville, R. I., and Gulfport, Mississippi, Construction Battalion Centers, home ports for the 14 battalions.

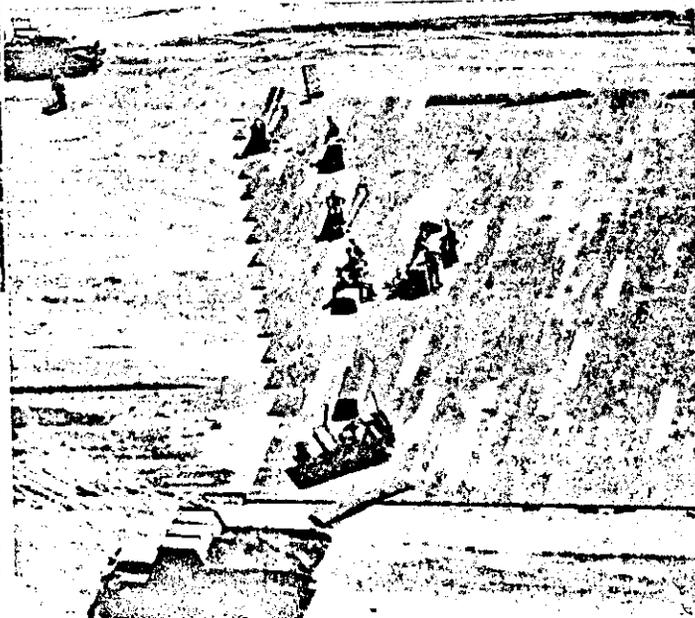
By August 1966, Seabee strength in Vietnam had reached a level of eight battalions, with one located at Hue-Phu Bai, five at Da Nang, and two at Chu Lai. The top level Seabee command in Vietnam by this time was the 3rd Naval Construction Brigade—the first active brigade since World War II—commissioned at Saigon under Rear Admiral R. R.

Wooding, CEC, U. S. Navy, on 1 June 1966. In April 1967, the number of battalions operating under the brigade increased to nine with the arrival of NMCB-11 at a new site at Dong Ha, just south of the Demilitarized Zone (DMZ).

Active, too, in Vietnam have been the Amphibious Seabees of the Pacific Fleet Amphibious Force. Detachments from Amphibious Construction Battalion ONE, the Pacific Fleet's only amphibious Seabee unit, have installed and operated a number of bottom lay or buoyant fuel systems used to move fuels and lubricants over the beach. Most have been in support of permanent Navy and Marine bases ashore, but some have been temporary installations in support of specific Marine Corps operations, such as "Double Eagle."

Because of the limited port facilities available in Vietnam, the Amphibious Seabees' famous pontoon causeways have been much in demand, too, for ship-to-shore handling of equipment, supplies, and personnel. Although the ACB-ONE Seabees have placed pontoon causeways at locations all along the coast of South Vietnam, their principal use has been in support of the forces at Chu Lai, Da Nang, and Hue. Another important use of pontoons was in "Double Eagle," where ACB-ONE placed two causeways to permit the landing of troops and supplies despite heavy surf.

A second phase of Seabee expansion opened early in October 1966, with the commissioning of NMCB-71 at the Davisville, R. I., Con-



struction Battalion Center. Continuing expansion brought Seabee strength to a new planned level of 19 battalions in June 1967, with the commissioning of NMCB-53.

Officer and enlisted manpower for this greatly expanded Naval Construction Force has come from several sources. The increased requirement for Civil Engineer Corps officers, who fill almost all construction battalion billets, has been met through an increased over-all strength of the Corps, together with an accelerated input of qualified engineers through the Officer Candidate School programs, voluntary recall of reservists, and some reductions in CEC staffing of shore activities. Increased Group VIII (Construction) petty officer strength has been realized through both an expanded advancement opportunity and a direct rating petty officer recruitment program, the first of its kind since World War II, which by the time of its termination in August 1966 had successfully procured 5,000 skilled construction men from civilian life in ratings through petty officer 1st class. An increased input through the recruit training commands and construction training schools has produced the necessary nonrated men.

Early in 1967, continuing Seabee expansion and replacement requirements brought a reopening of the direct petty officer recruitment program, with a goal of some 5,000 petty officers in grades through chief petty officer (E-7). A similar direct recruitment program for Civil Engineer Corps officers offered Naval Reserve commissions up through lieutenant commander for engineers with appropriate civilian construction and engineering experience.

NMCB-10's construction of the expeditionary airfield in the sands of Chu Lai still represents the most important single project yet undertaken by Seabees in Vietnam. Its successful conclusion under the difficult conditions encountered at Chu Lai seems destined to stand as one of the most significant Seabee accomplishments since the end of World War II.

The Viet Cong proved more a potential than an actual threat to the Chu Lai airfield construction. But, from the moment they began their movement across the beach, the Seabees were confronted with two other adversaries—heat and sand—that continued to

plague the project until its end. The heat, destructive to equipment and debilitating to men, was bad enough, but the real enemy was the sand that was everywhere at Chu Lai.

Equipment hogged down frequently in the fine, shifting sand. Indeed, some proved incapable of working productively in it at all.

Sand also presented some difficult construction problems on the airfield, where development of an adequately stabilized base was essential to successful use of the aluminum matting. After several methods of stabilizing the sand proved impractical, the Seabees adopted a procedure calling for placement of six to eight inches of compacted "laterite" earth fill, which was then sealed with asphalt to prevent water penetration. Taxiway and parking areas were prepared by an alternate method, which used pumped salt water to compact and stabilize the sand.

Repairing their equipment again and again when they could, borrowing equipment from other units when they couldn't, the Seabees of NMCB-10, through sheer tenacity, kept the Chu Lai airfield work moving forward 24 hours a day. By the time the entire field was completed on 3 July 1965, the men of TEN had moved almost a quarter of a million cubic yards of sand, hauled almost 65,000 cubic yards of laterite from their quarry several miles distant from the field, and laid aluminum airfield matting totaling over one and a third million square feet.

Several factors contributed to the success of NMCB-10 at Chu Lai. The battalion's two most recent deployments had been to hot weather sites in the Southwest Pacific—the Philippines and Guam—which had helped to acclimatize many battalion personnel to the severe heat of Southeast Asia. Early in 1965, shortly before NMCB-10 deployed to Okinawa to take up its Pacific Fleet "Alert Battalion" assignment, key elements of the battalion had participated in the Fleet Marine Force Pacific's extensive Exercise SILVER LANCE in California. A counter-insurgency war exercise, SILVER LANCE proved to be an excellent dress rehearsal for the sort of thing that took place at Chu Lai.*

* See J. B. Soper, "Observations: STEEL PIKE and SILVER LANCE," U. S. Naval Institute PROCEEDINGS, November 1965, pp. 46-58.

But by far the most important asset contributing to Seabee success at Chu Lai was the basic capability that has been built into a construction battalion, through organization, equipment, training, experience, and motivation. This capacity for accomplishing construction rapidly under the most adverse conditions was to be equally evident in subsequent Seabee work at Chu Lai, and elsewhere in Vietnam.

If the Chu Lai airfield was the most dramatic Seabee project in Vietnam to date, the diverse quantity of work undertaken since by the Naval Construction Force has been no less important to the advancement of the Navy-Marine Corps mission in the I Corps area.

Among the principal projects undertaken by NMCBs 3 and 9 upon their arrival at Da Nang in May and June of 1965 were construction or improvement of access roads to installations on Hill 327 and Monkey Mountain. The impending monsoon season lent a particular urgency to both projects. At Da Nang East, NMCB-9 began construction of a 400-bed naval hospital.

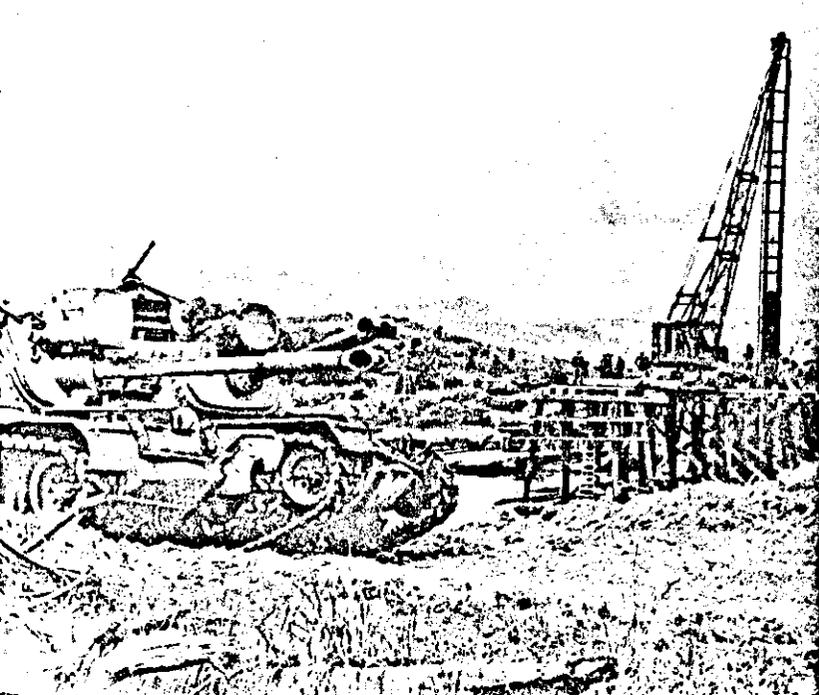
As U. S. force levels steadily increased through 1965, a serious shipping backlog began to develop as the mounting flow of supplies and equipment overwhelmed the inadequate Vietnamese port and harbor facilities.

As a consequence, much of the Seabee effort was directed toward either harbor improvement projects, or construction of related logistics facilities that would help to speed up the movement of cargo across the beaches.

The principal project undertaken by NMCB-8 on its arrival at Da Nang in September was the construction of LST and landing craft ramps and berthing areas in the Tourane River. Each battalion in the Da Nang area took on a share of a massive complex of warehouses, cold storage plants, and open storage for the Naval Support Activity on the Da Nang East peninsula. Similar projects provided necessary facilities for Marine Corps logistics units at Hue-Phu Bai, Da Nang, and Chu Lai.

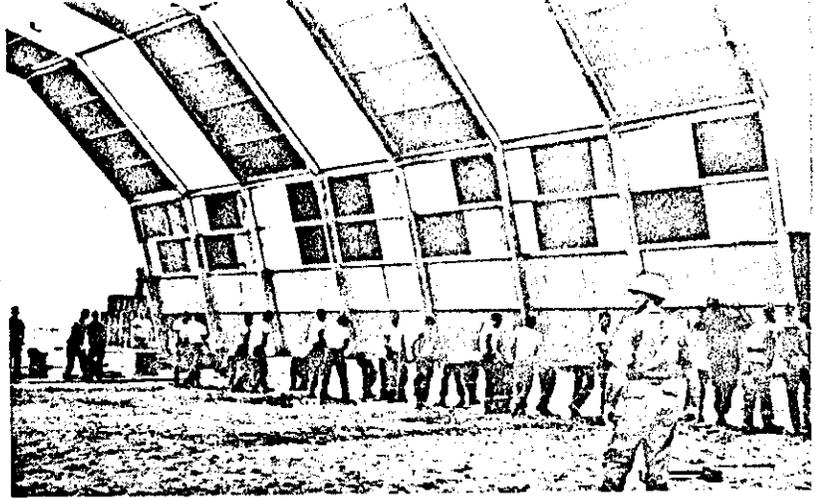
Each battalion has taken on a number of cantonment projects, building strongbacked tents or tin hutments, mess halls, showers, and other facilities to provide Marine units a modicum of comfort, at least in their base camps. Although most such projects have been confined to rear areas, more recently Seabee battalions have sent detachments to sites outside the established enclaves to construct cantonments for Marine combat units, or Army Special Forces teams. One such detachment recently constructed a camp for the South Korean Blue Dragon Brigade near Binh Son.

Similar Seabee detachments have recently



Marine Corps tanks stand sentry duty as Seabees construct access roads and a bridge to Marine installations around Hill 55, south of Da Nang.

Lightweight materials give today's Seabees capabilities their predecessors did not have; the framework of this huge, prefabricated building, for example, can be easily man-handled into position.



undertaken several airfield projects. At Dong Ha, six miles south of the Demilitarized Zone, a detachment of 30 Seabees laid a 3,720-foot aluminum matting runway in only six days. Meanwhile, at Khe San, another Seabee detachment put down a similar 3,900-foot runway in five days.

To support projects of this kind, which often can be reached only by air, the Seabees have acquired a complete line of air mobile graders, scrapers, bulldozers, and other construction equipment, all of it air-transportable by C-123 aircraft.

Seabee well-drilling rigs have been working steadily to develop adequate fresh water supplies, and close to 200 miles of roads have been built or reconstructed. Damaged temporary spans in the important Tourane River bridge at Da Nang were twice repaired by Seabees, and finally one of the battalions completed a permanent reconstruction of the bridge. Seabee steel erection crews have put up tankage for some 200,000 barrels of fuel.

Much of the Seabee construction completed thus far has employed prefabricated metal structures or complete advance base functional components, similar to those that proved so valuable during World War II. The complete 400-bed hospital at Da Nang, equipment maintenance facilities, galleys, cold storage plants, fuel tanks, and many other requirements have been constructed from advance base components, and prefabricated steel buildings have been assembled to provide thousands of square feet of warehouse space.

Now at a strength of over 7,000 officers and men, the nine-battalion force operating in Vietnam under the 3rd Naval Construction

Brigade is currently placing construction work at a rate representing a monthly value, for material costs alone, of over some \$2 million. Were it to be undertaken by contract, the same amount would probably represent a cost in excess of six million dollars a month. All told, military construction work representing some ten per cent of the total Vietnam construction effort, or a material cost alone of more than 140 million dollars, has thus far been programmed for Seabee forces. By the end of 1966 better than a third of this work had been placed.

Admittedly, much of the work that is being undertaken by Seabees could be performed as easily by the substantial construction contractor organization the Navy has established in Vietnam. But a sizeable portion of the Seabee work would not lend itself readily to contract construction, and it is their response to this sort of work that has made the Seabees invaluable to the successful prosecution of the U. S. war effort in the I Corps area. With an inherent capability for rapid response, flexibility, and defensive combat, Seabees have been able to place urgent projects under construction in a fraction of the mobilization time ordinarily required for contract work and have been able to work under security conditions that would have precluded the employment of a civilian contractor force.

Almost as important as their construction achievements in Vietnam have been Seabee accomplishments on another front of the war—the "civic action" program aimed at winning the support of the people of South Vietnam. With their intrinsic construction capability, Seabee battalions have proven a natural for this sort of program. Seabees have

assisted the people of Vietnamese villages and hamlets in the construction of new and rebuilt schools, improved water supplies, better roads, and many other improvements that have helped to raise living standards. Through "Operation Handclasp" and many similar individually organized programs, Seabees have distributed a wide variety of goods to Vietnamese villages and orphanages. During the month of July 1966 alone, the construction battalions in Vietnam distributed over three tons of clothing, soap, school supplies, toys, and the like. The chaplains of several battalions have conducted English classes for Vietnamese schools.

Still another part of the Seabee civic action program has been the participation of battalion doctors, dentists, and corpsmen in the Medical Civic Action Program (MEDCAP). Each battalion has undertaken a regular program of medical and dental sick call visits to villages and hamlets near their base camp. As many as 3,000 Vietnamese a month have been treated under this Seabee Medical Program.

Perhaps the best example yet of a comprehensive Seabee civic action program is that carried out by NMCB-11 throughout the battalion's eight-and-a-half-month deployment at Da Nang in 1966. Tasked by the Third Marine Amphibious Force to provide both

security and a program of civic action for My Thi, a hamlet on the banks of the Tourane River near the battalion's camp at Da Nang East, the battalion established a "provisional platoon" to carry out the assignment. Occupying the hamlet in reinforced rifle platoon size at night, the platoon provided security against Viet Cong infiltration and harassment. By day a single squad occupied the hamlet, providing both daytime security and carrying out a regular program of civic action work.

The battalion's doctor, dentist, and corpsmen provided regular sick calls in the hamlet, and the friends and families of the NMCB-11 men provided such a volume of goods that a surplus was available for distribution to other hamlets in the area. Long before the end of the battalion's deployment, the civic action mission in My Thi had been handsomely accomplished. For the first time, the hamlet knew uninterrupted security; the hamlet's children were attending a three-room school, constructed and supplied with Seabee assistance, where none had been in operation.

Although large-scale Seabee involvement in Vietnam began with the 1965 landing at Chu Lai, Seabees in smaller numbers have been involved in U. S. programs in the Republic since January 1963, principally in the form of 13-man Seabee Teams, which operate as detachments from a parent battalion.



The improvement of a village's water supply or of its people's health are monuments to Seabee "Can Do" that will last at least as long as the more obvious roads, bridges, buildings, and airstrips that are being built all over South Vietnam.

Composed of one junior officer of the Civil Engineer Corps, 11 carefully selected Group VIII (Construction) enlisted personnel, and a medical corpsman, the Seabee Teams represent a civic action and construction unit of remarkable capability.

The first Seabee Teams deployed to Vietnam were employed in support of the U. S. Army Special Forces in camp construction, civic action and military construction under a Civil Irregular Defense Group Program which continued until early 1966. Beginning in late 1963, additional Seabee Teams began work in a still-continuing program of support to the U. S. Agency for International Development (USAID) in rural reconstruction.

Equipped and specially trained for versatility, the 40-odd 13-man Seabee Teams and smaller Seabee well-drilling teams thus far deployed into Vietnam have completed an impressive number and range of projects, which include "New Life Hamlets," refugee villages, markets, schools, bridges, dams, roads, wells and water supply systems, Special Forces camps, and airstrips, as well as obtaining secondary benefits realized in the training of Vietnamese in construction skills.

The most heroic Seabee action thus far in the Vietnam war involved one of these teams, Seabee Team 1104 of NMCB-11. Engaged in construction of a Special Forces camp at Dong Xoai, nine men of Seabee Team 1104, together with 11 Special Forces men and a handful of Vietnamese defenders, were attacked by an estimated Viet Cong force of 1,500 to 2,000 men on the night of 9 June 1965, in what was up until that time one of the fiercest battles of the war. Two members of the team successfully evaded the enemy when a portion of the camp was overrun, while others successfully held off the attackers until the following afternoon, when they were finally evacuated by helicopter. Of the nine Seabees at Dong Xoai, two were killed and the remaining seven wounded. One of those killed, Petty Officer Marvin G. Shields, has subsequently been posthumously awarded the Medal of Honor for his gallant action in the Dong Xoai battle—the first Medal of Honor awarded to a Navy man in the Vietnam war, and the first ever to a Seabee.

The real success of the Seabees in meeting the demands of the Vietnam war is a product



A civil engineering graduate from Rensselaer Polytechnic Institute with the Class of 1950, Commander Middleton served from 1964 to 1966 as Executive Officer of U. S. Naval Mobile Construction Battalion ELEVEN during deployments to Okinawa and the Republic of Vietnam. His previous naval service includes public works assignments at Port Lyautey, Morocco, and NAS, Minneapolis; duty as civil engineering advisor to the Turkish Navy on the staff of the U. S. military mission to Turkey; and an assignment as planning officer at the Public Works Center, Norfolk, Virginia. He is currently Public Works Officer and OinC of construction at the Naval Air Station, Barber's Point, Hawaii.

of a peacetime Naval Construction Force training and employment doctrine that has developed military construction units of exceptional mobility, flexibility, and effectiveness. It is perhaps appropriate at this point to consider some of the concepts and doctrine that have produced construction units of the unique capabilities that characterize today's Seabees.

Manned at not much more than half the strength of the standard 1,080-man World War II battalion, the Mobile Construction Battalions that evolved in the postwar period were organized, trained, and equipped with a view to a highly flexible construction capability and a high degree of mobility, characteristics ideally suited to the variable contingency possibilities of the Cold War era.

Under current doctrine for the Naval Construction Forces, the Chief of Naval Operations has tasked these Mobile Construction Battalions with maintaining readiness to carry out a three-part mission:

- To provide rapid and effective construction support to Naval, Marine Corps, and other forces.
- To conduct defense operations when required by circumstance of the deployment situation.
- To conduct disaster control operations, including emergency public works operating functions.

As a necessary corollary to their readiness to carry out construction missions under the exigencies of the Cold War era, Seabee units

must be able rapidly to close out operations and deploy to a new site; ordinarily, the Mobile Construction Battalions are required to maintain readiness to redeploy in this manner in a period of no more than ten days.

The key to Seabee capability to attain this necessary mobility and construction versatility has been the continuing emphasis placed throughout almost the entire postwar period on the regular deployment of the battalions between home port training periods and overseas construction missions. Serving both to develop and maintain techniques and experience in rapid pack-out and embarkation, and to provide a broad variety of construction experience under widely varying conditions, the long hard years of these peacetime deployments have paid off in the remarkable ease with which one battalion after another has been able to deploy into a Vietnam site and commence effective construction operations almost immediately upon arrival.

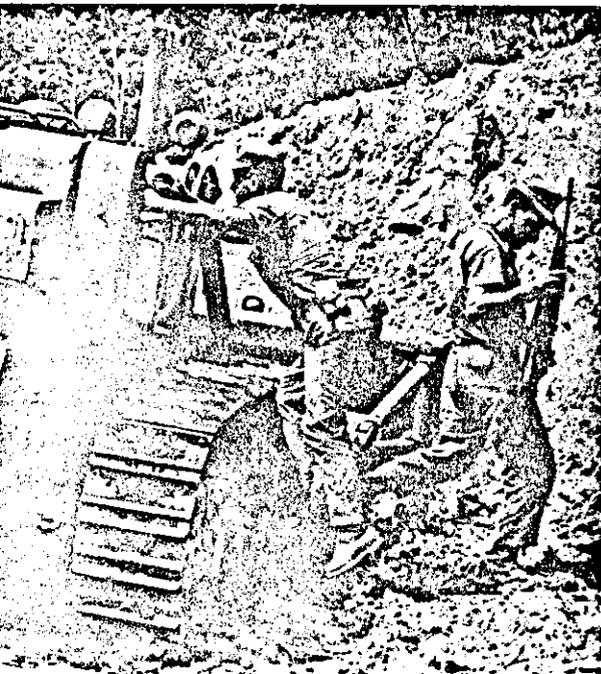
While a primary consideration in selecting peacetime Seabee construction missions has been to afford training in the skills required for their wartime mission, the Seabees have produced a significant part of Navy and Marine Corps overseas construction needs during the years since World War II. To name but a few, major Seabee projects overseas have included varied naval base facilities in North Africa, Spain, and throughout the Pacific; Polaris support facilities at Holy Loch and on

Guam; permanent Marine Corps bases on Okinawa; the Cubi Point (Philippines) Naval Air Station; family housing projects throughout the Atlantic and Pacific areas; and construction support of the Antarctic program since its beginning over a decade ago.

Such peacetime construction projects have provided broad practical experience in the skills that are basic to the Group VIII construction ratings—equipment operators, construction mechanics, construction electricians, utilities men, builders, steelworkers, and engineering aides. Supplementing this basic construction training, the peacetime Seabee program has included a wide range of additional training in such fields as well drilling, quarrying and blasting, logging and sawmill work, railroad construction and maintenance, waterfront construction, erection and operation of advance base structures and equipment, and many other specialties that might prove to be useful in support on contingency operations.

Military readiness of the Seabees is a subject that has received increasing attention in recent years. During their home port training deployments, each Mobile Construction Battalion participates in an extended military period under the direction of Marine Corps instructors, and each battalion is regularly cycled through a period of more advanced training and field exercises under Marine infantry training regiments at either Camp Lejeune, North Carolina, or Camp Pendleton, California. While it has by no means produced fully trained combat infantrymen, this Seabee military training program has provided the battalions with a high degree of proficiency in their assigned weapons and a thorough grounding in defensive tactics.

The construction skills that are inherent to a Mobile Construction Battalion are its principal assets in support of the Seabee disaster recovery mission. Supplementing this basic



All Seabees undergo extended military training at one of the two Marine Infantry Training Regiments in the United States before overseas deployment. As one Seabee replaces another on a bulldozer in Vietnam, that training could, at any moment, prove to have been invaluable.

capability, a regular training program provides the specialized skills required for disaster work under conditions of nuclear, biological, or chemical warfare.

An important principle contributing to Seabee effectiveness under the demanding conditions of Vietnam has been the development of an organizational structure which permits retention of a high degree of small unit integrity at all levels in the battalion, regardless of mission. Whether engaged in construction, combat operations, or disaster recovery work, a Seabee almost always works under the same leadership and in the same small unit.

Although there are differences, Mobile Construction Battalion organization closely parallels that of the standard Marine infantry battalion. Each Seabee battalion is organized into five companies of three platoons each—a Headquarters (HQ) Company, which comprises personnel of the staff and support groups; ALFA Company, made up of equipment operation and maintenance personnel; BRAVO Company, a shops and utilities company; and two general construction companies, CHARLIE and DELTA. ALFA and BRAVO companies are organized as rifle companies throughout, while the HQ, CHARLIE and DELTA company organizations include two rifle platoons and one weapons platoon. Weapon team, fire team, and squad organization within each platoon is identical to that of Marine Corps infantry units.

Weapons, as well as communication equipment and other military hardware provided to Seabee units are generally identical to those employed by Marine Corps units, a consideration that has made available ready ammunition and other support to Seabee units through logistics channels of the Marine Corps forces with which they most often operate. Seabee rifle platoons are armed with the M-14 rifle, (currently being replaced by the M-16 rifle in conformance with Marine Corps units) with an M-79 grenade launcher provided in each squad. Weapons platoons are armed with the M-60 machine gun and 3.5-inch rocket launcher.

Throughout the years of peacetime deployments, a continuing process of evaluation and refinement has produced an effective Mobile Construction Battalion allowance of tools,

equipment, and supplies, which has proven a major element in the successful Seabee performance in Vietnam. This MCB allowance, commonly referred to as the "P25A," is currently a 4,500-item, 2,300-measurement-ton, 5.4-million-dollar materiel package sufficient to sustain a high level of battalion operations for a period of 90 days.

The availability of a broad range of heavy construction equipment—*together with the skilled manpower to maintain and operate it*—has always been a Seabee specialty, providing the Mobile Construction Battalions with a heavy construction capability substantially exceeding that of almost any other military construction unit of comparable size. This heavy equipment—a fleet of some 250 bulldozers, cranes, graders, scrapers, heavy trucks, and other construction and automotive equipment—represents a value of nearly 3.6-million dollars per battalion, or better than two-thirds of the battalion's entire materiel outfitting.

This MCB allowance is separated into two parts. One contains purely organic equipment and supplies, such as tool kits, medical and dental supplies, administrative gear, and military hardware, which always moves with an individual battalion. A second part represents non-organic materiel, including the automotive and construction equipment allowance, a complete camp component, and POL supplies, which may or may not move with a battalion, depending on circumstances. Thus far in the Vietnam war each battalion moving into a new location has carried in the entire P25A package, while a battalion relieving another has brought only its own organic portion of the allowance, taking over the remainder of the allowance from the relieved battalion.

Having successively played in their 25-year span an exceptionally useful role under the varying conditions of general war, Cold War, and limited war, it seems a safe assumption that the Navy's Seabees will continue to be an important element of the naval operating forces.

For the moment, as General Douglas MacArthur wrote to Seabee founder Admiral Ben Moreel during World War II, "the only trouble with your Seabees is that you don't have enough of them."