

THE SEA



BEE

OREA KWAJALEIN NORMANDY OKINAWA PHILIPPINES SALERNO TARAWA TRINIDAD TULAGI VIET NAM

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Photo shows new three F-1 test stand addition at NASA High Thrust Area, Edwards California, constructed under supervision of the Los Angeles District, U. S. Army Corps of Engineers. Test Stand 1-E is on left with water recovery reservoir. Also shown is Test Stand 1-D in foreground right and Test Stand 1-C adjacent.



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RECRUITING FOR SEABEES!

By Lt. W. M. Baker, CEC/USNR

Not since World War II has there been such an intensive effort to recruit men in the construction trades for active duty with the SEABEES. The present recruiting drive is for enlistment in the USN and USNR alike to meet world-wide Naval construction commitments by the active Naval Mobile Construction Battalion Forces.

—Recruiting for immediate active duty:

There are no new rules for enlisting for immediate active duty. With one year of Apprentice School training up to the journeyman level, a man can be enlisted in the Advanced Pay Grade Program. This is handled only by the Regular Navy Recruiters. For persons interested in immediate active duty, refer them to any Regular Navy Recruiting Office.

Similar all-out recruiting efforts are in motion to recruit men in the construction trades for enlistment in the USNR-R (Inactive Naval Reserve Construction Battalions). The need for these men is essential to maintain a strong Naval Reserve ready for immediate recall when necessary during national emergency or war.

—Recruiting for Inactive Naval Reserve:

The rules are much different for enlistment in the Naval Reserve Construction Battalions for inactive duty. Men who are draft eligible, up to age 26, with a classification of I-A, II-A or III-A cannot apply. Men who are draft deferred up to age 35 cannot apply. In general, men who have completed their military obligation, 2 years active duty in any branch of the armed forces, and men who are not draft deferred, between ages 26-35, can apply. The maximum age for enlistment is age 42 unless the person has had prior service in any branch of the Armed Forces. In this case, add the number of years of active or satisfactory service performed to 42 to figure the maximum age. There are openings in all construction ratings which are:

- BU—Builder (Carpenter)
- CE—Construction Electrician
- CM—Construction Mechanic
- EO—Equipment Operator
- EA—Engineering Aid (Surveyor-draftsman)
- SW—Steelworker
- UT—Utilities Man (Plumber)

The maximum rate allowed to anyone is Petty Officer Second Class (E-5). The rules above are specific. A personal interview can be arranged by contacting any Naval Reserve Training Center.

Every Seabee veteran throughout the Nation, should mention this information to his employees, associates and friends and acquaint them with these facts.

In the next issue, another article will cover the benefits for members of Naval Reserve Construction Battalions of the Ready Reserve.

LETTER TO THE EDITOR

Sea Bee Magazine

Washington, D. C.

Editor:

Today's Seabees with their building, fighting, hurting and dying in Vietnam could be the largest body of forgotten men in United States military history

The Seabees are not forgotten by the United States Navy nor are they forgotten by their proud loved ones at home. They HAVE been forgotten by the American media, namely: the press, radio, television, and the motion picture industry. But it is not altogether the fault of such media. They must have good sound stories that the public will believe, and THEY ARE NOT GETTING THEM.

The Seabees are the unsung heroes of every war theatre since they were formed in 1942. Now, the Seabees are in South East Asia. I challenge any other branch of the armed forces to equal the day to day heroism that the Seabees show as they accomplish their missions in Vietnam.

As a newspaper publisher, I need your help in securing personal stories of the Seabee in Vietnam; those, of course, that SHOULD be told. We want to stir the public's

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PROGRESS REPORT

COMCBLANT

Fiscal Year 1965

During fiscal year 1965, the five Atlantic Fleet Naval Mobile Construction Battalions have had a broad range of technical and military training, as well as major construction accomplishments. Construction of naval facilities, participation in Navy-Marine Corps-Army exercises and unit and individual training at service schools and training camps were conducted by the battalions in order to improve their readiness to carry out our mission in support of contingency and large scale war plans.

The battalions received military training under Marine supervision at Camp Lejeune in subjects ranging from marksmanship to guerrilla warfare. They have played a major role in the first line of base defense at Guantanamo Bay Cuba. Under simulated contingency operations of the joint amphibious exercise Steel Pike I, a self-contained, self-sustaining battalion combat loaded aboard on LST, landed over-the-beach and constructed a Short Airfield for Tactical Support.

The Atlantic Fleet Naval Construction Forces were engaged in over 80 construction training projects in FY 65 with a contract value in excess of \$10 million. These projects included road construction, steel, concrete, masonry and wood frame building construction, waterfront pier and bulkhead work, power generation and distribution, water and sewerage systems and communication facilities. Construction support was again provided to Task Force 43 for the United States' scientific efforts during Operation DEEP FREEZE FY 65 in Antarctica. Seabee Teams continued to render engineering and construction assistance and emergency construction recovery aid to foreign countries.

Our battalions and teams were deployed to the following areas during this fiscal year: Costa Rica, Spain, Turkey, Greece, Dominican Republic, Liberia, Central African Republic, Puerto Rico.

In addition to the readiness construction and military training received, our readiness to meet contingency operations was increased with the procurement of more than \$700 thousand in automotive and construction equipment, tools and camp material.

The tasks accomplished by the Atlantic Fleet Seabees exemplifies the "Can Do" attitude and professionalism of our officers, petty officers and men. They have again surmounted all challenges and are ready to meet any future demands.

This is a summary of our operations and achievements in FY 65.

Sincerely,
S. R. SMITH
Captain, CEC, USN
Commander Naval Construction
Battalions, U.S. Atlantic Fleet

MISSION

The mission of the U. S. Atlantic Fleet Mobile Construction Battalions as units of the Naval operating forces.

- Maintain a state operational readiness to provide rapid and effective construction support to Naval, Marine Corps and other forces.
- Conduct military defense operations when required by the circumstances of the deployment situation.

tuation.

- Conduct disaster control and recovery operations including emergency public works operating functions when required.

GOALS

The Commander Naval Construction Battalions, U. S. Atlantic Fleet has established the following goals to achieve this mission.

- Improve and provide maximum support to the Naval operating forces and the Marine Corps with definitive planning and emphasis placed on mobility and readiness to meet emergency situations.
- Upgrade and retain manpower.
- Develop and maintain maximum utilization and effectiveness of manpower and material.
- Cultivate and assert high standards and a hard core of professional performance.

MCB ONE

U. S. Naval Mobile Construction Battalion ONE, commanded by CDR Richard T. HARDY, CEC, USN was deployed at the U. S. Naval Station, Argentia, Newfoundland from mid-July to mid-November 1964. At Argentia the Battalion received construction training on rehabilitation of an electrical feeder system, replacement of power and telephone lines and site preparation for a family housing project. In October, a construction platoon was deployed to NAS, Lakehurst, N. J. for contingency operations, construction training on a Marine expeditionary airfield, Short Airfield for Tactical Support (SATS). During the Battalion's homeport period at the CB Center, Davisville, R. I., in the winter of 64-65, intensive military training was conducted at the Marine Corps Base, Camp Lejeune, N. C.

The Battalion deployed to the U. S. Naval Base at Guantanamo Bay, Cuba in April 1965 for base defense and construction training operations. Projects at GTMO included waterfront mooring repair, air conditioning systems, public works shops, retaining walls and construction of a new barracks complex for non-U. S. employees at the Naval Base.

In cooperation with the U. S. Agency for International Development and the Government of Costa Rica, Detachment UNIFORM of MCB ONE was deployed to San Jose, (Continued on Page 8)

PROGRESS REPORT

(Continued from Page 7)

Costa Rica during FY65 for accomplishment of emergency flood control work. Three of the men of this detachment were awarded the Navy Commendation Medal for heroism in rescuing three persons from isolated areas after a mud flow near Cartago, Costa Rica. The Officer has recently been awarded the Navy Commendation Medal for the Detachment's work. Four enlisted members of the detachment received the Secretary of the Navy Commendation for Achievement.

MCB FOUR

During FY65 Mobile Construction Battalion FOUR, commanded by **CDR Charles G. MILLER, CEC, USN**, conducted construction and military training at the U. S. Naval Bases, Guantanamo Bay, Cuba and Rota Spain. The many projects accomplished by FOUR at GTMO included road and runway repairs, building construction, water distribution and repair, erosion control, sewerage repair, engine cooling system installation and replacement of pier-side electrical systems. In addition to its construction training projects, the Battalion was assigned numerous base defense construction and military missions along the fence line border of Castro's Cuba.

While in Cuba, the Battalion deployed Detachment MIKE to Vieques Island, Puerto Rico for road repair, building construction, magazine repairs, water supply and LST mole projects. During its 5 month deployment to Vieques, the 140 man Detachment was self-sufficient with berthing and messing facilities. Operating its own crusher plant, the Detachment produced over 35,000 cubic yards of crushed rock for the road surfacing projects. At the Naval Base, Rota, Spain, from 7 January to July 1965, MCB FOUR was engaged in extensive construction training on a 300 unit USA Homes housing project.

MCB SIX

The beginning of FY65 saw Mobile Construction Battalion SIX, commanded by **LCDR H. A. TOMBARI, CEC, USN**, completing a 5 month deployment at the Naval Station, Rota, Spain. At Rota, SIX was engaged in building and road construction training projects. During the Spain deployment, the Battalion deployed a

detachment to the Naval Air Station, Sigonella, Sicily for construction of public works shop facilities.

Returning to Davisville in July 1964, the Battalion conducted an intensive training program in preparation for its deployment to the Antarctic in support of the United State's scientific efforts during Operation DEEP FREEZE 65. During the deployment to the Antarctic from October 1964 to March 1965, MCB SIX was engaged in over 25 construction projects at the various "ICE" stations including McMurdo, Byrd, South Pole, Hallett, Eight, and Palmer Peninsula.

In June 1965 Detachment VICTOR of the Battalion deployed to the Naval Station, Argentina, Newfoundland for the construction of a bowling alley facility.

MCB SEVEN

During the major portion of FY65, Mobile Construction Battalion SEVEN was deployed at the Naval Base, Guantanamo Bay, Cuba. The Battalion was commanded by **CDR Charles C. HEID, CEC, USN** until January 1965 when **CDR James T. ACUFF, CEC, USNR** assumed command. While at GTMO, SEVEN undertook various construction training projects including building construction, boiler repairs, sewer line replacement, waterfront and pier facilities, and electrical systems. The Battalion was maintained in a high state of military readiness for base defense operations and also employed its construction talents on projects along the Bases defense line.

While at GTMO, SEVEN deployed two construction platoons, one to Anegada Island, British West Indies for construction work on fleet training target control facilities and the other to Vieques Island, Puerto Rico for construction of an Air Impact Zone in support of fleet training operations.

During September 1964, the Battalion's 75 man Air Transportable Disaster Recovery Detachment was mounted out from Davisville, R. I. to Mayport, Florida for accomplishment of emergency repairs to hurricane damaged beaches.

MCB SEVEN received the award as "Best of Type" in the Atlantic Fleet for fiscal year 65.

MCB EIGHT

U. S. Naval Mobile Construction Battalion EIGHT, commanded by **LCDR Joseph P. TRUNZ, CEC, USN**,

was deployed to the Naval Base, Rota, Spain from July to December 1964. At Rota, the Battalion began site preparation work for a USA Homes, 300 unit family housing project.

Demonstrating the primary mission of the Naval Construction Forces, MCB EIGHT deployed to Almeria, Spain with elements of the Second Marine Expeditionary Force for the joint Navy-Marine Corps amphibious exercise Steel Pike I in October 1964. Testing its combat construction readiness, the Battalion mounted out from Rota by LST, landed across unfamiliar Spanish beaches on the Mediterranean and constructed a Marine expeditionary airfield, Short Airfield for Tactical Support (SATS).

While the battalion was in Spain, two units were deployed for other construction training projects. A construction platoon erected administrative facilities at Karamursel, Turkey and Detachment ECHO was deployed to Nea Makri, Greece for completion of the communication facilities of Project JUDY.

Upon the Battalion's return to homeport, two months were spent at Camp Lejeune, N. C. for intensive military training.

SEABEE TEAMS

In FY 65, Atlantic Fleet Seabee Teams continued to demonstrate their invaluable worth in furnishing technical assistance, teaching construction and mechanical trades and assisting in construction of a wide range of both civic action and socio-economic projects to emerging nations that either require engineering and construction assistance or have been the victim of natural disasters requiring emergency aid.

Seabee Team 1-3 was located in Santo Domingo, Dominican Republic continuing the Skilled Manpower Development Center in cooperation with the Department of State/Agency for International Development. The Center is a school which trains the Dominicans in diesel mechanics and electrical power wiring.

Seabee Team 4-3 was deployed to the Central African Republic for the training of CAR Ministry of Public Works personnel in automotive and construction equipment operation and maintenance.

Seabee Team 7-2 was deployed for 6 months in Liberia for the training of Liberian personnel of the Department of Public Works in building construction trades, vehicle and

(Continued on Page 39)

UNION RESOLUTION BACKS SEABEE DRIVE

America's Building and Construction trade unionists have offered vigorous support to a Navy request for Seabee volunteers to meet mounting needs for skilled builders in Vietnam.

Some 4,000 delegates to the Eleventh National Legislative Conference of the Building and Construction Trades Department unanimously ap-

proved a resolution endorsing the Seabee recruiting drive during their meeting the week of March 21 in Washington.

It is the second time in a quarter-century that the trades have responded vigorously to a Navy call for help in an emergency.

The first time was in the early 1940's when skilled builders were needed immediately to form Naval Construction Battalions. This resulted in the creation in 1942 of the Seabees, whose name soon became a national legend as they fought and built their way across the islands of the Pacific to victory on V-J day.

At the war's end, 250,000 Seabees were on active duty, 200,000 of them serving overseas.

Speaking to the union delegates,

Commander Blake W. Van LEER, CEC, USN, explained the current Navy program, which permits trained construction men 17 to 40 years of age to enlist in the Seabees at Petty Officer level. The plan offers: Petty Officer Third Class rates to those with 32 months of building training or experience; Second Class for four years; and First Class to men with seven



SEABEE SUPPORT — Frank Bonadio, secretary-treasurer of the AFL-CIO Building and Construction Trades Department, seals support of the current Navy Seabee recruiting drive by shaking hands with Com-

mander Blake W. Van Leer, CEC, USN, Assistant Chief for Military Readiness, Navy Bureau of Yards and Docks.

years, including one year as subforeman.

"Your opportunity to join the Seabees is as close as your local Navy recruiter," Cdr. Van Leer said. There are 800 Navy recruiting offices throughout the nation.

Cdr. Van Leer is Assistant Chief for Military Readiness at the Navy Bureau of Yards and Docks, Washington, D. C.

He pointed out that a man meeting his military obligations by volunteering for Seabee service will gain experience valuable to his civilian career in the future. "He'll have been working in his trade, increasing his proficiency," the commander stressed.

Present-day Seabees are operating in support of U. S. Marine Corps

forces in Vietnam. They are building airstrips, troop encampments, roads, oil and gasoline tank farms, piers ramps, ordnance depots, storage areas and water systems.

"The same work that was done in World War II is being done today," Cdr. Van Leer declared.

Enlistees will take a quick military training program and then will be assigned to battalions, where they will be utilized in their building specialties.

Families of enlistees will be entitled to the same rights and privileges granted to all such military dependents.

In urging union delegates to carry the message back home, the commander reminded, "We aren't just taking these men in as recruits, we are taking them in again as we did in World War II with an advance rating, with the crow on the arm."

FORMER ENLISTED SEABEE PROMOTED TO LIEUTENANT (J.G.)

Franklyn J. HARTMAN of Mobile Construction Battalion Nine, a former enlisted Seabee, was promoted to Lieutenant (j.g.), Friday April 1, in a ceremony conducted by



the Battalion's Executive Officer, LCdr William L. WILSON.

Hartman, who is serving his third tour of duty with MCB-9, having been assigned originally when the Battalion was commissioned in 1952, was promoted in a ceremony conducted in the Battalion's Commanding Officer's office aboard Naval Construction Battalion Center, Port Hueneme. The ceremony was attended by Hartman's wife, Felipa.

Commissioned in the Navy Civil Engineer Corps, under the Limited Duty Officer Program, Hartman is a former Chief Equipment Operator.

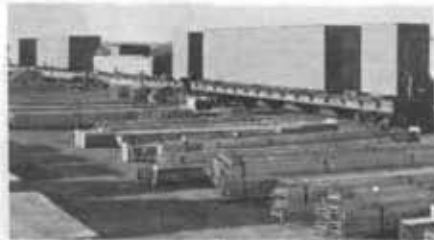
A native of Doniphan, Missouri, Hartman lives at 1075 B, Saipan Circle, aboard Construction Battalion Center, Port Hueneme, with his wife and five children: James, 14; Janet, 12; Mary, 9; Thomas, 8; and Katharine, 6 months.

Operation 'DEEPFREEZE'

From TOWLE, vans were hauled by D-8 Caterpillar to Williams Field, Mc Murdo's airstrip, where Air Development Squadron Six (VX-6) ski-equipped, LC-130F Hercules, waited to begin the long flight to Polar Plateau.

NEW BASE IN ANTARCTICA

PLATEAU STATION, ANTARCTICA —The completion of Plateau Station by the U. S. Navy's Operation DEEP FREEZE units may have achieved the ultimate in high-speed housing development. In three months, Operation DEEP FREEZE transported the station components 11,000 miles from Canada and assembled them into a compact unit ready for four Navy and four scientists inhabitants. These personnel will winter over from February to December in an area where the temperature is expected to reach 139 degrees below zero.



NO. 1

Constructed in Calgary, Canada by the ACTO firm, eight pre-assembled vans arrived at Davisville, Rhode Island by railway flatbed. They are destined for Plateau Station, a new U. S. scientific station 600 miles from the South Pole, high on the remote Polar Plateau.



NO. 2

The longest part of the journey over, the USNS TOWLE arrived at Mc Murdo Station in December, moored to six-foot-thick ice and began off-



Plateau Station is located at an elevation of 11,500 feet some 600 miles deeper into the heart of Antarctica than the South Pole itself. Primary living and working quarters were established by linking together five of the modular vans. Three of the vans are set apart from the main complex and serve as emergency generator and magnetometer buildings.

These photographs illustrate the story of Plateau, its transportation from the U. S. to Antarctica and its establishment on the Polar Plateau.

loading the Plateau Station vans. TOWLE steamed the last 23 miles to McMurdo through a channel cut by U. S. Navy icebreakers.



No. 3

Immediately off-loaded, the vans awaited a 1,400-mile air-lift from McMurdo to the Plateau Station site, perhaps the most remote and lonely spot in the world.



NO. 4



NO. 5

An exacting task, even for the seasoned loadmasters of VX-6, a D-8 tractor fits a van into the cargo bay of an LC-130F.



NO. 6

.....with inches to spare. Once squeezed aboard, the "Herc" began its 1400 mile flight to Plateau Station via South Pole Station where the giant plane paused for fuel.



NO. 7

The construction phase begins as the first van arrives at the Polar Plateau site.



(Continued on Page 33)

REAR ADMIRAL WALTER M. ENGER, CEC /USN

AWARDED NAVY COMMENDATION MEDAL

Secretary of the Navy Paul H. Nitze awarded the Navy Commendation Medal to **Rear Admiral Walter M. ENGER**, CEC USN, Deputy Chief of the Bureau of Yards and Docks for outstanding service from March 1964 to October 1965 while serving as Director of the Bureau's Chesapeake Division.



Rear Admiral Walter M. Enger, CEC, USN presented the Navy Commendation Medal by Rear Admiral Alexander C. Husband, CEC, USN

The medal was presented by **Rear Admiral Alexander C. HUSBAND** Chief of the Bureau of Yards and Docks and Chief of Civil Engineers of the Navy on behalf of the Secretary.

It cites him for developing general military planning for major Naval complexes in the Washington area. This includes construction done or scheduled at the National Naval Medical Center, the Washington Navy Yard, Marine Corps Headquarters and Washington area Marine Corps activities. Also, for development of master plans for facilities at the Naval Research Laboratory, the Bolling Anacosta Military Cantonment and the proposed Defense Office Building on the Bolling Air Force Base site.

The Secretary, in an accompanying citation, praised Rear Admiral Enger for displaying "outstanding professional skill and resourcefulness,"

which he said contributed materially "to the successful and expeditious completion of all these projects."

Rear Admiral Enger lives at 1200 North Nash St., Arlington, Va..

He attended the University of Illinois, receiving the degree of Bachelor of Science in Civil Engineering in 1935. He worked as an Engineer with the Bureau of Reclamation at Denver, Colo. and on Parker and Shasta Dams in California before joining the Naval Reserve in 1941 as a Lieutenant (j.g.).

He transferred to the Regular Navy in 1943 and had a varied Civil Engineer Corps career including service with the Seabees in World War II and construction and public works assignments thereafter. Significant positions before he became Assistant Bureau Chief for Military Readiness in 1963 included service on the faculty at the Naval Academy and as Deputy Chief of Staff, Naval Construction Forces, Pacific.

Rear Admiral Enger is a fellow of the American Society of Civil Engineers and a member of the Society of American Military Engineers. He is a registered Professional Engineer in the District of Columbia.

SCULPTURE

By Perry A. BASCH, JOSA

PORT HUENEME, Calif.—A Pittsburgh carpenter walked into a barber shop one day and was given a small, roughly sawed-out piece of wood resembling a dog. The Carpenter took it home and carved away the edges until the little figure was unmistakably a hound.

Thirty-five years and 25 sculptures later, **Norman E. ORLUSKE**, Assistant Director of Training and Planning at NAVSCON, is still creating figures in his spare time.

"To chip an elephant out of a block of granite, you just throw away everything that doesn't look like an elephant." This is the principle that Orluske uses when working

on his creations.

A former high school shop teacher, Orluske believes that the beginner should start on something small. "If you begin with something big, you might get frustrated and just give up."

His most challenging project was a life-size profile of his son when the boy was nine years old. He didn't keep a record of how long it took him, but admits that he spent five and a half hours and the ear alone.

Most of his creations are made



Mr. Norman E. Orluske with a display of figures he has created in his spare time. They are but few of the 25 sculptures he has done in 35 years.

from scrap wood, though he has been sent some fine pieces of wood from overseas.

"I like a challenge," says Orluske, "I'll see a cartoon with an amusing expression on its face and I want to put it on a block of wood."

Comic papers characters, caricatures, and cartoons are a good source for his carvings. These characters are blown up to the needed size by using an opaque projector and use in lieu of preliminary sketches. Using this method, the need to develop a skill in drawing is eliminated.

Orluske seldom sells any of his sculptures, but occasionally gives them away as presents.

SEABEES DONATE BLOOD

IN VIETNAM

Always willing to more than do their part, Navy Seabees at a Vietnam base recently donated 28 pints of blood.

This is just one of many times that the Seabees of Mobile Construction Battalion FIVE have voluntarily given blood at the base hospital at Da Nang. It has led to comment that with so much Seabee blood in their veins, Army and Marine hospital patients will soon be released so that they can construct their own troop camps and advance bases.

Greek Officer Graduates

By Perry A. Basch, JOSN

Thousands of enlisted personnel have graduated from the U. S. Naval Schools, Construction, (NAVSCON) at the Construction Battalion Center, but only a handful of officer have received sheepskins from its seven schools.

On April 8, Steelworkers School will hold graduation ceremonies for their 14-week "B" School. Among those



TRICKS OF TRADE are discussed by Lcdr. Panagiotis Avagianos, (left) a Greek officer attending Steelworkers Class "B" School, with Ltjg. J. V. F. Clay III, Officer in charge of the school.

receiving diplomas will be Lcdr. Panagiotis Avagianos, an officer in Greece's Royal Hellenic Navy.

Lcdr. Avagianos is attending NAVSCON under the Military Assistance Program. Before coming here, he completed a 12-week Class 'B' Molders School in San Diego, which began in September.

Lcdr. Avagianos graduated from the Greek Naval Academy as a mechanical engineering officer.

His course of study here is mainly concentrated on welding in order to give him a better understanding of this type work and also of how NAVSCON trains petty officers in welding. He expects to apply what he has learned here at the repair shops in Salamis or at the Navy Training Center at Kannelopoules, both possible future duty stations.

Steelworkers School isn't easy, Lcdr. Avagianos says. "It's a course for hardworking people." He found his background in advanced mathe-

matics very helpful and while he doesn't consider it necessary to have 400 hours, as he does, Lcdr. Avagianos does feel that students going through the school "must have a basic knowledge in math geometry, physics and chemistry."

While he finds the classes and course of study very interesting, the Greek officer admits to a little difficulty understanding the terms of the trade and the American slang.

"I can understand an Englishman perfectly, but when I came to the United States I had some trouble talking to Americans. They have a different accent, he says.

During his stay in the United States, Lcdr. Avagianos has observed a number of new and interesting customs, some of which he will introduce to his family on his return to Greece.

Upon his graduation from NAVSCON, Lcdr. Avagianos will attend the four week Instructors School in Great Lakes, Ill., and then return to his homeland.

One thing is certain, he says. He will bring back to Greece more than the technical and practical knowledge he has gained here.

"The people in the United States have given me so much hospitality that I'll never forget it. It has made me forget that I was thousands of miles away from my home."

FOREIGN STUDENTS

By Perry A. Basch, JOSN

Not all students who go through the U. S. Naval Schools, Construction (NAVSCON) are Navy men, Air Force and Marine personnel have attended school here. Sometimes, NAVSCON has even had students who live across the ocean attend classes.

On Feb. 18, two civilians, Peter B'uemling, a German citizen employed at Hahn Air Base in Koblenz, West Germany and Jean-Marie Schott of

France, who works at Toul-Rosieres a NATO Air Base in Nancy, France, graduated from the Heating Plant, Management and Supervision School at NAVSCON.

The men reported aboard for the 24-day course on Jan. 22. Their course of study included fuels and fuel characteristics, water sources and mineral content, external and internal water treatment and administrative and supply procedures.

Schott, who is charge of the Utilities Section of Toul-Rosieres, noted, "The school is perfect for me to learn about boiler plant operation. The course will be a tremendous help to me when I return.

"At first I thought the school would be quite difficult," Schott admitted. But now that the course of study is completed, he feels he did "very well."

B'uemling is employed as a heating superintendent and was sent here specifically to learn about management.

"I have a little trouble with the language, but I'm learning a great deal — the instructors are very patient," he noted.

While attending the school, Bluemling has been trying to cash a \$35.78 check he received from the United States in 1946, for picking cotton in Arizona at a dime an hour. He was a prisoner of war at the time, having been captured in 1943 when an American destroyer sank his submarine. He has been carrying the check around in his wallet all these years. Now he finds that the only way he can possibly collect on the check is to send it to the Treasury Department and have a new check issued.

B'uemling left Feb. 19 for Germany, where he will instruct four foremen in his division on what he has learned here.

Since this Schott's first visit to the United States, he was granted a 10-day leave after completing school. The thing that has impressed Schott the most since his arrival has been the freeways, so he is planning to take a bus tour of the U. S.

After his sight-seeing trip is completed, Schott will return to France. He expects to teach others what he has learned at NAVSCON at a school serving all NATO bases in Europe.

Both men found the course interesting and challenging and expressed their desire to return to the U. S. some day.

REMEMBER 1967!
25th Anniversary SEABEES
100th Anniversary CEC

ADMIRALS TOUR

SOUTHEAST ASIA

U. S. Naval Mobile Construction Battalion FOUR, presently deployed at Camp Shields, Chu Lai, RVN, was recently host to **Rear Admiral Walter M. ENGER**, Deputy Chief, Bureau of Yards and Docks and **Rear Admiral William M. HEAMAN**, Commander Construction Battalions, Pacific Fleet. The two high ranking Naval Officers were on a familiarization tour of South East Asia.

The Admirals visited USN MCB THREE and FOUR both deployed at Chu Lai, as well as the civilian contractors in the Chu Lai enclave.

They were given a tour of the many different job sites of MCB FOUR by the Commanding Officer, Cdr. W. A. Walls, and were lodged over night by the Fabulous FOUR Battalion.

Captain Nelson R. Anderson, Officer-in-Charge of the 30th Naval Construction Regiment at Da Nang was on hand to give the Admirals a briefing of the Seabee support in the Da Nang area.

Other members of the distinguished party included Captain Paul E. Seuffer, Liaison Officer-in-Charge of Construction in the Republic of Vietnam, Captain Greer A. Busbee, Jr. Officer-in-Charge of Construction (Da Nang); Commander Raymond W. Loomis, of the Bureau of Yards and Docks and Commander Albin W. Walton, Jr., of the Pacific Yards and Docks.

MCB FOUR REPAIRS RUNWAY

The mobility and readiness of the Seabees of U.S. Naval Mobile Construction Battalion FOUR was recently called to a test in response to a need for emergency repairs to the Kham Duc Airfield near Camp Jackson, Vietnam. Within 48 hours of being alerted, a detachment of fifteen Seabees with their engineering equip-

ment and construction consumables, was standing by to be air-lifted to the scene of action. The officer in charge of the group was Ensign John E. Wilkinson, Jr., CEC, USNR, of Reading, Mass.

The detachment's primary mission was to repair the 6,000-foot runway at Kham Duc which had been eaten away by erosion. The airstrip was originally built in 1942 by the Japanese and is presently being used as a U. S. strategic airfield. Erosion, caused by an adjacent stream and pond, had virtually cut the airstrip in two, leaving only 4,000 feet of the runway usable.

The detachment, comprised mostly of Equipment Operators and Mechanics from MCB FOUR, was charged with the task of filling the eroded runway and providing a runway pavement of soil-cement mixture. Also, the detachment was required to alleviate the drainage problem which had caused the erosion.

In an area that is heavily concentrated with Viet Cong activity, the volunteers were completely independent for the two-week duration of the project. Republic of Vietnam troops provided cover security and patrols, while the Seabees worked in the dense tropical forest away from the camp area.

The detachment was air-lifted from Chu Lai by eight C-130 cargo planes. In addition to the heavy equipment which they took with them, the men tried to repair and utilize abandoned, old French equipment left after the construction of Highway #14 near the airfield.

The Navy's Seabees are versatile, and the highly mobile Construction Battalions are capable of sustained and self-sufficient operations. Much of the organic equipment used by the Battalions is designed to be air-lifted to the construction site, such as the Kham Duc repair job. The men in the Battalions are trained in defensive combat operations as well as construction techniques. A high level of mobility and readiness is maintained at all times by the Seabees, and the Kham Duc detachment is exemplary of their capabilities.

DIRECT PROCUREMENT

Davisville, R. I. — The first class of Seabee petty officers who were enlisted in the Navy under the direct procurement program was graduated March 28, 1966, after completing a four-week indoctrination school at the Davisville Center. The men were enlisted in petty officer grades comparable to their civilian experience and by-passed the 11-week boot training given new men entering the service.

The direct procurement program was used during World War II to recruit men skilled in the building trades to form the Seabee construction battalions and was recently revived by the Navy to help increase its construction forces.

Out of the first class of 52 men, there were 39 third class petty officers, 12 second class petty officers, and one first class petty officer. During the next year, approximately 3000 more petty officers are expected to receive their training at Davisville. The first three weeks of the school are devoted to teaching Navy customs, traditions and regulations, and the last week the men are taught about the Seabees.

There were students in each of the seven Seabee job specialities in this first class..... eight construction mechanics, six utilitiesmen, seven builders, 13 construction electricians, six equipment operators, nine engineering aids (draftsmen and surveyors), and three steel-workers.

Five of the men had prior service with a branch of the armed forces other than the Navy. Two of the men had eight years experience each with the U. S. Air Force, two men had served in the U. S. Army, one six years and one three years. One man had four years prior service with the U. S. Marine Corps. The other 47 petty officers had no prior military service.

The new petty officers were given their certificates by Captain Spencer R. Smith, Commander Naval Construction Battalions, U. S. Atlantic Fleet. The graduation ceremony was held at the Base Disaster Recovery Training Department.



U. S. ARMY

CORPS OF ENGINEERS

L. A. DISTRICT OFFICERS

Colonel John A. B. DILLARD became District Engineer for the Army Corps of Engineers at Los Angeles in July 1965.



Colonel Dillard reported to his present assignment from the Joint Chiefs of Staff, Pentagon.

Los Angeles District is responsible for Corps of Engineers military construction, water resource development activities and related real estate functions. The area served in water resource activities comprises a total area of about 345,000 square miles, and includes all of Arizona and parts of California, Nevada, Utah, New Mexico, Colorado and Wyoming. Military construction functions are carried out in Arizona and in parts of California and Nevada.

Colonel Dillard was born in East St. Louis, Illinois, and was commissioned in the Corps of Engineers upon graduation from Virginia Military Institute, Lexington, Virginia, with a Bachelor of Science Degree in Civil Engineering.

In World War II he served in the European Theater of Operations as Platoon Leader and Company Commander, 125th Armored Engineer Battalion, 14th Armored Division, and Company Commander, 36th Engineer Combat Group.

He was assigned to Alaska in 1947-49. He was first at Fort Richardson, with the 823rd Engineer Aviation Battalion and the 925th Engineer Aviation Group. He later went to Elmendorf Air Force Base as Chief Master Plans, Plans Branch, Alaskan Air Command.

He was Executive Officer, Little Rock Engineer District, Arkansas, 1950-1951. After a year's service in Korea with the 65th Engineer Battalion, 25th Infantry Division, he served for a year in Japan with the 43rd Construction Battalion.

For the next two years, 1955-1957, he was Assistant District Engineer, Baltimore Engineer District, Maryland, before going to Hawaii as Battalion Commander, 65th Engineer Battalion, 25th Infantry Division, and later as Assistant Chief of Staff, G-4, 25th Infantry Division.

From 1961 to 1963 he was in the

Office of the Chief of Engineers as Assistant Director for Military Construction, Western Area, before assuming his duties in the Pentagon.

Colonel Dillard has a Masters Degree in Industrial Engineering from New York University and is a graduate of the Army Engineer School, Fort Belvoir, Virginia; the Command and General Staff College, Fort Leavenworth, Kansas; and the War College, Air University, Maxwell Air Force Base, Alabama. He is a Registered Professional Engineer in Maryland.

His decorations include the Bronze Star with Oak Leaf Clusters, Commendation Medal with one Oak Leaf Cluster, Purple Heart, Korean Chung Mu Medal with Gold Star, and the Legion of Merit.

LT. COL. R. T. OJENDYKE

Served as enlisted man in World War II, 82nd Airborne Division, European Theater of Operations; graduated



Iowa State University, BS degree Civil Engineering, 1950. Also received MS degree civil engineering from the same university in 1959. Commissioned in Regular Army—served in Okinawa, Korea, Austria, West Germany, and American Samoa. Prior to present assignment Col. Ojendyke was with Headquarters, U. S. Army Europe, Chief of Mapping Section, Intelligence and Mapping Branch.

LT. COL. R. W. PATTERSON

Lt. Colonel Robert W. Patterson is the Area Engineer for the Western Area Office of the U. S. Army Corps of Engineers, Los Angeles District, with headquarters at Vandenberg Air Force Base, Calif.



Under Col. Patterson's direction the Western Area Office has the responsibility for all construction work being accomplished by the Corps of Engineers in San Luis Obispo and Santa Barbara Counties. In addition to numerous smaller projects, this included the Minuteman II facilities with 6 launchers and 3 control centers, the Titan IIIX; Precision Measuring Equipment Laboratory and Component Cleaning Facilities, and a multi-million dollar Composite Medical Facility. Future con-

struction under his jurisdiction will include the Titan IIIC and Manned Orbital Laboratory Facilities.

Lt. Col. Patterson was born at Casper, Wyoming. He earned his B. S. degree in Military Science from the University of Maryland in 1958 and holds a degree in Civil Engineering from the Missouri School of Mines and Metallurgy. His military training was received at the Army Engineer School, Fort Belvoir, Virginia, where he completed basic and advanced courses in engineering.

He enlisted as a private in the Artillery in 1943 and received his commission in October 1944. He has seen service in the European, North American and Asian Theaters of Operation. Having completed tours of duty in Europe and the Philippines, he was assigned to Special Staff at the Pentagon, Washington, D. C. After attending Amphibious Warfare School in Coronado, California, he served as captain of a sea-going tug and freighter with the 2nd Engineer Amphibious Brigade. In 1950, he was assigned to the Alaskan Air Command, 925th Engineering Group, SCARWAF, at Elmendorf Air Force Base where he served as assistant Operations Officer for construction of "Dew Line" radar sites in the Alaskan region. He then served as an instructor at the Army Engineer School at Fort Belvoir, Virginia. He was then assigned to the Engineers U. S. Army Pacific as Plans Officer. While on this assignment, he saw duty in Southeast Asia with the South East Asia Treaty Organization. His last duty station before assuming command at the Western Area Office as Area Engineer was at Headquarters, U. S. Army, Pacific, Fort Shafter, Honolulu.

In February 1964, the Air Force gave the Los Angeles District, the responsibility of construction on Vandenberg Air Force Base of \$14 million worth of facilities to support the Minuteman II test program. Col. Patterson was given only 7 months to supervise the building of the first launch facility and launch control center. Under normal construction procedures, this would have taken an estimated year to year and a half to complete. Despite delays due to construction modifications, the job was completed on schedule. For this meritorious achievement and display of superior initiative and personal endeavor, Lt. Col. Patterson was awarded the Air Force Commendation Medal in November 1964.

He is currently President of the Vandenberg Air Force Base Post of the Society of American Military Engineers and is also a member of the American Society of Civil Engineers.

DIVER TRAINING

PORT HUENEME, When a person hears the word "Seabee" the mental image brought to mind is usually that of a man on a bulldozer with a rifle beside him. While there are many occasions in which this would be a correct picture, there are other less well known jobs that are required of Seabees.

In order to fulfill a vital construction capability along the waterfronts of the world D. M. Handley, CEP3; F. J. Mugrace, BUL3; R. D. Rausch, SWEEN; C. E. Steinmetz, EOH3; and C. A. Wade, SWE2; of U. S. Naval Mobile Construction Battalion TEN are undergoing diver training at the U. S. Naval Service School for Diving, San Diego, California. Though these men will usually be filling other jobs above the surface of the water, when the need arises they will be qualified to meet the need for underwater work. This will prevent construction delays involved when it is necessary to call in divers from other commands to assist.

MCB TEN is in the midst of training at its home port of Port Hueneme, California, in preparation for a return to Vietnam to continue construction projects needed for the support of U. S. Forces in country.

SEABEES AID VIETNAM ORPHANS

Port Hueneme, California, 23 February 1966. In Vietnam there are many refugees and orphans who need your help as a result of their suffering through the many years of war that have afflicted their country. The Pacific Seabees have seen the problem and are lending all the help within their means to the orphanages and refugee camps within their areas of responsibility in Vietnam.

In order to obtain clothing and other supplies to support this work, the U. S. Naval Construction Battalion Base Unit at Port Hueneme, California has made contact with various women's groups throughout the local area and Los Angeles. Among these are an association of Republican Women's Clubs; the women's clubs of the Naval Air Station Point Mugu, California and the Episcopal Church Women of all Saints' Church, Oxnard.

Officers from U. S. Naval Mobile Construction Battalion TEN, which has been giving talks to these clubs on recently returned from Vietnam have the role of the Seabees today and on the need for support of the orphans and refugees in Vietnam. To date LT Jerome R. Dunn, Civil Engineer Corps, U. S. Navy, the battalion Operations Officer and LT George M. Sheldon, Chaplain Corps, U. S. Naval Reserve, the battalion Chaplain have addressed five of these clubs and more speaking engagements are scheduled for the near future.

Other organizations and individuals are invited to participate in "Operation Seabees" or in "Operation Handclasp". Within the Los Angeles—Ventura County—Santa Barbara County area of California contact should be made with the Commanding Officer, Construction Battalion Base Unit, Port Hueneme, California. In other areas contact should be made with the nearest naval activity. Speakers are available within the first area by contact with the Base Unit.

Some of the needs of the people in Vietnam are: Orphans Books (1st grade readers), crayons, games and toys, pencils, writing paper, children's clothing, soap, powdered milk, and Refugees—clothing (boys' sizes 12-16), fabrics and soap.

When supplies are gathered by the clubs for the people of Vietnam, they will be turned over to the Construction Battalion Base Unit for shipment to Vietnam and then will be distributed by the battalions in country.

JOHN W. GILBERT TO USN FLEET RESERVE

John W. GILBERT, Second Class Equipment Operator, of Mobile Construction Battalion Nine was transferred this morning to the Fleet Reserve in a ceremony held at U. S. Naval Construction Battalion Center,

Port Hueneme, Calif. after more than twenty years active service.



John W. Gilbert, Equipment Operator Second Class, of Mobile Construction Battalion Mine, and his wife Catalina walk through a double line of fellow second class Petty Officers serving as side boys during a ceremony transferring him to the U. S. Naval Fleet Reserve on completion of more than twenty years of active service.

Gilbert's last duty, with MCB-9 included an eight month deployment to Da Nang East, Vietnam, from which the Battalion returned to Naval Construction Battalion Center, Port Hueneme, during the first week of February, 1966.

A native of Kenton, Tennessee, Gilbert lives with his wife Catalina and nine-year-old twin daughters Clara and Cora, at 1401 Fir Street, Oxnard, California.

Gilbert served with the Seabees in the Pacific Theater during World War II, participating in much of the action including the invasion of Mindanao. He left the Navy in 1946, after which he served 18 months with the Army, returning to the Seabees in August 1951 and serving on active duty until this morning.

SEABEE TEAM HELPS DOMINICANS

A Navy Seabee people-to-people team has returned to the U. S. after helping to establish a self-sustaining school to train auto and diesel mechanics in the Dominican Republic.

The school, known as the Skilled Manpower Development Center, has been operating for two years at Santo Domingo as a joint project of the Dominican Ministry of Labor and the U. S. Agency for international Development.

Four groups have graduated from the school, whose classes were taught by Seabees and Dominicans. The center will now be turned over to the Dominican government by USAID.

A Critical Look At (Not Through) Windows

By Del LUDWIG,
Product Promotion
ADOR/HILITE

Subsidiary of Rusco Industries, Inc.

"Everyone talks about the weather, but nobody does anything about it!" So goes the old wheeze. To some extent this remark might be altered to say: "Everyone looks through windows, but nobody does anything about them!" Not so any more!

A spectacular growth company has emerged from the pack of aluminum window and door manufacturers to become the leader—in size and completeness of product lines.

Briefly, the industry started with many small fabricators buying extrusions from aluminum suppliers. These sections were combined into windows and doors—some good, some bad. About ten years ago a few larger fabricators took the big step—they acquired extrusion presses to extrude their own sections. In round figures, a typical press and support equipment costs about a half-million dollars. Obviously, this separated the men from the boys.

A dominant manufacturer, Ador/Hilite, went several steps further. They installed two presses and the complete support equipment: induction billet heaters, 15-ton stretchers, aging ovens, and anodizing facilities. This major manufacturer sells through distributors and dealers to the national market. It is a major supplier for national, state, and city building projects—military and civilian.

And, recently, they installed a total energy plant with capacity to provide all electric power needed for the manufacturing complex, extrusion presses, billet heaters, and offices. The power plant has four generators driven by large diesels, which were converted to burn natural gas. The heat by-product is used to pre-heat the billets and for heating the anodizing liquids. The four generator units are programmed to work in cycles.

Of special interest to builders in coastal areas is the anodizing operation. This is an electrolytic process

whereby the metal's surface is transformed into a hard, crystalline oxide that is impervious to salt water, normal wear, and discoloration. Briefly, the process consists of



Anodizing tanks. A load of extrusions are being moved to the next tank. This electrolytic process seal the surface of the metal against corrosive salt water.

the following stages, with a rinse stage between each step: (1) Alkaline cleaner, (2) Caustic etch, (3) Deoxidizer, (4) Anodizing or Hard Coat, (5) Sealing, and (6) Drying.

Ador/Hilite's two extrusion presses push the aluminum billets, 5 1/8" diameter, through the intricate dies at 3000 P.S.I. pressure. Aluminum can be extruded at approximately



Showing the ram end of the extrusion press. The white cylindrical chamber contains the aluminum billet. The ram is shown nearly all the way in, at the end of the stroke. The extrusion is being run out in the track at the left. In the foreground the billets can be seen.

1200°F. To achieve this temperature, the billet is heated by electric induction heaters which raise the temperature to 800°F., in about 45 sec-

onds. The tremendous pressure of the extrusion ram forces the temperature up to 1200°F., at which heat the metal becomes plastic.

Following extrusion the sections are stretched to achieve straightness; this re-aligns the molecules as the stretcher exerts a pulling force of 15 tons. The extruded section is stretched about 10 inches at this stage.

Extrusions are hardened in the aging ovens to bring them up to the A.A.M.A. standards.

Vitally important to buyers of aluminum windows and doors is the seal of the A.A.M.A., Architectural Aluminum Manufacturers Association. This is the watchdog of the industry. It rigidly enforces controls and sanctions on all members. As a testimony to the effectiveness of this zealous control force, government agencies concerned with mortgages have found that insistence on the "Quality Certified" label of the A.A.M.A. is a safeguard for quality.

This is readily discernible when one realizes that the A.A.M.A. establishes metal thicknesses of all vital sections of aluminum windows and doors. Additionally, the organization devises tests and sets limits for air infiltration; it establishes water resistance tests, uniform load tests and horizontal deflection tests.

Builders appreciate this vital control of quality that must be built into these critical products—they look for the A.A.M.A. seal. It's their assurance of hidden quality.

HOT ON THE JOB

John R. WALTER, SW1, an instructor at the U. S. Naval Schools, Construction Steelworkers School, was conducting a class in forging, when one of his students accidentally reached back with a white-hot punch and punctured Walter right in the middle of his—lecture.

Despite his painful wound, Walter continued to perform his duties in an outstanding manner. In recognition of his brave conduct, his fellow instructors and LT j.g. J. V. F. CLAY Officer in charge of the school (left), presented Walter with a "Purple Heart".

REMEMBER 1967!
25th Anniversary SEABEES
100th Anniversary CEC

THE NORDBERG STORY

The 1880's were exciting times when the promise of success brought thousands of ambitious young immigrants to the "Land of Opportunity." Giants of men were changing the face of America . . . men like Henry Ford and Thomas Edison . . . men of vision who gave to America its great heritage of industrial genius and leadership.

This is the setting in which the Nordberg Story unfolds. It was in



8725 bhp, 6250 kw Nordberg Series 21 engine installed at Carthage, Mo., municipal plant.

1886 that Brundo V. Nordberg, a brilliant, creative young engineer had emigrated to Milwaukee from Finland at the age of 21.

Bruno Nordberg had begun his career as a draftsman for the E. P. Allis Company. He advanced rapidly and became Chief Assistant to the Chief Engineer. Then, destiny beckoned in a kind of failure when the Allis Company would not accept his idea of a revolutionary cut-off governor. Convinced of its ultimate success, young Nordberg worked incessantly — night after night — until the design was perfected.

A lawyer acquaintance, Jacob E. Friend, later to become Nordberg's second president, financially supported the patent application for his invention, and in 1886, largely through Mr. Friend's efforts, the Bruno V. Nordberg Company was founded. Production began with six men in rented third floor quarters.

Success came quickly to the Nordberg company. By 1890 the young and prosperous firm had incorporated under the new name of Nordberg Manufacturing Company and

moved to larger, more complete quarters.

By 1897, over 700 cut-off governors were in the field, the world's largest steam hoist was completed and more and more steam powered equipment was being built by Nordberg. A magazine article that appeared in 1897 said: "All the Nordberg machinery scattered through the Keweenaw Peninsula makes the copper country one vast monument to Nordberg's genius."

By 1901 the company was building some 15 kinds of steam driven machinery from bottle washing machines to steam stamps. The number of employees had grown to almost three-hundred. In 1901, the first section of the present plant was completed. The machine shop was the first in the world to have a separate motor drive on each machine.

In 1911, though Dr. Nordberg seemed firmly convinced that nothing could replace steam, he began to negotiate with Dr. Diesel regarding his unique oil burning engine. Meanwhile, development work was underway on a small, oil engine. With its completion in 1912, Nordberg enter-



2750-ton carbon made press, 36 feet high weight 600,000 lbs.

ed the internal combustion engine field.

In that same year, Dr. Nordberg became president.

Three years later, the first large diesel engine was built in this country for a large copper producer in the southwest. This only the beginning, but with orders for 12 more similar engines, Nordberg was in the engine business in a big way.

In a few years, America became involved in the "War to end all wars." As though in direct reply to Pershing's famous battle cry, Nordberg built about 100 triple expan-



7-foot Short Head Symons Cone Crusher with hydraulic clamping and adjustment.

sion marine steam engines for the Merchant Marine.

The "Roaring 20's" saw the beginning of great strides made by Nordberg . . . it was the real beginning of product diversification.

In 1924, Robert E. Friend became president. Eldest son of Jacob E. Friend, he held the post for 38 years.

The Railway Equipment Division began operations in 1925 with the production of the Track Shifter and in 1929, an adzing machine marked the very beginning of railroad machines built for the specific purpose of mechanizing track maintenance jobs.

During the mid-20's Nordberg manufactured disc crushers for the Symons Bros. Company . . . a forerunner of the Symons Cone Crusher.

In 1928 Nordberg acquired the Symons Cone Crusher business, and in a matter of a few years this machine, one of the most important for the reduction of ores and minerals, revolutionized crushing practices all over the world. The company began to build a complete line of Symons vibrating screens and grizzlies in 1934.

World War II brought new and greater challenges to the productive abilities of Nordberg. Quintuple and triple torpedo tube mounts were produced by Nordberg along with other material for cruisers and heavy cruisers. Four-hundred-and-twelve

(Continued on Page 18)

(Continued from Page 17)

large diesel marine propulsion engines were built, and under emergency orders direct from the White House, Nordberg produced 100 uni-flow steam engines for Baby Flat Tops.

The postwar program of expansion ushered in new products to serve new markets. In 1946 Nordberg acquired the Busch-Sulzer Bros. Diesel Engine Company, and in the same year began to build primary gyratory crushers, kilns and grinding mills.

In 1961 Nordberg had acquired the cold, and very wet mud, especially hydraulic press business of Elmes Engineering Company. Then, in 1963 to efurther expand its line of hydraulic machinery, Nordberg acquired the R. D. Wood Hydraulic Press and Hydraulic Valve business.

In September 1963 Mr. C. W. Foster became President and Chief Executive Officer and Mr. James A. Friend became Chairman of the Board.



Scarifier-Inserter on test on the Northwestern track outside of Des Plaines, Illinois.

In September of 1964 Nordberg entered into a license agreement with Sulzer Bros. Co. of Switzerland under which Nordberg will build Sulzer diesel engines up to 27,600 hp for marine and stationary applications.

Nordberg added a line of heavy-duty, reciprocating compressors to its growing list of products in the spring of 1966.

Nearly as impressive as the number, size and scope of its proprietary products, sub-contract work has been dramatic and varies — like the four million pound extrusion press for air-frame components which had to be

shipped on 50 heavy duty railway flat cars, or the 4 ft. x 4 ft. polysonic wind tunnel and frame structure—the largest of the many wind tunnel sections Nordberg has built. In Nordberg's land-locked plant, hull sections



Aerial view of Nordberg Manufacturing Company's Milwaukee, Wisconsin plant.

and hemispherical heads were machined and assembled for the Aluminaut — a deep diving submarine that will explore the ocean floor at depths to nearly three miles. And Nordberg recently built the 411-ton walking magnet for a zero gradient synchrotron or "atom smasher."

Since its modest beginning, Nordberg has grown continuously. Now, nearly 2500 people are employed and the plant covers over one million five hundred thousand square feet on 11 acres. Sales offices and dealer organizations blanket the U. S. The International Division administers overseas business through a growing branch operations, subsidiaries, joint ventures, licensees, and distributor organizations.

Management prudently and regularly returns a high percentage of earnings for plant expansion and the procurement of such modern machinery as tape controlled machine tools and data processing equipment. Yet, it is true... Nordberg's most valuable asset is people... talented people with whom you share in a bright and challenging future.

NAVY APPLAUDS OAKLAND FIRM

The FABCO Manufacturing Company of Oakland, California, received a certificate of appreciation from the Naval Civil Engineering Laboratory, Port Hueneme, in recognition of FABCO's outstanding effort

in meeting contract deadlines in spite of delays over which the company had no control.

CDR J. D. Andrews, NCEL Executive Officer, presented the certificate to FABCO representatives John Ainsworth, Vice President, and Ted Seidel, Southern California Factory Representative, in a ceremony at Point Hueneme.

The contract called for FABCO to deliver three truck tractors to NCEL by November 17, 1965, for use in NCEL's Antarctic Program. The work required design, fabrication, and assembly. Part of the design and fabrication entailed the modification of commercial truck chassis. Because the truck manufacturer was in the process of changing over from 1965 to 1966



Representatives of the FABCO Manufacturing Co., Oakland, receive certificate of appreciation from the Naval Civil Engineering Laboratory, Port Hueneme. (L to R) Cdr. J. D. Andrews, NCEL Executive Officer; John Ainsworth, FABCO Vice President; Ted Seidel, FABCO representative for So. California and William Bond and Justin Dykins of the NCEL Polar Division.

models, there was an unavoidable delay of 4 weeks.

In spite of the delay, FABCO delivered two of the vehicles on time and the other only 5 days later — still in time for shipment to Antarctica from Port Hueneme.

According to NCEL engineers, the workmanship was of the highest quality. The Navy believes that the speed with which the work was accomplished and the cooperation shown by FABCO employees went beyond the terms of the contract.

In presenting the certificate, CDR Andrews praised FABCO and American industry in general.

The work accomplished by FABCO made it possible for NCEL to carry out its program of study in the Antarctic during the austral summer of 1966.

REMEMBER 1967!

25th Anniversary SEABEES

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DAVIDSON & MAURER

ARCHITECTS and ENGINEERS

With a background of World War II experience in the design of military facilities including two torpedo plants, a 50-caliber cartridge plant, a 155-mm shell plant, the Terminal Island Fleet Base, Los Alamitos Naval Air Station and Rough and Ready Island, Naval Supply Depot, Larry Davidson and Pete Maurer pooled their combined experience to form Davidson and Maurer, Inc. in 1954.

In 1955 they designed and super-

they have designed 80 industrial and commercial structures and 30 military facilities with a total value of \$68,000,000.

Among its projects have been Officers' Club, Barracks and Mess Halls, George Air Force Base, Nose Cone Facility, Missile Assembly and Space Flight Simulation, Edwards Air Force Base, Nose Cone Facility, Vandenberg Air Force Base, Armory, San Diego; and modifications to Satellite



Communications-Electronics School Twentynine Palms, California

a.—Site area is approximately 3.6 acres. Site work will include grading, paved roads, walk, sewerage and gas systems, and an underground electrical distribution system. Approximately 2,700 feet of above-ground electrical cable trays will be provided for training unit interconnecting cabling. Unimproved area of the site will receive a dust palliative treatment.

b.—The aggregate area of buildings is approximately 61,000 square feet. This is comprised of eight new concrete and concrete masonry unit buildings plus some additions and alterations to two existing buildings. One building will include office and administrative area, and a 12,400 square foot training area which will be radiofrequency shielded to prevent interference between training equipment and adjacent radar units. Architect-Engineer: Davidson and Maurer, Los Angeles

vised the fabrication of all the component parts for 74 D.E.W. buildings which were transported by the Navy into the Arctic in the summer of 1955. The 74 buildings, of which 27 were 130-foot clear span aircraft hangars, were fabricated, export crated and shipped to the ports of embarkation at Seattle, Halifax, N.S. and Churchill, Canada in 75 days.

In the succeeding ten years, with a crew varying from 30 to 60 men,

Tracking Stations in Kodiak, Alaska, Kaena Point, Hawaii, and New Boston, New Hampshire.

Recent civilian projects have been electronic laboratory and manufacturing facilities for Beckman Instruments, Inc., National Cash Register Company, Control Data Corporation, and The Marquardt Corporation, as well as multistory structures for National Cash Register Company and The Rand Corporation.

The \$95 million project will provide the Navy with a multi-purpose underwater laboratory for oceanographic research and testing of anti-submarine weaponry.

The test range takes advantage of the mammoth underwater canyon known as the Tongue of the Ocean, which is approximately 120 miles long, 20 miles wide, and in excess of one mile deep, east of Andros Island, the largest of the Bahamas, about 125 miles east of Miami, Fla.

The construction, under the direction of the Navy's Bureau of Yards and Docks, will aggregate \$19 million when completed.

Initial construction program included dredging of a channel for the main base and at the outlying sites; a pier at the main base; tracking stations at five locations; and navigation aid stations at four locations.

Construction also includes a headquarters building, barracks, mess hall, communications facilities, laboratory, weapons shop, power plant, laundry and small stores, public works shops, storage facilities and ancillary functions for support.

Electronic equipment for acoustic measurements, underwater tracking, communications and navigation, monitoring, data processing, precise position fixing and other studies will run the total cost of the entire project to approximately \$95 million.

The principal Speaker at the ceremony will be RADM Norman J. Drustup, Director, Atlantic Division, Bureau of Yards, representing RADM Alexander C. Husband, Chief of the Bureau.

TOM W. RESIDE TO WASHINGTON

Tom W. Reside, former Administrative Assistant to the CB Program officer in the 11th Naval District in San Diego was recently called to Washington, D. C. by the Department of the Navy, Naval Facilities Engineering Command. His new duties are that of Assistant Director, Naval Reserve CB Programs.

During Tom's tenure in San Diego, besides his regular duties with the Navy, he was very active in veteran and civic affairs. He is a former President of the Seabee Veterans of America, a Director of the Society of American Military Engineers, San Diego Chapter and a member of Civitan.

As editor of **The SEABEE**, Tom Reside has devoted much time and effort toward making this publication one that all Active, Reserve and Veteran Seabees and Civil Engineer Corps officers can be proud.

AUTEC

The U. S. Navy's Project AUTEC (Atlantic Undersea Test and Evaluation Center) in the Bahama Islands will be dedicated in ceremonies April 14.

The \$95 million project will provide the Navy with a multi-purpose underwater laboratory for oceanographic research and testing of anti-submarine weaponry.

CDR. R. E. ANDERSON, CEC USN RECEIVES LEGION OF MERIT

The Legion of Merit, the Navy's fifth highest award, was presented to **Commander Richard E. ANDERSON**, Commanding Officer, U. S. Naval Mobile Construction Battalion Nine.

Cdr Anderson received the Legion of Merit from **Captain Robert D. THORSON**, Commanding Officer U. S. Naval Construction Battalion Center,



Cdr. Richard E. Anderson, Commanding Officer, USN MCB-NINE(right) stands at attention, after receiving Legion of Merit, the Navy's fifth highest award from Capt. R. D. Thorson, Commanding Officer, USN CBC Port Hueneme.

Port Hueneme, during an award ceremony held as part of a Regimental Review held aboard the Center.

Awarded for Cdr Anderson's outstanding leadership during Mobile Construction Battalion Nine's recent deployment to DaNang East, Vietnam, the Legion of Merit was presented in front of the assembled Seabees attached to various CBC, Port Hueneme commands. These Commands included, Mobile Construction Battalions Nine and Ten, Construction Battalions Base Unit, Construction Battalion Center, and Naval Schools Construction.

Mobile Construction Battalion Nine returned to Port Hueneme, during the first week of February from an eight month deployment to DaNang, East Vietnam, where the Battalion set

several new naval construction records under the leadership of Cdr Anderson.

CDR. F. M. BRIGGS, CEC USN New Long Beach ROICC

CDR F. M. Briggs hails from Kirley, South Dakota. He enlisted in the Navy on 31 July 1943, was selected for the V-12 Officer Program and finished his schooling in 1945 receiving a degree in Civil Engineering from the California Institute of Technology. Upon graduation, he was commissioned in the Civil Engineer Corps.

CDR Briggs has held Public Works duties at Whidbey Island; Camp Wallace, Texas, Bermuda; Dallas, Texas; and Lemoore, California. His contracting duties were at the Naval Training Center, San Diego, and with the OICC, Far East, Western Pacific. He has had a tour of duty with MCB-10 as Operations Officer; an assignment with the CB Division of BUDOCKS; and on the DPWO-12ND staff.

He is reporting to duty as ROICC, Long Beach Area, Seal Beach, after almost two years as Public Works



CDR. FRED M. BRIGGS, CEC/USN
Officer, Naval Air Station, Lemoore, California.

CDR Briggs is married to a lovely wife, Veda, and has three children Fred, 17; Keith, 14; and Janet, 5.

CDR Briggs is a registered Professional Engineer, licensed by the State of Virginia.

TOURS OF DUTY

1946 APWO, Whidbey Island
1946-1947 PWO, Camp Wallace, Texas
1947-1949 APWO; XO, CBD-15, Bermuda

1949-1951 DPWO-12ND, Staff
1951-1953 NTC, San Diego ROICC
1953-1955 MCB-10-OPS Officer
1955-1959 BUDOCKS-CB Division
1959-1961 NAS Dallas-PWO
1961-1964 OICC, Far East, WESTPAC,-ROICC

1964-1966 PWO, NAS Lemoore
Holder of: American Theatre Medal
W W II Victory Medal

SEABEE BUGLER

ROMBOW R. D., J03

Marine units in the Chu Lai, RVN area have repeatedly requested service of USN Mobile Construction Battalion FOUR's bugler for memorial services and change of command ceremonies.

Edward J. Denton, III, Construction Apprentice, USN, son of Mr. and Mrs. Joe E. Denton Jr., of 525 Cunningham Street, Corpus Christi, Texas borrowed a bugle from the SEABEE Drum and Bugle Corps at Port Hueneme, California prior to being deployed to Vietnam to play taps and reveille for the Battalion.

Since his arrival at Camp Shields, the base camp of MCB FOUR, he has played the bugle for memorial services and change of command ceremonies conducted by several different Marine groups here.

Denton started practicing on his grandfather's WWI bugle at the age of five. He played in his school band at W. B. Grey High School, Corpus Christi, Texas, and he majored in music at Del Mar Jr. College also in Corpus Christi. Upon entering the Naval service in March 1965, he joined the Recruit Training Drum and Bugle Corps at San Diego, California.

Although he is skilled in many brass instruments, Denton plans to stick to his construction trade when he leaves the Navy. He wants to enter the University of Texas and become an Electrical Engineer.

The Department of the Navy is eyeing the birds, trees and soil and water resources with more than casual interest.

Reason for this is a fast-growing program designed to create beauty, conserve animal, fish and plant life and provide recreational enjoyment for thousands of Americans on the Seagoing Service's five millions acre Shore Establishment.

Charged with construction of improvements and maintenance of this vast acreage, equal in size to Connecticut, Rhode Island and Delaware combined, is the Bureau of Yards and Docks (BuDocks), which also conducts the natural resource conservation program.

Drawing help from the U. S. Departments of Agriculture and Interior and State conservation agencies, BuDocks has already placed more than 2,000,000 acres under co-

species.

It holds a great potential for providing wholesome outdoor hunting, fishing, boating, camping, hiking and picnicking for many urbanized Americans in the years ahead.

The Navy forest management program got its biggest shot in the arm in the early 1960's when the Congress provided for the cost of forest management through the sale of timber on military land.

Appropriations to control soil erosion are usually made by Congress for each new military facility under construction. Conservation benefits are also obtained from government land leased to private operators, usually for farm use. Besides cash rentals it is estimated that outlease program provides conservation 200,000 acres leased under provision that each lessee use, improvements costing \$500,000 on proper

provide more intensive fish and wild-life management, landscape improvements and the most recreational pleasure to the general public. To date no funds have been appropriated for fish and wildlife management. Conservationists know, however, that first things come first. Which means that expansion of their programs must be limited until abatement of the threat to our nation in Vietnam.

To the public, one of the most popular conservation efforts is the fish and wildlife program, which offers hunting and angling to civilians and Servicemen alike on Navy land.

Already, 70 Naval Stations have fish and wildlife programs underway, and a total of 80 stations are expected to be involved within a year.

Under the program, ponds and lakes are built, streams are dammed, wildlife openings are maintained in wooded areas, controlled burning is done and game feeding areas are seeded. The aim is to form natural and adequate environs to encourage the propagation and growth of native fish and game.

State agencies help in many ways, including stocking with fish and game, providing technical advice, assisting in the establishment of food and cover and lending a hand during hunting seasons. The Navy, in turn, has been quite generous in giving fish and game to other agencies for stocking purposes.

Proper management of the soil and water and forest resources results in better food and cover for game birds and animals and more clean water is provided for fish. Thus, the various programs all work together and are interrelated through common interests.

An outstanding example of BuDocks' success in its over-all land effort is the fact that in 1964 the Naval Weapons Station at Charleston, S. C. captured second place in the coveted Secretary of Defense Conservation award. Winners are picked by an impartial board composed of some of the nation's top conservation experts.

The Charleston base, containing 13,368 acres, presented a staggering challenge of worn-out land, swamps and dense, jungle-like forest growth. Ponds used as rice fields in prosperous pre-Civil War days had declined into little more than stagnant mud holes.

In nine years, conservationists have put 93% of the Station's 10,108 non-military-use acres under a soil conservation plan. Of those acres,

(Continued on Page 40)

NAVY CONSERVATIONISTS WORK FOR AMERICA'S FUTURE

operative agreement for development of the fish and wildlife resources, prepared long-range forest resource management plans for 300,000 acres and prepared soil and water conservation plans for 1,500,000 acres

The Navy has cooperated with several states in these efforts to establish fish lairs and spawning grounds by dumping junked cars into the sea. Thousands of hours of volunteer labor have been donated willingly by Station rod and gun club members.

The dunking of old autos, incidentally, may become America's answer to the swelling auto "graveyards," which are creating eyesores across the land. The immersed cars become havens for swarms of game fish, and even more assuring, they also disintegrate in salt water after five years, thus creating a need for replacements.

This is just one way the Navy effort jibes with President Johnson's program to resource America's natural beauty.

Navy land management helps retain the quantity and purity of dwindling water supplies, prevents forest fires, boosts national wealth by quality timber production and prevention of soil erosion and builds up depleted fish and wildlife

soil conservation practices as spelled out in his individual contract. Substantial grounds maintenance savings are also obtained through this program.

In their program, BuDocks foresters have inventoried the timber on 73 Navy and Marine Corps Stations and have written 10-year management plans for each. They are planting and seeding desirable timber producing trees (to bring the highest price and best meet defense needs) at the rate of 3,500 acres yearly.

Timber sales now cover about 60 percent of forest management costs. Foresters expect their finances to be "out of the woods" and self-supporting by 1975. They say problems of the moment are due to the programs "youth" barren areas which must be brought into production, and the poor condition of forests on land acquired or "inherited" by the Navy.

Navy conservations are confident their program is doing well within available funds, but they feel that more could be accomplished—particularly in landscape beautification fish and wildlife conservation and recreational facilities—if more money was provided. Significantly, additional funds would expand portions of the program which would

LONGER CHOW LINES

By Perry A. Basch, JOSN

The population explosion of personnel on the station has had a tremendous impact on many divisions of the Construction Battalion Center during the last few months. Probably hardest hit has been the General Mess, better known to the men as the Chow Hall.

In four months, the number of men who have been served in the galley has almost tripled. Last August, the



STIRRING THE GRAVY for the afternoon meal is William J. Kelley, CS3. Cooked vegetables are also prepared in the cooper kettles.

average number of men served per meal was 800 — in January this figure jumped to 2,000. It is expected that approximately 6,000 men will go through the chow lines each meal in July.

An example of how this has affected the galley is found in these statistics: During August, the galley fried, scrambled or boiled 5,550 dozen eggs. In January, 6,630 dozen eggs were used. Forty thousand more gallons of milk were drunk by the men in January than in August. Fifty-six hundred pounds of flour was used to prepare rolls and pastries in January as compared with 3,700 pounds of flour used in August.

Because of the sudden influx of personnel, certain changes have had to be made.

Beginning Jan. 23, instead of the usual choice of eggs fried to order,

french toast hot griddle cakes, creamed chipped beef and four kinds of meat, the men are now served single items and just one kind of meat. On Monday morning, for instance, they are served hot griddle cakes and bacon. On Tuesday, eggs fried to order and sausage is on the morning menu.

The biggest change in the dinner and supper menus is the reduced variety of salads and pastries.

The men are served through three main lines at a rate of eight men per minute. This does not include the CPO section, which will possibly be transferred in the near future.

"Because more men are being served in the galley, longer chow lines have become a problem," Ltjg. R. R. Schwerin, General Mess Officer, stated. "To help compensate for this, the speed or express line (which served hamburgers and roto-broiled franks) was discontinued during the noon meal."

The hours have also had to be changed to meet the population growth. Formerly, the galley hours were 6 a. m. to 6 p. m. Now the mess hall opens at 4:45 a. m. and the last meal is served at 8 p. m.

Shortly the galley will go on a



SALADS DELUX—Joe A. Pugliese, CN, keeps the salad bar full of variety salads during the noon meal as hungry Seabees fill their plates.

split shift to help ease the work load on the 90 mess cooks who are Seabee strikers, men awaiting schools and men who are awaiting discharge. On 1 July, 100 civilians are tentatively scheduled to join the 18 Navy cooks. The civilians will take over the duties of the mess cooks who

will be reassigned by their divisions

Hand in hand with the need to serve more men is the need for additional equipment. To meet the demand, \$100,000 will be spent for such items as eight dish dispensers, a mixer for the bake shop, three coffee urns and six, 3-unit milk machines, chins.

Presently the galley is equipped with milk machines.

Presently the galley is equipped with 15 steamers, used as pressure cookers; 10 copper kettles, primarily used to cook vegetables; 12 ovens



EXPRESS LINE 'BURGERS—Billy G. Garner, CP, works in the meat locker preparing hamburger patties that will be served during the evening meal.

for baking and roasting; and a revolving oven that is used specifically for rolls. Steaks are prepared on 12 charcoal broilers.

"At the present time there are only 110 tables and 440 chairs in the mess hall," Ltjg. Schwerin noted. "When the additional 50 tables and 200 chairs on order arrive, we will be able to serve 640 men at a time."

"During the rapid changeover," Ltjg. Schwerin said, "there may be some dissatisfaction with the service due to these necessary changes, but we soon hope to have everything operating as smoothly as it has in the past. One thing the men can count on," he continued, "the quality of the food will be just as good as it has been in the past."

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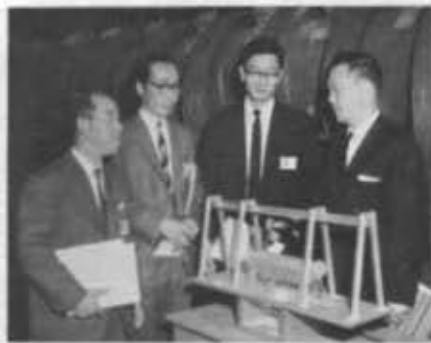
Salutes the USO



Japanese Scientists Visit NCEL

In a recent 1-month tour of the United States, three scientists from the National Research Center for Disaster Prevention Science and Technology Agency of the Japanese Government visited the U. S. Naval Civil Engineering Laboratory to learn of the state-of-the-art in protective construction and earthquake-resistant design.

The mission of the Agency is to prevent disasters created by various kinds of natural phenomena, to pre-



Stanley Takahashi (right) demonstrates a model of the atomic blast simulator to (l. to r.) Mr. Eigo Murata, Chief of Mechanical Engineering Section; Mr. Hisakazu Fukuzawa, Chief of Planning Section, and Mr. Hiroshi Ohashi, Investigator on Experimental Equipment of Earthquake-proof Construction.

vent the expansion of damage in case the disasters do occur, and to restore the damaged area. The agency was formed to try to prevent or alleviate disasters such as the Kanto Earthquake of 1923 that took the lives of 142,807 and destroyed 701,627 houses. Or the typhoon that struck T. Ise Bay in 1959, killing 5,098 persons and destroying 149,187 houses.

The Agency is in the process of building an earthquake engineering experimental apparatus that will advance knowledge in the science of seismology and earthquake engineering. The table for the vibration generator will be about 50 feet square, making it the largest and most capable in the world. The apparatus is expected to be finished by 1969 at an estimated cost of 2 million dollars.

While at the Naval Civil Engineering Laboratory the scientists toured the deep-ocean laboratory, the structural dynamics laboratory, the model wave basin, and the 100-man nuclear fallout shelter. They also had discussions with CDR J. D. Andrews,

Executive Officer; Mr. W. F. Burkart, Technical Director; Messrs. S. L. Bugg, W. A. Shaw, K. O. Gray, D. B. Jones, R. A. Breckenridge, C. R. White and D. True of the Civil Engineering Department; Messrs. J.M. Stephensen, L. W. Hallanger, and J. C. King of the Mechanical and Electrical Engineering Department; and Chief Mowen of the Disaster Recovery Training Department.

DISASTER RECOVERY TRAINING

PORT HUENEME, CALIFORNIA — April Fool's Day brought to light a dead body that was not dead at the U. S. Naval Construction Battalion Center, Port Hueneme, California.

Twenty simulated casualties with realistic looking "wounds" were spread throughout a section of the Seabee Base during a Disaster Recovery Training exercise conducted by U. S. Naval Mobile Construction Battalion TEN. One of these casualties was seen by a Civil Service worker on his way to work and the station hospital received an excited call that there was an "obviously dead man" down by the docks.

While the hospital was trying to dispatch an ambulance to the scene, the hospital operator was on the verge of notifying the Coroner's office of a death on the station. Fortunately the station operator routed the information to the station police who were able to reassure all persons concerned that the "dead" man was actually a part of a training exercise. Because of a delay in getting the ambulance started, it was recalled before it left the hospital. At this point the doctor quipped, "If I had gotten out there, I would have certified the man dead anyway."

The moral of this story is that not all April Fool's jokes are intentional, especially during the serious business of training to meet disasters.

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MODEL T's MODEL A's



PERRY A. BASCH,
JOSH

With all the comfort and efficiency of the American automobile, it would be hard to imagine that anyone would prefer to travel in a 1916 Model-T Express Wagon or a 1930 Model-A Roadster Pick-up. Sam Fowler, SW1 and Walter W. Irish, CMC, instructors at NAVSCON, think differently.

Both Seabees have the fascinating hobby of restoring and driving Model-T and Model-A automobiles. There is a slight distinction between the Model-T and the Model-A. The A, built from 1928-1931, is more streamlined and is a much more improved model than the Model-T, which was built from 1906-1926.

youngster, he worked with his father doing mechanical work.

Fowler specializes in restoring the Model-A's. He has restored six of them through the years, but has traded or sold all but his Roadster Pick-up, which he drives to work in.

Model-T's are the speciality of Irish. Besides his express wagon, he also has a 1926 Model-T coupe.

"Acquiring authentic parts for the automobiles is not as difficult as most people think," Fowler stated. "Swap meets and advertising in magazines and catalogs produce fine results."

"People are really good about letting us know about the parts they

gathering parts for his 1926 coupe. He estimated that his 1916 Express Wagon is worth about \$1,800, although he has put only \$1,000 into it. All that the wagon is lacking is a paint job. "There have been a lot of reproductions of my Express Wagon," Irish says, "But I think mine is the only original."

Approximately \$300 is all that Fowler has invested into his Roadster, but it is worth anywhere from \$2,000 to \$2,500. According to Fowler, there are only seven registered Model-A's like his. Five are in Pennsylvania, the other in California.

There is also a bit of rivalry that exists between these two instructors. According to Fowler, "The Model-A was made to two the Model-T." But Irish has a different view. He says, "The Model-T was here a long time before the Model-A and will be here a long time after it, too!"

Along with the rivalry is healthy respect, for each man knows that the other has spent many hours and a lot of spare time restoring cars that our Grandparents drove many years ago.



Steelworker Sam Fowler on his Model A, and Construction Mechanic Walter Irish on his Model T, proudly display their cars on the Seabee Center at

Port Hueneme. They are both instructors at the Naval Schools Construction at CSC.

Working with the cars is nothing new to the men, either. Fowler has worked on and off with cars since 1943. While working in various automotive shops he would observe his fellow workers restoring the "old timers." This inspired him to become a Model-A enthusiast.

Ever since he was 11 years old, Irish has worked with cars. As a

have available. But if we can't get a part by advertising or at swap meets, we manufacture it ourselves," Irish noted.

Cost is not a big problem. Irish pointed out, that, "most of the parts we get are traded with different enthusiasts."

Irish stated that he traveled almost 8,000 miles in a two-year period

METCALF & EDDY

JERRY M. GUEVARA, JOSH

Last night at MCB-11's Enlisted Men's Club, **B. B. TALLEY**, Brigadier General, U.S. Army, Retired, presented **CDR W. W. BARRON**, Commanding Officer of U.S. Naval Mobile Construction Battalion 11, with \$275.00, to be used in equipping the EM Club.

The presentation was made on behalf of the 38 members of **Metcalf and Eddy, Inc., American Engineers and Architects, Inc.**, who were evacuated from the City of DaNang at Camp Adenir on 5 April 1966.

The Command built two 12x64' strongbacks to house them during their stay. Brigadier General Talley replied in a letter to the command, "at considerable effort and inconvenience to your entire command, all of you shared with us the very best you had to offer. The warmth of your friendship and understanding made our stay a pleasant one. We shall remember it and talk about it for many years to come. The treatment we received is the highest tradition of the military service."

(Continued on Page 47)

CAPT. H. J. JOHNSON, CEC/USN NEW DEPUTY DIRECTOR PACIFIC DIVISION

PEARL HARBOR — Capt. Henry J. JOHNSON, CEC, USN, reported for duty Wednesday, June 1, on the staff of RADM William M. HEAMAN, CEC, USN, director of the Pacific Division, Bureau of Yards and Docks.

As the bureau's representative, the Pacific Division is the contract and supervising agency for the major part



CAPT. H. J. JOHNSON CEC/USN

of all U. S. military construction in the western Pacific and Southeast Asia, it directs construction of installations for the Army and Air Force as well as for the Navy, Marines and other U.S. activities.

During June Capt. Johnson will

succeed Capt. Wm. E. DAVIDSON, USN, as deputy director of the division, with additional duty as Deputy Commander, Construction Battalions, Pacific. Capt. Davidson will report in July to San Bruno, Calif., as director of the bureau's Western Division, with additional duties as officer in charge of the San Bruno Naval Facility and as 12th Naval District civil engineer.

Capt. Johnson previously was director of the bureau's East Central Division in Philadelphia. Prior to that he was on Guam as Officer in Charge of Construction, Marianas. He was there during November, 1962, when the typhoon named Karen devastated the island, and he directed the early phases of reconstruction.

He began his Navy career March 1, 1940, as a line officer, and he is one of the few staff corps officers authorized to wear the command at sea insignia. He served as engineering, navigation, executive and commanding officer of Navy ships, on the Ship Characteristics Board in the Office of Naval Operations and as officer in charge of the Special Devices Center at Sands Point, N. Y.

In 1947 he transferred to the civil Engineer Corps, and attended the corps officer school at Port Hueneme, Calif. His first corps duty was as

public works officer and resident officer in charge of construction of the Naval Medical Center, Guam. He went to Norfolk, Va., in 1949 as operations officer of the public works center, and later served as public works officer and resident officer in charge of construction at the Naval Ammunition Depot, Earle, N. J.

In 1954 he was named commanding officer of Amphibious Construction Battalion TWO and followed this with duty as staff civil engineer for Commander Amphibious Forces, Atlantic Fleet. In 1957 he went to the Public Works Center, Guantanamo Bay, Cuba, as public works officer, serving there until he was sent to the Armed Forces Staff College.

In 1960 he became director of the maintenance division of the Bureau of Yards and Docks, and later was named executive to the Assistant Chief of Bureau for Operations and Maintenance.

Capt. Johnson is a registered civil engineer in New York state, and a member of the American Society of Civil Engineers, the Society of American Military Engineers and the Naval Institute.

Capt. Davidson was commissioned a Lieutenant, JG CEC, USNR, in 1940,



CAPT. WM. E. DAVIDSON CEC/USN

and he transferred to the regular Navy in 1943. He was advanced to his present rank in April, 1956.

(Continued on Page 42)



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MCB FOUR COVERS THREE-QUARTERS OF THE WORLD

By TATOLES JOHN A., CN

The coming of 1966 brought new geographical horizons for the SEABEES of U. S. Naval Mobile Construction Battalion FOUR. The old year saw the Battalion truly mobile as FOUR traveled three-quarters of the way around the world. From Rota, Spain, to Chu Lai, Republic of Vietnam, the Battalion's movements have covered some 19,000 miles.

The beginning of 1965 found the officers and men of MCB FOUR embarked on the USNS Geiger bound for a seven month operational deployment to Rota, Spain. The Battalion was assigned the initial construction work for the erection of 300 prefabricated family housing units of USA Homes which are manufactured in Georgia and shipped to the erection site. This construction was new to the Battalion. Indeed it was the first time that anyone has undertaken a housing project of such magnitude using prefabricated structures. During its deployment in Spain, MCB FOUR'S efforts were directed towards a great deal of site preparation, road work, installation of utilities, and the erection of the first fourteen housing units.

On 14 July 1965, CDR W. A. WALLS, CEC, USN, who had come from the Bureau of Yards and Docks, relieved CDR C. C. MILLER, CEC, USN, as Commanding Officer of MCB FOUR. CDR MILLER was ordered to Washington, C. D. where he in turn took a position with the Bureau of Yards and Docks.

In appropriate ceremonies, including a ceremonial parade, CDR WALLS was welcomed aboard by the men of MCB FOUR.

CDR WALLS is a graduate of Stephens High School, the University of Arkansas, and the University of Illinois. He holds the degrees of Bachelor of Science in Engineering, Master of Science in Civil Engineering, and a Doctor of Philosophy. He is also a Professional Engineer in the District of Columbia.

Prior to coming to FOUR, CDR WALLS served as: Public Works Officer at the U. S. Fleet Activities, Yokosuka, Japan, and the Naval Air Station, Corpus Christi, Texas. He was Resident Officer-in-Charge of Construction, Bureau of Yards and Docks



Contracts, Sevilla, Spain; Public Works Officer at the U. S. Naval Ammunition Depot, Concord, California, and did Post-graduate study at the University of Illinois, Urban, Illinois. He then then served the Defense Atomic Support Agency, and the Bureau of Yards and Docks, Washington, D. C. CDR WALLS first entered the Navy in 1942, and served four years in the Naval Air Corps during World War II. He was designated a Naval Aviator in 1943.

On 26 July, the Battalion, under the command of CDR WALLS, was relieved by MCB SEVEN and departed for a well-earned home-port deployment at Davisville, Rhode Island.

However, the Battalion didn't remain settled for long. After one month, MCB FOUR re-deployed to Camp Lejeune, North Carolina, to receive four weeks of intensive military and combat training under the leadership of the Second Battalion, Eight Marines. Unknown to the SEABEES of FOUR, the combat tactics they learned from the Marines were to prove invaluable in the coming months. The Battalion returned to Davisville once again, but the following week received a message from the Chief of Naval Operations: ".....effective 9 November 1965 MCB FOUR assigned Permanent Duty Station Port Hueneme, California vice Davisville....."

The Battalion was on the move again. Within three short weeks, FOUR loaded its organic equipment aboard a train bound for the West Coast, and transported 400 officers and men, plus many of their families, 3,000 miles cross-country to Port Hueneme. MCB FOUR now became a member of the Pacific Fleet.

During the month it spent in Port Hueneme, the Battalion received additional military and technical training as well as numerous briefings on Vietnam. On 21 November 1965, a seventy-five man advance party departed for Chu Lai, Republic of Vietnam, the Battalion's future deployment site. Shortly thereafter, the main body of men embarked on eight

SEABEES

MCB's in

C-130 aircraft bound for Chu Lai to relieve MCB TEN at Camp Shields."

The men of MCB FOUR are playing a significant role in Vietnam. The principle mission of the Battalion is to insure that the nearby airstrip used by Marine jet fighter-bombers to stage daily sorties against the Viet-Cong is kept in operational condition around the clock.

Besides this vast and unending job, FOUR is also charged with a variety of other construction projects in the area. These projects include the development of roads and bridges, the installation of utilities, the operation of a rock quarry and crushing plant, and the construction of various structures to facilitate the Marines Corps operation. The professional requirements and demands on the men of MCB FOUR change almost daily, and there are certain to be many improvements in the Chu Lai area before MCB FOUR departs.

Mobile Construction Battalion FOUR was established on 12 February 1951, and was commissioned on 9 March 1951, at Norfolk, Virginia. There the Battalion joined the Service Forces, U. S. Atlantic Fleet.

MCB FOUR, winner of the coveted Navy Battle Efficiency "E" award for seven of the fourteen years since its commissioning, has played an outstanding role among the SEABEES of the Atlantic. The Battalion has been deployed to various locations in the Atlantic area where the SEABEES have constructed new facilities or repaired established facilities at overseas U. S. Forces in Vietnam. Its capable officers and professionally skilled men constantly demonstrate their eagerness, their construction qualifications, and their combat readiness to carry out varied missions in the finest of SEABEE tradition.

Thus, the SEABEES are playing a vital role in the Vietnam struggle to insure freedom of men's minds, and are resurrecting the famed "CAN DO" motto of World War II. The SEABEES of U. S. Naval Mobile Construction Battalion FOUR are prepared in every

VIET NAM

e NEWS

respect and; "CAN DO," "HAVE DONE," and "WILL DO."

JACKS OF ALL TRADES

"Variety is the spice of life" and the men of Bravo Company, U. S. Naval Mobile Construction Battalion FIGHT at Da Nang, Vietnam, have had plenty of variety lately.

Fact of the matter, their work is so varied that they hardly know from one day to the next whether they will be builders, electricians, plumbers or just about anything they are required to be at the moment.

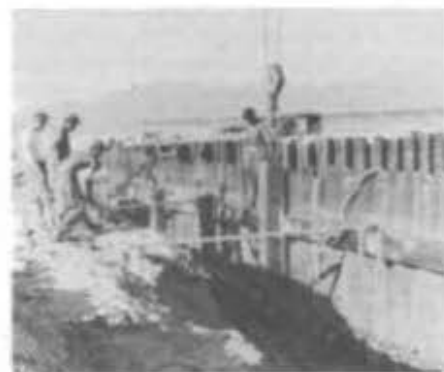
Primarily, the job of "B" Company is to maintain the camp maintenance and to make the living conditions just a little bit better for the other Companies. This entails everything from installing a piped-in music system, to making ash trays and trash cans.

Just recently, the Utilitiesmen built a new shower building that is the pride of the camp. This was accomplished by gathering the excess and left over material from four different jobs by **JOHNSON, UTI**, and his crew, under the supervision of **W. F. SWENEY, UTC**.

Two new type buildings now grace the horizon on the western edge of our camp. These are prototypes of what the camp will look like when **L.P. HUNSINGER, BUL3**, and his cohorts complete the conversion of the tent strongbacks, now used as quarters for the men.

This type of building is ideally suited for the 100 plus degree temperatures here in Da Nang East. This design was first built in Hue-Phu-Bai by a detached unit of MCB-8 under the direction of Ens. Eugene Stefens, SFC.

When the need for similar struct-



ures arose here in Da Nang, George Rickman, BUC, L. P. Hunsinger, BUL3, and A. L. Helke, CN, were returned from the attached unit and given the job of the conversions.

Additional men were added to the crew and the prototypes were erected to train the new crew members in the erection techniques. Comments around camp are that these are the best looking buildings seen yet. Work on the conversion of all the buildings is expected to commence next month.

During the last couple of weeks, a great deal of electrical work has been going in the Da Nang East Covered Storage complex being built for the Naval Support Activities. Ronald Cottman, Construction Electrician Chief, and his crew of R. E. Tanner, CE1, W. J. Morrison, CE1, A. V. Di Toro, CEP3, T. E. Angier, CEP3, J. Penezic, Jr., CEP3, J. O. Griffin, CEP3, and R. L. McCarley, CEP3, have practically wired 16 Butler Buildings in the record time of three days. This sort of performance should put them in competition with Consolidated Edison's finest.

One thing to remember about all of these tasks is, that these men are members of one of the world's most exclusive fraternity, the Seabees of USN MCB EIGHT, and it's all just a part of their job.

Rock Crusher

By L. L. Tatham JO2,USN

Chief Meredith was taking aspirin because he didn't have a headache ball.

A headache ball, of course, is not a medicine. It's a heavy ball of iron which, when swung from a cable by a crane, is used to smash boulders into smaller rocks.

Not having one can be a head-

ache.

MCB-FIVE's rock crusher, near Da Nang, Vietnam, gobbles up rock at a rapid rate and munches them down to gravel size. This gravel is used in great quantities by the Seabees, in concrete and in road construction. It is literally used up faster than it is manufactured.

Seabees have been breaking boulders apart with dynamite. Drilling holes in the rock in which to insert the dynamite is a time consuming task. Smaller boulders can be broken up dropping a heavy weight on them from a moderate height.

That's where the headache ball comes in.

But MCB-FIVE doesn't have one.

That's where Navy Chief Equipment Operator A. D. Meredith came in. Chief Meredith, a native of Cambridge, Md., now residing in Oxnard, Calif., heard of a second-hand anchor in disuse, in the Da Nang area. He got permission to cart it away—all 15,000 lbs. of it—and took it to the MCB-FIVE rock quarry, where he attached it to the cable of one of the battalion's big cranes.

If anything, it works even better than a headache ball.

Nine out of ten Seabees recommend it.

SEABEE

INGENUITY

Arriving in Vietnam in November 1965 the 13 men of SEABEE Team 0507 were presented with a real tough assignment—local officials of Tuyen Duc Province requested the team to construct a bridge across the Da Nhim River to facilitate the passage of large trucks heavily loaded with agricultural produce from the rural areas on one side of the river to the market places on the other side. This was a particularly difficult assignment because of the width of the river, the strong current and the limited equipment available to the Team to do this type of job. The people of the province themselves had built a bridge only to have it washed out every year for the past eight years during the annual monsoon or rainy season.

(Continued on Page 30)

SEABEE INGENUITY

(Continued from Page 29)

It was determined that, since the river was never dry and the current usually swift the only logical method of constructing the bridge would be to drive piles. The big problems was that there just wasn't a pile driver available. In the time honored tradition of the SEABEES of "if you don't have it and can't get it—make it!" Chief Equipment Operator Don D. Agent of Philadelphia, Mississippi



The 'home made' pile driver set up to begin operation on the Da Nhim River in Viet Nam

came up with the idea that if a mobile crane could be borrowed the Team could fashion their own pile driver. Chief Agent designed the pile driver and a 10 ton crane was borrowed from the 202nd Vietnamese Engineer Battalion. Working with such unlikely materials as scrap steel, concrete and barbed wire picket stakes, Steelworker First Class Lloyd E. Close of Independence, Iowa began construction of the pile driver.

The leads of the pile driver were made of sections of one half inch



Close-up showing the leads of the pile driver, and the catwalk extending from the base of the crane's boom out to the pile driver leads. The rig can be assembled or disassembled in about 10 minutes.

sheet piling welded together to a total length of 26 feet. The shell for the hammer, also made of sheet piling, was filled with scrap steel and

concrete and weighed approximately 2400 pounds. A catwalk extending from the base of the crane's boom out to the pile driver leads, which were suspended from the tip of the boom, was constructed by welding pieces of wire picket stakes together. The connection between the catwalk and the pile driver leads was adjustable so that the angle of the boom could be changed. As all connections between the crane, pile driver and the catwalk were bolted, the rig could be assembled or disassembled in about 10 minutes.

The piles to be used in constructing the bridge were hard wood logs about 16 inches in diameter at the but end and varying in length from 29 to 32 feet. The leads (guides) of the pile driver were designed with this in mind. The method to be used in the construction of the bridge was to drive one set of four piles next to the shore, construct one end of the bridges on these and continue driving piles with the cranes backing out on the completed portion of the bridge until the opposite shore was reached.

Finally the day arrived to try the weird looking contraption out. The Team assembled, the crane was start-



Part of the 36 piles are shown as the bridge rapidly approaches completion. Another example of the Seabee's ability to improvise.

ed up, the first pile was positioned and the pile driver hammer raised over it—this was the test—would it work—WHAM! you bet it worked. In all 36 piles were driven in that river bed each to an average depth of 14 feet to bedrock and not once did the SEABEES experience any trouble with their homemade pile driver.

Today there is a finished bridge across the Da Nhim River in Tuyen Duc Province of Vietnam. The deck of that bridge is approximately 16 feet above the river bed so that it will be above water even during the rainy season. It is a strong bridge and the heavily laden trucks and ox carts of the local farmers should be traveling its length for years to come, adding a great boost to the local economy.

A difficult task—yes, but impossible—certainly not. Once again, just

a little careful thought and a lot of SEABEE "Can Do" has benefited a great many people.

MCB 9 WINS PELTIER AWARD

The Society of American Military Engineers has announced the award, for the second consecutive year, of its Peltier Award, to Mobile Construction Battalion Nine.

This will be the sixth presentation of the Peltier Award, the third presented to MCB-9. The Battalion won the first ever presented, when Cdr Ferdinand W. Arnold, CEC, USN, then Commanding Officer, MCB-9 accepted the award from RAdm E. J. Peltier, then Chief of the Navy's Bureau of Yards and Docks, and Chief of Navy Civil Engineers, in May, 1961. MCB-9 won the Peltier Award again last year, and will receive this year's.

MCB-9 was chosen as recipient of the Peltier Award for the Battalion's outstanding work in 1965 during its deployment to DaNang East, Vietnam. During that deployment, MCB-9 completed many construction projects and set several new naval construction records. Possibly the most significant achievement during the deployment was the completion, on schedule, of the first 200 bed increment of a 400 bed advance base hospital, that was constructed in record time, after complete destruction of ten buildings and other partially completed work, during a Viet Cong attack, October 28, 1965.

Cdr Richard E. Anderson, C. O., MCB-9 has also been named recipient of the Society of American Military Engineers' Morell Medal, for military engineering by a member of the Civil Engineer Corps, U. S. Navy.

The Morell Medal is named in honor of Adm Ben Moreell, the World War II Chief of the Bureau of Yards and Docks and the founder of the Seabees.

Cdr Anderson was notified of his selection for the award in a letter from Adm Moreell. In reference to the citation that will accompany the Morell Medal, Adm Moreell wrote, "The citation is a fitting tribute to your outstanding performance of duty in Viet Nam." MCB-9 returned to Naval Construction Battalion Center, Port Hueneme from Viet Nam, during the first week of February.

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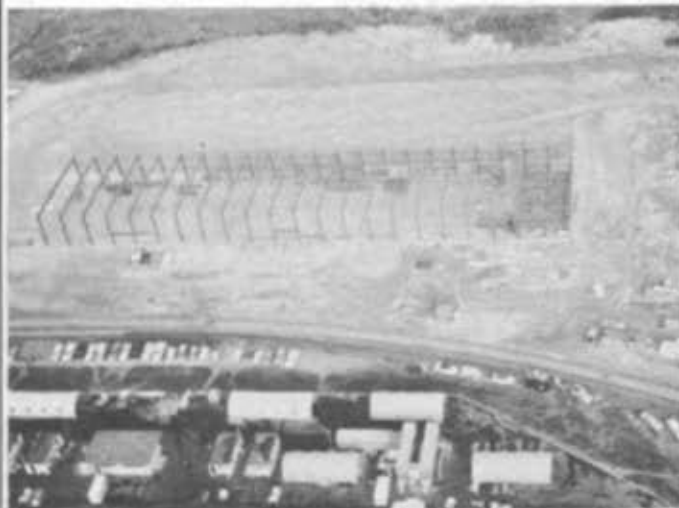
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NEW BASE

(Continued from Page 10)

NO. 8

Arriving at its ultimate destination, a van is off-loaded onto a specially-constructed sled to facilitate transport over the soft snows of Plateau Station.



NO. 9

Two of the eight pre-fabricated vans that will comprise Plateau Station are moved into positions on their wooden foundation.



NO. 10

Finally completed after a journey of 11,000 miles, this five-van complex will house the living and working areas for eight winter-over men. Two other vans will be used as geomagnetic laboratories and one as an emergency generator building.



NO. 11

Fuel oil will be life's blood for Plateau Station's occupants, providing heat and electricity during the nine-month winter when temperatures are expected to reach -130°F. In addition to the vans and equipment, LC-130Fs air-lifted fuel to the new station where it was pumped into 25,000 gallon fuel bladders.

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READY FOR ADVANCING WINTER

MCMURDO STATION, ANTARCTICA— Plateau Station, the United States' newest and most remote Antarctic scientific outpost, has been turned over to the eight men who will operate it for the next year, the National Science Foundation announced today.

Located at an altitude of nearly 12,000 feet on Antarctica's desolate continental plateau, the station is 630 miles from Amundsen-Scott South Pole Station, its nearest neighbour. It is about the same distance from Vostok, a Soviet scientific station. Except for radio communication the four scientists and four naval support personnel will be isolated for about nine months.

Present plans call for the last flight to be made to Plateau Station in early February. The first relief flight, following the long dark Antarctic winter, is expected to reach the station about mid-November. The last sunset the men will see will be on April 17 and, though there will be long periods of twilight before and after the darkest part of the winter, the sun will not rise again until August 25.

During the year the scientists at Plateau Station will conduct continuous studies of the earth's magnetic field; the aurora australis (southern lights); naturally occurring, very low frequency radio emissions, and the weather. The temperature at the station during the winter may reach 125° below zero.

Formal transfer of the station from the naval units that conducted logistic and construction operations during the Antarctic summer took place January 30 following inspection of the facilities by Rear Admiral Fred E. Bakutis, Commander U. S. Naval Support Force Antarctica, and Kendall N. Moulton, U. S. Antarctic Research Program (USARP) representative. The National Science Foundation funds and coordinates scientific projects conducted under USARP. Temperature at the station during the

ceremonies was 40° below zero.

With an air pressure altitude of about 13,500 feet, the thin air at the station site left a number of visitors dizzy and gasping. Station and construction personnel, now thoroughly adapted to the rarified air, were completely comfortable.

Officer in Charge of Plateau Station is Lt. James Gowan, a navy doctor. Station scientific leader is Stanford University radio scientist Robert Flint, 25, of Wilmington, Delaware. The scientific group includes: Martin Sponholz, 24, U. S. Weather Bureau, of Milwaukee, Wisconsin; Hugh Muir, 26, Arctic Institute of North America auroral scientist, of Washington D. C., and Robert Geissel, 26, U. S. Coast and Geodetic Survey magnetician, of Summit, New Jersey.

The naval support group includes: Edward C. Horton, ETN3, radioman and electronics technician; Gerald M. Damschroder, CM1, mechanic and electrician; and William F. Lulow, CS2, cook.

ANTARCTIC MUD

By **TOM MORGAN, JOSA**

MCMURDO STATION, ANTARCTICA — You won't find it on any supply list, it doesn't arrive in plain envelopes, and it isn't normally bottled. But you'll generally find it where there's an American serviceman in the field.

On the Seventh Continent, American sailors have found it.

It's called mud — at least, that's the polite name for it.

Even though the summer temperature averages less than 30 degrees, the dirt roads at this station — the largest in Antarctica — are

crisis-crossed by little streams of melted snow from the surrounding hills.

These rivulets gradually find their way down to the sea, but in their tracks they leave masses of gooey, cold, and very wet mud, especially at low points, and always between you and where you want to go.

It is somewhat disquieting to stand in mud half-way up to the knee and look out over the ice pack in "Finter Quarters Bay." And as for the a "White Christmas," it was downright embarrassing to scrape the mud from boots while less than 800 miles from the South Pole.

FRIENDLY CHALLENGE

By **LEE QUINN, JOC**

Do you like a friendly challenge. If so, the Navy's Antarctic Air Squadron, VX-6, offers these statistics for other operators to beat:

The Squadron's four ski-equipped C-130s flew a total of 1,486.3 hours during the month of January, which to each aircraft averaging a healthy 11.97 hours in the air during each of the month's 31 days.

This figure is even more impressive considering that two of the ski-birds were unavailable for flight for seven days while undergoing maintenance calendar checks in Christchurch, New Zealand.

During one record-breaking day, the four Hercules flew 85.5 hours, or almost 21.4 hours apiece during the 24 hour period.

Conditions supporting the accelerated operations were not exactly ideal. There is no hangar space available at McMurdo Station, Antarctica, and all daily and line maintenance is performed while the aircraft are parked on a ski-parking lot with sub-zero temperatures always on hand to harass crews.

Most maintenance is performed by the flight crews of each aircraft, and the individual crews each have a unique pride concerning their plane's performance. Competition was keen last month as the crews watched their aircraft competing for the title of "heavy hauler."

The C-130 that finally won the title came up with a total of 466.6 hours, (Continued on Page 43)

"FABULOUS FOUR BATTALION"

By CDR W. A. WALLS, CEC, USN
COMMANDING OFFICER,
USN MCB FOUR

Pilots of the C-130's, the Marine Corps, four engine trojan work horse cargo and troop carrier plane, jocularly call landing at the Chu Lai air strip a 'controlle crash on the metal-matting runway.' The field was constructed under assault conditions and has seen heavy and continuous usage since its completion in June 1965. So much traffic has rolled over the matting that it now has as many humps and dips as an amusement park roller coaster. Hence its knickname: "The Chu Lai Funway."

However, SEABEES of U. S. Naval Mobile Construction Battalion FOUR, the "FABULOUS FOUR BATTALION," have undertaken the rehabilitation of the "funway." The aluminum surface



Seabees of MCB4 rehabilitate "the Chu Lai Funway"

matting must be removed, or 'slipped', the subgrade and foundation smoothed and strengthened, and the matting replaced. The rehabilitation is being accomplished without interfering with the tactical strikes launched from the field and the daily routine traffic of C-130's.

Fighter pilots of the various squadrons based at Chu Lai have had to resort to Navy Carrier flight techniques in order to continue flights from the stretch of runway not undergoing repair. These carrier techniques include using JATO (jet assist take-off) units for the take-offs, and arresting gear and tail hooks for short landings.

LTJG GIL HOLLIFIELD, CEC, USNR, of Marion, North Carolina, is project engineer for the rehabilitation work. He claims that the SEABEES working

on this project surely are entitled to "hazardous duty" pay! For, often the planes barely clear SEABEES industriously working at the end of the runway. This constant hazard plus an occasional jetisoned JATO bottle tumbling from the skies keeps all hands on the alert to "take cover" in a split second.

TOURANE RIVER BRIDGE BACK IN OPERATION

By L. L. Tatham JO2, USN

The trouble-prone bridge across the Tourane (Da Nang) River is back in operation after its latest mishap, thanks to the speedy work of MCB-



MCB-FIVE Charlie Company pendant flies from new bridge section being installed on Tourane (Da Nang) River bridge by a floating crane.

FIVE steelworkers, with able assistance from MCB-EIGHT and Naval Support Activity (NSA).

The bridge, at various times in its history, has been knocked out by VC, washed out by monsoon flood, and broken up by a truck too wide to squeeze between its railings.

This time, a mobile crane (not a Seabee-owned machine) proved too heavy for the bridge, and a section of it collapsed under the strain.

The heavy daily traffic across the bridge was forced to cross the Tourane by barge, ferry, landing craft, pontoon boat, and, frequently, sampans piloted by old women. Lines of trucks waiting for the ferry across the river were backed up several blocks along many streets in Da Nang.

An MCB-FIVE steelworker crew constructed a new bridge section on a barge in the river. Meanwhile, crews from MCBs FIVE and EIGHT removed the broken down section. A floating crane owned by NSA was pressed into service to place the new section on the bridge, and while MCB EIGHT installed planking on the new

section, MCB-FIVE dismantled the old one.

Once again, it's business as usual across the busy Tourane.

MCB FOUR AIDS VILLAGERS

By TATOOLLES, J. A. CN

Where "bombs and bullets" may be the major weapons on one front, just plain old fashioned soap and water is the key that will unlock the door to a new, more healthy way of life for many Vietnamese people if USN Mobile Construction Battalion FOUR has its way.

The Battalion is actively participating in the vital "PEOPLE TO PEOPLE" PROGRAM currently in full swing throughout the Chu Lai, RVN area. One phase of FOUR's contribution to this desperately needed civic action assistance is through dental aid to nearby villagers.

Each Saturday, Battalion Dentist ROBERT BACHAND, LT, DC, USNR,



journeys to the nearby village of An Tan to provide dental aid to the Vietnamese residents. Setting up his field equipment beneath the open sky of the village school-yard, assisted by his dental technician, begins immediately treating the people who have quickly gathered to receive the much needed aid.

While the dentist is occupied with diagnosing, treating and extracting, other volunteers from MCB FOUR join Marines in giving the younger children of the village a good "ole' fashioned scrubbin, down" with soap and water. Daily or weekly bathing with soap and water is a unique ex-

(Continued on Page 36)

(Continued from Page 35)

perience to which Vietnamese oldsters and youngsters alike are mostly



strangers.

The dynamic program of dentistry and cleansing has been carried out each week since MCB FOUR's arrival in Chu Lai early last December. While a great deal of work remains to be done educating the people in proper personal hygiene techniques, definite progress is seen each week.

SEABEES GIVE VIETNAMESE GIRL NEW CHANCE

Tay Ninh, S. Vietnam— It's a very ugly and dirty war, and as in all was the brutal consequences are felt



Seabees of 1006 build wheel chair for young Vietnamese girl from scraps of angle iron, sheet metal and bicycle parts.

not so much by those engaged directly in the conflict as soldiers for one side or the other, but come to rest on those innocent individuals who are guilty only of trying to exist amidst the wreckage and violence of their

ravaged homelands.

The Viet Cong terrorist are not particular where they hit or who their victims happen to be. Such was the case recently in this small town located in the upper Mekong Delta region of Vietnam. A VC mortar attack, fear, jarring explosions, panic and finally when silence returned, a pretty young Vietnamese girl with no legs.

Crutches, artificial limbs and wheel chairs are practically non-existent in this area of Vietnam and are considered to be precious objects. Those unfortunates who have lost the use of their legs are reduced to crawling along the ground in order to get from one place to another. This was the future this young woman had before her.

Then in January the 13 men of SEABEE 1006 came to Tay Ninh to work on Military Civic Action projects in support of the U. S. Agency for International Development's (USAID) rural civic action program. The Team's mission is the construction of roads, bridges, school houses, medical facilities and other projects to enable the Vietnamese to raise their standards of living.

Some of the Team members hearing of the Girl's difficulty, decided there was something they could do about it, and they wasted no time in setting to work to get it done. With a few scraps of angle iron, some sheet metal, and three old and discarded bicycle wheels Equipment Operator First Class Herbert Sneed of Cherokee, North Carolina and Clinton E. Proctor, Construction Mechanic Second Class of Meeker Colorado went to work and in a short time had built a very serviceable wheel chair.

The wheel chair was recently presented to the disabled girl at the USAID building in Tay Ninh and as she sat in it for the first time and knew that she was no longer destined for a life of immobility the smile of pleasure that came to her lips and the look of gratitude that filled her eyes were all the thanks needed by the "Can Do" SEABEES of Team 1006.

Smallest

MCB Eight holds the dubious distinction of being the smallest Seabee Battalion in RVN. With personnel numbering under 450 (most Seabee battalions run six-seven hundred men) MCB EIGHT still manages to do

its fair share in the current DaNang deployment.

"Despite our size were tackling the biggest and most important jobs in DaNang the LCU LST project and the NSA Cover Storage Job," says LtJG Platt of Eight's Operations Department. These projects, which are the top two priority jobs in the area, will help in the unloading and storing of vital supplies, one of the biggest headaches for U. S. Forces in Vietnam.

Other important jobs being carried out by Eight include extensive road maintenance, the NSA Galley project,



Setting forms at the Port Facilities in Da Nang are (L-R) J. E. Womak, and C. Hoken. The large port facilities heads the list of important projects undertaken by USN MCB-EIGHT.

and a 314 foot wooden pier to increase logistical support of U. S. troops.

Another claim to uniqueness of this small battalion with the big punch is that of having the only detached unit in RVN. This detachment, located at Hue-Phu Bai, is doing a superlative job of building vitally needed containers for such Marine Units as 2/1, HMM 163, and "A" Med.

When Eight's current deployment is over the Battalion expects to gain many more "Bees." Until then MCB Eight, "the smallest Seabee battalion in RVN," will carry on with the "Can Do" Spirit of the "Bees" as they demonstrate that good things come in small packages.

SEABEE - MARINE COOPERATION

By L. L. Tatham JO2, USN

A new chapter in the book on Seabee-Marine cooperation was written
(Continued on Page 37)

(Continued from Page 36)

Feb. 11 when Marine Gunnery Sergeant T. E. Johnson became a member of U. S. Naval Mobile Construction Battalion FIVE. GySgt Johnson joined the battalion at Camp Hoover, Da Nang, Vietnam.

The Seabees are engaged in numerous construction projects in support of U. S. Forces in the Da Nang sector of Vietnam. The majority of this construction thus far has been for U. S. Marines.

Johnson takes over the military training department in MCB-FIVE and will serve as advisor on camp defense. He attended Marine Guerilla Warfare School and—in another instance of being attached to other than a Marine Corps unit—U. S. Army Special Forces School. His training, Marine Corps experience, and the fact that he is an expert on the .45 pistol and the M-14 rifle (the standard Marine-Seabee weapon), make him particularly qualified for military training duty.

GySgt Johnson makes his home with wife Tamiko and their three children at 1700 Walton St., Ocean-side, Calif. His mother, Mrs. Amonee Johnson, resides at 1364 Quincy St., Washington, D. C.

this jet-lined trip as they boarded the plane at 2 p.m. Thursday, Mar. 10, at Davisville. At 7:30 that evening they landed for their first stop at Kelley AFB, San Antonio, Texas. With heavily clouded skies, the Air Force treated the Seabees to an outstanding



dinner during refueling operations.

Winging its way west, the Starlifter carried the 'First and the Finest' on to Travis AFB, approximately 50 miles from San Francisco, California. During the two hour stopover, many Seabees dashed to telephones to make that last Stateside call to a loved one, while all took advantage of the fine food offered by the 24-hour service Air Force Exchange.

Leaving the warmth of California behind, the travelers continue their jet-smooth ride to the ten-below-zero picturesque mountains of the on-timed "Seward's Folly" and Elmendorf AFB, Anchorage, Alaska. During this five hour layover, the men once again enjoyed the cuisine of both the Air Force Exchange and mess hall for a fine breakfast.



These MCB ONE-ites took good advantage of this layover to clean up, read the Anchorage Daily News, which predicted a fair day with the high near five above, and watch a beautiful, golden sunrise above the snow-frozen Alaskan mountains. One member of the group, a native Alaskan, remarked that on a clear day you might be able to see Mt. McKinley, the highest peak on North America.

Following an eight hour flight, the Seabee-laden jet aircraft added a touch of the orient to MCB ONE's journey as it landed for a brief meal

stop at Yokota AFB, Tokyo, Japan. Several members of the flight took the time to exchange a dollar for three hundred sixty yen and send it home. The young lady handling the exchange of money was very gracious, and voluntarily mailed this money for a number of the 'Bees'.

For Mobile Construction Battalion ONE's final stop prior to tonight's arrival in Da Nang, the plane, which carried the 'First and the Finest' all the way from Rhode Island, stopped briefly at Clark AFB, Manila, in the Philippines. Seabees noticed quite a change from 10 hours earlier when it had been 10 below and was all of a sudden 85.

Thus, the Seabees of MCB ONE, the 'First and the Finest', have added



another "first" to their outstanding heritage by being the first Atlantic Seabee unit to be airlifted directly from Rhode Island to Da Nang here tonight.

"THE FIRST THE FINEST"

John F. Alden, JO3, USN

DA NANG, VIETNAM, — United States Naval Mobile Construction Battalion ONE, under the command of Commander Richard T. Hardy, Civil Engineer Corps, U. S. Navy, arrived here tonight from its homeport, Davisville, R. I. This Seabee unit, known throughout the 'Bees' as the 'First and the Finest', is the first Atlantic coast Battalion to be airlifted directly from Rhode Island to Vietnam.

The first flight of MCB ONE, nearly 100 men strong, 41 hours after its Rhode Island departure, arrived in Da Nang. During the trip, the 'Bees' were hosted by the Air Force's Military Airlift Command on five of their finest bases for this two-day, half way around the world flight on a new Air Force C-141 Starlifter.

The 'First and the Finest' began

MCB 7

By Fred WINNE, JO1, USN

U. S. Naval Mobile Construction Battalion SEVEN is now deployed at Hue Phu Bai, South Vietnam. The Battalion was flown by Military Airlift Command from its homeport, Davisville, Rhode Island half way around the world to Hue Phu Bai. The lift started on April 6 and each flight took about two days. The entire Battalion was on site by April 13.

MCB-7 has had an advance party on the new deployment site since March 12. The job of this advance party was to construct a camp in preparation for the arrival of the full Battalion. The Seabees of the advance party did an outstanding job and the erection of the camp proceeded on schedule. When the main

(Continued on Page 39)

MCB EIGHT WORKS AT NSA

One of the many important projects assigned U. S. Naval Mobile Construction Battalion EIGHT when they deployed to Da Nang, Vietnam, was that of transforming a sandy, barren area into a vast storage area for the newly established Naval Support Activity.

MCB EIGHT has been working on this project with two other Battalions. There will be a total of 96 prefabricated sheet metal buildings, Butler Buildings, assembled in this project, which is scheduled to be completed by June 15th.

EIGHT was assigned to assemble 32 of these buildings and do the road work and drainage system. The buildings are being assembled in 12 complexes, eight buildings to a complex. To date, EIGHT has essentially completed 16 of these buildings, with steel going up for eighth more and foundation and footing poured for another eight.

The Seabees of EIGHT are expected to be completed with their share

of the buildings the first of May. It usually takes about three weeks to one month to complete one-eight building complex.

EIGHT's Charlie Company is doing the work in the Butlers kith **LT. C. H. BENDER, Jr.**, as Project Officer and **D. R. HESS, SWCS**, as Project Chief. Alpha Company is handling the road work, with about 30% of the work completed. Bravo Company is busy with the task of supplying the lighting for the buildings.

So once again, a 2,000 man activity depended on the Seabees of MCB EIGHT to help them get on their feet, since this is the second successful job that has been completed for NSA. The first was the completion of the most modern galley in the Da Nang area, or in RVN for that matter. Nothing but the best can be produced by the sharpest in the West.

BEANS BULLETS MAIL

FRED WINNE,JO1

The Post Office which U.S. Naval

Mobile Construction Battalion 7 operates, at Hue Phu Bai, South Vietnam, is the northernmost Navy Post Office in this country.

The main body of MCB-7 arrived in Vietnam on 12 April 1966. The two Navy Postal Clerks, **Donald L. MERKLE, PC1** and **Charles W. RHAR, PC2** immediately went into action and located a temporary Post Office in Tent One of the Seabee Tent City at Hue Phu Bai. Within a day the men of the Battalion were able to send and receive mail to the United States to maintain close ties with families and friends even though half a world away.

The operation of this post office provides one of the biggest morale factors to the men of the Battalion while on this deployment. Mail rates high in the needs of any military man away from home. The importance of this service is expressed by the men as the first things they look for is "Beans, Bullets and Mail."

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MCB SEVEN

(Continued from Page 37)

body arrived they had places in which to live, work, eat and sleep, waiting for them.

Preparation for this deployment of MCB-7 was accomplished with the aid of the Army and the Marine Corps.

The Army aided by helping to train a number of the Seabees in counter guerilla warfare at Fort Devens, Mass. The Marine Corps lent a hand by giving the Battalion four weeks of intensive military training at the U. S. Marine Corps Base, Camp Lejeune, North Carolina. The machinery, equipment and materials which will be used by the Battalion on this deployment were shipped by sea.

The mission of Mobile Construction Battalion SEVEN while in Vietnam is three-fold. First, they will be building facilities for other units presently in Vietnam. Secondly, the Battalion is prepared to defend what they build, and thirdly the Battalion will be active in the Civic Action Program, to win friends among the Vietnamese civilians and there have been several programs planned which will help to make the life of many Vietnamese people a little better by the Battalion before departure from the United States. In one instance, the City of Holyoke, Mass., conducted a "soap for SEVEN" drive in which the residents of that city donated cases of soap for distribution in the Battalion Civic Action Program. MCB-7 is also responsible for the transportation of more than one thousand pounds of clothing for an orphanage in Vietnam. This clothing donated by the citizens of Holyoke.

MCB ONE BUILDS CAMPSITE

JOHN F. ALDEN, J03, USN

DA NANG, VIETNAM — One hundred Seabees, comprising Mobile Construction Battalion ONE's advance party, under the leadership of Lieutenant **Norman L. CERVENKA**, Civil Engineer Corps, U. S. Navy, Officer in Charge, have turned a 50 acre sand-filled beach area into a liveable, workable camp site here in

only two weeks.

Beginning with no equipment and little material, these CAN DO men, with aid from MCB FIVE, the Marines' 7th Engineers and the 30th Naval Construction Regiment, have carried on the fine heritage of MCB ONE, the 'First and the Finest,' in preparing for today's arrival of the first flight of the main body.

First of all, combined builder crews constructed 32 huts with material one crew had pre-cut utilizing the 7th Engineers' shops. All of these huts, while being built, were electrically wired, a process which was speeded up by using direct burial cable.

Through intense heat, sand and hauling in dirt, the Seabees put in a half mile laterite, rock and clay, access road from Highway 1, the main road to Da Nang, to the MCB ONE area to aid in rapidly establishing the camp.

The advance party, working from dawn to dusk each day, also established another "first" for the 'First and the Finest' by being the first advance party to have the standard five hundred man galley with a concrete deck in full operation prior to the arrival of the main body.

The utilitiesmen and steelworkers also made tremendous CAN DO efforts towards the establishment of MCB ONE's camp. There are two wells dug, one of which is in full operation with a water purification unit. The men also have the enjoyment of open air showers that can accommodate up to 40 men at one time.

Highlighting the 14 days MCB ONE's advance party spent at the camp, having moved on the camp site Feb. 25, was when another battalion sent a cake, cold beer, soda and steaks that were charcoal broiled to help the MCB ONE-ites celebrate the Seabee birthday on Mar. 6. This was also the only afternoon off the advance party has had.

PROGRESS REPORT

(Continued from Page 8)

equipment maintenance and operation and road construction and repair techniques.

After severe earthquakes demolished many dwellings on the Isle of Sao Jorge in the Azores, a Seabee Team was rapidly deployed with a shipment of quonset huts. The team erected several huts and also trained local people in quonset hut erection.

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NAVY CONSERVATIONISTS

(Continued from Page 21)

85% are incorporated into a fish and wildlife program, with 78% being used for proper forest resource management.

Renovated ponds teem with bream and large-mouth bass and hunters are bagging wild turkeys, deer, quail, doves, ducks, rabbits, opossum, raccoons and squirrels.

Typical of such Navy efforts, Charleston rod and gun club members hatched, raised and released thousands of game birds and, along with Boy and Girl Scouts, National Rifle Association members and Station wives, donated hours of work toward the outdoor program. Seabee reservists also built lakes and roads, curbed waterfront erosion and created picnic areas.

Such programs become fascinating ventures to those involved and provide real challenges to amateurs and experts alike. Many city men, finding themselves in the Navy, have had a whole new world open up to them upon their enrollment in the Station rod and gun club.

Among better-known Navy conservation programs are those at: Naval Weapons Station, Yorktown, Va., where a deer dressing station is available and boating and fishing are excellent; Marine Corps Base, Camp Lejeune, N. C., which offers deer, duck and bear hunting by gun or bow and arrow. The Naval Ammunition Depot, McAlester, Okla., where 44,965 acres are under the fish and wildlife program; and at the Naval Air Station, Lakehurst, N. J., which in 1963 took first place in The Chief of Naval Operations Natural Resources Conservation Awards.

Navy conservationists are quick to use newly developed techniques and to experiment with innovations to aid the program. For example, "Gallinaceous Guzzlers" have been placed on arid Navy land in the Southwest. Invented by a California scientist, the "Buzzer" catches all available moisture and pools it into a drinking station for birds. Unwanted species and predatory animals are barred by metal grill-work.

At the Naval Weapons Station, Concord, California, Navy foresters are experimentally growing 33 types of Eucalyptus trees and 16 varieties of Mexican Pine in the hope that rugged specimens will be found

(Continued on Page 41)

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NAVY CONSERVATIONISTS

(Continued from Page 40)

which can put relatively unproductive Navy land into more gainful use.

Helping to finance the three growing experiments are proceeds from timber sales, typical of which are: Marine Corps Base, Camp Lejeune, \$135,400 worth; Puget Sound Shipyard, Bremerton, Wash., \$22,000; Naval Air Station, Cecil Field, Fla., \$35,000; and the Naval Air Station, Patuxent River, Md., \$14,000.

The Navy tries to boost the economy of rural communities by awarding tree planting and timber sale contracts to the best bidders among local businessmen. Experience has shown that trees get more "tender loving care" from such men than from huge companies with headquarters located far from the Naval Station concerned.

The Navy makes sure that land rental contracts spell out requirements which will help the conservation program. An agreement worked out by conservationists in Hawaii gives a sugar company a long-term lease on 1,200 acres of bars, wasteland. In return, the company will install irrigation and drainage and create rich soil by dumping tons of sugar cane trash on the unproductive areas. After growing a succession of crops, the firm will then return the converted wasteland to the Navy in the form of rich agricultural lands.

In the fish and wildlife program, native fish and game get the preferential treatment, but experiments are made to introduce other species which may prove adaptable and beneficial. For instance, Himalayan snow partridge are being tried out on Mt. Grant at the Naval Ammunition Depot, Hawthorne, Nev. Much larger than the chukar partridge — already introduced from India to any U. S. Naval Stations — the Himalayan snow partridge lives only in mountain altitudes above 7,000 feet.

The fallow deer, a sleek graceful animal, has been imported from Spain and introduced with success at several Naval Stations.

The Navy realizes the heavy trust and responsibility that goes with the privilege of "inheriting" public land. It feels that by putting the "know-how" of educated conservationists to work, it can formulate land management programs which will serve to

(Continued on Page 46)

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CAPT. H. J. JOHNSON CEC/USN

(Continued from Page 27)

was as a project manager in BUDOCKS. Two years later he became executive officer of Naval Construction Battalion 60 which went to the southwest Pacific in April, 1943. He became commanding officer a year later. Returning to the mainland in February, 1945, he became training officer (and later executive officer) at the Davisville (R. I.) Training Center later he had duty with the Bureau of Ordnance, BUDOCKS, San Francisco Navy Shipyard and as deputy officer in charge of construction, Marianas.

In May, 1952, he became commanding officer of the Civil Engineer Research Laboratory, and two years later returned to BUDOCKS as assistant chief for construction. In February, 1957, he came to Pearl Harbor as deputy officer in charge of construction for the 14th Naval District. He left Hawaii in July, 1959, to attend the Industrial College of the Armed Forces and, after graduation was named public works officer at Key West Naval Station. He came to his present job from there.

LETTER TO THE EDITOR

interest and strengthen the image of the forgotten Seabee.

Therefore, it is urgently requested that through your excellent and widely read magazine you will ask your readers to share with me their Vietnam experiences. Please ask them to send a postcard or letter to me:

Ben W. Morris
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Editors Note:

As one of the Navy's first frog men in 1943, and with ACB 1 1950, Ben has his own WWII and Korea stories. He publishes four newspapers in the San Fernando Valley area of Los Angeles and is Commanding Officer with the rank LCDR of the Naval Reserve Seabee Division at North Hollywood, California. He also finds time to head up the Seabee Veterans of America as California State President and serves as Public Information Officer for the Beverly Hills Council of the Navy League. He also is a member of other military and civic organizations including the California Newspaper Publishers Association and the greater Los Angeles Press Club.

\$ 1 MILLION BUILDING

MCMURDO STATION, ANTARCTICA — Plans have been completed for the largest building ever erected in Antarctica and preliminary preparations are under way for its construction at the U. S. Navy's largest antarctic base here.

Scheduled to be completed by 1969 at an estimated cost of nearly one million dollars, the building will provide Operation DEEP FREEZE personnel with a two-story, 250-man barracks, barber shop, ships store, dining hall, laundry, and a mechanical equipment area.

With an overall length of 315 feet and width of 165 feet, the building will be pre-fabricated by H. H. Robertson Co. and erected by Seabees from Atlantic Fleet construction battalions.

The building's 67,693 square foot floor space will furnish men of McMurdo with the best living conditions on the seventh continent.

As an unofficial dedication for the newly-prepared grounds upon which the building will rest, Seabees from McMurdo's Mobile Construction Battalion Six (MCB-6) used the area for a football game on Jan. 15.

Playing against athletes from Antarctic Support Activities (ASA), the Seabees proved more successful at preparing a football field than playing on it. After a hard-fought, but good-natured contest, the Seabees bowed to a 24-12 defeat.

FRIENDLY CHALLENGE

(Continued from Page 34)

averaging over 15.5 hours airborne each day.

VX-6 began using the Hercules in August, 1960, and all of the birds have accumulated almost 7,000 hours apiece, the highest time of any U. S. operated C-139, although another service began operating the aircraft considerably earlier.

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EASTER LILIES!

Camp Shields, Chu Lai, RVN—Easter lilies in Chu Lai? Seabees can do the impossible, but Ron Rombow, JO3 and Pete Carriere, CN of USN MCB-4 suspected something "phony" when their Chaplain summoned them to see the "growth" of Easter lilies in front of the Battalion Chapel at Camp Shields. Actually, the flowers were artificial and were flown three quarters the way around the world to trumpet Easter tidings to the Seabees of "Fabulous Four".

The Easter lilies were part of an Easter Sunrise display, including a life-size cross, that was set up on the beach in front of barbed wire and bunkers. One Easter Eve, the cross, built by James McCrea, BUL3, stood stark against the South China Sea. It was caught and illuminated in the beams of huge floodlights aimed across the water to spot possible VC attackers approaching the beach.

But all was quiet Easter Eve, and the rising sun of Easter Dawn illuminated the cross from the opposite direction, heralding the good news of Easter Day at Camp Shields, RVN.

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ICE IN CHU LAI

Chu Lai, RVN—Thanks to the tireless efforts of the Seabees of U. S. Naval Mobile Construction Battalion FOUR, Commanded by CDR **Worthen A. WALLS**, all Marines and combat personnel in the Chu Lai Combat Base will have ice during the sweltering hot, dusty days this summer.

The Seabees of FOUR worked for three weeks to sink a 150-foot well to find the constant source of water needed to keep the Chu Lai ice plant supplied. The rotary drill at times cut through extremely hard rock, at one point requiring twelve hours of constant drilling to go through three inches of rock. The well will supply fifteen gallons of water per minute, enough to make ice for all units of the Combat Base.

The ice plant itself is now being erected by the Seabees of FOUR and will be able to produce fifteen tons of ice per day. The ice will not only be used to cool the drinks of sweating, parched Marines returning from patrols, but will also be used by doctors and nurses in the various medical units of the Combat Base.

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RECREATION CENTER

The most elaborate Enlisted Men's Recreation Center in the Da Nang, Vietnam area was opened by U. S. Naval Mobile Construction Battalion EIGHT, at their camp Sunday, March 13th.

The ribbon was cut by Captain **N. R. ANDERSON**, Commander 30th Naval Construction Regiment, and



The opening of the new 1,000-man galley for Naval Support Activity in Da Nang, Viet Nam, was celebrated with the traditional cake cutting ceremony.

Commander P. A. PHELPS, Commanding Officer MCB EIGHT. Approximately 400 Seabees converged upon the new facility to enjoy the free refreshment and live entertainment.

Miss Shirley Simmons provided the entertainment, singing and leading the 'Bees in songs.

The new facility was built by Fleet Personnel of MCB EIGHT, with some assistance from the Seabees, under the keen direction of Chief **R. B. DANIELS**, BUC, and was completed in a matter of weeks.

The new center has a covered patio area in front, with 12-feet of the 62-foot Grand piano-shaped bar extended out to it. There is a 35'x12' elevated stage in the center, and a movie screen will be at the back of the stage.

The rear of the building houses the Special Services offices and is used for checking out recreation equipment. The front doors of the building are the unique saloon-type swinging doors and the outside has three feet of louvers all the way around is topped by screens. Corrugated sheet metal is used on the roof, and fluorescent lights are used for lighting.

Only thing missing at the camp now is a swimming pool. But with the Bees of EIGHT working on their spare time, who knows what will be accomplished next.

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191.....	9:15	11:25
193.....	10:25	12:35
51.....	12:30	2:40
195.....	1:30	3:40
005.....	4:00	6:10
111.....	5:55	8:05
201.....	6:45	8:55
197.....	8:55	11:05

HONOLULU TO LOS ANGELES:

FLIGHT	DEPARTURE	ARRIVAL
196.....	1:15	9:10
190.....	9:30	5:25
200.....	11:50	7:45
058.....	12:50	8:45
192.....	1:30	9:25
016.....	2:30	10:25
194.....	5:05	1:00
100.....	11:10	7:05
198.....	11:30	7:25

SAN FRANCISCO TO HONOLULU:

FLIGHT	DEPARTURE	ARRIVAL
181.....	9:00	10:55
185.....	10:10	12:05
183.....	11:10	1:05
021.....	1:10	3:05
187.....	5:50	7:45
189.....	9:15	11:10

HONOLULU TO SAN FRANCISCO:

FLIGHT	DEPARTURE	ARRIVAL
180.....	9:00	4:40
182.....	12:20	8:00
036.....	2:00	9:40
184.....	4:30	12:10
186.....	9:30	5:10
188.....	10:20	6:00

Numbers in light type indicate A.M. Example: 11:45

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"ACEY DEUCEY"

By RON ROMBOW, JO3

The clinking of glasses, the hiss of cold beer being spewed from cans and the loud boisterous talk of a hundred or more thirsty Seabees marked the gala opening of USN Mobile Construction Battalion FOUR's "Acey Deucey" Club at Camp Shields, Chu Lai, RVN.

The brief informal ceremony took place Saturday April 2 at the Seabee Camp. The club was built for the First and Second Class Petty Officers by local Vietnamese who were employed to do the work.

The 82-foot long and 45-foot wide "T" shaped structure is made of bamboo and thatched elephant grass. Bamboo logs, woven grass and bamboo strips for the walls and roof were precut in a nearby village and transported to the camp by the Seabees.

None of the well known machines and tools used by the Seabees were used in the construction. The precut bamboo was lashed together with thin strips of bark and holes drilled at the ends in which wooden pegs were driven to form trusses. The trusses were raised with long poles and lashed together with bark.

Walls for the building are made of thin bamboo matting. Bamboo shutters over the window openings can be raised or lowered.

The structure will provide a place for the weary Bees to momentarily forget the battles being fought nearby and loneliness for loved ones at home. It will provide a place to relax after a long hot day in the tropical heat of Vietnam.

The Acey Deucey Club is the second club built for the Seabees at Camp Shields by the Vietnamese. Earlier this year a similar building was erected for the Enlisted Mens Club. And at the present time Vietnamese carpenters are constructing a chapel for the Bees of "Fabulous FOUR".

BARBED WIRE

By L. L. Tatham JO2, USN

DA NANG, Vietnam,
When Seabee Lawrence Rosanbalm

said he was "goin' back to farmin'," he didn't mean he was leaving the Navy. It was just a joking appraisal of his latest construction assignment: stringing two miles of barbed wire fence at Red Beach, near Da Nang, Vietnam.

In days on his father's farm in Washington state, Rosanbalm had strung fence to keep their cattle IN; now he is working to keep the critters OUT. MCB-FIVE has a big construction project coming up at Red Beach, and it just wouldn't do to have cows wandering around among the bulldozers.

Aside from the danger of equipment-animal entanglements, the fencing will probably discourage any Seabee raised in the Wild West who hankers to show off his bull-dogging form. Last week one such Seabee (not Rosanbalm) attempted to ride an obviously unwilling and undomesticated water buffalo which promptly unseated him, resulting in a sprained arm. An MCB-FIVE regulation prohibiting buffalo-back riding was published shortly thereafter.

Last month, Rosanbalm's steel-worker crew constructed four large steel water tanks in hilly country west of Da Nang. "Yesterday, we completed a 40 ft. by 100 ft. warehouse across the river in Da Nang East," Rosanbalm said, looking up from his fence. "Today we're on a sandy beach stringing barbed wire. One thing about being a Seabee: there's lots of variety."

REUNION

Two Navy brothers who haven't seen each other since last November held a happy reunion recently when their paths crossed at Camp Shields, Chu Lai, Republic of Vietnam.

David Maldonado, SN, USNR, and his brother Rueben Maldonado, FN, USN, were able to meet while the USS Maury, AGS, layed off-shore the Chu Lai area in the South China Sea. Hitching a ride in one of the ship's auxiliary boats that came ashore to take-on supplies, Reuben was able to visit his brother Seabee at Camp Shields, the home of U.S. Naval Mobile Construction Battalion FOUR.

David has been deployed with MCB FOUR at Chu Lia since December 7.

Reuben has been in Vietnam waters since December 5. His homeport is Pearl Harbor, Hawaii.

The two brothers are the sons of Mr. and Mrs. Rueben J. Maldonado of 6046 Springvale Drive, Los Angeles, California.

FREE WASH FREE DRY

By L. L. Tatham JO2, USN

Da Nang, Vietnam, — There was a grand opening recently near Da Nang, Vietnam, which went practically unheard of. Without Klieg lights free balloons, or door prizes, MCB-FIVE opened its new cold-water laundromat to the Seabees.

A pet project of the construction electricians and utilitiesmen, the laundromat features automatic washers and dryers, six of each. There is no hot water, but this is a small matter to many men who have been washing in buckets and tin pans. [There is a laundry service available through a Vietnamese contractor from whom most men have their green uniforms laundered, starched and pressed.]

There is still some work to be done on the machines. One Seabee finally decided to hang his clothes out to dry after removing them, still damp, from a dryer in which they had been tumbling for two lukewarm hours.

Ne one complains, though, for this washateria boasts not only a "Free Dry", but also a "Free Wash". The Seabees merely supply their own detergent.

The new whash-a-mat, like the nightly hot-water showers, is a good example of how the Seabees use skills in a few "charity at home" construction projects in the few spare hours left them after a 10 or 12-hour day of construction for the Marines and other U. S. Forces.

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(Continued from Page 41)

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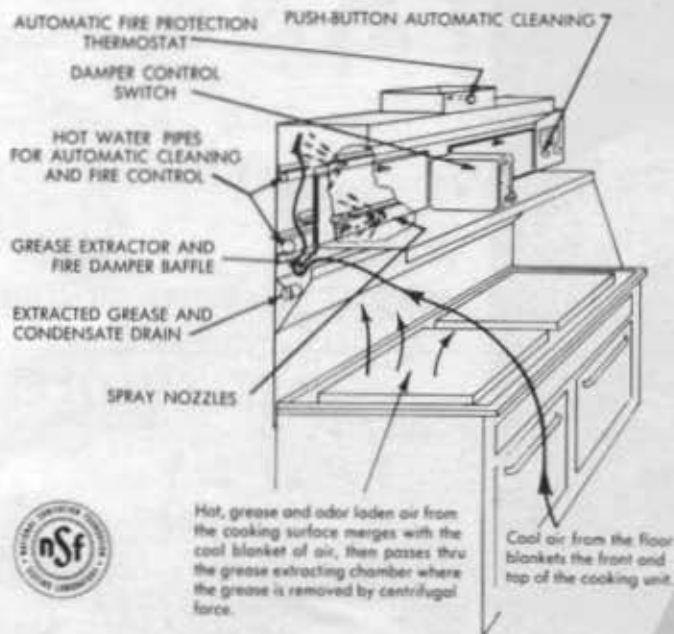
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