

SPECIAL COMMEMORATIVE DOUBLE ISSUE 2003



"Don't kid yourselves by what you saw on TV. This was **not** an easy **fight."**

- Rear Adm. Charles R. Kubic

NSIDE **SPECIAL COMMEMORATIVE DOUBLE ISSUE 2003**



Bees Close Roosey Roads

The end of an era: After more than three decades as the Navy's biggest Beehive in Caribbean, the Seabees took down Camp Moscript.

27 & 52



Return of the Seabee Jedi

Working night and day, in high temperatures and often MOPP gear, the Desert Bees became RADM Charles R. Kubic's own "Seabee Jedi."



4



Reach from the Beach: the ELCAS/M Solution

The Elevated Causeway System/Modular proved its worth when Seabees extended a high-capacity "highway" from the beach to the sea.



Constructing **Camp Patriot**

To work their missions, joint forces had to have bases. See how PhibCBs, UCTs and other services made freedom's footprint in the sand.

48



'We're not in Kansas anymore.'

A reporter from trade journal Engineering News-Record embeds with the Seabees in Kuwait and Iraq — and gets the drive of a lifetime.

58



SERT5: The Seabee Shadow Warriors

In Iraq, NMCB 5's Seabee Engineer Reconnaisance Team is believed to be the first Seabee unit to face hostile fire since Vietnam.

46 The Desert Bees: "Let's Roll"

Camp 93 arose from featureless desert to provide another base for Operation Iraqi Freedom and commemorate the first strike back in the global war on terrorism.

47 The Desert Bees: SCW@War

Even while deployed in the fight to liberate Iraq, Amphibious Construction Battalion 1 took time to train like it would fight, qualifying Seabees for Seabee Combat Warfare pins.

56 Baghdad Secured, the Real Work Began

In perhaps the most "purple" environment ever, jointcombined U.S. and coalition forces worked side by side solving problems. First: Decide on common terminologies.

72 Neither Rain nor Sleet

Seabees from NMCB 23 deployed on their first-ever fully tactical exercise in Sharp Wedge 2003, which featured bad weather and a pep talk from a Medal of Honor Recipient.

74 This School is a Blast

Students learn a lot about one of the most unique jobs in the Seabee inventory. And then they get to blow stuff up.

76 Seabee Recruiters Take Can Do! to the Streets Looking for a challenging, fast-track new job? Seabee recruiting is a different kind of "field assignment."

77 The Case of the Sub Base Staircase

When Sub Base New London needed project help, Seabees from CBMU 202 stepped up.





30 WEAPONS OF MASS CONSTRUCTION

64 SPECIAL: SEABEES REMEMBER KOREA



July 2003 marked the observance of 50 years since the end of the Korean War, and the nation paused to give thanks to its veterans. Like they had been in the World War immediately prior, Seabees were in the thick of this conflict, too. An informal history, including accounts — and imagery — from Bees who were there.

DEPARTMENTS

- 6 Topside An anniversary year of tough challenges.
- 8 Kubic Sends Seabees in Iraq excelled — once again.
- 10 Foreword From the Master Chief Petty Officer of the Seabees.
- 11 1NCD CMDCM

Dispatches from desert: Seabee Can Do! spirit is alive and well.

- 12 In Memorium: BU3 Doyle W. Bollinger, 1982-2003 A Seabee shipmate is killed in the Arabian Gulf.
- 14 Commemorating a Seabee Legend: Seabee Betty, 1934-2003 The "Seabees' grandmother" in Guam passes away.
- 16 Reporter's Notebook: Inside the Lion's Jaw Bees and SEOs protected the president of Afghanistan.

18 Newsbreak

The Seabee/CEC/NAVFAC Anniversaries; Christilaw chosen for 2003 Shields; Little Creek has a mysterious visitor; honoring those who served; "bee-tainer" backload; enlisted Bee helps prep Iraqi plant for SECDEF inspection; "kids are kids"; raising the Freedom Chapel; 40 kicks off PRT; honoring Bloody Nose Ridge on Peleliu; NMCB 4 hammers together new order in Iraq; Return of the Seabee Jedi, Part I; boxers wow; Naval Facilities Expeditionary Logistics Command debuts; Seabee Memorial sculptor de Weldon dies; SCW program updated; reserve CEC awarded Bronze Star.

78 Afterword

Take the plunge — enter the first SEABEE Magazine photo contest.

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Stay Navy. Stay Seabee.



topside



WASHINGTON NAVY YARD — With CEC officers, Seabees and many of our civilian corps at work on the war in Iraq or battling the threats of terrorism, 2003 has shaped up as a time of significant challenge as well as opportunity. Our challenges in Iraq and elsewhere in the world are many, but American and coalition forces in the Middle East are today literally making the world a safer place in which to live.

Commemorating the accomplishments of everyone who contributed to the successes in Afghanistan and Iraq would take a book (and someone probably is writing one right now). We're trying to do our part with this extraordinary Special Commemorative Issue of *SEABEE* Magazine that overlaps the Winter and Spring periods in one publication.

An enormous amount of time and effort has gone into preparing this special collector-sized magazine, and we hope you enjoy reading all about the exploits of our Seabees as they built schools, roads and expeditionary airfields, restored electricity – and restored hope – to Iraqi people terribly oppressed for decades. It was against this sobering backdrop that we celebrated the 2003 Seabee/CEC/ NAVFAC Anniversary Ball this year. We officiated our combined Washington-area event only a short walk away from the Pentagon, in Crystal City; meanwhile, in the Gulf area, the celebration was led by RADM Chuck Kubic, Commander of the First Naval Construction Division/Naval Construction Forces Command and also Commander of the 1st Marine Expeditionary Force (I MEF) Engineer Group (MEG). A story on the anniversary events is included in this issue.

I was truly honored and pleased to host our celebration of the 161st birthday of the Naval Facilities Engineering Command, the 136th anniversary of the Civil Engineer Corps and the 61st anniversary of the Seabees. Our special guest speaker was the Vice Chief of Naval Operations, Adm. William J. Fallon.

We were honored to have ADM Fallon at our head table, where we were also joined by current Acting Secretary of the Navy, the Hon. H. T. Johnson. We were additionally honored to share this special occasion with a large number of distinguished veterans and retirees, area Seabees, CEC officers and our civilian employees.

Our command's history is long, diverse and fascinating. NAVFAC began in 1842 as the Bureau of Yards and Docks, but today we do much more than build and maintain shipyards and Naval stations. In our 161 years, Team NAVFAC has become the premier facilities authority among all the military services — with the effectiveness provided by speaking in and working with "One Facilities Engineer Voice."

We've taken the lead in adopting Webbased technology and advanced business practices, providing creative engineering and construction solutions, and keeping our commitments to all our DoD clients.

But most importantly, the Navy and Marine Corps Combat Team trusts us to be their provider of choice when it comes to facilities engineering support. No other facilities engineering organization can match our accomplishments.

We will continue to lead in technical innovation, facilities engineering, acquisition and construction, while enhancing Naval readiness ashore — and improving the quality of service for our military members, our civilian workforce and families into the 21st century.

Our talented team, comprised of dedicated Civil Engineer Corps officers (active and reserve), other military personnel, civilians and contractors work around the world pioneering engineering applications and leading the Seabees in peace and war.

The Seabees came into being in World War II under the leadership of Adm. Ben Moreell to perform then as they still do today — build anything, anywhere, and do it in hostile conditions if necessary.

Then 50 years ago, in Korea, the Seabees went to war in a cold, harsh land. They led the way into battle positioning the pontoons for the landing at Inchon, the first major success of that war. They then went behind enemy lines and stole some trains to get the supply lines moving. And they built the runways that gave us the air superiority necessary to prosecute the enemy.

At the end of the Korean War, the Seabees could look back with pride in their accomplishments and that, once again, they proved they could do any job in any weather at any time.

As we celebrate the 50th anniversary of the end of that terrible war this July, the brave men and women of our Seabees,



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SEABEE Magazine is the publication of the United States Navy Seabees, active duty and reserve, celebrating 61 years of proud Seabee service.

together with their counterparts throughout the Department of Defense, are working to build and preserve peace and defend freedom against tyrants and terrorist forces, and those who would harbor them.

One doesn't know where they will be called next, and whether it will be to build a bridge, an airfield — or the trust of some downtrodden people who need that special Seabee humanitarian work you provide so often and with distinction.

Trouble across the globe today reminds us of our obligation to safeguard the precious legacy of our military, our Navy, our Civil Engineer Corps and our Seabees ... a legacy of freedom, justice and liberty.

Right now, our Seabees and Civil Engineer Corps officers are stationed and deployed around the globe, some in war or hostile-fire zones, others offering aid and humanitarian assistance. They are writing American history as they are deployed with construction battalions, mobile and amphibious; Underwater Construction Teams; and at State Department offices around the world.

With the uncertain state of current events and change always in the wind, you are all doing superlative,



first-class, history-making work. I could go on and on, of course, about the many marvelous accomplishments of Team NAVFAC, the Civil Engineer Corps and the Seabees, but in this forum, at least, I know I'm preaching to the choir.

For now, though, we still have a lot of work to do.

Michael R.

MICHAEL R. JOHNSON Rear Admiral, CEC, USN Commander, NAVFAC and Chief of Civil Engineers



kubic sends



AL HILLAH, Iraq — I write this greeting for *SEABEE* Magazine from Saddam Hussein's Babylon Palace. The Palace grounds are located near the site of the ancient city of Babylon and its infamous tower, and now host our Seabee forward command post in Iraq.

As I survey the unusual surroundings and reflect upon how much Seabees have done in such a short time, I am astounded and filled with pride. Seabees have always done great things in war and peace, but *wow* — look what Seabees have done this time! From the standup of the First Naval Construction Division (1NCD) less than a year ago, to the wartime mobilization of Seabee reserves, to the campaign to liberate Iraq, to the civil-military operations we are conducting here right now, Seabees continue to write new chapter after chapter of our proud history.

During Operations *Enduring Freedom* and *Iraqi Freedom*, Seabees of the First Naval Construction Division formed the core of the 1st Marine Expeditionary Force (MEF) Engineer Group (I MEG). Stand up of the MEG enabled us to integrate fully with the Marine Corps, and to execute a highly innovative interoperability doctrine that had never before been tested in combat.

The I MEG was organized as a joint force of Navy, Marine and Army engineers formed into three regimental task forces. The I MEG force structure included four Seabee battalions, three reserve Seabee heavy air dets, a Naval Construction Force Support Unit, a Construction Battalion Maintenance Unit detachment, an Underwater Construction Team, two Army engineer battalions and a Korean engineer battalion. I MEG task forces were configured to focus on mobility, construction and sustainment, and were arrayed in echelon across a 67,000 square mile battlefield to respond with unbelievable agility and speed engineer speed was key to winning the war in Iraq.

The I MEG Command Element (CE) included active and reserve Navy, Marine and Army officers and enlisted from 24 commands. The CE directed the operations and forward deployment of I MEG forces and enabled joint/combined engineers to fulfill a broad range of missions successfully in support of I MEF objectives.

Not only did I MEG organizational strategies come together seamlessly, but Seabees also employed innovative engineering techniques for bridging, road repair and maintenance, troop bed-down and force protection projects. Seabee Engineer Reconnaissance Teams (SERTs) were employed for the first time in direct combat operations. These 10-man teams included two CEC officers, a chief and seven petty officers. They performed advanced route surveys to assess bridges, road conditions and maneuver obstacles, and provided real-time digital pictures, information and analysis directly from the forward edge of the battlespace.

"Seabee Jedi" from I MEG Future Ops then crafted expeditionary engineer solutions by exercising engineer reachback capability, which linked SERTs with the I MEG CE and highly dedicated professional engineers working in their offices at PACDIV in Pearl Harbor and LANTDIV in Norfolk — a truly amazing effort.

The Order of Battle in this Iraq War placed SERTs and lead MEG elements directly behind the Marines, in the forward area, as the 1st Marine Division and Task Force Tarawa (from 2nd Marine Division) attacked north. Seabees have not been this close to the fight since Vietnam. More importantly, Seabee performance in this war demonstrated that we are no longer simply a rear-area defensive force. Seabees advanced quickly, supported themselves with their own combat logistics convoys, and traversed nearly 400 miles in close follow to and direct support of Marines on the attack.

As the war unfolded, it became apparent that the Seabee effort would be focused on road and bridge work to ensure major supply routes were clear and in good shape for continuous flow of logistics and troops. Seabees built bridges — big, 70-ton bridges. Standard 40-to-60 meter Mabey-Johnson bridges were constructed, using highly innovative earth moles to narrow the wet gaps. Seabees once again used their *Can Do!* ingenuity, and, in effect, made the Iraqi rivers and canals fit their standard length bridges.

Seabees also worked nonstop on many other projects, such as connector roads to bypass hostile areas, large-scale dust suppression on roads and airfields, construction of Patriot battery positions and force protection berms, and camp QOL upgrades for U.S. troops. Most importantly, Seabees worked day and night prior to D-Day completing major force bed-down projects, including huge munitions storage areas, fixed and rotarywing pads and support facilities, and their signature project — a 20-acre concrete parking apron for the F/A-18s that rocked Saddam's regime on opening night and throughout the MEF's air-ground attack. This pad included enough concrete to pave a road from the nation's capital to Dulles airport and it was built in a little over 90 days.

The I MEG task force configuration enabled Seabees to shift direction quickly to wherever the Marines needed them, and to respond heroically each and every time. Seabee achievements during the attack were nothing short of miraculous when you consider the I MEG was constantly moving thousands of troops and hundreds of pieces of CESE through dozens of locations, and advancing nearly 400 miles from Kuwait to Baghdad in only 22 days.

Seabees were combat-ready throughout the war. Our convoys were hard and alert, and Seabees returned fire with deadly accuracy when our ability to fight was challenged.

When hostilities ended, the Seabee mission was just warming up. As I write this, the I MEG remains fully engaged in civil military operations, currently working to rebuild city infrastructure; to repair and construct bridges for local communities; to restore power and water; to repair public buildings and schools; and to clean debris from city streets. Iraqis from all walks of life had truly been brutalized for over three decades by the Saddam regime, but Seabees are finding the Iraqi people to be warm, friendly and deeply appreciative of their liberation.

Although the war in Iraq has necessarily been the Naval Construction Force's primary focus this year, Seabees have continued to perform their global mission at many other locations throughout the world, and this outstanding work has not gone unnoticed. From exercises in the Balkans to *Cobra Gold* in Thailand, to continuing ops in Guam and Rota — and everywhere in between — Seabees have proved on a daily basis that they are invaluable in war or peace.

Fellow Seabees, it is with great pride and awe that I recognize all of you, your exceptional accomplishments and your unselfish sacrifices. You have always succeeded beyond my high expectations. Thanks for your heroic achievements and thanks for being Seabees.

Ktaw.

C. R. KUBIC Rear Admiral, CEC, USN Commander, 1NCD/NCFC/I MEG



foreword





I am extremely pleased to be the Master Chief Petty Officer of the Seabees right now. It has always been my pleasure and personal honor, of course, to hold such a title, but these days it is even more special to be a leader of Seabees.

In my travels to sandy locations in recent months, I have seen first-hand what wonderful work is being accomplished by our dedicated Seabee community. Whether you are assigned to the Public Works Center in San Diego or a battalion detachment in Spain – or building airfields and providing humanitarian comfort in Baghdad and Afghanistan – Seabees of all stripes continue to play a decisive, forceful role in keeping America free and people safe.

Just as no one can deny the superlative work Seabees are doing, it's equally undeniable that the workload is increasing across the board. This is a fact of life. Seabees are working literally all across the globe, but the most recent and visible jobs have occurred in the context of Operations *Enduring Freedom* and *Iraqi* *Freedom.* Often working seamlessly in a joint-forces environment, Seabees in Iraq have become essential to the restoration of adequate public works, such as reliable fresh water and electricity. The job in Iraq will be long and complex, by all accounts, and the challenges are certain to be many, but as we always have, Seabees will answer with a characteristic "*Can Do!*"

This Special Commemorative Double Issue of *SEABEE* Magazine – the same page count as the combined regular Winter and Spring issues it replaces – is full of reports on what miracles a "*Can Do!*" attitude can create. Even though much of the coverage describes events now history, many of our stories here are reported in a compelling "you are there" style that underscores their immediacy.

Our Bees have been crucial to getting important river crossings restored; they have hammered together new furniture to replace that looted from Iraqi schools; and they have fulfilled the needs of coalition forces in the region by building countless camps, unloaded countless cargo ships and provided the few creature comforts that could be had in a windblown, sand-covered, war-time location.

There is so much war news to report to you, in fact, that more of it will be included in the Summer issue coming out next.

July 2003 also marked the national recognition of the 50 years elapsed since the Korean War. In this issue, appropriately one commemorating new good works by Seabees, we also take time to celebrate the selfless actions of Bees during the Korean War. Then as now, Seabees were constructing roads, airfields and more where none had previously existed, and making life easier for their fellow troops in the process.

I'm extremely proud of you all, past and present.

allankan

HARRELL T. RICHARDSON CNOCM (SCW) Master Chief Petty Officer of the Seabees



History in the making can only explain how we were successful in this heroic campaign to liberate the people of Iraq and there was no finer force to do that than U.S. Navy Seabees.

For the first time in history, while completing supernatural construction projects, Seabees moved more than 400 miles with Marine maneuver forces contributing to campaign success. A rare breed of men and women, Seabees always succeed no matter what challenges lie ahead and they do it with their own *Can Do!* style.

As RADM Kubic said up forward here, the I MEF Engineer Group was made up of Navy, Marine Corps and Army components, both active and reserve. They performed flawlessly and became a force to be reckoned with. I am very proud of each and every Sailor, Marine and Soldier for the sacrifices they made — and for the families back home that have given us all so much support. Without that support, our successes would not have been possible. You have all given new meaning to the phrase "service with honor."

During *Operation Enduring Freedom*, Seabees completed aircraft parking aprons, ammo storage areas, hot refueling points, helicopter parking pads, tent camps and numerous other projects. Without the completion of these construction projects the coalition forces would not have been able to move so swiftly through the battlespace.

And elsewhere on the Seabees' global playing field, Bees active and reserve came up to full speed on every task presented to them. The quality of work performed at a time of the greatest tasking in modern memory has been unequalled in the history of the Seabees.

When *Operation Iraqi Freedom* kicked off, again the Seabees jumped into action with dedication and efficiency.

They provided expedient construction projects comprised of building bridges, maintaining MSRs and ASRs, EPW camps, rapid runway repairs, forward operating bases and resupply of front-line forces all the way from Kuwait to the city limits of Baghdad.

When areas became somewhat secure, the humanitarian missions started and our Seabees wasted no time in winning the hearts and minds of the Iraqi people. They repaired local schools, hospitals, restored power generation and water treatment plants, and even put local Iraqis back to work.

Seabees are truly a national treasure and are the force of choice. In Afghanistan, in Iraq, and all around the world, Seabees continue to exemplify our motto of "With Compassion for Others, We Build, We Fight." *Ooh-Rah!*

Herris C Dimm

KEVIN C. TIMMONS CMDCM (SCW) First Naval Construction Division

Builder 3rd Class Doyle W. Bollinger 1982-2003

'We have to do this,' he had told his mom. 'We're going to have another 9/11 if we don't. We have to keep families safe.'

STORY BY LT ERIC BRIETENBACH, NMCB 133 AND KEELY WEST, POTEAU (OKLA.) DAILY NEWS



eabee Builder 3rd Class Doyle "Wayne" Bollinger, a 21-year-old Sailor from Poteau, Okla., assigned to Naval Mobile Construction Battalion 133, was remembered with full military honors June 13 during funeral services held at 2 p.m. in the Poteau High School's gymnasium, the Sherman Floyd Fieldhouse.

Bollinger was killed June 6 in Iraq, the victim of an accident when unexploded ordnance detonated in the area where he was working.

He had been hand-selected to be a member of the battalion's air detachment for its 2003 deployment. He served as rifleman number two for the first fire team, second squad of the vertical construction platoon.

A Seabee air det is the "tip of the spear" for the battalion and generally is the first responder for a contingency. Bollinger's selection for this important role was motivated by his excellent historical performance.

He was key to many of the air det's accomplishments, including crossing the border into Iraq on the second day of the war to help construct a 14,000-person enemy prisoner of war (EPW) camp.

Establishing the EPW holding area was critically important to prevent the combat force from being slowed by the administrative handling and processing of prisoners. The construction of the complete facility took just 96 hours, finishing an impressive two days ahead of an already tight schedule.

Bollinger was then selected to be a crew member of a detachment of Seabees defending a key river crossing in Iraq.

While a member of this defensive team, he also participated in the removal of four medium girder bridge (MGB) supports. An MGB is a bridge that Naval Construction Force Seabees are trained to assemble over a river and then disassemble, if needed, for reassembly elsewhere.

The completion of this project played an integral role in maintaining and improving the main supply route for movement of critical supplies to forward coalition force units.

The Seabee was later chosen to join the runway repair team sent to Al Jarrah airfield outside of Al Kut, Iraq. The team placed more than 1200 cubic yards of concrete in two 3000-meter runways and a taxiway intentionally damaged by Iraqi forces to prevent coalition forces from using it after the outbreak of hostilities.

Bollinger's contributions to repairing the airfield proved vitally important, because they provided civilian aid organizations a base of operations for essential humanitarian assistance to the



people of Iraq.

At a June 12 afternoon press conference, Bollinger family members shared some of their memories of the young man who lost his life in Iraq, and their feelings of pride and sense of loss.

"I told him the last time I talked to him on the phone that he'd be okay," said his father Doyle Bollinger Sr. "He was with the Seabees, and they're more behind the lines."

Bollinger's brother, Clendon, said that he and his Seabee brother had their ups and downs while growing up, but they grew closer as they got older.

He said Bollinger was doing what he loved from the time he was very young construction — and he talked about how friendly Wayne was to everyone.

"Everybody in the neighborhood knew Wayne," Clendon said. "He loved to talk and he wasn't afraid of anything. He'd walk up to strangers."







Bollinger was also generous. The last time his mother, Evelyn Bollinger, talked to him on the phone, about 10 days before his death, he told her that he loved her, that he was okay and that she should be expecting a letter.

Bollinger had sent his mother a list of about 40 guys who, he said, never received "care packages," or anything from home, in hopes that she could help.

"Wayne was just Wayne," Mrs. Bollinger said, and he had a great sense of humor. She told Wayne he couldn't go to Iraq, that he'd have to call his commanding officer and tell him that his mom had grounded him.

"He pulled out his cell phone like he was going to call and said, 'Sorry mom — phone's broken.""

Family members said it had been a very difficult time, but they had received a tremendous amount of support from both the community and the Navy. "He knew [the Navy] was better for him," Mrs. Bollinger said of her Seabee. She said he also believed in the actions the United States took in Iraq.

"We have to do this," Bollinger had told his mother. "We're going to have another 9/11 if we don't. We have to keep families safe."

Mrs. Bollinger also told reporters she knows her son would rather have died than for any of the others who were injured to have died instead of him.

She encouraged everyone to continue their prayers and support of the troops serving overseas.

"They need our support and they need to be remembered when they come home, and be treated with respect," Mrs. Bollinger related.

In the tradition of a U.S. Navy Seabee, Bollinger was notably dedicated to service and the welfare of others. He had helped to construct SEA huts at various Marine Corps units to provide relief from the blistering heat of Iraq. These huts are still used by the Marines for rest and relaxation while not on duty. Bollinger was a genuine team player and consistently impressed by contributing to improving the lives of those around him.

Even while assigned to food service attendant duty, a job not envied anywhere in the Navy, he was *always* thinking of his Seabee shipmates. He led an effort to purchase sodas, case by case, until enough were collected and could be served cold during evening meals. He was always thinking of ways to make the lives of those around him just a little better.

The greatest accolade of all? He was highly respected by his fellow Seabees.

Bollinger was preceded in death by his grandfathers, a sister and an uncle.

Survivors include his mother, Evelyn Bollinger of Poteau; his father, Doyle Wayne Bollinger Sr. of Haltom City, Texas; brothers Clendon Bollinger and Michael Bollinger, both of Poteau; sister-in-law Penny Bollinger of Howe; nephew Caleb Walston of Poteau; his half-brother Timothy Bollinger of Greenwood, Ark.; grandmothers Elsie Lemmons of Poteau and Norma Bollinger of Spiro and numerous other relatives.

The Rev. Jim Parsley officiated at the Poteau services. Interment followed in Oakland Cemetery.

Commemorating a Seabee Legend: SEABEE BETTY

Vicenta Chargualaf Peredo 1934-2003

'My Seabees need attention. I am the Seabee grandmother on Guam, you know?'

STORY BY JO1 (SCW) MICHAEL D. MITCHELL AND COLEEN R. SAN NICOLAS-PEREZ

Seabees, she will be forever remembered as "Seabee Betty."

Born Sept. 10, 1934, in the village of Yona, Guam, Seabee Betty was a surrogate mother for generations of Seabees until her death June 9.

"She will be fondly remembered by thousands of her Seabee-Sailor shipmates, Marines and Airmen around the world, whom she befriended on Guam over the past 50-plus years," said RADM Michael R. Johnson, Commander, Naval Facilities Engineering Command.

As a young woman growing up in post- World War II Guam, Seabee Betty was known for her goodwill and love of humanity. Her job on the Navy base at *Club Mocambo* introduced her to thousands of Soldiers, Sailors, Marines, Airmen and, of course, Seabees.

In 1952, she took a strong interest in the Seabees stationed on or deployed to Guam. Recognizing the sacrifice of being so far from home, Seabee Betty took it upon herself to welcome the hard-working men of the construction battalions and introduce them to the native Chamorro culture of Guam.

"Going to Seabee Betty's house was always like going home for the holidays," said CAPT Joe Ludovici, commanding officer of Public Works Center Guam. "Seabee Betty reminded me of my own grandmother, very sweet and engaging, but also the firm matriarch of a large extended family."

For more than 50 years, Seabee Betty cared for each battalion deployed to

Guam by hosting hundreds of fiestas, attending official functions and planning several Chamorro-style weddings over the decades.

Every service member she met instantly became a long-lost member of her family and was welcomed with a kiss on the cheek, a friendly hug or a kind word.

What most people now call community service, Seabee Betty called friends helping friends. She worked for decades to bring her "two families" closer together.

For her devotion, she was recognized over the years by numerous chiefs of naval operations, U.S. senators, admirals and generals, President Ronald Reagan and, more recently, President George W. Bush. In 1991, she was inducted into the Seabee Museum at Port Hueneme, Calif., only the second civilian to be bestowed this honor. The first was actor John Wayne, who starred in "The Fighting Seabees."

As each new group of Seabees arrived in Guam, they were welcomed with the same affection and enthusiasm as the battalion that came before. RADM Charles Kubic, Commander, First Naval Construction Division, discovered this truism when he introduced his son to Seabee Betty.

"When I visited, I took Charlie and [his] photo down to visit Betty — she was absolutely thrilled that yet another generation of Seabees was coming of age," Kubic said.

Seabee Betty wasn't paid for her many contributions, but she was compensated by the recognition of her good deeds, by military members of all ranks, and that was enough for her, her daughter said.

Vicenta Chargualaf Peredo was laid to rest in the Guam Veterans Cemetery June



20, surrounded by her family, friends and the Seabees she loved. She is survived by nine children, 40 grandchildren, 38 greatgrandchildren and the thousands of Seabees she cared for.

Seabee Betty was and remains an institution in the annals of the Seabees and Civil Engineer Corps. The CEC and the Seabees are soliciting ideas for a Seabee Betty memorial that will seek to capture and commemorate her limitless and selfless contributions to the welfare of Seabees over many decades.

To submit your suggestions, and for additional information about how to make a memorial donation for this worthy cause, contact the Seabee Betty Memorial Fund at **seabee_betty@hotmail.com**. (#)

Remembering Seabee Betty

STORY BY JO1 (SCW) ANDREW SCHARNHORST



For decades, whenever U.S. Navy Seabees deployed to the small South Pacific island of Guam, they knew where to find their home far away from home.

In the village of Yona sits a small, singlelevel house on a cramped yard owned by a woman named Vicenta Peredo, but that's not what most Seabees called her. From the highest-ranking Civil Engineer Corps officers to the youngest constructionmen and equipment operators — to all who have deployed to Guam for 50 years — she was affectionately known as "Seabee Betty."

Seabee Betty hosted get-togethers for Seabees since 1951. Back then, some particularly heavy storms had damaged her modest wooden house, especially her kitchen. She worked at the Navy Exchange (NEX) then aboard Naval Station Guam and she knew many of the Seabees who were on the island. Upon hearing what happened to the house, Vicenta's oldest daughter remarked, "I heard your kitchen caved in. Maybe by tomorrow the Seabees will put it up."

Well, it actually took a little longer than that, Seabee Betty said. "Two days later, my kitchen was back up."

To show her gratitude, Vicenta threw a party for the Seabees, serving all manner of native Chamorro cuisine to her American benefactors. In return, she earned the moniker she held so dear.

Red Jones, then commanding officer of the 30th Naval Construction Regiment, told her, "You may be Vicenta to the rest of Guam, but you'll always be 'Seabee Betty' to the Seabees." Since then, Seabee Betty has hosted several parties each year for deployed Seabee battalions.

"I love all my military, but my heart goes for the Seabees more," she said.

Seabee Betty hosted fiestas coinciding with the birthday of each of the saints to whom she prayed throughout the year. During these periods of fervent prayer, she also began cooking all the food for the fiesta party.

"I say my nine days' novena, and then I cook, and then I invite my Seabees," she said. "I invite my Seabees because they are away from home. I pray nine days with my family, and then after the nine days we have all this food."

More than just hosting fiestas, Seabee Betty offered a place for the Bees to get away from the camp and the Navy for awhile — and she has even been known to help get a Seabee or two out of jail.

"That's because my Seabees ... need attention," said Seabee Betty, ever the doting matriarch. "I am the Seabee grandmother on Guam, you know?"

CDR Michael L. Blount, commanding officer of Naval Mobile Construction Battalion (NMCB) 1, was a lieutenant with NMCB 40 when he first met Seabee Betty in 1987.

He said that even before arriving in Guam from Gulfport, Miss., he'd heard stories about the legend of Seabee Betty. "Within the first month, I saw Seabee Betty on camp," Blount remembers, "and within the first three months, we had our first fiesta at Seabee Betty's house."

He quickly found the tales he'd previously heard to be no exaggeration.

"I had to provide the transportation, and I was dumbfounded that one person was going to host the battalion," Blount said.

Little changed over the years.

When NMCB 1 returned to Guam again, Blount, Executive Officer LCDR Mark Jackson, Command Master Chief CUCM (SCW) Danny Duval and ENS Jeffrey Dupart were invited to her house for "a snack."

"We arrived and the spread was [amazing]," with enough food for about 50 people, Blount recalled.

"I haven't had the local food before, but everything you can possibly imagine is here, [and] it was really good," said firsttime visitor CECN Michael Bavlnka, 23, from Dallas. "It's just outstanding. Whoever hasn't shown up, I don't see why they wouldn't want to come out here. It's just nice and relaxed. Good people."

"Her generosity is known throughout the Seabees, and I'm glad [I was there]," Blount added.

Seabee Betty had no plans to stop caring for her Seabees anytime soon.

She once said, "Until God put me six feet under, I'll be continuing."

This story was adapted from an original piece appearing on the NMCB 1 Web site.

NOTEBOOK:



Inside the Lion's Jaw: Seabees Protect the President of Afghanistan

STORY BY LUIS TORRES-TORRES AND CE1 (SCW) CHRIS BECK PHOTOGRAPHY BY CE1 (SCW) CHRIS BECK





The Afghan presidential palace (above and right) had seen better days by the arrival of the Seabee

Technical Security Team (top, left to right), with members SEO Luis Torres-Torres, BUC Miles Cross, CE2 Chris Beck and SEO Darin Hushour shown with President Karzai (center).

KABUL, Afghanistan — Hanzala of Badghis, a Dari poet, once wrote, "If leadership rests inside the lion's jaw, so be it. Go snatch it from his jaws."

You don't have to be a Dari poet to view the lion's jaw as a metaphor for the danger of leadership in Afghanistan.

For a more recent specific example, we have Seabees aiding the Bureau of Diplomatic Security in the challenge of protecting Afghan President Hamid Karzai, a responsibility assumed unflinchingly and with breathtaking swiftness.

There are many worthy stories here involving multiple elements of Diplomatic Security, and major contributions by Information Resource Management, the Bureau of Overseas Buildings Operations and others. Here is ours.

We were pleased to be part of the Karzai Protection Mission, providing enhanced physical and technical security for the Presidential Palace here. Everyone knew from the outset that this task would be a huge undertaking. Multi-level, multi-bureau and multi-agency working groups were formed to develop a plan. Contracts were awarded, equipment was procured, staged and shipped, and a team of Security Engineering Officers (SEO), Seabees and physical security specialists was formed, trained and launched — all under painfully short deadlines.

Once on the ground, the team of SEO Darren Hushour, SEO Luis A. Torres-Torres, Chief Builder (SCW) Miles Cross, Construction Electrician 1st Class (SCW) Chris Beck and Physical Security Specialist Ray Rivera faced the daunting task of getting 90 tons of cargo unloaded from a Russian Antonov cargo aircraft. Orchestrating Pakistani truck drivers, Turkish Air Force forklift operators and Russian air cargo crew — and getting the equipment to the palace compound became a two-day event. The usual glitches and miscommunications were overcome, however, as we quickly grew accustomed to operating in our new environment.

With the equipment in hand, we faced another challenge in securing sections of a 130-acre compound enclosed by 35-foot-tall, 400-year-old walls and structures. Picture a crumbling medieval castle compound.

Rebuilt in 1873 after being destroyed by the British, the *Arg* (citadel) is a collection of palaces added to by subsequent Afghan rulers. Like almost every building in war-torn Afghanistan, the heavily fortified palace complex bears its scars, with old shell holes in walls and slabs of concrete lying in piles in its gardens.

As the compound had no reliable source of electricity, the first order of business was to build a power distribution system. The team installed four generators, fuel tanks, transfer switches, an uninterruptible power supply, four load distribution centers and ran nearly four miles of power and signal cable. With power newly available, security lighting was placed strategically throughout the compound.

Next came the Emergency Notification System. About a dozen closed-circuit tele-

vision (CCTV) cameras were installed to provide the new Security Control Center with coverage of the surroundings. Anticipating the long distances between the cameras and the control center, the team was the first in the history of the BDS to install such a large-scale *wireless* CCTV system — which performed flawlessly, much to our personal delight and professional relief.

To improve physical security, the team and local Pakistani labor erected a 12-ft high by 80-ft long wall made from Hesco barriers. A

Hesco barrier is a security device (like a huge sandbag made of wire mesh filled with rocks) that makes it easier to build a substantial wall in less time than one made conventionally.

Three strands of razor-sharp concertina wire adorned the top of the wall for additional intruder protection. In addition, many hundreds of sandbags were used to fill in windows and other openings in the compound structures and walls.

The team adjusted to bunking six persons to a 40-foot Conex shipping container and shuttling between the American Embassy and Afghan Palace compounds in Chevy Suburban "Fully Armored Vehicles" (FAVs), plus working from 35-foot ladders and eating new and interesting food.

Almost every day saw President Karzai as he moved from the residence to his office. He invariably acknowledged us with a wave and a smile in appreciation of our work. It was both inspiring and humbling to realize that the hopes and expectations of the Afghan people were embodied in this cheerful personage we helped protect.

President Karzai's undeniable personal courage and grace — in the face of constant threat — meant that to be with him, even for six weeks, was truly to be "inside the lion's jaw." (#)



newsbreak

Scenes From a Ball 2003

This year, the world itself was the stage for the annual celebration of Seabee, CEC and NAVFAC birthdays







In the US and in the sand, Seabees and CEC officers, active duty and reserve, paused to celebrate and commemorate the three-way anniversaries.

All over the world in 2003, celebrants gathered to observe the 161st anniversary of the Naval Facilities Engineering Command (NAVFAC), the 136th anniversary of the Civil Engineer Corps and the 61st birthday of the Seabees.

Hosted by RADM Michael R. Johnson, Chief of Civil Engineers and Commander NAVFAC, and his wife, Terry Johnson, the headquarters celebration was held March 15 in the Marriott Crystal Gateway in Crystal City, the node of hotels and office complexes only walking distance from the Pentagon, in Arlington, Va.

More than 650 attendees included Seabees, CEC officers and other service members, veterans and retirees from most of the eastern seaboard.

Special guests included Acting Secretary of the Navy, the Hon. H.T. Johnson, and special guest speaker, the Vice Chief of Naval Operations, ADM William J. Fallon. Led by Commanding Officer LCDR Dale Uyeda, Construction Battalion Maintenance Unit 202, from Naval Submarine Base New London on Groton, Conn., hosted its well-attended Seabee Ball at the Mystic Marriott March 1.

The event's special guest was RDML Michael C. Tracy, Commander, Navy Region Northeast and Commander, Submarine Group 2.

Naval Mobile Construction Battalions 5, 74 and 133, Naval Mobile Construction Force Support Unit 2, the Twenty Second Naval Construction Regiment and staff members of the 1st Marine Expeditionary Force (I MEF) Engineer Group (MEG) gathered at Kuwait's Camp Moreell March 1 to mark the three-way birthdays.

The host of the desert event was RADM Charles R. Kubic, Commander, First Naval Construction Division/Naval Construction Forces Command and Commander, I MEG. He was joined by





Capt. William McKerall, Commander, 22NCR. The special guest was U.S. Marine Corps Lt. Gen. James Conway, Commander of I MEF.

The active duty and reserve Seabees were deployed in the Gulf region to provide construction support to I MEF engaged in Central Command area of operations, including *Operation Iraqi Freedom*.

Kubic reminded the Seabees that they were celebrating their birthday in much the same way Seabees did the first year they were formed — in harm's way when they provided contingency construction support to U.S. Marines during the battle of Guadalcanal.

He encouraged the Seabees to continue with the same valor as their predecessors.

Turning to Lt. Gen. Conway, he remarked, "The Seabees have never left you — and we never will."













newsbreak

Seabees say farewell to famed 'Roosey Roads' beehive

STORY AND PHOTOS BY JO3 LANDON MASON

fter 34 years of service to Naval Station Roosevelt Roads (NSRR), the Seabees who deploy to Camp Moscrip here said farewell this spring.

"It's sad, really," said Master Chief Constructionman Pam Taylor, the assistant officer in charge of Naval Mobile Construction Battalion (NMCB) 74, Detachment Puerto Rico, the last det of Seabees to come to NSRR. "This is the end of an era."

The first Seabee battalions began deploying to NSRR in 1969 and they set up Camp Moscrip, which would become a familiar home away from home for Seabees on deployment.

In 2001, NMCB 74 was the last battalion to deploy its main body of Seabees to the camp. Since that time, 74 and NMCB 40 have only deployed detachments of fewer than 100 personnel.

More than 50 percent of 74's Seabees at NSRR left for locations in Southwest Asia in February and March, while the rest were scheduled to leave in April.

"I think it's sad to see Camp Moscrip close," Taylor said, "but mission and tasking priorities require our presence elsewhere. With the realignment of our deployment schedule from seven months deployed and seven months at home, to six months deployed and 10 months at home, the Naval Construction Force is no longer able to support four main-body sites.

"Although Camp Moscrip will no longer be home to the Atlantic Alert Battalion, it will remain alive in the chronicles of Seabee history."

In an ironic twist, Taylor's husband is a retired Senior Chief Equipment Operator who was deployed to Camp Moscrip with NMCB 71 when it first opened in 1969. He returned with another battalion 16 years later, and more recently, last December on a visit.

"I was one of the first occupants of those shiny, brand new Butler Huts and I worked



Seabees from NMCB 74 and contractors from J.A. Jones carefully remove the historic display Seabee from its pedestal in front of Camp Moscrip (top). The metal bee was originally placed there by NMCB 4's Bravo Company in June 1982. Steelworker 3rd Class (SCW) Daniel Ramirez (above, left) removes the bee's wings with a cutting torch before it can be shipped to its new home at the First Naval Construction Division in Little Creek, Va. Chief Equipment Operator (SCW) John Tyson (above, right) removes letters from the sign in front of the camp.

in the quarry behind where the base commissary now stands," Tom Taylor said. "Now my wife is one of the last Seabees to deploy there, turning out the lights and taking down the bee. It brings closure to an era of my life in which Roosevelt Roads played a significant part.

"I was very fortunate to be able to visit the camp before it closed," he continued. "I know many of the Camp Moscrip plankowners had hoped to attend a formal decommissioning ceremony, but circumstances dictated otherwise. I suppose for them, Camp Moscrip will always be here."

Camp Moscrip was named in honor of LTJG Arthur D. Moscrip Jr., a Seabee then with NMCB 1. He was killed in Da Nang, Vietnam Sept. 13, 1968, during the battalion's third deployment there.

In the camp's early days, there wasn't much in the quality-of-life arena, with only

temporary buildings barely larger than tents that served as barracks and an outdoor theater. Later growth of the camp brought construction of permanent barracks and additional support facilities. When NMCB 74 left in 2001, the camp was almost selfsufficient. Units on the camp had their own gym, galley, chapel and mini-mart.

A little more than six months after NMCB 74 departed, a detachment returned to close the camp and bring the bee, which had stood guard over the camp for 21 years, to its new home at the First Naval Construction Division/Naval Construction Forces Command in Little Creek, Va. With help from contractors, Bees from NMCB 74 lifted the display bee off its pedestal and prepared it for shipping.

Christilaw chosen for SAME's 2002 Shields

The Society of American Military Engineers (SAME) has selected Builder 1st Class (SCW) Nicholas E. Christilaw, USN, as the recipient of its prestigious 2002 Marvin Shields Award.

SAME annually recognizes a Seabee who has made exceptional contributions to military construction, facilities maintenance, training or readiness.

Christilaw distinguished himself while assigned to Naval Mobile Construction Battalion (NMCB) 3 as project supervisor for the 22nd Naval Construction Regiment in Guantanamo Bay, Cuba, serving as air det operations chief and the detail OIC.



Assigned to Joint Task Force 160, Christilaw aggressively led a platoon of Seabees and Marines to construct 320 al-Qaeda detention cells at Camp X-Ray, as well as 85 Southeast Asia huts

for more than 1000 security force and fleet hospital support personnel.

In addition, because of his thorough knowledge of the mission and polished communication skills, he was hand-selected to brief the detainee cell construction in Spanish on CNN Worldwide.

Seizing CPO duties as air det operations chief for the battalion's two-week field exercise at Fort Hunter-Liggett, Calif., he motivated his detail to complete construction of six complex projects without a single mishap, despite "black flag" heat conditions.

While deployed to Okinawa, he was picked to fill the CPO billet as detail OIC, supervising a 16-person crew working on three remote, high-visibility and technically challenging projects at the jungle warfare training center.

"Petty Officer Christilaw's professional achievements and dynamic leadership-byexample style mark him as an invaluable asset to the Seabees and the United States Navy," RADM Michael R. Johnson, CEC, USN, Commander NAVFAC and the Chief of Civil Engineers said in his congratulatory message.

"He constantly demonstrates exceptional technical skills, meticulous attention to detail and a motivated '*Can do*!' attitude. He is most deserving of this prestigious award. Well done, Seabee!"



Dig this: Seabees assist maritime crew with a mysterious visitor

The normal calm of Naval Amphibious Base (NAB) Little Creek's beachline was interrupted when Seabees called from Construction Battalion Unit (CBU) 423 brought a 36-foot *Sei* whale ashore, found dead by Coast Guard officials floating near Craney Island in the Elizabeth River.

Bulldozers were used to dig a grave for the large mammal in the Little Creek beach, its final resting place after being held at Naval Station Norfolk the night before. They also set the stage for members of the Virginia Marine Science Museum's Stranding Team to perform a necropsy to determine the whale's cause of death.

"We hooked a towline to one of our D-7 bulldozers and essentially dragged the whale onto the beach," said Chief Steelworker (SCW) Scott Hill, Alpha Company chief for CBU 423. "The evolution couldn't have gone any smoother — it went off without a hitch."

An examination determined that the whale died after being struck by the bow of a ship, possibly as long as a week before it was found. There was no way of knowing whether the ship was military or civilian, but it was indeed a large vessel.

"We came to the Navy for help in this, and they definitely came through," said Sue Barco, who lead the team performing the necropsy. "This species is usually found in the open ocean. The whale could have been carried by the ship into the harbor, then dropped off after the ship slowed. The examination is consistent with a ship strike while the animal was alive."

The Navy has long been known to assist the civilian and maritime communities in various search, rescue and salvage operations — but whale carcass removal?

"Not since I've been here, but I know that NAB has assisted with dolphins and other water mammals who drift into the harbor," said Hill. "It just goes to show you that we're up for just about any task put before us."

The whale's actual time of death and physical causes will ultimately be determined after several days of tissue and blood analysis.



newsbreak

"... any man who may be asked in this century what he did to make his life worth while, I think can respond with a good deal of pride and satisfaction: 'I served in the United States Navy.'"

— President John F. Kennedy Address to the United States Naval Academy, Aug. 1, 1963

NMCB 1's Funeral Detail Honors Those Who Served

roops from all the armed forces feel pride in their service to their country, and rightly so. But a group of Seabees from Naval Mobile Construction Battalion (NMCB) 1 has an additional reason to be proud of their Naval service. These Seabees provide military honors for deceased veterans as members of the NMCB 1 funeral detail.



"We come out and pay our last respects to servicemen who have passed on, both active duty and retired," said Construction Mechanic 2nd Class (SCW) Brent Maher. "It's rewarding, because we get to render honors to people who have gone through the same things we have."

A funeral with full honors requires a team of 16 service members who perform a carefully orchestrated routine, beginning before the arrival of the funeral procession through the folding of the flag, a 21-gun salute, the playing of taps and the presentation of the flag to the next of kin.

"It feels good to be able to provide this service," said Equipment Operator 2nd Class (SCW) Levi McIntosh. "This gives us an opportunity to see why things are the way they are with the 21-gun salute and the flag folding. You feel bad for the family, but having them come up and thank you

The rifle squad (above) of NMCB 1's funeral detail stands at parade rest during a funeral at Biloxi National Cemetery. EO2 (SCW) Levi McIntosh (left, below) salutes the flag after passing it to BUC (SCW) Brian Coffee for presentation to the veteran's family.



afterwards gives you a good feeling."

"I enjoy it, and at the same time it makes me proud to be in the service," added Utilities Constructionman Mark Crubaugh. "I'm providing honors to those who have already given service to their country."

The men and women of NMCB 1's funeral detail are proud of the service they provide, and it shows in their professionalism. Few witness their efforts, but the return on their time investment makes the job worthwhile.

"It makes me feel good to give a last bit of respect to the servicemen who have passed on," said Maher. "The thanks and smiles we get from the family are really rewarding."

- JOC Daniel Pearson



JS NAVY PHOTO BY JO1 JOSEPH KRYPEL



CAMP PATRIOT, Kuwait — As thousands of U.S. Navy Sailors, Marines and other service people prepared to depart the Central Command area of responsibility, Camp Patriot's joint-service shipping stronghold lent a hand loading Conex-style "Bee-tainers" full of returning equipment.

With the extraordinary Navy Elevated Causeway System/ Modular (ELCAS/M) in the background (see story on page 34), the 'Gator Bees' of Amphibious Construction Battalions 1 and 2 provided beach management and loaded an Army Landing Craft Utility (LCU) vessel with military supply containers using the Rough-Terrain Cargo Handler, sort of a forklift truck on steroids.

Camp Patriot and the ELCAS/M were a key backload point in the North Arabian Gulf at the completion of primary combat operations. Camp Patriot's joint-service team was vitally important in the movement of military supplies required to complete combat missions in Iraq. It was home to more than 3000 Sailors, Marines, Soliders, Airmen and Coast Guardsmen forward deployed since January.

— JO1 Joseph Krypel



Gulfport Bee Helps Army, Marines **Prep Iraqi Plant for SECDEF Inspection**

BAGHDAD, Iraq - Symbolizing the importance of American special operations forces to Operation Iraqi Freedom, Defense Secretary Donald H. Rumsfeld arrived in Baghdad on an Air Force MC-130 less than a month after the fall of the Iraqi capital city.

"When one looks back on this effort, I think and pray, indeed, that what would be significant is that a large number of human beings - intelligent and energetic - have been liberated, and that they are out from under the heel of a truly brutal, vicious regime," he said in Basra.

In Baghdad, Rumsfeld met with coalition leaders at the Saddam Hussein's Abu Gharib

Palace and toured a power plant where Iraqi civilians were working with U.S. military engineers to reestablish the electrical, water and sewage systems.

Shown above, Iraqi water treatment facility inspectors Army Lt. Col. Matt Gapinski, 358th Civil Affairs Team Leader, U.S. Marine Maj. Robert Carr, Civil Affairs Team Leader and Seabee Utilitiesman 1st Class Chyne Greek, with Naval Mobile Construction Battalion 7 from Gulfport, Miss. assess damage sustained by a water treatment facility.

UT1 Greek and his colleagues were assigned to the 15th Marine Expeditionary Unit, working with city government officials to restore order to the city.



brieflv noted

Here to help EO2 Chris Amescua, from Stevensville, Mont., and EOCS (MDV) John Green, from Alliance, Ohio, both Seabees from UCT 2, carry an auto accident victim to an ambulance near the city of An Aumaniyah,

Iraq, April 30. The woman's vehicle overturned in front of Task Force Charlie's Seabee Engineer Reconnaissance Team



convoy, which immediately stopped to aid the woman and her husband. The two Iraqis suffered only minor injuries. "Americans do nice things, they didn't come to hurt. Thank vou!" said one local ... Punkin Patch Land Nav On a sunny fall 2002 weekend, Naval Mobile Construction Battalion (NMCB) 4 Seabees joined their children, known as "Kiddie SCWS

Warriors," for some land navigation at Faulkner Farms. Amber Baerwald and mom, Construction Electrician 1st Class



(SCW) Tammy Baerwald (right), finally reached an agreement on this pumpkin during H their visit to the pumpkin patch ... SOYbased Medina Machinist's Mate 1st Class (SW) Marc Medina, assigned to NSA Naples and attached to the Public Works Department as the LPO in the Seabee Division, was named the 2002 Regional Sailor of the Year at a ceremony held Feb. 6 in the "Ciao Hall" at Capodichino ... Bee-hiving The worker Bees of NMCB 3 Detail Diego Garcia completed a

Chapel Entrance project. The crew finished demolition of the overhead concrete



canopy and the existing concrete pad, placed footings, columns and concrete pad and are installing the formwork for the concrete overhead placement ... Bravo Zulu Only two weeks after hauling in Sailor of the Year for Naval Station, Rota, Utilitiesman 1st Class (SCW) Joseph Ramos earned the same title for Commander, Naval Activities Spain ... BZ II The Naval Construction Forces Command announced the selection of active and reserve battalions for Atlantic and Pacific Battle 'E' awards. Active duty battalion winners were NMCB 133 for the Atlantic and NMCB 4 for the Pacific; Reserve winners were NMCB 14 on the Atlantic side and NMCB 28 for the Pacific. RADM Charles R. Kubic, Commander NCFC, said "With high intensity focus on military unit readiness and our global response to calls for Seabees, the Naval Construction Force again performed miraculous construction feats all over the world. I applaud the strong motivation and outstanding achievements by all Seabees."

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newsbreak

'Kids are Kids'

NMCB 15 Builds a Playground, and Hope, for Iraqi children

STORY BY JO2 FARRUKH DANIEL PHOTOGRAPHY BY PH1 (SW) ARLO K. ABRAHAMSON

AL HILLAH, Iraq — The Seabees of NMCB 15 had scarcely completed the playground job at the Al Hillah West Primary School when it was effectively overrun by excited Iraqi school kids. This had been a relatively simple assignment for the battalion of Seabee Reserves from Kansas City, Mo., but it meant the entire world to the innocent children of Al Hillah.

The school, which is a boys' school in the morning and becomes Al-Azwar Primary School for Girls in the afternoon, sits in the shadow of the ruins of ancient Babylon, whose history extends back to the beginning of recorded time. The location has been home to several major empires, and the site of countless events that have affected the course of history for most of the western world.

So, after several millennia, NMCB 15 also brought a historical first to this region. They built the children a playground. May 26, CAPT Albert Garcia III ceremonially broke through the 10-foot wall around the school to create a gate opening onto a brand-new courtyard — filled with playground equipment the Seabees here built from scratch.

LTJG Daniel Niec said, "We just *built* it. We didn't have any plans or blueprints, but one of the guys had built something similar for his kids back home, so we got the material and put it together."

Some of the material came from unusual sources. "Some of the pieces we used on the equipment came from a Republican Guard base not far from here." Niec said.

Once the wall was breached, the children just poured through. And they did what kids all over the world do — they swarmed the equipment, and they didn't always form orderly lines to wait their turn.

"We've had to settle some disputes and make them take turns, just like you would on any playground," noticed Petty Officer



BU3 John Steward (below right) pushes an Iraqi boy on a swing set that is part of a newly constructed playground (above) designed and built by NMCB 15 Seabees. While her mother looks on (below left), a young Iraqi girl receives medical attention from HM2 Jerry Stinson at the school in Al Hillah.



Dotson, a Seabee Reservist from Des Moines, Iowa. "Kids are kids wherever you go."

NMCB 15 worked on renovating six schools in the city. "Every school in Al Hillah was falling apart," Niec explained about the difficulty of the projects. "They had been looted right down to the light fixtures, sinks and toilets, and the government had cut the main power line to a couple of the schools because they hadn't paid their electric bills.

"We also had to deal with the fact that some schools had been used to store munitions before the war. That adds a whole new level to job-site safety," he added.

The Seabees did more here than build a playground. They refurbished the desks, rewired the electricity, installed new lights, ceiling fans and chalkboards. They applied a fresh coat of paint and painted murals on walls all over the school.



According to Construction Electrician 1st Class Scott Cox, site supervisor for the project, "We hired local citizens to do most of the cleanup and the painting, so we could put money back in to the economy right away. These guys worked very hard. This is their neighborhood. They took a lot of pride in the work they did here."

And obviously, so did the Missouri Bees.

When asked to describe his wartime contribution, Construction Electrician 2nd Class Daryl Dotson of NMCB 15's Air Detachment had a succinct reply.

NMCB 7 Raises the 'Freedom Chapel'

STORY BY CHAPLAIN LTJG TRENT JESSUP PHOTOGRAPHY BY ENS MATT BARNES

CAMP CASTLE, Kuwait — It's rare for a Navy chaplain to ever experience the privilege of building a chapel. Then again, not too many chaplains have the privilege of working with the Seabees.

I consider myself fortunate: I'm on my first deployment, at my first duty station, and I'm the Command Chaplain for Naval Mobile Construction Battalion (NMCB) 7. Shortly after I arrived at Camp Castle, I was able to assist my Bees in building what we have christened the Freedom Chapel.

The 26th chapter of the Book of Exodus tells of how God dictated to Moses the "blueprints" for the first tabernacle ever built by the Israelites. In 1 Kings, chapters five and six describe in vivid detail the building of the temple. Most chapels erected during times of war resemble, out of necessity, that biblical tabernacle. In other words, th e y 'r e tents! However, the Seabees of NMCB 7 had much more ambitious plans. With a true "*Can Do*!" attitude, they set out to build a structure that any chaplain would be proud to occupy.

We built a 14-foot by 32-foot structure using 2x4s and plywood, topping it off with a white corrugated metal roof. Not your typical SEA hut, the chapel is more noticeably distinct owing to its 20x12-foot porch and the gable roof over the front door. The 'Do Crew II: BU2 Marc Willett, Lake Charles, La.; BUCA Christopher Woods, Jacksonville, Fla.; BU3 Raymond Rankins, Chicago, III.; SW1 Paul Donnigan, Sherman Oaks, Calif.; LTJG Trent Jessup, Mt. Airy, N.C.; BU3 Jennifer Waltz, Randolph Center, Vt.; and BU1 Ronaldo Reyes, Parma Heights, Ohio stand proudly in front of the completed Camp Castle Chapel. Catholic and Protestant religious services, Bible studies and more are held here regularly.

Other noteworthy features include steel exterior doors, a dropped ceiling, electricity and air conditioning. Inside are two offices, complete with built-in desks

and shelving, and a large multi-purpose room.

Located in the center of Camp Castle, the wartime chapel serves many purposes. The battalion musters in front of it every morning for quarters.

During the day, the chapel is constantly occupied, serving as the gathering place for Bible studies and religious services, various meetings and training, as well as functioning as a collection point for care-package items, free religious materials and the command library. I'll freely admit to swelling with pride as several chaplains and Religious Program Sailors serving the Marine battalions at nearby Camp Fox recently gathered for a meeting at the Freedom Chapel. No other battalion around has a chapel that can compare, and our visitors were clearly impressed.

Obviously, construction isn't my day job, but I was grateful to swing a hammer, erect trusses and climb the ladders — with the safety instructions that went along with each lesson. It made the chapel even more special for me to know I had played a small role in building it.

But more importantly, the chapel will remain when we depart — and I gained admiration and appreciation for who my troops are and what they do; for how truly blessed I am to be able to serve such an exceptional group of Seabees. (#)



Starting out strong ...

NAVAL BASE VENTURA COUNTY, Calif. — Seabees of Naval Mobile Construction Battalion (NMCB) 40 — the "Fighting Forty" — conduct the 1.5-mile run portion of the Navy Physical Fitness Assessment Test. NMCB 40 is homebased at Naval Base Ventura County and currently deployed to Okinawa. US Navy photo by "Fighting Forty" PHAN Lamel J. Hinton.



PELELIU ISLAND – BU1 Scott Heubler, from Naval Mobile Construction Battalion 74 Civil Action Team CAT 74-01, shows respect at the Bloody Nose Ridge US Marine Corps Memorial. The Seabee battalion was on its regularly scheduled sixmonth deployment to the Republic of Palau.

Desk set: NMCB 4 Bees Hammer Together Order in Iraq

AD DIWANIYA, Iraq – Safe school buildings, conducive to learning, are needed to educate the young in any location; and a judicial building and a police station that enable the police to keep the peace are all public services many Americans take for granted. Here in Iraq, the Seabees are jumpstarting such important rebuilding projects.

Strong communities are the key for a nation's stability and Naval Mobile Construction Battalion (NMCB) 4 is providing valuable assistance in rebuilding the infrastructure, one community at a time.

One Seabee crew that provides internal and external support for the rebuilding effort is the Pre-Fabrication yard, or "Pre-Fab" for short.

"Safety, quality and production have been great," said Builder 1st Class Cloves Tennis of Kiowa, Kan., crew supervisor. "This crew is good! They require little supervision and come to work knowing what

they have to do, ready to work."

The NMCB 4 Seabees have built more than 600 pieces of furniture here, ranging from desks and tables for area schools to shave tables, showers and benches for Marines in the area.

Area schools d e s p e r a t e l y needed the Pre-Fab yard's sturdy desks and chairs. However, before furniture could be moved in, a good cleaning of the schools was required — and it went far beyond a little Windex and some sweeping.

Marines and Seabees combined efforts to recreate a positive environment for learning. Windows and electric ceilings fans were installed, along with much needed electrical repairs.

Now the schools are cleaned up, furniture is replaced and the building is ready for classes to start. The historic initial step in rebuilding a community is nearly complete.

Interestingly, none of the damage done to the schools was a result of the war, but from looting that occurred during and after the war. Vandalism remains a problem.

Steelworker 1st Class Terry McCune of Tucson, Ariz., one of the project supervisors, said, "Vandalism is a big concern. My guys have done a *lot* of work here and we would hate to see anything happen to the work they have proudly put in place."

NMCB 4 Seabees are fully committed to assisting Ad Diwaniya and the Iraqi people re-build their community. New school desks may indeed be the foundation bricks in Iraq's future.

- SWC Bryan Bliss

Return of the SEABEE JEDI, PART I

As coalition forces pushed forward on missionoriented tasks in the broad Central Command area of operations in support of *Operation Iraqi Freedom*, Seabee and Navy Civil Engineer Corps engineers servicing the 250-mile-long supply line had to use speed and ingenuity.

To devise a crossing of the swiftly flowing Saddam irrigation canal in southern Iraq's Tigris-Euphrates Valley, RADM Charles R. Kubic turned for expert help to a coterie of engineers he fondly calls his "Seabee Jedi."

See the extended story on page 52 in this issue.

April 1, a day before elements of the 1st Marine Division crossed the Tigris to close within 18 miles of Baghdad, RADM Kubic included the bridge site on a whirlwind inspection of Marine Engineer Group projects and staging areas along the main supply routes he commanded.

Below, members of Naval

Mobile Construction Battalion (NMCB) 74 quickly and safely work all day and all night to complete a medium girder Mabey-Johnson bridge for a main supply road in central Iraq.

NMCBs 74, 21, 4, 133, Support Unit 2 and Underwater Construction Team 2 worked bridge projects. *OIF* is the multi-national coalition effort to liberate the Iraqi people, eliminate Iraq's weapons of mass destruction and end the regime of Saddam Hussein.



newsbreak



NMCB 40 Fighter Wows Crowd in Olympic Thrilla

Steelworker 1st Class (SCW/SW) Keith Spencer (left) of Newark, N.J., a member of NMCB 40's Charlie Company, represented the Navy as a heavyweight division championship contender in the National Boxing Tournament held at the Olympic Training Center.

Although Spencer outweighed and outreached his worthy opponent, the US Army's Carlos Ibrerra, the judges declared Ibrerra the winner on points in a fourthround decision.

CBCPH Becomes NFELC

OPNAV Notice 5450 of May 20, 2003, was a small document that marked a big change in the Seabee continuum. Henceforth, the command CBCPH will be called the Naval Facilities Expeditionary Logistics Center (NFELC). The postal address is unchanged.

The name change was implemented to better reflect the value proposition and the mission of the command today. CBCPH also doesn't identify the business line and marketspace that fits the functions performed by the command.

Renaming will better align the image of the command with its mission — and provide a name that tells people the command is all about expeditionary forces and their logistics needs.

Effective June 1, NFELC will be an Echelon 3 command reporting to NAVFAC, responsible to generate, fulfill and sustain the warfighting platform for the Naval Construction Force and other naval expeditionary forces.



Seabee Memorial Sculptor De Weldon Dies at 96

Sir Felix de Weldon, who sculpted the Seabee Memorial located on the inbound side of the Memorial Drive entrance road into Arlington National Cemetery, died June 2 of congestive heart failure at a nursing home in Woodstock, Va. He was 96.

De Weldon reportedly created more than 2000 monuments all over the world since 1924, when he won a national sculptor contest in his native Austria at age 17. He later came to the US and served in the Marines Corps and in the Navy in World War II.

His sculpture of Marines raising the flag on Iwo Jima is a well-recognized Washington sentinel and one of the world's best-known memorials to valor. Inspired by a Pulitzer Prize-winning photograph by Associated Press photographer Joseph Rosenthal, de Weldon's Marine Corps War Memorial took hundreds of assistants, and more than nine years, to complete.

Seabee Combat Warfare Program Updated

NAVFAC ANNOUNCED a Seabee Combat Warfare (SCW) personnel qualification review. The goal was to update enlisted Personnel Qualification Standards (PQS) and recommend revisions to the Seabee Combat Handbook and other SCW-related training materials.

The PQS, Seabee Combat Handbook and Construction Battle Skills Guides needed revision to reflect current operating practices and to align standards with the rest of the Navy. These publications were identified as requiring updates:

- NAVEDTRA 43904 common core PQS Sept. 1998
- NMCB PQS Sept. 1998
- PHIBCB PQS Sept. 1998
- UCT PQS Sept. 1998
- NCFSU PQS Sept. 1998
- CBMU PQS Sept. 1998
- Construction Battle Skills Guide p-1160, Book 1 (Aug. 2001)
- Construction Battle Skills Guide p-1161, Book 2 (Aug. 2001)
- Construction Battle Skills Guide p-1162, Book 3 (Aug. 2001)
- NAVEDTRA 14234 Seabee Combat Handbook, Vol. I 1993
- NAVEDTRA 14235 Seabee Combat Handbook, Vol. II 1996

To facilitate support and input from as many construction units as possible, reviews were conducted March 3-7 at CECOS in Port Hueneme and April 21-25 in Gulfport.







Bronze Star Awarded to LCDR Byron M. Hudson

MCB CAMP LEJEUNE, N.C. — LCDR Byron M. Hudson, Alpha Company Commander for Naval Mobile Construction Battalion (NMCB) 14, was awarded the Bronze Star Medal by RADM James McGarrah, Deputy Commander, First Naval Construction Division, during a field award ceremony here April 2.

Executive Order 9419, signed Feb. 4, 1944 by President Franklin D. Roosevelt, established the Bronze Star Medal "with accompanying ribbons and appurtenances, for award to any person who, while serving in any capacity in or with the Army, Navy, Marine Corps, or Coast Guard of the United States on or after Dec. 7, 1941, distinguishes, or distinguished, himself by heroic or meritorious achievement or service, not involving participation in aerial flight, in connection with military or naval operations against an

enemy of the United States."

During Operation Enduring Freedom, from Dec. 26, 2001, to Aug. 5, 2002, Hudson's meritorious service directly impacted the success of combat operations in the tactical area of responsibility. While assigned as the Coalition Forces Land Component Command's (CFLCC) airfield construction officer, he was responsible for assessments of five forward operating bases in Afghanistan, Pakistan and Uzbekistan.

As CFLCC's recognized expert on airfield construction and maintenance, he personally crafted successful repair courses of action and briefed senior leadership regarding the maintenance and repair of mission critical airfields at Kandahar and Bagram, Afghanistan.

His efforts in identifying needed forward operating base perimeter defensive improvements resulted in the identification of vulnerabilities, which were addressed directly by the Commander of the Task Force Rakkasan, 101st Airborne Division, Kandahar. This effort greatly improved the defensive posture of this forward operating base.

On his own initiative, he followed up on the vulnerability team assessment by developing a \$1.4 million military construction program for security improvements at a classified airfield location in the CENTCOM AOR. This effort is now scheduled for funding and execution.

During February 2002, Hudson led a joint CFLCC/US Army Corps of Engineers mission to assess and develop repairs to the Pasni Air Base, Pasni, Pakistan. This high-visibility project required him to assess damage caused by US aircraft, develop a complete repair

scheme and brief six flag officers, including those from the Pakistani Air Force.

During April 2002, Hudson was instrumental in assisting coalition partners in developing defenses of Khowst Airfield. His insight and recommendations resulted in a reorganization of the perimeter.

When conventional repair methods failed at Bagram Airfield in July 2002, Hudson researched, selected and pressed for an innovative repair solution, using a proprietary



RADM McGarrah presents the Bronze Star to LCDR Hudson.

product and troop labor. Expeditious repairs, completed in a previously unheard of timeframe of days versus weeks, allowed continued flights of Air Force A-10 Warthog attack aircraft and other fixed-wing close air support.

Without Hudson's expertise, tenacity and skill, COMCFLCC and CJTF-180 would have had to shut down airfield operations. This accomplishment had a singular significant impact on continued conduct of combat operations and close air support.

CAPT(s) John Prien, CEC, USNR, commanding officer of NMCB 14 said, "The men and women of NMCB 14 are very proud of LCDR Hudson and what he accomplished while mobilized in support of *Operation Enduring Freedom*.

"All of his accomplishments were made under harsh conditions in areas where the threat of attack, unexploded ordinance and mines were a constant factor in the conduct of operations. These successful efforts are a testament to his professional dedication and attention to duty. He is a credit to the Civil Engineer Corps, the Navy Seabees and to NMCB 14."



In the secret opening days of the war, Seabees from NMCB 74 were

WEAPONS OF MASS CONSTRUCTION

STORY BY JO1 STAN TRAVIOLI AND JO2 (AW) TRACI FEIBEL PHOTOGRAPHY BY PH1 BRIEN AHO

BEGINNING IN THE EARLY DAYS of October 2002, the Seabees of Naval Mobile Construction Battalion (NMCB) 74 arrived in Kuwait to undergo a 90-day concrete placing project. Working nonstop, the Seabees constructed a 12-inch thick aircraft parking apron nearly 20 acres in size — the largest Seabee concrete placing project since World War II.

What was once an open stretch of sand across a portion of a jointly owned U.S. and Kuwaiti Air Force base became a critical parking apron for fighter jets traveling between the sea and the war scene.

"We worked literally around the clock for 84 days," said NMCB 74 Commanding Officer CDR Cliff Maurer. "In the first 60 days, the only day the troops had the whole day off was Christmas Day. Our Christmas holiday lasted just 18 hours, similar to a typical workday for Seabees on deployment, although this particular job site was running 24 hours a day, seven days a week." The Seabee crews had to move nearly one and a half million cubic feet of earth. Some portions of the concrete pad had to be raised more than six feet to make it level, but the earth leveling work had to be done six inches at a time.

In a laborious process, the Bees placed fill material, rolled it flat, checked it for the proper compaction and then moved on to place another six inches.

"We collapsed the local market's fill material," said Chief Builder (SCW) Wayne Jensen, one of the site foremen.

The local concrete makers couldn't keep up with the Seabees, either. The four local companies hired would bring as much product as they could each day, but it was never enough. "We poured as much as they supplied," said Jensen.

"At one point, we actually had some down time because they just couldn't bring us the material as fast as we could place it," Chief Builder (SCW) Ray Roberts echoed.

Working nonstop through dust storms, rainstorms and extreme desert winter with

bone-chilling temperatures, NMCB 74 completed the largest single-battalion construction project executed in the last 30 years.

Exceeding a battalion's normal tasking for a full six-month deployment, the project was completed in true Seabee fashion — using only a third of a normal-sized battalion, and in half the time.

Opening the pad to Marine Corps attack jets, a ribbon-cutting ceremony was held and attended by RADM Charles R. Kubic, Commander of the First Naval Construction Division and the 1st Marine Expeditionary Force (I MEF) Engineer Group (MEG), accompanied by numerous Kuwaiti dignitaries.

"That made it all worthwhile when the first F/A-18 'Hornet' pulled onto the pad," beamed Jensen.

Essential aircraft now have a place in a vital location to touch down and rest during theater flight ops. The project proved again that Seabees continue to follow their tradition: building something from nothing, with heart and sweat, anyplace on earth.





















STORY & PHOTOGRAPHS BY JO1 JOSEPH KRYPEL

> The Seabees' sophisticated new Elevated Causeway System/Modular provided a big helping hand to a big job in OPERATION IRAQI FREEDOM

AMP PATRIOT, Kuwait — In the minds of many here, the real "shock and awe" that will be most remembered from *Operation Iraqi Freedom* won't be from any air campaign or the huge televised explosions causing destruction to enemy troops and secret military headquarters. Instead, the sharpest memories will be of the awesome offload and backload of thousands of Marines and the tons of fighting equipment and ammo meant to supply all American military services. >>



In what is being called the largest amphibious operation in the history of the United States, Camp Patriot, a "purple suit" jointservice, multinational base camp constructed in Kuwait by amphibious Seabees, was a key contributor to bringing the fight to Iraq and then it will help bring our people and equipment out again.

The methods and means of moving troops and supplies in a war zone are varied, but one of the primary tools built and used for the mammoth effort is the Navy's innovative Elevated Causeway System–Modular, or ELCAS(M), which is owned and operated by Amphibious Construction Battalion (ACB) 2, homeported in Little Creek, Va.

The ELCAS(M) is an extraordinary blend of ingenuity and engineering, designed to support large cargo offloads in areas where no pier facilities exist or, as in the case of Camp Patriot, where facilities or scheduling of movement need to be enhanced with additional resources. It's an expeditionary pier that bridges the surf zone, providing a crossing point between lighterage, cargo vessels and the beach.

Used previously only in exercises, the "portable pier" is in a war operation for the first time, supporting combined-service Joint Logistics Over The Shore (JLOTS) operations. "This is pretty monumental," explained LCDR Timothy Cowan, operations officer of ACB 2. "This is the first time that the system has been put into use for a wartime operation, and as importantly, it was the effort of all the PhibCBs that made it a reality."

Cowan explained that while the ELCAS(M) is an asset of ACB 2, it was constructed in a joint effort with ACB 1, homeported in Coronado, Calif.

"We have trained together for years, and while we may own it, this was a *Seabee* project — not an East or West Coast project," Cowan said.

The Navy has only these two hard-working Seabee outfits responsible for amphibious construction, one on each coast of the US and both were at Camp Patriot, Kuwait.

ELCAS(M) construction began April 1 and the 1400-foot pier was completed April 18. Among busy beaches and across limited real estate, crews of 48 Seabees per shift were hindered by equipment and weather delays, yet the "Combined *Can Do!* Gator Bee Team" still managed to complete its work three days ahead of schedule.

The ELCAS(M) is capable of a 3000-foot pier length and has a roadway spanning 24 feet. It features two 175-ton cranes, two tractor-



CAMP PATRIOT SEABEES SAID 'CAN DO!' WHEN CALLED ON T THEIR REACH ACE



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Master Chief Construction Utilitiesman David Daniels, 41, a Seabee Master Diver from Camp Springs, Md., surfaces from a dive with his Kuwaiti counterparts during a joint debrisclearing operation conducted at Camp Patriot. Daniels and the members of Underwater Construction Team (UCT) 1, homeported in Little Creek, Va., worked side-by-side with their Kuwaiti hosts on a daily basis to reshore piers and clear underwater debris that formerly held beaches hostage to tidal schedules. By removing the debris, the coalition dive operation led by UCT 1 ensured the safety of watercraft engaged in amphibious and offload operations. Camp Patriot was home to nearly 3000 active duty and reserve Sailors, Soldiers, Marines, Airmen and Coast Guardsmen forward deployed in support of Operation Iraqi Freedom.


trailer turntables and lighting for 24-hour operational capabilities.

Structural support is provided by 24-inch steel piles that come in 30-foot-long pieces. The piles are welded together, then driven into the ocean floor until they reach a sufficient depth to support the load-bearing capacity.

According to Chief Steelworker Charles Bailey, the project's leading chief petty officer, the soil survey at the ELCAS(M) site disclosed the ground was very yielding.

"Because the soil was so soft, we had to use much longer lengths of pile than we're routinely used to," explained Bailey. "All the piles used were more than 76 feet long, and some used were as long 95 feet."

The pier can accommodate three-wide and five-wide barge ferries, as well as Army and Navy Landing Craft Mechanized (LCM 8) vessels, Landing Craft Utility (LCU) vessels and Logistics Support Vessels (LSV).

The causeway roadway and pierhead are capable of handling heavy-hauling truck traffic in both directions at once. Cargo throughput is managed on both sides of the expeditionary pier.

According to Chief Equipment Operator Ricardo Hernandez, one of two safety officers assigned to the project, preparation and construction of the unique ELCAS(M) were completed incident free.

"The site itself had to be inherently safe," commented Hernandez, an ACB 1 crew member. "Everyone had to know the job, the safety aspects and what precautions were necessary to achieve this tasking safely. Everyone worked together to ensure that adequate safety precautions were continuously taken. We're proud of everyone's 'safe-thinking' work ethic."

Even prior to the pier's completion, busy Navy barge ferry operations had moved more than 1500 containers in-stream, while Camp Patriot personnel offloaded more than 15,000 containers and pallets that were pushed forward to the fight.

It was expected that thousands more containers containing military supplies and equipment would transit the ELCAS(M), while the 'single-service' team — without regarding for the military branch identification tape on a uniform —continuously provided the support to bring *Operation Iraqi Freedom* to its eventual end. Partnered with the PhibCBs were nearly 2500 active duty and reserve Sailors, Soldiers, Marines, Airmen and Coast Guardsmen. Providing the leadership as well as the means to expedite the process are the hardcharging "ACBees" of the US Navy.

O MAKE A FOOTHOLD IN THE SAND — AND THEY EXTENDED ROSS THE BEACH.

>>

Seabees assigned to ACBs 1 and 2 smoothed the beaches for future operations in preparation for the completion of Camp Patriot and the Elevated Causeway System-Modular. ELCAS(M) is an innovative expeditionary pier facility for use where port facilities are damaged or nonexistent, or where surf conditions preclude direct discharge of cargo and equipment ashore. ELCAS(M) provided the capability to offload containers from beyond the surf zone to the shore via wheeled vehicles on the elevated roadway structure. The Seabees were deployed in support of Operation Iragi Freedom, the multi-national coalition effort to liberate the Iragi people, eliminate Irag's weapons of mass destruction and end the repressive, dictatorial regime of Saddam Hussein.



The Nuts and Bolts of ELCAS/M

The remarkable ELCAS(M) is a system of temporary pierhead and roadway made from connected, P40-series steel pontoons, elevated on piles extending seaward across the surf zone up to 3000 ft from the beach. The eventual system installation length is determined by the requirement to reach a maximum water depth at the pierhead of 20 ft [Mean High Water (MHW)].

The underside of the pierhead and roadway structure is in-

stalled a minimum of 15 ft above the Mean Low Water (MLW) level, based on a maximum tidal range of 8 ft. The primary function of the system is to provide for throughput of containerized cargo offloaded from lighterage at the pierhead, which is carried by trucks to the beach.

The entire system is made up of the ELCAS(M) facility, the marshalling yard system and the barge ferry system. The ELCAS(M) facility is defined as an elevated modular pontoon structure (or pier) that begins with a beach ramp, transitions to a variable length roadway, and extends to the seaward point of the pierhead. It includes the Pier System, a Lighting System, Safety, Navigation and Cargo Handling Systems.

The 24-ft-wide beach ramp portion of the ELCAS(M) pier system provides a transition from the elevated roadway to the beach, accommodating all necessary military vehicles. The variable length roadway is also 24 ft wide and is capable of supporting two-way truck traffic. The length of the roadway from the beach ramp to the pierhead can be varied up to a total of 67 pontoon sections (2,680 ft) to accommodate varying beach gradients to satisfy the lighterage water depth requirement.

The system is normally installed, operated and retrieved by an Amphibious Construction



System Mission

The mission of the ELCAS(M) system is to provide logistic support to the Marine Corps and Joint Expeditionary Forces. Where port facilities have been damaged or are nonexistent, or where surf conditions, beach gradient or other hydrographic conditions preclude direct discharge of cargo and equipment ashore, the ELCAS(M) provides the capability to off-load containers from lighters beyond the surf zone and quickly move the cargo ashore via wheeled vehicles on the elevated roadway.

The majority of ELCAS(M) components have been designed to be either International Standardization Organization (ISO) compatible or are capable of being stored and transported in ISO containers. Once installed, the system is designed to be disassembled, repacked, and back-loaded aboard a T-ACS vessel or commercial containership.

Operational Requirements

The ELCAS(M) assists Marine Corps and Joint Service Expeditionary Force logistic support requirements, specifically through Joint Logistics Over the Shore (JLOTS), Logistics Over the Shore (LOTS), or Amphibious Assault Follow-on Echelon (AFOE) operations, by providing a suitable port facility for the transfer of containerized cargo from displacement-type lighters.

To satisfy the requirements for timely delivery of resupply and sustainment of supplies,



the complete 3000-ft ELCAS(M) facility must be installed within 168 hours — only seven days. For a satisfactory mission completion, the installation time constraint requires tight scheduling and parallel operations. Therefore, as equipment on the first barge ferries begin arriving at the beach, the major installation events have already begun in parallel.

For example, off-load operations, such as ship-to-shore transportation and unloading pontoon barge ferries, continue while receipt and stowage of hardware, beach end and roadway erection, and installation of operating systems are in process.

The ELCAS(M) has been designed to interface with Navy Lightered (NL) causeway barge ferries, Navy Mechanized Landing Craft (LCM-8), Utility Landing Craft (LCU, 136.25 ft overall length), Lighter Aboard Ship (LASH) barges and Seabee barge lighterage. The ELCAS(M) cargo handling system is capable of transferring fully loaded 40-ft ISO cargo containers (maximum weight of 67,200 lb) from the above lighterage.

The ELCAS(M) facility cargo handling system is required to provide a cargo throughput rate of 370 20-ft container equivalents (TEU) per day in modest Sea State 1 weather conditions.

As weather conditions degrade, the ELCAS(M) facility must remain capable of a cargo throughput of 330 TEU per day in rougher Sea State 2 and 200 TEU per day in Sea State 3.

In order to adequately support these throughput rates, the facility provides a pierhead arrangement outfitted with two cargo cranes and two vehicle turntable assemblies to allow for cargo handling on both sides.

Lighting

Two mobile floodlight trailers provide temporary or mobile lighting for marshalling yard nighttime operations prior to the installation of permanent lighting.

Following the installation of permanent lighting, and as necessary, these mobile lighting units are used to provide nighttime lighting to the barge ferry access area, the empty container stowage area and any other areas of the operating theater having insufficient lighting.

The floodlight trailer is a selfcontained, diesel engine-driven, portable generator set equipped with four 1000-watt floodlight fixtures mounted on a versatile telescoping tower.

The permanent or fixed marshalling yard lighting is part of the ELCAS(M) general lighting system. Six lighting standards, each supporting three 1000-watt lamps and their ballast, are provided for the marshalling yard permanent or fixed lighting.

The light standards are 36 ft high and are mounted in empty pile bins. For installation into an empty pile bin, a mounting bracket that clamps around a bottom cross-beam of the pile bin is provided for each marshalling yard light pole.

Advantages of the ELCAS(M) facility over previous or comparable systems include initiation of construction from the beach vice the sea, in addition to important ISO compatibility of all components (exclusive of support vehicles) using the containerization methods, and extensive interchangeability of the pontoons. \textcircledightarrow



Using an ingenious system of interlocking segments not unlike the toy Lego[™] blocks many played with as children, the ELCAS/M can be extended up to 3000 ft into the surf, far enough to reach cargo ships under all foreseen circumstances. The key to "throughput," or volume of cargo reaching the beach, is the turntable at the pierhead. An 18-wheel flatbed, for example, can drive head-in, be loaded to the gunwales with essential cargo, and the turntable rotates the package 180 degrees to facilitate a straight-off departure. The ELCAS/M system is key to effective JLOTS by providing a suitable port facility for the transfer of containerized cargo from displacement-type lighters.



The Desert Bees: NMCB 74 - The 'Do Crew



Left to right, top to bottom: UT3 Brian Campbell, BUCN Jason Bailey, BUCN Manual Colon, BUCN Eddie Rodriguez, BU2 Jeremy Grey, SWCN Michael Snider, BUCN Stormi Young, BU2 Nick Neeley, BUCN Bobby Williams, UTCN Brandon Belew. Brothers – and sister – in arms, somewhere in time, somewhere in sand.





CONSTRUCTING CAMP PATRIOT

A one-time quiet little spot in Kuwait was transformed into a key naval base for the prosecution of the war.

CAMP PATRIOT, Kuwait – With remarkable speed and dedication to task, the \$18 million Joint Kuwait Naval Base (KNB) Enhancement Project and Camp Patriot build-out were completed in less than five months.

US Navy projects focused on contingency operations in support of *Operation Iraqi Freedom* (OIF) the creation of Camp Patriot, and upgrade of base infrastructure to support ongoing operations for the Navy's special warfare units working out of KNB. Army projects were focused on establishing Joint Logistics Over The Shore (JLOTS) capability at KNB and creating a more permanent presence in support of watercraft pre-positioning directives. The one-time quiet little base was transformed into a key naval base for the prosecution of OIF.

The KNB Enhancements Project was a joint services development. The Navy removed landside and seaside obstacles, built staging areas, a ramp for Landing Craft Air Cushion (LCAC), wash rack, and a new helicopter pad to support OIF and future operations. Army projects included a 10,000-sq ft office and parts storage building, 35,000-sq ft covered storage building for housing causeway sections, telephone/fiberoptic communications, force protection, as well as renovations to the Port Operations Center and Pier Security Tower at KNB.

In addition, Camp Patriot projects included a gray-water removal system, fresh-water conveyance system and an upgrade to base force protection with security towers and entry control points to support a maximum population of 4500. Included were power generation and air conditioning projects for the camp that provided six megawatts of power for the base camp and air conditioning load. The AC provides 2500 tons of cooling and was completed just in time for the onset of Kuwait heat. A total of 27 projects at KNB made it the premier base in Kuwait.

Key to the approval process was a commitment by the Navy and Army to provide onsite construction management and quality assurance throughout the duration of the work. An early decision by the Navy and Army to utilize the NAVCENT Force Civil Engineer and ROICC offices as



SEABEE WORK TO E

a clearinghouse for all construction served to maximize the use of available subcontractors and limited construction materials within Kuwait.

One of the notable projects was removal of obstacles on the North Beach at KNB. This included the removal of 32 concrete blocks of about 62

SCENES: SANDBAGS FOR FORCE PROTECTION; THE NIGHT GALLEY; GREET



US NAVY PHOTO BY PH3 AARON PINEDA





STABLISH THE BASE WENT ON 24/7

tons each and the removal of an old pier abutment and four sunken barges. Work was completed by Jan. 1, 2003, in time for the first offload of equipment and personnel from the amphibious task forces.

Another project was the completion of 12,000 square meters of asphalt for the ammunition staging area near the South Beach. This project was completed in less than 30 days to support the offload and onward movement of US Marine Corps ammunition during the first week of January 2003.

Projects working simultaneously with the construction of staging areas and the LCAC ramp included renovations to the Port Operations Center and Security Tower. The stand-up of the Combined Joint Logistics Command Center (CJLCC) to direct ship movements and offload through KNB was critical to the safe and successful offloads.

Managed by LT Jay Bieszke of Amphibious Construction Battalion (ACB) 1, the construction of Camp Patriot was also underway to support a projected 4500 personnel. NAVCENT engineers aided ACB 1 in the ordering and expediting of the delivery of materials for strongback tent production and other force protection construction.

Seabees from ACB 1, ACB 2, and Construction Battalion Maintenance Unit 303 constructed 267 strongback tents, expeditionary camp facilities, and all life support needed for the Navy, Marine, Army, Coast Guard and coalition tenants.

To ensure efficiency and operational effectiveness, projects were prioritized to so that Navy and Army operational commitments were met while optimizing the productivity of subcontractors doing renovations, demolition and placement of concrete and asphalt.

During the build-up to OIF, many projects had to be reprioritized to meet the needs of Marines, Navy, Army and coalition forces coming ashore at KNB.

The NAVCENT construction management staff was made up of LCDR John W. Johnson; LT Steve Stasick, ROICC Bahrain; LT David Wilhite, field engineer; and Terry Quinn, ROICC Quality Assurance. Construction design and onsite management oversight were keys to delivering the customers' requirements, quality construction and meeting operational deadlines for use of the projects.

Close coordination was critical between CAPT Donald Cook, Naval Beach Group 1, the KNB bed-down manager; CAPT Vinny Racanelli, ACB 1 commanding officer; the Army's 143rd Transportation Command (TRANSCOM) and the construction management staff.

Army Lt. Col. Greg Maida of 143rd TRANSCOM provided key customer acceptance standards for the enhancements at KNB and provided a daily key interface with the Kuwait Navy.

Lt. Col. Maida's direct involvement in defining projects that supported JLOTS operations was instrumental in the success of the construction continuing during operations.

ING THE MASTER CHIEF PETTY OFFICER OF THE SEABEES; WARFIGHTERS







BM2 Cecil McLaughlin from Danville, Va., turned 50 while deployed in to the US Central Command region as part of Operation Enduring Freedom.





ACBs Create New Range for Camp Patriot

STORY BY LT MIKE CHUCRAN, CEC, USN PHOTOGRAPH BY JO1 JOSEPH KRYPEL

Equipment operators from Amphibious Construction Battalions 1 and 2 constructed a new 300-meter weapons range within the Ammunition Supply Point at Camp Patriot.

What started as an improvement to an existing 300-meter range turned into the construction of a new facility. After meeting with the Kuwait Naval Base public works officer, a decision was made that a new range facility adjacent to the existing range would better suit the needs of the Kuwait military and coalition forces.

The range was used initially to test HMMWV-mounted .50 caliber machine guns that belong to the Kuwaiti military.

The project took 30 days and was completed March 30. About 1782 man-hours were spent moving tons of earth, constructing two 300-meter berms each 35 feet tall, and one 50-meter berm that is 45 feet tall.

Project supervisor EO1 James Streicher, of Spokane, Wash., was onsite from Day One as 64,000 cubic yards of earth were beginning to be moved.

"This project was a golden opportunity for the Seabees to shine," Streicher said. "We took a flat dirt field and created three small mountains in 30 days, while giving our equipment operators a chance to spend quality time on the bread and butter of our profession."

The workhorses throughout the project were the D7G bulldozers. Three bulldozers worked nonstop throughout the task.

This project afforded many of the company's junior Bees a significant amount of stick time in a bulldozer — and provided senior petty officers with an important leadership opportunity.

The new range was used for a variety of weapons, from 9 mm pistols up to .50 caliber machine guns. @

CONCEPT **COMPLETION:** The PhibCBs make freedom's footprint

STORY AND PHOTOGRAPHS BY JO1 JOSEPH KRYPEL

CAMP PATRIOT, Kuwait — "If you build it, they will come." That was the message given to the amphibious Seabees (PhibCB) of the West Coast months before Operation Iragi Freedom ever began.

"They" are nearly 3000 joint-service permanent residents and a rotating stampede of US Marines that kept "it" — the amphibious Seabee-built Camp Patriot — evolving to accommodate a population increasing since December 2002.

Naval Central Command (NAVCENT), forward deployed in Bahrain, tasked CAPT Donald P. Cook and Naval Beach Group (NBG) 1, homeported in Coronado, Calif., to design a base camp. When it came to the architecture of a camp, Cook got experts.

The Seabees of Amphibious Construction Battalion (ACB) 1, also homeported in Coronado, Calif., were the ones that had to build it — and build and build they did. "We spent months

preparing for this,"

explained Atlanta native LCDR George N. Suther, operations officer for ACB 1. "Our Seabees are accustomed to building and maintaining a beach camp that houses approximately 1200, but we had to excel beyond that and come up with a plan that would accommodate 4500."

Suther, along with his Charlie Company commander, LT Jay Bieszke, developed a site plan that allowed for the phased erection of the camp. Suther and Bieszke explained that concentration was placed on developing a limited amount of real estate, while continuing to focus on force protection and centralized amenities.

"We had a perceived shortfall," explained Suther, "and that was that our battalion wasn't designed to handle such a large tasking." Perceived was all it turned out to be. According to Suther, the leadership at the unit level really banded together and that made the difference.

"We came together, we spent long hours together and we put together our plan. When the order came down, we were 100 percent ready, and it's apparent," Suther admitted. "Our battalion is proud of the fact that we are a selfsufficient organization and did not have to rely on a lot of outside contracts. However, where it made good business sense, we contracted out to eliminate the stress of our comparatively smaller work force," said Suther.

First came tents, then the working spaces, then the strongback tents, and finally — blissfully — new air conditioning. With areas designated first for ammunition, parking and harbor assets, the people spaces were placed where they could be located safely. According to Suther, the plan went even better than expected.

"The men and women here really put some sweat into this place and it was growing fast," Suther said. "We were actually struggling to find the real estate to put things."

The PhibCB team understood that what they were building was in direct support of the warfighters, and they never complained about long hours.

"No one could be more proud of the effort demonstrated here," praised Suther. "This was a labor of love and it's evident by the craftsmanship you see.

"Everyone here, even our fleet Bees of Bravo Company, put in the sweat to erect strongback tents and build protective bunkers."

Camp Patriot is built on 200 acres of space shared with the Kuwaiti naval forces.





'LET'S ROLL'



Seabee Camp in Kuwait named for Flight 93 heroes

STORY AND PHOTOGRAPH BY JO1 STAN TRAVIOLI

CAMP 93, Kuwait — "Let's roll!" had always signaled the beginning of every family trip for the Todd Beamer family. Sadly, it was the last words the outside world heard from Beamer, before he and other passengers took action in America's war on terrorism on the United States' second day of infamy.

Beamer was one of the courageous people who stepped forward after their plane, United Flight 93, was hijacked Sept. 11, 2001. Via cellular phone, the passengers had already learned the tragic fate of the other hijacked planes earlier that day and they decided it wouldn't happen to them too. They chose to stand and fight.

On a barren stretch of desert in Northern Kuwait, out of the dust and sand, has emerged an oasis of freedom. This place in a far-off land has a name, and it's known as Camp 93.

Lonely winds blowing across desolate wastelands are now met here with a 15-foot high earthen berm. This berm, in the shape of a square, was bulldozed from the raw desert floor, and on top of it are brave men and women standing their watch many thousand miles away from home.

Inside the perimeter is a vibrant tent city comprised of more than a thousand troops, hundreds of pieces of construction equipment and millions of dollars of construction material.

What is also present inside the berm is a buzz, much like that of bees busy about their business around a hive. This buzz embodies a distinct sense of purpose and a noble cause. A simple, even previously trite phrase a man had uttered a thousand times before, has now become a legendary new battle cry for a new generation of warfare.

We'll never know for sure what happened on the plane that day — or how much more death and destruction would have occurred if the terrorists had been able to direct the airliner to their intended target.

But we do know that some very brave Americans forfeited their lives so that many others might live.

That resolute spirit of fighting for what is right, so bravely demonstrated by Todd Beamer and the Flight 93 passengers that day, was alive and well here in Kuwait at the namesake Camp 93, a new home to the US Navy Seabees. Located here are members of the Thirtieth Naval Construction Regiment, Naval Mobile Construction Battalions 5, 74 and 133, and elements of Underwater Construction Team 2.

Camp 93 is a constant work in progress. Seabees are training for a wide array of missions, and they are always ready when they get the call. Here, the defenders of freedom can be seen building with invincible Seabee pride.

It's with great honor Seabees occupy a camp featuring two classic slogans: "*Can Do*!" and "*Let's Roll!*"

The two phrases may have derived from two wars separated by more than half a century, but they both stand for the same thing: Peace with Freedom.

Camp 93 is on the front lines of the war on terror that Todd Beamer helped begin. (#)





SCW @WAR ACBs 'train like they fight' while fighting.

STORY BY CMDCM (SCW) KEVIN J. EICHMANN

CAMP PATRIOT, Kuwait — "Never in the history of the Amphibious Seabees has it been so important to learn and understand Seabee Combat Warfare."

These were the words uttered by Camp Patriot Equipment Operator 3rd Class (SCW) Justin Jeffers from Collinsville, Ill., upon receiving the Seabee Combat Warfare designation within two weeks after arrival in Kuwait for *Operation Iraqi Freedom*.

With warfare qualifications becoming mandatory for all enlisted personnel in the paygrade E-5 and above on sea duty and assigned to a qualifying unit, the men and women of Amphibious Construction Battalions (ACB) 1 and 2 displayed unprecedented intensity toward achieving Seabee warfare qualification, despite the initial big construction effort of the building of a 4500-person field camp that left many personnel dog tired at the end of the workday. Nevertheless, training for the SCW program began soon after initial construction began.

With the start of the war pending, battalion Training Officer LCDR Dale Tysor from Douglasville, Ga., made a major push to increase attendance numbers. Compiling a list of qualified personnel, he assigned subject-matter experts to instruct key topics of the warfare program, establishing a rigid training regime.

Real-world contingency operations reflect the value of training for a Seabee Combat Warfare qualification. Mess Specialist 2nd Class (SCW) Robert Caesar from Yonkers, N.Y., said, "Tactical convoy operations for resupply of potable water, Meals Ready to Eat (MREs) and numerous other logistics for life sustainment have become a reality. With each convoy conducted, the threat of ambush by enemy forces requires the immediate action of all personnel in the convoy for success. The Seabee Combat Warfare program has prepared me to perform this vital mission."

SCW training ranges from general military tactics to chemical, bio and radiological protection and decontamination. To be Seabee Combat Warfare qualified means a Seabee is certified to have extensive knowledge in combat operations pertaining directly toward contingency missions.

As this is written, five Seabees have become Seabee Combat Warfare qualified while deployed and another nine are preparing for their formal qualification board and subsequent designation. Through an intense training program, these numbers are expected to increase 10 fold over the period of the unit's deployment.

As the Command Master Chief, it's my responsibility to manage the Seabee Combat Warfare program for the battalion. The program we have instituted is making a serious positive impact on the mission readiness of this command, well in keeping with the Master Chief Petty Officer of the Navy's philosophy of "mission first." (#)

CMDCM (SCW) Eichmann is the Command Master Chief for ACB 1, homeported in Coronado, Calif.



KUWAIT — We're definitely not in Kansas anymore.

About 15 camels saunter lazily across the horizon several hundred yards from Camp Castle's perimeter concertina wire. The camp in central Kuwait is the operations base for Navy Mobile Construction Battalion (NMCB) 7. Based in Gulfport, Miss., NMCB 7 is one of the original 10 Seabee battalions commissioned by Rear Adm. Ben Moreell during World War II.

During that war, the Navy deployed the unit to Espiritu Santo, New Hebrides; Iroquois Point, Hawaii; Mariana Islands and Okinawa. Then, as now, the median age of personnel in all the U.S. armed forces was 19 to 20. Not the Seabees, which were ing humanitarian assistance in Haiti after the Duvalier regime fell and providing construction support for the Paralympic Games in Atlanta.

These days NMCB 7, one of eight Seabee battalions under commission, is again in the fight. It is in Kuwait, as part of the 1st Marine Expeditionary Force's engineering complement — the MEG, or Marine Engineer Group. The MEG is supplying engineering and construction support to coalition troops pushing into Iraq to topple Saddam Hussein. NMCB 7's Executive Officer, CDR Chris Lacaria says that although he won't receive specific directives until he's in the theater of operations, the unit's role will possibly include rapid road As British, Australian and American forces pushed north to within 50 miles of Baghdad in one of the fastest advances in the history of warfare, Iraqi irregulars and the special forces known as the *Saddam Fedayeen* harassed the coalition's extended supply lines in southern Iraq near Basra. The land and sea bottlenecks in the theater's southern supply line effectively kept the final complement of NMCB 7 on the ground in Gulfport — one unit, a few hundred coalition forces — out of tens of thousands scheduled to flow into the area.

The delay gave the stateside Seabees time to finalize arrangements. Finding time between more important tasks, ENS Vincent Palrose took me to requisition field gear.

'We're not in Kansas anymore.'

A reporter from *Engineering News-Record* embeds with the Seabees and gets the drive of a lifetime.

STORY BY ANDREW G. WRIGHT LEAD PHOTOGRAPH BY PH1 AARON ANSAROV

stocked with skilled tradespeople. Their median age was 38. Their mission: to act as the Navy's construction work force. NMCB 7 spent that war in the Pacific, constructing base camps, runways, hospitals and island infrastructure for advancing US Marine forces. Subsequent missions involved deployments to Korea, Japan and the Atlantic and Pacific theaters.

The Seabee credo is "We Build, We Fight." NMCB 7's activities since World War II illustrate this duality. The emphasis was on military work at Guantanamo Bay during the 1961 Cuban missile crisis and later in Vietnam. The unit later turned to peacetime building efforts as well, by constructing a LORAN station on Guam, restoring roads and sanitation services in the Caribbean after Hurricane Georges, supplyand runway repair and quarters construction for refugees and/or prisoners of war.

At Seven's invitation, I joined the final flight from the homeport to join the majority of the battalion already in the Mideast. What was to be a day or two in Gulfport stretched to a week as the coalition's command grappled with an extremely fluid situation in the field. Turkey's refusal to permit staging there for the US Army's Fourth Infantry Division to open a northern front and push south to Baghdad complicated matters.

The coalition diverted material from the Mediterranean through the Suez Canal and into Kuwait. Iraqi-laid mines in the Persian Gulf also backed up ships bringing food and other humanitarian supplies into the Iraqi port of Um Qasr.

Web gear carries the minimal survival gear that Seabees must wear or have at hand 24-7 in Kuwait and Iraq: two canteens and a holstered gas mask. Two pieces of Kevlar are next: the "brain pan" helmet and bodyarmor vest. A desert camo backpack carries the Mission Objective Protective Posture (MOPP) suit: lightweight fabric pants and tops lined with charcoal, two sets of overshoes and gloves. They're designed to protect against "sliming," or chemical, biological and radioactive exposure. Three metallic charcoal filter canisters that attach to the gas mask complete the kit. I managed to squeeze in minimal CBR training, which should enable me to don my mask within nine seconds, with canisters properly affixed. "You don't want to breathe bad juju," says Palrose.

The laconic ensign, a 25-year-old native of Las Vegas, was in Officer Candidate School at Pensacola, Fla., when 9/11 hit.

"The attitude in training changed overnight," he says. "Now everybody knew we had a job to do. A big job." The event ultimately disrupted Palrose's personal plans — he and his fiancée planned to marry in April in Vegas. When deployment orders came down, they had a Baptist minister perform a ceremony in Gulfport March 16. The plan was for her to head for Vegas to meet his family for the first time and have a formal ceremony upon his return.

She's ambivalent at best about the war, she says, but "he's in the military and when the time comes to go, they go. That's just the way it is. I just pray to God that he'll send my husband back home to me safe and sound. And soon."

Final muster in Gulfport is March 27 after dinner on a macadam parking lot called, for some unknown reason, "the grinder." There is an atmosphere of equal parts tension and anticipation, like being backstage before the curtain goes up on opening night.

A shore patrol detachment shows up to take one young Seabee to say goodbye to his wife, who's having a panic attack. One of the chief petty officers states the case succinctly.

"Hug her, hold her, try to calm her down. Make sure she knows that if she needs to go to the hospital for medical attention, we'll see that she gets there," the chief says to the Seabee. "But make sure she also knows that you're going to be on that plane."

On March 27, we are locked down in an airplane hangar about 9 p.m., waiting for a 4:30 a.m. flight. The flight plan is eight hours of air time to Amsterdam, deplaning for two hours in a secured area in Schiphol Airport, then reboarding with a new crew for the final 7-hour, 15-minute leg to



Kuwait City.

We leave in the dark and fly east against the sun, so by the time we land in Amsterdam, we've gained seven hours and the sun is going down. We gain two more hours on the final leg and land at 7:52 a.m., completing a long night's journey into day.

The plane is a Northwest 747-200 with a civilian crew. Two of the pilots are military veterans. Mark Ness, 51, flew cargo planes for the Navy; and Bob Lewis, 49, flew F-15s for the Air Force. Northwest participates in a government program called the Civilian Reserve Air Fleet. Under CRAF, the Pentagon requisitions commercial airliners to move troops during wartime. The airlines are reimbursed, the flight crew says, but Northwest is losing money on the deal.

"This plane is normally in the Pacific trade, which is one of the few money-making routes we have these days," says Ness. But on the approach to Amsterdam, the captain keys the intercom and tells his 310 passengers: "Ladies and gentlemen, it's been an honor and a privilege to serve you. We wish you Godspeed on your mission. We and the rest of the country are proud of what you're doing for the people of Iraq. Stay safe and come home soon."

Not long after we arrive and disembark, we don our chem-bio MOPP tops and pants, then reclaim our checked gear. During the wait on the tarmac, I strike up a conversation with an activated reservist, Petty Officer David Kripps, 40, from New Haven, Conn. "Three weeks ago, I was working as a facilities engineer for Winchester Arms, back home. I got the call-up." He was slated to join the fleet hospital as a heating, ventilation and air conditioning specialist.

Then some of the contingent are sent to a camp near a Kuwaiti military airfield; the rest of us are off for a two-hour drive to Camp Castle. After the long flight and seemingly endless wait to depart for this final ground leg, most of the people on my bus are asleep.

The main highways, limited-access thoroughfares with four lanes divided by a median, are sparsely traveled this Saturday



afternoon. Traffic seems to be an equal mix of Kuwaiti civilian vehicles and coalition military gear: Humvees, armored personnel carriers, tanks and lots of construction equipment on flatbeds, some water and fuel tankers, and two-and-a-half-tonners and five-ton tandems.

There are checkpoints every few intervals, manned by Kuwaitis. We are waived through, but civilians must display identification. Later I'm told intelligence reports indicate the *fedayeen* will try to infiltrate, blend in with the Kuwaiti population and detonate suicide car bombs or perform other acts of sabotage.

Eventually we leave the four-lane for a two-lane secondary road. The terrain is desolate — waterless, flat and sandy, with minimal scrub vegetation. We pass a few herds of goats and their tenders. In places, half the road is covered by large sand drifts, remnants of a major sandstorm several weeks earlier.

As we approach Camp Castle, olive drab dozers and road graders clear drifts from the road. Rollers are flattening the shoulders in places. We squeeze past a line of empty flatbeds, apparently owned by contracted civilians who delivered supplies to the tent camp. I note that most of the tractors bear the Mercedes logo on their grill. A few others are Renaults.

Inside the camp, we disembark and get our check-out gear. I'm assigned a cot in a headquarters company tent. I find it, drop my laptop and CBR pack and am preparing to get my backpack and ALICE pack. As I come out of the tent, two Marines approach and ask if I'm Andrew Wright from *ENR*. Guilty as charged, I say.

"You're to come with us," says LT Aaron Taylor. "We've got a berth for you at the MEG at Camp Commando. We have to run an errand, then we'll head on up. We have space for you in one of our SUVs. Get your stuff."

The change in plans makes a long day a few hours longer and suddenly snaps the bonds I've forged in a week with NMCB 7, but I regard it as my first battlefield promotion. The MEG is the Marine Engineer Seabees drew a line in the Kuwaiti sand at Camp Commando (opposite). Left, the Seabee flag reads backwards through the fabric as Bees pound sand. How to tell? Gas masks are strapped to the left leg.

Group, assigned to the 1st Marine Expeditionary Force. Tracing its roots to *Operation Desert Storm*, it aims to coordinate battlefield engineering and synchronize efforts among the Navy, Marine Corps and Army units.

The MEG consists of several light, fully integrated regimental task forces. Current units include the First Naval Construction Division (Seabees), the Marine Augment Detachment 88835, the Marine Corps 4th Combat Engineer Battalion, the Army 265th Engineer Group and Georgia National Guard.

At Camp Commando, orders flow from RADM Chuck Kubic, commander of the First Naval Construction Division. He has a long list of impressive credentials, but the one that may interest engineering readers most is that he graduated at the head of his class at Lehigh University in 1972 with a BS in civil engineering.

The MEG he commands coordinates a number of support activities: airfield construction and repair, road upgrade and maintenance, troop bed-down, specialized bridging, force protection and the capability to draw on expertise from rear area engineers. The MEG prides itself on the flexibility to take on specialized battlefield missions with speed. The operation is mobile, agile and, if necessary, hostile.

We finally reach the camp around 10 p.m. I'm taken to the chow hall for a late meal, then find a temporary berth in a tent. The canvas tent, an A-frame set on a plywood base about 12x24 ft, is set up for about eight officers. I grab the bunk of a lieutenant who is up north for several days on a mission. I unroll my sleeping bag.

About midnight, on a day that began nine time zones and 59 clock-hours earlier, I finally fall asleep.

RETURN OF THE SECARBELL, JEDI

To keep traffic and vital materiel flowing smoothly across rivers and canals in Iraq, RADM Kubic leaned heavily on junior people with the right stuff especially the civil engineers and Seabees he called his "Seabee Jedi."



Seabees from NMCB 133 rebuilt the Sarabadi bridge (left) across the Tigris river near Al Hillah, Iraq, in May. Seabee units rebuilt or replaced destroyed bridges in numerous locations, repairing war damage so that Iraqi citizens could use them once again. Above, an alert EO3 Patrick Jenkins from 133 stands security watch as local citizens pass over the Sarabadi bridge during *Operation Iraqi Freedom*, the multi-national coalition effort to liberate the Iraqi people, eliminate Iraq's weapons of mass destruction and end the regime of Saddam Hussein.

STORY BY ANDREW G. WRIGHT, *Engineering News-Record* Photographs by PH1(SW) Arlo K. Abrahamson

MESOPOTAMIA VALLEY, IRAQ – As coalition forces pushed forward, military engineers servicing the 250-mile-long supply line used speed and ingenuity. To devise a crossing of the swiftly flowing Saddam irrigation canal in southern Iraq's Tigris-Euphrates Valley, RADM Chuck Kubic turned to a coterie of engineers and Seabees he fondly calls his "Seabee Jedi."

April 1, a day before elements of the 1st Marine Division crossed the Tigris to within 18 miles of Baghdad, the admiral included the bridge site on a daylong whirlwind inspection of the 1st Marine Expeditionary Force (I MEF) Engineer Group's (MEG) projects and staging areas along the main supply route.

The mission had many purposes: mail and personnel drops, and briefings with field commanders about supplies, logistics and progress. A quick check on a never-beforeattempted bridging technique ranked high on Kubic's checklist. He is a registered engineer licensed to practice in Pennsylvania and Virginia and a qualified Seabee Combat Warfare officer. The MEG boss believed the strategically important bridge was worth a firsthand look.

"What we're going to see today represents a year of planning," Kubic said. "Only the Seabees could do this."

On his rapid inspection, Kubic took support staff and a reporter into southern Iraq about 100 miles north of the demilitarized zone with Kuwait. The group left the MEG's Camp Commando field headquarters in central Kuwait shortly before 0900 local time in a pair of twin-rotor CH-46 Sea Knight helicopters.

On each chopper, gunners manned twin .50-caliber machine guns, a standard security measure that was not called into play on this day.

At the chopper's first stop, a Seabee contingent out of Port Hueneme, Calif., was bridging an irrigation canal at a breakneck pace. The crossing will enable the supply line to bypass several cities between Basra and Baghdad, removing an opportunity for the Iraqis to bring the battle to an urban setting. Naval Mobile Construction Battalion (NMCB) 4, supported by a small team of divers from Underwater Construction Team 2 out of Port Hueneme, was constructing a 61-meter-long, 16-meter-wide Mabey-Johnson bridge. "Really one of many offshoots of the Bailey bridge," says Kubic.

While NMCB 4's commanding officer, CDR Jim Worcester, briefs the admiral, officer in charge LT Marc Rouleau oversees a hive of Seabee activity. Assisted by a fourton forklift with a hook attachment, one crew is busy sledge-hammering pins into place on the bridge "nose."

Each bay is 10 ft long and the assemblage is placed on 4x4-inch cribbing. As the span takes shape, grillages and distribution beams spread the load. The nose is angled upward by about 10 degrees to keep the center of gravity over the landward side during launching. The fully assembled structure will weigh 135 tons with the nose and only 105 tons once the steel proboscis is disassembled and removed, says Chief Petty Officer George Freese. The crew planned to ferry a four-ton forklift across the river a few hundred yards downstream to help disassemble the nose once the canal was spanned. "We'll jack it down onto cribs, place a spreader beam and disassemble it," says Rouleau. "It should take about 14 hours."

As it turned out, the Seabees could not transport the forklift across the canal, so they took it apart manually.

Kubic would have preferred to buy a portable bridge from a US manufacturer, but "no one could really match the flexibility and combination of configurations they offered us." A mid-January site visit to their ISO 9001-rated, Gloucester, U.K., factory reconfirmed the decision.

"Their quality control is excellent and their plant is state-of-the-art, with robotics," Kubic says. A pair of Mabey-Johnson technical advisors, a retired British commando and a former U.S. Army combat engineer, came to Kuwait before the war started, but the firm's legal department ordered them to return home. The assembled bridge will be able to support between 70 and 80 tons.

"It will handle an M-1 Abrams tank," Rouleau says.

A pair of Caterpillar D-7 bulldozers moved rubble from a "borrow pile" about 30 yards downstream, placing it on the earthen foundation abutment. "We've been sheep-footing the ground on the approach path," Rouleau adds. "It's important to have this bridge good to go ASAP."

But what sets the project in a unique category is the substructure's underpinning: sheet pile culvert modules (SPCM, pronounced "spickum") that armor the earthen launching abutment upstream, face and toe. The canal, which is 73 meters wide and 3 meters deep in places, flows at a rate of 3 meters per second. The design team, headed by LT Dave McAlister, wanted to extend an earthen mole pier far enough to narrow the canal's width sufficiently to create an abutment. This enabled the bridge to span the channel. At the same time they knew that they must contend with scouring that would be induced by the increased flow velocity.

The standard solution would be sheet piles, but they're cumbersome and difficult to transport in a war zone, where every square foot of space on a convoy is precious. In addition, the team looked for materials that would be in abundant supply for this and other Seabee missions. Seabee Jedi team members McAlister, LTJG Eric Ulmen and LCDR Russ Seignious conceived the SPCM late one night last December in a tent in Kuwait.

In February, the MEG tapped available Seabees to field-test the earthen pier-SPCM concept, also dubbed a "Mac mole" in McAlister's honor. They trucked in stacked sections of corrugated culvert 72 inches in diameter and 12 ft long on a flatbed. The team first bolted together sections, then lashed them together with wire rope in groups of three. A backhoe operator, using a wire rope hung from the bucket, picked each triangular assemblage, tilted it vertically and deftly wiggled it into place in the canal sediment. A backhoe filled each SPCM with dirt, providing mass and structural integrity. Interlocking overlapping placement provided additional strength to the toe and armors the earthen pier. Earth overtopping completed the substructure's armor.

"If we want to make this permanent when the war is over, we'll place sheet piling as required," said McAlister.

The Seabees practiced assembly in the desert in February. "Out here, I've got my A-team, my instructors on the job," says Rouleau. "And the dirt is working better than the sand." Pointing to the crimped tops of the first few Mac molds, he says, "Doesn't look very pretty, but we're getting it done." The goal was to have the crossing spanned and several kilometers of approach road ready to roll by the end of the following day.

Assured that all was in order on the jobsite, Kubic discussed security arrangements with his cadre before boarding the Sea Knights and heading for the next stop. "I don't think the Iraqi command knows we're here yet, since these guys started this morning. But they'll know, probably by tomorrow night. So these folks will have to defend the bridge after they construct it."

He seemed confident that the Seabees' bridge defense would be as efficient as their construction. Later, NMCB 4 reported April 2 that the canal had been crossed successfully and after minimal work to the approaches, a convoy could roll by midnight.

It may have been a year in the planning, but executing the job took well under 75 hours, from start to finish. (#)



>> Seabees from NMCB 133 and NMCB 4 became a get the job done. Above, an excavator serves effectiv into place. Below left, a Bee welds angle iron roller-Johnson bridge erected in Sarabadi. The stops preve when the bridge is launched. Below right, a Bee ham Navy video, bottom, NMCB 4 Bees connect side rails





adept at repurposing available tools and resources to vely as a crane to lift Mabey-Johnson support beams bearing stops to the steel foundation of the Mabeyent the roller-bearings from sliding off the foundation mers a pin into the bridge support. In two stills from a s on the bridge spanning the Tigris River.





'Don't kid yourselves by what you saw on TV. This was not an easy fight.'

STORY BY EO1 (SCW/AW) KEVIN CULLEN

RADM Charles R. Kubic returned briefly from the front lines to conduct business with the Pacific Fleet and his Pearl Harbor Seabees. Kubic spoke about the war, its aftermath and Seabee humanitarian efforts.

"We are now moving into a period of 'civil military operations' designed to stabilize the country," Kubic said, "... making expedient repairs to basic infrastructure and setting the conditions for a free Iraq to create a democratic governance system."

The effort however, wasn't without its challenges. "Don't kid yourselves by what you saw on TV," said Kubic. "This was not an easy fight."

During the opening moments of the war, an Iraqi Scud missile impacted only 200 yards from Kubic's command post. During the first 48 hours of the conflict, Seabees took shelter in their defensive bunkers 36 times. Once mobile, they were peppered by small arms fire along main supply routes as they pushed forward into Baghdad with U.S. Marine forces.

According to Kubic, the operational tempo for Seabees remains high.

"The pace has not slackened since Baghdad fell and Iraq is still a very dangerous country," said Kubic. "Having won the war, we must now win the peace," he said. "In many respects, this will be much harder. There are still many Ba'ath party regulars and *fedayeen* thugs in Iraq."

Kubic's command of nearly 20,000 Seabees throughout the Navy is joined by his command of the 1st Marine Expeditionary Group (I MEF) Engineer Group (I MEG), a joint-service combat engineering component comprised of Navy, Marine and Army personnel. It includes structural, mechanical, civil and electrical engineers who, unlike some of their corporate counterparts in the private sector, don't wear business suits, eat lunch at the club or drive BMWs to the office.

They wear desert camouflage, eat MREs (Meals Ready to Eat) and drive tactical vehicles. As engineers who love tackling technical challenges, the MEG spends much of its time evaluating options; it's a problem-solving body with a seabag full of solutions for any number of scenarios. Whether it's a contingency plan for an airfield modification, bridge construction project, or a roadwork problem for an advancing army, the MEG not only has a solution — it often has 10 of them.

Working from secret messages and schematics forwarded to the combat operations center at Naval Facilities Engineering Command Pacific Division, engineers based in Hawaii worked around the clock to design six different bridges that were instrumental in the rapid push into Baghdad.

One of their major projects included designing a 70-ton two-lane bridge over the Diyala River. Seabees not only replaced the blown-out bridge destroyed by opposing forces, but they repulsed attacks during the construction phase and completed the entire project in just 190 hours.

"[In the civilian world], we couldn't even get the permits for a project that size in such a short time," said Kubic.

Most recently, Kubic's Seabees returned to a town that only weeks before had been caught in the crossfire of Iraqi liberation. While the dust was still settling, Seabees helped put the ravaged town back together.

One of their projects included getting a school back on its feet by repairing class-rooms and building playground sets for the children [See "Desk Set" on page 26 for this story. – Ed.]. At the rededication festivities for the school, the town counsel selected a local boy for the ribbon-cutting ceremony.

According to Kubic, the little boy had been selected for his charm and charisma. Weeks earlier, his father had been forced into servitude with the Iraqi army and was subsequently killed during the conflict.

"In many respects, it's all about the kids," said Kubic. "Ironically, the freedom and security of our grandchildren could well be tied over the next 10 years to the freedom and security of the children of Iraq."

EO3 Joshua Winjum of NMCB 5 operates a road grader to distribute the select fill evenly over an aircraft staging area. NMCB 5 constructed an AH-1 and CH-53 helicopter staging area for operations in the Central Command AOR. NMCB 5 based out of Port Hueneme, Calif.

With Baghdad Largely Secured, Seabees Shifted Into Overdrive

First, figuring out a common language

STORY BY ANDREW G. WRIGHT, *Engineering News-Record* Photographs by PH1 Brien Aho

ome of the rear-guard Seabees in Kuwait were disappointed that the retreating Iraqis had not been destroying bridges.

Many expected to see the tactic employed to slow coalition forces that swept north across the DMZ and then from Basra to Baghdad in less than two weeks. Rapid bridge replacement and repair is a Seabee specialty and the troops had been looking forward to strutting their stuff.

But turning the Seabees' efforts away from tactical bridging and toward road repairs, humanitarian relief and other endeavors is not necessarily a bad thing to the King Bee in the theater of operations, RADM Chuck Kubic.

"If you win the Super Bowl 45-0, should you be disappointed because the offense didn't get to play very much?" Kubic asks.

Kubic earned his second star last Aug. 9 when he became commander of First Naval Construction Division at Little Creek, Va.

56

The move united 18,000 Seabees in the Atlantic and Pacific Naval Construction Brigades under a single command. In the campaign to strip Saddam Hussein from power, he was put in command last year of the 1st Marine Expeditionary Force (I MEF) Engineer Group (I MEG).

As head of the I MEG, Kubic headed a staff comprising active duty, reserve and

National Guard units from US Navy Seabees, Marine Corps and Army.

Each branch of service has its own peculiarities of communication. Making sure everyone spoke a common language was the first order of business; similar terms abound among the US military.

Take the phrase "target registration," for example. To a Seabee, that could mean compiling a spreadsheet of targets, similar to writing a construction project take-off list. But to a Marine Corps or Army artillery officer, the term means firing at a target and recording the coordinates of where each round lands, says Marine LtCol. Steve Duarte, the I MEG's fire protection officer.

After months of

detailed planning and hard training together, the I MEG became a fully integrated staff because its members were willing to focus on the same goals.

The end result was a powerfully successful mission.

For Marines and Seabees, the relationship harkens back to Guadalcanal in World War II, said Marine Col. Michael C. Howard, a military historian and the MEG operations officer.

Howard was also commanding officer of a Marine Corps reserve unit, the 4th Combat Engineer Battalion, 4th Marine Division.



At Guadalcanal, Marines took the beachhead, with the Seabees close behind. Their task: to rebuild an airfield they had earlier helped to destroy. The Sixth Naval Construction Battalion was the first Seabee unit to build under combat conditions. The Marine-Seabee fight in the crucial 1942 battle "was a shotgun marriage, but it worked. Now we're together again, with the Army thrown into the mix," said Howard.

For months, Kubic and staff routinely worked 16-hour days to come up with their game plan. Working from the latest intelligence, the team met several times daily, formulating and readjusting the game plan, trying to plan for every contingency. Typically, each move has at least two alternatives.

"We've war-gamed this thing to death," Duarte said.

I MEG's three regimental task forces focused on different objectives. Task Force Mike concentrated on mobility issues, constructing or repairing bridges. Task Force Charlie was put together for construction, whether it was quickly building or repairing roads and runways,

"If you win the Super

Bowl 45-0, should you be

disappointed because

the offense didn't get

to play very much?"

erecting enemy prisoner of war camps or field camps.

Task Force Echo, the endurance crew, focused on the transition to a militarycivilian Iraqi government. Its projects could involve humanitarian aid delivery or restoration of critical infrastructure, such as water and power or port services.

Kubic leaned heavily on junior officers with the right stuff, especially the civil engineers and Seabees he calls his "Seabee Jedi."

Last April, NMCB 4 completed one such Jedi project, a 61-meter Mabey-Johnson bridge across the Saddam irrigation canal west of An Nasiriyah. The crossing, along with 32.1 kilometers of road construction and repairs, enabled the main supply route to bypass the city and links Route 1 to Route 8.

The job took about 70 hours from start to finish, even though Seabees had to disassemble the 30-ton bridge nose manually, since they could not ferry a fourton forklift across the canal as planned.

Several months prior, Kubic had read a paper about the British 1914-1918 Basra-Baghdad campaign to take the same ground that coalition troops had been moving over for the last two weeks. The author – Col. Mike Howard – had written the article for the *Marine Corps Gazette*, but the editorial board had opted to put the piece on its Web site because of its timeliness.

The British saw a chance to cut into the Ottoman Empire's exposed flank and to take control of oil fields discovered in 1913. They ultimately succeeded, but paid a high price: Nearly 29,000 troops died from battlefield wounds or cholera.

"I learned three things from Col. Howard's article, mistakes that we didn't want to repeat here," Kubic says. In summary, the British military leadership stayed in India, the field logisticians remained in Basra and "the rivers kicked their butts. They had trouble coping with high water and low water."

Even as Baghdad was largely secured, the I MEG retained a substantial work load, Kubic said.

"We have to close the gaps in the main supply route [and there's] road repair and bridge upgrades." Some bridges may be structurally upgraded to bear the weight of the 70-ton Bradley armored fighting vehicle. "We'll reach back to our people in Hawaii for expertise there," he said.



Above, EO3 Edward Allen of NMCB 5 operates an excavator scooping up select fill rock and placing it in a rock dump truck. NMCB 5, based at Port Hueneme, Calif., constructed a 500-person tent camp for operations in the Central Command AOR. Below, Seabees of NMCB 74 practice with Steel Medium Girder Bridging for river crossing operations. The battalion is based out of Gulfport, Miss.



THE NAVY HAS A NEW SECRET WEAPON: THE SEABEES' SHADOW WARRIORS





STORY BY ANDREW G. WRIGHT, *Engineering News-Record* Lead Photograph by PH1 Brien Aho File Photographs by PH1 (SW/DV) Eric J. Tilford



The Seabees have always said, "We build, We fight," but typically the emphasis is on construction and humanitarian efforts. Still, a Seabee recon team supporting the 2nd Marine Division's push toward Baghdad found itself in a hot zone in the Euphrates-Tigris River Valley. SERT 5, formed within Naval Mobile Construction Division (NMCB) 5 out of Port Hueneme, Calif., is believed to be the first Seabee unit to face hostile fire since Vietnam.





The SERT — Seabee Engineer Reconnaissance Team — performs fast evaluations of field site conditions, usually regarding roads and bridges. Their job is to gather and report engineering intelligence. They help determine what measures and equipment will be needed to "fill in the gap."

If front-line combat engineers need to cross a river, often they'll call for an engineering support battalion to "splash" a floating bridge into place for passage, then it will be dismantled as soon as possible and moved forward to the next crossing.

The third wave, or rear-guard engineers, from the 1st Marine Expeditionary Force (I MEF) Engineer Group (I MEG) then place bridging that can handle 70-ton loads, which could include loaded fuel and water tankers or M1A2 Abrams tanks.

"We'll look for a suitable adjacent site to the floating bridge," says Chief Warrant Officer Matthew Kiefer. "We'll also do route assessments, looking for quarries, cement batch plants, equipment — anything that can be used for road, bridge and camp construction. Then we look for a staging area." The goal is to enable mobility as quickly as possible for the main force.

"A battalion has a big footprint," adds Equipment Operator 2nd Class Craig Ray, from South Bend, Ind. His specialty is route analysis. "Any intel we can provide benefits [the engineers]."

Typically, 10 people are in a team, split into three elements: reconnaissance, security and liaison. Field intelligence is quickly put into a digital format, usually text or digital image files, then downloaded to a computer and transmitted to the rear via a high-frequency data stream.

The I MEG can then develop a game plan in the field. For more complicated projects, the MEG can reach back to Pacific Division engineers located in Honolulu for a detailed recommendation.

SERT 5 was b r a n d - n e w when formed in December 2002 and deployed to Kuwait. "We trained together, lived together, and slept together, until we functioned as a unit," says Kiefer. The group



became part of Task Force Tarawa. This gave them two weeks of final training with elements of the 2nd Marine Division.

When the war started, the Army's 3rd Infantry Division raced up the left flank along the Euphrates River. British troops concentrated on Basra, the second largest city in Iraq. They besieged the city and began the arduous and potentially dangerous job of house-to-house fighting.

The 1st Marine Division swept forward on the right flank, following the Tigris. The 2nd Division, the spear point of Tarawa, with SERT 5 in tow, took the middle.

"We were just in a gaggle — thousands of vehicles moving across the desert in a gaggle," says Kiefer.

The British met stiff resistance in Basra, besieged the city and settled into a pattern of block-to-block close combat. Task Force Tarawa encountered its strongest opposition the first 10 days around An Nasiriyah, encountering armed resistance, sporadic sniping and a carbomb ambush.

"When we came through An Nasiriyah, Tarawa had been through the night before. They got hit pretty hard," says Kiefer. "We were monitoring the tactical nets [and] it was intense. It was a hot but everyone zone, sounded really calm."

A three-man detachment from Underwater Construction Team 2 augmented SERT 5. The recon unit now carried gear necessary to work the Tigris and Euphrates rivers and the Saddam irrigation canal: scuba tanks, Zodiacs even a soil penetrometer. But the push was moving too quickly for detailed analysis, said Personnelman 2nd Class Gary Hudson from Ft. Lauderdale, Fla., a member of the liaison crew.

In training, he said, "we work in terms of a 96-hour window, with a plan that can be defined and redefined. There's a lot of pre-planning. But once we started rolling, there wasn't much opportunity to do detailed analysis."

"It wasn't possible to stop to go under the bridges," says Ray. "A quick visual [indicated] that everything was MLC 70 [Military Load Class 70 tons], so our mission kind of dwindled." But the situation prevented SERT 5 from dropping back or even waiting in place for support units to move up.

Although organized Republican Guard units turned tail early on, Iraqi irregulars continued to throw down sporadic mortar and small arms fire.

"I didn't really think they were firing at me," said Kiefer. "It was surreal."

Whenever opposition revealed itself, close air support was immediate and overwhelming. Marine Corps AH-1W Super Cobra and Army AH-64D Apache Longbow helicopters raked the area with AGM-114 Hellfire missiles and machine gun fire.

"The U.S. forces were too much for them," Ray said.

While the SERT concept is still being tested and refined in both active duty and reserve Seabee battalions, nothing beats the experience and lessons-learned gained in *Operation Iraqi Freedom*. The principal role of the SERT is to surveil a target area and report back. This is done via voice on a radio (left) and, importantly, by capturing digital imagery (right) and squirting it back to those who can evaluate it in nearly real time. SERT teams operate day or night, but are trained to be invisible in either environment.

Seabees and Marines often indulge in rough sibling humor: Seabees say they're skilled tradespeople, too smart to be groundpounders. Marines say Seabees should stick to nail guns instead of M-16s. But now, says Ray, "I have a new respect for the Marines. They are warriors."

Being shot at, rolling through a battle zone and seeing the overwhelming retaliatory response was a sobering experience. After the Marines took casualties at An Nasiriyah, the tenor changed. The game had gotten much more serious for many troops.

None of the men could speak in specifics of the damage they saw inflicted. Their photographs tell more than their words, with helicopters hovering with a black smoke cloud on the horizon, enemy prisoners of war under guard, and a charred pickup truck with the remains of an antiaircraft gun still on the bed.

SERT 5 team leader, LT Bill Windus, Somerville, N.J., said only, "We went to do engineering, but the only engineering to be done was way up the road. I saw stuff I won't talk about for a long, long time. If ever."

SERT 5 left for home April 6.

Reporter Andrew G. Wright was embedded with several Seabee units during his stint covering events in Central Command. SEABEE Magazine is grateful for permission to use his work reprinted from Engineering News-Record, copyright The McGraw-Hill Companies, Inc. All rights reserved.





Aqua, man

Equipment Operator 2nd Class (DV) Chris Amescua from Underwater Construction Team 2 surfaces after a training dive at Camp Patriot, Kuwait. UCT 2 was forward deployed to *Operation Enduring Freedom*.

U.S. NAVY PHOTO BY PH1(SW) ARLO K. ABRAHAMSON



July 25-27, 2003, on the National Mall in Washington, DC, and all over America, the nation paused to give thanks to veterans of the Korean War. Like they had in the World War immediately prior, Seabees were in the thick of this one, too. An informal history.

STORY PROVIDED BY THE NAVAL HISTORICAL CENTER PHOTOGRAPHS COURTESY FRED SIMON

eabee history didn't stop between the Second World War and the Korean War, but it slowed down in one quick hurry. Following the victories in Europe and Asia, the U.S. Armed Forces rapidly demobilized. The Seabees were part of this demobilization, and by June 1946 their number had fallen from peak strength of more than 250,000 men to approximately 20,000.

In the continental United States, the web of training bases and depots dissolved and all Seabee activity was concentrated at the Naval Construction Battalion Center, Port Hueneme, Calif. [The command was redesignated effective June 1 as the Naval Facilities Expeditionary Logistics Center. –*Ed.*]

As Seabee ranks continued to thin, the early post-war years saw only a few battalions and small construction battalion detachments scattered to naval bases and stations abroad. Despite the diminished strength of the force, Seabee peacetime activities took on a unique and diversified character. Besides maintaining advanced bases built during the war, they were confronted with many unprecedented construction assignments.

What could be more unusual than Seabees building a fleet weather station on Russian soil? Yet in September 1945, Seabees of the 114th Naval Construction Battalion, stationed in the Aleutian Islands, were ordered to Russia's Kamchatka Peninsula to accomplish just such a project.

They perhaps have the distinction of being the only Americans invited to do construction work in the Union of Soviet Socialist Republics. Also in 1945 and 1946, six battalions of Seabees performed a variety of tasks on mainland China at Shanghai, Tsingtao, Tangku and other cities. Primary among their duties was the construction of harbors and airfields to be used for the evacuation of the defeated Japanese troops and the importation of supplies for the war-torn Chinese nation.

China was not the only nation to receive Seabee assistance after the guns fell silent. As part of the occupation force, 13 construction battalions and three special battalions were sent to Japan to aid US naval forces at Hiroshima, Kabayana, Yokosuka, Omura, Nagasaki, Sasebo and Kure.

Out of the post-war rubble, they rebuilt all types of facilities, including airstrips, docks, houses, electric and telephone systems, bridges, roads, recreation areas and hospitals.

In mid-1946, Seabees were assigned the task of constructing facilities on Bikini Atoll in preparation for the historic atomic bomb tests there.

That same year, *Operation High Jump* brought Seabees to Antarctica for the first time. An initial detachment of 173 men accompanied Admiral Richard Byrd to Little America to build new facilities and unload supplies and equipment.



When Vieques Island, off the coast of Puerto Rico, was chosen as the site for an inter-service war exercise code-named *Operation Portrex*, Seabees performed a dual function. They were on the scene prior to the main-body arrival to reclaim the island's abandoned wartime defense facilities. They then returned as participants in the exercise and

successfully built a pontoon causeway that brought the arriving army units ashore.

During World War II, the Seabees were a Naval Reserve organization, created specifically for that war. Most Seabees were "USNR" and served "for the duration plus six months." After the war, however, it was clear that the Seabees, having more than proved their worth, would be a valuable new addition to the regular, active duty force. In 1947, the Seabees became part of the regular, peacetime Navy.

In December 1947, a Seabee Reserve Organization was established to augment active-duty Seabees during national emergencies. Many of these first Seabee Reservists were Seabee veterans of World War II who wished to continue to serve the nation. The first Reserve Seabees were organized into a number of divisions in each Naval District. Each Seabee Reserve Division initially consisted of five officers and 40 enlisted men. Although by 1949 the number of active duty Seabees had dwindled to 3300, the reserve organization served as a ready force for expansion in the coming emergency in Korea.

Seabees Enter the Korean War

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

On Sept. 15, 1950 U.S. troops and Bees landed at Inchon in what has come to be known as one of the most brilliant amphibious assaults in history — and the Seabees achieved renown as the men who made it possible. Battling enormous 30-ft tides and a swift current while under continuous enemy fire, they positioned pontoon causeways within hours of the first beach assault.

Following the landing, the incident known as the "Great Seabee Train Robbery" took place. The need to break the equipment bottleneck at the harbor inspired a group of Seabees to steal behind enemy lines and capture some abandoned locomotives. Despite enemy mortar fire, they brought the train engines back intact and turned them over to the Army Transportation Corps.

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

66



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

By February 1951, however, the tide turned once again and the Seabees returned to Inchon for another landing. They found their previously constructed harbor facilities in a state of ruin, but miraculously enough, some of their sturdy pontoon structures were still in place. After a rapid repair job, men and equipment streamed ashore again.

Seabee participation in the Korean War was certainly not limited to amphibious operations. Another of their outstanding contributions was in that specialty of their World War II predecessors — airfield construction. Seabees could be found throughout the war zone constructing, repairing, and servicing the K-fields of the various Marine Air Groups. The Seabees were broken up into numerous detachments and each was assigned to an airfield designated with a "K" number, such as K-3 at Pohang, K-18 at Kimbo and K-2 at Taegu [See page 67. –*Ed.*]

Keeping the planes flying was an arduous and often dangerous task. At one small airstrip on the 36th Parallel, chuckholes were opening up in the failing concrete faster than the Seabees could repair them.

As it was absolutely vital that the field remain open, the undaunted Seabees graded, poured and patched one side of the runway while bomb-laden aircraft continued to fly off the other side.

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

One of the most incredible Seabee feats of the war took place on the small island of Yo in the Bay of Wonsan. In communist hands again in 1952, Wonsan was a key supply and transportation center for the enemy. As such, carrier-based aircraft strikes against Wonsan and points deeper in the interior were numerous and constant.

Planes were hit by enemy fire daily, leaving their pilots with the unhappy choice of either ditching at sea or attempting to land in enemy-held territory. The need for an emergency airstrip was critical and, under the code-name Operation "Crippled Chick," a detachment of Seabees came to the rescue.

Put ashore on Yo Island, they were given 35 days to construct a runway. Working under constant artillery bombardment from neighboring enemy positions, they managed to complete the 2400-foot airstrip in only 16 days. By a prearranged signal — "Steak is Ready" — the Seabees signaled that the job was done, and nine damaged aircraft landed on the new field that same day.

The rapid demobilization that followed the Second World War was not repeated after the signing of the Korean Armistice in July 1953. Crises in Berlin, Cuba, Africa, South America and especially in Southeast Asia created the necessity to maintain military strength and preparedness. Seabee Reservists had helped meet the Korean crisis, but the onset of the Cold War had indicated the need for a basic reorganization of Seabee capabilities as well as for increased Seabee numbers.

Accordingly, between 1949 and 1953, 13 battalions of two distinct types were established. The new establishments signified a gain in greater battalion mobility and specialization.

The first type, the new Amphibious Construction Battalions, were landing and docking units. An integral part of the fleet amphibious forces, their mission was to place causeways and ship-to-shore fuel lines, construct pontoon docks and perform other functions necessary for the expeditious landing of men, equipment, and supplies.

Mobile Construction Battalions constituted the second type. They were responsible for land construction of a wide variety, including camps, roads, tank farms, airstrips, permanent waterfront structures and many other base facilities. (#)

I was there: An Oral History FRED SIMON

"I HAD JUST FINISHED A JOB with Construction Battalion Detachment [CBD] 1802 on Okinawa and was living with the Army's 29th Infantry Division at Kubasaki, surveying an old Japanese airstrip and the Buckner Bay Harbor. When finished, I flew to MCB 2 NAS Atsugi Japan.

"In November 1951, CBD 1804 was formed and, like CBD 1802, we were mostly surveyors. We were to travel to Po Hangdong, Korea. Our job was to survey the existing air strip being used by the 1st Marine Air Wing, Marine Air Group [MAG] 33.

"The strip was too short for the larger planes and had to be extended. The Navy bussed us to Itami, Japan where we were issued foul weather gear and asked, 'Where would you like your body sent?' I said, '*Nowhere!* I'm bringing it back with me.'

"We flew to Korea in a Military Air Transport plane and with us was the escort shown in the attached picture. We were given a wooden barracks in the Marine compound and other than an incident when

a Marine Corps officer barged in screaming for us to grab our weapons and get outside, life was fairly routine. We enjoyed the company of the Marine airmen.



"While surveying the strip, we were right down the center with our instruments when the tower fired a flare. We ran for the foxholes around the perimeter and a Grumman F6F 'Hellcat' came down with a bomb hanging from its wing. It seems the old WWII planes sometimes had trouble detaching bombs from the aircraft and many times, after trying to shake it off, would come in with it dangling.

"Such bombs usually came off when the plane touched down and they skipped across the strip and came to a stop without detonating. The F9F 'Panther' jets didn't have that problem.

"Our two Marine squadrons flew many sorties and there were also some night bombers that took pictures over the battle areas.



"We had this thrill quite a few times while completing the survey: We saw a Vought F-4U 'Corsair' catch fire while attempting a take off. We threw snow on the engine and helped the pilot get out safely. He said, 'Did you ever try to get out of one of those with a parachute on?' Of course we hadn't, but it was quite a sight seeing *him* squeeze out. He also said he was trying to get it flying in order to take it to Japan to trade it in on a better plane.

"The final estimate was one million square yards of earth fill to make the runway long enough, another good job that was completed by Navy Seabees. We were quite impressed with the men of MAG 33 and joined them in their Christmas of 1951 and New Year's celebration of 1952. The chow was good and the quarters were usually as warm and comfortable as an oil burning stove.

"We didn't experience any air attacks, as the squadrons were a good deterrent, but the siren went off a few times and we wondered what we'd do, as our foxholes were half full of frozen water.

"The attached picture [above] is how we kept warm outside, as modeled by Rod Howard and Paul Sweeney. The motto on the 'Welcome' sign [left] says 'Trans Korean Airlines — Anything, Anywhere, Anytime, Small Fields a Specialty.'The detachment picture [previous page] shows me as the fourth from the right, bottom row, behind the flag, which is hanging on my wall now."

- Fred Simon

PHOTOS BY CHARLES A. GODSHALL (2)

Seabees in Korea, 1950-1953

The worldwide US network of WWII bases and stations remained after the war. The Navy's were still in existence in the late 1940s — and Seabee units were deployed around the globe.



STORY BY CAPT. LARRY G. DEVRIES, CEC, USNR (RET.) PHOTOGRAPHS COURTESY PAT MORRIS Above, Seabees set up a pontoon pier to unload supplies from landing craft at Inchon, Sept. 19, 1950. Below left, a CBD 1804 "class picture" at K-3, Spring 1953. Below right, a rock crusher operating at K-3.



The story of the Navy Seabees and their performance during the Korean Conflict begins in the immediate post-World War II years. As with all of the US armed services, the Seabees were part of the wholesale release of active personnel during the 1945 to 1947 period. The World War was ended and more than 12 million uniformed personnel were released from active duty beginning in 1945.

Several events during the post-World War II period drew attention to possible future US military actions. The period was one of developing world tension. The Soviet Union took over Hungary in 1947 and Czechoslovakia in 1948. The East Germans and the Soviets blocked the land access to the Allied sections of Berlin causing the Berlin Airlift during 1948-1949.

The US armed forces, including reserve forces, were engaged in the Berlin Airlift. The explosion of an atomic bomb by the Soviet Union in 1949 continued the escalation of tensions.

68

Seabees on active duty dropped from over 250,000 during World War II to a level of 3300 active duty Seabees by 1949. That number increased to 6000 by 1950, primarily due to increasing demand for construction and maintenance support at naval bases and stations worldwide. In general, the post-World War II period was a time of smaller operations and austere budgets for the Navy and the Marine Corps.

When the North Koreans crossed the 38th parallel June 25, 1950, and entered South Korea, US forces were shocked initially and absorbed the attack while withdrawing to the south. The theater commander was GEN Douglas MacArthur, Supreme Commander, Allied Powers Japan.

The Naval Forces Far East Command had been under the command of ADM C. Turner Joy, USN, since August 1949. He reported in Japan to General MacArthur, who was later designated, Commander in Chief, UN Command. The Far East Command, including the mission of logistics support,



was located in Japan and its principle bases were at Yokohama, Guam and at Subic Bay in the Philippines. All were significant distances from any action in Korea. The operating fleet was the Seventh Fleet under VADM Arthur D. Struble, USN.

Reacting to the need for personnel for Korean operations, President Truman called out the nation's Reserve and National Guard units July 19, 1950. As an example of the speed of mobilization, the first Marine Corps Reserve units reached Camp Pendleton, Calif., July 31, 1950. By Sept. 1, 1950, call-ups had brought in about 256,000 men into the three services.

The Seabees supported the Marine Corps in Korea as they had done in World War II. This was especially true of airfield maintenance and construction, because the transition from prop-driven planes to jet aircraft occurred during this time. From an engineering viewpoint, the Pierced Steel Planking (or Marston mat), used so successfully as main runways in World War



Seabee CE3 Pat Morris, with CBMU 1 at Chinhae, Korea, in 1953.

II for piston-engine aircraft, did not stand up to the punishment meted out by jet aircraft. That fact demanded new methods and materials in airfield runway construction and a six-inch blacktop layer was often used.

Cold weather, approximately that of northern Maine, and hot weather, approximately that of Washington, DC, contributed to the stress on the work and

the Seabees. The shortage of native skilled labor and lack of local supply sources contributed to the challenges of construction.

The Navy's Seabee battalions were not deployed to Korea as complete Mobile Construction Battalion units. Active duty Bees were called upon to provide smaller construction units.

NCB-104 was formed by reactivation of a World War II unit in 1947. It arrived at Camp McGill, Japan, at the outbreak of the Korean Conflict. It was shortly converted into ACB-1. GEN MacArthur successfully landed with the United Nations forces at Inchon, South Korea Sept. 15, 1950, and drove north. The Seabees of ACB-1 were attached to the 1st Marine Division and were part of the landing force under RADM James H. Doyle, USN, Commander, Amphibious Force at Inchon.

ACB-1 was organized in 1950 from NCB-104. It served at Inchon, Wolmido, Red and Blue Beaches and Yo Island in the Bay of Wonsan assigned to the 1st Marine Division. It was part of Task Force 90 and *Operation Chromite*, US Army X Corps, during the Inchon landing and was part of landing of The Wonsan Campaign of October 1950.

The ACB-1 Seabees were landed on Inchon as part of the landing force. Their effort was directed at providing the pontoon causeways necessary to unload LSTs.

In May 1952, ACB-1 managed to build an emergency airstrip on the small island of Yo. While under heavy enemy fire, they built a 2400-foot airstrip in

16 days.

During the work, they were forced to repair the new shell holes made daily by the enemy batteries across the bay. During the year it was used, it saved more than 60 fliers and at least \$10 million in aircraft.

During the Korean War, the UN Far East Air Force (FEAF) used some 15 air bases in Japan to support combat operations in Korea. In addition, the Air Force either improved or constructed some 55 airfields. These air bases were all numbered and some became better known by their number than by their name. The more important of these airfields included:

K-1 Pusan West	
K-2 Taegu	K-13 Suwon
K-3 Pohang-dong	K-14 Kimpo
K-5 Taejon	K-16 Seoul
K-6 Pyongtaek	K-40 Cheju-do
K-8 Kunsan	K-46 Heongsong
K-9 Pusan East	K-47 Chunchon
K-10 Chinhae	K-55 Osan

The Seabees grew from their strength of 3300 just prior to Korea up to 14,000 at the peak strength during the conflict. The authorized strength of a Mobile Construction Battalion was 550 men, but actual strength often varied.

The standard issue rifle was the M-1 .30cal Garand rifle, but some Seabees were reportedly issued M-1903 .30-06-cal Springfield rifles in training, a carry-over from World War II. The .45 cal. pistol was a standard sidearm.

The Seabees' uniform was a mixed assortment. Seabees on active duty intheater Korea wore Marine Corps-issue uniforms, while some of those in training in the States, including Reservists, wore the white "Dixie cup" cap with blue work dungarees and a Navy work jacket.

RADM Joseph F. Jelley, CEC, USN, had been Chief of the Bureau of Yards and Docks (BuDocks), and the Seabees, since Dec. 1, 1949. The worldwide US network



of World War II bases and stations remained after the war and the Navy's were still in existence in the late 1940s. BuDocks, therefore, still had responsibilities and missions in many places around the globe, including Seabee units deployed in the Atlantic, Caribbean, European and Mediterranean areas.

A Korean-era project that occupied many Seabees was begun in the Philippines in 1951. It was at this time that the Seabees began building the naval base there at Cubi Point. About 3000 Seabees from MCBs 2, 3, 5, 9 and 11 spent the next five years expending over 20 million man-hours building the installation for the Navy's Seventh Fleet.

Reserve Seabees

As we know, the Seabees were created in World War II and their ratings were considered Reserve ratings. In fact, all World War II Seabee construction personnel were designated "USNR." All Seabees remaining on active duty continued in that status before the Navy made them a permanent part of the Navy and classified construction ratings as permanent "USN" in 1947.

The Naval Reserve had existed since 1916, but the Seabees were not a part of the Naval Reserve as the Seabees had been created during World War II. After a period of post-war review the Seabees became an official part of the Naval Reserve on December 31, 1947.

The Reserve Seabee program consisted of 234 Seabee Companies, with about 1100 officers and 9000 enlisted, organized in about



200 Naval Training Centers. Reserve Seabee Companies were not deployable organizations, so no "Reserve Seabee units" per se served

in the Korean era.

70

Seabees from the reserve component, however, had a profound effect when the Korean Conflict began. The Navy called on the Seabee Reserve for skilled construction men to bolster the regular force.

Within a few weeks, individual volunteers from across the country had been activated and had proceeded to their ports of embarkation.

Within a few months, more than 60 percent of Seabees on active duty were Reservists.

I was there: An Oral History

RICHARD COULSON

BU2s Jack Kaelin (left) and Richard Coulson, "apparently trying to figure out what we were doing there." >>

"DURING THE KOREAN WAR, I

served two tours in Korea with CBMU 1 and CBMU 101. They were attached to the 3rd Marine Air Wing out of Orange County, Calif., at the old El Toro Marine Base, now closed.

"All in all, I owe so much to the Seabees for getting me started in a useful career in construction, being a contractor and a consultant, and today owning a large, successful general engineering and construction consultancy. But prior to enlisting, while in high school and college, I joined the Navy as a Reservist. While in school during and after World War II, many of my friends had joined the Army Reserves in California.

When the Korean Conflict started, all who belonged to the Army Reserves were called to active duty with the famous 40th Division, which went directly to Korea. I didn't want to wait for my call up, so I went to Los Angeles and enlisted in the Seabees. It was the best thing that ever happened to me.

"I was advised never to volunteer for anything, but I volunteered for everything that came along. It often really paid off. While in Korea, my commanding officer asked for a volunteer to fly to the island of Cheju-do and make a survey for a later radar site. One of the Marine pilots flew me over in his plane and I was there for two weeks.

"The island was a training base for Republic of Korea (ROK) Marines. While waiting for my plane ride back to base, I spent time with the famous Ama community. In their culture, women go diving for food, for kelp, lobster and abalone, while the men stay home and take care of the children. Having done some diving in the waters of Southern California, where I was born and raised, I



felt I could free-dive with the best of them. Was I ever wrong! Those Ama women divers could hold their breath for three to four minutes at a time. I couldn't even approach that time.

"For the most part, CBMU 1 was stationed at K-3 at Pohang-dong, on the east coast near Taegu. Our unit's project was to construct and maintain an airfield for the 3rd Marine Air Wing — one of whose pilot members was Ted Williams, at the time probably one of the best professional baseball players in the world. I had played some baseball in school, as most all students did in those days. There is just no comparison between the ball we played, though, and the ball played by Ted Williams. This by itself was worth the trip to Korea to be able to say, 'I played baseball with *Ted Williams*.'

"I later was stationed on Guam with Construction Battalion Detachment 1506. While there, I would volunteer to look for Japanese stragglers from WWII. Either they didn't know the war was over or didn't believe it. They hid in caves during the day and came out at night to scour local ranches for foodstuffs.

"During my tour, we captured three such holdouts that were shipped back to Japan. While on Guam, I volunteered for temporary duty at such exotic places Saipan, Spain, Tinian, Kwajalein, Bikini and Eniwetak.

"The photos I was able to salvage after 50 years were taken by a Kodak Box camera that I carried with me, a present from my Mom. I apologize for the quality, but that's all I had. I really did join the Navy to see the world – and any success I have had in the business world is due to my time spent with the United States Navy Seabees."

- Richard Coulson

SEABEE Magazine expresses its profound appreciation for the personal photos former Seabees pulled — from their wallets and Web sites.











Seabee scenes, clockwise from upper left: Local workers help build the airstrip at K-3; baseball legend Ted Williams, a Marine Corps fighter pilot in WWII and in Korea, walked away from an unscheduled hard landing there. A Korean English teacher and his family. An officer departs for home. "Military Payment Certificate" was "American money" in Korea. Ray Sorrentino and Tex Groves at CBD 1804. Bees from CBMU 1 open their Korean new "superhighway." Seabee Supply at K-3. Below, another Seabee Quonset hut goes up.





In the spring of 52 an 1804 officer gets orders to go home! Godshall



Conventional wisdom holds that if you *train* like you *fight*, you will *fight* like you *train*. The wisdom makes no exceptions for adversity. Here's how a battalion of Seabee Reserves put that axiom to the test to triumph over their enemy and the weather at *Sharp Wedge 2003*.

STORY BY LT LILA BAKKE AND JO1 BRIGETTE BARNES PHOTOGRAPHY BY JO1 BRIGETTE BARNES

THE RAIN FELL FOR 16 DAYS. It wasn't the kind of rain that kept the grass green and the trees tall. It was the kind of rain that hurts when it hits your head. The skies opened up and the water poured down. You could look it up in Webster's under the entry for "biblical." On top of that, it was freezing.

That didn't stop Naval Mobile Construction Battalion (NMCB) 23, from Fort Belvoir, Va., entrenched in the field March 27-April 13 at Marine Corps Base Camp Lejeune, N.C., for the *Sharp Wedge 2003* (SW03) exercise. The Reservist Bees built and secured a camp where they lived for more than two weeks — and faced many challenges on the unit's first fully tactical field exercise (FEX).

The annual combat training exercise is designed to test the military and construc-

tion skills of Naval Construction Force reserve units to meet the operational requirement to support the US Marine Corps in a contingency environment. As part of the SW03, Marines from II Marine Expeditionary Force (II

MEF) Camp Lejeune, as well as instructors from the Twentieth Seabee Readiness Group, Atlantic (20SRGLANT), out of Gulfport, Miss., regularly probed the camp to test the Seabees' ability to defend their position.

Each Seabee received a weapon and Multiple Integrated Laser Engagement System (MILES) gear. Essentially a sophisticated laser tag scorekeeper, the MILES gear allows exercise instructors to know who was shot, who fired a weapon and how many rounds were fired, as well as other information about each participant.

Seabees learned the value of keeping their field gear close at hand, particularly the gas mask and their weapons, as the Marine and instructor aggressors, simulating real-world situations, dropped CS gas canisters frequently and in great numbers.

"We are trying to train these people to prepare for the unexpected," said Hospital Corpsman 2nd Class John Batson, 36, of Easley, S.C., a member of the 20SRGLANT. The instructors were pleased with the

reserve battalion's performance.

"They did pretty well," Batson said, adding that the terrorist situations were challenging for the battalion. "But they were very eager to learn. It makes our job a lot easier when we see their appreciation."

Aggressor scenarios included infiltrators in the camp, combatants disguised as civilians, with snipers, protestors, and refugees as well as the more traditional and easily identified soldier-combatants.

Simulated protestors from a local village wanted the Seabees to leave and tried to get through the lines; supply and personnel convoys (both real and notional) were attacked; prisoners of war were taken; and many were "killed in action." Those missing and killed



Reserve Bees "going forward" in a scene that could have been torn from a WWII history book. Below, "protestors" are repelled by Seabee security forces.



in action, however, were quickly resurrected or returned after the appropriate paperwork — casualty reports and requests for replacement personnel — had been filed with higher headquarters. Their camp could hardly have been more difficult to set up. A recently clear-cut forest, the site was populated with stumps measuring 12 to 18 inches from the ground, with burnt, half-rotted logs left where they







had fallen, like giant toothpicks spilled haph a z a r d l y from their

box. Shrubbery had grown wild and tangled. The logs and debris had to be removed before the tents could be pitched.

It was impossible to pitch a tent without having half a dozen stumps inside. The site became known, affectionately, as "Camp Stumpy."

In all, 47 tents were raised in two and half days, including two strongbacks for the command operations center and battalion aid station, showers and galley tents. The galley tents were the last to go up. It was six days before the air det had hot food and showers, only four for the main body.

The completion of the shower and galley facilities marked a turning point for most Seabees and greatly bolstered morale. With food in their stomachs and clean bodies, the Seabees worked and defended their camp with renewed vigor.

Hard-line communications, including phone lines, were put in place and a small bustling community came to life. Fighting positions were on a line following the perimeter of a landing zone, yards away from anything, in holes dug into the sand. Work shifts were at 12-hour intervals.

"You go to bed, get up, get your gear on, grab an MRE and go to your hole," observed Steelworker 2nd Class Roger Fair, of Charlie/Delta Company, when asked what it was like to be on the line. "It's not all that complicated. But you do have to be alert and aware out there. That is not easy in the best of weather. That's why there are two to a hole, so that you can take turns sleeping.

"Most nights, you couldn't see past the muzzle of your weapon, so you had to smell or listen for the Marines."

Fortunately, the Marines didn't escape the extreme weather unscathed, Fair laughed. "Mostly, you could hear them coughing and sniffling," he said, as they were as miserable as the Seabees they were stalking.

"Sharp Wedge is critically important," said CAPT Barbara Sisson, commanding officer of the Third Naval Construction Regiment, "because this exercise is the culmination of all training preparation for deployment. It puts us at the peak of readiness. Until you actually go and *do* it, how can you actually know that you can?"



Medal of Honor Recipient Visits Bees at *Sharp Wedge*

Medal of Honor recipient and Deputy Assistant Secretary of the Navy for Reserve Affairs H.C. "Barney" Barnum Jr. visited with NMCB 23 in the field March 31.

Barnum encouraged the Seabees to take the training seriously.

"We don't know what's going to happen," Barnum said. "In war, stuff happens. Murphy has his hands in everything. Get as much out of this training as you can, so that if you have to go, you will be better prepared to perform."

A former Marine Corps Lieutenant Colonel, Barnum served on active duty more than 27 years, including tours in Vietnam, Pearl Harbor, Parris Island and Headquarters Marine Corps in Washington, D.C. Barnum was the fourth Marine to receive the Medal of Honor — the nation's highest honor for valor — for his service action in Vietnam.

He met with many of the battalion's Seabees individually, thanking them for their service and encouraging them to get the most out of what they were doing.

"Our forces have to be flexible," he said. "We may require more Seabee support. Just think of the reason you are here. It's very important."

Barnum told the Seabees that he didn't feel he had to give a huge motivational speech, because "the motivation is going on over there in the big sandbox."

– *BB*

This School is a Blast

There are wild extremes of weather, from picture-postcard lakeside idylls to cold mountain vistas. But students learn a lot about one of the most specialized jobs in the Navy.

And then they get to blow stuff up.

STORY BY STEVE MCCOMBS, EOCS(SCW) ART MESSER & EOC(SCW) TOM KUNTZ PHOTOGRAPHS BY EOC(SCW) TIMOTHY "DZ" DZIERGAS & EO1(SCW) PHIL CUZZETTO







From the armies of the Great Byzantine Empire and Roman Legions to modern military forces in the Middle East, there are a couple of elements that make armies successful — water, and rock.

Water, because huge combat forces require water to sustain them, and rock, so that roads, highways, airfields, port facilities and foundations for camps can be built to support fighting forces. The mission of the Naval Construction Force takes Seabees all over the world. Oftentimes, Civil Engineer officers and the Seabees must rely on acquiring building materials from the local area to complete mission tasking. Water and rock. Tucked away in the high desert hills above the Naval Air Warfare Center (NAWS) in China Lake, Calif., a group of Seabees train Navy combat engineers in the fields of Water Well Drilling and Blasting and Quarry Operations. NAWS China Lake is home for the Naval Construction Training Unit, military professionals dedicated to providing a world-class education in how to get water out of the ground and "making little rocks out of big rocks." Senior Chief Equipment Operator (SCW) Douglas Hunt is the officer in charge of the unit, reporting to the Naval Construction Training Center (NCTU) Port Hueneme, Calif.

For those who have never been to the high desert, China Lake can be an awakening experience, especially in the summer months when the temperatures often exceed 115 degrees and everyone carries water to avoid dehydration and heat stress. During the winter months, China Lake gets cold, often hitting temperatures down to 10 degrees. Winds come off the nearby Sierra Nevada Mountains and whip through the area, adding wind chill to an already frosty environment. And when you consider the

desert is home to a variety of unsavory creatures, such as rattlesnakes and scorpions, it's no place for the timid or tender of foot.

Water Well Drilling training is ideally suited to the high desert because of the varied geologic formations. Water Well classes drill between two and three wells in a six-week course. One well may be in an ancient lakebed to a depth of 300 feet and the next may be in a confining layer of granite or volcanic basalt, where the depth could go as deep as 1500 feet. Drillers are challenged with learning how to bore through various strata to different depths.

Water Well drilling is a refined art, combining the ability to interpret geologic

data and identify water-bearing formations through surface indications. Using the latest technology and equipment to drill the water well, Chief Equipment Operator (SCW) James Jones, Equipment Operator 1st Class (SCW) John Romero and Construction Mechanic 2nd Class (SCW) Caleb Painter lead the NCTU Water Well Team.

You say you need several tons of granite blown out of the side of a mountain? "Can do, sir!" This is where the Blasting and Quarry crew, led by Chief Equipment Operator (SCW) Timothy "DZ" Dziergas steps in to teach Seabees. As lead blasting and quarry instructor, Dziergas and a select few watch as the drillers gracefully operate heavy equipment up on a rock ledge. As the holes are drilled, they are capped to prevent any debris from entering and interfering with the explosion, and then all the charges are set in place.

Some blasts, called "shots," are done with plastic explosives. At other times, the shot might call for an Ammonium Nitrate and Fuel Oil (ANFO) mixture. Each method and related tasks is a precise and rigorous process, with each hole containing a pre-determined amount of explosive.

Safety is the top priority with this training. Operational Risk Management is

performed at every level of the operation with no room for short cuts. Safety procedures, pre-mishap plans and use of personnel protective equipment are strictly enforced. Only authorized personnel are allowed in the blasting area and every conceivable precaution is taken. When every requirement is checked and double-checked, the blasters are ready to fire.

Non-essential personnel are mustered at a safe distance away from the blast zone. Only a select few personnel are allowed in the

bunker, a steel container covered with sandbags. The lead blaster for the shot makes a final check of the area and proceeds to the bunker. A siren wails and a countdown begins.

"Fifteen, fourteen ... three, two, one — fire the shot."

Several tons of rock and soil erupt. When the dust clears, there is a neat, clean pile of debris in the exact location the blasters wanted. Once the blast area is given final clearance, the front-end loaders can move in and haul off the rock for use in numerous applications, including making concrete. It is an awesome demonstration and one of the most motivating experiences going.

experts like Equipment Operator 1st Class (SCW) Phil Cuzzetto and Construction Mechanic 1st Class (SCW) Lewis Lovos, provide classroom training, teaching the basic theories of soil mechanics, rock drilling and explosives. Once the students have passed a strict series of examinations, it's off to the quarry site for hands-on operations.

When an area of rock is chosen for demolition, an exacting process takes place. The weight and composition of the soil is calculated and the blasters decide where they may want to "move" it. Holes are drilled to a specific depth and placement into the rock. It's quite an operation to



Seabee Recruiters Take 'Can Do!' to the Streets

If you seek challenges, a chance for improved advancement and more, being a Seabee recruiter is a different kind of 'field assignment'

STORY AND PHOTOGRAPHY BY JO1 MICHAEL B. MURDOCK

With Seabees deployed literally all over the planet, the need for high-quality Bees never stops. The "*Can Do!*" spirit is alive and well in the world of Navy recruiting, with as many as 200 Seabees working as recruiters across the country on any given day.

While recruiting duty can be an intensely challenging assignment, recruiters often find it to be very rewarding as well.

"When I see a kid who comes off the street, I kind of have flashbacks of being that kid, just like when I first joined," said Builder Senior Chief (SCW) Richard F. Cataldi, recruiter in charge of Navy Recruiting Station Everett, Wash. "I wanted to get away and I wanted a better life for myself. That's still what kids come into my office looking for."



EO2(SCW) Grayden J. Hollister (I), talks with prospective enlistee Joseph N. Mashore.

The chance to help others while helping themselves, leads many Sailors and Seabees to look at recruiting duty. What they discover is that recruiting offers many

benefits that are not available anywhere else in the Navy. As a result, the reasons for taking orders for a recruiting tour are many.

"Actually, I have three reasons," said Equipment Operator 2nd Class (SCW) Grayden J. Hollister, Navy Recruiting Station Puyallup, Wash. "First, I wanted to afford myself an opportunity to continue working on my degree.

"Second, because of an agreement with my wife when I came on active duty, that at some point in my career, she would be able to go home. The third reason was because I had heard so much about what recruiting can do for your career."

Career enhancement is probably the biggest reason Sailors choose recruiting. In the Seabee community, where the ranks are comparatively small and advancement can sometimes be difficult, a recruiting tour offers the chance to stand

apart from peers.

"I plan on doing 20 [years] and this gives me diversity in my



CM2 (SCW) Tauati P. Malietufa talks to a prospective Seabee applicant by phone.

career," said Construction Mechanic 2nd Class SCW) Tauati P. Malietufa, of Navy Recruiting Station Metro Seattle. "I think every Seabee should try it out."

Advancement was high on the list of priorities for Cataldi. When he was offered orders to a construction battalion unit, he turned them down.

Instead, he chose recruiting duty because it offered a better chance for advancement and the opportunity to live in a location that was otherwise tough to get orders to.

Recruiting duty worked for Cataldi, too. Not only was he was assigned to a recruiting station near where he wanted to live — he was also advanced to Senior Chief Petty Officer less than a year after arriving in Everett.

According to Cataldi, if you are planning to make the Navy a career, a challenging tour like recruiting can be a good choice.

When their recruiting tours are over, the Seabees are look-

ing forward to returning to their old jobs, which they feel will be enhanced by the skills learned while on recruiting duty.

Ultimately though, what the Seabee recruiters seem to take pride in the most is the chance to help someone do something to better themselves.

"You put someone in the Navy, and they go to boot camp, they go to "A" school and they come back to visit you, and they are doing well," said Cataldi.

"It makes you feel good about what you do."

Seabees interested in a recruiting tour must first call their in-rate detailer and ask to be released to special programs. Once released, they must prepare and submit a screening package to determine their eligibility for recruiting.

The screening package will be the determining factor in whether applicants are selected for recruiting duty. For more information on Seabee recruiting, contact your Command Career Counselor. Seabee Ingenuity: THE CASE OF THE SUB BASE STAIRCASE

CBMU 202 Rides to the Rescue

When Sub Base New London needed help, Seabee Reserves 'stepped up'

STORY AND PHOTOGRAPHY BY LCDR RONALD HILL, CEC, P.E. AND EOC KENNETH TORIAN

The shortest distance between most of Submarine Base in New London, Conn., and the Naval Ambulatory Care Center (NACC) used to be up a rocky incline — with a 100-ft elevation difference. This didn't stop people from trying to take this shortest route, often subjecting themselves to potential injury and the secret joys of poison ivy exposure.

Alternative routes were at least eight times longer. Center administrators decided to build a walkway to help people get up the hill and make visiting NACC a little easier, and that's when Construction Battalion Maintenance Unit (CBMU) 202, a Reserve Seabee unit located at the base, got involved.

The initial design called for a poured concrete stairway. However, equipment and manpower shortages precluded taking that plan. Instead, the Bees opted to use structural aluminum, with aluminum grating and expanded metal treads. The aluminum could be cut and fabricated using available tools.

Several base departments pitched in. The Public Works Department prepared new drawings, which were based on earlier unused plans. In addition, PWD also supplied the material.

The new staircase climbs a rambling, hilly 100-ft ascent.



Members of CBMU 202 supplied the labor, using annual training and additional duty training time as well as regular drill time.

The walkway, 4 ft wide by 350 ft long, has an elevation change of 97 ft that required 180 steps.

Support footings for this walkway are 12-in. diameter, 3000-psi concrete. Sonotube, round cardboard forms, were used as the concrete form for the footings.

These tubes required much less effort and material than formwork. Where existing soil was available, the footings were 42 inches deep, well below the 36-inch Connecticut frost line. Where footings had to be

installed on rock, holes were put in the rock the and rebar was grouted in at least 6 inches. The footings were attached to the rebar. All told, 74 footings were needed, requiring 12 cubic yards of concrete.

All of the concrete was thoroughly hand-mixed and then manually placed.

The structure



was built from 4-by-4-inch aluminum angle and 12-by-4-inch aluminum channel. The angle and channel were cut using a chop saw with a carbide blade. Bolt holes were drilled using a drill press with standard bits.

Both tools were located at the construction site and powered from a local utility pole. The all-bolted construction method eliminated the need to weld.

The 11-inch by 4-ft treads were fabricated with nosing installed. The tread height was 7 inches, and both steps and treads were held to within a quarter inch throughout.

Light poles, designed to withstand a 90-mph wind, were attached to the side of the walkway so the stairway could be used at all hours.

Aluminum tube railings were installed along the entire length, on both sides of the walkway. The railing was constructed from aluminum tubing and connected using speed rail connectors.

Construction began in the summer of 2002, one of the hottest on record and was concluded in the winter of 2003, one of the coldest on record.

afterword



U.S. NAVY PHOTO BY PH1(SW) ARLO K. ABRAHAMSON

Take the plunge. Enter the SEABEE Magazine Photo Contest

You can be a published photographer by capturing Seabees and CEC officers at work and at play. The entire Seabee Nation is your subject for the first-ever *SEABEE Magazine* Photography Contest.

You do not have to be a professional photographer, either. We're looking for those classic slice-of-life images that safely reflect the full spectrum and diversity of the Seabee Experience, from work site to after work — to a "beauty shot" of your favorite piece of equipment.

Hey, a dozer can be a *beautiful* thing. What we want

Seabees do some of the most interesting work in some of the most fascinating locations on earth. Photos of Seabees, CEC officers and their activities are a good place to start, whether on duty or off. You decide what makes the best picture for you. Both black-and-white or full color images are both acceptable.

All Seabees and CEC officers, active duty or reserve, are strongly encouraged to submit photos. Anyone else may also submit as long as the subject matter is related to the Seabee Experience. All we ask is that you submit original work not previously or concurrently submitted to

any other contest.

What we don't want

We cannot accept laser-printed, photocopied or faxed images, instant or Polaroid[™] images.

How to submit digital images

With the prevalence of high-quality digital cameras today, and the ease in our accepting digi-files, we strongly encourage you to shoot and submit high-quality digital photos. All digital images must be sized to 300 dpi at 5x7 inches at minimum.

A complete caption or description of what's happening in the photo must be included (preferably embedded in the electronic file), and all recognizable persons must be identified by full rank/ rate, name and unit.

To submit electronic images, send an e-mail with the image(s) attached to **seabeemagazine@navfac.navy.mil**. Please include the photographer's full rank/rate, name, unit and contact telephone numbers. If the submitter is not the photographer, provide contact information for the both people in case we need to reach either person.

By postal mail, you may also burn a

compact disk with images, if necessary, and send the disk in secure packaging to the contest postal address below.

How to submit prints

If not shooting original digital, we strongly encourage you to shoot highquality print film instead of slide or transparency film. Many print films are well sharp enough to rival many of the slide films.

Don't forget, most photo processors will be happy to scan your negatives to a CD when your film is processed. You can send the CD itself or e-mail photos from it to us.

Prints (and CDs) may be sent to: SEABEE Magazine, Attn: PHOTO CONTEST CODE PA, 1322 Patterson Avenue SE Ste 1000, Washington Navy Yard, DC 20374-5065.

While overnight delivery is not required, U.S. Postal "Express Mail" or a delivery means other than routine firstclass mail are strongly recommended to avoid possible damage in transit or security handling.

Deadline

All submissions must be in our hands no later than Jan. 31, 2004, so don't overlook those year-end holiday photos! @

Tools.



POWER TOOLS.



Kuwait. Iraq. Liberia. Florida. Okinawa. Indian Head. Bahrain. San Diego. Spain. Portsmouth. Washington DC. Africa. Germany. Brunswick. Guam. Reykjavik. Diego Garcia. Nebraska. Afghanistan. London. Michigan. Around the clock. Around the block. Around the world.



<u>Seabee Service Matters</u> — More than ever. Stay **Navy**. Stay **Seabee**.

LIFE, LIBERTY AND THE PURSUIT OF ALL WHO THREATEN IT.



We know you have great stories and photographs of active duty and reserve Seabees at work and at play — and turns out we have lots of pages on which to print them. *SEABEE* Magazine is the official publication of the US Navy Seabee community, active duty to reserve, and of additional interest to Seabee veterans and retired, Seabee families and friends. Your magazine wants to cover all things about Seabee people and their activities, around the clock, around the block and around the planet.



Not a writer? Not a problem, that's what you have us for. Send words, photos and your contact name with telephone and e-mail information — and we'll do the rest. For some tips on how to get started, what we're looking for and more, send an e-mail with your contact information to **seabeemagazine@navfac.navy.mil** and put "Writer's Guidelines" in the Subject line. Let us hear from you, early and often.

SEABEE Magazine. We'll leave our work light on for you.

DEPARTMENT OF THE NAVY

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