

Multimeters for Seabees

Fluke donates DMMs to Al Asad Air Base

Technology at Work

Engineering and building don't get much more intense than this. As part of the U.S. Naval Seabees, hundreds of reservists who work in the construction trade as civilians are helping the U.S. military build its infrastructure in Iraq.

At Al Asad Air Base in the Al Anbar province, the Seabee Naval Mobile Construction Battalion (NMCB) 24—consisting of construction specialists, engineers and steelworkers—were there to support the Second Marine Expeditionary Force at Al Asad. Their tasks included building bases for new Iraqi security forces, building a triage wing for a hospital, refurbishing a runway and installing armor on vehicles used by Marines and Seabees. Materials and tools to do these jobs are often thousands of miles away. The climate is harsh on tools and often troops are forced to make do with what's at hand.



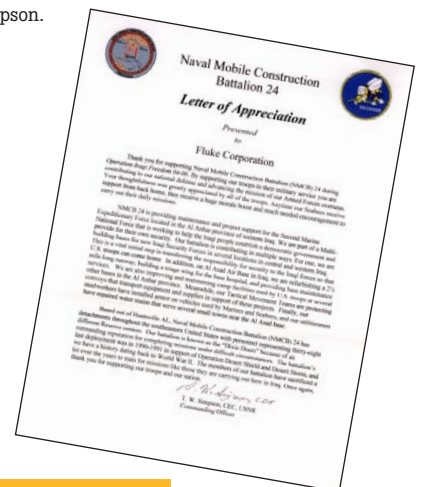
These members of the NMCB 24 wrote in to Fluke asking for DMM service to support their engineering and construction work in Iraq. Below, a letter of appreciation to Fluke from Commanding Officer Tim Simpson.

When NMCB 24 found itself without any working Fluke meters, finding replacements wasn't going to be easy. CE3 Rodney Mason contacted the Fluke customer service center with their problem.

Fluke Customer Service Representative Sue Hunt was reading the international e-mails on May 15, 2005, when she came upon the message from Mason in Iraq. In his e-mail, Mason explained

that he and his battalion were building operation structures and living quarters for the US marines stationed in Iraq. He went on to say that their multimeter of choice was Fluke and that they had three inoperative meters they needed to repair or replace. Mason wanted to know if Fluke could help them with a discount.

For Hunt, it struck a nerve that "They were in a war situation and they depended on the Fluke prod-





Construction Electrician 2nd Class David Martinez, right and Construction Electrician 1st Class Eddie Valdez use a Fluke Clamp Meter to test the voltage of a generator in order to ensure the correct power needs are supplied to a Marine Corps berthing facility in Al Asad, Iraq. Martinez and Valdez are both members of Naval Mobile Construction Battalion Twenty-Two and are deployed to Iraq in support of Operation Iraqi Freedom.

ucts." She took the request to her manager, Senior Service Provider, Marty Kidd. With help from Judi Smith, a specialty associate, Kidd obtained several refurbished 87V multi-meters and sent them to Mason.

Battalion 24 put the tools to use. While in Iraq the NMCB 24 built forward operating bases in three locations. They also completed building a location for the newly-formed Iraqi Security Forces.

"Anytime our Seabees receive support from back home," Commanding Officer Tim Simpson wrote to Fluke, "they receive a huge morale boost and much needed encouragement to carry out their daily missions."

Lone Star Battalion arrives in Iraq

After Hurricane Katrina devastated the Louisiana and Mississippi gulf, the battalion was called home in late September to assist in rebuilding. They were replaced by the NMCB-22, (Lone Star Battalion) from Fort Worth, Texas, which took over the responsibilities NMCB-24 left behind. The Lone Star Battalion brought with them their own long history of engineering and construction including building

for the Atlanta Olympic Games, rebuilding after flooding in North Carolina and considerable work in Saudi Arabia during Operation Desert Storm.

Fortunately, the tools remained at Al Asad to continue testing.

"Our primary task is construction in forward operating areas," says NMCB-22 Commander Gilbert Jordan. "This encompasses a wide range of jobs."

But the work they do is not much like that of their civilian counterparts in the United States. "The pace is frantic, requiring long hours and seven days per week scheduling," Jordan says. "Many of the basic components we build are designed and engineered, but the field implementation usually requires onsite design to adapt the site and basic design for construction, utilities, and force protection." That work needs to be done in a hurry and with limited resources in a harsh environment.

Many of the battalion reservists, Jordan says, have told him that the most striking difference in Wartime Seabee construction from their civilian work is the existing infrastructure and metric and international standards for nearly all types of construction materials. That is one area in which the Fluke meters can be

of help. "They have been especially helpful for safety in places requiring both international voltage (230/400) and US standard voltages (120/208 and 277/480)," Jordan says.

The battalion faces other hardships as well. "The lead time for materials can be very long, which requires adaptability to be able to complete projects with the material on hand."

Working conditions are difficult with extreme heat and dust, Jordan says, "and are very harsh on nearly all of our tools and equipment." The climate can take a toll not only on the tools and equipment but on the men as well. Additional strain comes from the fast pace of the work. "Work schedules are long," Jordan says, "and require adaptability to meet operational requirements, mission changes and force protection requirements."



Construction Electrician 2nd Class Grant Wallace uses a Fluke multimeter with an amp clamp to check for proper voltage to an outlet in a Southwest Asia Hut or SWA Hut, a stand-alone wooden multi-purpose structure. The SWA Hut in the photo will be used as a berthing facility for Naval Mobile Construction Battalion Twenty-Two (NMCB 22) members and is located on the NMCB-22 compound in Al Asad Iraq. Wallace is a member of NMCB 22 and deployed to Iraq in support of Operation Iraqi Freedom.

Fluke tools at work

Jordan says that the three Fluke DMMs handed down from Battalion-24 are used in a variety of applications. "On forward construction they are used to ensure the safety and operation of installed electrical systems and to troubleshoot a variety of equipment," Jordan says. That can range from AC systems to heavy equipment. In maintenance and repair of existing infrastructure they are used for electrical systems, he says, including chiller systems, pump systems, generator troubleshooting, AC systems and a variety of other uses.

The Lone Star Battalion is also rebuilding a damaged bridge that is critical to the Iraqi people, continuing runway repair, doing electrical upgrades and building

and maintaining camps throughout the Al Anbar Province. Jordan even used a Fluke 187 to repair a non-working stationary bike at the base. "This was a morale booster," he says.

For those at home in the Fluke office, Everett, Wash., there was satisfaction in knowing how the tools would be used. "This felt really good," Smith said and Hunt agrees.

"It's heart-warming to see the impact a small gesture can have on our troops," says Kidd. Kidd spent 10 years in the US Air Force himself and feels a connection to those Seabees in Iraq. He says, "I know what it's like to be out there, wondering if people back home are thinking about what you're doing ... I hope we get more opportunities to let our troops know we care."



Utilitiesman 2nd Class Pablo Esquivel uses a Fluke Clamp Meter to check voltage on the base theatre chill water plant in Al Asad, Iraq. Esquivel is a member of Naval Mobile Construction Battalion Twenty-Two and deployed to Iraq in support of Operation Iraqi Freedom.

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