

8th Engineer Support Battalion's Support of Operation IRAQI FREEDOM

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“Whatever it takes.”

Early in the spring of 2002, while I Marine Expeditionary Force (I MEF) was diligently planning and wargaming its role in what was to be called Operation IRAQI FREEDOM (OIF), 8th Engineer Support Battalion (8th ESB) was engaged in engineering projects around the globe with its construction, bulk fuel, bridge, and engineer support companies in Florida, Texas, Virginia, Barbados, Bulgaria, and Panama. The secrecy with which OIF was being organized and planned prevented many of the units who would be involved the ability to get a jumpstart on preparation. In July 2002 the command element of 8th ESB was invited to participate in the I MEF command post exercise (MEFEx) held at Camp Pendleton. During the preplanning for MEFEx, 1st Force Service Support Group (1st FSSG), in a unique and thoughtful move, decided it could best support the engineer missions by functionalizing the ESB into three distinct areas—bulk liquids, led by 6th ESB; construction support, led by 7th ESB; and bridging, to be led by 8th ESB. To accomplish this never before tried task, 8th ESB had to reorganize its entire battalion and create tactics, techniques, and procedures (TTP) in order to fulfill the command and control (C²) aspect of a single bridge battalion in support of a Marine division. Time was short, tactical bridging was scattered around the globe and, adding to the dilemma, the Marine Corps in the aftermath of DESERT STORM cadred the bridge companies of 7th and 9th ESBs, leaving them only a small bridge training set but without the table of organization structure of a bridge company to maintain proficiencies. Only 8th ESB was left with an active bridge company. The following is how this battalion lived up to its motto, “whatever it takes,” to successfully meet the challenge.

Building a Bridge Battalion

Preparations commenced with the battalion forming a core planning group made up of the operations officer, bridge company commander, and enlisted bridge experts from the battalion and the Camp Lejeune area. The Marine

Corps Planning Process model was the heart of the initial planning and tactics rework. The planning centered on distilling *Field Manual 90-13, River Crossing*, that was written by the U.S. Army for engineer brigade-level C² of river crossings into a usable Marine Corps engineer battalion-level document. Long hours and many drafts later, the initial battalion standing operating procedure (SOP) was written. The battalion directed its bridge company to try out and test the SOP by performing a series of river crossings in the surrounding North Carolina counties that closely resembled crossing requirements we could expect in Iraq. The support from the local communities was outstanding. The TTP were laid out and the bridge company convoyed, maneuvered, emplaced its control points, and placed a ribbon bridge. Numerous times over the following months tests were conducted, including diverting an artillery battery from 10th Marines in retrograde from Fort Bragg, NC to Camp Lejeune over an improved ribbon bridge (IRB) across the Cape Fear River. The testing enabled the bridging company to hone its techniques and modify the operation as required, turning the river crossing SOP into an effective document for division-level operations. The battalion hosted the engineer brigade staff of the Army's 3d Infantry Division (3d ID) in early December 2002 to participate in the first ever joint river crossing exercise culminating in a 325-meter IRB spanning from Engineer Point into French Creek aboard Camp Lejeune. This effort employed armor, artillery, amtracks, trucks, military police, and infantry units adding friction and realism to the efforts. The organizational and personal relationships built here proved invaluable later during the transfer of the Army's multirole bridge companies (MRBCs) to 8th ESB during the conduct of the war.

The battalion staff continued to work on bridge equipment improvements, maintenance, employment, and transportation configurations. Most of the fleet of bridge erection boats (BEBs) were in poor shape from a combination of age, lack of parts, minimal maintenance, and continual use in brackish water. The 8th ESB's single active bridge company did not have a history of enough usage to ensure that the Defense Supply Agency maintained an adequate stock of required repair parts. To compound the repair problems, the realignment and subsequent experimentation with the integrated logistics concepts (ILC) showed severe limitations in that ability to repair the BEB fleet. As the war loomed the battalion requested an infusion of funding and outside support from Marine Corps Systems Command (MarCorSysCom). This support came from the U.S. Coast Guard rebuild facility in Baltimore, MD. BEBs from Camp Lejeune and Marine Corps Logistics Base Albany were taken in and rebuilt to meet the needs of the deployment. Marines from 7th and 8th ESBs were sent to both Marine Corps logistics bases to inventory and repalletize medium girder bridge (MGB) components into usable combat loads. IRB stock was identified throughout the Marine Corps, and the process of consolidation began. During this time period 7th ESB, under the direction of 1st FSSG and I MEF, sent their bridging equipment to Kuwait for prepositioning. The challenge became clear as we gathered equipment and deduced requirements through refinements in the planning process. Bridge and heavy equipment transport was woefully insufficient to load the bridge companies. MarCorSysCom again supported our needs with a commercial off-the-shelf (COTS) purchase of BEB trailers. This effort increased our crossing capability by allowing an MK48-18 truck to haul an IRB bay while pulling a BEB on a trailer.

Forming the Battalion

Discovering the whereabouts of the equipment and Marines to support the 8th ESB's vision of an assault bridge battalion was another challenge to overcome. 2d FSSG, as 8th ESB's parent command, was designated as the Marine Logistics Command (MLC). As such, the MLC acquired portions of the battalion's capability for self-sustainment. With the battalion unable to regain control of its assets that migrated to other battalions under the ILC, the battalion lobbied 1st FSSG, I MEF for support and received augmentation from 1st Transportation Support Battalion (1st TSB), 1st Supply Battalion, 6th ESB, 7th ESB, 6th Motor Transport Battalion, 1st and 2d Combat Engineer Battalions (CEBs), and Headquarters and Service (H&S) Battalion, 1st FSSG. This loss of core competencies from within the battalion is analogous to an infantry battalion consolidating its mortars and crews at the regiment or

division level and then getting back a pickup team of mortar men who did not have the culture and training of the infantry battalion. The Marines and sailors who were placed under the command of 8th ESB were highly motivated but required extensive training in order to be independent bridge builders under wartime conditions. (See Figure 1.)

Rehearsals

Training to river crossing standards in the middle of the Kuwaiti desert was a challenge overcome by the ingenuity of the young Marines.

Engineer support company was given the task of building both a dry gap pit and a pond large enough to test the BEBs, and they accomplished both in short order. The training regimen undertaken prior to crossing the line of departure (LD) was intense both day and night in order to build a cohesive and bridge savvy battalion. Repetitive C² exercises, large-scale convoy operations, and bridge building became the daily task for each bridge company. This effort proved immensely helpful during the war as each company, C² element, and individual Marine or sailor became proficient in the procedures and immediate action required of them in both movement and bridge emplacement. Small unit leadership in executing mission type orders, complete understanding of command intent, and adherence to supporting the division with the “whatever it takes” initiative was exhibited by the battalion’s officers, staff noncommissioned officers (SNCOs), and NCOs.

Fighting for Needs

The requirement to cross the Euphrates, Tigris, and Al Garraffh Rivers in a nearly simultaneous time frame was a daunting task. The most pressing difficulty was the loss of each set of bridging assets as they were emplaced. Preliminary plans suggested the possibility of reloading the empty bridge carriers with spare bridge components and continuing the movement. This sounded like the best course of action, but it became increasingly difficult to achieve. Competition for the very scarce MK48-18 and qualified drivers who could launch and retrieve the ribbon bridge between all three ESBs and the combat service support battalions was fierce. One solution was the purchase of COTS boat trailers modified slightly to accommodate the BEB. The purchase of 26 trailers was to relieve the MK48-18 from carrying the BEB by only carrying IRB, with the BEB in tow. Unfortunately, only half of the trailers were delivered prior to crossing the LD. Marines took risks by loading two pallets of MGB on each MK48-18 vice one. The load configuration required the operator to slide an MGB pallet as far forward as possible with the second MGB pallet load being positioned sideways on the rear of the trailer. This presented an awkward traveling load, but the drivers quickly mastered the problem.

Combat Operations

The battalion was under the administrative control of 2d FSSG (Rear) located in Camp Lejeune but under the operational control (OpCon) of 1st FSSG, who in turn placed the battalion in direct support (DS) of the 1st Marine Division (1st MarDiv). This C² relationship was understood by all participants. Joint planning and frequent exercises took place between 8th ESB and 1st MarDiv. However, as with many tactical operations, change is constant. Adding friction to the battalion’s already overextended communications mechanisms and C², the battalion was transferred OpCon to Task Force Tarawa (TFT) with a different staging and starting point just under 72 hours prior to crossing the LD.

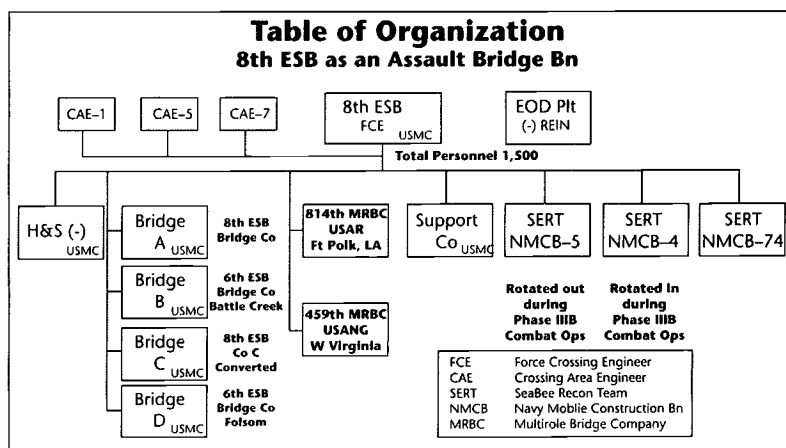


Figure 1.

This required a revision to the battalion's plan for movement, staging, and follow-on 1st MarDiv operations as TFT attacked north from Breach Point West to An Nasiriyah. To support this movement the battalion placed Bridge Company A and Bridge Company B under the Crossing Area Engineer 5 (CAE-5) C² cell. The force crossing engineer (FCE) C² cell was collocated with the TFT command element. After crossing the LD into Iraq the battalion echeloned its forces toward An Nasiriyah where it was planned to establish two bridgeheads in the vicinity of both the eastern and western bridges across the Euphrates River. As the battle was waged it was determined the bridging effort was not required as the eastern and western bridges were taken intact by 3d ID and TFT.

The battalion, in the midst of three forces (TFT, 1st MarDiv, and 3d ID) maneuvering along a very narrow frontage, was detached from TFT and placed OpCon to 1st MarDiv while on the move. Additionally, during this change of C², the battalion accepted two MRBCs from the U.S. Army's 3d ID while simultaneously linking up with 1st MarDiv. Adding to the overall confusion associated with these ongoing efforts, the enemy began to increase its resistance in and around the An Nasiriyah eastern bridges.

Assuming OpCon of two MRBCs in the vicinity of the western Euphrates bridge, while supporting 1st MarDiv in the attack up both Routes 1 and 7, was successful because of the small unit leadership displayed by the CAEs. The support plan was simple: support Regimental Combat Team 1 (RCT-1) up highway 7 to Al Kut with CAE-5 with two bridge companies, and support the division main effort up Highway 1 with CAE-1 and CAE-7 with two bridge companies. At this point, and adding to the friction, both U.S. Army MRBCs reported their fuel supplies nearly exhausted. The 1st FSSG engineer cell coordinated a successful 3d Marine Aircraft Wing resupply mission that required the use of twenty 500-gallon bladders to a point just south of the western bridge sites. The Marines' fuel supply was adequate because prior to crossing the LD the battalion's fuel storage capability was doubled when all companies were outfitted with locally produced and commercially acquired gypsy racks purchased by the 1st MarDiv during the prewar preparation stage. These COTS items proved their worth time and again as the units rarely ran out of fuel.

The CAE C² cells became pivotal points, enabling the battalion to continue its movement and combat support. Both CAE commanders understood the battalion's intent and the 1st MarDiv requirement for dual-axis support up Highways 1 and 7. Abbreviated operational commands were given over secure Iridium phones, and the CAEs, with their bridge companies in trace, maneuvered up both routes in support of their assigned RCTs. CAE-5, following RCT-1 up Route 7, ran a gauntlet of small arms and rifle propelled grenades (RPGs) indiscriminately shooting from An Nasiriyah to the junction of Routes 7 and 15. The Army's 459th MRBC, encountering its first enemy contact and unfamiliar with the execution of immediate action drills, required direct supervision from the Marines of CAE-5 in order to conserve ammunition and continue its forward movement. To ensure the unit was ready for their next contact, CAE-5 Marines provided immediate action drill training and stressed the need for small unit leaders to take charge and effectively employ their organic weapons to neutralize the threat.

The FCE and CAE-1 traveled up Route 1 in trace of the 1st MarDiv main assault force. The route required the construction of four MGBs to span box culverts in order to permit follow-on logistics traffic. This effort took place during what turned out to be the worst sandstorm of the war. Following the emplacement of the MGBs and in coordination with Combat Engineer Battalion (1st and 2d CEBs), 8th ESB filled in 13 additional culverts using D7G bulldozers. During these efforts the battalion was ordered to return one of the MRBCs to the U.S. Army. This, unfortunately, was a very difficult task as all four forward bridge companies were employed or on the move in support of the 1st MarDiv. CAE-5 and the 459th MRBC were well up Highway 7 in general support (GS) of RCT-1; CAE-1 with the 814th MRBC and Bridge Company B, 8th ESB were emplacing MGB along Route 1; and CAE-7 and Bridge Company A, 8th ESB were en route up Highway 1 behind RCT-7. Once the sandstorm subsided the 814th MRBC, less its MGB, was ordered off the road to wait for an opening

that would allow them to return to the 3d ID. Coordination with 3d ID was nonexistent, and the location of the 814th MRBC was passed up through the I MEF to the combined forces land component commander (CFLCC) to be pushed down to the engineer brigade of 3d ID. Recovery of the 814th's MGB did not take place until 3 weeks later.

Flexibility on the Move

With the ability to mobile load only two of the four Marine Corps bridge companies and the need to have six employed within the 1st MarDiv plan, a flexible and innovative echelon plan was required. The force movement control center from 1st FSSG was inundated with movement demands and could only fulfill movement requests assigned the highest priority. This took approximately 96 hours from the time of demand. This time delay was not the most responsive with 1st MarDiv moving 50 to 65 miles a day. Therefore, once the bridge companies began the employment of floating bridges at the Saddam Canal and Tigris River, requirements for movement of additional bridge components could not be fulfilled in a timely manner. The battalion's engineer support company created two convoys from empty trucks and traveled back to Kuwait to move additional bridging forward, again living up to the battalion's motto, "whatever it takes."

To compound the difficulties the convoys, with their own internal security, had to travel through multiple zones belonging to the 1st MarDiv, FSSG, 3d ID, British forces, and I MEF controlled space without adequate communications. Iridium phones were the only source of reliable communications but required constant alternating current charging and were susceptible to the elements.

While resupplying the expended bridge components, 1st MarDiv continued their attack toward An Numaniyah and across the Saddam Canal where a single-lane bridge, rated at a maximum of 20 tons, was located. A bypass route was identified as a requirement to ensure the line of communications remained open. CAE-1, in concert with lead elements of RCT-5, conducted a reconnaissance of the bridge immediately after the RCT-5 secured the far bank. Bridge Company A, 8th ESB was tasked to emplace the bypass bridge, completing the task by the following morning. Simultaneous to the emplacement of the Saddam Canal bridge, CAE-5 and its attached bridge company arrived via Route 17 after detaching from RCT-1 and collocated with the division forward command post to support the division's movement toward An Numaniyah. As 1st MarDiv approached An Numaniyah, the battalion was directed to emplace a supporting bridge across the Tigris River north of the An Numaniyah bridge. Emplacement of this 155-meter IRB was initiated by Bridge Company A and completed by Bridge Company B. This bridge supported elements of RCT-5's movement north and provided the only alternate crossing site in the case of failure or loss of the An Numaniyah bridge.

Following the emplacement of this bridge, personnel and motor transport assets from Bridge Company A were transferred to Bridge Company C to make this company self-mobile. Once across the Tigris the 1st MarDiv maneuvered up Route 6 toward Baghdad. The battalion's FCE with CAE-5, Bridge Company C, and the 459th MRBC moved to a position approximately 5 kilometers south of the Route 6 bridge over the Diyala River leading into Baghdad. The FCE was tasked with locating bridge crossing sites to the north of the city. The FCE directed the efforts of both CAE-1 and CAE-5 with reconnaissance elements of RCT-1 and RCT-5 to locate the crossing points. Crossing the river was not the issue, finding appropriate approach routes was. After 24 hours of looking, no appropriate sites could be located, and the division directed the battalion to cross in the southern approaches. The battalion located five possible crossing sites, emplaced bridging over three, and directed the use of armored vehicle launched bridging over a fourth. The southern bridge along Route 6 had been partially destroyed by the enemy early in the week. The crossing operation required the removal of the remaining partially destroyed concrete support pier to allow the emplacement of MGB. Assets and personnel were moved where they could best be employed. Marines from Bridge Company C took control of the 459th MRBC's MGB and emplaced the bridge. After reviewing the military and civilian traffic flow that would be passing through this point, it was decided to emplace a ribbon bridge just north of the Route 6 bridge site and designate it for military use only. This effort required an

enormous engineer effort to shape the extreme inclines of entrance and exit banks. Rubbling of structures next to the sites was required to stabilize the banks. Simultaneous to these actions, CAE-1, with additional reorganized elements of Bridge Company A and portions of the 459th MRBC, were sent north to emplace the third ribbon bridge. These efforts required route improvement to and from the crossing sites that was interrupted on a number of occasions by small arms fire. Within a 24-hour period the battalion had emplaced three bridges totaling over 200 meters, built entrance and exit points, and set up traffic control points that provided 1st MarDiv with full access to continue its attack into Baghdad.

Postcombat Assignments

With the operational success of 1st MarDiv came additional assignments from CFLCC to attack and secure Tikrit. This change of direction required extending the supply lines while simultaneously supporting the division's main effort of securing the suburbs of Baghdad. The battalion and 1st FSSG determined that additional bridging missions could be on call with capability staged for employment within 12 to 24 hours of its request. The battalion moved its base of operations south from Baghdad to An Numaniyah and Logistics Support Area (LSA) Chesty. At this point the battalion established on call bridging with Bridge Company C. They placed the daily crossing maintenance for the emplaced bridging across the Nahr Diyala under the supervision of CAE-1 with the 459th MRBC in support and detached a bridging C² element to accompany the attack to Tikrit. Bridge Companies B and C were downloaded and their MK48-18s were formed into convoy operation teams. The battalion's main body arrived at An Numaniyah and established battalion maintenance, food, and administration services. CAE-7 converted to managing convoy operations. The battalion formed, loaded, and led convoys each day from LSA Chesty to Refueling and Rearming Point 26 at the division forward support area east of Baghdad. During this time period the battalion was relieved of its DS mission to 1st MarDiv and directed to begin planning captured enemy munitions support missions. The battalion's explosive ordnance disposal (EOD) detachment, which had been in GS to I MEF, collocated with the battalion and began sweeps and unexploded ordnance (UXO) removal in the local area. The battalion organized Bridge Company C with support from Engineer Support Company, EOD, and H&S Company into an engineer task force in support of 1st CEB's effort inside Baghdad to clear the UXO. This task lasted for 5 days until the battalion received orders to move to Al Kut in GS of TFT and I MEF in the Wasit Province of Iraq. The battalion convoyed to Al Kut and established itself on the eastern end of the runway. Once established, the battalion's utilities section detached from the MLC and located with the battalion. This section provided showers, laundry, and air-conditioning support to units in the Al Kut area.

At this time the battalion turned over its long haul logistics support missions to 1st TSB and reformed its bridge companies into captured enemy material retrieval and destruction units. Each platoon was dispatched with two to four EOD technicians to render safe or destroy captured enemy munitions. This was a monumental effort that will not be fully appreciated until well into the future. Every home, vehicle, culvert, school, and public area contained munitions and weapons caches that required disposal. This effort lasted for a month, and the battalion destroyed or rendered unusable vast amounts of trucks, tanks, antiaircraft guns, rifles, pistols, RPGs, and all calibers of ammunition.

During this time period, TFT requested the battalion's support for humanitarian efforts in and around Al Kut and other cities in the Wasit Province. Engineer platoons were dispatched to repair playgrounds and fill in fighting and artillery holes, as well as remove war materials. Company C provided demolition expertise and engineer support to the SeaBees in their repair of the main runway at the Al Kut airbase. Other portions of the battalion supported various units within TFT with hygiene support. As a gesture of support and friendship, the battalion undertook the cleanup and partial restoration of a British war cemetery dating back to World War I. This task required a week's worth of effort just to clear trash, remove overgrowth, and piece together over 50 headstones. The end result was celebrated in a combined ceremony between the British military forces present and Marines. The

British standard was raised over the cemetery once again.

Summary

With the end of hostilities the battalion retrograded to Kuwait, disbanded, and transferred back to the 2d FSSG. Throughout their previous year and in combat, 8th ESB undertook its tasking to reform and employ as a bridge battalion with great pride. Through the resourcefulness and determination of its personnel, their employment in combat was a great success. The battalion overcame the effects of peacetime personnel and equipment losses; aggressively pursued, obtained, and employed over 600 large vehicles with 1,500 personnel; successfully emplaced 10 bridges; supported the destruction of captured enemy material; converted portions of the battalion to logistics support; and maneuvered over 250 miles into Iraq without the death of a Marine, soldier, or sailor. The small unit leader initiative, motivation, and esprit were commonplace. The battalion's motto of "whatever it takes" was epitomized by these courageous men and women in their unwavering support of the 1st MarDiv and TFT in combat operations.



No Farp Too Far!

by the Commander and Staff, MWSG-37

Marine Corps Gazette, December 2003.

Aviation ground support provided by MWSG-37 to Marine aviation units during Operation IRAQI FREEDOM was a critical part of the overall success of I MEF combat operations.

The guiding philosophy of Marine Corps warfighting is maneuver warfare. Maneuver warfare emphasizes rapid, focused effort; tactical and operational flexibility; and decentralized adaptation upon the enemy and the enemy's cohesion. 3d Marine Aircraft Wing (3d MAW) offered the I Marine Expeditionary Force (I MEF) a potent maneuver element across the spectrum of war during Operation IRAQI FREEDOM (OIF). Marine Wing Support Group 37 (MWSG-37) provided critical aviation ground support (AGS) functions to 3d MAW in order to enhance its abilities as a I MEF maneuver element. The inherent mission of the MWSG was and is more closely aligned with combat support in an operational environment than combat service support. Combat support as defined by Joint Publication 1-02 (JP 1-02), *Department of Defense Dictionary of Military and Associated Terms*, is “. . . operational assistance [emphasis added] provided to combat elements.” Whereas combat service support as defined by JP 1-02 “. . . encompasses those activities at all levels of war that produce *sustainment* [emphasis added] to all operating forces on the battlefield.” The MWSG was not, and is not, a “mini force service support group” (FSSG) within the MAW. Instead, OIF demonstrated that the MWSG was a ground maneuver element of the MAW that provided essential AGS functions to enhance the MAW's mobility and survivability, much as a combat engineer battalion supports a Marine division. MWSG-37 supported 3d MAW by bounding or “leapfrogging” forward arming and refueling points (FARPs) every 40 to 50 kilometers, which allowed for both the rapid movement of the FARPs and the continuous rotary-wing aircraft support to I MEF forces. Thus, the MWSG acted conceptually as a Marine wing expeditionary group.

MWSG-37 arrived at Ahmed Al Jaber and Ali Al Salem airbases in mid-November 2002 charged with the task of establishing support infrastructure sufficient to support over 15,000 Marines and nearly 400 tactical aircraft. These sites would prove to be the home base of the entire 3d MAW as it prepared for the impending war. To accomplish this task, three west coast Marine wing support squadrons (MWSS-371, -372, -373) and two east coast MWSSs (MWSS-271, -272), totaling over 3,400 personnel, were deployed and in place by February. MWSS-374 remained behind at Marine Corps Air-Ground Combat Center Twentynine Palms to support the training of any follow-on forces as well as to be ready to support operations on the Korean peninsula, if necessary. Four of the MWSSs (MWSS-271, -371, -372, -373) would maneuver into Iraq providing FARP and forward operating base (FOB) support, while the fifth MWSS (MWSS-272) would continue critical support to the airbases in Kuwait. Additionally, Company C, 1st Battalion, 24th Marines, 4th MAW, Marine Wing Headquarters Squadron 4 Military Police (MP) Detachment, and detachments from 3d Low Altitude Air Defense were attached to MWSG-37 to enhance our limited organic force protection capabilities that were severely diminished because of the MP battalion consolidation at II MEF. The consolidation reassigned MWSS-271's and MWSS-272's MP platoons to the 2d FSSG, removing any organic internal airbase force protection capability. (See Table 1.)

At Ahmed Al Jaber Airbase the U.S. Navy SeaBees, with assistance from MWSG-37, constructed an 880,000 square foot concrete aircraft/parking ramp in just over 4 weeks. This around-the-clock construction resulted in a parking ramp large enough for all of the F/A-18s and AV-8Bs assigned to 3d MAW. The Marines from 3d MAW installed almost 1.7 million square feet of Aluminum Matting 2 at both airbases and several camps in Kuwait to support aviation operations. Furthermore, over 900 hardback sleeping tents and scores of other maintenance and support tents were constructed to support 3d MAW operations in Kuwait.

MWSG-37 quickly responded when the requirement for a KC-130 expeditionary airfield (EAF) close to I MEF's center of logistics operations was identified. MWSS-272 designed and constructed this EAF in the Kuwaiti desert within 2 weeks of receiving the requirement. Affectionately named Marine Corps Air Station (MCAS) Joe Foss in honor of the recently deceased World War II Marine aviator and Medal of Honor recipient, the KC-130 EAF was an improved dirt runway that provided a hot refueling capability and parking ramps for KC-130s and rotary-wing aircraft. Maintenance

and upkeep of the EAF was a constant effort as the dirt strip deteriorated with every KC-130 landing, but the Marines of MWSS-272 kept the EAF open throughout combat operations. Due to its strategic placement and proximity to key logistics elements, MCAS Joe Foss was constantly utilized by KC-130s and proved invaluable throughout the war.

While the necessary improvements to the infrastructure of the existing Kuwaiti airbases occurred, the staff of MWSG-37 worked diligently on an aggressive FARP and FOB plan that would support not only the maneuver of 3d MAW but also 1st Marine Division (1st MarDiv), Task Force Tarawa, and 1st British Armored Division. Working closely with representatives from Marine Aircraft Groups 29 and 39, a plan was developed to leapfrog FARP teams past one another so that continuous FARP support could be provided while simultaneously keeping pace with 1st MarDiv and Task Force Tarawa. (See Table 2.)

With the necessary infrastructure in place and the commencement of combat operations, MWSG-37 set up two rotary-wing FARPs close to the Iraqi-Kuwaiti border to support the breaching of Iraqi defenses and subsequent crossing of the Iraqi obstacle belts. MWSS-372 had a “be prepared to” mission to support the breaching of obstacles in Regimental Combat Team 7’s sector and subsequently established a coalition FARP at Safwan with British helicopter units. The rapid success of the border crossing set the pace for the war as coalition forces quickly gained hold of all of southern Iraq with MWSG-37 emplacing FARPs approximately every 40 to 50 kilometers and leaping FARP and rapid runway repair (RRR) teams to the next location based on the tactical situation. Utilizing everything from repaired Iraqi airfields to wide stretches of highway, as well as flat empty fields and concrete slabs previously used as building foundations, the Marines of MWSG-37 established 21 FARPs and 8 KC-130 tactical landing zones (TLZs) throughout Iraq.

Due to shipping delays of organic equipment before the start of combat operations, MWSG-37 was forced to outfit the five assigned MWSSs with the equipment usually associated with the table of equipment for four MWSSs. By the time hostilities commenced MWSG-37 was able to task organize eight FARP teams and three RRR teams to accomplish our assigned missions, stretching our personnel and equipment to the absolute limits. At one point during the war MWSG-37 was supporting eight different FARP and FOB sites simultaneously across Iraq and Kuwait, while also providing line haul to resupply our organic units. Additionally, MWSG-37 FARPs provided 130,000 gallons of fuel to 1st MarDiv and Task Force Tarawa to support their continued combat operations into An Nasiriyah and Baghdad.

While 1st MarDiv and Task Force Tarawa continued their fight around An Nasiriyah and toward Baghdad, MWSG-37 was tasked to insert a FARP team at Qalat Sikar. This task required MWSS-371’s FARP and RRR convoy, with help from the 15th Marine Expeditionary Unit’s light armored reconnaissance company, to fight its way past the town of Ash Shatrah on Highway 7 in order to reach its assigned destination. This unfortunately resulted in the only MWSG-37 Marine death during OIF. Sgt Padilla-Ramirez gave his life so that a crucial FARP in support of RCT-I could be established at Qalat Sikar. MWSS-371’s FARP mission to provide the necessary fuel, ordnance, chow, and water via a logistics air bridge at Qalat Sikar was further elevated when all resupply convoys up Highway 7 were halted for over a week due to the heavy resistance by Iraqi paramilitary forces. MWSS-371 met this challenge head on and had the FARP operational within 2 hours of arriving, and a KC-130 TLZ in less than 8 hours. Fuel, repair parts, ammunition, and other key supplies to fight the war were flown into Qalat Sikar until Highway 7 was made safe for convoy operations.

As the coalition forces marched onward to and beyond Baghdad, the FARPs continued to be the key stepping stones in supporting the aviation combat element that in turn supported the most important element of all—the infantry Marines on the frontlines. With the relevance of the FARPs proving their importance to 1st MarDiv, 1st Combat Engineer Battalion assisted MWSS-271 at An Numaniyah airfield by removing numerous obstacles off the runway prior to

West Coast MWSSs		
MWSS-371	MCAS Yuma	Sand Sharks
MWSS-372	MCAS Camp Pendleton	Diamondbacks
MWSS-373	MCAS Miramar	Aces
East Coast MWSSs		
MWSS-271	MCAS Cherry Point	Workhorses
MWSS-272	MCAS New River	Untouchables
Reserves That Supported MWSG-37		
Charlie Company, 1st Battalion, 24th Marines		
MP Det, Marine Wing Headquarters Squadron 4, 4th MAW		

Table 1.

MWSS-271's RRR team arriving. This allowed the arrival of KC-130s with critical logistics hours earlier. As 1st MarDiv approached Baghdad they became critically low in artillery ammunition and meals, ready-to-eat. MWSS-372 promptly repaired an existing airfield 20 miles outside of Baghdad within 6 hours of arrival so that KC-130s could provide the logistics air bridge to the frontline forces. Although not their doctrinal mission, MWSS-372 additionally provided the line haul for those same critical supplies to the RCTs on the outskirts of Baghdad.

After 1st MarDiv had seized northern Baghdad, they were assigned a follow-on mission to seize Saddam's hometown of Tikrit. The MWSG-37 jump command element met with 1st MarDiv planners in Baghdad and within 2 hours developed a FARP plan to support the movement of Task Force Tripoli from Baghdad to Tikrit. Within 24 hours FARP and RRR convoys were assembled and subsequently moving with Task Force Tripoli while refueling and rearming the rotary-wing aircraft from Marine Aircraft Group 29, who was charged with providing the essential close air and assault support.

During the war MWSG-37 accepted the additional task of tactically recovering downed helicopters, and by the conclusion of the war, MWSG-37 had recovered 21 helicopters with limited organic security assets. These recovery missions often used an impromptu task organized force of personnel and vehicles from varying MWSSs to quickly rush to a crash site to recover the helicopter before it was stripped or further destroyed by enemy forces.

Throughout OIF the FARPs were implemented and controlled by the MWSG-37 jump command post (CP) based on the tactical situation and intelligence information that was gathered from direct communications with 1st MarDiv, Task Force Tarawa, and Task Force Tripoli. Utilizing both voice and data communications assets from the collocated Marine Air Control Group 38 (MACG-38) jump CP, MWSG-37 jump was able to keep the 3d MAW tactical air control center aware of the ever-changing ground situation, essentially acting as 3d MAW's forward "eyes and ears" on the ground. The MWSG-37 command element traveled over 530 miles into Iraq, finally coming to a halt in Tikrit. The MWSG-37 headquarters, along with the MACG-38 headquarters, fought farther into Iraq than any other 3d MAW group headquarters.

During OIF MWSG-37 set up and supported 21 FARPs, 6 FOBs, and 8 KC-130 TLZs stretching from Kuwait to northern Iraq over a distance of 530 miles, delivering in excess of 11 million gallons of JP-8 (jet petroleum) to 3d MAW aircraft. By the end of major combat operations 3d MAW aircraft had delivered over 6 million pounds of ordnance via 7,800 combat sorties in support of I MEF forces.

OIF enabled MWSG-37 to provide an excellent demonstration of how the MWSG should be properly employed in combat as well as trained in peacetime. MWSG-37's performance during OIF prompted the 1st MarDiv plans officer, LtCol Paul Kennedy, to comment during a planning meeting in Baghdad, "Before the war I didn't even know the MWSS existed. Now I dream about them in my sleep."

<u>CODE NAME</u>	<u>LOCATION</u>	<u>FARP/FOB</u>
Ali Al Salem	Kuwait	Airbase
Al Jaber	Kuwait	Airbase
Sheikh Isa	Bahrain	Airbase
MCAS Joe Foss	Kuwait	FOB/EAF
Turner Field	Kuwait	FARP
Astrodome	Kuwait	FARP
Busch Stadium	Safwan	FARP
Arlington	Ar Rumaylah	FARP
Riverfront	Jalibah	FOB/TLZ
Camden Yards	An Nasiriyah	FARP
Fenway	Qalat Sikar	FARP/TLZ
PacBell	Hwy 1	FARP
Wrigley	Hwy 1	FARP/TLZ
QualCom	Shaykh Hantush	FARP/TLZ
Three Rivers	An Numaniyah	FOB/TLZ
Ebbets Field	Sarabadi	FARP
Yankee	Salaman Pak East	FOB/TLZ
T.A. Wolf	N. of Baghdad	FARP
	Hwy 1 (Hasty)	FARP
	Samarah	FARP
	Tikrit South	FARP/TLZ
	Al Kut	FOB/TLZ
	Ad Diwaniyah	FARP
	Tallil	FOB
	Al Hillah	FARP

Table 2.



Disbursing Goes to War

by Lieutenant Colonel James A. Hogberg

<<http://www/mca-marines.org/gazette/2004/04hogberg.html>>. January 2004.

Disbursing services during wartime range from contracting to ensuring that Marines receive their pay in the combat zone.

As a Service operation that rarely deploys beyond a Marine expeditionary unit, disbursing services were used extensively and in depth throughout Operations ENDURING FREEDOM/IRAQI FREEDOM in support of the Marine expeditionary force (MEF). Sixty-six Marines were assigned to disbursing billets within I MEF, and another 25 billets were assigned to 2d Marine Expeditionary Brigade and Marine Logistics Command disbursing operations. Additionally, 60 disbursing Marines were assigned to other duties such as company commanders, watch officers, force protection, assistant machinegunners, mortuary affairs, and first sergeants. Disbursing agents not only displaced far into Iraq with combat service support units, they also were placed in direct support of the ground combat element (GCE) at the battalion level. The latter suggests that disbursing operations might also be described as a reaffirmation that every Marine is first, and foremost, a rifleman. More than a few disbursing agents earned combat action ribbons while deployed.

Combat Service Support Battalion 12 (CSSB-12), with a general support mission to the MEF, served as the hub for disbursing operations. With a table of organization of 36 billets (including the disbursing officer), CSSB-12 disbursing operations not only provided routine pay support, it was the central bank for the 5 other disbursing detachments located within the MEF. Activities included providing functional oversight for all disbursing operations, the collection and processing of all payrolls, liaison with U.S. Army Finance Command and the Marine Logistics Command, distribution of cash, establishment of captured currency collection points, maintaining reachback support with Camp Pendleton, and facilitating commercial contracting operations within Iraq/Kuwait.

While the 1st Force Service Support Group (1st FSSG) disbursing officer deployed with \$2.5 million in order to begin startup operations, sustained cash resupply in theater came from the Army Finance Command. The 336th Army Finance Battalion maintained the theater-level central funding vault at Arif-jan, Kuwait. They provided currency and coin in all denominations. Throughout the deployment the central funding vault was used to receipt for more than \$20 million in currency necessary to support Marine Corps deployed pay operations.

During the planning stage, disbursing operations were oriented toward (1) making cash available to Marines (split pay, casual pay, check cashing), (2) commercial vending and contracting support, and (3) currency/deposit support for the field exchanges and postal detachments. Interestingly, as combat operations commenced and the need for these services expectedly lessened, the need for other, less practiced disbursing support areas increased. Combat forces seized large amounts of Iraqi and U.S. currency from government vaults and buildings requiring the establishment of disbursing captured currency collection points. Civil affairs units used disbursing agents extensively to make small purchases on the local economy, often as a token of goodwill as much as they were to buy needed goods and services. I MEF also initiated guidance for solatium payments, or payments that offer a small token of money as an expression of sympathy or remorse for an indigenous victim. Additionally, disbursing agents were used to help pay civil servants and Free Iraqi Forces soldiers.

The most unexpected use of disbursing agents, however, was their direct support assignment with the 1st Marine Division (1st MarDiv) at the battalion level. The 1st MarDiv Commanding General, MajGen James N. Mattis, had made limited use of paying agents while in Afghanistan and wanted to replicate that success on a larger scale in Iraq. As a result, disbursing agents were sent to division units on or around G+5 (fifth day of the ground war). Their purpose was twofold. First was to buy goods and services the Marines might need, such as translators, day laborers, short-term property rentals, and construction materials. Second was to promote goodwill among the Iraqi people; even small purchases went a long way in demonstrating to the Iraqis that we were

not there as conquerors. The intent was to establish disbursing agent, field ordering agent, and translator teams that could communicate with the local citizenry. These disbursing agents lived and moved forward with their respective units (tanks, infantry battalions, etc.). As they reached Baghdad some were consolidated in the Palestine Hotel where they were used to make more substantial purchases from the larger downtown economy. Most worked with the civil affairs groups as they made their rounds among the communities. Some of these Marines were put in harm's way and earned combat action ribbons. In one instance, Cpl Morales, a disbursing agent, was involved in a downtown Baghdad shootout while the civil affairs team to which he was assigned sought to confiscate weapons and apprehend illegal arms merchants. As the MEF moved into stabilization operations, these disbursing agents were each assigned to a regional governorate established at each of the major cities within the I MEF area of responsibility (AOR). Assigned to a governorate, the disbursing agents worked with translators and field ordering agents to make necessary purchases on the local economy. Disbursing agents also assisted in the payments of civil servants and other government employees. The funding sources varied from appropriated funds to seized currency to approved reconstruction funds. Each funding source had to be accounted for separately.

It is important to note that the majority of disbursing agents were noncommissioned officers (NCOs). Normally, paying agent responsibilities are reserved for officers or staff NCOs; however, because of the sheer volume of support necessary to service a MEF, NCOs were required to assume greater responsibilities. These disbursing pay agents made over 260,000 individual cash payments totaling nearly \$27 million to Marines and other servicemembers. It was not unusual for a corporal to sign out several hundred thousand dollars and then, as a member of a mobile support team, drive from unit to unit making payments to Marines. In some instances these Marines would be cash couriers for deliveries between disbursing detachments and tasked with carrying over \$500,000.

Pay support was provided to all servicemembers (Marines, sailors, soldiers), as the Marine disbursing agents, at times, represented the only pay support present within the I MEF AOR. This deployment also represented the most extensive support provided to other Services by Marine Corps disbursing in decades. With over 22,000 Marines signed up for the Marine Corps split pay program, other Marines and other servicemembers were offered casual payments (\$100 per month) as well as check cashing services. The support provided by disbursing agents was not only extensive but also encompassing. Marine disbursers deployed well forward with over 90 percent of the overall number of disbursing agents placed in Iraq. Again, pay services were heavily utilized as Marines were provided access to the tactical field exchanges where they could purchase hygiene items, sundry food items, and miscellaneous field gear.

Another success story worth expanding on is the relationship between the civil affairs teams and their designated field ordering officer, translators, and disbursing agents. Together this team provided the commander with an important tool in winning the hearts and minds of the Iraqi people. Small purchases from local vendors went a long way in bridging cultural gaps and establishing working relationships; the sooner local Iraqis could be convinced that our intent was positive, the sooner the reduction in distrust and tension.

Support for I MEF contracting exceeded \$600 million in payments. More than 6 months before the deployment, coordination was made with the National Bank of Kuwait for the purpose of establishing a local depository account. Approval for establishing this account was required by the U.S. Embassy in Kuwait. With an account established at the National Bank of Kuwait, payments could be made by local check and currency. This capability proved to be the lifeline for the MEF, necessary to procure major sources of goods and services that were required but unavailable through normal supply channels. Items purchased included vehicle rentals, food service, bottled water, and construction materials. Again, this was a transparent service to the end user yet managed by the disbursing officer (directing account activity through his designated disbursing agent in Kuwait City), as coordination was required with reachback services at Camp Pendleton for funds transfers from the Federal Reserve Bank to the overseas account.

The disbursing Marines assigned to 1st FSSG contributed in different ways. With many trained as vehicle drivers, to include the 7-ton medium tactical vehicle replacements (MTVRs), they were frequently required to support unit movements and the transportation of things. During the first days of the war, disbursing Marines

drove ammunition convoys north into Iraq directly supporting the division movement. Other duties included augmenting the battalion-level force protection teams, manning crew-served weapons, and combat operation center watch standers.

The overall concept of support for disbursing was based on simplicity—focus on pay support, make access to cash by Marines unencumbered, and provide a transparent service. Obtaining money was as easy as showing an identification (ID) card and signing your name. Mobile pay support was in coordination with the warfighter express service teams and, along with the exchange, postal, and legal services, traveled from unit to unit. These mobile support teams even went into downtown Baghdad where Marines from Task Force Tarawa were in desperate need of exchange services. Some Marines had had their uniforms and other gear destroyed in battle and appreciated the mobile exchange and disbursing services where they could purchase hygiene and uniform items. Some Marines used their dog tags (attached to their boots) as identification for payment as they had even lost their ID cards.

Disbursing management of captured currency was another unique, operationally oriented mission. Marine units seized almost 3 billion Iraqi dinars and 10 million U.S. dollars. Most of the money came from government buildings, Ba'athist safe houses, or disrupted bank robberies. The volume of Iraqi dinars was enough to literally swim in as it at times filled a 20-foot container more than waist high. The seized currency was earmarked as funds for the Office of Reconstruction and Humanitarian Assistance (later to be called the Office of the Coalition Provisional Authority). As such, commanders were authorized to spend some of the monies on various civil projects or to aid the Iraqi people. In one instance captured Iraqi dinars helped to pay for repairs to a university after rioters looted it. Disbursing agents managed the payment schedule set in place by contracting officials. The bill for the university repairs totaled approximately \$170,000 (U.S.); however, it was paid in equivalent Iraqi dinar notes. Because the devalued Iraqi dinar was used for payment, it took an MTRV truck for disbursing pay agents to deliver the currency, and special containers were used to keep the notes from spilling over the sides.

Disbursing operations also supported the tactical field exchanges and post offices. Disbursing officers receipted for over \$9 million in exchange receipts. The exchange sales were deposited with the disbursing office each night and then consolidated for a weekly electronic funds transfer payment to preestablished stateside bank accounts. The monies were then able to be recycled through this "I MEF economy" via check cashing and split payments, thereby helping to limit the need for cash resupply into Iraq. Disbursing also supported the exchange and postal units with currency support. More than \$50,000 in quarters and over \$200,000 in \$1 bills would be required to support these operations throughout the deployment.

Disbursing operations were conducted primarily in a field environment (desert, urban, temperate). Unlike Operation DESERT STORM where disbursing operations were mostly static, disbursing moved well forward and into Iraq. Perhaps the most extensive disbursing field operations since Vietnam, disbursing agents lived and operated alongside other CSS units, some even with the GCE. Marines were paid out of general purpose tents as well as from the back of 7-ton trucks. The demand for disbursing services was unprecedented and received only a nominal number of complaints and an overwhelming number of compliments. It may have been an unanticipated surprise, something that was possibly overlooked or perhaps frowned upon as less than necessary in the planning processes yet turned out to be of great benefit to commanders and a necessity while deployed for individual Marines.

Value to the Marine Air-Ground Task Force

Marine disbursing was a business force multiplier to the MEF. It facilitated and made transparent to the average Marine the procurement of large-scale goods and services necessary to conduct the I MEF campaign. Marines and other servicemembers enjoyed an unencumbered pay service that did not carry a large logistical footprint. Because the Marine Corps split pay program allowed monies to accumulate, commanders were not tied to twice a month paydays and therefore, when engaged in combat operations, could forego payments for a later time when Marines had the opportunities to spend money. The commanders and individual Marines were able to tell disbursing when they wanted to be paid. This paid big dividends and added to the overall Service mission—unencumbered support.





Caring for the Fallen: Mortuary Affairs in Operation Iraqi Freedom

by Lieutenant Colonel John M. Cassady, Major Jefferson L. Kaster, and Chief Warrant Officer 4 Cheryl G. Ites

U.S. Naval Institute Proceedings, April 2004.

The recovery of battlefield casualties requires respectful, competent, well-trained and well-equipped Marines to complete. Anything less places the Marine Corps at risk and breaks faith with those who have sacrificed the most.

Just off the town square in Bastogne, Belgium, is a small commercial museum. It is a worn-out place, barely eking out a living for its owners. The upper floors contain artifacts of the local farming industry, and the cellar is dedicated to the historic battle for Bastogne during December 1944. Most of the cellar exhibits are of no real significance. However, immediately on the right through the curtained entrance is an arresting display.

There are photographs of a fallen German paratrooper, killed in the battle for Bastogne. His resting place for some 40 years was under an overhang of roots, where he crawled or was left by comrades. The vegetation served as a natural crypt, preserving the soldier's remains in remarkable integrity. Discovered in the mid-1980s by relic hunters, the soldier's bones were returned to Germany, but his personal items, equipment, and photograph apparently were felt to have commercial value. Among the artifacts on display are the belt buckle with a .30-caliber bullet hole, the uniform, with dried blood and skin still clinging to it, and the helmet, with snatches of sandy-colored hair intertwined in its webbing.

Forlorn and ghoulish, this display desecrates the memory of fallen warriors everywhere. It does not matter that this man was an enemy: military ethos demands that the remains of all nations' fallen soldiers are respectfully and properly handled.

Among U.S. Marines, it is expected that those who pay the ultimate price in combat will be reverently, respectfully, and rapidly returned to their loved ones. This expectation, backed by more than 200 years of tradition, allows the living to carry on, knowing their comrade is cared for. It gives maneuver commanders the ability to execute their concept of operations unfettered. Friendly or enemy, the dead are an impediment to the actions of the living out of proportion to their number.

To be true to our values, the Marine Corps maintains a small, trained cadre to accomplish battle-field recovery of fallen Marines. This unit is comprised of reservists, and it operated with distinction during Operation Iraqi Freedom (OIF). Nearly 300 Marines from Marine Forces Reserve were activated, mobilized, and deployed to Iraq to do what no Marine wants to do—care for those who have fallen. Lessons from this mission, if considered and implemented, will ensure that the Marine Corps' mortuary affairs (MA) capability is ready for the next conflict.

Iraqi Freedom Mission

Combat produces fatalities. The recovery of remains and personal effects and the identification and evacuation of remains to a cemetery or mortuary facility are the responsibility of mortuary affairs.¹ This is a difficult job, made even more difficult when remains are disassociated, mingled, contaminated, or otherwise rendered unidentifiable by any number of circumstances created by the violence of modern weapon systems. A single pilot in an aviation crash, for example, might present multiple remains portions, each of which must be treated separately to ensure all persons involved are accounted for—e.g., a bystander who might have been hit and killed by the crashing aircraft.

For Iraqi Freedom, Headquarters, Marine Corps, used a casualty model that suggested casualties would be in the thousands.² Marine Corps mortuary affairs personnel, by definition and doctrine focused primarily on graves registration, found themselves tasked with combat recovery of remains under the concurrent return program, which required much more capability in terms of personnel numbers, skills, and equipment than existed at the outset of OIF. The need to position MA personnel forward on the battlefield, where they could be responsive to emerging requirements, and the size of the battle space resulted in a plan to employ five MA platoons (approximately 250 Marines) plus an MA headquarters. The concept of operations assumed one MA platoon would be employed with each regimental combat team.

The combat service support provider for I Marine Expeditionary Force (I MEF) was 1st Force Service Support Group (1st FSSG). Its mortuary affairs mission was to “establish MA collection points (MACP) which will receive, process, and expeditiously evacuate I MEF remains to the theater mortuary evacuation point. Be prepared to assist in the search, recovery, and tentative identification of I MEF remains and decontaminated remains as they are moved to the MACPs.”³

MA operations flow from search and recovery to processing to evacuation. There are two types of search-and-recovery operations. In the first type, the unit experiencing the death of a Marine is responsible for initial efforts to recover the remains. The unit then “packages” the remains, placing them in a sleeping bag cover or a remains pouch, and moves them to a collection point. The unit also must record the fallen Marine's identification (unit, name, and social security number), as well as the date, time, and location of death. For cross-reference purposes, the unit should provide the same information for the Marine making the identification.

The deceased Marine's major subordinate command (MSC) also is responsible for releasing the personnel casualty report. The MSC should ensure that the mortuary affairs unit and Commander, Marine Forces Reserve, are info addresses on the report.

During OIF, unit-level accountability for remains and personal effects was not properly maintained. The MA team drafted and disseminated a point paper to the commands listing proper procedures. In the future, all Marines need to be taught how to mark remains for identification, as well as to establish a chain of custody for both the remains and the personal effects.

In the second type of operation, the MA team conducts a deliberate search-and-recovery mission after collecting as much information and intelligence about the tactical situation as time allows.

In both types of search-and-recovery operations time is of the essence for a number of reasons:

- It helps the commander know his casualty rate and accountability. Personnel accountability is of utmost importance to the Marine Corps for tactical as well as public relations reasons.
- It helps eliminate confusion about a Marine's status: killed in action, missing in action, prisoner of war, etc.

Mortuary Affairs Responsibilities & Programs

The Marine Corps has three primary mortuary affairs responsibilities:

- “The Marine Corps maintains a mortuary affairs force structure capability to provide support during operations to Marine Corps units. Personnel are fully trained to provide mortuary. The Army provides back-up and [general support] to Marine units.”²
- “To facilitate the transition to and from war, the Marine Corps maintains and designates a single office as [point of contact] to respond to mortuary affairs issues.”
- “The Marine Corps provides the [Army Office of the Deputy Chief of Staff for Logistics] with a report of requirements, on-hand stockage levels, and shortages of mortuary affairs supplies and equipment stocked to support joint operation plans and [military operations other than war] on an annual basis. . . . coordinated with the Navy Mortuary Affairs Office.”

By doctrine, there are three mortuary affairs programs:³

- *Current death* “is in effect during peacetime and during hostilities of short duration when few casualties are expected. Remains are moved from a unit’s area of operation to a collection point, then to a mortuary either within or outside the continental United States, and finally to the person authorized to direct disposition of remains.”
- *Concurrent return* “is in effect during wartime. Under this program, remains move from the unit area of operation to a collection point, then to a theater mortuary evacuation point, next to a mortuary located in the continental United States, and finally to the person authorized to direct disposition of remains.”
- *Graves registration* “is used only as a last resort and only upon order of the geographic combatant commander. This program is only enacted when an overwhelming number of remains prevent normal mortuary affairs operations from occurring or when contaminated remains cannot be decontaminated.”

How the Marines Corps’ mortuary affairs assets and capabilities are trained, organized, and equipped is not mandated by doctrine. Accomplishing the three doctrinal responsibilities across the three programs requires a critical analysis of past efforts and a plan for the future.

¹Joint Publication 4-06, *Joint Tactics, Techniques, and Procedures for Mortuary Affairs in Joint Operations*; Chairman, Joint Chiefs of Staff, August 1996, pp. 1-4, 1-5. Emphasis omitted. See also FM 10-64, *Mortuary Affairs Operations*, and FM 286, *Identification of Deceased Personnel*. Both are available online.

²“Back-up” is not doctrinally defined, but however it is defined, this statement is not true. The Army provides general support, nothing more.

³See Marine Corps Warfighting Publication 4-11.8, *Services in an Expeditionary Environment*, Marine Corps Combat Development Command, September 2001, pp. 4-1, 4-2, and JP 4-06, p. 1-2, 1-3.

- It helps ensure remains are protected from the effects of weather and animals. Delay in recovery may render a body unviewable, which is an inestimable loss to the family.⁴
- It prevents hostile personnel from desecrating U.S. remains, for example, parading them around or selling them as ghoulish souvenirs, or using them as political capital in later negotiations, à la Vietnam.
- It helps sustain the morale and health of the Marines continuing the fight. They know if they fall they will not be abandoned, and they do not have to maneuver around the dead, friendly or otherwise, to prosecute the fight. In addition, as a force protection issue, rapid recovery of remains helps prevent the spread of diseases.

This “rapid response” paradigm is a uniquely Marine Corps view that is neither shared nor taught by U.S. Army MA doctrine. Rapid response requires MA platoons to be forward positioned in support of the maneuver elements, and their personnel to be fluent in the art and language of tactical operations, as well as in the profession of mortuary affairs. This operational awareness signif-

ificantly improves the chance of recovering remains rapidly.

Marine MA units recover in both permissive and hostile environments to meet the expectations and operational needs of unit commanders. In contrast, current U.S. Army doctrine assumes recovery of remains by MA personnel will occur after hostile risk is reduced to acceptable levels.⁵ According to Army doctrine, initial recovery is the responsibility of the unit commander. Army MA personnel are not used until the area is secure. The Army does not risk the living to recover remains.⁶ This philosophy is completely untenable in the Marine Corps.

After the search-and-recovery operation is complete, the MA Marines process the remains. During processing, a medical officer, usually a battalion surgeon or higher, officially certifies death and the MA team establishes a believed-to-be identity and accounts for all personal effects found with the remains. Then the remains are evacuated by air to the appropriate military mortuary for positive identification and disposition to the family.

The MA teams deployed to Iraq found they lacked a substantial skill set, which threatened the MA mission. These missing core competencies included combat search and recovery; hazardous material- and nuclear, biological, and chemical-contaminated remains handling; heavy rescue; recovery operations; transportation planning;⁷ and explosive ordnance handling. MA teams also needed to provide their own security, which required availability of and proficiency in crew-served weapons.

Explosive ordnance handling is a critical skill because MA personnel frequently encounter ordnance such as fragmentation grenades, smoke grenades, and live ammunition. In one instance, an intact M-16 magazine of ball ammunition was recovered from a casualty's chest cavity.

Heavy rescue is the retrieval of remains from a catastrophically damaged structure that requires major excavating (sometimes by machine), tunneling, shoring up of the structure, and in the case of a catastrophically damaged vehicle, "jaws of life" type equipment to get to the remains. When a Marine was killed when an ammunition supply point exploded, MA personnel had to conduct heavy rescue and then process the remains, all the while surrounded by smoldering live ordnance, including artillery high explosive, white phosphorous, and primers.

It would be erroneous to conclude that Marine Corps MA operates in a Marine-only environment. Personnel in Iraq processed the remains of U.S. soldiers and sailors, foreign personnel, and civilians, including journalists.⁸ As a result, MA Marines frequently must coordinate with other services, coalition forces, diplomatic and political agencies (including U.S. and foreign Departments of State), nongovernmental organizations such as U.N. agencies, the International Committee of the Red Cross, and others. Thus, future training for MA senior noncommissioned officers and officers needs to include professional liaison skills.

MA personnel also need to coordinate the processing of remains with numerous service agencies—intelligence agencies,⁹ unit postal officers,¹⁰ civil affairs, the Criminal Investigative Division/Naval Criminal Investigative Service (CID/NCIS), Military Police, the staff judge advocate, the Armed Forces Medical Examiner (AFME), and the Disaster Mortuary Response Team (DMART), to name a few. For example, 38 MA Marines assisted in processing a U.S. Army Pavehawk crash site, which required coordination with the Army, AFME, and DMART. Over five days, these Marines laid out the recovery grid and dug and sifted a ten-square-meter area of desert to a depth of six inches. This effort recovered many remains not visible to the initial (untrained) recovery team.

The loss of a Marine CH-46 with four U.S. and eight British Royal Marines required coordination by DMART, U.S. and British MA Marines, U.S. Army MA, British liaison officers, British Headquarters, Marine air wing units, a security team, the combined forces land component commander, I MEF, AFME, and medical personnel. This crash site took eight days to close.

MA operations are unpredictable. Frequently, MA personnel are the first to discover evidence of war crimes, and occasionally find wounds that might indicate torture or murder. They also often

are involved in the excavation of mass graves, the presence of which could indicate a Law of Land Warfare violation. As part of the maneuver element, MA personnel need to understand certain components of Operational Law. Occasionally, they process the remains of suicide victims. These functions and operations require liaison with CID, NCIS, and the staff judge advocate. MA Marines need to be trained to work with these agencies to ensure proper legal authorities are notified and pertinent evidence is not inadvertently destroyed.

During OIF, Marine MA officers coordinated the transport of civilian and enemy remains from the USS *Comfort* (T-AH-20) to an interment site in Iraq or to the families when possible. These efforts involved not only the captain of the *Comfort* and MA officers, but also the civil affairs unit, Red Cross, and I MEF personnel. Burials had to be documented and a report prepared for I MEF for the combined forces land component commander. In addition, procedures for burial of enemy and civilian remains had to be approved by higher headquarters to ensure compliance with different religious demands. These procedures were received and a one-page reference sheet was prepared for each collection point.

MA personnel also were tasked with supporting criminal cases involving loss of life. In these situations, coordination was made with AFME, CID, NCIS, and other related agencies to ensure evidence was safeguarded and remains returned quickly to the families. The discovery of several mass

Training & Staffing

According to Marine Corps Warfighting Publication (MCWP) 4-11.8, “the Army is the executive agent of mortuary affairs for all Services. However, each Service plays a major role in the handling of its deceased.”¹

Prior to Operation Iraqi Freedom, the only mortuary affairs (MA) capability in the Marine Corps was a single Mortuary Affairs Platoon, located with Military Police Company C (which is part of Headquarters Company, Headquarters and Services Battalion, 4th Force Service Support Group [FSSG] in Dayton, Ohio. To increase the capability available to deploy to the Middle East, the staffs of 4th FSSG and Marine Forces Reserve developed a program to use MA Marines from the Dayton platoon to train reserve Marines. Lieutenant Colonel John M. Cassidy was activated in October 2002 to lead this effort. Beginning on 15 January 2003, the MA unit cross-trained approximately 300 Marines—from Rations Company, 4th Supply Battalion, Anacostia, D.C., and Battery A, 1/14, Aurora, Colorado, and Headquarters and Service Battalion, Marietta, Georgia—in mortuary affairs.

Currently, Marine Corps MA personnel are trained at the U.S. Army Mortuary Affairs Center, Fort Lee, Virginia. There is only one military occupational specialty for Marine Corps MA personnel: 9051, Graves Registration Specialist, and it is a skill designator only, for all grades from lance corporal through master gunnery sergeant.²

According to MCWP 4-11.8, MA Marines “conduct tactical search and recovery operations in hostile, benign, and/or contaminated environment; recover personal effects and record personal information; conduct temporary interment/disinterment; and conduct temporary burials, if necessary, of human remains. The platoon must also be prepared to establish and operate casualty collection points, supervise theater evacuation point operations, and coordinate the transfer of remains and personal effects of deceased service members.”³ The MOS manual requires a larger skill set.

¹Marine Corps Warfighting Publication 4-11, Services in an Expeditionary Environment, Marine Corps Combat Development Command, September 2001, p. 4-2.

²USMC MOS Manual, pp. 3-397 and 3-398.

³MCWP 4-11.8, pp. 4-2, 4-3.

gravesites led MA Marines to partner with Iraqi civil authorities and civilian communities. A mass gravesite in southern Iraq required coordination with the Kuwaiti government, I MEF, and the combined forces land component commander to ensure proper excavation and repatriation of remains to Kuwait. The MA officer was tasked with liaison duties and coordinating the efforts of different commands to ensure compliance with international laws and procedures.

Future of Marine Corps Mortuary Affairs

The clarion call for MA in the Marine Corps as a result of OIF is that MA must be a primary focus. The training, equipping, and organizational structure of the entire capability must be updated:

- Foremost, mortuary affairs needs to be restructured as a primary military occupational speciality (MOS), and relevant, practical doctrine, techniques, tactics, and procedures need to be drafted and implemented. Specifically, two new MOSs need to be created, and the MA establishment renovated to reflect a permanent professional capability within Marine Forces Reserve, including permanent professional schools. In addition, two MA platoons should be created within the present Reserve structure and relocated from Dayton, Ohio, for easier access to training and education facilities—ideally, close to or located with NBC units, somewhere along the eastern seaboard.

- The MA capability must be part of operational and tactical planning from the earliest stages. It will require that MA Marines be included in drafting the ops plan and that the MA capability is in theater, on the ground, and forward deployed with the maneuver elements as early as possible.

- Marine Forces Reserve MA Marines need meaningful annual training—working with the Central Identification Lab, Hawaii; Chemical Biological Incident Response Force; Federal Emergency Management Agency; DMART, and other military and civilian homeland defense or domestic crisis response agencies.¹¹

- MA issues should be integrated into traditional training exercises. Marines of all grades should be introduced to MA and understand their roles in the recovery process. This can be done at basic training and at professional military education schools, including noncommissioned officer courses and Command and Staff.

- MA units need to be properly equipped for the mission. Among the most pressing needs are better tables of equipment and allowances. Specifically, MA units need communication and motor transport assets, refrigerators, and enough MA-specific tools/supplies to equip 150 Marines.

Failure to correct the problems identified during Iraqi Freedom will cripple our ability to properly recover, process, and return our fallen Marines to their families. The recovery of battlefield casualties is a long and involved process that requires respectful, competent, well-trained and well-equipped Marines to complete. Anything less places the Marine Corps at risk and breaks faith with those Marines who sacrifice the most.

¹Marine Corps Warfighting Publication (MCWP) 4-11.8, *Services in an Expeditionary Environment*, Marine Corps Combat Development Command, September, 2001, p. 4-1. Hereinafter MCWP 4-11.8.

²What was not predicted was the number of civilian, coalition, and enemy combatant deaths. Had the actual number approached the prediction (even one mass casualty event) Army and Marine MA capabilities would have been overwhelmed.

³Tentative identification, otherwise known as “believed-to-be” identification is made by a casualty’s unit members based on personal knowledge or by recovery personnel based on identification cards and other identifying material. Positive identification is made by the armed forces medical examiner based on dental and/or DNA tests once the remains have evacuated to either Landstuhl, Germany, or Dover, Delaware. For the Marine Corps, there were no reported discrepancies between tentative and positive identifications. At this writing there are no unknown Marine casualties from OIF.

⁴In today’s era of embedded reporters and cellular telephones, rapid recovery is critical as it relates to the casualty call for the family.

⁵The initial Army model for OIF was to deploy teams from Germany to recover remains after combat operations ceased. This changed once ground combat operations were under way, and Army MA assets were moved into theater. Such delay could have resulted in the MA assets on the ground being overwhelmed, particularly in cases of mass casualties or chemical, biological, or radiological contaminated remains.

⁶Thomas Bourlier, director, Mortuary Affairs Center and School, Ft. Lee, Virginia, interview with authors.

⁷MA units did not have organic transportation assets, as these assets arrived in theater late because of transportation shortages. 1st FSSG supplied vehicles to MA units, meeting minimal requirements. MA Marines need to know how to request air and ground transportation assets from higher headquarters and coordinate their efficient use, to include proper convoy techniques.

⁸1st FSSG MA Marines processed remains of U.S. Marines, soldiers, sailors, and personnel from England, Jordan, Argentina, Canada, Kuwait, and Iraq. The remains were those of soldiers and civilians, including journalist.

⁹MA needs to coordinate with these agencies before identification media are stripped from the enemy remains.

¹⁰Hopefully, the casualty call has been made to the next of kin before mail is returned as undeliverable.

¹¹From a recruiting standpoint, including these skills makes an otherwise unattractive MOS palatable to those who have the mettle, desire, and capability to do this kind of work. These skill sets are very marketable in the civilian sector, particularly in professions related to homeland defense (fire, police, emergency medical technician, etc.)





MCLB Corpsmen Return from Iraq

by Corporal Joshua Barhardt

<http://www.leatherneck.com/forums.showthread.php?t=8329>>.10 July 2003.

MARINE CORPS LOGISTICS BASE BARSTOW, Calif. (July 10, 2003)—Eleven corpsmen from MCLB Barstow were deployed in support of Operation Iraqi Freedom.

Some of those who were attached to forward Marine units have started returning home. Their experiences over there are just some of the many shared by U.S. service members during the war.

“I was deployed with 3rd Battalion, 4th Marines, Lima Company,” said Hospital Corpsman 3rd Class Jay-R Enguillado, a corpsman attached to MCLB Barstow’s Branch Medical Clinic. “We went into Iraq at night time and went all the way to Baghdad.

Enguillado said they didn’t really encounter major resistance.

“We only had two major battles on our way to Baghdad,” said Enguillado. “We stayed where Saddam’s statue was torn down.”

Enguillado said the Iraqi people destroyed the statue.

“When we got there the statue was gone,” said Enguillado. “The people took the head off and it disappeared.”

Even though they saw some fighting, Enguillado said he only treated minor wounds on Marines.

“I only had to treat a couple shrapnel wounds,” said Enguillado. “I treated mostly civilians who stepped on land mines or got shot by their own people.”

“The worst thing I saw was a 5-year-old kid with his face all burnt up,” said Enguillado. “I wrapped it up for him and sent him on his way because that’s all I could do for him.”

Enguillado said the civilians knew he was medical personnel.

“I guess they figured out our rank or something, but the civilians would always know I was a corpsman and

come to me for help,” said Enguillado.

Enguillado said he had enough Meals Ready to Eat to last him a lifetime.

“I don’t ever want to eat M&M’s or Skittles again,” said Enguillado.

Hospital Corpsman 3rd Class Phil Alexanian was deployed with 3rd Battalion, 4th Marines, India Company. He said he was there to watch the Saddam statue come down.

Alexanian said combat wasn’t fierce, but it still will stay with him.

“I saw enough,” said Alexanian. “I saw all I wanted to see.”

“The worst thing I saw was actually the first thing I saw,” said Alexanian.

He said he went into an area after it was attacked by an AH-1W Cobra helicopter and came across an 8-year old boy who was missing the bottom half of his face.

Alexanian said the boy was probably injured during the attack. If the boy was injured during the attack, it’s an example that it was nearly impossible to eliminate collateral damage even though the U.S. military went to great lengths to limit civilian deaths and injuries and to minimize damage to nonmilitary facilities.

“When I came home, my wife and mother had it on video tape because one of the embedded reporters was there and it got put on the news,” said Alexanian.

He said that he heard the boy survived because the boy was airlifted to a hospital for medical treatment.

Alexanian was among many American combat medics who treated scores of Iraqi civilians and service members throughout that country.

On April 8 it was reported that there were nearly 300 wounded Iraqi soldiers and civilians being treated in coalition hospitals, and many more were being treated medics on the battlefield.

Alexanian said the Iraqi people were really happy to see them.

“All the Iraqi’s were full-on happy we were there when we came into Baghdad,” said Alexanian. “They kept saying, “Good Bush.””

When the armed forces took over Baghdad, Alexanian said the looting was pretty serious.

“It made the L.A. riots look like a joke,” said Alexanian.

Chief Petty Officer Dave Bockelman was attached 1st Battalion 7th Marines Headquarters and Service Company. He helped set up battalion aid stations and get them ready for triage and other aspects of medical care for when the United States moved into Iraq.

He said there is definitely things he will remember.

“Well I definitely remember getting shot at with RPGs,” said Bockelman. “That’s something you don’t forget.

“A lot of the trauma was with Iraqi soldiers and civilians,” said Bockelman. That was because the Republican Guard were setting up their civilians in areas they knew we were going to hit.”

Bockelman said when they got to Baghdad, they were in charge of some presidential palaces.

“I got to go into Saddam’s closet and look at his stuff,” said Bockelman.

The following corpsmen were sent to Iraq from MCLB Barstow’s Branch Medical Clinic: Enguillado, Alexanian, Bockelman, Hospital Corpsman 3rd Class Dominic Topete, Hospital Corpsman 2nd Class Terry Morocco, Hospital Corpsman 2nd Class Jimmy Oglesby, Hospitalman Micah Davis, Hospital Corpsman 1st Class Advinto Alejo, Hospital Corpsman

3rd Class Jay Angle, Hospital Corpsman 1st Class Allen Maluto, and Hospital Corpsman 1st Class Dave Pope.





Marine Corps CH-46's Vital to CASEVAC Missions in Iraq

by Sergeant Matthew P. Shelato

<globalsecurity.org/military/library/news/2003/07/mil-030729-mcn05a.htm>. 30 June 2003.

ALI AL SALEM, Kuwait (July 30, 2003)—During peacetime in their home country, sick and injured service members can typically rely on emergency medical services and an ambulance to transport them quickly to a nearby hospital.

When those servicemembers are sent to the front lines on foreign soil, however, conventional means of transporting injured personnel are “up in the air.”

During the fighting to depose former Iraqi president Saddam Hussein and his regime, wounded warriors on both sides of the campaign have learned to trust the corpsmen and Marines flying aboard the CH-46E helicopters of the First Marine Expeditionary Force’s Casualty Evacuation Teams with their lives.

To date, I MEF casevac teams have had a 99.007 percent survival success rate in the treatment of U.S. service members, enemy prisoners of war and Iraqi civilians cared for by aircrew casevac corpsmen, according to Navy Lt. Erik P. Voogd, flight surgeon of Marine Medium Helicopter Squadron 165.

In this conflict, the enemy has had the “hometown advantage” and the most intense ground fighting has been done house-to-house in urban areas. Regardless, the death rate for servicemembers during Operation Iraqi Freedom is only one-eighth what it was during the Vietnam War and the Gulf War combined, Voogd explained.

“I’d like to say medicine is better today,” Voogd said of the degree of success the Casevac flights have had in saving lives. “But the one thing making a difference here is how quickly we get in there and remove those (injured) Marines from danger. That couldn’t be done without combat pilots and aircrew who can get to a hostile landing zone and get the patients out.”

According to Voogd, a Parkersburg, Iowa, native, the most critical period of time for anyone who is seriously injured is the “golden hour,” or the interval between the occurrence of the injury and the administration of first aid. The faster a patient with a gunshot wound or shrapnel injury can get to an established medical facility, the better the victim’s chances of surviving. During the operation, one of the best methods of getting out of harm’s way has been aboard the “Phrogs” of the casevac team, said Voogd.

“These guys flew in horrible conditions, facing everything from Iraqi aggressors to bad weather, to get as close to an injured Marine as possible,” Voogd said of the ability of the CH-46 pilots

and aircrews. "During the heavier fighting, they would fly low and slow to make their way through dust storms and low visibility just to pick up a patient."

Each member of the aircrew, including the medical corpsmen, has been trained for combat situations, including operating in a "hot" landing zone, near active combat operations. The "Devil Docs" are also qualified to operate the two .50-caliber machine guns aboard the aircraft, which are meant for defending the crew and helicopter when in danger.

Other helicopters, such as the CH-53E and Army UH-60, were used opportunistically for Casevac missions, while the CH-46 belonging to the Marine Medium Helicopter Squadrons here were the primary aircraft tasked with casualty evacuation. Other types of missions flown by the Phrog squadrons include assault support and command and control flights.

"There's definitely a difference between a casevac and a medevac flight," Voogd said.

Voogd said the medical evacuation system, or "Medevac" flight, were created as a means to carry wounded or ill personnel from an established battalion aid station or an basic medical facility to a higher echelon medical clinic. The primary helicopter used for Medevac missions has been the Army UH-60A Blackhawk, with CH-53D and CH-46E and aircraft also participating in medevac operations.

Casevac missions flown by Phrog squadrons have medical corpsmen on hand who are trained to treat trauma patients. The hospital corpsmen who fly aboard casevac missions have completed combat aircrew training and can assist the aircrew and pilots during flight operations. A casevac aircraft is capable of landing near an active combat zone, loading patients rapidly and defending the aircraft from enemy fire upon withdrawal.

"We can assist the pilots when landing, make sure the (landing zone) is clear, then jump out of the aircraft and take care of the wounded," said Petty Officer 2nd Class Jeff S. Coslett, search and rescue medical technician for HMM-268.

Coslett, a member of the I MEF casevac team, has experience as a civilian paramedic in his native city of San Diego.

"It's a different experience when someone is shooting at you," Coslett said, comparing his service in Iraq and San Diego. "Working in a combat zone is a reality check—it's so loud on the aircraft, we couldn't tell when (the enemy) was shooting at us and the patient can't usually tell me what's wrong with him," said Coslett.

Even in the "fog of war" created in a combat zone, Coslett said the medical corpsmen attached to the infantry units were giving the injured warriors the best treatment available.

"The corpsmen on the ground were the 'Johnny on the spot' guys," Coslett said. "The work they did for the injured was outstanding—a patient would always be packaged up and ready for evacuation by the time we were there to pick (the patient) up."

Once the wounded were flying aboard the helicopter, traveling at speeds reaching 145 knots, the work of the casevac team's corpsmen had just begun. Several of the patients were in need of constant medical attention, which was made difficult by the environment aboard the aircraft.

"If you could picture an emergency room or an ambulance back in the states, it would almost be a controlled environment," Coslett said. "Here (on a CH-46E) it's difficult to even take a pulse because of the noise and vibration. We constantly have to make decisions from our experiences and training.

The casevac team also saved the lives of several Iraqi civilians and soldiers who needed medical attention. Coslett said his team carried more injured Iraqis than coalition forces, but the language barrier was only one difficulty overcome by the Corpsmen providing medical care for the enemy.

"A Marine knows I'm there to help him, but an (Iraqi soldier) might not understand," said Coslett. "He's probably asking himself, 'Who is this, and what is he doing to me?'"

The casevac teams often risk their lives to be able to help others. During the conflict, the corpsmen and aircrew would remain as close as possible to the infantry units they were supporting, enabling them to get to a patient as fast as possible.

When on standby, the casevac team's nights were often spent near or aboard the aircraft, usually sleeping on the same stretchers used to carry the wounded. Coslett recalls long nights spent near the front lines, eating Meals Ready to Eat while listening to "talking" artillery and receiving enemy mortar attacks. "Iraq artillery

would land nearby, almost too close sometimes,” Coslett said.

“Our artillery would respond with their own barrage and the enemy would usually get one more chance to return fire. By then our guys had zeroed in on their position, and we’d hear ‘BOOM BOOM BOOM!’ and (the Iraqis) would stop shooting back.

The skill of the medical corpsmen and aircrews of the I MEF casevac teams are evident in the amount of success they’ve had in saving lives during Operation Iraqi Freedom.

“I don’t see how anything I’ll ever do in the future for the Navy will ever compare to what I’ve done out here,” Coslett said.