


AFTER ACTION REPORT

OPERATION IRAQI FREEDOM II

February – August 2004

NMCB 74

NAVAL MOBILE CONSTRUCTION BATTALION SEVENTY-FOUR

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EXECUTIVE SUMMARY

Detachment SOUTHWEST ASIA (DET SWA) consisted of several different elements (Advance Party, Offload Preparation Party, Main Body 1, Main Body 2) that arrived in Kuwait at different points between 6 February and 11 March 2004. Prior to mass personnel and equipment movements, DET SWA sent *advanced camp reconnaissance elements* to Camp Fallujah (previously known as MEK) and Camp Ar Ramadi (previously known as Junction City). Upon arrival in theater, DET SWA (320 Seabees) was redesignated as TASK FORCE ECHO (TF-E). TF-E maintained "main body" operations at Camp Fallujah and sent details to Camps Ar Ramadi and Al Asad in the central-western part of the Al Anbar province.

Project work began late in March (see chart below) and continued until two days prior to NMCB 74's departure from Iraq. In addition to earning 19,982 mandays of work in support of Operation IRAQI FREEDOM II, NMCB 74 observed firsthand the importance of maintaining considerable Tactical Movement, Engineer Reconnaissance, and jobsite security capabilities.

PROJECT	MAR				APR				MAY				JUN				JUL				AUG			
	1	2	3	4	1	2	3	4	1	2	3	4	1	2	3	4	1	2	3	4	1	2	3	4
Det Ar Ramadi Miscellaneous																								
Det Al Asad Miscellaneous																								
Barracks/Office Rehab																								
Operation VIGILANT RESOLVE																								
Al Asad Vehicle Trench																								
Building 21																								
Cloverleaf Clean-Up																								
Bravo Surgical																								
Building 29 Doors																								
FLT Compound																								
Fallujah Brigade Camp																								
Iraqi Border Patrol Camp																								
ICAP																								
Community Outreach Center																								
Traffic Circle Upgrade																								
Cloverleaf Bypass																								
JCC Upgrades																								
East Helicopter LZ																								
Qanishyah Bridge Repair																								
COC Projectors in Bldg 21																								
2/1 Towers																								
Camp Mahmudiyah Mess Facility																								

INTRODUCTION

The FEARLESS Seabees of NMCB SEVENTY FOUR entered Iraq expecting to renovate schools, repair hospitals, and build playgrounds. As the Battalion established its base of operations however, it became more and more apparent that the resistance and hostility from anti-Iraqi forces would change the focus of the Battalion's mission as indicated in the COMMANDER'S INTENT:

1. Be Bold. Through innovative, active, and aggressive project planning and management, we will conduct sustained Civil Military Operations (CM)) to increase regional stability in support of IMEF objectives, by providing comprehensive engineer solutions and by executing highly effective construction with troops and local contractors.

2. Coordinate CMO work in full alignment with IMEF/1MARDIV objectives. Secure required resources for these CMO projects Expedite planning and execution of projects within first 90 days to support 1MARDIV's "first fifteen" plays.

3. Remain vigilant on all force protection and security aspects inherent to our mission. Maintain a strong combat posture in all convoy operations and at all remote project sites.

4. Establish an effective construction safety program that eliminates major mishaps and keeps our force fully capable.

5. Raise quality of construction standards to increase pride and appreciation within Iraqi communities.

6. Maintain high availability and strict accountability for weapons, communications assets, CESE, and the entire TOA.

7. Provide Seabees and Marines the highest possible QOL to sustain a vibrant force with high morale.

By the end of March the Fearless Seabees had established their hive and were ready for action. Hostile activity in the area of operations had increased steadily during March and had culminated in a brutal and sadistic attack on four American contractors working in Fallujah. The attack effectively shifted the MEF's and MEG's focus from CMO to Force Protection. Det SWA built and fought alongside the Marine Corps constructing bunkers, berms, and bypasses and then shifted focus once again to perform clean-up operations.

As the stability and optimism gradually increased, the Fearless Seabees began several traditional contingency projects including the construction of a "thousand man camp" for the Fallujah Brigade and a frontier outpost for the Iraqi Border Patrol. Seabees developed and implemented the Iraqi Construction Apprentice Program and undertook a substantial project to build a Community Outreach Center for the Fallujah Liaison Team. These projects ran concurrently with several camp improvement projects that significantly increased the security and quality of life for both Seabees and Marines. Seabees further supported MEF operations by installing

watchtowers along a main supply route, creating a bypass to a historically hostile supply route crossroads, repairing a bridge damaged by anti-Iraqi forces, and building a hardened bunker for United States Marine Corps camp in Mahmudiyah.

EMBARKATION

MPSRON II OFFLOAD
DET SWA's operations began with deployment of a twenty-person Offload Preparation Party (OPP) to Diego Garcia and Sigonella, Sicily and a 125 person advanced party to Camp Moreell, Ali Al Salem, Kuwait. The DET offloaded the P-25, P-29 and an additional Core of CESE from MPSRON I from the MV Lopez, MV Phillips, MV Baugh, MV Button, MV Williams and the "black bottom" ships Bellatrix, Alitar, and Sissler which carried augment CESE and TOA from Gulfport.

A marshalling yard was established at Port Ash Shuaybah Kuwait where CESE and containers were staged, mobile loaded, and staged for convoy to Camp Moreell. Equipment and container bar codes were scanned prior to departing the staging area and upon arrival at the assembly area. Thirty Seabees transported 406 units of CESE and 127 Containers to Camp Moreell, Ali Al Salem, Kuwait with an additional 12 Seabees providing convoy security.

Upon arrival at Camp Moreell, CESE was positioned in an established Alfa yard and each unit of CESE received a Joint Limited Technical Inspection (JLTI), which revealed several broken MTVR windshields. Cores 1, 2, & 3 were staged by core in the container lot.

Eight personnel (3 daytime, 5 nighttime) maintained 24-hour per day Supply Operations to pull all required items from each core. The inventory operations revealed significant location discrepancies, which were noted and forwarded to Gulfport and Port Hueneme for resolution.

TRAINING

Prior to deployment, five personnel were selected to go to Camp Pendleton, California to participate in various "Train the Trainer" courses, which focused primarily on Convoy Ambush Immediate Action drills and Improvised Explosive Device (IED) recognition. A company-based training plan that covered these topics as well as *Use of the AN/PVS 11 GPS* and *Military Operations in Urban Terrain* (MOUT) was developed and executed in homeport prior to Deployment. Two additional crew-served weapons range trips were also conducted to bolster the number of qualified personnel to meet all future tasking.

The Main Body of DET SWA initially deployed to Rota, Spain and continued the homeport training. Convoy immediate action drills included all aspects of near and far ambushes, breaching obstacles, and actions used during vehicle unloading procedures. (The Advanced Party of DET SWA conducted similar training upon completion of the Maritime Preposition Force (MPF) offload.) All members of DET SWA Battle Site Zeroed (BZO) their M16A2E3 at the Udairi Range and crew served weapon teams underwent comprehensive training that included proper usage of the weapons misfire procedures, weapons cleaning, and proper rates of fire during hostilities. Every member of the DET with a previous crew served weapon qualification was re-trained and re-qualified with their weapon.

Rota, Spain

COMBAT SKILLS BLOCK TRAINING

All personnel designated for further deployment to Southwest Asia in support of Operation Iraqi Freedom received training prior to deployment and again upon arrival in Rota Spain. Specially designed two-week block training included items listed below plus a blank-fire convoy ambush exercise. Courses focused on hands-on training in four-hour instructional periods for platoon-sized classes. The additional training ensured that all personnel deploying to Southwest Asia had every opportunity to practice these skills.

Block Training Topics:

- PRC-119 familiarization
- Basic First Aid, heat injury aid, STDs, general health
- Land navigation, PLGR familiarization
- Southwest Asia (SWA) Area of Operations Rules of Engagement (ROE)
- Improvised Explosive Device (IED) identification and response
- Crowd control tactics
- Vehicle search techniques
- Movement on Urban Terrain (MOUT) tactics
- Personal and crew-served weapons familiarization
- Immediate Action Drills (IAD)

CONVOY TRAINING

Recognizing that contingency operations would involve convoys that would traverse significant distances it became quickly apparent that convoy training would be critical to the DET's success. Initial training involved command and control practice to move large vehicle convoys across unimproved roads with limited terrain features. Training progressively incorporated additional contingency operational requirements. Various size convoys were conducted during daytime and nighttime hours. Training included use of NVGs, PLGRs, immediate action drills, Improvised Explosive Device recognition, vehicle breakdowns, and other aspects of command and control. Vehicles were loaded during the Bridge EX and convoys conducted to identify load improvements. Convoy dispersal and assembly formations were practiced.

Fallujah, Iraq

SEABEE COMBAT WARFARE SPECIALIST PROGRAM

During the SWA deployment 71 enlisted personnel and 6 officers successfully qualified as Seabee Combat Warfare Specialists (SCW). A robust SCW training program which conducted classes three nights per week not only proved itself substantially beneficial to individual professional development, it also honed the skills of the many subject matter experts who played active roles in the training and board preparation process.

ENLISTED FLEET MARINE FORCE WARFARE SPECIALIST PROGRAM

During the SWA deployment, 11 NMCB 74 Seabees successfully qualified as Enlisted Fleet Marine Force (FMF) Warfare specialists. The qualification signifies that the Seabee/Sailor is competent in his/her rate and has acquired additional general knowledge that enhances his/her understanding of warfighting, mission effectiveness, and command survivability. Members attended classes which were held three nights per week, displayed general knowledge of the I Marine Expeditionary Force organization, mission, assets, employment, combat systems, and USMC battle skills techniques, and mastered basic equipment through written examination, hands-on demonstration of knowledge, and an oral board examination.

PHYSICAL TRAINING

Physical training was continued for the personnel attached to Task Force Echo. PT was held three days per week and included DET runs of varying lengths interrupted with calisthenics, pushups and sit-ups and indoor weight lifting and elliptical machines during inclement weather. Due to operational tasking, the PFA was waived for personnel deployed to SWA.

Operation IRAQI FREEDOM II
NMCB 74 Daily Chronology of Events

JANUARY 2004

Offload Preparation Party (OPP) departed Gulfport, Mississippi for Diego Garcia and Sigonella Sicily

FEBRUARY 2004

5 FEB
Detail Southwest Asia (DET SWA), 123 personnel, departed Gulfport, Mississippi for Kuwait.

6 FEB
DET SWA arrived at Camp Moreell, Ali Al Salem Air Base in Kuwait.

- Established Camp Moreell security watch section.

7 FEB
Forty-two personnel departed to Port Ash Shuaybah for the MPF offload.

8 FEB
SWC Engel and GM2 Bolton arrived on a cargo flight consisting of three tri-cons of weapons, 7 tri-cons of communication gear, and one pallet of NVGs.

- Began MPF Offload upon arrival of the MV Lopez.
- Repaired gate at Camp Moreell ECP.

9 FEB

- Sent two convoys carrying 51 units of CESE from the port to Camp Moreell.
- Began construction of Armory Seahut using recycled materials.
- Established computer operation and internet access in Camp Moreell office spaces.

10 FEB

- Completed MV Lopez offload.
- Received one convoy with 7 units of CESE at Camp Moreell.
- Opened barbershop.

11 FEB

- Began offload of MV Phillips upon arrival.
- Received one convoy with one unit of CESE at Camp Moreell.
- Received 13 pallets via cargo aircraft.

12 FEB

- Sent three convoys with 45 units of CESE from the port to Camp Moreell.

- Reported vehicle mishap at the port. (Unattended, leased 25-passenger bus rolled off of the pier and into the water. No injuries were reported.)
- Completed 25 JLTIs.

13 FEB

MV Baugh arrived in port. Leased bus recovered by EOD divers.

- Completed MV Phillips offload.
- Received three convoys with 57 units of CESE at Camp Moreell.
- Completed 26 JLTIs.
- Established sandbag position at OP2.

14 FEB

- Received one convoy with 17 units of CESE and 37 containers at Camp Moreell.
- Completed Armory Seahut.
- Commenced installation of concertina wire around the armory.

15 FEB

- Received one convoy with 41 units of CESE at Camp Moreell.
- Completed 24 JLTIs

16 FEB

- Completed MV Baugh offload.
- Received two convoys with 26 units of CESE and 22 containers at Camp Moreell.
- Completed 22 JLTIs.

17 FEB

- Commenced MV Button offload upon arrival.
- Completed 36 JLTIs.
- Placed force protection barriers at Camp Moreell.

18 FEB

- Sent four-man camp reconnaissance team to Champion Main.
- Completed 33 JLTIs.
- Completed Camp Moreell Armory project.
- Placed additional force protection barriers at Camp Moreell.

19 FEB

- Completed MV Button offload.
- Commenced MV Williams offload upon arrival.
- Received two convoys with 47 units of CESE and 28 containers at Camp Moreell.
- Completed 27 JLTIs

20 FEB

- Completed MV Williams offload.
- Received three convoys with 42 units of CESE at Camp Moreell.

- Completed 26 JLTIs.
- Completed serialized inventory of weapons.

21 FEB
S3, S3C and S4 arrived at Camp Moreell.
- Completed one convoy with 21 containers arrives at Camp Moreell.
- Placed additional force protection barriers placed at Camp Moreell.

22 FEB
- Received one convoy with 24 units of CESE at Camp Moreell.
- Completed 29 JLTIs.
- Sent 24 personnel from the port to Camp Moreell.
- Skinned seven strong-back tents.

23 FEB
- Completed 32 JLTIs.
- Skinned 5 strong-back tents.

24 FEB
- Completed 31 JLTIs.
- Conducted Combat Lifesaver training.
- Skinned five strong-back tents.

25 FEB
CO and CMDCM arrived at Camp Moreell.
- Completed 6 JLTIs.

26 FEB
- Began Bellatrix and Alitar offloads upon arrival.
- Completed 26 JLTIs.
- Conducted Combat Lifesaver training.
- Began fabrication of steel hardening for non-tactical vehicles.
- Reported forklift mishap; forks punctured refrigeration container; spotter was present.

27 FEB
- Hardened one MTVR.

28 FEB
- Received two convoys with CESE at Camp Moreell.
- Hardened one tractor-trailer.

29 FEB

- Installed armored doors on 12 vehicles.
- Completed BEEP to NMCB 1.

- Installed 12 HMMWV fording kits on the HMMWVs.
- Constructed 20 targets.
- Hardened one tractor-trailer.

MARCH 2004

1 MAR
- Hardened 14 HMMWVs.
- Hardened 3 out of 10 15T tractors for the first convoy to Iraq.

2 MAR
- Began Sissler offload upon arrival.
- Installed 15 of 23 fording kits
- Turned-over 9 of 49 units of CESE to NMCB 5.

3 MAR
- Hardened five vehicles for the first convoy to Iraq.
- Installed 17 of 23 fording kits.
- Trained 14 personnel in NVG use.

4 MAR
- Received eight units of CESE from Port Ash Shuaybah.
- Completed hardening vehicles for the first convoy.
- Installed 18 of 23 fording kits.
- Installed improved doors on 14 Soft-top HMMWVs.
- Staged Convoy 1.
- Conducted NVG Training.

8 MAR
- Delivered one soft-top HMMWV to contractor to install O'Gara-Hess Hard-Kit Armor System.
- Installed Fording kits on 17 of 20 HMMWVs.
- Issued personal gear to 100 new arrivals.
- Celebrated 62nd Seabee Birthday
- Began inventory of Camp Fallujah TOA.
- Completed loading TOA for Convoy 1.

9 MAR
- Installed Kevlar blankets in 9 of 9 Convoy 2 HMMWVs.
- Installed fording kits on 1 of 3 HMMWVs.
- Completed hardening vehicles for Convoy 2; started hardening vehicles for Convoy 3
- Conducted range, IED, and convoy security training for 57 personnel.
- Installed Foster/Miller kits and Kevlar blankets for Convoy 2 and Convoy 3.
- Staged Convoy 2; started staging Convoy 3.
- Loaded TOA onto Convoy 2.

- Sprayed permethrin on uniforms and mosquito netting.
- Began Site Prep and move-in for Galley Project at Camp Moreell.

10 MAR
Convoy 1 arrived at Navistar at 1940Z.
- Received 76 personnel from Rota.
- Began TOA loading for Convoy 2 and Convoy 3.
- Installed Foster/Miller kits and Kevlar blankets for Convoy 2 and Convoy 3.

11 MAR
Convoy 1 arrived at Scania @ 1915Z.
- Loaded TOA for Convoy 2 and Convoy 3
- Issued personal gear to new arrivals.

12 MAR
Convoy 1 arrived at Junction City @ 1900Z.
- Conducted convoy rehearsals (Convoy 2).
- Staged Convoy 3 and started on Convoy 4.
- Completed Galley foundation construction. Began wall fabrication.
- Conducted BZO/Familiarization Fire range exercise for 90 personnel.

13 MAR
Convoy 2 departed Camp Moreell at 0900Z and arrived at Navistar at 1320Z.
- Installed Kevlar blankets for Convoy 3.
- Finished loading TOA on Convoy 3.
- Started staging Convoy 4.
- Began roof framing for Galley.

14 MAR
- Conducted security training (Convoys 3 & 4).
- Installed Foster-Miller kits and Kevlar blankets for Convoy 3 and Convoy 4.

15 MAR
Convoy 2 departed from Scania at 1000Z and arrived Camp Fallujah at 1435Z.
- Issued CBR gear to Convoy 3.
- Finished installing armor on Convoy 3.

16 MAR
Convoy 3 arrived at Navistar 1445Z.

17 MAR
Convoy 3 arrived at Scania at 1555Z.
- Applied metal sheeting to Galley roof; continued electrical work.
- Cleared site for MWR Building Construction at Camp Fallujah.

18 MAR
Convoy 3 arrived at St. Mere 1350Z.

19 MAR
Convoy 4 arrived at Navistar 1320Z.

20 MAR
Convoy 4 arrived at Scania 0920Z.

- Finished metal sheeting for Galley roof; Continued electrical work.

21 MAR
Convoy 4 held over in Scania.

22 MAR
Convoy 4 arrived at Camp Fallujah to RON enroute to Camp Al Asad.

- Supported route reconnaissance mission with 1st Recon Battalion & 82nd ABN (SERT 74).
- Installed swing gate at MEF HQ entrance.
- Completed ICAP OPT.

23 MAR

- Began placing protective wire around outer wall of Camp Fallujah Seabee compound. Placed protective wire around Camp Fallujah MLO and CTR grounds.
- Completed installation of East ECP steel barriers.
- Opened NMCB 74 BAS, S4 spaces, and armory.
- Began construction of new road to Shark Base (Camp Ar Ramadi).
- Wired lights and switches for Marine EOD (Camp Ar Ramadi).
- Wired NCO BEQ for C-MED (Camp Ar Ramadi).
- Constructed flag stands and ceremonial Lost Soldier Monument (Camp Ar Ramadi).

24 MAR

- Installed concertina posts on top of outer wall of Camp Fallujah Seabee Compound.
- Completed Task Force Echo (TF-E) MWR building, gym, and post office.
- Conducted combat lifesaver training for TMT personnel.

25 MAR

- Began concertina wire placement around outer wall of TF-E Compound.
- Commenced installation of Comm Wall at Marine Recon COC.

26 MAR

- Aided Iraqi contractor in fixing broken Camp Fallujah water main.
- Completed concertina wire installation on outer wall of TF-E Compound.
- Completed galley expansion project. *(Camp Moreell)*

27 MAR

- Completed Comm Wall installation at Marine Recon COC.
- Began Comm Ceiling at Marine Recon COC.
- Began construction of new berm at East ECP Gate.
- Began construction of MHG Armory Berm.
- Repaired 4" water main break (Fallujah).
- Built basic furniture items for 9th Comm, RCT-1, and RCT-1 MT.

28 MAR
- Completed 9th COMM Berm.
- Completed MHG Armory Berm.
- Completed Comm Ceiling at Marine Recon COC.
- Completed fabrication of steel barriers for Camp Fallujah North ECP.

30 MAR
- Completed Pontoon Bridge Surveys IVO Camp Al Qaim (SERT).
- Completed new East ECP Berm.
- Backfilled 4" water main replacement (Fallujah).
- Began construction of Special Forces Berm (Fallujah).
- Began gym site prep and construction at Camp Moreell.

31 MAR
- Completed 5th SFG Berm phase I & II.

APRIL 2004

1 APR
- Began 3rd Phase of Camp Fallujah East ECP berm.
- Placed Texas Barriers at Camp Fallujah South ECP.
- Began installation of two service-windows in bldg 126 for Alfa Dispatch.

2 APR
- Completed bridge reconnaissance missions IVO Hadithah Dam and convoyed to Camp Al Asad (SERT).
- Completed 3rd Phase of Camp Fallujah East ECP berm.
- Placed more Texas Barriers at Camp Fallujah South ECP.
- Removed debris from around MEF/MEG buildings and backfilled sidewalk with gravel.
- Completed MHG COC Wall.
- Commenced HMMWV towbar fabrication.

3 APR
- Commenced convoy prestage and fabrication of bunkers in support of operation VIGILANT RESOLVE.
- Conducted multiple bridge reconnaissance missions (SERT).
- Completed 3rd phase of 5th SFG berm.
- Repaired/placed HESCO barriers along Camp Fallujah north wall.

4 APR

- Staged convoys and bunker material in support of operation VIGILANT RESOLVE.
- Constructed mock-up bunker in Camp Fallujah.
- Fabricated bunkers for Operation VIGILANT RESOLVE.
- Moved barriers to Camp Fallujah east ECP.

5 APR

- Fabricated bunkers for Operation VIGILANT RESOLVE.
- Constructed TCPs in Direct SUPPORT OF 2/1 Marines for OPERATION VIGILANT RESOLVE.

6 APR

- Completed HESCO bunkers at TCPs 4, 11, 9, and 3 in direct support of CSSB-1 and Marines for Operation VIGILANT RESOLVE.
- Conducted rapid resupply of TMT-74B at TCP 9.
- Fabricated bunkers for TCPs and modified design of 7' HESCOs based on field input.

7 APR

- Constructed and subsequently demolished bunkers and berms at TCP 12 in support of Operation VIGILANT RESOLVE.
- Modified CG's vehicle antenna mount.

8 APR

- Began grading of SOF compound, cleared and graded laydown area, dug burn pit, began dust abatement at Camp Baharia.
- Moved barriers, filled/placed HESCO bastions at Camp Fallujah east ECP.

9 APR

- Completed furniture/shelves for RCT-1.
- Unloaded five trucks of MREs and water for U.S. Army at Camp Fallujah.

10 APR

- Repaired Camp Fallujah south ECP gate.
- Conducted project survey (IMEF HQ, Bldg. 21) with OICC.
- Completed berm work at Camp Fallujah east ECP (Phase IV).

11 APR

- Provided two UTs to RCT-1 to assess 8" water main break IVO TCP 3.
- Conducted site survey for potential Displaced Civilian Camp (DCC) with 3rd CAG (SERT).
- Developed project scope and began P&E for IMEF HQ, Bldg. 21.
- Filled HESCO barriers and moved Texas barriers for TF 626 at Camp Baharia.
- Completed work at Camp Fallujah east ECP (Phase IV).
- Provided backhoe support to CSSB-1 to excavate trench.

12 APR

- Conducted site survey with RCT-1 for construction of berm around southeast side of Al Fallujah.
- Installed swing gates on interior sides of Camp Fallujah north and south ECPs.

13 APR

- Installed spiked swing gates on exterior of Camp Fallujah north ECP.

14 APR

- Constructed 3km berm around southeast side of Al Fallujah in support of RCT-1 under sustained enemy fire.
- Conducted site visit to TCP 3 with RCT-1 to assess additional utility and infrastructure repairs.
- Conducted engineering recon and site assessment of destroyed bridge at CP22A, MSR Tampa (SERT+).

15 APR

- Conducted broken water main site visit near CP1 (TMT 74-A).
- Repaired pump truck for RCT-1.

16 APR

- Conducted water line repair near CP 3.

17 APR

- Completed inventory of CBR gear and began gas mask testing.
- Constructed 3-hole and 1-hole burnouts.
- Removed existing berm north of fuel farm due to MHG FP concerns.
- Relocated TF-E antenna farm to hardened structure.

18 APR

- Completed repairing pump truck for RCT-1.
- Completed gas mask testing.
- Removed part of berm from 9th COMM.

19 APR

- Completed site assessment of ICDC/IPS personnel processing site; delivered 3-hole burnouts for 3rd CAG.
- Completed gym project. (Camp Moreell)

20 APR

- Conducted reconnaissance of three sites east of Al Fallujah for Displaced Civilian Camp (DCC)/TAF (SERT+).
- Participated in Camp Fallujah ground attack drill.
- Completed BM for 3rd CAG office space, Bldg 20.

- Conducted OPT to identify resources to repair damaged infrastructure at TCP 3.

21 APR
- Completed TCP at southeast corner of TF-E compound.
- Began construction of TCP near Camp Fallujah east LZ.
- Placed and filled HESCO baskets near Camp Fallujah south ECP for 112th MP Battalion.

22 APR
- Conducted planning for construction of displaced civilian TAF.
- Completed 18 3-hole burnouts and 11 1-hole burnouts.
- Completed 2nd TCP at intersection adjacent to Camp Fallujah east LZ.

23 APR
- Conducted planning for construction of displaced civilian TAF and Fallujah clean up.
- Completed TCP Relocation Project.
- Began filling HESCOs around Camp Fallujah satellite galley.
- Began filling HESCOs in front of circus tents for TF 626 (Camp Baharia).

24 APR
- Completed burnout construction.
- Provided forklift support for HESCO barriers around satellite galley.

25 APR
- Completed DET Ar Ramadi rollback to Camp Fallujah.

26 APR
- Completed placing and filling HESCO baskets for TF 626 berthing Camp Baharia).
- Began filling HESCO baskets for blast protection around Camp Fallujah satellite galley for IMEF.
- Assisted NMCB 5 with placing and filling of HESCO baskets at MEG berthing.

27 APR
- Completed construction projects in IMEF HQ, Bldg. 21.
- Completed placing and filling HESCO baskets for blast protection with NMCB 5 at MEG berthing.

28 APR
- Began relocation of berm for new Special Forces berthing area.
- Assisted in pumping and repair of four breaks in water line on southern half of Camp Fallujah.

29 APR
- Conducted ROC drill for post-OVR operations.
- Refined CONOPs for Fallujah clean up with MEG G3 staff.
- Administered E-4 and E-5 late exams to 157 Seabees.

- Began renovation of Bravo Surgical Company Facilities.
- Completed filling HESCO baskets around satellite galley for IMEG.
- Completed force protection barrier installation near MEG berthing area.
- Excavated outfall ditch and pumped lake (east of Camp Fallujah detention center) to locate additional water line breaks.

30 APR
- Escorted G00 on TF-E compound tour; visited berm crew and TMT-74A.
- Completed relocation of berm for new Special Forces berthing area.
- Excavated 400m comm line trench for 112th MP Battalion.
- Placed and filled 4' HESCO Baskets near Camp Fallujah south ECP for 112th MP Battalion.

MAY 2004

1 MAY
- Completed repairs to 64 doors at the apartment complex near TCP 3 (TMT 74-B).
- Relocated additional berm for new berthing area at 5th SFG compound.
- Placed and filled 4' HESCO baskets near Camp Fallujah south ECP.
- Assisted RCT-1 with filling HESCO barriers around Camp Fallujah.

3 MAY
- Began work on Perimeter Gate Project at the SE corner of Camp Fallujah for India Company 3/24 Force Protection.
- Began compound clean up and security improvements.
- Began construction of two SWA huts and renovations to existing facility at FLT.
- Began fixing TF-E barracks showers and plumbing.

4 MAY
- Completed work on Perimeter Gate Project at the SE corner of Camp Fallujah.
- Filled pit near Division Interrogation Facility.
- Began electrical wiring and renovation of existing building at FLT; completed leech field.

5 MAY
- Began MHG MWR volleyball project.
- Repaired Generator at Camp Fallujah Detention Facility.
- Began building Armory Shelter (Camp Moreell).

6 MAY
CO and CMDCM conducted DET Swing visit to Camp Moreell.
- Placed and filled 7' HESCO baskets around ASP.
- Completed cloverleaf clean up.

7 MAY

- Placed and filled 7’ HESCO baskets near ASP.

8 MAY
- Completed Camp Fallujah northeast perimeter Gate Project.
- Completed both SWA huts at FLT.

9 MAY
- Completed floor molding in Bravo Surgical Operating Room 3.

11 MAY
- Reconnoitered former Iranian Training Camp (SERT).
- Completed Armory Shelter (Camp Moreell).

14 MAY
- Completed installation of suspended ceiling and reserve water tank in IMEF HQ Bldg, Room 110.

15 MAY
- Completed shower and sink installation at Bldg 126.

17 MAY
- Spread and compacted gravel for TFS site.
- Began Berthing Blast Protection Project for RCT-1.
- Conducted SECNAV tour at Bravo Surgical Rehab project site
- Began construction of ECP bunker, berms and additional SWA huts at FLT.
- Conducted convoy training with NMCB 3 (Camp Moreell).

18 MAY
- Completed kennel, pedestrian bunker, vehicle bunker; Began additional SWA construction at FLT.
- Conducted convoy training with NMCB 3 (Camp Moreell).

19 MAY
- Poured concrete for Camp Moreell TFS entrance ramp.
- Completed Picnic Pavilion at FLT.
- Conducted convoy training with NMCB 3 (Camp Moreell).

20 MAY
- Began Bravo Surgical Operating Room 2 rehab.
- Conducted convoy training with NMCB 3 (Camp Moreell).

21 MAY
- Conducted convoy training with NMCB 3 (Camp Moreell).

22 MAY
- Started construction of TFS; conducted convoy training with NMCB 3 (Camp Moreell).

23 MAY
- Reconnoitered Qanishyah Bridge (SERT)
- Began berm work and tent erection at Fallujah Brigade Camp (FBC).

24 MAY
- Began electrical work at FBC.
- Conducted convoy training with NMCB 3 (Camp Moreell).

25 MAY
- Conducted convoy training with NMCB 3 (Camp Moreell).

26 MAY
NMCB 3 SERT+ departed Camp Moreell with 23 personnel from NMCB 3, 10 personnel from NMCB 5, and 4 personnel from NMCB 74.
- Completed SWA Hut #3; began construction of SWA Hut #4 at FLT.

29 MAY
- Completed construction of TFS at Camp Moreell.

30 MAY
- Completed 10 picnic tables, one volleyball court, and two horseshoe pits for MHG.

JUNE 2004

1 JUN
- Completed leach field at FLT.

3 JUN
- Completed TFS erection in TF-E compound.

5 JUN
- Completed tent erection at FBC.
- Disassembled MEG briefing room at Camp Moreell.

8 JUN
- Began construction of Iraqi Border Patrol (IBP) camp.

9 JUN
- Reconnoitered potential FOB sites at Blue Diamond and Camp Ar Ramadi (SERT).
- Completed generator set-up and BAS and COC tent erection at IBP camp.

10 JUN

- Began installing temporary BAS, Galley wiring, temporary shower unit, and A/C units at IBP camp.
- Started reassembly of MEG Briefing room as a Camp Maintenance Shop at Camp Moreell.

11 JUN

- Completed placement of tents and 4’ berm at IBP camp.

12 JUN

- Began foundation layout for Community Outreach Center at FLT.

14 JUN

- Completed layout of foundation for Community Outreach Center and SWA hut #4 at FLT.
- Completed 8’ berm and concertina wire installation at IBP camp.
- Began offload of 105 pieces of CESE at Port Shuaybah, Kuwait.

15 JUN

- Installed 31/36 AC units at IBP camp.

16 JUN

- Conducted Al Qaim site survey and returned to Camp Fallujah (SERT).
- Conducted rapid resupply to Ar Ramadi (TMT 74-B)
- Began P&E and constructability review of new design for Community Outreach Center; completed head facility at FLT.
- Completed offload at Port Shuaybah, Kuwait

17 JUN

- Conducted IBP rapid resupply to Camp Ar Ramadi and returned to Ar Ar (TMT 74-B)
- Completed FLT ECP.
- Completed ECP and leech field at IBP camp.
- Loaded CESE at Port Shuaybah for CULT convoy to Iraq.

19 JUN

- Completed plumbing and sink installation and tile work in Dental Room at Bravo Surgical
- Completed floor tile placement in Dental Room.
- Completed repairs of sewer line outside CG’s office.
- Completed electrical distribution and plaster work at FLT.
- Began towers construction at IBP camp.

20 JUN

- Completed hard cover over JCC waiting room (FLT)

21 JUN

- Completed hallway painting at Bravo Surgical.
- Completed SWA hut # 5 at FLT.
- Completed electrical distribution and shower unit at IBP camp.

22 JUN

- Completed pavilion benches at FLT.
- Completed tower #2 construction and HESCO filling at IBP camp.
- Moved remaining CESE from Port Shuaybah to Camp Moreell via convoys.

24 JUN

- Began rehabilitation of Bravo Surgical Ward Room.
- Began excavation of Community Outreach Center foundation at FLT.

25 JUN

- Prepared and formed Tire Shop Pad.
- Began layout of Traffic Circle Improvements.

26 JUN

- Placed concrete for Tire Shop Pad (used cretemobile).
- Completed rehabilitation of Bravo Surgical Ward Room.
- Completed utility connections to MEG Trailer.

27 JUN

- Conducted reconnaissance of MSR Mobile and cloverleaf bypass with RCT-1 (SERT).

28 JUN

- Completed reassembly of MEG Briefing room roof trusses and painting of gym interior at Camp Moreell.

30 JUN

- Began construction of fence and gate near head facility and SWA Hut #6 at FLT.

JULY 2004

1 JUL

- Began and Completed Fallujah Cloverleaf Bypass Project.
- Began HET Room work at FLT.

2 JUL

- Repaired tents at Camp Moreell in preparation for turnover in August.

3 JUL

- Repaired broken sidewalk outside I MEF in conjunction with MHG and 120th Eng BDE.

5 JUL

- Completed new CESE yard.
- Repaired sidewalk outside I MEF Compound.

6 JUL

- Placed bunkers for MLO yard.
- Began compaction of foundation at Community Outreach Center.
- Installed sheet metal roof on Camp Maintenance building (formerly MEG Briefing Room) at Camp Moreell
- Relocated contaminated soil from the area around generators and placed Blivitt system at Camp Moreell

8 JUL

- Completed bunkers for Camp Fallujah MLO yard.
- Completed gate and fence near head facility at FLT.
- Set security, established camp, and began repairs to Qanishyah Bridge.

9 JUL

- Began road repairs at Camp Fallujah North Gate.
- Completed removal of bridge deck plates and bay 1 at Qanishyah Bridge.
- Conducting P&E of the MWR Block Buildings.

10 JUL

- Completed Force Protection set-up, camp set-up, and removal of bay 2 at Qanishyah Bridge

11 JUL

- Provided excavation support to USMC for Iraqi obstacle course near South Gate.

12 JUL

- Completed Pavilions at FLT.
- Installed sheet-metal roof on Camp Maintenance building (formerly MEG Briefing Room) at Camp Moreell.

13 JUL

- Provided grader support for the LZ project.

16 JUL

- Began temporary generator shelter construction at Camp Moreell.

19 JUL

*** *Naval Mobile Construction Battalion SEVENTY-FOUR Change of Command* ***

20 JUL

- Completed LOGCOM turret installation.

- Shuttled CDR Maurer to BIAP.
- Completed fence and gate on north side at FLT.

21 JUL
- Began debris removal and site clean-up operations at Camp Iskandariyah.
- Completed COC projector project at Bldg 21.
- Completed HET room at FLT.
- Received twelve 7’ HESCO baskets for Camp Mahmudiyah Mess Facility project.
- Installed 12 new air conditioners in tents at Camp Moreell.

22 JUL
- Completed SWA hut #6, HESCO barriers around SWA huts at FLT.
- Began second night shift for Camp Mahmudiyah pre-fab roof panel construction operations.

23 JUL
- Completed shower trailer set-up.
- Completed debris removal and site clean up at Camp Iskandariyah.
- Completed Balad Bridge Park parts search.

24 JUL
- Spread gravel at Camp Fallujah east helicopter LZ

26 JUL
- Supported MHG with water truck and driver.
- Began disassembly of Tents C11, C10, D11, and D10 in preparation of SWA HUT construction at Camp Moreell.
- Installed 12 new air conditioners into tents.

27 JUL
- Supported MHG with water truck and driver.

28 JUL
- Received 4”x4”x12’s at Camp Mahmudiyah to complete Mess Facility roof panels.
- Installed 12 new air conditioners into tents.

29 JUL
- Supported MHG with water truck and driver.
- Reconnoitered FOB Kalsu (SERT-74).
- Completed demolition of Camp Mahmudiyah galley and received rebar for new Mess Facility column footing.
- Received 31 personnel from NMCB 14 and MEG at Camp Moreell.
- Built eight additional door entries for MEF operations at Camp Victory.

30 JUL

- Completed first row of HESCOs and began filling second row at Camp Mahmudiyah Mess Facility.
- Commenced BEEP and turnover of Admin, IT, Projects, and Embark with NMCB 14 at Camp Moreell.
- Received 26 personnel from NMCB 74 TMT and completed disassembly of tents C10, D11, and D10 in preparation of SWA Hut construction at Camp Moreell.

31 JUL

- Completed 2nd row of HESCOs, began 3rd row, and began excavation of column footings at Camp Mahmudiyah Mess Facility.
- Began site preparation and completed demolition and clean up for SWA HUT at Camp Moreell.

AUGUST 2004

2 AUG

- Began to fill 3rd row of HESCOs and completed excavation of footings for bay 1 at Camp Mahmudiyah Mess Facility.
- Finished SWA HUT site preparation and started foundation structure at Camp Moreell.
- Received second wave of NMCB 74 Advanced Party Personnel at Camp Moreell.

3 AUG

- Began erecting columns in bay 1 and began excavation of footings for bay 2 at the Camp Mahmudiyah Mess Facility.
- Began Seabee Transition GMT and medical briefing at Camp Moreell.

4 AUG

- Completed erecting columns in bay 1 and began erecting columns in bay 2 at the Camp Mahmudiyah Mess Facility.
- Concluded Seabee Transition GMT training, Medical Briefing, and Chaplain Briefing at Camp Moreell.
- Received NMCB 4 Advanced Party.

5 AUG

- Completed erecting columns in bay 1 at the Camp Mahmudiyah Mess Facility.
- Conducted NMCB 74 Advanced Party container, weapons, and personnel customs inspection at Camp Moreell.
- Completed BEEP with NMCB 14 at Camp Moreell.

6 AUG

- Conducted NMCB 74 Advanced Party container and personal baggage customs inspection.

7 AUG

- Completed setting footers and erecting columns in bay 1, placed concrete in bay, and completed pre-fab roof panels, beams, columns, column footings and headers at Camp Mahmudiyah Mess Facility.
- Conducted NMCB 74 Advanced Party container and personal baggage customs inspection at Camp Moreell.
- Shuttled NMCB 4 to range.

8 AUG
- Prefabricated 4”x4” footers for Camp Mahmudiyah Mess Facility.
- Shuttled NMCB 74/MEG Advanced Party personnel to flight line.
- Repaired main electrical cable for berthing side generator at Camp Moreell.

10 AUG
- Poured concrete footers at the Community Outreach Center.
- Placed concrete in bay 1 at the Camp Mahmudiyah Mess Facility.

11 AUG
- Continued digging footers and placing columns in bay 2, filled HESCOs, placed roof panels on bay 1, and began interior framing in bay 1 at Camp Mahmudiyah Mess Facility.
- Initiated turnover for Alfa Company, Camp maintenance, Supply/Galley, Camp Projects, and Security to NMCB 14 at Camp Moreell.

12 AUG
- Placed concrete in bay 2 at the Camp Mahmudiyah Mess Facility.

13 AUG
- Completed turnover of Admin to NMCB 14 at Camp Moreell.

14 AUG
- Conducted joint site survey with SERT-4, S3, NMCB-4 S3 and S3C at FOB Kalsu (SERT-74).
- Placed concrete for bay 2 at the Camp Mahmudiyah Mess Facility.

15 AUG
- Finished placing roof bay 2 and completed project turnover with NMCB 4 at the Camp Mahmudiyah Mess Facility.
- Returned to Camp Al Fallujah (Camp Mahmudiyah Mess Facility Detail).
- Completed turnover with NMCB 14 at Camp Moreell.

16 AUG
- Conducted ICAP Graduation Ceremony; graduated 23 students.

17 AUG
- Transferred command of Task Force Echo to NMCB 4.

OPERATION IRAQI FREEDOM II TASKING

DET AL ASAD

ACTION SUMMARY

A DET consisting of 50 personnel from Task Force Echo (TF-E) was sent to Camp Al Asad to establish a camp, provide support to the 3rd Marine Air Wing, and prepare for the arrival of Task Force Tango (TF-T). DET Al Asad completed 19 projects in addition to establishing working spaces and berthing. After earning 1600 mandays the DET was relieved by a detail from NMCB 14, which assumed responsibility for 12 ongoing projects.

The Fearless Seabees were given four out of the seven "500-Series" buildings at Camp Al Asad for use as warehouses. Each building measured approximately 30 ft x 100 ft and was wired for electrical power though electricity had not been routed to individual receptacles. Building 500 featured a large open space and was used for Alfa maintenance; Building 501 was transformed into the COC, BAS, Ops, and Khaki berthing; Building 502 was used for the armory and MLO; Building 503 became the Bravo and Charlie shops. A large area nearby was used for the Alfa yard. The DET also established a 12-head shower facility.

Temporary berthing was set up in three 60ft x40ft tents with electricity, A/C, and wood decks. The tents were located two miles from the shops and workspaces, and approximately one mile from the chow hall. Two MTVRs were used in the morning to transport the Seabees from berthing to the dining facility and the workspaces. The MTVRs were also available for lunchtime and end-of-the-day transportation.

Class IV was available at an MWSS 273-operated class IV lot with electrical and plumbing supplies and a CSSB-7-operated class IV lot with lumber and tactical wire. These lots were available to the Seabees for projects and to upgrade and renovate the Seabee camp.

Communication was initially set up upon designation of the new camp. A 1011 was set up for HF data but did not have the reach back capability to Camp Fallujah due to the absence of a coupler. Upon receipt of a coupler, a TR-72 antenna was set-up to enable HF data transfer to Camp Fallujah. UHF voice was established during the first week of May. Late in May communications were limited to the Iridium Satellite phone because of the distance of the Seabee Camp from the rest of the occupied camp facilities. Working with the 3rd MAW G-6, phone, SIPR and NIPR were installed greatly improving the communications capability of the DET.

CONVOY OPERATIONS

DET Al Asad provided convoy support to an NCIS unit traveling to Camp Al Fallujah and Al Asad. The convoy consisted of 19 vehicles including 4 hardback HMMWVs (with crew-served weapons), 1 MTVR (with crew-served weapon), 4 NCIS vehicles, and 57 personnel. The convoy departed Camp Moreell at 1200 on 18 Mar 2004 for Camp Navistar.

The DET arrived at Camp Al Asad on 22 Mar 2004 after five days of convoy operations including RONs at Navistar, Scania and Camp Al Fallujah. Nothing significant happened during the convoy.

On 22 April, TMT A convoyed to Al Asad with 2 additional MTVRs to retrieve TF-E DET Al Asad. TF-E also transferred 3 15-ton dumptrucks and 2 tractor-trailers with a bulldozer and a dresser for potential to Camp Fallujah for use at that location. The convoy left Al Asad at 2100 and arrived at Camp Fallujah shortly after 0100.

DET AL ASAD

CAMP CLEAN UP/CONSTRUCTION
AL ASAD, IRAQ




Scope of Work Summary:

Clean out and construct COC, office, medical and working spaces in 500 series buildings. Rewire electrical in buildings. Repair fence and install gate. Repair shower facility.

Project Start Date:	24 Mar 04	Average Crew Size:	20 Personnel
Project Completion:	30 Apr 04	Total Project Mandays:	192

Specifications:

The Seabees were given an area of the 500 series buildings, (500-503) to use for shops and office space. The buildings are located on the west end of the base and provided adequate area for Alfa yard, Bravo and Charlie shops, Armory/ASP, Medical, MLO, and COC office space.

The Alfa maintenance shop, building 500, had debris made up of aircraft parts stacked halfway to the ceiling. It required the front-end loader and over 40 dumps to clean out the area.

Although shore power was available to all the buildings, none of the buildings had power running through them. In the COC, there was a fire in the breaker box. The electricians replaced the box and used existing wire throughout the building. The three other buildings needed minor trouble shooting and rewiring. All breakers were replaced in the circuit panels. Lights were replaced in all buildings and outlets added. Existing wire was reused when possible.

Other work included the repair of a 20-meter gap in the perimeter fence, the separation of the three 500 series buildings that didn't belong to the Seabees, and the construction of a force protection gate. In addition, triple-strand wire was placed in the gap in the fence and to separate the other buildings.

Significant QC/Safety Issues:

.
Preparing area for placement of trailers and aligning them so they bolt together.

Significant Material/Equipment Issues:

The 12k forks did not extend out far enough to fit through the holes on 4 of the office trailers.
The wood from the disassembled tents was sometimes unreuseable.
MWAA 273 provided roller and operator support to prepare the site.

SKID ROW BERM REMOVAL
Al ASAD, IRAQ

Scope of Work Summary:
CG's number one priority project. Remove 200 m long berm next to AH-1 and UH-1 parking.

Project Start Date:	24 Mar 04	Average Crew Size:	2 Personnel
Project Completion:	30 Apr 04	Total Project Mandays:	20

Specifications:
A 200-m long berm 20 meters off the helicopter parking/landing area created difficulty in take offs and ladings. Brown out conditions existed compounding the problem of a helicopter running into the berm. The berm needed to be removed and the ground leveled to eliminate the hazard.

Significant QC/Safety Issues:
.
None

Significant Material/Equipment Issues:

The 750 Dozer was overtasked at times to move the amount of soil required.

AACG/DACG RELOCATION
AL ASAD, IRAQ



Scope of Work Summary:

Relocate 6 office trailers, 18 60ft x40ft tents, the wood decks, and associated electrical. Prepare area for cot lot measuring 600ft x 300ft and install triple strand around. Three phases of work
–Phase 1- Relocate 6 Container Offices, 2 tents, small generator, and prepare site.
–Phase 2- Relocate 5 tents
–Phase 3- Relocate remaining tents and 600KW generator.

Project Start Date:	29 Mar 04	Average Crew Size:	15
Project Completion:	15 Apr 04	Total Project Mandays:	100

Specifications:

The AACG/DACG needed to be relocated to an area next to the PAX terminal being constructed. Three offices consisted of two 20ft x 40ft containers. They were bolted together on the outside and lag screws on the inside with transition strips screwed over the gaps. The trailers were disassembled and using the 20k forklift, placed on the highboy trailers. The trailers were driven to the new location two miles down the road, then offloaded and reassembled.

The specified location for the cot lot had a high point making it unsuitable for placing cargo on a level surface. Using two 15-ton dumps and a front-end loader, moved over 15,000 cubic yards of soil outside the cot lot.

The tents were disassembled then the tent decking was disassembled, loaded on highboys and reassemble at the new location. Tents were then erected over the decks. Power was then run from the Distribution panels to the tents and A/C was installed.

Significant QC/Safety Issues:

.
Preparing area for placement of Trailers and aligning them so they bolt together.

Significant Material/Equipment Issues:

The 12k forks did not extend out far enough to fit through the holes on 4 of the office trailers.
The wood from the disassembled tents was sometimes unreuseable.
MWAA 273 provided roller and operator support to prepare the site.

ANTI-VEHICLE DITCH
AL ASAD, IRAQ FRAGO # M025-04




Scope of Work Summary:

Construct an anti-vehicle trench at the perimeter of Al Asad in high vulnerability areas. The primary focus of execution will be toward contractor execution or military execution supplemented with significant rental equipment.

Project Start Date:	12 Apr 04	Average Crew Size:	7 Personnel
Project Completion:	20 Apr 04	Total Project Mandays:	60

Specifications:

TF-E DET Al Asad began construction of an anti-vehicle trench outside the wire at the south end of the base in an area to prevent high-speed vehicle access to the runways. Using the 750, a D9, and a grader, an existing trench was enlarged to fulfill the requirements of the trench, 12 foot wide by 5 foot deep. The dozers would cut the new trench and push the spoils to the side. The Grader would dress up the side of the trench preventing the formation of a berm to provide enemy forces from obtaining cover. TF-E provided security outside the wire. Guard towers were lined along the perimeter at 500 to 600 meter intervals. The security had communication

with the towers and also QRF. TF-E completed 1100 meters of trench before returning to Camp Al Fallujah.

Significant QC/Safety Issues:

.
Eliminate build up of spoils to provide protection to any enemy approaching the base.
TF-E provided their own security detail at the job site.

Significant Material/Equipment Issues:

The D9 was augment from CEB 1. It was retrieved midway through the project.
An excavator would have been good for deep cuts on the sides.

OTHER OIC DISCRETIONARY

CUSTOMER	PROJECT	MD
NMCB	Maintenance	287
MAW 3	Comm Shop Awning	6
A/DACG	Furniture Construction	27
NMCB	In-Camp New Construction	192
HOSPITAL	Hospital Oxygen Room Walls	15
RCT-7	Rawah Camp Setup	150
RCT-7	Tent Camp Relocation	64
RCT-7	RCT-7 COC	22
HOSPITAL	Hospital Office Construction	47
MAW 3	CSSB-7 A/C	12
MAW 3	Class I Platform	22
MWSS 273	Build tent (25x30) floors and two walls	2
A/DACG	Install tent floors with electrical and A/C	100
CSSB 7	Repair A/C	4
CSSB 7	Remove and Install A/C unit	2
MAW 3	Vehicle Barriers	5
MACG 38	Load Hesco barriers.	12
G-4	Install 2 tents in Berthing Area	60

TURNOVER OIC DISCRETIONARY PROJECTS

CUSTOMER	PROJECT	MD	
MAG 16	Behind Bldg. 209 and Haul	14	0
FDP MU East	Land clearing for burning. EO1 Martinez P&E	4	0
CSSB 7	Build shed over Laundry skids.	2	0
MAG 16 HQ	Install plumbing & electical hookup in berthing	12	0
HMH 466	Safe-up wiring inside and outside building.	46	0
Postal Unit	Repair Fence and gate	4	0
A/DACG	Crush stone	30	15
HMM764	A/C work and Interior partitions	76	
Lima Co.	Repair Gate/FENCE @ ASP Flea	100	66
Post Office	Put door back on.	4	0
3rd LAAD	Run power to newly installed A/C units on top of building 125	12	0
MACG 38	Build cover over the generator	8	0

DET AR RAMADI

CAMP AR RAMADI, IRAQ PROJECT NUMBER: IZ4-300

Above: Strongback Tent Construction
Right: Constructing Ramp into Sharkbase

Scope of Work Summary:

Detail Ar Ramadi convoyed over 700 miles from Camp Morrell, Kuwait to Camp Ar Ramadi, Iraq from 09-11 Mar 2004. The details mission was to deliver RNMCB-14's CESE to Camp Ar Ramadi, set up the camp for their arrival, support 1BCT by taking on projects on base as OIC discretionary and to support MEG(FWD) with two TMT teams of three vehicles each. After an attack on one of the TMT teams at a local school in Ramadi resulting in one FWIA, the two teams were combined into one TMT with six vehicles. Additionally, Detail Ar Ramadi played an instrumental role in the support of Operation Vigilant Resolve by sending their TMT team as well as tractor-trailers loaded with HESCO barriers and CESE to Camp Fallujah on five hours notice prior to the commencement of the operation.

Project Start Date:	09 Mar 04	Average Crew Size:	75 personnel
Project Completion:	26 Apr 04	Total Project Mandays:	3500

PROJECTS:

Office And Coc Construction For TF-T:	366 MD
Strongback tents for TF-T:	80 MD
Office Rehab for 1BCT:	51 MD
B-3100 Electrical Rehab:	321 MD
B-3250 Electrical Rehab:	291 MD
Construct Softball Field Dugouts:	146 MD
Construct Ramp into Shark Base for SOF:	176 MD
Fill HESCO Force Protection Barriers:	421 MD
TMT Training and Missions	1240 MD
E/S Work Requests for 1EN:	941 MD
Operation Vigilant Resolve Support:	768 MD
Camp Maint:	176 MD

FALLUJAH LIAISON TEAM
BAHARIA, IRAQ PROJECT NUMBER: IZ4-117

***Scope of Work Summary**:*

The Fallujah Liaison Team (FLT) Compound outside of Baharia was a key facility for the execution of IMEF and MARDIV's CMO operations. Hailed as a secure location outside of Camp Fallujah, it afforded the Command Element a safe meeting forum with the leaders of Fallujah as well as the Fallujah Brigade. FLT also proved to be instrumental as a meeting place for Iraqi contractors and MEG Contracting Officers. The Iraqi Construction Apprentice Program (ICAP) in Fallujah began at FLT as it provided a secure location for Iraqi's to work and learn side by side with Seabees.

Project Start Date:	14 May 04	Detail Size:	15 personnel
Project Completion:	16 Aug 04	Total Project Mandays:	1364

***Specifications**:*
The crew completed the following:

- Five Southwest Asia Huts.
- ECP with approach lanes, vehicle and personnel bunkers and pavilion.
- Renovation of the 840 sf main hardstand building.
- Two dog houses and kennels with air conditioning.
- Septic system tank, leach field and plumbing.
- Water supply system, 5400 gallon tank and pump.
- Three seven foot tall guard towers.
- 67 feet of six foot high privacy fences.
- Four miles of 5-8' high berm.
- Four air conditioners.
- Generator shed.
- Spread gravel over the entire compound.
- Tank trap, 18' x 14'.

Force Protection Issues:
360° defensive perimeter and construction site security was required throughout contingency operations.
FLT took indirect fire on numerous occasions.

Significant QC/Safety Issues:
Work typically was conducted in Interceptor vests and Kevlar helmets often in temperatures exceeding 120 degrees Fahrenheit; heat stress was continually guarded against.

Significant Material/Equipment Issues:
None

RENOVATION OF IMEF HEADQUARTERS, B-21
CAMP FALLUJAH, IRAQ PROJECT NUMBER: IZ4-110

Scope of Work Summary:
Renovated a 14,000 SF facility to be used by the IMEF Commanding General for his COC, IOC, administrative spaces, and berthing. This project as started by Iraqi contractors who were delayed in finishing the contract when Operation Vigilant Resolve commenced. Due to the security situation around Fallujah, contractors were no longer willing to work on base until the hostilities subsided. Once the contractor pulled off the job TF-E was tasked with completing the project.

Project Start Date:	12 Apr 04	Average Crew Size	35 personnel
Project Completion:	26 Apr 04	Total Project Mandays:	1209

Specifications:
The renovation of the 14,000 SF facility included split unit air conditioning installation, complete plumbing rehab to include tank, pressure vessel, piping, hot water heaters and fixtures. Electricians installed panels, circuits and light fixtures. Builders installed drop ceilings, new doors, blinds, tile, stucco, plaster and painting.

Force Protection Issues:
None

Significant QC/Safety Issues:
None

Significant Material/Equipment Issues:
Contractors would not deliver material to Camp Fallujah during Operation Vigilant Resolve requiring convoys to BIAP to pick up material delivered there.
Contractors could not meet the construction schedule resulting in delaying completion by four days.

CONSTRUCT 3-HOLE BURNOUTS PROJECT NUMBER: IZ4-111

Construct 20 3-Hole Burnouts and 15 1-Hole Burnouts for Marine units deployed in the field and to supplement Camp Fallujah facilities during Operation Vigilant Resolve when contractors were not coming on base to service the port-o-lets.

Project Start Date:	12 Apr 04	Average Crew Size:	8
Project Completion:	26 Apr 04	Total Project Mandays (MD's):	92

BARRACKS/ OFFICE REHAB PROJECT NUMBER: IZ4-104

Renovation of Task Force Echo's berthing, company and command element spaces. Scope of work includes painting, replacement of doors, repairing plumbing in berthing heads and the creation of company office spaces from an open bay.

Project Start Date:	22 Mar 04	Average Crew Size:	10
Project Completion:	Turned over to NMCB 4	Total Project Mandays (MD's)	1362

TRAFFIC CIRCLE RECONSTRUCTION
CAMP FALLUJAH, AL FALLUJAH, IRAQ

Reconstruct concrete steps and brick side walls at the traffic circle on Camp Fallujah. Install metal insignia of the Marine Corps, Army, Seabees and the Navy Medical Corps on the four sides of the center column.

Project Start Date:	26 Jun 04	Average Crew Size:	4
Project Completion:		Total Project Mandays (MD's):	128

OPERATION VIGILANT RESOLVE TRAFFIC CONTROL POINT BUNKERS
AL FALLUJAH, IRAQ




EXECUTIVE SUMMARY

NMCB 74 was assigned the task of constructing bunkers at various Traffic Control Points (TCPs) in the vicinity of Al Fallujah in support of Operation Vigilant Resolve. Two detachments, DET ALFA and DET BRAVO were dispatched at 2130 on 3 April 2004 to join 1st MARDIV Marines before commencing the operation. Between 0300 on 4 April and 1830 on 5 April, DET ALFA constructed six bunkers plus one serpentine berm at TCP 4 and six bunkers plus one berm at TCP 11. DET BRAVO constructed seven bunkers at TCP 3; seven bunkers plus one roadblock berm at TCP 9; and five bunkers at TCP 12. DET Bravo sustained direct and indirect enemy fire while working at TCP 3 and supported a USMC MEDEVAC while working at TCP 12.

CONVOY OPERATIONS

After linking with 1st MARDIV, 2/1 and CEB Marines at Camp Baharia at approximately 2200 on 3 April, both detachments conducted final vehicle checks and prepared for a 2400 departure. DET Alfa consisted of 38 Seabees, six hardback HMMWVs, two 20-ton tractor-trailers, two MTVRs, and one 25-ton wrecker. DET BRAVO consisted of 40 Seabees, six hardback HMMWVs, three 20-ton tractor-trailers hauling materials and CESE, two MTVRs, and one 25-

ton wrecker. Each HMMWV carried a VRC 90 and several carried PRC 119s to allow monitoring of multiple nets. Each detachment had individuals that carried hand-held radios, and Iridium/Thuraya phones. Tractor-trailers and MTVRs carried Front-End Loaders (both wheeled and tracked) and Class IV. Each detachment carried eight crew-served weapons, six of which were mounted on HMMWVs. A Quick Reaction Force (QRF)/Rapid Resupply team was maintained at Camp Fallujah.

DET ALFA arrived at its initial objective, TCP 4 at approximately 0220 on 4 April. Four tractor-trailer tires had been punctured enroute and were replaced by rear axle tires from other tractor-trailers given insufficient spare quantity. Upon arrival, DET ALFA set security then established a MEDEVAC site and communications. The DET completed six bunkers and a serpentine berm at approximately 1130 and returned to Camp Fallujah for resupply. The DET departed Camp Fallujah at 1445 and proceeded to TCP 11. Upon arrival the DET augmented existing security, built six bunkers and a berm, and returned to camp at approximately 0030 on 5 April.

DET Bravo arrived at TCP 3 at approximately 0300 and staged vehicles approximately 100m from the actual jobsite. The staging position enabled the convoy to take advantage a railroad track berm for cover. After setting security, positioning vehicles for easy egress, and establishing communications, the detachment identified a MEDEVAC helicopter-landing site and conducted the UXO sweep. Upon completion of work, the DET departed the site (leaving the Marines at that location) at approximately 0800 and returned to Camp Fallujah. The detachment underwent resupply, and immediately redeployed to TCP 9.

DET Bravo departed Camp Fallujah and arrived at TCP 9 at approximately 1230 on 4 April. The DET established contact with 2/4 Marines at the site while establishing the defensive perimeter and communications. Given the close proximity to Bravo Medical at Camp Fallujah, the DET established a vehicle MEDEVAC plan and subsequently conducted the UXO sweep. Upon completion of work, the detachment returned to camp at approximately 2000.

At 0940 on 5 April the detachment departed Camp Fallujah and proceeded to TCP 12. Upon arrival, the detachment established contact with the Light Armored Reconnaissance Unit at the site and set security inside of their security perimeter and then identified a MEDEVAC helicopter-landing site. Given the distance from Camp Fallujah, the detachment needed to set-up an OE254 VHF antenna before establishing communications. Upon completion of work, the detachment returned to Camp Fallujah at approximately 1920.

CONSTRUCTION OPERATIONS

NMCB 74 developed a bunker design that featured a combination of 7ft and 4ft “HESCO” barriers and a roof panel with sandbags (see figures 1-4 below). The design emphasized ease of construction and the use of local fill material. The 4ft barriers were used on one side of the bunker to provide field of fire crew-served weapons. Each TCP was to have a total of seven bunkers arranged according to the needs and layout of each individual site.

Construction Issues/Observations:

Original HESCO baskets had been modified to reduce the amount of soil needed to fill 7' baskets. Modification of the baskets left an unstiched fabric seam. This seam resulted in insufficient connector quantity and such the fabric seam separated and allowed soil to spill from baskets at several locations.
HESCO baskets shifted and failed due to soil conditions and improperly prepared (given inadequate CESE) bunker pads. Additional HESCO connectors were subsequently used to strengthen baskets.
Wet soil with high clay content at TCP 4 caused significant soil clumping which complicated bunker construction.
Dry silty soil at TCP 11 caused significant dust issues.

DET ALFA constructed six bunkers plus one berm each at TCP 4 and TCP 11. DET BRAVO constructed seven bunkers each at TCPs 3 and 9. Additionally, the detachment created a berm roadblock and installed vehicle-stopping spike strips at the request of the Marines at TCP 9. DET BRAVO constructed five bunkers at TCP 12 but ceased construction activities at TCP 12 prior to completion due to changes in the operational situation. Before departing TCP 12, the detachment demolished the five bunkers and secured the building materials in accordance with instructions.

DETs executed ORM by maintaining heightened situational awareness of nearby hostile activity and engagements and potential for indirect mortar/rocket fire, UXO and FOD. Low ambient air temperature necessitated wearing additional cold weather gear.

ENEMY ACTIVITY
DET ALFA observed firefights during the early morning of 4 April at TCP 4. The detachment sustained multiple mortar attacks at TCP 11 and witnessed firefights between Coalition and Anti-Coalition forces in surrounding areas.

DET BRAVO and 1st MARDIV Marines were attacked by Anti-Coalition Forces (ACF) using small arms and indirect fire weapons. The attack commenced within five minutes of arriving at TCP 3 at 0305 on 4 April. At least one rocket-propelled grenade (RPG) exploded within 25m of the vehicle perimeter after ricocheting off the ground at a point between two Seabee security vehicles. Marines immediately returned fire and requested close air support. One Marine was killed in action by enemy fire. Subsequent sporadic small arms attacks continued during the ensuing two hours at which point the ACF made a second indirect fire attack. One RPG exploded within 25m of a Seabee security vehicle and another RPG or mortar round exploded within 50m of another Seabee security vehicle. Notably, DET Bravo's Hospital Corpsman, Chief Campbell assumed medical responsibility for not only DET Bravo but also for the 1st MARDIV Engineers following the first attack which had incapacitated their corpsman.

OTHER ACTIVITY
At approximately 1530 on 5 April, USMC vehicles bearing wounded Marines arrived at DET Bravo's worksite at TCP 12. The LAR Marines at the site immediately made a MEDEVAC request and requested medical assistance from DET Bravo. HMC Campbell directed Corpsman DT2 Wenzel and Combat Life-saver BU3 Dickey in the triage and treatment of the wounded Marines while he himself performed first aid and coordinated the actual helicopter MEDEVAC.

CLOVERLEAF CLEAN UP
AL FALLUJAH , IRAQ

Scope of Work Summary:
Collect and bury trash and battle debris; restore landscape to pre-war condition.

Project Start Date:	3 May 2004	Average Crew Size:	6
Project Completion:	5 May 2004	Total Project Mandays:	18

As directed by MEG, Fragmentary Order MS032-04 MOD (1) (S), NMCB 74 was tasked with removing trash and battle debris from the Cloverleaf East of Fallujah, Iraq. Tasking involved gathering trash, collecting broken guardrail, excavating a hole, burying the trash and debris, and smoothing the entire area. The intent is to return the landscaping of the area to pre-war condition.

Upon arriving on the scene, the site was immediately divided into four quadrants. The work began in the Northwest quadrant after security was established. Six hardback HMMWVs, four with crew served weapons, were utilized in forming a 360° defensive perimeter around the quadrant. A tracked front-end loader, rubber-tired front-end loader and dump truck were utilized to collect and place all debris into an existing slot ditch. Once in the ditch the material was covered and the area leveled. Simultaneously, a D7 Dozer was utilized to push an earth berm 300’ along the asphalt roadway leading west into the city.

Upon completion of the Northwest quadrant, the crew continued to the Northeast quadrant. Utilizing the same equipment, the material was collected and a slot ditch was dug and the material subsequently buried. This concluded the first day of the operation.

The second day started by again establishing proper security. Once set the crew started work on the Southeast quadrant. An additional dozer, JD 1150, was taken to the site to help expedite the completion of the remaining two quadrants by COB on day two. Both of the remaining quadrants were finished on the second day. Subsequent to finishing the original tasking, the crew then went ½ mile to the east and cleaned some additional guardrail debris from the side of the road.

A total of 120 tons of trash and debris was removed and buried on the site.

During clean up operations, UXO was discovered within the Southeast quadrant. EOD was notified. One UXO was determined to be debris and the other was blown in place. There were no incidents of aggression or receipt of direct or indirect fire through the duration of the project.

FALLUJAH BERM
AL FALLUJAH, IRAQ

Scope of Work Summary:

Project Start Date:	14 April 04	Average Crew Size:	
Project Completion:	14 April 04	Total Project Mandays:	41

As directed by I MEG, NMCB 74 was tasked with providing equipment and operator support to 1st CEB, for the construction of a berm around southeast Fallujah, Iraq. Tasking involved the construction of a 2m high by 4Km berm used to cordon southeast Fallujah and channel all traffic to the main thoroughfares and police/military checkpoints in support of USMC forces patrolling in the region. NMCB 74 was tasked with completing 2 km of this berm and 1st CEB was to complete the remaining 2 km.

NMCB 74's convoy consisted of three tractor trailers carrying two D-7 dozers and one 750B dozer, a field maintenance vehicle, and 6 armament security HMMWV's. The convoy formed up at 0630 and proceeded to the pre-determined staging area to await the movement of the 1st CEB convoy. At approximately 0800 the 1st CEB convoy stepped off and NMCB 74 followed them out the north gate of Camp Fallujah and proceeded to the flat area off the roadway adjacent to TCP 9. At this point, 1st CEB dismounted and NMCB 74 continued to the southwest to the predetermined starting point through the use of a navigator with a GPS.

At approximately 0930 earth moving operations began and within 15 – 20 minutes small arms fire was received. The berm work continued as did the small arms fire and indirect fire from RPGs and mortars. At various times throughout the day, fire support was provided by USMC LAVs. "Fearless" Seabees continued to construct the berm while returning fire throughout the day. At one point during the afternoon, EO3 Mangrum was struck in his Kevlar helmet with a 7.62mm round that entered through the driver side door frame. Some of the vehicles and at least one tire from a 20-ton tractor received hits from small arms fire. After completing the original tasking of 2km of berm, 1st CEB was no where to be found. NMCB 74 continued on and finally made sight of 1st CEB sometime around 1700. At this time 1st CEB was berming toward the east side of a large depression of a deep sand quarry and NMCB 74 was berming toward the west side. The berm was completed at approximately 1900. After loading equipment, NMCB 74 proceeded back to camp around 1930, in a separate convoy from 1st CEB.

Under continuous hostile fire the Fearless Battalion completed 3 km of the 4 km berm and excavated approximately 4,700 cubic yards of material with 3 dozers within 9 hours.

NMCB 74 arrived in Camp Fallujah at approximately 2000 at which time one of the tractors received a flat tire. The convoy pulled to the side of the road, repaired the tire and proceeded to the Battalion compound. The mission was completed at approximately 2100.

1000-MAN FALLUJAH BRIGADE CAMP
AL FALLUJAH, IRAQ FRAGO # M043-04




Scope of Work Summary:

Task Force Echo provided equipment, tools, manpower, and all necessary materials in order to construct a 1000-man tent camp to support the 1st battalion of the Fallujah Brigade (FB). Camp will include administrative, berthing, messing, medical, and shower facilities, and will include all standard force protection measures. Grid coordinates for location of camp: 38SLB 830935. Camp was constructed of the same quality used for long-term NMCB contingency camp operations. The material used was originally set aside for the Displaced Civilians Camp (DCC). FSSG was to provide utilities and associated equipment until permanent materials including generators and water bladders could be purchased and installed. This includes items such as generators and water bladders.

Project Start Date:	25 May 04	Average Crew Size:	70 Personnel
Project Completion:	19 Jun 04	Total Project Mandays:	980

Specifications:

Personnel validated previous inventory of the DCC and identified item shortfalls. Most of the shortfalls from the expeditionary DCC to the Fallujah Brigade Camp included electrical, A/C's, wood decking and shower facilities. A BM was submitted to cover the shortfalls.

The camp sat on a 200 x 250 meter square. 82 tents were erected including 48 enlisted berthing, 15 officer berthing, 3 shower tents, 5 galley tents, 1 prayer tent, and 10 office tents. Tents are all erected over wood decks with power provided to all tents. The FB provided labor several of the days to help erect the tents and build the decks.
Work to be contracted included clearing the debris from the area, building the berm, installing generators and bringing A/C units.
FB was on-site to provide security during work phase and also watch material overnight. TMT also provided additional security.

Significant QC/Safety Issues:

The center section of the camp had a destroyed building with columns still standing and debris around the area. The original design did not accommodate the structure. A contractor was hired to remove the debris and clear the area but never arrived on site. The north berm was moved out 50 meters to accommodate the tents.
Heat injuries were a concern at the job site due to the need for personnel to wear interceptor vests and kevlar helmets. The Medical Officer and an Corpsman made rounds to ensure the crews were properly hydrated.
Because the tents came in three different sizes, the decks had to be constructed to support all three sizes.

Significant Material/Equipment Issues:

Due to the commencement of the Iraqi Border Patrol (IBP) project and limited line-haul capabilities, material for the entire project had to be moved and staged at the job site.
CESE at the job site was also limited due to the IBP project commencing and CESE on deadline.

IRAQI CONSTRUCTION APPRENTICE PROGRAM (ICAP)
AL FALLUJAH, IRAQ

Chronology
05APR04 – Submitted initial outline of instruction, including training schedule, topics, and curriculum outline for electrical, plumbing, masonry, and steelworker.

07MAY04 – Received ICAP confirmation brief from LT Serre

19MAY04 – CUCM Taylor and UT1 Winsor went to Blue Diamond to meet with LT Serre and CECS Stuart to discuss the ICAP program. Topics included:
Review of minutes from recent GX meetings
Review draft Frago
Review curriculum
ICAP projects – Community Outreach Center in Fallujah at FLT
Review materials (class IV and tools for basic curriculum)
Review funding - $200K CERP funds
Agenda for 3 days prior to start of class – instructors, logistics, security, training area
Agenda for first 2 days (4 hours) of curriculum
Training provided by Marine CAG on Iraqi customs/norms

20MAY04 – CUCM Taylor and UT1 Winsor started working issues for Fallujah site.
Developed POA&M and schedule for implementation of ICAP, tentative start date 19JUN04
Developed Indoc curriculum for first day of training

25MAY04 – Received Frago for ICAP

26MAY04 – 07JUN04 – CUCM Taylor and UT1 Winsor continued to work POA&M items
Submitted ICAP confirmation brief to S3 (02JUN04)
03JUN04 – CUCM Taylor conducted a site visit to FLT to meet with LtCol McNease, RCT-1 POC for logistics (messing and pay), and recruiting students.

07JUN04 – Received Fragmentary Order for construction of Community Outreach Center. Received partial drawings for foundation of building.

08JUN04 – Submitted RFI's on foundation drawings

09JUN04 – Submitted BM, Level II and III to S3. Did site visit and met with LCDR Striklin, discussed project funding, funding for students/interpreters, transportation for interpreters from the base (if needed), design approval for project

12JUN04 – Site visit, talked to Maj DeRocha (3rd CAG) about ICAP program starting. LtCol McNease not available for status on students, interpreters, and funding

13JUN04 – Bldg layout complete for foundation design #1. Ten students signed contracts and were issued PPE.

14JUN04 – Received drawing and design #2 from OICC. One additional student signed contract and was issued PPE.
A total of 11 students enrolled, ages 17-43, two with secondary education (12th grade), the remainder with primary education (5th/6th grade). Issued coveralls, safety glasses, hearing protection, and gloves. Two students are training as electricians, the remainder as carpenters. The students are paid $8 per day, and get paid once a week (on Thurs). Students receive daily work assignments and are assigned to crew members for training and tasking. Daily log is kept on attendance and tasks completed for each student.
The majority of the students are eager to learn and work well with their Seabee counterparts. To date, interpreters have not been assigned, but are available via OICC. Security is provided by TF-E security teams.

22JUN04 – Bldg layout complete for design #2 (modified).

24JUN04 - Students showed up for work as scheduled. At 0820, FLT site started taking incoming rounds – IDF, RPG's, mortars, and SAF. Students were placed in bunkers and hardstand building but students were released at approximately 1230 to go home. Students received their stipend for the day. Students were not paid their weekly wages today due to being under fire, they will be paid on Saturday. Engineers were due to show today to go over building drawings and BM, but did not show.

25JUN04 – Scheduled groundbreaking today for the Community Outreach Center. Not completed due to incoming rounds. Re-scheduled for 26JUN04.

26JUN04 – Met with Fallujah Engineers and LCDR Klepac (OICC) re: building re-design and bill of materials. Engineers drew up BM for materials and stated that they would order them for delivery next week. Students showed up to get paid and then left. They stated they would be back when it quieted down – "tomorrow, tomorrow."

28JUN04 - Met with engineers and LCDR Stricklin re: building design. Upon the engineer's recommendation, the entire foundation will be excavated to 75 cm for the footers (change #3). Engineers were given down payment and delivery order for foundation materials to be delivered NLT Sat 03JUL04.

29JUN04 – Students showed back up, after three day absence.

30JUN04 – Received three interpreters for ICAP. Hired locally (Baghdad) by Titan Corp. Will reside on base, at MEG spaces, and ride out to job site with crew. Intro'd interpreters to students. Broke ground on Outreach Center. Interviewed 5 boys, ages 16-17, for ICAP, they are interested in the program.

01JUL04 – Arrived at FLT just before 0700 to the sound of RPG's and mortar fire. Immediately went to bunkers. Firefight taking place at cloverleaf/TCP #1, with one round landing 100m west of FLT compound. Crew went to work at 0900, two students showed at 1100 and worked for 1/2 day, they were paid for the week at the end of the day.

03JUL04 – Total of 7 students showed up, 6 went to work, assigned to build a SWAhut. The 7th student said that he was quitting because his parents were afraid for him. On his way out, he talked to the other students, and they too, quit. They were paid to date, turned in their gear, and left the site. Signed up 6 more students in the afternoon. Interpreters stated that they would stay and had no intention of quitting.
04JUL04 – New students showed, brought 2 more students. Issued PPE and signed contracts.

05JUL04 – All students showed, brought 4 more, for a total of 12 students. Issued PPE, except coveralls and hearing protection, to be issued later on this week when coveralls come back from laundry.

06JUL04 – All students showed, brought 3 more, for a total of 15 students. Issued PPE and coveralls. Students assigned to SWAHut and Pavilions. Due to extreme heat, working hours were changed today. Step-off from camp at 0500, students show at 0600, everyone works until 1230, clean up and depart back to camp at 1300.

07JUL04 – Signed one more student, total of 16.

08JUL04 – Engineers showed up just before noon. Brought drawings of bldg on CD and placed delivery order for doors, windows, and brick. Engineers are very cooperative and show up twice a week for consultation.

10JUL04 – Signed up 7 more students for a total of 23, class is now full and registration is closed! Received shipment of tools from Spirit of America – graduation tools for the students. Also received shipment of tools, gear, and equipment to be used specifically on ICAP projects. Engineers visited today; discussed compaction of site and compaction testing.

11JUL04 – Finished issuing coveralls and PPE for all students. Safety shoes came in for the students, but the soles were peeling off, so they were returned to MLO, for return to supplier.

Students were divided into three groups – SWAhut #6, pre-fab formwork for COC, pre-fab re-bar for COC. Each group has 2-3 instructors and one translator assigned. Students show up at 0600, change into their coveralls, and start work. They are given a break at 0900 and are given a Halal MRE at that time. The translators have an excellent work ethic and excellent working relationship with the students and the Seabees. They continually mentor the students about learning, safety, and their future. They are always willing to help out the Seabees and students alike. The instructors and the students have a very amiable relationship as well. Materials continue to arrive on time for the Outreach Center and the Engineers are very supportive. At this time, the elements of ICAP are falling into place and the program is starting to meet its objectives.

22JUL04 – FLT tasking completed. All students and instructors now dedicated to Community Outreach Center. Students have been divided into four six-person teams (one with 5), with two instructors per team (three instructors with 5 person team). Each team has been assigned 1/4 of the building to do as their practical application. Each team must install formwork and rebar within specifications and upon completion each team will be graded accordingly. Conducted lesson on blueprints, specifications, and use of transit for shooting in building lines and elevations. Students were very receptive and attentive, however, due to their lack of education, many had difficulties trying to comprehend the many details of a drawing. They were shown the drawing and details of a Seahut (complicated drawing) and then the drawing for the Outreach Center (simple drawing). They understand the drawings for the COC and know that is the building they are to construct. The goal is to have the footers completed in time for turnover. Received tools ordered for ICAP. Tools and equipment will be marked, tool kits assembled, and then placed in conex boxes on site. Still waiting on replacement safety boots for students.

SUMMARY

Overall, the program progressed very well…

- Good group of students
- Excellent translators
- Enthusiastic instructors
- Tools and equipment
- Materials
- Viable training project

NOTE: A program such as this should NOT be implemented until all key elements are in place, especially when it is a combined joint effort that impacts Iraqi-American relations.
20 students is an ideal class size, provided you have the tools, equipment, materials, and projects to keep them all learning and working. The age group (14-20) is conducive to the learning and working environment. They are more receptive and willing to learn than an older group of students. The right number of translators and instructors should be maintained for adequate student ratios. There should be at least a 4-6 week interval between classes so that the "senior" class can help mentor the "junior" class.
Working closely with the Fallujah Engineers provided valuable insight into Iraqi construction methods. This was critical for teaching the students local construction methods vice western methods.

The translators, as previously noted, are honest, professional, and hard-working. They continually mentor the students and provide assistance to the instructors. They play a significant role, which is vital to the success of this program.
Security was a constant issue. The Marines provided security for the FLT compound in general, but not specifically for the Seabees or students. Based on threat conditions and significant events, a security element of 3-6 vehicles was required everyday to escort the convoy to/from, and to provide security while on the jobsite. Once on site, the Seabees and students had designated bunkers assigned, inside the compound, in case of attack. In case of attack, the Seabee security team stayed posted on the perimeter berm surrounding the compound, supplementing the Marine security force. On four separate occasions FLT took incoming rounds while we were on site.
The Seabee instructors enjoyed teaching and working with this last group of students. They noted how quickly some of them learned and which ones needed prodding. They also noted that the younger group, unlike the first group, was more receptive and listened to them. The instructor-student relationship remained professional and amiable at all times.

Total Mandays: 496

DETAIL AR AR
AR AR, IRAQIZ4-120

Scope of Work Summary:
Detail Ar Ar convoyed over 350 miles from Camp Al Fallujah Iraq, to the Saudi Arabian Border to construct a 100 person camp for the Iraqi Border Patrol from 07-23 June 2004. The details mission was to convoy to Ar Ramadi, pick up class IV materials before continuing on to Ar Ar. Due to the contractor not providing all the required material by the required step off date two additional resupply convoys back to Ar Ramadi were required while the detail continued construction. The camp consisted of 1600 feet of protective berm and triple strand concertina wire, two five meter steel guard towers, an ECP, 50 meter small arms range, installation of a 12' x 40' shower trailer with leach field, 12 tents with decks, 36 split unit air conditioners, 2 power generators and associated distribution system, and HESCO force protection barriers around the tents.

While onsite the detail provided their own security as well as security for resupply convoys to Mudaysis and Ar Ramadi.

Project Start date:	07 June 04	Detail Size:	74 personnel
Project Completion date:	23 June 04	Total Project Mandays:	1344

CLOVERLEAF BYPASS RAILWAY EMBANKMENT RAMPS
AL FALLUJAH, IRAQ

NMCB 74 was tasked with providing equipment and operator support to 1st CEB to construct a temporary railway crossing near CP 1 (Cloverleaf). The crossing provides a bypass for MSR Mobile.

Tasking included:

- Load and haul 100cd of fill material from Camp Fallujah to railway crossing.
- Providing 1 vibratory roller and 1 water truck to 1st CEB to assist in their construction of the north side ramp.
- Provide assistance in placing wooden rail decking to allow for vehicle passage over the tracks.
- Construct a ramp leading up to the south edge of the railway.
- Place and fill 12 Hesco baskets to (6 each side of lane) to create a 15' wide lane, and provide supporting walls on the sides of the ramp.
- Push dirt up to the outside edge of the baskets to provide extra support.
- Construct a ramp 15' wide and approximately 80'-100' long. Ramp was constructed by placing fill in 6" compacted lifts to a height to allow for approximately a 5% grade. 10 cd of 1" minus (crushed and washed) gravel was placed on top of the fill, wet down, and rolled in to the fill material to provide a lasting wear course.
- Place fill material and grade to provide for a smooth transition from the existing roadway to the ramp.

Total mandays expended on these improvements: 50
Total cubic yards of material moved: fill dirt: 180, gravel: 40

These improvements provided a great training opportunity for several of the Equipment Operators and Crew Leaders, while providing a safe alternate route for vehicles using MSR Mobile.

QANISHYAH BRIDGE REPAIR
ASR URANIUM, IRAQ

EXECUTIVE SUMMARY
In accordance with I MEG FRAGO 171-04, NMCB 74 sent a 99 person detail to perform repairs to a double-lane quadruple bay Mabey-Johnson bridge at Grid 38S KC 659554. Bearing plates and bays at the bridge's North end had been damaged by four separate explosive charges. Damage was limited to the immediate areas of the charges. The abutments, intermediate supports, and the other spans did not sustain any damage. The damaged bridge's Military Load Classification was 1 and the bridge was incapable of supporting any vehicle traffic.

Scope of work required removing and replacing 2 bays of the Mabey-Johnson bridge; however, the bridge could not be recovered without jacking the bridge over 4'. The repair COA selected involved constructing jack columns to be placed under the 3rd bay, building an earthen platform to work off of, removing the damaged bays, reinstalling 2 new bays and lowering the bridge back down.

Det Qanishyah arrived on site at 0900 on 08 July 04 and immediately started repairs. Original estimates for bridge repair was 4-14 days based on the degree of difficulty in disassembly/reassembly due to damaged connections. By using several creative solutions to expedite disassembly and reassembly, bridge repairs were completed in only 4 days. Non-availability of certain parts, especially pins and bolts, resulted in not all support bracing being installed, but the bridge could be opened. Based on these missing components and site inspection of existing end panels being type UA 571 G instead of MU 125, a reinforced panel, the bridge MLC is only rated MLC 60 for one-way traffic. Additional components and a Mabey-Johnson technical representative bridge inspection were requested.

Total Mandays: 544

CONVOY OPERATIONS
Det Qanishyah departed Camp Fallujah on 07 July 04 at 2200 with 29 vehicles and 99 personnel. The convoy security element consisted of nine hardback HMMWV's each with a mounted crew-served weapon (2 M2HB, 1 MK19, and 6 M240B), and 2 MTVR's with M240B's. The convoy traveled along MSR Mobile to MSR Bronze to ASR Uranium to Al Asad, for an interim stop to pick up dunnage, and finally to the bridge site. Det Qanishyah reached the objective at 0900 on 08 Jul 04. A 4-vehicle USMC security element from 2/7 had secured the site and conducted a land mine/UXO sweep prior to Det Qanishyah's arrival.

Upon arrival, Det Qanishyah established a 360-degree security perimeter, communications, and a ground MEDEVAC plan. Vehicles were unloaded, dispersed throughout the site and staged for emergency egress.

With completion of the bridge repairs and camp tear down complete, Det Qanishyah departed the bridge site at 1800 on 12 July 2004. One HMMWV was on deadline and being towed by the wrecker. The additional crew served 240B was mounted on an MTVR. One tractor-trailer's break lines failed and had to be field repaired. Det Qanishyah made an interim stop at Al Asad at

1850 to drop of supplies and send reports. A power steering line failed at 2000 as the convoy started to depart Al Asad and had to be field repaired. The convoy finally departed at 2030 and arrived at Camp Fallujah at 0030.

CAMP SET UP/FORCE PROTECTION

Due to the bridge's vulnerability when it is resting on columns, the detail was required to remain on site. Construction took place from 07-12 July when the temperature in the sun exceeded 140 °F making heat a significant threat. Primary enemy threats were indirect fire and a 30-person Muhajadeen insurgent element operating in the towns immediately to the east.

Based on indirect threat & heat, Det Qanishyah set up camp under the good section of the Mabey-Johnson Bridge (bridge consisted of three spans, only one span was damaged). Three GP Medium tents were set up under the bridge for COC/Security, BAS/female berthing and troop berthing. 2 additional GP Mediums were set up immediately adjacent to these tents for troop berthing. The refer truck was also placed immediately adjacent to the tents to simplify power requirements. A berm was constructed around the tent compound to provide protection from indirect fire. Bunkers were constructed throughout the camp for protection from indirect fire. Berms were also positioned to provide elevated fighting positions for the bridge crew if the camp was attacked.

Protective wire was run along East & West flanks were troops could approach from the wadi. Interlocking M-240B's were mobile mounted on both flanks to cover this avenue of approach. ECP's were constructed with serpentine berms, wire and mobile mounted M-2's. Overwatch positions were established adjacent to both ECP's. MK-19 was utilized for overwatch due to the deadspaces created by the training. 4 Guardian Angel teams were deployed on shifts to cover high threat avenues of approach. These teams and flank security vehicles shifted positions to ensure no set patterns were established. ECP's halted all non-military vehicles. Any vehicles without proper paperwork indicating they worked for the electric company or ING were immediately turned around. One vehicle broke down at the ECP & was immediately pushed away. The ING was contacted and they removed the vehicle.

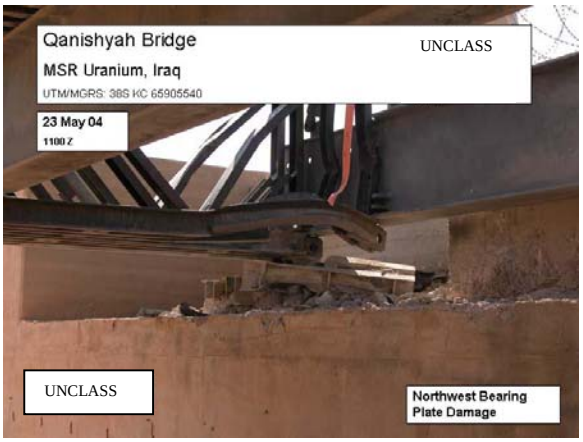
COMMUNICATIONS

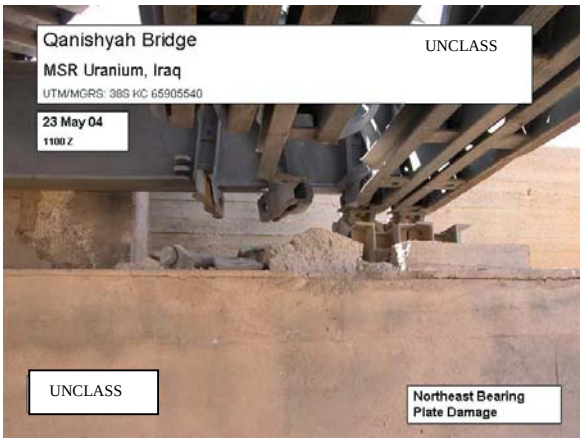
Det Qanishyah brought VHF, HF, UHF, Iridium phones and Blue Force Tracker. HF communications were fraught with problems. A supersession was scheduled for 10 July; however, not all NCF units performed the supersession causing the Det to lose HF communications with the MEG and NMCB 14. After troubleshooting and crypto reloading, Det Qanishyah was able to communication with NMCB 14's Det on the Syrian border and showed messages were sent successfully to NMCB 14; however, the Det could link with the MEG, but was never able to hold the link long enough to transmit data. HF capability was degraded as a result of nearby powerlines, weather conditions and being located in a wadi surrounded by ridges. Communications personnel continued troubleshooting HF during the entire duration.

VHF communications were established with NMBC 14, 2/7 Marines and RCT-7. VHF communications were reliable throughout the project. Iridium phone calls were condition dependent. The majority of SITREPS were passed using the Iridium phone; however, some were relayed via VHF and some sent across Blue Force Tracker. The Det suffered from insufficient

knowledge of Blue Force Tracker capabilities and trained personnel for Blue Force Tracker to be fully implemented (see Lessons Learned for need on additional training). Communications were run from the communications HMMWV located on top of the bridge. Using OE 254 antennas, this location was acceptable for all VHF communications.

INITIAL BRIDGE CONDITION
ASR URANIUM, IRAQ GRID 38SKC65905540





Scope of Work Summary:
Repair 2 damaged bays at Qanishyah Bridge on ASR Uranium and provide feedback to I MEG and Seabee Bridge to determine final bridge MLC rating.
Mission Start Date/Time: 07 Jul 04 at 2200D
Mission Completion Date/Time: 12 Jul 04 at 1120D

Construction Sequence:




Bridge decking was removed using a 40 ton hydraulic crane to reduce bridge weight and gain access to bridge components. An earthen platform was hauled and dumped under both sides of the bridge (river bottom was too rocky & hard to push up the platform. Jack columns were constructed under the 3rd bay. Ground was leveled first, a 1" steel plate was placed on ground, bridge decking removed earlier was stacked up approximately 4' high, 10"x10" timbers were stacked on top of the decking, another 1" steel plate was placed and then smaller dunnage was used to reach the underside of the bridge. Six 35 ton jacks were placed on the two columns (3 on each column) to lift the bridge. One jack immediately failed; however, the bridge was successfully lifted only using two jacks on one side. After the bridge was lifted approximately 4" off the damaged bearing plates, the damaged components were removed. Several panels were damaged significantly and required removal. Several pins were also stuck and had to be cut out. After removal of the first 2 bays, installation of two new bays started. Some pins were very difficult to drive into position; however, with some slight lubrication, the pins could be installed. While unloading the bridge components, it was discovered that several components shipped were for a different Mabey-Johnson bridge configuration. Several components were reused from the removed bays. Two new bays were constructed. New bearing plates were installed on four layers of 1" steel plating in lieu of concrete pads that would require 7 days of cure time. Bridge was jacked down & decking was reinstalled.




Specifications:
Bridge repairs had to be completed using only Mabey-Johnson Universal parts in Iraq. No additional parts could be ordered.

Significant Issues:
Heat was a formidable threat with temperatures in the sun hitting over 140 F. Personnel were consumming 1.5 liters of water every 2 hours. Work hours were from first light till 1400, bridge crews went down from 1400-1700 due to heat & then work started again at 1700 till dark. Personnel working near bridge, where it could serve as overhead protection from indirect fire, were allowed to drop flak vests to minimize heat threat.
Bridge was an early Mabey-Johnson Universal (LSB version) that was not compatible with some of the later Universal and Compact bridges.
Only 32' transoms were available. Bridge required a 34' transom; however, 1 transom was too damaged to reuse, therefore a 32' transom was used as the final transom over the bearing plates. This resulted in both the outer east and west panels not being bolted to the transom. A stiffner chord was welded on the panels to ensure support between all four panels.
Only 4 bearing plate tops were shipped with the 8 bearing plates. 3 bearing plate tops could be reused from the damaged bridge; however, one bearing plate top had to be fabricated from a reinforcing chord.
Bolts and pins were not shipped with horizontal and vertical sway braces so these components could only be installed on a couple of bays using pins and bolts that could be salvaged.

FOB ISKANDARIYAH CLEAN UP
ISKANDARIYAH, IRAQ

EXECUTIVE SUMMARY
In accordance with I MEG FRAGO M080-04, NMCB 74 sent a 38-person detail to perform clearing operations on Forward Operating Base (FOB) Iskandariyah.

The scope of work required removal of debris in two adjacent areas from burned tents following a mortar attack (approximately 40 rounds) and cookoff of assorted munitions stored in several of the tents at FOB Chosin. Det Iskandariyah removed 4 piles of material previously bulldozed by the resident Army unit (1st Battalion, 32nd Infantry Regiment, 10 Mountain Division) and performed demolition as necessary. The final scope called for leveling and grading work in the cleared area to prepare for new tent construction in the days immediately following clearing operations.

Det Iskandariyah departed Camp Fallujah at 1130 on 21 July 04, arrived on site at 1430 on 21 July 04, and immediately commenced operations. The customer estimated 2 days for completion. Upon arrival on site operations proceeded effectively and efficiently with two front end loaders and 4 dump trucks, enabling tasking to be completed one day early. The Det departed FOB Chosin at 2200 on 22 July 04 under the cover of darkness. Because space was available in the convoy, four Marines from CSSB-1 were transported to Camp Fallujah. Following an intermediate stop at Baghdad International Airport (BIAP) for ARP and supplies, Det Iskandariyah completed its mission upon arrival at Camp Fallujah at 0400 on 23 July 04.

CONVOY OPERATIONS
Det Iskandariyah departed Camp Fallujah at 1130 on 21 July 04 with 13 vehicles (15 pieces of CESE) and 38 personnel. The convoy security element consisted of six hardback HMMWV's each with a mounted crew-served weapon (1 M2HB, 1 MK19, and 4 M240B). The convoy traveled along MSR Tampa across to ASR Jackson across to Musayib before turning north for the final few kilometers. Det Iskandariyah reached the objective at 1400 on 21 Jul 04.

Upon arrival, Det personnel offloaded equipment, staged personal gear in accommodations, and established necessary medical, logistical, and operational contacts on the FOB. Operations began immediately thereafter.

Following completion of tasking, Det Iskandariyah departed the FOB at 2200 on 22 July 2004 and made an interim stop at BIAP at 1300 to retrieve cargo. The convoy departed BIAP at 0245 and arrived at Camp Fallujah at 0400.

CAMP SET UP/FORCE PROTECTION
Force protection and camp facilities – galley, berthing accommodations, and restrooms – were provided by the supported unit.

COMMUNICATIONS

Det Iskandariyah brought HF and Iridium phones as redundant communications. Blue Force Tracker and VHF (VRC 90s and VRC 92s), which were organic to the TMT, were used for convoy communications.

At FOB Chosin the supported unit provided NIPR, SIPR, and DSN communication capabilities throughout the mission. The backup HF system was not utilized.

SUPPORT RCT-1 WITH ISKANDARIYAH CLEANUP EFFORTS
FOB ISKANDARIYAH, IRAQ

Scope of Work Summary:
Remove debris in two adjacent areas from burned tents at FOB Iskandariyah following a mortar attack and cookoff of assorted munitions stored in several of the tents. Remove 4 piles of material previously bulldozed by the resident Army unit (1st Battalion, 32nd Infantry Regiment, 10 Mountain Division) and perform demolition as necessary (see picture). Perform leveling and grading in the cleared area to prepare for new tent construction in days immediately following clearing operations.

Mission Start Date/Time:	20 Jul 04, 0800Z
Mission Completion Date/Time:	23 Jul 04, 0100Z

Specifications:
Verbal specifications were provided through coordination – via telephone prior to departure and in person during execution – with the FOB Deputy Commander. Areas were to be cleared of debris and leveled as part of site prep for reconstruction.

Significant Issues:
One of two front end loaders went down not far into clearing operations. This would have had a severe impact to project duration if a loader onbase had not been loaned to the det for a good portion of the operation timeframe.
Persistent heat was the only major issue faced by personnel. All work was completed in hot equipment and in direct sunlight. Personnel switched out of equipment frequently to reduce heat fatigue potential. Additionally, due to Marine forces moving in and the destruction of berthing tents, no air conditioned berthing space was available and det personnel were provided an open warehouse space with cots. Consequently, no relief from the heat was available, except for cold drinks provided by the supported unit.

HARDENED GALLEY FACILITY
MAHAMUDYA, IRAQ

Scope of Work Summary:
CG's number one priority project. Remove 80 ft by 80 ft galley and construct a new 3 bay hardened facility for 2/2 marines AT Camp Mahamudya.

Project Start Date:	19 Jul 04	Average Crew Size:	18 Personnel
Project Completion:	31 Aug 04	Total Project Mandays:	810

Specifications:
An 80 ft by 80 ft wood structure galley was being utilized by 2/2 Marines and was insufficient for protection from indirect fire while occupied during chow hours. A hardened structure was designed by NAVFACLANT and implemented by NMCB 74.

Significant QC/Safety Issues:
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Concrete became a QC issue due to the slump provided by local Contractor. The slump was # 11 at best and was difficult to finish properly. The wood materials purchased would warp and twist while laying in direct sunlight and cause assembly difficult and prefab of pieces not to fit properly.

Significant Material/Equipment Issues:

While driving nails into the wood, sometimes would crack and split the sub standard material.

CAMP MOREELL

GALLEY EXPANSION PROJECT
CAMP MOREELL, ALI AL SALEM, KUWAIT KWA-001

Left: NMCB 74 Seabees preparing roof trusses. Right the finished Galley Extension that doubled the seating area.

Scope of Work Summary:
Construct 2500 square foot galley expansion. The expansion is a replica of the original timber framed facility with a connecting breezeway. Starting literally on day one, Detail Moreell's first project was a much-needed expansion of the camp dining facility to support the movement of troops to and from Kuwait and Iraq.

Project Start Date:	08 Mar 04	Average Crew Size:	8 Personnel
Project Completion:	26 Mar 04	Total Project Mandays:	172

Specifications:
The existing 28'x80' Galley was insufficient to seat all camp personnel when the campwas at maximum capacity. The addition was designed to double galley seating by NMCB 5 and constructed by NMCB 74 with additional assistance provided by NMCB 1 and NMCB 14.

Significant QC/Safety Issues: Interior and exterior of new structure must match existing building.

***Significant Material/Equipment Issues*:** Cost overage due to discrepancies in original BM for the project. Original project was planned and estimated by a previous unit but the design package was not available at turnover.

MWR GYM FACILITY
CAMP MOREELL, ALI AL SALEM, KUWAIT KWA-002


Left: Wall Framing complete, the facility awaits roof truss installation. Right: The finished project that is four times the size of the old facility.

Scope of Work Summary:
Construct 2500 square foot gym for MWR. It is a replica of the galley facilities. Detail Moreell went immediately from the Galley Expansion Project to construction of a very similar structure for use as a gym. The quick transition and experience gained from the previous construction enabled completion well ahead of schedule.

Project Start Date:	27 Mar 04	Average Crew Size:	8 Personnel
Project Completion:	19 Apr 04	Total Project Mandays:	123

Specifications:
The existing gym equipment was spread over through three areas that were extremely inadequate. The existing elliptical machines and treadmill resided in the very crowded MWR facility where camp tenants watched movies, played games and made morale calls. The weight benches were housed in a 16'x32' strongback tent and had overflowed into a camouflage covered outdoor space immediately behind the tent. The new 28'x80' gym would allow all of the exercise equipment to be housed in a single use facility allowing camp personnel to exercise in a separate space from those personnel want to relax and make personal phone calls. The project was designed by NMCB 5 and constructed by NMCB 74 with the assistance personnel from NMCB 14 and Marines from C Co. 4th LSB.

Significant QC/Safety Issues: Decreased spacing on floor joists and double-layered floor to support extra weight of exercise equipment.

***Significant Material/Equipment Issues*:** Cost overage due to discrepancies in original BM for the project. Original project was planned and estimated by a previous unit but the design package was not available at turnover.

TENSION FABRIC STRUCTURE
CAMP MOREELL, ALI AL SALEM, KUWAIT


Left: NMCB 74 Seabees finish assembling the skeleton. Right: The finished TFS that doubled Alfa Company shop space.

Scope of Work Summary:
Construct a 46'x50' Tension Fabric Structure for use as a secondary Construction Mechanic Shop for Alfa Company. The new TFS comes from TOA and is on the foundation of a previously existing TFS of the same size. As the third major project for Detail Moreell's Charlie Company, the TFS project for Alfa Company was a challenging learning experience for most of the crew, and highlights the versatility of the work, which we are able to accomplish.

Project Start Date:	24 May 04	Average Crew Size:	6 Personnel
Project Completion:	30 May 04	Total Project Mandays:	123

Specifications:
The existing gym equipment was spread over through three areas that were extremely inadequate. The existing elliptical machines and treadmill resided in the very crowded MWR facility where camp tenants watched movies, played games and made morale calls. The weight benches were housed in a 16'x32' strongback tent and had overflowed into a camouflage covered outdoor space immediately behind the tent. The new 28'x80' gym would allow all of the exercise equipment to be housed in a single use facility allowing camp personnel to exercise in a separate space from those personnel want to relax and make personal phone calls.

Significant QC/Safety Issues: Elevated work required use of a man-lift..

***Significant Material/Equipment Issues*:** The TFS materials utilized were obtained from existing TOA onsite.

CAMP MAINTENANCE
DET SWA, CAMP MOREELL

CAMP MAINTENANCE TASKING
PMs 70
WRs 551
SJs 92

Figure 1: Right: UT3 Isom, NMCB 74 fixing a toilet

PROJECTS

- Galley Addition 35
- Construct Gym 42
- MWR Project 18
- TFS 4
- CESE Off Load 7
- Builders Shop 14
- Embark 4

Figure 2: NMCB 74 Seabees installing Electrical Panel For New Gym

TOTAL MANDAYS EXPENDED 837

Figure 3: CE1 Eastman installs breakers for the Galley Expansion.

CO DISCRETIONARY
DET SWA, CAMP MOREELL

PROJECT LISTING

Repair Decks 10
Paint Interior of Gym 42
Camp Victory Various Projects 40
Builder/Maintenance Shop 53
Armory Upgrades (Cleaning Station Canopy & Weapons Racks) 40
Ship Offload Regulus 80

Upper Left: Deck construction at Area 51, Ali Al Salem, Kuwait
Upper Right: Deck construction at Camp Moreell, Ali Al Salem Kuwait
Lower Left: Armory Upgrades, Rifle Rack Installation, Camp Moreell, Ali Al Salem, Kuwait
Lower Right: Regulus Offload CESE, Camp Moreell, Ali Al Salem, Kuwait

TOTAL MANDAYS EXPENDED 265

CESE

NCF CESE was offloaded at Port Shuaybah, Kuwait during January and February 2004. A total of 457 units and 113 ISO containers were offloaded from six MPF ships. After the offload, the CESE was staged and convoyed to Camp Moreell where JLTI inspections were completed within the seven-day time requirement. Numerous repairs were required during the inspection process.

The CESE was divided among three NCF units: NMCB 1, NMCB 14, and NMCB 74. NMCB 74 was responsible for the acceptance, repair, and hardening of all the CESE. Once prepared, NMCB 74 conducted a BEEP with each unit to complete the turnover process. During this same period, NMCB 74 and NMCB 5 conducted a BEEP on 100 units of additional CESE from Bahrain. This CESE was in A5 or A6 condition and required extensive repairs to raise the availability from its starting point of 16%. NMCB 74 staged and convoyed assigned CESE/TOA to Camps Fallujah, Ramadi, and Al Asad in Iraq.

The maintenance and equipment operation programs were monitored from the mainbody site at Camp Fallujah. When NMCB 14 arrived in theater, a BEEP was conducted at both Detachment sites. Operations and maintenance programs were conducted in accordance with COMSECONDNCB/COMTHIRDNCB INST 11200.A as additional units arrived.

EQUIPMENT POPULATION

Vehicles	MPF	FEB	MAR	APR	MAY	JUN	JUL	AUG	BEEP
In Service	366	466	317	187	232	247			
In Storage	0	0	55	55	0	0			
Total	366	466	372	242	232	247			

PM & IMTERIM REPAIR ERO SUMMARY

MONTH	**REPAIR**	**01's**	**02's**	**03's**	**07's**	**09's**	**12's**	**Total**	**PM: INT RATIO**
MPF 04					336		2	2	
FEB 04	203	241	22	0	0	0	2	466	1.3:1
MAR 04	84	0	2	0	0	0	1	87	1.4:1
APR 04	39	45	25	0	0	0	1	110	1.2:1
MAY 04	55	29	38	0	3	0	7	132	1.3:1
JUN 04	45	31	18	0	34	0	4	132	1.8:1
JUL 04									
AUG 04									
Total	426	346	105	0	37	0	17	925	1.1:1

EQUIPMENT AVAILABILITY STATUS

	MPF	FEB	MAR	APR	MAY	JUN	JUL	AUG	BEEP
On Deadline									
Auto	1	2	6	1	0	0			
Construction	1	3	6	14	9	11			
MHE	1	1	2	1	1	1			
WHE	0	1	1	0	0	1			
Total	3	15	15	16	10	13			
Total EQ In Service	336	466	372	242	232	242			
% Availability	99%	98%	96%	93%	96%	95%			

SAFETY

The deployment operations were inextricably linked to national security and Safety was accordingly given high priority during all phases of NMCB 74's mission. Through the use of operational risk management and small unit leadership all reasonable safety precautions were taken and all standards were met. The principal hazard exposure within the theater of operations involved those typically associated with contingency construction: heat injury, hostile fire, and unexploded ordnance. Deployment tasking included construction of several expedient campsites and force protection projects within Camp Fallujah and around the city of Fallujah, rehabilitation of offices and berthing in buildings 29 and 125-132; repair of a substantial Mabey Johnson bridge, as well as several camp maintenance and hazard abatement tasks. Personal Protective Equipment (PPE) was procured and used during all construction operations. The initial conditions at Camp Fallujah exposed personnel to all types of hazards including electrical shock, poor sanitation, open manhole drains, improperly stored chemical hazards, and general poor condition of camp facilities. As the deployment progressed, the danger of heat casualties was mitigated through the use of "Camelbak" hydration systems, training, and constant supervision at the small unit level. To help reduce the risk of injuries, all personnel practiced constant situational awareness of their surroundings and supervisors/crew leaders enforced strict adherence to safety policies. Primary PPE included goggles (for wind, sun, and shrapnel protection), Uvex safety glasses, hearing protection, leather gloves, Kevlar helmets, and steel toe boots.

The elevated safety summary indicators for the deployment illustrate the impact of a 24 hr/day schedule, individual work days typically 14-16 hours, and the physical/equipment intensity of the work performed. 95% of all reported mishaps during the deployment are considered *recordable* but not *reportable* to the Naval Safety Center.

SUPPLY/LOGISTICS

Upon arrival to Camp Fallujah, Iraq, the Supply Department spaces did not have operational electricity, water, DSN phone lines, or SIPR/NIPR lines. Office spaces had been stripped of virtually all usable equipment and materials. Iridium satellite phones were used to conduct outside communication with vendors, deployment sites, and 1NCD. Within three weeks, phone lines and LAN lines had been installed significantly improving operations. Prior to our arrival, the First Marine Expeditionary Force (I-MEF) was expected to provide material support for Class I-IX through Combat Service Support Battalion Twelve (CSSB-12). However, support was effectively non-existent for approximately 6 weeks due to attacks on supply lines and unreliable vendors. The importance of the need for the battalion to bring at least 30 days worth of consumables prior to arrival in theatre was clearly demonstrated. The MEG established 3 different Logistic Cells (LOGCELLS) throughout theatre: Camp Moreell (Kuwait), Al Taqquadam, and Camp Al Fallujah (Iraq). Initially, logistics were problematic given inadequate local points of contacts and convoy routes. As a result, NMCB-74 encouraged the MEG to send a Seabee to Baghdad International Airport (BIAP) to receive parts and supplies via established DHL and FEDEX supply lines. Parts availability increased dramatically as NMCB-74 began to run its own convoys.. Accordingly most of the *consumables* support came from battalion OPTAR and the IMPAC card via Battalion personnel in Rota, Spain who enabled operations that otherwise would not have been possible. Ten tri-walls worth of consumables were shipped from Rota to support the battalion during this deployment.

PERSONNEL SUPPORT ITEMS

Phone, banking, and postal services plus Navy Exchange support were readily available at Camp.Fallujah. With a normal population of approximately 7,000 soldiers, sailors, airmen, and Marines and a typical transient population of several thousand more personnel, Camp Fallujah inhabitants often encountered significant lines at the dining facilities, post office, shops/services, gym, and internet café. The tailor and barber shops were temporarily closed more than once due to attacks by Anti-Iraqi Forces that targeted the Third Country Nationals (TCNs) that served as employees. The Battalion's *Ship's Serviceman* Third-Class maintained extended hours to provide hair-cutting services to other commands during the periods of closure.

P-25 NMCB TOA

MPSRON 2 NON-CESE TOA included 394 Facilities and Assemblies loaded into 117 International Standards Organization (ISO) containers consisting of 20-foot Bulk containers, 20-foot Half-height Open containers, 20-foot Full-height Open Rack Containers and 8-foot TRICON containers. All material was received in excellent condition. "As Packed" information was not packed inside of all containers and this fact prevented validation of the container contents. Some material appeared in unrecorded locations suggesting that the material may have been moved after final as packed listings were produced due to space limitations. The CD-ROM of the "As Packed" List was available but locations did not match up to include no indication of material deficiencies or shipment status. Inadequate TOA and Maritime Prepositioning Force (MPF) homeport training resulted in Storekeeper personnel struggling to both execute daily business and maintain accountability. Unfortunately, this is the same issue that we had last year.

However, with the experience from last year' lessons learned, SK1 Heyse was able to conduct a full wall-to-wall inventory of all TOA containers. He created his own spreadsheet so we have 100% accountability of all TOA items and know exactly which locations tools/toolkits were located.

PROCUREMENT CAPABILITIES

All material (ARP, consumables, tools) were processed through the LOGCELLS. If material was not available at any of the LOGCELLS, then the requisitions would be filled by P95 in Gulfport and sent via DHL or FEDEX to Iraq. Requirements were processed in most cases under 48 hours. Cylinder and rams were our biggest issue. Because they were sitting on the MPF ships for almost a year with no use, they began leaking immediately upon arrival. LOGCELL 2 in Kuwait was able to have them repaired in town. Also, 55K worth of rams/cylinders were open purchased from the states. Towards the end of deployment, the battalion was able to establish a Marine Ordering Officer (MOO) which allowed us to purchase items directly from local vendors.

CONTRACTED SERVICES

All required food service, berthing, showers, porta-lets and trash removal were included under a consolidated contract let by I-MEF. The food service portion managed by KBR left much to be desired. Though it continually improved over the five-month period, the most noticeable improvements were towards the end. During certain periods, food was scarce due to convoys being attacked and lack of drivers. Supply routes were greatly affected by the insurgents causing the camp to turn to MREs, "Jimmy Deans", and reduced quantities of beverages and assortment of items. Bottled water supply was extremely limited at times causing the camp to go to using water buffaloes. Showers were restricted at times due to lack of water. Also, since the porta-let contractors did not show up for work due to threats, NMCB-74 built over 25 3-hole burnouts and 15 1-hole burnouts for the Camp Fallujah and pumped our own porta-lets.

COMMUNICATIONS

Deployment Communications Department operations included: 1. Establishment of detachment sites; 2. Embarkation; 3. OIF II projects.

1. Establishment of Detachment Sites

The first priority upon arrival at Camp Fallujah, Iraq, was to establish an antenna farm for all HF and VHF communications. Not only did Camp Fallujah serve as NMCB-74 mainbody site, it also served as headquarters for I MEG. For this reason a combined antenna farm was established to minimize the amount of equipment and watch standers required. Battalion operations were established in a preexisting hardstand building. A COC and quarterdeck watch was stood-up and VHF antennas were erected on the roof to allow direct control of the Battalion's convoys and increased radio range. Initially the antenna farm was located within a GP medium tent with power supplied from a generator. Once communications and shore power were functional, the antenna farm was relocated to a hardstand building with shore power and a generator backup.

Due to the fact that power was supplied to the compound by a contracted generator, electrical service was periodically interrupted, usually without warning. To prevent disruption of VHF communication, a 5kW generator was placed outside the COC. Later this was also used to power the switch providing Internet service. Reliable power was also an issue at the other detachment sites.

In addition to establishing a compound at Camp Fallujah, DETs were established at Ar Ramadi and Al Asad. Both were required to maintain HF voice and data as well as UHF SATCOM with Camp Fallujah while being supplied with less reliable contracted power. The generators supplying power were not properly grounded causing frequent spikes in power which posed a significant danger to personnel and resulted in damage to some equipment. Once recognized, the contractor was able to remedy the problem and power spikes were no longer an issue. Communication personnel also encountered problems establishing a ground for the HF equipment due to existing soil conditions, but resolved it by using table salt and water in the area adjacent to the grounding rods.

At Al Asad, CSSB-7 provided phone and Internet services. Initially, who was to provide services was an issue but once the support chain was defined, services were quickly online.

For Camp Fallujah, 9th Communications Battalion provided Internet and phone services. Establishing these services was an arduous process due to the Battalion's compound being located on the opposite side of the base from the 9th Comm. Long runs of fiber optic cable were required with a series of four switches which greatly reduced the bandwidth and speed of the connection. Per 9th Communications Battalion, lack of fiber optic cable in theater prevented the increase of bandwidth. Initially the Marines refused any help from Battalion personnel, but after three months on site, qualified battalion personnel were able to obtain administrator rights which reduced the number of trouble calls made to the Marines.

DSN capable phones and STE and KY-68 phones were supplied by the Marines. Due to a problem with the satellite link, secure calls from Camp Fallujah were not possible. After initial

installation of the phone system there were a myriad of problems ranging from static in lines to loss of power. Numerous trouble calls were place, but due to a lack of trained personnel and the set up of the IMEF COC, several weeks passed before the phone system functioned properly.

2. Embarkation

Prior to leaving homeport personnel and communication equipment requirements were identified. With help from the 22nd NCR, communication equipment was split into three parts and sent with personnel to four separate locations: 1. MPF ships; 2. The receiving port; 3. Camp Moreell, Kuwait; or 4. Rota, Spain. Each one of these locations had different support requirements. Personnel sent to the ships were issued Motorola two-way radios vise Saber radios. This allowed for communication within the team without the security requirements of the Saber radio. Personnel assigned to the port were also issued Saber radios along with four Dolch laptops and two 4-in-1 printers. Personnel heading for Camp Moreell were issued 11 Dolch laptops to initiate camp operations. The battalion's communication TOA was packed into five Tricon containers and shipped to Camp Moreell via military air transport.

The OPORDER had NMCB 74 establishing three detachment sites in Iraq with the same basic communication requirements. For ease of dissemination the TOA was separated in three different subsections, one going to each site. The Tricons were labeled for their specific site and kept separate thoughout the battalions stay at Camp Morrell.

Once on site, in Kuwait and Rota, training began for all personnel assigned to Operation Iraqi Freedom II. This training covered all aspects of communications from VHF and HF radio operation to antenna setup/breakdown and convoy operations. The training was tailored to fit the anticipated environment the battalion expected to encounter based on the experience gained from the previous deployment.

When MPF offload was completed, installation of communication equipment began at Camp Moreell. Vehicles coming off the ships initially came without radio mounts, power cables, antennas, etc. If vehicles on the MPF ships were loaded with basic equipment it would significantly reduce the time to prepare for missions.

3. OIF II Projects

VHF communications was the preferred method for convoys and project sites due to the majority of projects sites being within VHF range of the Battalion's compound. Tactical Movement Teams were developed to escort convoys and provide security to the job sites. Each TMT consisted of six hardback HUMMWVs each with VHF capabilities. At least one vehicle in the TMT was outfitted with a VRC-92 allowing the convoy commander to simultaneously monitor the battalion tactical net and the battle space commanders tactical net. This capability was imperative in situations such as reporting roadside IEDs.

Due to the large distance between detachment sites, VHF communication was not possible with convoys exceeding the range of the VHF equipment. Supplementing the convoys with Iridium and Thuraya phones mitigated this problem.

MEDICAL

MEDEVACS
Three personnel were MEDEVACed from Iraq for the following medical issues:

1) Lower extremity injury secondary to RPG; taken to Bethesda, MD
2) Posterior nosebleed – returned to theater after treatment in Germany
3) Meckel's diverticulum with infarcted bowel, status post emergency resection; ultimately MEDEVACed to the States

Two personnel were sent out of theater for medical issues (non-MEDEVAC, routine transport):

1) Persistent low back pain (L1 compression fracture)
2) Gynecologic issue (G1P0010)

MENTAL HEALTH/COMBAT STRESS
Awareness of the prevalence of combat/operational stress reactions and mental health diseases is critical. Approximately 5% of Task Force Echo developed or was diagnosed with psychological issues during the deployment ranging from major depressive disorder to obsessive-compulsive disorder. Relational problems were not uncommon. An additional 5-10% were identified on the post-deployment health assessment as having emotional or psychological reactions needing follow-up on return to homeport. A close working relationship between the chaplain and medical officer, as well as a proactive approach have helped get individuals the interventions they need earlier rather than later.

PREVENTIVE MEDICINE

1) Eye protection – Ballistic eyewear was a MEF requirement; all individuals must have eye protection for work and convoys. 'Wiley-X' lenses provided excellent protection against projectiles and against harmful UV radiation. The Marines had several globe injuries that could have been prevented had the individuals been wearing the appropriate protection. Planning <u>well in advance</u> of deployment is necessary to get prescription ballistic eyewear.
2) Hearing protection – Ballistic hearing protection was recommended for troops traveling outside the wire, to prevent blast injury to the ear/eardrum. The Combat Arms Earplug was available and was been recommended by the MEF Surgeon (NSN: 6515-01-466-2710).
3) Vector borne diseases – Measures to be taken to prevent vector borne illnesses (e.g. leishmaniasis) include standard personal protective measures such as uniform spraying and DEET application. Each uniform should be sprayed with Permethrin prior to arrival in theater; keep aware of the potential need to respray the uniform depending on the length of deployment and concentration of Permethrin used. Every member should be given adequate supply of DEET prior to arrival, with awareness of the need to resupply during deployment. Malaria prophylaxis was not required in our AOR. Other locations within SWA may fall under different malaria guidelines.
4) Heat casualties – Staying vigilant against heat casualties goes a long way in the prevention of them. Hydration should be pushed to the troops. Ample supply of Gatorade should be made available (plan ahead). Troops should be made aware of the potential to overhydrate themselves with water. Solely drinking water can cause a

dilutional hyponatremia, as was experienced by both Marines and Seabees. A Seabee presented with severe headache, fatigue, and constipation; labs were consistent with overhydration via hypotonic fluids. He improved with fluid restriction.

5) General hygiene – Alcohol based hand cleanser/dispensers should be made readily available outside of head facilities to cut down on transmissible illnesses.
6) Immunizations – Immunization supply is difficult to obtain. Immunizations should be done prior to arrival in theater to the greatest extent possible. Routine immunizations cannot be expected to be available. Anthrax and Smallpox were available once the supply lines were established. The current guiding instructions allow units deploying to high threat areas (HTA) to begin Anthrax up to 3 months prior to departure. There is no limit on smallpox lead-time, provided the unit is deploying to a HTA.

SUPPLY AND LOGISTICS

Medical – A full AMAL was not available to the battalion upon arrival to theater. The department was able to make due with what was on hand. Resupply was quicker for some items than others, and some assistance was received from Bravo Surgical Company as well as the battalion's other sites at Camp Moreell, Kuwait and in Rota, Spain. The AMALs contained some outdated equipment as well as some equipment that is unlikely to be used. A more up-to-date, task-tailored AMAL would be more effective and economical.

Dental – The dental table of allowances (TOA) was non-existent for much of the deployment. This hampered the ability of the dental department to practice dentistry. Some arrangements were made with Bravo Surgical Company to have limited time slots for our dental department. Two conclusions can be drawn. If the dental department is going to deploy forward, they will need the full TOA and a 30KW generator to perform adequately. Otherwise, they would be of more benefit elsewhere. If the decision is made not to bring the dental department, arrangements can be made for dental care if a surgical/dental company is located on the base. This should be coordinated prior to arrival in theater to efficiently allocate resources where they are needed.

PERSONNEL

MEF requirements for convoys included at least one corpsman providing medical support. Ample medical assets must be assigned in the planning stages while in homeport, so that this requirement can be met. Tactical movement teams, SERT, independent details, and the mainbody battalion aid station must be accounted for in the overall manning requirements for deployment to Southwest Asia.

An abundant supply of combat lifesavers (CLS) is needed to ensure adequate field medical care can be given to those who are injured. There cannot be too many. As many CLS as possible should be trained. The Army offers a formal class, as well as a "train-the-trainers" class.

COMMUNICATIONS

A NIPR and SIPR line should be designated for use in the BAS. A SIPR line is required for the daily medical SITREP and the Disease Non-Battle Injury report (DNBI). It is also used for researching/studying medical intelligence. NIPR is required for medical research, patient tracking, and other medical databases.

APPENDIX A.
LESSONS LEARNED

LESSONS LEARNED

1. KEY WORD: ADMINISTRATION

(a) ITEM: LESSONS LEARNED

(b) DISCUSSION: Lessons Learned are provided after every operation. Many manhours are spent developing them. All the lessons learned from OIF I did not make it through the entire NCF chain of command. Changes were at the Battalion level only. ACR's were filled out and sent but nothing changed with zero feedback as to why. Changes that were made were made only because the Battalion hand carried the lessons learned to the individual department that could correct the problem(s). This a major issue that must be corrected. Input from the on site personnel working the processes is invaluable and must be heard in order for processes to be refined.

(c) RECOMMENDATION: Create a smooth system to make changes to the TOA. The current system is not efficient. Provide not only a new system for feedback but training to those personnel who will be receiving it to ensure maximum benefit to equipment and process improvements.

(a) ITEM: LESSONS LEARNED

(b) DISCUSSION: Many lessons learned from OIF are re-appearing on OIF II. With no person directly assigned to implement the lessons learned, they tend not to get implemented.

(c) RECOMMENDATION: Assign person to actually implement lessons learned.

(a) ITEM: GOVERNMENT TRAVEL CREDIT CARDS

(b) DISCUSSION: Currently not all command personnel are allowed to get government travel cards. This causes many problems when personnel who do not possess a card are sent to training or missions that require government travel funds. The requirement to issue a card on short notice only creates emergent work for everyone in the issuing system. Many times personnel are forced to utilize mission critical preparation time working the card issue prior to the training or mission.

(c) RECOMMENDATION: Issue all personnel government travel cards as they check in to their first command and activate them as needed.

2. KEYWORD: COMMAND AND CONTROL

(a) ITEM: LACK OF WELL-DEFINED SCOPE OF WORK

(b) DISCUSSION: The scope of the berm mission was vague. Exact starting points were not given, except to make sure vehicles did not get through between the existing canal and the berm. After approximately 2 km of berming was complete, another Unit wanted a crew sent back to block off an alley way approximately 400-500 meters inside the danger area. After being tasked to construct 1.5 km, 2.5km was completed prior to making contact with 1st CEB. After receiving small arms fire, the position of friendly forces patrolling in the area was not known. Upon making contact with HHQ, it was determined no friendlies were patrolling. The lack of scope and coordination from Higher and adjacent units made completing the task more confusing and difficult.

(c) RECOMMENDATIONS: When planning for or assigning a mission, a well defined scope of work needs to be developed to the maximum extent possible (Who, what, when, how many, what type, size, etc.) The scope should consist of at a minimum, starting and stopping points, approximate dimensions, who is responsible for which portions of the work, if outside assistance is available, and a description of the customer's desires.

(a) ITEM: MISSION PREPARATION TIME

(b) DISCUSSION: Mission was received 19 hours prior to step off. With a mission that involves coordination between 5 units participating in the reconnaissance as well as coordination with units responsible for this AO, additional time is required to adequately plan, coordinate and conduct rehearsals. Mission was also scheduled immediately following another mission. Time is required to clean weapons, communications gear and SERT gear.

(c) RECOMMENDATION: Ensure that adequate time, 36-hour minimum if possible, is provided prior to mission step-off to ensure patrol is properly prepared to leave friendly lines. With short-fused missions, quick-reference COC boards (communication info, adjacent units, etc.) would be very beneficial.

3. KEYWORD: OPERATIONS

(a) ITEM: TIRE PLUGS

(b) DISCUSSION: During incoming small arms fire, vehicle tires encountered metal debris in the sand, causing flat tires. The Field Crew Mechanics (CMs) had a limited supply of tire plugs on hand, and had to split the tire plugging material between different tires. This enabled transport of the vehicles off site, however one of the tires was flat by the time the convoy reached the base.

(c) RECOMMENDATIONS: Ensure that the maintenance crew has extra tire plugs in their vehicle.

(a) ITEM: CONVOYS

(b) DISCUSSION: As the Det Qanishyah convoy traveled along MSR Bronze, a civilian convoy intermingled as the convoy made a critical turn. As a result of careful attention by convoy members, convoy members observed the wrong turn and quickly halted the convoy and corrected the situation. Fortunately, all drivers had strip maps issued so drivers could ensure they were following the correct route. Convoy briefing described the route that the convoy would be traveling.

(c) RECOMMENDATION: Security vehicles need to post at intersections so civilian traffic can not intermingle with convoys.

(a) ITEM: TOA TENT BOXES

(b) DISCUSSION: Construction materials and techniques used to build TOA boxes were inadequate to hold up to loading, transportation and reloading. Most tent boxes and other boxes needed to be reconstructed in order to load supplies.

(c) RECOMMENDATION: NCF should look at high strength plastic boxes that fold up when not in use and quickly snap back similar to what industry uses.

4. KEYWORD: CESE

(a) ITEM: 35T LATTICE-BOOM CRANES

(b) DISCUSSION: The NMCB TOA 35-T lattice-boom cranes are too large and bulky to travel into a contingency environment. The 35T lattice boom crane is a relatively fragile piece of equipment. It functions well as a yard crane for prolonged operations in one location. Again it does not travel well or lend itself to easy set-up and take down. A hydraulic crane will work great in these areas and can be loaded on a lowboy trailer, provided one is available. Neither crane travels very efficiently, especially in rough field conditions.

(c) RECOMMENDATION: Add a 40T hydraulic crane to the NMCB TOA.

(a) ITEM: ARP O-LEVEL STOCKING

(b) DISCUSSION: CESE on MPF ships are supported with O-level maintenance repair parts. As a result, commands did not have the required parts to perform minor repairs. Having the necessary parts to perform maintenance is a must. Most contingencies will not have a smooth supply reordering system present at the time of offload.

(c) RECOMMENDATION: G level repair parts should be onboard MPF ships and H level should be packed up ready for deployment at one of the CBC bases for immediate shipment to forward deployed location when requested.

(a) ITEM: CYLINDER RAMS

(b) DISCUSSION: The fine dust that is found in theater has created major problems causing leaking cylinders rams. The dust attaches itself to the rams and wears out the ram cylinder seals.

(c) RECOMMENDATION: All equipment containing cylinders should be rebuilt and sealed before going back on the MPF ship. This will ensure the next unit will have operational equipment when offloaded.

(a) ITEM: PROPER ASSIGNMENT OF CESE

(b) DISCUSSION: CESE equipment lists were presented in homeport. That list was not seen once in theater but a new one was developed by G3. CESE should be distributed after tasking is known. The developed listed did not meet the majority of mission requirements. Equipment had to be relocated between the commands causing unnecessary travel through hostile environments.

(c) RECOMMENDATION: Send out a team of higher headquarter staff members to determine the mission before developing the CESE distribution list for four units.

(a) ITEM: TECHNICAL MANUALS

(b) DISCUSSION: Technical manuals for all CESE should be kept onboard MPF ships to assist the mechanics when repairs are required. When the ship pulls into port for an offload the Seabee mechanics would have tech manuals to start repairs and to order parts. This will eliminate the problems of trying to locate all manuals in the containers.

(c) RECOMMENDATION: Have all required Technical manuals on board ship and readily available to be utilized by MPF mechanics or Seabee Mechanics during OPP. Also place tech manuals on CD for easy access.

(a) ITEM: CONTAINER PACKING

(b) DISCUSSION: The containers are packed without consideration of organizational requirements and are not completed in accordance with Battalion needs. Containers should be packed with Companies in mind. All Alfa Company support TOA and tool kits should be in one or two containers. Charlie and Bravo Company equipment should

be packed in the same manner. This would eliminate the downloading of a full container to locate one toolbox. This would make drawing tool kits and items quicker and more efficient. Often, containers that are offloaded do not all go forward.

(c) RECOMMENDATION: When the re-containerization begins have an NCF agent present to pack into Battalion Company containers. This will eliminate hundreds of mandays in attempting to pull necessary gear for forward movement.

(a) ITEM: ADVANCE PARTY TOOL KITS

(b) DISCUSSION: There are no tool kits present during the offload of the ship. OPP brought small kits with them to assist in maintenance when traveling to the offload site. Tool kits need to be added to the ship and also to Advance Party to assist with repairs at the port.

(c) RECOMMEDATION: Have tool kits already staged on board for the OPP to perform maintenance on vehicles. Also send a kit 31 and kit 13 with the advance party for maintenance at pier side.

(a) ITEM: MR TRAILER METAL STOCK

(b) DISCUSSION: When the MR Trailer arrives on shore, it cannot be utilized to it's fullest potential due to lack of material. There should be a small amount of metal stock available for use at the MR Trailer. This would assist the Machinist Repairman in repairing or fabricating items.

(c) RECOMMENDATION: Place MR stock on the Rig Tender to be utilized by the MR's when they hit the deck.

5. KEYWORD: SUPPLY

(a) ITEM: DRY ERASE BOARDS

(b) DISCUSSION: When arriving into a contingency operation, Alfa Company must track equipment the minute it arrives (as mandated in the 11200.1A). Alfa Company has ordered numerous white boards after every MPF offload. Additionally, all companies utilize white boards to track operations and personnel.

(c) RECOMMENDATION: Add White boards to the consumable container and also to the TOA. Update the consumable container with common use items. Request a 30 day supply of consumables.

(a) TOPIC: COMPUTER ASSETS

(b) DISCUSSION: Due to limited availability of computers within the battalion the safety office was not equipped with a computer. Alfa Company received a fair share of the computers available while forward deployed. However the total number was not efficient to properly run the Operations and Maintenance programs. Five personal computers had to be utilized to ensure success. The assets need to be allocated to perform the job tasked. The correct amount of computers should be provided to Alfa Company already loaded with CBCM, FEDLOG, MOSS and MTVR programs.

(c) RECOMMENDATION: Due to the Confidential and Privacy Act nature of information generated and stored by the safety office it is recommended that a computer be procured and assigned to the safety officer to ensure timely and accurate reporting to both the chain of command and the Naval Safety Center. Give the Battalion their full allocation of computers and printers. Have all programs preloaded on computers for companies.

(a) ITEM: AMMUNITION QUANTITY

(b) DISCUSSION: NMCB 74 did not have the historical intelligence data on the berm site area. As a result, NMCB 74 was unprepared for the 7-hour firefight with anti-coalition forces and had to be re-supplied.

(c) RECOMMENDATIONS: When planning for missions, plan for the worst possible scenario. Draw at least double the normal combat load.

(a) ITEM: BRIDGE PARTS

(b) DISCUSSION: NMCB 74 was unable to perform a complete inventory of replacement bridge parts prior to departing on the Det because parts were already loaded for transport when the inspection team arrived at Balad (inspection team was delayed 2 days due to non-availability of flights). Upon arrival at the bridge site and inspection of bridge parts, it was determined that some parts were not the correct components. NMCB 3 had performed a bridge parts inspection; however, the some of the components sent did not match up with the Mabey-Johnson Universal bridge system.

(c) RECOMMENDATION: Ensure all NMCB units are fully trained on the Mabey-Johnson bridge systems.

6. KEYWORD: COMMUNICATIONS/ADP

(a) ITEM: BLUE FORCE TRACKER

(b) DISCUSSION: TMT Bravo had received their Blue Force Tracker and some limited training shortly before the Det departed. The training was a three week course condensed into several days and only limited personnel were able to attend. With HF

and SATCOM communications working poorly, the Det attempted to utilize the Blue Force Tracker; however, it quickly became apparent that the Det did not have any personnel with sufficient training on the system.

(c) RECOMMENDATION: NCF units have now received this system during both OIF and OIF II and it appears to be a system that will be used for years to come. NCF units should add this training requirement to their training requirements to ensure the battalion has enough qualified personnel.

(a) ITEM: BLUE FORCE TRACKER

(b) DISCUSSION: TMT 74B had full Blue Force Tracker capabilities in the Convoy Commander's vehicle. The system is amazing and very effective to meet navigational and short-fused communication needs.

(c) RECOMMENDATION: Blue Force Tracker should be the standard for all TMT/convoy security cells within any NCF unit. The system should be provided with effective personnel training to make the system as useful as possible.

7. KEYWORD: SAFETY

(a) ITEM: PERSONAL PROTECTIVE EQUIPMENT (PPE)

(b) DISCUSSION: The current battalion Table of Allowance (TOA) does not include sufficient PPE for a contingency deployment.

(c) RECOMMENDATION: Establish a Safety Consolidated Seabee Allowance List (COSAL) into the TOA to include sight, hearing, respiratory protection, fall protection and testing equipment sufficient to equipment an entire battalion. These items should be held in the CTR for issue to personnel on a job requirement basis.

(a) ITEM: MATERIAL SAFETY DATA SHEETS (MSDS)

(b) DISCUSSION: Material procured in a contingency environment does not fall under Occupational Safety & Health Administration (OSHA) requirements. No materials received during the deployment to South West Asia were accompanied by MSDS's.

(c) RECOMMENDATION: Because locally procured materials are not required to be shipped with MSDSs, procurement of a computer based MSDS library would enhance our safety programs and increase "workers right to know" as well as bring us within compliance with OSHA standards while abroad.

APPENDIX B:
SERT AFTER ACTION REPORTS

SERT AFTER ACTION REPORTS

EUPHRATES BRIDGES RECONNAISSANCE
MSR TAMPA, EAST OF AL MAHMUDIYAH, IRAQ

EXECUTIVE SUMMARY

Based on the bridge water parameters and engineering reconnaissance results, SERT 74 determined the following bridge classifications:

- Golden Gate bridge is rated at MCL 20.
- Memphis Bridge is rated MLC 5.
- Brooklyn is rated as MLC 2.
- Al Haqiaqiah bridge is MLC 70T/120W.
- Makalan pontoon bridge is rated at MLC 5.
- Al Hadithawah pontoon bridge is rated at MLC 60.
- Al Hadithah is rated as MLC 60
- Al Haqiaqiah bridge is a MLC 70T/120W.
- The Fajawi pontoon bridge is rated as MLC 5.
- Al Hit Bridge is rated as MLC 60.
- North Mashhad bridge was washed out approximately 1 year ago and no longer exists.
- South Mashhad pontoon bridge is rated as MLC 3.
- East Mashhad pontoon bridge is rated as MLC 1 (with caution).
- Ar Amadi Lower Bridge is rated as MCL 70.

All bridges with an MLC of 20+ were not likely to be significantly affected by rising waters; however, bridges with an MLC of less than MLC 20 would likely be destroyed or impassable with rising waters.

BRIDGE RECONNAISSANCE PARAMETERS

SERT 74 was dispatched to review the condition and capacity of all bridges from the Syrian border at Al Qaim down through Ar Ramadi. Rising water levels as a result of excessive discharge from Syria and higher than normal snow melt anticipated from Turkey raised concerns from I MEF on whether existing pontoon bridges would remain operational with the high waters. SERT was required to access the existing conditions and bridge capacity to handle rising waters.






BRIDGE 22A RECONNAISSANCE
MSR TAMPA, EAST OF AL MAHMUDIYAH, IRAQ

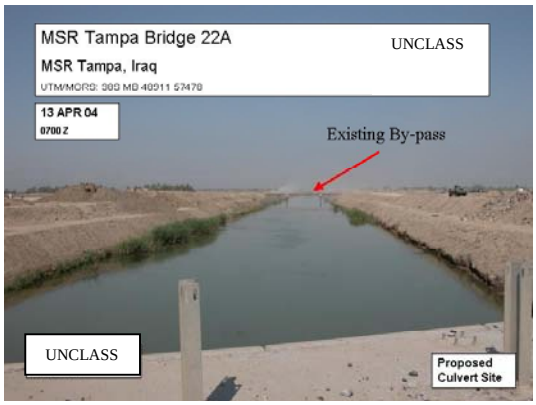
EXECUTIVE SUMMARY

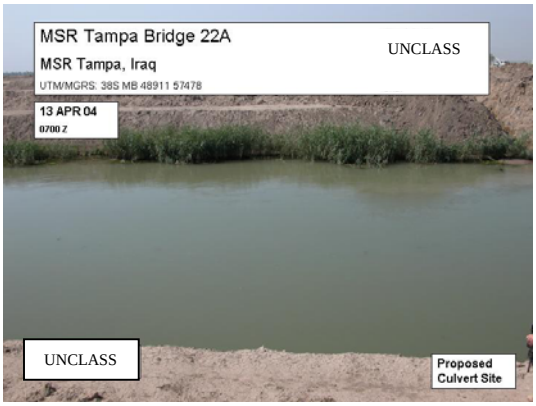
As directed by MEG, SERT 74 conducted bridge reconnaissance of MSR Tampa Bridge 22A,grid 38S MB 48911 57478, on 13 April 04. Mission tasking including review of damaged bridges and assessment of over bridging installation, viability of installation of an earthen/culvert bridge and identification of bypasses.

As part of this mission, SERT was tasked with conducting HF data reach back to the MEG, who utilized SIPR to send information to the Seabee Bridge at LANTDIV. Seabee Bridge reviewed bridge data and identified any additional information they would like to have to design an earthen/culvert bridge. Final determination from Seabee Bridge was an earthen/culvert bridge was not practical at this site due to water depth and current velocity.

SERT was able to transmit one report via stationary HF data before the link dropped, 1 ½ hour into transmittal of the two photos. SERT attempted to re-establish the link for 2 ½ hours including relocating 3 times. Finally, SERT elected to attempt rolling HF data while en route to BIAP. At 55 mph, SERT was able to establish an HF data link and send a report.

PROPOSED EARTHEN/CULVERT BRIDGE AT CHECKPOINT 22A
MSR TAMPA, IRAQ GRID 38S MB 48911 57478





Scope of Work Summary:
Investigate area adjacent to damaged Bridge 22A to determine if an earthen/culvert bridge could be installed. Bridge assessment determined viability of earthen/culvert bridge did not seem prudent due to depth and speed of water coupled with availability of two bypass bridges. Installation would require significant work.

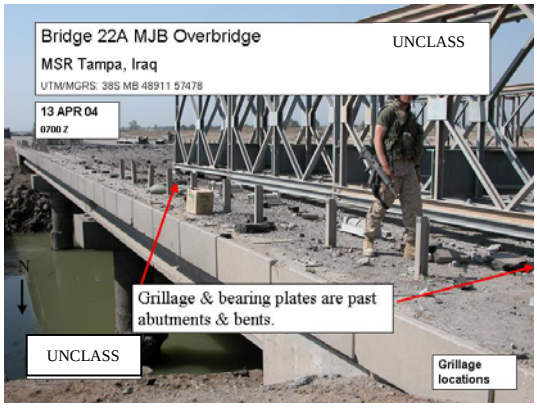
Mission Start Date/Time: 13 Apr 04 at 0800D
Mission Completion Date/Time: 13 Apr 04 at 1100D

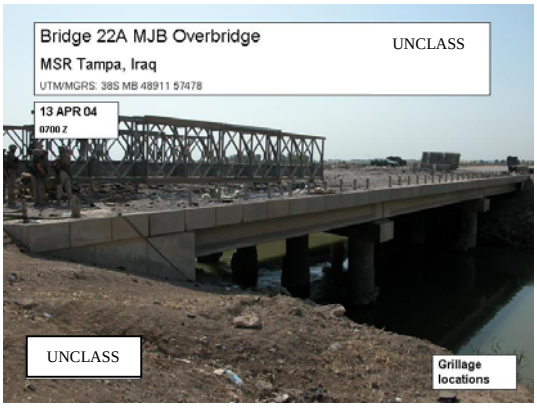
Specifications:
SERT would need to work with the Seabee Bridge to develop the specifications required to construct the earthen/culvert bridge.

Significant Issues:
- Soil at Checkpoint 22A was silty sand.
- Communications included VRC 90's and VRC 92's in every HMMWV, hand held radios in all other vehicles as well as Iridium and Thuryah phones. PRC150 & GRC231 were brought for HF data communications.
- ORM concerns included continuous situational awareness by all personnel, firefights in adjacent areas, indirect fire from mortars and rockets, UXO and FOD sweeps as well as cold weather gear to mitigate significant drop in temperatures during operations.
- Stationary HF data was very slow, link dropped and could not be re-established. Rolling HF was finally established to send second report.
- Seabee Bridge requested depth of silt on bottom; however, SERT has no capability to perform this task.

BRIDGE 22A OVER BRIDGE ASSESSMENT
MSR TAMPA, IRAQ GRID 38S MB 48911 57478

Two sections of Mabey-Johnson Bridge were being installed over the damaged southbound bridge. Over bridge sections were 2-lanes wide and being installed for MLC 100. Both sections were over bridging from the abutments to the next bent. Grillage and bearing plates were being placed to ensure structurally sound abutments and bents were carrying load. Mabey-Johnson representative, Rob, who assisted training Task Force Mike personnel during Operation IRAQI FREEDOM, was present to ensure the bridge was being placed and installed in accordance with Mabey-Johnson structural requirements. Bridge components being utilized were Iraqi components that had been discovered.





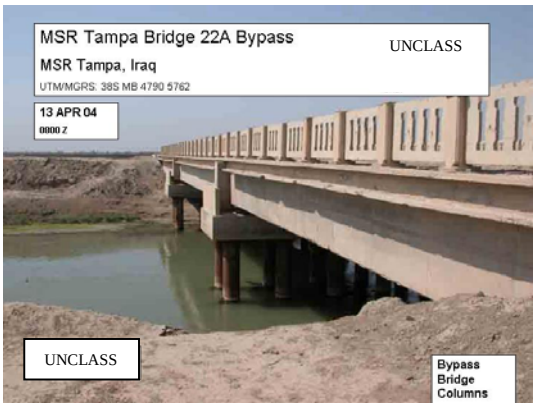
Scope of Work Summary:
Assessment of bridge damage concluded that only surface damage occurred to the bridge abutments. The south abutment of the southbound lane had only superficial damage while the north abutment sustained enough damage to expose surface rebar but no significant structural damage. Most severe damage occurred at bridge decking. Center lane of northbound bridge remained in tact at MLC 100 and only required debris to be removed.

Mission Start Date/Time: 13 Apr 04 at 1000D
Mission Completion Date/Time: 13 Apr 04 at 1030D

Specifications:
MJB Bridge Specifications identify requirements for installation of Mabey-Johnson Bridging. A Mabey-Johnson representative was on site to ensure bridge was being installed properly.

Significant Issues:
- Communications included VRC 90's and VRC 92's in every HMMWV, hand held radios in all other vehicles as well as Iridium and Thuryah phones. PRC150 & GRC231 were brought for HF data communications.
- ORM concerns included continuous situational awareness by all personnel, firefights in adjacent areas, indirect fire from mortars and rockets, UXO and FOD sweeps as well as cold weather gear to mitigate significant drop in temperatures during operations.
- Stationary HF data was very slow, link dropped and could not be re-established. Rolling HF was finally established to send second report.

BRIDGE 22A BYPASS
MSR TAMPA, IRAQ GRID 38S MB 48911 57478



Scope of Work Summary:
Bypasses were located to the east and west of the damaged bridges. West bypass was assessed to be MLC 70. Only minor earthwork would be required to enable tractor-trailer traffic to travel this route easier. A surface coat of some type would also be beneficial if tracked vehicles were going to use this bypass, as some surface rebar was visible. No structural concerns were associated with minor visibility of surface rebar. Bypass bridge is shown below.

Mission Start Date/Time: 13 Apr 04 at 1000D
Mission Completion Date/Time: 13 Apr 04 at 1100D

Specifications:
Existing bridge was assessed in accordance with standard bridge assessments.

Significant Issues:
- Soil at Checkpoint 22A was silty sand.
- Communications included VRC 90's and VRC 92's in every HMMWV, hand held radios in all other vehicles as well as Iridium and Thuryah phones. PRC150 & GRC231 were brought for HF data communications.
- ORM concerns included continuous situational awareness by all personnel, firefights in adjacent areas, indirect fire from mortars and rockets, UXO and FOD sweeps as well as cold weather gear to mitigate significant drop in temperatures during operations.
- Stationary HF data was very slow, link dropped and could not be re-established. Rolling HF was finally established to send second report.

TRANSIENT ASSEMBLY FACILITY (TAF) SITE RECONNAISSANCE
AL FALLUJAH, IRAQ

EXECUTIVE SUMMARY

Based on the site selection parameters and engineering reconnaissance results, SERT 74 is recommending a blended site of the ASP Transient Assembly Facility (TAF) Site and the Railroad TAF Site. The Railroad Site could be used for CMOC, Security HQ, government agencies and support services. The actual tent camps could be located across MSR Michigan at the ASP TAF. This option would maximize benefits from existing railroad infrastructure and open terrain. DC's and supplies could then be transported via rail. Shower and laundry facilities could be established on the Railroad Site to benefit from water tower and more immediate power sources. DC check-in/out and transportation could be coordinated through Railroad Site.

SITE SELECTION PARAMETERS

SERT 74 was assigned the following parameters for the development of a Transient Assembly Facility (TAF):

1. Supportability- TAF must be located so that the camp can be easily supported with items such as potable water, food, medical, etc.
2. Security- TAF must be located so it can be easily defended, indirect fire threats are minimized and it does not jeopardize other military operations.
3. Distance to Fallujah- must be located within a 10km radius of Fallujah.
4. Ease of Displaced Citizen (DC) Access- Site should be accessible to DC's but other alternatives such as staying with relatives, etc. should be better alternative.
5. Size- TAF should be sized for 1,000 DC's with the ability to expand.
6. Transportability of DC's- Infrastructure (roads, rail, etc.) to support the transportation of up to 65,000 DC's.

SERT identified the following criteria to meet these requirements and address the design criteria to construct a 1000 person camp: 700m x 700m TAF site with a gradual slope, adequate soil conditions, egress in and out, expandable, availability of secondary power, potable and non-potable water, sewage pits, medical services, manageable UXO and availability of existing facilities.

DISPLACED CITIZEN COLLECTION POINT (DCCP) SITE RECONNAISSANCE
AL FALLUJAH, IRAQ

EXECUTIVE SUMMARY

With the initiation of the cordon of Al Fallujah and Operation VIGILANT RESOLVE, a large number of displaced citizens was expected. I MEF encouraged displaced citizens to relocate to other areas or stay with family members outside of the city to prevent mass collection of displaced citizens, which would result in security, logistics and sanitation problems. If large numbers of displaced citizens were to be encountered, I MEF needed collection points to identify the displaced citizens and pass them information so they would know where to go. I MEF tasked SERT 74 to identify a north Displaced Citizen Collection Point (DCCP) and a north DCCP. Based on the site selection parameters and engineering reconnaissance results, SERT 74 recommended the South DCCP be located at grid 38S LB 90707 87803 and the North DCCP at grid 38S LB 88609 94663. South DCCP could expand in several directions if require. TCP# 13 could also be used for check-in point if hard structure is required or should at least be secured so AIF cannot use this position against Coalition Forces. Expansion at North DCCP could either occur at North Expansion Site or to north.

SITE SELECTION PARAMETERS:

1. SERT 74 was assigned the following parameters for the development of two Displaced Citizens Collection Points (DCCP):
2. Ease of Displaced Citizen (DC) Access- Site must be accessible by citizens departing Fallujah on foot.
3. Supportability- DCCP must be located so that the camp can be easily supported with items such as potable water, food, medical, etc.
4. Longevity- DC's should be at DCCP no longer than 24-96 hours. Therefore showers & laundry are not required.
5. Security- DCCP must be located so it can be easily defended, indirect fire threats are minimized and it does not jeopardize other military operations.
6. Size- DCCP should be sized for minimum 1,000 DC's with the ability to expand significantly.
7. Transportability of DC's- Infrastructure (roads, rail, etc.) to support the transportation of up to 65,000 DC's.
8. Location- South Site should be IVO 38S LB 873 956 and North Site should be IVO 38S LB 908 888.

SERT identified the following criteria to meet these requirements and address the design criteria to construct a 1000 person camp: 700m x 700m DCCP site with a gradual slope, adequate soil conditions, egress in and out, expandable, availability of secondary power, potable water, sewage pits, minor medical services, manageable UXO and availability of existing facilities.

CHEMICAL OPERATIONS SITE RECONNAISSANCE
AL FALLUJAH, IRAQ

EXECUTIVE SUMMARY

SERT 74 conducted a hasty survey of this site after discovering during the TAF Site Recon. During the hasty survey, presence of chemicals and types of structures were noted. As mission requirements for an Iraqi military compound were identified to support the Fallujah cordon, this site was identified as a prime location and SERT was dispatched to conduct a detailed facility recon. The compounds location and access roads made it an ideal location to support the Iraqi 1st Fallujah Brigade efforts. The detailed survey revealed most facilities could be used for multiple purposes; however, a list of recommendations is included below along with building sizes. Detail survey also determined that Building 1, Lab Bldg, needed to be checked and cleared by a USMC chem./bio team prior to being used. Building 4 Industrial Building could be used for berthing several hundred personnel. Guard shacks could be located in buildings 2, 3 and 16. Administrative spaces could be placed in buildings 6, 14, 18, 20 (1 in future). COC could be located in Building 5. Maintenance shops in Buildings 11 and 11a and storage in Buildings 7, 13 and 19.

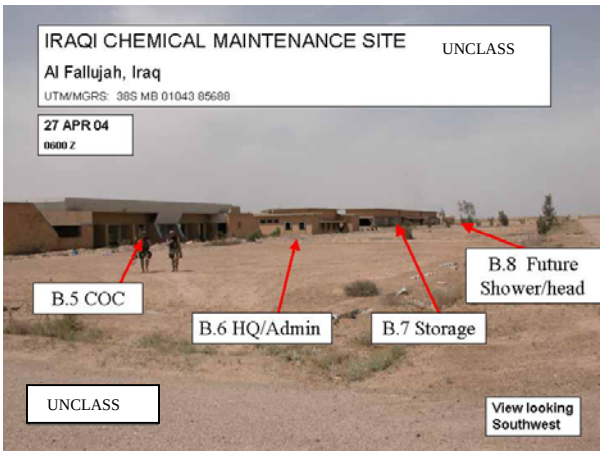
PROPOSED COMPOUND LAYOUT:

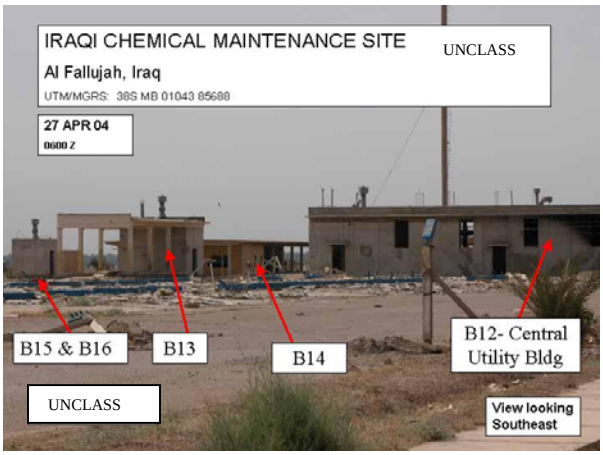
Building #	Proposed Use	Original Use	Size (m^2)
1	Reserve for cleanup/intel	Laboratory	**1530**
2	Guard shack	Guard shack	**15**
3	Guard shack	Guard shack	**15**
4	Berthing	Industrial	**4600**
5	HQ/Admin	HQ/Admin (?)	**420**
6	COC	Classroom	**225**
7	Storage	Berthing	**1350**
8	Future shower/head	Shower/head	**100**
9	Kitchen	Kitchen	**100**
10	Galley	Galley	**100**
11	Maintenance Bays	Maintenance Bays	**600**
11a	Maintenance Area	Storage	**144**
12	Future Central Utilities Bldg (Temp Storage)	Central Utility Bldg	**525**
13	Classroom/Storage	Admin/Storage	**105**
14	Admin	Mechanical	**300**
15	Future Generator Bldg	Generator Bldg	**12**
16	Guard shack	Guard shack	**15**
17	Covered Parking	Storage	**300**
18	Admin	Mechanical	**15**
19	Admin/Storage	Admin/Storage	**300**
20	Admin	Mechanical	**15**
		Total=	**10786**

OVERALL SITE CONDITIONS

Facilities are well hardened against indirect attacks. Guard shacks are well positioned for observation. Additional guard shacks should be installed to cover south and east directions. Perimeter fence posts still remain. Triple strand concertina wire could easily be run to secure the compound. Observation posts on top of Building 4 (2 story structure) would have clear fields of view in all directions.

Covered parking existed next to Building 4; however, scavengers clearly torn down the structure for the metal. Rubble should be cleared. Foundation still remains.





100 mm water lines feed into Building 4 from both east and west direction. Additional investigation should be performed to determine if these lines are still active (1 valve had water in pit indicating it may be charged).

Sewer drainage pipes appeared to still be usable; however, lines will clearly need to be cleaned.

MSR MOBILE/MICHIGAN CLOVERLEAF CLEAN-UP RECONNAISSANCE
AL FALLUJAH, IRAQ

EXECUTIVE SUMMARY
This mission had two objectives: 1. Establish scope of work for restoration and improvement of the Eastern Fallujah Cloverleaf landscaping; and 2. Evaluate existing physical security barriers. SERT 74 surveyed the area on 2 May 2004 and reported the following:

Scope of Work for Clean-up
1. Remove scrap metal (guardrail waste, other debris)
2. Fill holes and level mounds of dirt/sand

Evaluation of Physical Security Barriers
1. The existing barriers can be integrated into RCT 1's security plan (see figure 1)
2. Identify any security recommendations or improvements to RCT 1's security plan.

SERT 74 developed two Courses of Action for the clean up.
COA 1:
Contract all cleanup work to a local civilian service provider. This COA is preferable given that this type of work is inconsistent with Seabee operations and the fact that local citizens would presumably be less likely targets of anti-Iraqi forces.

COA 2:
Combined contractor and Seabee workforce: Seabees would do bulk debris cleanup and contractor would perform detailed cleanup and beautification. Seabees would collect and haul large piles of guardrail and smooth out large holes. Contractors would perform detailed cleanup of smaller debris, curb cleanup and repair, street sweeping, finish grade area and landscape area. This option would allow OICC to bid and award cleanup contract.

CLEANUP AND SECURITY PARAMETERS

CLEANUP PARAMETERS:
SERT 74 was assigned the following parameters for cleanup:

7. Seabee Labor- Identify which work on site should be performed by Seabee Labor
8. Contractor Labor- Identify which work should be performed by contractors

SECURITY PARAMETERS
SERT 74 was assigned the following security parameters:

1. All civilian traffic needs to be funneled down east-west road on MSR Michigan.
2. Foot traffic, vehicular traffic and VIP traffic all need separate single lanes.
3. VBIED's are significant threat and design needs to minimize VBIED dangers.
4. Separation of units performing tasks. Protection needs to be provided to each group so an explosion in one area is isolated from other areas.

CLOVERLEAF SECURITY AND CLEANUP RECONNAISSANCE

SECURITY RECONNAISSANCE:
CURRENT SECURITY IMPROVEMENTS:
(See attached sketch for locations)

- Develop lanes for VIP and local traffic into and out of Fallujah on MSR Michigan using Jersey barriers. Lanes will run from current TCP to MSR Mobile intesection.
- Place HESCO and Jersey barriers along sides of roads and around security points or push berms on MSR Michigan, west of MSR Mobile.
- Place HESCO barriers around crew serve locations to protect against VBIED's.
- Lengthen serpentine and add concertina wire to channelize traffic into and out of Fallujah to allow all vehicles to be searched.

CLEANUP RECONNAISSANCE:
CURRENT CLEANUP REQUIREMENTS:
Below is a list of cleanup requirement:

- Bulk guardrail cleanup throughout area.
- Detailed debris cleanup in all areas (small piles of debris exist throughout area)
- Street sweeping in all areas.

- Patch on ramp to North bound MSR Mobile from East bound MSR Michigan at two locations were a tracked vehicle pivoted and spalled the asphalt.
- General curb cleanup and repair.
- Return grade to original conditions by filling in holes and smoothing out dirt mounds.
- Repair bridge curb and guardrail where IED damaged concrete and guardrail.

FALLUJAH LIAISON TEAM (FLT) FACILITY SITE RECONNAISSANCE
AL FALLUJAH, IRAQ

EXECUTIVE SUMMARY

I MEG tasked SERT 74 to develop a scope of work to meet the needs of the Fallujah Liaison Team (FLT) mission requirements. The FLT is designed to serve as a meeting place between military leaders, local Fallujah contractors, ICDC recruitment and Iraq government officials. The facility was an abandoned 1 building compound, which had previously had some minor improvements completed by NMCB 74 and I MEF engineering assets.

Below is a list of recommended projects, listed by priority, for the FLT improvement along with who should perform the work:

Priority	Description	Work Performed By
1.	Relocate Fire Pit	Seabees
2.	Force Protection Improvements	Seabees
3.	Provide 2 light plants for ECP	Contract
4.	New generator and soundproofing	Seabee/Contract
5.	3 additional Seahuts	Seabees
6.	Add HESCO barriers around 2 existing Seahuts	Seabees
7.	Remove concertina wire & construct pavilions	Seabees
8.	Construct HET conference room	Seabees
9.	Construct doghouses with a/c	Seabees
10.	Restroom upgrades	Seabees
11.	Construct 3 Kevlar & flack jacket racks	Seabees
12.	Construct 60 8’ benches for pavilion area	Seabees
13.	Add’l gravel to interior travel paths	Seabees
14.	Construct Iraqi style burnouts	Contract
15.	Construct shading areas	Joint
16.	Construct outdoor picnic area for berthing residents	Seabee
17.	Install Iraq Flagpole	Contract
18.	Misters for courtyard	Contract

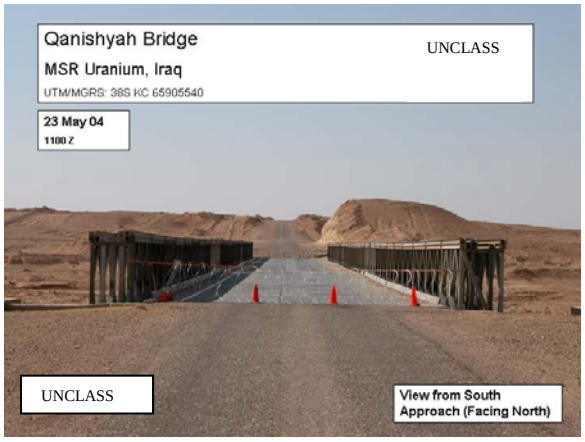
Force protection improvements include:

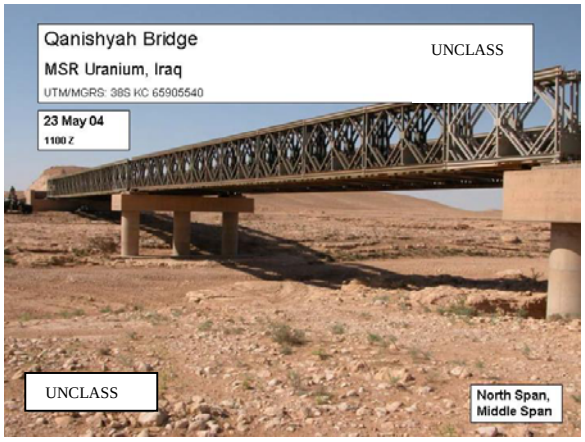
- Construct perimeter berm
- Construct pedestrian walkway using Jersey barriers or HESCO barriers with HESCO barriers at entrance to prevent vehicular traffic.
- Construct HESCO bunker for MP’s
- Construct 2 single arm gates for northeast entrance and one double arm for east entrance.
- Construct vehicular serpentine with Jersey barriers or HESCO barriers.
- Construct elevated pad with HESCO barriers on 3 sides and cantilevered carport for HMMWV w/ crew serve.
- Construct 2nd cantilevered carport for interior berm location.
- Relocated NW guard tower in inner compound outside (Seahut will be positioned in this location).

QANISHYAH BRIDGE RECONNAISSANCE
ASR URANIUM NEAR CAMP AL ASAD, IRAQ

EXECUTIVE SUMMARY
As directed by I MEG, SERT 74+ reconnoitered the Qanishyah Bridge on ASR Uranium (grid 38SKC65905540) on 23 May 04. Mission tasking included assessment of damage and evaluation of repair/replacement options. The stated objective was a two-lane, steel, double-truss, quadruple-bay Mabey-Johnson Bridge that spans a 125m-wide dry wadi.

Bearing plates and bays at the bridge's North end had been damaged by four separate explosive charges. Damage was limited to the immediate areas of the charges. The abutments, intermediate supports, and the other spans don't appear to have sustained any damage. The bridge's current Military Load Classification is 1 and the bridge is incapable of supporting any vehicle traffic.





Scope of Work Summary:
Reconnoiter Qanishyah Bridge on ASR Uranium. Assess damage caused by explosive charges, evaluate current bridge capacity, evaluate repair/replacement options.

Mission Start Date/Time:	23 May 04 at 1315D
Mission Completion Date/Time:	24 May 04 at 1120D

Specifications:
SERT and "Seabee Bridge" should evaluate bridge damage and repair COAs.

Significant Issues:
- Road conditions along ASR Uranium merit consideration. Significant potholes and uneven pavement necessitate lower vehicle speeds. Convoy encountered a significant hole (GRID 38SKC8574332244), flooding (GRID 38SKC9765611862), and a missing bridge (GRID 38SKC7181448249). The missing bridge was poorly marked and represents a significant hazard.
- Communications included VRC 90's and VRC 92's in every HMMWV as well as Iridium and Thuryah phones. PRC150 & GRC231 were brought for HF data communications if needed.

- The bridge spans a 120 m wadi that's presently completely dry. Maps show a small dam approximately 325 km upstream of the bridge. The dam appears to be 10 to 12m high but doesn't contain a particularly large body of water. Climatology data projects zero mean monthly precipitation during June, July, and August and slight precipitation in September. The "rain season" starts in October.

REPAIR COAs

Bridge repair operations will involve mobilization of substantial volumes of equipment, materials, and personnel. Normal traffic could be maintained during the mobilization and execution of bridge repairs if the bypass was adequately improved.

Bypass Improvement

Bypass Improvement COA #1: Make Temporary Bypass Improvements

The existing bypass could be improved via earthmoving/fill operations and concrete placement. These improvements would expectedly be destroyed or damaged by flooding but could last indefinitely otherwise.

Temporary bypass improvements could be completed in approximately 10 days and would require approximately 10 Seabees plus a security element (25 Seabees with 6 Hardback HMMWVs).

Bypass improvement COA #2: Make Permanent Bypass Improvements

The bypass could be permanently improved by installing culverts and subsequently filling and grading the roadway.

Culvert installation and associated roadwork could be completed in 14 days and would require 15 Seabees plus a security element (25 Seabees with 6 Hardback HMMWVs).

Bridge Repair

Given that the damage is limited to the two northernmost bays, the damaged pieces could be replaced after lifting and shoring the northernmost span at the 3rd bay with heavy timbers and jacks.

Bridge repair could be completed in six days of 24-hour operations and would require approximately 60 Seabees plus a security element (25 Seabees with 6 Hardback HMMWVs). The Seabees would be divided into two crews each of which would work 12-hour shifts. Each crew would have three Equipment Operators and will be divided into three teams: "left-side", "right-side", and "center". Each "side" team would consist of ten Seabees and one crew-leader. Each "center" team would consist of five Seabees.

CONCLUSION

Temporary bypass improvements will be adequate if the bridge repair can be completed before September 2004. Permanent bypass improvements will be required if 1.) Bridge repairs cannot be completed before September; and/or if 2.) Permanent bypass capability is desired given the potential for future sabotage.

RECOMMENDATIONS

- Identify and contract a Mabey-Johnson Technician/Technical Representative.
- Use SEABEE BRIDGE personnel to develop shoring plan.
- Identify and order long lead-time bridge repair materials immediately.
- Use NMCB 14 equipment and personnel to execute bypass improvement given their availability close proximity to the site.
- Use NMCB 74/4 equipment and personnel to execute bridge repair.

SERT LESSONS LEARNED

1. KEYWORD: COMMAND AND CONTROL

(a) ITEM: SATCOM DATA

(b) DISCUSSION: HF data transmittal is too slow and unreliable causing SERT to sit in a dangerous environment for longer than necessary.

(c) RECOMMENDATION: NCF needs to work to get SATCOM data access for SERT missions. Amount of data to be transmitted is minimal and frequency is low enough that SERT should be allowed to come up on someone else's net for a short period.

(a) ITEM: FRAGOs

(b) DISCUSSION: SERT has received the majority of MEG direction via verbal direction. Verbal direction may omit key information or be misinterpreted.

(c) RECOMMENDATION: Attempt to assure all missions are issued using a FRAGO.

(a) ITEM: DIRECT SUPPORT COORDINATION

(b) DISCUSSION: Mission was received with note only to coordinate all requirements with RCT-7. Location of bridges turned out to be in RCT-7 & BCT-1's AO. SERT was also informed to only depart with 3 SERT vehicles when 6-vehicle minimum was required for movement in AO requiring SERT to link up with logistic convoys for movement through theater or security patrols to get to mission locations. RCT-7 and BCT-1 were reluctant to set up security escorts until SERT arrived on site. With only 8 days to complete mission, SERT had to coordinate security escorts and next convoy escorts immediately upon return from mission resulting in personnel only getting 1-4 hours sleep a night for the entire mission.

(c) RECOMMENDATION: SERT should travel with enough security to travel areas without need for waiting on logistics convoy to get to the next area. FRAGO issued needs to identify to supporting command that coordination should be initiated prior to SERT arriving on site.

(a) ITEM: MEG ASSET

(b) DISCUSSION: SERT needs to have a separate TOA and be assigned to Regiment or MEG. SERT needs to have dedicated personnel that are assigned to SERT and remain on SERT for their tour. This will allow SERT to maintain their specialization and high

tempo. SERT should remain on-call for immediate embark to anywhere in the world (especially in support of natural disasters and special operations).

(c) RECOMMENDATION: SERT should be permanently assigned to the Regiment or MEG with a specialized TOA and capability to embark anywhere within 36 hours.

(a) ITEM: MISSION REQUIREMENT CLARITY

(b) DISCUSSION: SERT mission had some parameters for identifying the Transient Assembly Facility (TAF); however, a complete understanding of the requirements was not available, which leads to interpretation.

(c) RECOMMENDATION: Ensure FRAGO's are issued with complete information to enable adequate mission planning.

2. KEYWORD: OPERATIONS

(a) ITEM: UXO AWARENESS

(b) DISCUSSION: UXO is common throughout many of the areas traveled by SERT. Awareness of types of UXO and methods for dealing with UXO are invaluable. SERT 74 was able to go through a 1 day awareness course at the Ranger camp at Eglin Air Force Base. This training turned out to be extremely beneficial on the missions SERT has conducted.

(c) RECOMMENDATION: Add a UXO/explosives awareness course to SERT training schedule. A greater understanding of UXO/explosives.

(a) ITEM: INTELLIGENCE COLLECTION

(b) DISCUSSION: SERT runs across a lot of potential intelligence material. A quick awareness on what types of information SERT should be looking for could assist in collecting the proper information.

(c) RECOMMENDATION: Have I MEF intel provide a quick overview of the types of intelligence material that is most beneficial.

(a) ITEM: SATCOM DATA

(b) DISCUSSION: HF data transmittal is too slow and unreliable causing SERT to sit in a dangerous environment for longer than necessary.

(c) RECOMMENDATION: NCF needs to work to get SATCOM data access for SERT missions. Amount of data to be transmitted is minimal and frequency is low enough that SERT should be allowed to come up on someone else's net for a short period.

(a) ITEM: SATELLITE IMAGERY

(b) DISCUSSION: With SERT being request to conduct rapid site reconnaissance, access to up-to-date maps and satellite imagery is critical. Most map recon's have to be pulled off existing larger scale maps. In order to get satellite imagery, SERT must either request from battalion intel or MEG intel and based on time restraints and availability of personnel, satellite imagery is often difficult to obtain. SERT requested additional C2PC training in homeport; however, due to limited seat availability, it was impossible for SERT to obtain the necessary seats.

(c) RECOMMENDATION: More battalion and SERT personnel need to receive C2PC training to facilitate obtaining more up-to-date imagery and routes. Specific individuals need to be assigned the task to ensure that this imagery is available within 2 hours of receipt of a FRAGO. Plotters and computers w/ C2PC need to be set aside for this purpose. An ACR needs to be submitted to increase the battalion computers and additional plotter, paper and laminate to provide dedicated equipment for this critical function.

(a) ITEM: NBC DETECTION

(b) DISCUSSION: During the facility surveys, SERT encountered several chemicals and vials. SERT did not have the capability to detect chemical or biological agents prior or during site surveys.

(c) RECOMMENDATION: SERT needs to have detection equipment and should be issued a complete CBR suit in case it is required to complete a mission.

(a) ITEM: SERT CBR SOP

(b) DISCUSSION: With the variety of missions and isolated environments SERT operates under, a variety of CBR threats could be experienced.

(c) RECOMMENDATION: SERT should have a standard SOP for various CBR threats and environments.

(a) ITEM: MARINE ADVISOR

(b) DISCUSSION: SERT missions are typically performed for I MEF and require a significant amount of coordination with USMC units. If one of the 10-person SERT

was a Marine, this Marine could serve as a Marine Advisor to SERT during training periods and assist in the liaison during missions. If Marine were in a combat engineer MOS, the Marine would also bring a working knowledge of mobility/countermobility requirements for the ground combat element.

(c) RECOMMENDATION: Add a Sergeant Marine Advisor billet to SERT.

(a) ITEM: UCT PERSONNEL

(b) DISCUSSION: UCT personnel were attached to SERT during OIF. These personnel brought specialized gear to assist in underwater reconnaissance as well as some basic EOD capabilities. Either a UCT augment or incorporation of 2 UCT personnel into SERT would greatly enhance SERT's capabilities.

(c) RECOMMENDATION: Add 2 UCT personnel when SERT deploys in support of contingency operations.

(a) ITEM: EOD PERSONNEL

(b) DISCUSSION: EOD was available for the TAF mission. With a significant amount of UXO on various locations, it turned out to be very beneficial to have EOD along.

(c) RECOMMENDATION: Add EOD or UCT personnel when SERT missions contain requirements for their services.

(a) ITEM: TRANSLATORS

(b) DISCUSSION: SERT missions often require discussions with local population to ensure local information is included in reconnaissance. Civilians were at several TAF sites; however, with SERT members only knowing limited Arabic, information was not gathered that could have been important.

(c) RECOMMENDATION: Ensure translator availability.

3. KEYWORD: ADMINISTRATION

(a) ITEM: AVAILABLE FUNDING FOR REQUESTED SCOPE

(b) DISCUSSION: SERT developed scope of work with no clear understanding of what type of funding would be available. Knowing a magnitude of money available as well as the different colors of money, would enable SERT to develop a better scope of work, which could save multiple hours for others.

(c) RECOMMENDATION: FRAGO should identify type of funding when project involves developing scopes of work.

APPENDIX C:
MEDIA COVERAGE

MEDIA COVERAGE

Hurry Up And Wait
By Patrick Peterson
The Sun Herald, Posted 06apr2004
Baghdad - You've Never Been Stuck Until You've Been Stuck In Baghdad.

Attacks Keep Marines On Edge At Night
By Patrick Peterson
The Sun Herald, Posted 07apr2004
Camp Victory, Iraq - Mortar Attacks Several Times A Night Send Marines Camped Outside Fallujah Sprinting For Bunkers.

Seabees' Mission Changes
By Patrick Peterson
The Sun Herald, Posted 08apr2004
We Have Arrived At Camp Fallujah To Discover We Have Quite A Different Mission Than Expected.

Setting Up Shop At Camp Fallujah
By Patrick Peterson
The Sun Herald, Posted 10apr2004
2004camp Fallujah, Iraq After Two Nights Without Sirens Announcing A Mortar attack, life seemed pretty, well not good, but routine at Camp Fallujah.

Seabees scout refugee sites
By Patrick Peterson
THE SUN HERALD, Posted 11APR2004
CAMP FALLUJAH, Iraq - Gulfport Seabees on Saturday scouted places where refugee camps could be built for residents of Fallujah, where Marines are battling well-armed insurgent fighters.

GIs deal with Easter in Iraq
By Patrick Peterson
THE SUN HERALD, Posted 11APR2004
CAMP FALLUJAH, Iraq - Sunrise today finds Christians among Seabees and Marines clinging to their faith in an unfriendly country with a radically different religion.

Prayer prepares troops for dangers
By Patrick Peterson
THE SUN HERALD, Posted 12APR2004
CAMP FALLUJAH, Iraq - IRAQ Battalion members pray together before they take trips outside their compound.

Seabees enjoy work of building
By Patrick Peterson
THE SUN HERALD, Posted 14APR2004

CAMP FALLUJAH, Iraq - About half the members of Naval Mobile Construction Battalion 74 served in Iraq last year. Some of those returning like it better this time. Some like it less. All of them enjoy their work.

Seabees prevail in 5-hour firefight
By Patrick Peterson
THE SUN HERALD, Posted 14APR2004
CAMP FALLUJAH, Iraq - Seabees prevailed in a 5½-hour firefight Tuesday on the outskirts of Fallujah, protecting bulldozers building a berm to prevent insurgents from going around Marine checkpoints.

Seabees play big role in Iraq, admiral says
By Thomas Ropp
THE ARIZONA REPUBLIC, Posted 16May2004
SCOTTSDALE - After all the talk about weapons of mass destruction, Navy Adm. Charles Kubic expected to be "slimed" by chemical warfare during Operation Iraqi Freedom.

Troops learn to adapt to life in hot, barren land
By Patrick Peterson
THE SUN HERALD, Posted 17APR2004
CAMP FALLUJAH, Iraq - Conversations in the chow hall often begin like this:

Talks crucial to Fallujah's future
By Patrick Peterson
THE SUN HERALD, Posted 17APR2004
CAMP FALLUJAH, Iraq - A second day of talks begins today as coalition leaders put their faith in a group of "tribal leaders" who they hope can bring peace to Fallujah, a city of 200,000, from which at least a fourth of its citizens have fled.

Seabees keep eye on future, Bonds with Iraqis starting to take shape
By Patrick Peterson
THE SUN HERALD, 18APR2004
CAMP FALLUJAH, Iraq - When the smoke clears, Seabees will play an important role in rebuilding Iraq.

Seabees prepare for fatherhood far away from home
By Patrick Peterson
THE SUN HERALD, Posted 18APR2004
CAMP FALLUJAH, Iraq - While they serve in Iraq, some Gulfport Seabees will be among U.S. troops missing the births of their children.

Repairs keep Seabees busy
By Patrick Peterson
THE SUN HERALD, Posted 19APR2004

CAMP FALLAJUH, Iraq - A Seabee repair group fixed several leaks in the water system of an apartment complex within the embattled city on Thursday, as U.S. Marines prepared to end the offensive halt and clear the city.

In Fallujah, a semblance of normalcy
By Patrick Peterson
THE SUN HERALD, Posted 19APR2004
CAMP FALLUJAH, Iraq - Since the Marines cordoned off Fallujah, the mortar and rocket attacks on the camp have decreased.

'Keep your head on a swivel'
By Patrick Peterson
THE SUN HERALD, Posted 20APR2004
CAMP FALLUJAH, Iraq - Shoot anyone digging beside the highway and shoot anyone lurking on the roadside wearing black clothes and the yellow and green headbands of fanatic insurgents,

Hugs, cheers as Seabees return home
By Tracy Dash
Posted 25APR2004
GULFPORT - Family and friends gathered at the Naval Construction Battalion Center on Saturday afternoon to welcome more than 200 Seabees returning from a nine-month deployment in Iraq.

Goodwill-Hunting Marines Set Their Sights on Refurbishing Mosques
By Tony Perry
Times Staff Writer, 21May2004
FALLOUJA, Iraq — Marines and Navy Seabees are seeking Iraqi contractors to repair and refurbish mosques in an effort to dispel the notion that the United States has declared war on Islam.

U.S. troops direct their efforts to refurbishing Iraq mosques
By Tony Perry
LOS ANGELES TIMES, Posted 26MAY2004
FALLUJAH, Iraq - Marines and Navy Seabees are seeking Iraqi contractors to repair and refurbish mosques in an effort to dispel the notion that the United States has declared war on Islam.

The Fallujah Brigade
By Brendan Miniter
Wall Street Journal, Posted 1JUN2004
How the Marines are pacifying an Iraqi hot spot.

Seabees keep low profile scouting out projects in Iraq
By Charlie Coon
Stars and Stripes, European edition, Posted 21JUN2004

FALLUJAH, Iraq — The convoy rolled at 8:30 a.m. and as usual it would be rolling through some dicey territory.

Sharing Seabees' stories compels return to Iraq
By Patrick Peterson
Sun Herald, Posted 25JUN2004
CHERRY POINT, N.C. Saying "goodbye" was spooky this time. One co-worker nearly wept as I left the office for my third assignment in Iraq, where I will cover the handover of authority to the Iraqis and the efforts of Gulfport's Seabees.

APPENDIX D:
COMMENDATORY CORRESPONDENCE

COMMENDATORY CORRESPONDENCE

R 091703Z AUG 04
FM COMFIRSTNCD LITTLE CREEK VA
TO NMCB SEVEN FOUR
INFO CNO WASHINGTON DC
CDR USJFCOM NORFOLK VA
CDR USJFCOM NORFOLK VA
CDR USCENTCOM MACDILL AFB FL
CDR USCENTCOM MACDILL AFB FL
HQ USEUCOM VAIHINGEN GE
COMFLTFORCOM NORFOLK VA
COMUSNAVEUR LONDON UK
COMUSNAVCENT
COMUSNAVSO
COMUSNAVSO
COMUSMARCENT
COMUSMARCENT
COMMARFORLANT
I MEF HQ GROUP
I MEF HQ GROUP FWD
COMSIXTHFLT
COMNAVFACENGCOM WASHINGTON DC
COMFIRSTNCD LITTLE CREEK VA
CTF 68
FIRST NCD FORWARD PEARL HARBOR HI
CBC GULFPORT MS
NFELC PORT HUENEME CA
TWO ZERO SEABEE READINESS GROUP GULFPORT MS
THREE ONE SEABEE READINESS GROUP PORT HUENEME CA
COM TWO TWO NCR
COM THREE ZERO NCR
COM THREE ZERO NCR DET PORT HUENEME CA
UNCLAS //N03590//
MSGID/GENADMIN/COMFIRSTNCD/-/AUG//
SUBJ/SEABEE DEPLOYMENT BRAVO ZULU//
RMKS/1. CONGRATULATIONS TO THE "FEARLESS" SEABEES OF NAVAL MOBILE CONSTRUCTION BATTALION SEVENTY-FOUR AS YOU COMPLETE YET ANOTHER HISTORIC DEPLOYMENT. YOU PERFORMED FLAWLESSLY AS YOU CONDUCTED CONTINGENCY OPERATIONS, COMPLETED VITAL CONSTRUCTION PROJECTS, AND IMPROVED READINESS, WORKING CONDITIONS AND QUALITY OF LIFE AT LOCATIONS AROUND THE GLOBE.
2. RE-COCKING AFTER YOUR FIRST OEF/OIF DEPLOYMENT, YOU REJOINED I MEF IN THE HIGHLY CONTESTED SUNNI TRIANGLE IN WESTERN IRAQ. ALTHOUGH THE PLAN WAS TO BEGIN CIVIL-MILITARY CONSTRUCTION PROJECTS, YOU WERE CALLED ON TO CONSTRUCT BERMS, BUNKERS, ENTRY CONTROL POINTS AND MANY OTHER ESSENTIAL FORCE PROTECTION FACILITIES. IN AND AROUND FALLUJAH, YOU BUILT AND FOUGHT DURING SOME OF THE MOST DEADLY AND DANGEROUS BATTLES OF THE WAR. AFTER YOU HELPED TO CONTAIN THE UNREST IN THE AREA, YOU COMPLETED NUMEROUS COALITION FORCE INFRASTRUCTURE PROJECTS, SUCH AS THE RECONSTRUCTION OF THE AREA'S SURGICAL FACILITY AND THE RENOVATION OF I MEF'S TACTICAL OPERATIONS CENTER. ADDITIONALLY, YOU AGGRESSIVELY BEGAN THE IRAQ CONSTRUCTION APPRENTICESHIP PROGRAM (ICAP). YOU WERE ALSO CALLED ON TO OPERATE, MAINTAIN AND MANAGE CAMP MOREELL IN KUWAIT. WITH A KEEN FOCUS ON READINESS AND SUPPORT, THE CAMP WAS KEY TO LOGISTIC SUPPORT AND TACTICAL TRAINING PREPARATION FOR FORWARDED DEPLOYED SEABEES. YOUR ABILITY TO BUILD AND TO FIGHT GREATLY IMPROVED THE

READINESS AND QUALITY OF SERVICE FOR SAILORS AND MARINES OPERATING THROUGHOUT WESTERN IRAQ. YOUR TENACIOUS DEDICATION AND FOCUS ON MISSION ACCOMPLISHMENT WAS TRULY IMPRESSIVE, AND SET THE STANDARD FOR FUTURE MISSIONS.
3. IN ROTA, YOU TACKLED SEVERAL CHALLENGING CONSTRUCTION READINESS TRAINING PROJECTS, WHICH INCLUDED CAMP MITCHELL'S ADMINISTRATION FACILITY AND ROTA'S HOSPITAL PEB. YOU ALSO DEPLOYED EUROPEAN DETAILS TO SIGONELLA ITALY AND SOUDA BAY, GREECE, WHERE MOTIVATED SEABEES ACCOMPLISHED HIGH-QUALITY CONSTRUCTION TASKING, AND BROUGHT FURTHER CREDIT TO THE NAVAL CONSTRUCTION FORCE.
4. DESPITE THE GEOGRAPHIC CHALLENGES OF GLOBAL OPERATIONS, YOU SKILLFULLY PARTICIPATED IN TWO IMPORTANT JOINT EXERCISES. DEPLOYED IN SUPPORT OF THE WEST AFRICA TRAINING CRUISE (WATC) IN GHANA, SEABEES WORKED TIRELESSLY TO IMPROVE LIVING CONDITIONS AND THE QUALITY OF LIFE WITH THE CONSTRUCTION OF DORMITORIES, A MEDICAL CLINIC AND A PLAYGROUND WITH SOCCER FIELD. WATC GHANA EXERCISE CONSTRUCTION ALSO INCLUDED A K-SPAN WAREHOUSE AND C-130 PARKING APRON IMPROVEMENTS. WHILE DEPLOYED TO CROATIA, YOUR DET WORKED CLOSELY WITH OTHER MILITARY FORCES AND HOST NATION PERSONNEL TO COMPLETE THE INSTALLATION OF OVER 6 MILES OF WATER MAIN PIPING. THE DET ALSO COMPLETED HEAD FACILITIES AND OVER 5 MILES OF ROADWAY IMPROVEMENTS. BOTH DETS WERE SUPERB EXAMPLES OF TENACIOUSDEDICATION AND CAN DO SEABEE SPIRIT.
5. YOU ARE ALL OUTSTANDING SEABEES. YOU PERFORMED SUPERBLY AS YOU DEMONSTRATED IMPRESSIVE CONSTRUCTION AND TACTICAL EXPERTISE AROUND THE WORLD. YOUR "FEARLESS" CAN DO SPIRIT HAS LEFT A POSITIVE, LASTING IMPACT AND HAS SIGNIFICANTLY ADDED TO THE HISTORIC ACHIEVEMENTS OF THE SEABEES AND THE NAVY AND MARINE CORPS TEAM. I COMMEND YOU FOR A JOB WELL DONE. ENJOY A WELL-DESERVED HOMECOMING WITH FAMILY AND FRIENDS. THANKS FOR YOUR PROFESSIONALISM AND DEDICATED SERVICE. AND MOST OF ALL, THANKS FOR BEING SEABEES. RADM KUBIC SENDS.//
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