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# EXECUTIVE SUMMARY



#### **EXECUTIVE SUMMARY**



U.S. Naval Mobile Construction FIVE (NMCB FIVE) completed a successful deployment overcoming numerous command and control difficulties, logistical, and material quality challenges, while seamlessly operating in a joint environment. NMCB FIVE integrated with NMCB TWO ONE, NMCB TWO SIX, Army's 63<sup>rd</sup> Engineer Company (Combat Support Equipment) and 186<sup>th</sup> CSE in forward deployment of 812 Seabees to Camp Arifjan, Kuwait. NMCB FIVE dispersed around the world with twelve Details covering three AORs, five continents, and twelve time zones. Immediate impact was made with Detail New Horizons, a humanitarian mission focused on improving medical, educational, and public works facilities in impoverished Peruvian villages. Detail Horn of Africa executed missions across an area of responsibility larger than the United States, responded to flood victims in Ethiopia, drilled water wells in northeastern Kenya, and constructed medical facilities in the Seychelles. Main Body and CENTCOM details increased the operational capabilities of warfighters throughout Iraq and Afghanistan. NMCB FIVE completed 66,574 mandays of quality construction at a cost savings of \$23.2M.

#### **ADMINISTRATION**

The Administration Department supported a wide array of personnel, career information, embarkation, medical, dental, ministerial, legal, force protection, drug and alcohol abuse prevention, public affairs, MWR, and family support areas. The team executed all operational requirements, provided full customer support, and maintained peak personnel readiness. Throughout deployment the Administration Department executed 60 PCS transfers, 38 separations, 61 receipts, 60 reenlistments, 198 awards, 43 security clearance packages and 2,000 pay and personnel related documents.

#### **TRAINING/READINESS**

With an ongoing goal of maintaining current mission readiness levels, preparing for the next deployment, and training better Seabees, NMCB FIVE completed 11,500 mandays of military, technical, and physical training spread loaded over monthly Company training days and Battalion-wide Military Skills and Command Post Exercise. Military training also included individual weapon qualifications, combat lifesaver refresher courses, and embarkation planning & procedures.

#### **OPERATIONS**

NMCB FIVE Seabees executed construction projects around the world safely and responsively. During the deployment, 109 projects were tasked and 98 brought to completion, with a substantial portion of the work in a contingency environment. Command Safety Program maintained an aggressive and comprehensive NAVOSH program, focused on Operational Risk Management (ORM). Camp Maintenance greatly improved conditions at Camp Mitchell through upgrades to the facilities and grounds and Detail sites worldwide, Seabees expeditiously responded to critical service needs as required.

#### **SUPPLY / EQUIPMENT**

NMCB FIVE Supply Department provided outstanding logistic and supply support to mainbody and Detail sites across the globe. Supply Department teamed with Area Support Group - Kuwait leveraging resources and improving the Battalion construction process. NMCB FIVE acquired approximately \$892,000 in reutilized material from the local Defense Reutilization Material Office (DRMO). At Camp Arifjan, the first Southwest Asia Logistics Operational Readiness Inspection was conducted with a focus on ensuring proper Army and Navy logistics processes were in place to support the Global War on Terror.

# **ADMINISTRATION**





#### **ADMINISTRATION DEPARTMENT**

The Administration Department performed superbly and provided outstanding customer support in all facets of administration for 960 Seabees, including Navy Reserve personnel from NMCB TWO ONE and NMCB TWO SIX deployed to Kuwait, Iraq, Afghanistan, Horn of Africa, Bahrain, Andros, Cuba, and Spain. The Administration Department was directly responsible for 135 active duty and reserve Fitness Reports, Evaluations, and Letters of Extension. Throughout the deployment, award ceremonies, advancements, frockings, and SCW pinning ceremonies were held at each site. Additionally, the Administration Department completed security clearance packages, no-cost TAD orders, general correspondence, and directives while providing a vital link between NMCB ONE THREE THREE's and NMCB TWO SIX personnel for administrative issues.

#### FITNESS REPORTS AND EVALUATIONS PROCESSED

Month	Rank	Active Component	Reserve Component
	CWO2	1	1
September	E-7	26	4
	E-8	6	0
October	O-4	2	0
November	E-6	81	0
January	O-3	11	2
	O-2	3	0
   February	E-5	176	0
	Demobilization Fitne	ess Reports, Evaluations, Letters of Extension	144

#### **AWARDS PROCESSED**

Navy and Marine Corps Commendation Medals	5
Army Commendation Medals	11
Navy and Marine Corps Achievement Medals	48
Army Achievement Medals	37
Flag Letters of Commendation	75
Commanding Officer's Meritorious Masts	32

The Personnel Department expeditiously processed and completed the PCS check-in of 61 Seabees, transfer of 60 Seabees, separation of 38 Seabees, and transfer of two Seabees to the Fleet Reserve. They also completed service record entries, processed travel claims, and ensured proper pay entitlements were started and stopped. A majority of Personnel Department paperwork and processes were conducted by NMCB FIVE's PAPA Detail in Port Hueneme which consisted of Personnelmen and Yeomen. All advancement examination requirements for both Active and Reserve Component personnel for the September 2006 E4-E6 Navy-wide Advancement Examinations and January 2007 E7 Navy-wide Advancement Examination were meticulously achieved and maximized advancement opportunities. The Administration Department provided impeccable customer service throughout deployment despite communication difficulties and logistic challenges due to distance and time difference between deployment sites.

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#### **BATTALION ADVANCEMENT SUMMARY MATRIX**

#### **JANUARY 2007 CPO RESULTS**

Time in Rate Eligible	61
Board Eligible	41
Selected	Pending
% Selected	Pending

#### **ADVANCEMENTS SEPTEMBER 2006**

	E4	E5	E6	Total
Time in Rate Eligible	93	132	56	281
Participated	89	127	56	272
Selected	62	41	9	112
% Selected	69.7	32.3	16.1	41.2
Navy Average	35.5	19.4	11.6	22.2

#### AT EAOS INELIGIBLE LOSSES REASON FOR SEPARATION

		Zone A				Zones C&D	Zone E	Total
	#	% of Loss	Reason Weight (%)	Ave. LOS (Yrs)	#	#	#	#
Comp Enlist Unretainable	0	0.0	0.0	0	1	2	0	3
Total For Above Reasons	0	0.0	0.0	0	1	2	0	3

#### BEFORE EAOS LOSSES REASON FOR SEPARATION

		Zone A				Zones C&D	Zone E	Total
	#	% of Attr	Reason Weight (%)	Ave. LOS (Yrs)	#	#	#	#
Alcohol Abuse	3	25.0	25.0	2.8	0	0	0	3
Physical Stand / PRT	3	25.0	25.0	4.8	0	0	0	3
Misconduct	2	16.7	16.7	3.1	0	0	0	2
Other Med Or Disability	2	16.7	16.7	2.6	0	1	0	3
Hardship	1	8.3	8.3	1.8	0	0	0	1
Personality Disorder	1	8.3	8.3	2.3	0	0	0	1
Fleet Res/Retire At HYT	0	0.0	0.0	0	0	0	1	1
Parenthood	0	0.0	0.0	0	0	1	0	1
Serious Offense	0	0.0	0.0	0	0	1	0	1
Total For Above Reasons	12	100	100	3.2	0	3	1	16



#### **RETENTION SUMMARY**

Zone	At EAOS	Before EAOS	Ineligible Losses Before EAOS RE-4	Ineligible Losses Before EAOS Other	Reenlistment	RA	% Reenlistment Rate	%Reenlistment Rate With RA	%RA Rate	%Cross Section Att Rate	Avg Non EAOS Inv.
A 0-6 Yrs	33	12	7	5	17	0	51.5	51.5	0.0	6.9	415
B 6 - 10 Yrs	6	0	0	0	5	0	83.3	83.3	0.0	0.0	66
C 10 - 14 Yrs	4	3	1	2	4	0	100.0	100.0	0.0	11.1	65
D 14 - 19 Yrs	5	0	0	0	3	0	60.0	60.0	0.0	0.0	56
E 20 Plus Yrs	0	1	0	1	0	0	0.0	0.0	0.0	25.0	10
Total Less Zone E	48	15	8	7	29	0	60.4	60.4	0.0	6.0	602
USNR 2YO RAD's (Included as eligible separates):							0				
Release of Officer Programs All Zones (not counted as losses):							0				
6YO Oper Ext:										0	

Average LOS at Reenlistment:	Α	4.3	В	8.5	С	11.9	D	17.3	E	0	1
------------------------------	---	-----	---	-----	---	------	---	------	---	---	---

#### **DENTAL**

NMCB FIVE arrived at Camp Arifjan to find a non-operational Battalion Dental Clinic. The dental chair did not operate correctly, air compressor was not functional, storage items were disorganized and poorly maintained, and remaining equipment was in poor condition. The staff performed a complete overhaul and transformed the NMCB FIVE Dental Clinic from a non-operational tent, to a mission ready clinic with proper materials and supplies. New technology featured two operational dental chairs and digital radiography to provide routine operative treatment, minor surgical procedures, routine endodontics, dental prophylaxes and limited prosthodontic repairs for Seabees as well as emergency treatment for all Camp Arifjan service members.

The Dental Department coordinated care for the Battalion worldwide. Throughout the deployment, the Dental Department worked to maintain a clean clinic to deliver routine and emergency oral health care to not only NMCB FIVE Seabees, but also many Marines, Soldiers, Airmen, and Coalition Forces living in Zone 6. Excellent communication with deployed Details spanning four different unified combatant commands was key to achieving a Battalion dental readiness of over 98% and a 28% increase in Battalion dental health to 66%. NMCB FIVE met the FY09 Navy wide goal of 65% two years ahead of schedule! The dental department performed \$74,000 of dental services over deployment.







The Dental Department assisted in the design and construction of an addition to the Dental Clinic Tent. The renovation included increasing available power to the clinic to support a newly installed second air compressor which greatly increased dental hygiene procedures and provided for multi-chair dentistry. The addition will allow future dental departments to utilize more space for administration and storage as well as a suitable waiting area for patients prior to their appointments.

The NMCB FIVE tobacco cessation program focused on eliminating both cigarettes and smokeless tobacco use in the Battalion. Part of the pilot health promotions

initiative by Naval Construction Force Medical, the program consisted of four short one-on-one counseling sessions tailored to the tobacco habits of Seabees and adjunctive pharmacotherapy, to include nicotine replacement therapy and other medication to help smokers quit. The Dental Department facilitated sixteen Seabees and three soldiers stationed at Camp Arifjan to quit smoking.

#### **MEDICAL**

The NMCB FIVE Medical Department fully integrated with reserve augments from NMCB TWO ONE and NMCB TWO SIX over a very successful deployment. NMCB FIVE Hospital Corpsmen served the main body at Camp Arifjan, Detail Camp Moreell, and Detail Horn of Africa (HOA). The Medical Department

supported operations in Iraq, Afghanistan, Andros, Cuba, and Rota by phone and during redeployment preparations.

Through the dedicated efforts of the Medical Department and each company chain of command, the Battalion departed Port Hueneme in August at a high state of medical readiness through implementation of the new Individual Medical Readiness (IMR) system. Readiness continually improved throughout deployment in immunizations, Physical Health Assessments, and preventive programs. NMCB FIVE conducted Combat Lifesaver refresher courses for 100 personnel, over twice the number required by 1NCD.



Representatives of the Medical Department manned Battalion Aid Stations (BAS) at Camp Arifian, Camp



Moreell, Camp Lemonier and while mobilized with water well teams in Kenya. In Kuwait, the department worked closely with Camp Maintenance to renovate the BAS. New floors and patient bays were created to improve patient privacy and care in a cleaner environment. Working with the Expeditionary Medical Facility and Troop Medical Center, seamless patient care was ensured throughout the Kuwait Details with specialist referrals. The Battalion's preventive medicine technician worked with local preventive medicine units to help with overall camp pest control. During the Battalion Military Skills Exercise, the department provided range coverage, first aid instruction, stretcher bearer training, and a highly successful mass casualty drill.

#### **ADMINISTRATION**



In Djibouti, the corpsmen provided excellent care under austere conditions. Early in deployment, a Seabee sustained a serious laceration to his hand. Through quick action by the Corpsman, the member was able to reach higher level care expeditiously and the injury was successfully repaired. Middeployment, 1NCD inspected the department and awarded top marks to the Battalion and "Fully Combat Ready" certification. A 100% inventory of the medical supplies was done with 95% validity.

Prompt care provided through the retrograde and Warrior Transition Program ensured all Seabees returning from deployment received the medical and spiritual attention they required. The program facilitated a smooth reintegration of Seabees with their families, the rest of the Battalion, and their homeport lives.

#### **RELIGIOUS PROGRAM**

The NMCB FIVE religious ministry team provided life-transforming ministry to the battalion during the 2006-2007 deployment. Through religious ministry services conducted by the Battalion Chaplain and Religious Program Specialists at Camp Arifjan and ASG-KU services provided by U.S. Army Chaplains, NMCB FIVE service members were refreshed with worship opportunities. Additionally, life skills coaching and counseling ensured deployment readiness. The "United through Reading" program was implemented at all Kuwait Detail Sites and facilitated Battalion members contact with their families. The Joint Military environment also provided opportunities for the Command Religious Program to provide ministry for the Army and Air Force.





# **TRAINING**





NMCB FIVE maintained its military skills proficiency throughout deployment to remain poised for any emergent mission and guarantee deployment success. The Deployed Training Plan focused on technical and military skills necessary to maintain and improve the "Combat Ready" Battalion rating achieved during homeport. The technical training focus was On-the-Job training (OJT) which included award of skill achievements through Seabee Skill Assessment Program. Military training included a robust three day military skills evolution at Udari Range, individual weapon qualifications, combat lifesaver refresher courses, worldwide command post exercise, and embarkation planning & procedures involving the main body and six remote detail sites. The Training Department focused on homeport and issued all Battalion personnel with a detailed individual training plan prior to departing deployment sites.

#### **TECHNICAL TRAINING**

Technical training significantly increased the Battalion's wartime construction capability. Worldwide project tasking provided valuable experience in all facets of construction and resulted in attainment of numerous technical skills. Through the Seabee Skills Assessment Program, NMCB FIVE gained 305 technical skills, 277 directly contributing to readiness by fulfilling SORTS training requirements.

#### **EMBARKATION TRAINING**

NMCB FIVE, in conjunction with 22NCR Embark, gained experience in all aspects of embarkation, including hands-on participation in air and surface embarkation via vessel shipments and armed convoys. Detail Camp Moreell embarked 7,071 personnel, 213 pieces of CESE, and 715 tons of various cargo to locations throughout Iraq, Afghanistan, Kuwait, HOA, Bahrain, and CONUS for 16 NCF and 2 NAVCENT Command elements. Camp Arifjan embarked 90 Seabees, tools, equipment, and weapons on three missions in Iraq and Afghanistan. The main body conducted embarkation and convoy training in conjunction with the Battalion Command Post Exercise and SWA Details conducted "real world" convoys and embarkation operations in a tactical environment. The experienced gained from hands-on embarkation evolutions enhanced the Battalion's already full bodied wartime mount-out capability.

#### **GENERAL MILITARY TRAINING (GMT)**

NMCB FIVE optimized training days to conduct Military and Technical Skills training in addition to GMT. GMT was conducted in accordance with FY06 / 07 GMT topic list. GMT topics covered during deployment were Drug Alcohol and Tobacco Awareness, Sexual Harassment, Equal Opportunity & Grievance Procedures, Fraternization, and Code of Conduct. Additional GMT topics included Hazing Awareness, Heat Stroke Awareness, Suicide Awareness, OPSEC, and Information Awareness. Special emphasis was placed on ORM with a deployment goal of 99% trained by 01 DEC 2006 and compulsory training for all new check-ins.

#### SEABEE COMBAT WARFARE SPECIALIST (SCWS) TRAINING

NMCB FIVE aggressively pursued SCWS training throughout deployment. Over 60 SCWS training classes were taught, resulting in qualification of 141 Active duty and Reserve Seabees and requalification of 40 Seabees as Seabee Combat Warfare Specialists during the deployment.

SCW Qualification	Personnel Assigned	Previously Qualified	Qualified on Deployment	Total Qualified
01 – 05	26	10	8	18
E7 – E9	47	34	3	37
E1 – E6	742	182	130	312

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#### **MILITARY SKILLS TRAINING**

To maintain military skills proficiency, NMCB FIVE conducted intense deployed Military Skills Training. Co-locating all Kuwait Seabees to Camp Moreell for three day focused evolution, NMCB FIVE executed enhanced weapons handling centered on squad shoot and maneuver exercises and individual shoot and move instruction. Small unit evolutions ranged from squad patrols and defensive positions to terrain modeling and MEDEVAC procedures. The military skills evolution culminated with first aid training and a simulated mass casualty event.



#### **WEAPONS TRAINING**

NMCB FIVE aggressively pursued weapon proficiency throughout deployment. Shortly after arriving, the Battalion conducted an M-16 live fire BZO range. During deployment, 10% of Battalion personnel qualified on 9mm and M-16 TOA weapons. Weekly weapons handling, safety, and clearing training was held worldwide. The following ammunition was expended for weapons training.

Training	NALC	Weapon	Туре	Quantity
BZO	A059	M-16	5.56mm Ball	7,410
Qualifications	A059	M-16	5.56mm Ball	7,320
Qualifications	A363	M-9	9mm Ball	2,880
	A080	M-16	5.56mm Blank	200
	A111	M-60	7.62mm Blank	0
	A598	M-2	.50 cal Blank	0
Military Skills Training	G945	N/A	Yellow Smoke	0
	G940	N/A	Green Smoke	0
	L495	N/A	Trip Flares	0
	A059	M-16	5.56 Ball	40,320

#### MAINTENANCE MATERIAL MANAGEMENT (3M) SYSTEMS

NMCB FIVE achieved significant milestones with the implementation of 3M at all deployment sites The Battalion continued emphasis with regular training sessions conducted by the 3M Coordinator and Alfa Company to maintain proficiency.

3M System Training Qualification	Previously Qualified	Qualified on Deployment	Total Qualified
3M 301 Level Qualification	208	63	271
3M 303 Level Qualification	45	81	126
Micro SNAP Training	0	92	92



#### **ARMORY**

The armory fully implemented 3M Program at seven sites across three continents. Following a detailed inventory, the armory provided NAVSEA Small Arms Center a complete and updated inventory of weapons on hand that were previously documented with UICs other than Camp Mitchell TOA. NMCB FIVE Gunner Mates supported numerous ranges and in country training for forward deploying units, as well as providing maintenance and storage of weapons for 22NCR and collocated military units.

#### **COMMUNICATIONS/INFORMATION SYSTEMS**

The Communications Department provided exceptional communication equipment support and repairs throughout the deployment. Through successful coordination, management, and maintenance of a mobile Antenna Farm for the Battalion Command Post Exercise ensured uninterrupted command and control with all camps in Kuwait and Detail Horn of Africa. Service cleaning and operational checks of all tactical communications equipment were performed, increasing the overall Battalion Communications readiness from 50% to 95%. The Communications Department trained 407 Seabees on EKMS Lite PQS in accordance with 1NCD directive.





#### MAIN BODY CAMP ARIFJAN

Course Type	Training	Manda	ys (MD)
Military	SCWS	688	1088
Ivilitary	CPX/Embark Exercise And Battalion Military Skills	400	1000
Safety	Safety & ORM	1227	1227
Administration	GMT	688	1336
Administration	Petty Officer Indoc, 3m, In-Rate	648	1330
Total			3651

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#### **DETACHMENT TRAINING IN MANDAYS**

	scws	GMT/Safety/Gen. Topics	Total
Camp Buehring	151	682	833
Camp Moreell	26	127	153
Camp Virginia	41	518	559
NAVCENT	131	251	382
НОА	200	765	965
Andros	44	213	257
Cuba	25	253	278
Rota	27	176	203
Afghanistan	23	7	30
Afghanistan II	200	59	259
Tallil	29	9	38
TOTAL	897	3060	3957

# **OPERATIONS**





#### **SAFETY DEPARTMENT**

NMCB FIVE executed an extremely safe deployment. Safety remained in the forefront utilizing an aggressive and comprehensive NAVOSH program. NMCB FIVE utilized Operational Risk Management into everyday practices and conducted continual training to ensure safe work practices.

During the deployment NMCB FIVE used its newly formed Occupational Safety, Health, and Risk Oversight Council (OSHROC) and Company/Detail Operational Risk Assessment Teams (ORATs) to conduct deliberate ORM on trends spotted in Battalion safety metrics. The primary example of this was addressing a dramatic increase in low speed motor vehicle accidents during the months of September and October. The OSHROC conducted deliberate ORM and implemented a number of timely controls to curtail this trend. These controls were then implemented by the Company/Detail ORATs. As a result of these proactive steps, the trend was arrested and total MVA's decreased by 14% from last deployment.

Lost time mishaps dropped 33% during deployment due to implementation of ORM, NAVOSH safety training, situational awareness, and operational risk management practices. Project safety supervisors' constant inspections of jobsites, materials, and equipment ensured Seabees were working in a safe environment.

#### **SAFETY SUMMARY**

	Aug	Sep	Oct	Nov	Dec	Jan	Feb	Total
Fatalities	0	0	0	0	0	0	0	0
# Lost Days	10	3	0	8	18	0	0	39
# Lost Day Cases	2	3	0	3	3	0	0	11
# Light Duty Days	48	115	79	29	149	10	0	430
# Light Duty Cases	7	14	10	6	10	2	0	49
# No Lost Time Mishaps	13	15	15	12	14	3	0	72
#Govt Vehicle Mishaps	0	10	9	4	1	1	0	25
Total Number Mishaps	16	28	24	19	18	4	0	109
Govt Vehicle Repair Costs(est)	\$0	\$4,969	\$1,370	\$100	\$100	\$0	\$0	\$6,539
GVM Miles driven	8,210	13,940	17,009	17,109	7,032	5,816	6,982	76,098

#### **ON-DUTY MISHAPS**

	Aug	Sep	Oct	Nov	Dec	Jan	Feb	Total
No Lost Time Mishaps	13	12	12	7	11	3	0	63
Cases Light Duty	7	11	9	5	9	2	0	45
Light Duty Days	48	58	53	25	143	10	0	429
Cases Lost Work Days	2	2	0	3	3	0	0	14
Lost Work Days	10	2	0	8	18	0	0	42
Fatalities	0	0	0	0	0	0	0	0



#### **OFF-DUTY MISHAPS**

	Aug	Sep	Oct	Nov	Dec	Jan	Feb	Total
No Lost Time Mishaps	0	3	3	5	3	1	0	15
Cases Light Duty	0	3	1	1	1	0	0	6
Light Duty Days	0	57	26	4	6	0	0	93
Cases Lost Work Days	0	1	0	0	0	0	0	1
Lost Work Days	0	1	0	0	0	0	0	1
Fatalities	0	0	0	0	0	0	0	0

#### **ENVIRONMENTAL/HAZMAT**

NMCB FIVE worked to quickly incorporate Overseas Environmental Baseline Guidance and ASG-KU Environmental Policies into the current Environmental/HAZMAT program. Unit SOPs, Site Specific Spill Plans, and five Part Folders (HAZMAT inventory, MSDS, inspection records, etc.) were established and continuously maintained. Weekly self-assessments and monthly inspections were conducted along with a systematic HAZMAT management program. Over the course of deployment, 1,000 training hours were dedicated to UECO, HAZWOPER, and HAZCOM classes.

#### **DISPOSED HAZWASTE**

Lead acid batteries	7 pallets				
Used petroleum products	220 gal				
Oily rags	110 gal				
Coolant	110 gal				
Used oil filters	110 gal				

#### **QUALITY CONTROL**

NMCB FIVE Quality Control (QC) Department was engaged and proactive in establishing a strong presence at multiple project sites. A consistent focus on definable features of work, specified tolerances, and project planning greatly improved project management over the course of the deployment. The QC Department established proper three phases of QC in every project, identified Battalion QC limitations and pursued methods to ensure their correction.

#### STATISTICAL DATA

Validity of project inventory during the Kuwait Deployment turnover	100%
Number of projects during the Kuwait Deployment turnover	2
Number of total projects requiring quality control completed during deployment	16
Average number of projects per day during FY06	8



#### **OPERATIONS SUMMARY MATRIX**

Project Number	Total Project Mandays	Total Project Material Cost (\$)	Mandays Tasked	Tasked %	Final WIP %	Mandays Expended by prior NMCBs	Mandays expended this deployment
AD5-500	140	12,500	140	100	100	0	140
AD5-830	4112	360,000	650	8	100	3456	363
AD5-831	3909	360,000	690	18	18	0	722
OIC DISC	250	7,000	250	100	100	0	93
GB0-501	79	0	79	100	100	0	66
GB2-827	250	0	250	100	100	0	250
GB2-882	1795	866,380	700	70	70	556	700
SP6-PWD	3512	257,636	977	28	100	2535	723
AP6-800	418	58,864	418	100	100	0	412
AP6-801	418	58,864	418	100	100	0	361
AP6-802	330	12,000	330	100	100	0	165
AP6-803	330	13,000	330	100	100	0	251
AP6-804	330	13,000	330	100	100	0	246
AP6-805	433	128,233	433	100	100	0	283
TOTAL	16306	2,147,477	5995			6547	4775

#### **OPERATIONS**



#### **DETAIL ANDROS EXECUTIVE SUMMARY**

NMCB FIVE deployed 22 Seabees to Andros Island in support of Atlantic Underwater Testing and Evaluation Center (AUTEC). Logistics were a constant challenge as materials procurement relied on funding availability and minimum of two month shipment time from order to arrival. Detail Andros was tasked with 1,950 mandays of construction and training to include completion of Concrete Block Housing unit (CBH-14) and commencement of Concrete Block Housing unit (CBH-15). Both projects provide significant improvements to an overpopulated Naval Base.





Seabee setting corner leads.



Erecting the pre-cast concrete roof in place.

### PIER ELECTRICAL SHELTER PROJECT AD5-500

Seabees constructed an electrical housing facility on Andros Island to enclose two major electrical panels deteriorating from constant salt water corrosion. The panels supply all power to AUTEC pier operations.

**Project Scope:** Construct a 15 ft. x 9 ft. 4 in. x 9 ft. CMU electrical housing facility with tilt up concrete roof and interior lighting.

Personnel: 4

**Duration:** October 2006 - January 2007

Mandays Expended: NMCB FIVE: 140

Cumulative: 140

Tasking: WIP at Turnover: 0%

WIP at Completion: 100% MD Tasked to NMCB FIVE: 140 Total Project MD: 140

 Material Cost:
 \$12,500

 Cost Savings:
 \$49,000

Significant Safety Issues: None.

Significant QC Issues: Project not designed for nominal block layout.

Significant Design Issues: Project design was altered during construction causing re-work.

**Significant Material Issues:** All project materials were not on site and barge shipments consistently delayed construction and completion.





Sponge sanding drywall.



Completed view of CBH-14.

#### CONSTRUCT CBH 14 AD5-830

Construct a highly anticipated housing project on Naval Base AUTEC, Andros Island Bahamas.

**Project Scope:** Construct a 182 ft. x 52 ft. permanent, single story, CMU block, energy efficient Combined Bachelor Housing structure with ten (10) 815 sq. ft. private living areas. Each living area will include a living room, kitchen, private bath and closets.

Personnel: 10

**Duration:** August 2006 - December 2006

Mandays Expended: NMCB THREE: 2116

NMCB SEVEN: 1340 NMCB FIVE: 636 Cumulative: 4092 WIP at Turnover: 92%

WIP at Completion: 100%
MD Tasked to NMCB THREE: 2042
MD Tasked to NMCB SEVEN: 1420
MD Tasked to NMCB FIVE: 650
Total Project MD: 4112

 Material Cost:
 \$360,000

 Cost Savings:
 \$1,439,200

Significant Safety Issues: None.

Tasking:

**Significant QC Issues:** Quality of the concrete provided by contractors varied from truck to truck and resulted in inconsistent finishes.

Significant Design Issues: None.

**Significant Material Issues:** Inconsistent quality and delivery delays caused the workability and finish of the concrete to vary significantly. All project materials were not on site and barge shipments consistently delayed construction and completion.





Crewmember re-locating fire hydrant.



3909

Crewmember verifies elevations.

#### CONSTRUCT CBH 15 AD5-831

Construct a highly anticipated housing project on Naval Base AUTEC, Andros Island Bahamas.

**Project Scope:** Construct a 182 ft. x 52 ft. permanent, single story, CMU block, energy efficient Combined Bachelor Housing structure with ten (10) private living areas at approximately 815 sq. ft. each. Each living area will include a living room, kitchen, private bath and closets.

Personnel: 14

**Duration:** August 2006 - February 2007

 Mandays Expended:
 NMCB FIVE: Cumulative: 722

 Tasking:
 WIP at Turnover: 0% WIP at Completion: 18% MD Tasked to NMCB FIVE: 690

Total Project MD:

 Material Cost:
 \$360,000

 Cost Savings:
 \$1,368,150

Significant Safety Issues: None.

**Significant QC Issues:** Sink holes were discovered while excavating for under slab sewer even after ultrasonic tests were conducted. No means to validate compaction of subgrade.

Significant Design Issues: Sections of design still need to be finalized.

**Significant Material Issues:** All project materials were not on site and barge shipments consistently delay construction. Project materials are purchased when funds become available. Permit issues required use of excavated coral for site fill. On-island assets limited excavation and impacted productivity.





Crew prefabricating forms for fuel trench.



Completed fuel trench with Neenah grates.

### REPAIR DRAIN TRENCH SITE 2 OIC DISCRETIONARY

Seabees constructed a 110 ft. concrete U-ditch to replace to existing damaged CMU ditch. The fuel trench houses the main lines supplying fuel to Andros Island barge. It receives heavily traffic volume during loading and off loading of the barge.

**Project Scope:** Repair 110 ft. existing fuel line CMU U-ditch. Remove existing 8 in. block sides and pour 8 in. thick concrete wall with Neenah frames and grates as per details.

Personnel: 4

**Duration:** October 2006 - December 2006

Mandays Expended: NMCB FIVE: 93

Cumulative: 93

**Tasking:** WIP at Turnover: 0%

WIP at Completion: 100% MD Tasked to NMCB FIVE: 250 Total Project MD: 250

 Material Cost:
 \$7,000

 Cost Savings:
 \$32,550

Significant Safety Issues: None.

**Significant QC Issues:** Only 120 ft. of the 160 ft. deteriorating U-ditch was replaced. Remaining 40 ft. ties into finish product.

Significant Design Issues: None.

**Significant Material Issues:** Project materials were not on site and barge shipments consistently delayed construction and completion. 40 ft. of grating was not purchased to replace entire ditch.

#### **OPERATIONS**









Cutting the perimeter lawn.

## DETAIL ANDROS CAMP MAINTENANCE ADO-300

#### Camp Maintenance Tasking

WRS SJO Projects	50
WKS	0
MDC	0
PMS	0



Completed weed-wacking the MLO yard.





#### **NMCB FIVE DET ANDROS**

Labor Distribution Summary

	Aug	Sep	Oct	Nov	Dec	Jan	Feb	Total	%Total
Direct Labor MDs	186	289	301	288	317	344	21	1746	74%
Indirect Labor MDs	78	47	55	96	59	38	11	384	16%
Readiness/Training	32	34	30	58	43	37	2	236	10%
Total MDs Exp	296	370	386	442	419	419	34	2366	100%
# Total Personnel	20	20	22	22	21	21	21	N/A	
# Direct Labor	13	13	15	15	14	14	14	N/A	
# Workdays	15	24	23	23	23	24	2	134	
% Direct Labor	65%	65%	68%	68%	67%	67%	67%	67%	
Ideal Capability	232	371	411	411	383	400	33	2232	
Availability Factor	94%	87%	81%	84%	94%	95%	69%	86%	

#### **OPERATIONS**



#### **DETAIL CUBA EXECUTIVE SUMMARY**

NMCB FIVE deployed 26 Seabees to U.S. Naval Station, Guantanamo Bay Cuba. Detail Cuba was tasked with 1,630 mandays of construction and training to include a 196 ft. structural steel bridge with timber decking and concrete approaches spanning across the Guantanamo River and a 28 mile perimeter road project consisting of pothole repair, grading, hauling and compacting fill material. Officer in Charge discretionary tasking included a 175 manday pool house demolition, filling pool with demolition debris and capping with select fill, placement of 22 cu. yd. of concrete for sidewalks and retaining wall, and other various smaller projects. Camp Maintenance included 175 mandays of re-painting traffic lines, MLO warehouse delineators, and painting of various office spaces throughout the camp.





The pool before demolition commenced.



Completed site.

### OIC DISCRETIONARY POOL DEMOLITION GB0-501

Seabees worked through extreme weather conditions and CESE issues to complete demolition pool project on time for Naval Base Guantanamo Bay, Cuba.

**Project Scope:** The project consisted of the pool house demolition. All metal materials were taken to the metal scrap yard and all other debris was placed at the bottom of the pool and filled with select fill.

Personnel: 3

**Duration:** August 2006 - September 2006

Mandays Expended: NMCB FIVE: 66

Cumulative: 66

**Tasking:** WIP at Turnover: 0%

WIP at Completion: 100% MD Tasked to NMCB FIVE: 79 Total Project MD: 79

Material Cost: \$0 Cost Savings: \$25,550

Significant Safety Issues: Pool house and surrounding structures were coated with lead paint.

Significant QC Issues: None.

Significant Design Issues: None.

Significant Material Issues: None.





Seabee repairing a section of road.



Completed section of road.

#### REPAIR PERIMETER ROAD GB2-827

Seabees worked through extreme weather conditions and poor CESE availability, to ensure safe travel around the perimeter of Naval Base Guantanamo Bay, Cuba. This improved the Marine Corps' overall response time while patrolling along the perimeter fence line.

Project Scope: Maintain 28 miles of base perimeter roads on both Windward and Leeward.

Personnel: 3

**Duration:** August 2006 - February 2007

Mandays Expended: NMCB FIVE: 251

Cumulative: 251

**Tasking:** WIP at Turnover: 0%

WIP at Completion: 100% MD Tasked to NMCB FIVE: 250 Total Project MD: 250

Material Cost:\$0Cost Savings:\$87,500

**Significant Safety Issues:** Exposed communication wires were a continuous hazard. Marine Corps continued patrolling perimeter roads as roadwork was being conducted.

Significant QC Issues: Inadequate quality of available fill material.

Significant Design Issues: None.

Significant Material Issues: Inadequate fill for roads.





Bridge progress at deployment start.



Bridge progress at deployment completion.

#### REPLACE BRIDGE GB2-882

Seabees worked through extreme weather conditions and logistical issues while constructing the Guantanamo River Bridge for U.S. Naval Station Guantanamo Bay, Cuba. The bridge will improve the security posture by allowing a constant line of sight for the Marine Corps Security Force while patrolling the perimeter fence line.

**Project Scope:** The work included the construction of a new 196 ft. structural steel bridge with timber decking, steel sheet piling bulkheads, timber protection, and related site work.

Personnel: 7

**Duration:** February 2006 - February 2007

Mandays Expended:NMCB THREE:102NMCB SEVEN:454

NMCB FIVE: 769 Cumulative: 1325

Tasking:WIP at Turnover:29%

WIP at Completion: 70%
MD Tasked to NMCB THREE: 102
MD Tasked to NMCB SEVEN: 554
MD Tasked to NMCB FIVE: 700
Total Project MD: 1795

 Material Cost:
 \$866,380

 Cost Savings:
 \$628,250

Significant Safety Issues: Lack of adequate fall protection.

Significant QC Issues: Concrete cylinder testing not funded during concrete phase of construction.

**Significant Design Issues:** Prints and specifications lacked necessary details.

#### **OPERATIONS**







Space after completion.

Space before creation of CMSR.

#### **DETAIL CUBA CAMP MAINTENANCE GB0-300**

#### Camp Maintenance Tasking

PMS WRS 0 0 SJO 0 Projects 186

#### **Total Mandays Expended**

186



Finished detail sign.



#### NMCB FIVE DET CUBA

Labor Distribution Summary

	Aug	Sep	Oct	Nov	Dec	Jan	Feb	Total	%Total
Direct Labor MDs	124	262	210	246	278	243	0	1363	55%
Indirect Labor MDs	120	117	110	158	143	160	28	836	34%
Readiness/Training	42	44	32	49	44	47	5	263	11%
Total MDs Exp	286	423	352	453	465	450	33	2462	100%
# Total Personnel	22	23	24	26	26	26	26	N/A	
# Direct Labor	13	13.5	13.5	15	15	15	15	N/A	
# Workdays	15	24	24	23	24	22	2	134	
% Direct Labor	59%	59%	56%	58%	58%	58%	58%	58%	
Ideal Capability	232	386	386	411	428	393	36	2278	
Availability Factor	72%	79%	63%	72%	75%	74%	14%	64%	

#### **OPERATIONS**



#### **DETAIL ROTA EXECUTIVE SUMMARY**

NMCB FIVE supported Commander, Task Force 68 with a task-tailored detail of 33 Seabees located at Camp Mitchell, Rota, Spain. The primary mission of Detail Rota was support for the TSCP, providing technical construction expertise and logistical support for missions moving "South and East" from Europe. Detail personnel also provided critical support of a Military Operations in Urban Terrain (MOUT) training facility utilized by the USMC Security Company Europe, located at NAVSTA Rota. The 2,300 sq. ft. facility consisted of reinforced concrete, CMU block, and wood-framed roofing system with metal sheeting. In spite of weather delays, the facility was completed within budget and ahead of schedule. Detail Rota completed the Hogan's Alley Project and facilitated logistical support to NMCB FIVE mainbody and detail sites increasing the flow of needed parts and tools. The Seabees maintained an aggressive camp maintenance program in support of FIRST Naval Construction Division (1NCD) and completed three MCD projects and various OIC discretionary project work.





Seabees placing concrete.



Completed building.

# PUBLIC WORKS SUPPORT - HOGAN'S ALLEY SP6-PWD

An initial small crew of three Seabees continued this project after turnover. Upon the completion of DFT New Horizons in September, the crew was increased to 14 Seabees. Crew worked through unusual wet weather conditions to complete a MOUT training facility for Marine Corps Security Company Europe. Project directly increased the capabilities of Commander, Task Force 68 (CTF-68) in support of ongoing operations in the European theater.

**Project Scope:** Construct urban combat training center to include two-story CMU block façade, one-story CMU block building, and two x two-story CMU block buildings to include sitework, concrete pads, stairs, and metal roofs. Additional work by customer includes roads, sidewalks, curbs, covered bleachers, and perimeter security fence.

Personnel: 14

**Duration:** August 2004 - January 2007

Mandays Expended: NMCB FIVE: 723

Cumulative: 3258

Tasking:WIP at Turnover:72%

WIP at Completion: 100% MD Tasked to NMCB FIVE: 977 Total Project MD: 3512

 Material Cost:
 \$257,636

 Cost Savings:
 \$1,229,200

Significant Safety Issues: None.

Significant QC Issues: None.

**Significant Design Issues:** Mid-project customer-driven DCD mandated additional planning and estimating creating project delay.

**Significant Material Issues:** Delivery of poor quality concrete increased setup and finishing times due to contractor providing wrong type of concrete. Inconsistent block sizes and mortar quality created varying bed joint sizes.

#### **OPERATIONS**









Furniture move.

# DETAIL ROTA CAMP MAINTENANCE SP6-300

#### Camp Maintenance Tasking

PMs	0
WRs	12
SJs	74
Projects	203

#### **Total Mandays Expended**

289



**Bravo Company office space renovation.** 

#### **OPERATIONS**









Seabees install a personnel gate.

# DETAIL ROTA OIC DISCRETIONARY PROJECTS SP6-OIC

#### **Project Listing**

Hogan's Alley Interior Walls	37
Bleacher Steel Overheads	42
CTF-68 Perimeter Project	50
Security Shotgun Range	24
EOD Fitness Enhancement	7
Total Mandays Expended	160



Seabees weld an overhead bleacher awning.





#### NMCB FIVE DET ROTA

Labor Distribution Summary

	Aug	Sep	Oct	Nov	Dec	Jan	Feb	Total	%Total
Direct Labor MDs	39	76	207	356	389	346	49	1462	79%
Indirect Labor MDs	26	26	25	44	47	51	6	225	12%
Readiness/Training	11	11	25	47	35	30	3	162	9%
Total MDs Exp	76	113	257	447	471	427	58	1849	100%
# Total Personnel	20	20	26	33	33	32	32	N/A	
# Direct Labor	5	5	10	17	17	16	16	N/A	
# Workdays	15	24	24	24	24	24	3	138	
% Direct Labor	25%	25%	38%	52%	52%	50%	50%	42%	
Ideal Capability	89	143	286	486	486	457	57	2018	
Availability Factor	56%	61%	81%	83%	87%	82%	91%	77%	

#### **OPERATIONS**



#### **DETAIL NEW HORIZONS EXECUTIVE SUMMARY**

NMCB FIVE deployed a 45-person detachment to Lambayeque, Peru as Detail New Horizons 2006 on 10 July 2006 in support of Combined Joint Task Force Puma (CJTF Puma). The Detail was OPCON to CJTF Puma and ADCON to TWO TWO Naval Construction Regiment (22NCR) for duration of mission. Detail was tasked to provide general engineering support to CJTF Puma for the construction of three (3) water wells and two (2) 980 sq. ft. CMU block medical clinics in the vicinity of Chiclayo, Peru. Additional tasking received during deployment included base camp construction and one (1) 1800 CMU block schoolhouse due to limitations in Task Force personnel approved for deployment. Marines originally tasked with schoolhouse were not approved on final Peruvian Country Clearance Authorization.

Illness, primarily gastro-intestinal, was prevalent throughout the exercise. The root cause was determined to be a protozoa parasite (*Crypto Spiridia*) and resulted in 150 liters of intravenous fluids administered to Seabees over the course of the exercise. One Seabee was evacuated to Lima for acute appendicitis.

44





Seabees placing concrete.



Completed clinic.

#### **HUACA TRAPICHE CLINIC AP6-800**

Seabees from NMCB FIVE worked twelve hour days and seven days a week with numerous logistical and design changes to provide the community of Huaca Trapiche with a two room medical clinic. This project will significantly impact the local population's ability to receive and provide adequate medical care.

Project Scope: Construct a 980 sq. ft. (28 ft. x 35 ft) two room clinic to include placement of 196 cu. yd. of select fill, 35 cu. yd. of concrete, 2100 CMU block, interior plumbing, electrical, finishes, and a steel roof structure. Exterior and interior painted to match surrounding village.

Personnel:

**Duration:** July 2006 - September 2006

Mandays Expended: NMCB FIVE: 412

Cumulative: 412

Tasking: WIP at Turnover: 0%

WIP at Completion: 100% MD Tasked to NMCB FIVE: 418 Total Project MD: 418

**Material Cost:** \$58.864 \$146,300 **Cost Savings:** 

Significant Safety Issues: None.

Significant QC Issues: None.

Significant Design Issues: Poor design and coordination with a constant changing scope of work.

Significant Material Issues: CMU block purchased locally was not a standard size causing issues with layout and construction of the building.





Seabees placing concrete.



Completed clinic.

## MONTE HERMOSO CLINIC AP6-801

Seabees from NMCB FIVE worked twelve hour days and seven days a week with numerous logistical and design changes to provide the community of Monte Hermoso with a two room medical clinic. This project will significantly impact the local population's ability to receive and provide adequate medical care.

**Project Scope:** Construct a 980 sq. ft. (28 ft. x 35 ft) two room clinic to include placement of 196 cu. yd. of select fill, 35 cu. yd. of concrete, 2100 CMU block, interior plumbing, electrical, finishes, and a steel roof structure. Exterior and interior painted to match surrounding village.

Personnel: 8

**Duration:** July 2006 - September 2006

Mandays Expended:NMCB FIVE:361Cumulative:361

**Tasking:** WIP at Turnover: 0%

WIP at Completion: 100% MD Tasked to NMCB FIVE: 418 Total Project MD: 418

 Material Cost:
 \$58,864

 Cost Savings:
 \$146,300

Significant Safety Issues: None.

Significant QC Issues: None.

Significant Design Issues: Poor design and coordination with a constant changing scope of work.

**Significant Material Issues:** CMU block purchased locally was not a standard size causing issues with layout and construction of the building.





Casing drilled well.



Completed water well.

#### NORIA NUEVA WELL AP6-802

NMCB FIVE Seabees worked twelve hour days and seven days a week with numerous logistical and design changes to provide the community of Noria Nueva with water well capabilities. This project will significantly impact the local population's health and living conditions.

**Project Scope:** Construct a 185 ft. well to include a 20 ft. sump, 100 ft. of screened aquifer, 65 ft. of blanks and well head. Install a 4 ft. x 4 ft. concrete pad and Baker hand pump. Turnover well to Host Nation following completion of potable water tests.

Personnel: 16

**Duration:** August 2006

Mandays Expended: NMCB FIVE: 165 Cumulative: 165

**Tasking:** WIP at Turnover: 0%

WIP at Turnover.

WIP at Completion:

100%

MD Tasked to NMCB FIVE:

330

Total Project MD:

330

 Material Cost:
 \$12,000

 Cost Savings:
 \$115,500

Significant Safety Issues: None.

Significant QC Issues: None.

Significant Design Issues: None.





Seabees place concrete.



Completed water well.

#### ANCHOVIRA WATER WELL AP6-803

NMCB FIVE Seabees worked twelve hour days and seven days a week with numerous logistical and design changes to provide the community of Anchovira with water well capabilities. This project will significantly impact the local population's health and living conditions.

**Project Scope:** Construct a 240 ft. water well to include a 20 ft. sump, 100 ft. of screened aquifer, 120 ft. of blanks, and well head. Install a 4 ft. x 4 ft. concrete pad and Baker hand pump. Turnover well to Host Nation following completion of potable water tests.

Personnel: 17

**Duration:** July 2006 - August 2006

Mandays Expended:NMCB FIVE:251Cumulative:251

Tasking: WIP at Turnover: 0%

WIP at Completion: 100% MD Tasked to NMCB FIVE: 330 Total Project MD: 330

 Material Cost:
 \$13,000

 Cost Savings:
 \$115,500

Significant Safety Issues: None.

Significant QC Issues: None.

Significant Design Issues: None.





Seabees casing well.



Completed water well.

#### ANAPE WATER WELL AP6-804

NMCB FIVE Seabees worked twelve hour days and seven days a week with numerous logistical and design changes to provide the community of Anape with water well capabilities. This project will significantly impact the local population's health and living conditions.

**Project Scope:** Construct a 185 ft. well to include a 20 ft. sump, 100 ft. of screened aquifer, 65 ft. of blanks and well head. Install a 4 ft. x 4 ft. concrete pad and Baker hand pump. Turnover well to Host Nation following completion of potable water tests.

Personnel: 8

**Duration:** July 2006 - September 2006

Mandays Expended: NMCB FIVE: 246 Cumulative: 246

**Tasking:** WIP at Turnover: 0%

WIP at Completion: 100% MD Tasked to NMCB FIVE: 330 Total Project MD: 330

 Material Cost:
 \$13,000

 Cost Savings:
 \$146,300

Significant Safety Issues: None.

Significant QC Issues: None.

Significant Design Issues: None.





Seabees placing concrete.



Completed school.

#### HORNITOS SCHOOL PROJECT AP6-805

NMCB FIVE Seabees worked twelve hour days and seven days a week with numerous logistical, material and design issues to complete the Hornitos school project (initially tasked to a Marine reserve unit). The project greatly increased the capability of the local village's educational opportunities.

**Project Scope:** Construction of a 1,740 sq. ft. (30 ft. x 58 ft.) two-room school to include placement of 196 cu. yd. of select fill, 42 cu. yd. of concrete, 2,400 CMU block, electrical, finishes, a steel roof structure and flagpole. Exterior and interior painted to match surrounding village.

Personnel: 8

**Duration:** August 2006 - September 2006

Mandays Expended:NMCB FIVE:283Cumulative:283Tasking:WIP at Turnover:0%

WIP at Completion: 100% MD Tasked to NMCB FIVE: 433 Total Project MD: 433

 Material Cost:
 \$128,233

 Cost Savings:
 \$147,000

**Significant Safety Issues:** Fatigue while driving in Peru, especially at night, was a constant concern during hour long commutes following an extended workday.

Significant QC Issues: None.

**Significant Design Issues:** The design and scope of work was not clear and continually changed until the last few days of construction.

**Significant Material Issues:** Materials were not on site when required and continued to arrive until project completion. BOM was not properly received by the Task Force BOM manager and contained many shortages and deficiencies that caused work delays.





#### NMCB FIVE DET NEW HORIZONS 06

Labor Distribution Summary

	Aug	Sep	Oct	Nov	Dec	Jan	Feb	Total	%Total
Direct Labor MDs	642	638						1280	62%
Indirect Labor MDs	582	104						685	33%
Readiness/Training	71	40						111	5%
Total MDs Exp	1294	782	0	0	0	0	0	2076	100%
# Total Personnel	45	45						N/A	
# Direct Labor	40	40						N/A	
# Workdays	30	26						56	
% Direct Labor	89%	89%						89%	
Ideal Capability	1428	1238						2666	
Availability Factor	50%	55%						52%	





#### **CONTINGENCY OPERATIONS SUMMARY MATRIX**

Project Number	Total Project Mandays	Total Project Material Cost (\$)	Mandays Tasked	Tasked %	Final WIP %	Mandays Expended by prior NMCBs	Mandays expended this deployment
AJ6-001	108	0	108	100	100	0	108
AJ6-085	417	68,850	278	100	100	139	278
AJ6-127	897	53,164	897	100	100	0	903
AJ6-131	2942	1,000	2,942	100	100	0	285
AJ6-135	163	8,000	187	87	87	0	325
AJ6-160	849	40,000	849	100	100	0	636
AJ6-170	511	12,500	511	100	100	0	528
AJ6-171	511	12,500	511	100	100	0	442
AJ6-174	87	0	87	100	100	0	87
AJ6-186	327	450,000	327	100	100	0	272
AJ6-192	105	0	105	100	100	0	101
AJ6-197	542	12,500	542	100	100	0	272
AJ6-198	542	12,500	542	100	100	0	243
AJ6-199	50	68,569	50	100	100	0	50
AJ7-003	96	0	96	100	100	0	96
AJ7-008	50	0	50	100	100	0	50
AJ7-009	211	190,250	211	100	100	0	211
AJ7-012	50	85,750	50	100	100	0	50
AJ7-014	75	1,164	75	100	100	0	75
AJ7-017	65	0	65	100	100	0	65
AJ7-018	118	139,650	118	100	100	0	118
AJ7-022	96	0	96	100	100	0	96
AJ7-031	105	0	105	100	100	0	105
AJ7-032	88	66,555	88	100	100	0	88
AJ7-033	51	0	51	100	100	0	51
AJ7-049	55	0	55	100	100	0	55
AJ7-064	28	12,500	28	16	16	0	28
AJ7-072	269	0	269	77	77	0	269
AJ7-073	45	28,000	45	100	100	0	45
BU5-055	1174	155,132	778	66	66	0	720
BU5-244	1640	725,000	22	100	100	1,618	13
BU5-374	700	53,534	70	100	100	663	110
BU6-049	680	20,684	252	100	100	428	290
BU6-067	530	0	62	12	12	0	99
BU6-077	1200	735,200	720	100	100	470	548
BU6-157	50	0	50	100	100	0	41
BU6-162	652	335,691	589	90	90	0	418



Project Number	Total Project Mandays	Total Project Material Cost (\$)	Mandays Tasked	Tasked %	Final WIP %	Mandays Expended by prior NMCBs	Mandays expended this deployment
BU6-164	650	0	598	100	100	52	450
BU6-173	246	0	246	100	100	0	142
BU6-182	178	29,750	178	100	100	0	257
BU6-183	150	17,000	150	100	100	0	146
BU6-195	365	17,788	365	100	100	0	212
BU7-002	98	0	98	100	100	0	98
BU7-023	99	0	99	100	100	0	67
BU7-024	220	35,000	220	100	100	0	270
BU7-027	623	0	623	100	100	0	274
BU7-034	87	20,000	87	100	100	0	55
BU7-038	48	0	48	100	100	0	31
BU7-042	220	0	220	100	100	0	41
BU7-043	300	0	300	100	100	0	41
BU7-052	84	29,819	84	100	100	0	48
BU7-088	78	0	53	68	68	0	57
OIC-001	477	35,000	200	100	100	277	210
CV5-830	496	82,105	286	70	70	377	315
CV5-835	350	33,039	27	100	100	323	34
CV6-032	363	25,000	363	100	100	0	327
CV6-058	206	11,381	98	100	100	108	214
CV6-084	427	6,842	303	100	100	217	391
CV6-088	484	0	484	100	100	0	221
CV6-111	427	37,231	303	100	100	44	118
CV6-137	120	9,797	120	100	100	0	135
CV6-158	315	2,500	315	100	100	0	277
CV6-167	52	2,000	52	100	100	0	68
CV6-168	65	1,500	65	100	100	0	45
CV6-169	72	0	72	100	100	0	123
CV7-025	197	20,000	197	100	100	0	137
CV7-303	55	34,000	55	100	100	0	62
OIC DISC	150	20,000	150	100	100	0	159
DJ6-049	405	225,000	405	100	100	0	405
DJ6-050	551	101,425	551	100	100	0	835
DJ6-085	167	36,423	167	100	100	0	291
DJ6-087	68	3,971	68	100	100	0	71
DJ6-132	371	53,864	371	100	100	0	429
DJ6-902	198	0	198	100	100	0	198



Project Number	Total Project Mandays	Total Project Material Cost (\$)	Mandays Tasked	Tasked %	Final WIP	Mandays Expended by prior NMCBs	Mandays expended this deployment
DJ6-903	132	0	132	100	100	0	132
DJ6-904	446	1,013,130	446	100	100	0	718
DJ6-905	161	82,434	161	100	100	0	237
DJ6-906	493	123,651	493	100	100	0	643
DJ6-907	1,222	0	1,222	100	100	0	917
DJ6-909	1,582	0	1,582	100	52	0	1,260
DJ6-910	443	120,000	148	100	100	0	148
DJ6-951	287	23,583	287	100	100	0	365
DJ6-952	270	10,000	270	100	100	0	270
DJ7-901	293	0	293	100	100	0	263
AF6-900	315	0	315	100	100	0	267
AT7-901	728	260,000	728	100	100	0	728
AT7-903	315	57,000	315	100	100	0	315
AT7-905	200	35,000	200	100	100	0	200
AT7-915	40	46,000	40	100	100	0	40
AT7-929	35	66,000	35	100	100	0	35
AT7-944	60	8,700	60	100	100	0	60
AT7-957	95	37,000	95	100	100	0	95
BA6-901	96	0	96	100	100	0	64
BA6-904	158	0	158	100	100	0	186
TL6-901	610	148,000	610	100	100	0	390
TOTAL	1,738	3,288,693	1,712			3,318	8,171





Leveling the gravel prior to AM2 placement.



Completed AM2 placement.

## AM2 MATTING PLACEMENT PROJECT AJ6-001

NMCB FIVE and TWO ONE Seabees worked night shifts due to extreme heat to convert gravel foot paths into AM2 matting walk ways. The project improved the living conditions and morale of troops occupying the Zone VI at Camp Arifjan and provided better accessibility to the PCB area, DFAC and area in front of the performance stage.

**Project Scope:** Place AM2 matting in various common areas of Zone VI providing a stable traffic corridor for troop's safety. Project consists of 308 sq. m of plywood demolition in DFAC area, clear and level a 2,613 sq. m area, installation of 1,774 x 1.27 m x 1.27 m AM2 sheets and placement of over 4,000 sand bags to reinforce AM2 matting joints.

Personnel: 10

**Duration:** August 2006 - September 2006

Mandays Expended:NMCB FIVE:108Cumulative:108

Sumulative. 100

**Tasking:** WIP at Turnover: 0%

WIP at Completion: 100%
MD Tasked to NMCB FIVE: 108
Total Project MD: 108

Material Cost: \$0 Cost Savings: \$37,800

**Significant Safety Issues:** None.

Significant QC Issues: None.

Significant Design Issues: None.

**Significant Material Issues:** Shortage of locking pins altered the method of connecting each AM2 mat with additional sand bag reinforcement for stability.





Manhole excavation.



Concrete placement prior to back fill.

# ZONE VI, COMMUNICATION UPGRADE PROJECT AJ6-085

Seabees worked night shift due to extreme weather conditions in Camp Arifjan, Kuwait in order to complete the joint communication upgrade project with Army 54<sup>th</sup> Signal Battalion. The project increased the communication capabilities across Camp Arifjan.

**Project Scope:** Perform survey, excavation, and various manhole/handhole installation in support of Zone VI. Project included excavation of 3,325 LM of trench, placement of seven (7) 12 ft. x 7 ft. x 7 ft. manholes, and thirty-five (35) 4 ft. x 4 ft. x 4 ft. hand holes. All materials, conduit installation, electrical work, and cable pulling was supported by the 54<sup>th</sup> Signal Battalion.

Personnel: 8

**Duration:** July 2006 - October 2006

Mandays Expended: NMCB SEVEN: 139

NMCB FIVE: 278 Cumulative: 417

**Tasking:** WIP at Turnover: 39%

WIP at Completion: 100%
MD Tasked to NMCB SEVEN: 139
MD Tasked to NMCB FIVE: 278
Total Project MD: 417

 Material Cost:
 \$69,850

 Cost Savings:
 \$145,950

Significant Safety Issues: Location of undergound utilities was not known as work progressed.

**Significant QC Issues:** Maintaining 30 degree tolerance in reference to max bend in PVC conduit and trench depth within +/- ½ in. tolerance of 42 in. depth.

Significant Design Issues: None.

#### **CONTINGENCY OPERATIONS**



Seabees complete catch basin.



Completed pad.

#### D.U.S.T. WASH PAD AND CATCH BASIN AJ6-127

Integrated Active Duty and Reserve Seabees worked through extreme weather conditions in a contingency environment to complete a Wash Basin for D.U.S.T civilian organization on base. The project increased the capabilities of the D.U.S.T facility, which reutilizes military equipment from Iraq in direct support of Operation Iraqi Freedom.

**Project Scope:** Construct 95 ft. x 80 ft. x 6 in. reinforced concrete drying / wash pad and 20 ft. x 10 ft. x 5 ft. concrete catch basin adjacent to D.U.S.T. Warehouse. Project includes site preparation to achieve proper elevation and slope toward catch basin, installation of handrails around catch basin and access ladder into pit.

Personnel: 15

**Duration:** August 2006 - November 2006

Mandays Expended:NMCB FIVE:903Cumulative:903

Surrulative. 903

**Tasking:** WIP at Turnover: 0%

WIP at Completion: 100% MD Tasked to NMCB FIVE: 897 Total Project MD: 897

 Material Cost:
 \$53,164

 Cost Savings:
 \$314,300

Significant Safety Issues: None.

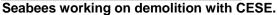
**Significant QC Issues:** Poor quality concrete resulted in inconsistent finishes.

Significant Design Issues: None.

**Significant Material Issues:** Quality of the concrete provided by contractors varied from truck to truck. Additionally, initial lumber supply was low quality making planned reuse of forms difficult.

#### **CONTINGENCY OPERATIONS**







Seabee grading new pad.

## AMMO STORAGE PAD AND BERM RECONSTRUCTION AJ6-131 / AJ6-108

Combined force of Active and Reserve Seabees reduced the footprint of ammo pad by reconfiguing the pad area. The excess land will be returned to Kuwaiti government. Footprint will be reduced from 1,230 ac to 628 ac.

**Project Scope:** Remove fence, berms, c-wire, fill in old water retention ponds, and grade site to restore site to original condition. Construct new ammo storage pads out of gravel and getch mixture, construct new perimeter berm and fence, construct new road network out of gravel and getch, and excavate water retention ponds around new ammo storage pads. Relocate existing security towers to new locations. Remove and recycle gravel from existing storage pads and road network.

Personnel: 12

**Duration:** September 2006 - November 2006

Mandays Expended: NMCB FIVE: 285

Cumulative: 285

Tasking: WIP at Turnover: 0%

WIP at Completion: 100% MD Tasked to NMCB FIVE: 2942 Total Project MD: 2942

 Material Cost:
 \$1,000

 Cost Savings:
 \$99,750

Significant Safety Issues: None.

Significant QC Issues: None.

**Significant Design Issues:** No Host Nation approval. Project on hold indefinitely.





Setting washing machine pad.



Completed floor and washer pad.

#### BUILDING 150 LAUNDRY FACILITY AJ6-135

Integrated Active Duty and Reserve Seabees worked together to transform a barracks room into a laundry facility for the personnel living in Building 150. The project improved morale of the personnel and the surrounding tenants by increasing laundry access.

**Project Scope:** Demolish interior room to construct a laundry facility within existing building. Project includes partition wall construction with applicable finishes, plumbing and electrical installation for 6 washing machines, 5 stackable dryers, and new lighting.

Personnel: 10

**Duration:** August 2006 - November 2006

 Mandays Expended:
 NMCB FIVE: 325

 Cumulative:
 325

 Tasking:
 WIP at Turnover: 0%

 WIP at Completion: 87%

MD Tasked to NMCB FIVE: 163
Total Project MD: 187

 Material Cost:
 \$8,000

 Cost Savings:
 \$57,050

**Significant Safety Issues:** Working in close quarter requires special attention to job site cleanliness, hearing protection, and attention to detail when lifting and moving items in the work area.

Significant QC Issues: None.

**Significant Design Issues:** Design provided to NMCB was inadequate to anticipate existing room conditions. Lack of concrete floor slab and existing plumbing caused delays as work crew adjusted to adapt existing plumbing to anticipated plumbing.

**Significant Material Issues:** Local vendors had difficulty meeting the electrical and plumbing material requirements necessitating inspection of all incoming material to ensure quality.

#### **CONTINGENCY OPERATIONS**



Initial site.



Completed pad.

#### ENGINEERING LAMS PAD AJ6-160

Integrated Active Duty and Reserve Seabees worked through extreme weather conditions in a contingency environment to complete a concrete Large Area Maintenance (LAM) pad. The project was the first of many pads at the new engineering camp site.

**Project Scope:** Perform site grading, surveying and foundation preparation for one (1) Large Area Maintenance (LAM) facility. Lay out, form and place concrete for 100 ft. x 150 ft. x 8 in. pad.

Personnel: 12

**Duration:** August 2006 - November 2006

Mandays Expended: NMCB FIVE: 636

Cumulative: 636

**Tasking:** WIP at Turnover: 0%

WIP at Completion: 100% MD Tasked to NMCB FIVE: 849 Total Project MD: 849

 Material Cost:
 \$40,000

 Cost Savings:
 \$297,150

Significant Safety Issues: None.

**Significant QC Issues:** Concrete set time is very fast during summer months. Ensure concrete was placed at night and tested at a 5-1/2 in. slump to prevent cracks in the concrete.

**Significant Design Issues:** Provided drawings were inadequate and required significant re-work during project planning.

**Significant Material Issues:** Low quality lumber required expending mandays straightening warped wood for the forms.

#### **CONTINGENCY OPERATIONS**



Seabees laying out track.



Completed central hallway.

#### BUILD OUT OF PCB 1201 AJ6-170

Integrated Active Duty and Reserve Seabees completed an interior build-out of an existing Pre-Cast Building (PCB) and convert it into nine separate living quarters for senior soldiers living in PCB 1201. The project increased the moral of the personnel and the entire base.

**Project Scope:** Interior vertical construction in existing PCB number 1201 located in Zone VI. Work to include interior build-out to facilitate nine-(9) separated berthing compartments and one open common area with all associated wiring and appurtenances. Specifically, 320 LF of 8 ft. tall wall partition, 52 duplex receptacles, 9 individual wall switches, and miscellaneous wiring, painting, and trim.

Personnel: 12

**Duration:** August 2006 - October 2006

Mandays Expended: NMCB FIVE: 528

Cumulative: 528

**Tasking:** WIP at Turnover: 0%

WIP at Completion: 100% MD Tasked to NMCB FIVE: 511 Total Project MD: 511

Material Cost: \$12,500 Cost Savings: \$178,850

Significant Safety Issues: None.

Significant QC Issues: None.

**Significant Design Issues:** Resulting light pattern is not conducive to new room layout. Field adjustment request was approved to realign light fixtures for future PCBs.

**Significant Material Issues:** Quality of drywall varies. Drywall dimensions are not uniform and some drywall was delivered damaged.





Erecting metal studs.



Final product.

#### BUILD OUT OF PCB 1103 AJ6-171

Integrated Active Duty and Reserve Seabees completed an interior build-out of an existing Pre-Cast Building (PCB) and convert it into nine separate living quarters for soldiers living in PCB 1103. The project increased the morale of the personnel and the entire base.

**Project Scope:** Interior vertical construction in existing PCB number 1103 located in Zone VI. Work to include interior build-out to facilitate nine-(9) separated berthing compartments and one open common area with all associated wiring and appurtenances. Specifically, 320 LF of 8 ft. tall wall partition, 52 duplex receptacles, 9 individual wall switches and miscellaneous wiring, painting and trim.

Personnel: 9

**Duration:** September 2006 - November 2006

Mandays Expended: NMCB FIVE: 442

Cumulative: 442

**Tasking:** WIP at Turnover: 0%

WIP at Completion: 100% MD Tasked to NMCB FIVE: 511 Total Project MD: 511

Material Cost: \$12,500 Cost Savings: \$178,850

Significant Safety Issues: None.

Significant QC Issues: None.

**Significant Design Issues:** New light pattern used on this PCB improves light dispersion between rooms. Repeated EOD explosions in base vicinity can cause cracks in the drywall. Future PCBs will utilize alternative drywall placement method (ie. Slapstud versus California Corners).

**Significant Material Issues:** Quality of drywall varies. Drywall dimensions are not uniform and must be measured prior to erecting wall studs.





Completed northeast corner.



Completed interior walkway.

# INSTALL WOOD DECKING ON GROUND FLOOR OF POD'S AJ6-174

Integrated Active Duty and Reserve Seabees worked in Camp Arifjan to install wood decking on the ground floor of the senior officer and enlisted personnel quarters. The distance to ground exceeded building construction standards and area would be a hazard during the wet season.

**Project Scope:** Install wood decking on the ground floor of Senior Officer/SGM's PODs. Wood decking shall consist of minimum 2 in. thick (nominal) lumber and shall be attached to the columns supporting the mezzanine for the second floor.

Personnel: 7

**Duration:** November 2006

Mandays Expended: NMCB FIVE: 87

Cumulative: 87

Tasking: WIP at Turnover: 0%

WIP at Completion: 100% MD Tasked to NMCB FIVE: 87 Total Project MD: 87

Material Cost: No Information

Cost Savings: \$30,450

Significant Safety Issues: None.

Significant QC Issues: None.

Significant Design Issues: None.

Significant Material Issues: Wood quality varied. Crew inspected wood when vendor delivered it and

rejected if warped.

#### **CONTINGENCY OPERATIONS**



Structure erection.



Completed exterior.

#### SPRUNG STRUCTURE AJ6-186

Integrated Active Duty and Reserve Seabees worked expeditiously to erect a high priority sprung structure for an Army Dive Unit. This project is located at Kuwaiti Naval Base (KNB) and was utilized to prolong critical diving equipment exposed to the elements.

**Project Scope:** Erection of 90 ft. x 135 ft. prefabricated structure on existing Kuwaiti slab located at KNB. Construct with technical representative assistance. Sandbags placed around perimeter of structure to prevent water infiltration into the structure.

Personnel: 12

**Duration:** October 2006 - November 2006

 Mandays Expended:
 NMCB FIVE:
 272

 Cumulative:
 272

 Tasking:
 WIP at Turnover:
 0%

 WIP at Completion:
 100%

WIP at Completion: 100% MD Tasked to NMCB FIVE: 327 Total Project MD: 327

 Material Cost:
 \$450,000

 Cost Savings:
 \$114,450

**Significant Safety Issues:** Over 50% of work was completed using man lifts. Proper safety gear was worn and qualified personnel operated lifts.

Significant QC Issues: None.

**Significant Design Issues:** Sprung Company drawings were not sufficient to erect structure. Technical Representative was on site during all phases of construction.

**Significant Material Issues:** Sprung tents did not come with a full electrical suite. Sprung will only provide lights. Wire, panel boxes, power source, and receptacles, were not included in package.





Trailers after relocation.



Relocated trailer with complete plumbing.

## ZONE VI RELOCATE THREE LAUNDRY TRAILERS AJ6-192

Integrated Active Duty and Reserve Seabees worked in a contingency environment to complete a relocation of three laundry trailers in accordance with Zone VI Camp Master Plan. Project decreased camp costs by eliminating the need for a gray water storage tank in the area saving Camp Arifjan \$2,500 a day in water disposal costs.

**Project Scope:** Relocate three (3) laundry trailers from 1100 block PCB's to the west end of the service trailer line for the 1200 block PCB's. Included disconnection of existing electrical power and water service, and reconnection of the same.

Personnel: 6

**Duration:** January 2007

Mandays Expended: NMCB FIVE: 101

Cumulative: 101

Tasking:WIP at Turnover:0%WIP at Completion:100%

WIP at Completion: 100% MD Tasked to NMCB FIVE: 105 Total Project MD: 105

Material Cost: \$0

**Cost Savings:** \$36,750

**Significant Safety Issues:** Lifting and moving trailers are a high risk activity that required cordoning off significant area around the work site and ensuring personnel are not in surrounding trailers.

Significant QC Issues: None.

**Significant Design Issues:** Coordinated with DPW and FET to design new electrical run to the relocated trailers. Existing electrical grid could not support the trailers at the new location.





Mudding hallway drywall.



Completed hallway.

#### BUILD OUT OF PCB 1114 AJ6-197

Integrated Active Duty and Reserve Seabees completed a re-model of an existing Pre-Cast Building (PCB) and convert it into nine separate living quarters for soldiers living in PCB 1114. The project increased the morale of the personnel and the entire base.

**Project Scope:** Interior vertical construction in existing PCB number 1114 located in Zone VI. Work to include interior build-out to facilitate nine-(9) separated berthing compartments and one open common area with all associated wiring and appurtenances. Specifically, 320 LF of 8 ft. tall wall partition, 52 duplex receptacles, 9 individual wall switches and miscellaneous wiring, painting and trim.

Personnel: 9

**Duration:** November 2006 - January 2007

Mandays Expended: NMCB FIVE: 272

Cumulative: 272

Tasking: WIP at Turnover: 0%

WIP at Completion: 100% MD Tasked to NMCB FIVE: 542 Total Project MD: 542

 Material Cost:
 \$12,500

 Cost Savings:
 \$189,700

Significant Safety Issues: None.

Significant QC Issues: None.

**Significant Design Issues:** Drywall placed horizontal vice vertical to better prevent cracking during ordinance disposal evolutions. California corners were maintained for this PCB.

**Significant Material Issues:** Quality of drywall varies. Drywall dimensions not uniform and must be measured prior to erecting wall studs.

#### **CONTINGENCY OPERATIONS**



Hallway stud layout.



Completed room.

#### BUILD OUT OF PCB 1124 AJ6-198

Integrated Active Duty and Reserve Seabees completed a re-model of an existing Pre-Cast Building (PCB) and convert it into nine separate living quarters for soldiers living in PCB 1124. The project increased the morale of the personnel and the entire base.

**Project Scope:** Interior vertical construction in existing (PCB) number 1124 located in Zone VI. Work to include interior build-out to facilitate nine (9) separated berthing compartments and one open common area with all associated wiring and appurtenances. Specifically, 320 LF of 8 ft. tall wall partition, 52 duplex receptacles, 9 individual wall switches and miscellaneous re-wiring, painting and trim.

Personnel: 9

**Duration:** November 2006 - January 2007

Mandays Expended: NMCB FIVE: 243

Cumulative: 243

Tasking: WIP at Turnover: 0%

WIP at Completion: 100% MD Tasked to NMCB FIVE: 542 Total Project MD: 542

 Material Cost:
 \$12,500

 Cost Savings:
 \$189,700

Significant Safety Issues: None.

Significant QC Issues: None.

**Significant Design Issues:** Drywall was installed horizontally using slapstud vice California corner technique. Intent is to strengthen walls against shock damage caused by EOD operations.

**Significant Material Issues:** Quality of drywall varied. Drywall dimensions were not uniform and must be measured prior to erecting wall studs.

#### **CONTINGENCY OPERATIONS**



Seabees grading the MP-1 lot.



Completed project.

#### EXPANSION GRADING IN MP-1 AJ6-199

Combined force of Active and Reserve Seabees expanded MP-1 area by 14,000 sq. m. Site grading will alleviate drainage problems experienced currently. Gravel will be placed to avoid erosion and rutting, a detriment to the convoy operations.

**Project Scope:** Perform grading to alleviate drainage problems and prepare 14,000 sq. m area for gatch and gravel installation. Grading shall be completed from the current MP-1 fence to the edge of Hawaii perimeter road in order to allow proper drainage. Gatch and gravel shall be laid to a depth of 8 in. (two 4 in. lifts) in the fenced area and tie into the existing gravel area.

Personnel: 4

**Duration:** January 2007

Mandays Expended: NMCB FIVE: 50

Cumulative: 50

Tasking: WIP at Turnover: 0%

WIP at Completion: 100% MD Tasked to NMCB FIVE: 50 Total Project MD: 50

 Material Cost:
 \$68,569

 Cost Savings:
 \$17,500

Significant Safety Issues: None.

Significant QC Issues: None.

Significant Design Issues: None.





Seabees placing first pad.



Completed pad.

# DETENTION CENTER FLOORS AJ7-003

Integrated Active Duty and Reserve Seabees worked in conjunction with local contractors to complete the new Tents G & H that are utilized as pre-trial containment locations from other inmates. Existing floors were rotten and contained mold. Elevated concrete floors eliminated this problem.

**Project Scope:** Pour two concrete pads for the placement of tents at the detention facility. Pads will be 20 ft. x 32 ft. with 6 ft. x 14 ft. entrance platform. Pads will be 4 in. thick.

Personnel: 8

**Duration:** November 2006 - January 2007

Mandays Expended: NMCB FIVE: 110

Cumulative: 110

Tasking: WIP at Turnover: 0%

WIP at Completion: 100% MD Tasked to NMCB FIVE: 96 Total Project MD: 96

Material Cost: No Information

**Cost Savings:** \$33,600

**Significant Safety Issues:** Limited work space caused a safety issue, especially with Bobcat operations. The Bobcat required a ground guide and all personnel had to exercise situational awareness of their surroundings.

**Significant QC Issues:** There is limited space around pads to work bull floats during concrete placements. Space around pads is approximately 8 ft. per side.

Significant Design Issues: None.





Containers filled with sand.



Completed demolition and clean up.

# REMOVE ELEVEN SAND FILLED CONTAINERS FROM CAMP DOHA AJ7-008

Combined force of Active and Reserve Seabees removed containers to complete Camp Doha turnover to Kuwait. This project had command attention due to the potential of additional costs for use of this property.

**Project Scope:** Perform demolition of eleven sand-filled sea containers. Containers to be cut open from the side and sand distributed on a lot adjacent to Camp Doha. Empty containers to be dismantled and relocated to DRMO at Camp Arifian.

Personnel: 8

**Duration:** November 2006

Mandays Expended: NMCB FIVE: 50

Cumulative: 50

**Tasking:** WIP at Turnover: 0%

WIP at Completion: 100% MD Tasked to NMCB FIVE: 50 Total Project MD: 50

Material Cost: \$0 Cost Savings: \$17,500

Significant Safety Issues: Extra care required due to close proximity of residential area.

Significant QC Issues: None.

Significant Design Issues: None.

#### **CONTINGENCY OPERATIONS**



A Seabee grading the container lot surface.



Completed project.

## CONTAINER LOT SURFACE HARDENING: LOTS 2, 3P, 4 AJ7-009 / AJ7-019 / AJ7-020

Combined force of Active and Reserve Seabees improved strength and drainage of the lot surface while reducing the dust hazard. Work will facilitate expedient extraction and placement of stockpiled material by container lot equipment.

**Project Scope:** Perform necessary earthwork to prepare conditioned surface roadways and staging areas. Clear and grub, place 6-8 in. sub-base of compacted gatch and gravel, place minimum 1.5 in. layer of additional gravel top coat / wearing surface using 15,000 cu. yd. of material.

Personnel: 8

**Duration:** November 2006 - January 2007

 Mandays Expended:
 NMCB FIVE:
 211

 Cumulative:
 211

 Tasking:
 WIP at Turnover:
 0%

 WIP at Completion:
 100%

WIP at Completion: 100% MD Tasked to NMCB FIVE: 211 Total Project MD: 211

 Material Cost:
 \$190,250

 Cost Savings:
 \$73,850

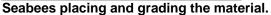
**Significant Safety Issues:** Significant heavy equipment traffic required coordination during container relocation.

Significant QC Issues: None.

**Significant Design Issues:** Lack of detailed design specification and unexpected scope change created confusion of work site boundaries.

#### **CONTINGENCY OPERATIONS**







Completed project.

## KCIA OUTBOUND PERSONNEL LOT DRAINAGE AJ7-012

Combined force of Active and Reserve Seabees performed the work prevent significant water ponding during the wet season. This project eliminated the US FDA's concern about the redeploying soldiers importing soil to the United States.

**Project Scope:** Grade and level 100 yd. x 75 yd. area to divert drainage away from parking and PAX area, and provide minimum 2 in. gravel cover. Limited surveying and minor ditching required to divert water from the up-grade parking lot.

Personnel: 8

**Duration:** November 2006

Mandays Expended: NMCB FIVE: 50

Cumulative: 50

**Tasking:** WIP at Turnover: 0%

WIP at Completion: 100% MD Tasked to NMCB FIVE: 50 Total Project MD: 50

 Material Cost:
 \$85,750

 Cost Savings:
 \$17,500

Significant Safety Issues: None.

Significant QC Issues: None.

Significant Design Issues: Changing and growing scope required rework.





Installing sunshade.



Completed sunshade.

# ZONE VI, ATHLETIC BENCHES AND SUNSHADE AJ7-014

Integrated Active Duty and Reserve Seabees worked to enhance the quality of life at the ball field in Zone VI. The field can support team events with benches and shade structures for additional command personnel to sit comfortably and not be unduly affected by the direct sunlight.

**Project Scope:** Construct and install two sunshades for the existing bleachers and install two team aluminum benches at the Zone VI Athletic Field.

Personnel: 5

**Duration:** January 2007

Mandays Expended: NMCB FIVE: 52

Cumulative: 52

**Tasking:** WIP at Turnover: 0%

WIP at Completion: 100% MD Tasked to NMCB FIVE: 75 Total Project MD: 75

Material Cost:\$1,164Cost Savings:\$26,250

**Significant Safety Issues:** Exercised caution when welding top of placed sunshade. Crew ensured adequate fencing due to personnel exercising near the project site.

Significant QC Issues: None.

Significant Design Issues: None.

#### **CONTINGENCY OPERATIONS**



Completed exterior of phone center.



Completed interior of phone center.

## MWR WALL PARTITION AJ7-017

Integrated Active Duty and Reserve Seabees worked to enhance the quality of life for personnel living at Zone VI. The community center's phone center and television viewing area, pool tables, and gaming area were co-located in a large room. The wall partition will provide greater privacy for personnel utilizing phones in the community center.

**Project Scope:** Construct a partition wall in the Zone Six MWR building that will separate the phone call area from the television viewing area.

Personnel: 5

**Duration:** November - December 2006

Mandays Expended: NMCB FIVE: 65

Cumulative: 65

**Tasking:** WIP at Turnover: 0%

WIP at Completion: 100% MD Tasked to NMCB FIVE: 65 Total Project MD: 65

Material Cost: No Information

Cost Savings: \$22,750

**Significant Safety Issues:** Community center is open 24 hours. Work crews worked during low use time periods, cordoned off work area, and maintained situational awareness while moving material into and out of the community center.

Significant QC Issues: None.

Significant Design Issues: Scope changed during construction to add lights to phone center.





A Seabee grading the lot.



Completed lot.

## TCSP EARTHWORK FOR CSA AJ7-018

Combined force of Active and Reserve Seabees improved strength and drainage of the lot surface while reducing the dust hazard. Work will facilitate expedient extraction and placement of stockpiled material by container lot equipment at Theater Consolidation and Shipping Point (TCSP), Zone 7, Camp Arifjan.

**Project Scope:** Scarify existing surface, place and wet compact 7,222 cu. yd. of gatch and gravel at the lot. The site is located in the vicinity of Virginia and Rhode Island.

Personnel: 8

**Duration:** November 2006 - December 2006

Mandays Expended: NMCB FIVE: 118

Cumulative: 118

**Tasking:** WIP at Turnover: 0%

WIP at Completion: 100% MD Tasked to NMCB FIVE: 118 Total Project MD: 118

 Material Cost:
 \$139,650

 Cost Savings:
 \$41,300

Significant Safety Issues: None.

Significant QC Issues: None.

Significant Design Issues: None.

#### **CONTINGENCY OPERATIONS**



Setting floor.



Completed laundry trailer floor.

## REPLACE LAUNDRY TRAILER FLOOR AJ7-022

Integrated Active Duty and Reserve Seabees worked to construct sub flooring and installed marine grade plywood to prevent personnel injury and property loss or damage of appliances due to water damage.

**Project Scope:** Remove existing flooring, sub-flooring, and floor covering and replace with a new floor.

Personnel: 5

**Duration:** December 2006 - January 2007

Mandays Expended: NMCB FIVE: 96

Cumulative: 96

Tasking: WIP at Turnover: 0%

WIP at Completion: 100% MD Tasked to NMCB FIVE: 96 Total Project MD: 96

Material Cost: No Information

Cost Savings: \$33,600

**Significant Safety Issues:** Confined area required masks during demo of damaged floor and had to maintain high situational awareness during installation of new floor.

**Significant QC Issues:** Tile would not stick to the trailer floor due to cool temperature at this time of year. Customer approved text coat paint vice tile.

**Significant Design Issues:** Project was re-planned once demo of existing floor revealed more work than necessary would be required to complete the project.





Seabee installing interior lights.



Installed lights.

# INSTALL ELECTRICAL SYSTEM FOR SPRUNG TENT AT KNB AJ7-031

Integrated Active Duty and Reserve Seabees worked in a contingency environment to design and install the KNB SPRUNG tent electrical system. This project provided power for Engineer Dive Units stationed at Kuwait Naval Base.

**Project Scope:** Install electrical system to supply existing lights, new outlets, and equipment used by engineering dive team on a 110 V system connecting to existing generator.

Personnel: 10

**Duration:** January 2007 - February 2007

Mandays Expended: NMCB FIVE: 90

Cumulative: 90

**Tasking:** WIP at Turnover: 0%

WIP at Completion: 92% MD Tasked to NMCB FIVE: 89 Total Project MD: 97

Material Cost: No Information

**Cost Savings:** \$36,750

**Significant Safety Issues:** Over 30% of work was completed using man lifts which required proper safety gear and qualified lift operators.

Significant QC Issues: None.

Significant Design Issues: Electrical plan was designed for 110 V only.

**Significant Material Issues:** Sprung tents did not come with a full electrical suite and required wire, panel boxes, power source, and receptacles. Significant material delays resulted in project being turned over to NMCB 133.

#### **CONTINGENCY OPERATIONS**



Seabees placing Alaska Barrier.



Completed project.

## ALASKA BARRIER INSTALLATION - PHASE I AJ7-032

Combined force of Active and Reserve Seabees installed Alaska barriers along the perimeter fence of gas station, Camp Patriot, Kuwait. The gas station is adjacent to the Camp Patriot laundry facilities, DFAC, and NCW HQ. Alaska barriers will significantly reduce the collateral damage to surrounding area in the event an explosion at the gas station.

**Project Scope:** Perform site grading, surveying, and foundation preparation for Alaska barrier system to be placed around existing gas station at Kuwait Naval Base.

Personnel: 4

**Duration:** January 2007

Mandays Expended: NMCB FIVE: 88

Cumulative: 88

Tasking: WIP at Turnover: 0%

WIP at Completion: 100% MD Tasked to NMCB FIVE: 88 Total Project MD: 88

 Material Cost:
 \$66,555

 Cost Savings:
 \$30,800

Significant Safety Issues: None.

Significant QC Issues: None.

Significant Design Issues: None.

Significant Material Issues: Barriers not available at the rate of placement.





Seabees placing a guard tower.



Completed project.

# RELOCATE FOUR REFURBISHED GUARD TOWERS AJ7-033

Combined force of Active and Reserve Seabees performed the relocation of four refurbished guard towers from Camp Arifjan to Camp Patriot for additional perimeter force protection at Kuwait Naval Base.

**Project Scope:** Relocate four refurbished guard towers. Move all exterior components including two external light plants, HVAC equipment, and existing concrete foundation block for each tower.

Personnel: 4

**Duration:** January 2007

Mandays Expended: NMCB FIVE: 51

Cumulative: 51

**Tasking:** WIP at Turnover: 0%

WIP at Completion: 100% MD Tasked to NMCB FIVE: 51 Total Project MD: 51

Material Cost: \$0

Cost Savings: \$17,850

Significant Safety Issues: None.

Significant QC Issues: None.

Significant Design Issues: None.





Repairing mechanical coupling.



Completed encased water line.

## LOWER WATER LINE ZONE 4 PODS AJ7-049

Integrated Active Duty and Reserve Seabees worked to lower branch water lines and install intermittent shut off valves. These improvements will allow repair of parts of the line without shutting down all 36 latrine units for 592 units and will lower the surface pressure and prevent further line breakage.

**Project Scope:** Install a new main line shut off and lower seven branch lines. Properly bring to finish grade and topped with a 3 in. gravel bed.

Personnel: 5

**Duration:** January 2007

Mandays Expended: NMCB FIVE: 55

Cumulative: 55

Tasking: WIP at Turnover: 0%

WIP at Completion: 100% MD Tasked to NMCB FIVE: 55 Total Project MD: 55

Material Cost: No Information

**Cost Savings:** \$33,250

Significant Safety Issues: None.

Significant QC Issues: None.

**Significant Design Issues:** Existing sewage lines above proposed lowered water lines. Lowered water lines were encased in concrete to prevent leaking sewer lines from contaminating fresh water lines.

**Significant Material Issues:** Existing PVC pipe was very brittle. Pipes may fail during future line maintenance and renovation.

#### **CONTINGENCY OPERATIONS**



Seabees constructing stage rooms.



Stage at turnover.

## ZONE VI STAGE EXTENSION AJ7-064

Integrated Active Duty and Reserve Seabees worked in conjunction with local contractors to expand existing stage, install overhead cover, install electrical, and construct dressing and storage rooms.

**Project Scope:** Repair existing MWR stage in Zone 6 and construct extensions to the stage on each side, dressing rooms, and storage per the attached drawings. Canopy was installed by contractor.

Personnel: 9

**Duration:** February 2007

Mandays Expended: NMCB FIVE: 28

Cumulative: 28

**Tasking:** WIP at Turnover: 0%

WIP at Completion: 16% MD Tasked to NMCB FIVE: 28 Total Project MD: 157

Material Cost: No Information

**Cost Savings:** \$54,950

Significant Safety Issues: Overhead ladder work required proper tie off and crew situational awareness.

Significant QC Issues: Limited QC plan due to poor provided design. Nail/screw holes, paint/finish, and electrical were not addressed.

**Significant Design Issues:** Design provided to Battalion did not have electrical plan, finish plan, properly account for installed overhead cover. Design was modified by Battalion to match site conditions.





Mudding drywall.



Seabees priming hallway.

## BUILD OUT OF PCB 1452 AJ7-072

Integrated Active Duty and Reserve Seabees completed a re-model of an existing Pre-Cast Building (PCB) and convert it into nine separate living quarters for soldiers living in PCB 1452. The project increased the morale of the personnel and the entire base.

**Project Scope:** Interior vertical construction in existing PCB number 1452 located in Zone VI. Work to include interior build-out to facilitate nine-(9) separated berthing compartments and one open common area with all associated wiring and appurtenances. Specifically, 320 LF of 8 ft. tall wall partition, 52 duplex receptacles, 9 individual wall switches and miscellaneous wiring, painting and trim.

Personnel: 9

**Duration:** January 2007 - February 2007

Mandays Expended: NMCB FIVE: 198

Cumulative: 198

**Tasking:** WIP at Turnover: 0%

WIP at Completion: 77% MD Tasked to NMCB FIVE: 420 Total Project MD: 542

 Material Cost:
 \$12,500

 Cost Savings:
 \$189,700

Significant Safety Issues: None.

Significant QC Issues: None.

**Significant Design Issues:** Drywall placed horizontal vice vertical to better prevent cracking during ordinance disposal evolutions. California corners were maintained for this PCB.

**Significant Material Issues:** Quality of drywall varies. Drywall dimensions not uniform and must be measured prior to erecting wall studs.





Road partially graded.



Completed project.

## FUEL FARM ROADWAY IMPROVEMENT AJ7-073

Combined force of Active and Reserve Seabees performed the work in Zone 7 CSA Retail Fuel Point, Camp Arifjan, Kuwait. This project improves road conditions for trucks exiting the CSA Retail Fuel Point that often get stuck in the deep dust layer.

**Project Scope:** Construct a 150 m road, from Missouri Road to the south gate of the CSA Retail Fuel Point. The road should be ten m wide and suitable for the exiting fuel tanker trucks. The new road should have a two percent normal crown.

Personnel: 6

**Duration:** January 2007

Mandays Expended: NMCB FIVE: 45

Cumulative: 45

**Tasking:** WIP at Turnover: 0%

WIP at Completion: 100% MD Tasked to NMCB FIVE: 45 Total Project MD: 45

 Material Cost:
 \$26,937

 Cost Savings:
 \$15,750

Significant Safety Issues: None.

Significant QC Issues: None.

Significant Design Issues: None.









Zone VI Re-enlistment facility ceiling.

## CAMP ARIFJAN MINOR PROJECTS AJ7-300

## **Project Listing**

Install Security Grate TMC	12
Zone VI LSA Lighting	36
APO Mail Box Pads	23
Zone VI Guard Shack Installation	24
Zone VI Re-enlistment Facility Ceiling	33
T504 Electrical Building Testing	6
Fire Strobe Installation at TACC	6
Install Basketball Hoops and Paint Court	25
Install AM-2 Matting 1300 PCB Block	30
Install AM-2 Matting 1400 PCB Block & DFAC	38
Total Mandays Expended	233



Seabees installing LSA lights.









Installing Battalion flag pole.

## CAMP ARIFJAN CAMP MAINTENANCE AJ7-310

## Camp Maintenance Tasking

PMs	55
WRs	1445
SJs	0
Projects	0

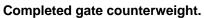
### Total Mandays Expended 1500



Constructing new S-6 workshop.









**Moving Zone VI Temper Tents.** 

## CAMP ARIFJAN OIC DISCRETIONARY AJ5-510

### **Project Listing**

Construct Temper Tent Doors Zone VI Renovate Temper Tent Foyers Zone VI	39 134
	39
Demo and move Zone VI Command Cell Temper Tents	24
Anchor DFAC Guard Gate Demo Old Post Office; Zone I	3 40
Extend 1201 guard gate/ Construct new gate counterweight	12
Move furniture in/out of PCB 1452	42
Move furniture in/out of PCB 1114  Move furniture in/out of PCB 1124	42 42
Move furniture in/out of PCB 1201	42
Move furniture in/out of PCB 1103	42



Installing new Temper Tent foyers.



#### NMCB FIVE DET CAMP ARIFJAN

Labor Distribution Summary

	Aug	Sep	Oct	Nov	Dec	Jan	Feb	Total	%Total
Direct Labor MDs	849	2552	3032	2779	2027	2487	80	13806	71%
Indirect Labor MDs	479	986	852	308	314	282	25	3246	17%
Readiness/Training	312	392	397	634	311	383	10	2439	13%
Total MDs Exp	1640	3930	4281	3721	2652	3152	115	19491	100%
# Total Personnel	280	283	312	187	145	150	76	N/A	
# Direct Labor	127	116	129	128	85	95	27	N/A	
# Workdays	12	26	26	22	24	25	3	138	
% Direct Labor	45%	41%	41%	68%	59%	63%	36%	51%	
Ideal Capability	1905	3770	4193	3520	2550	2969	101	17423	
Availability Factor	61%	78%	82%	97%	92%	97%	89%	85%	



#### **DETAIL CAMP BUEHRING EXECUTIVE SUMMARY**

Integrated Seabees from NMCB FIVE and reserve battalions NMCB TWO ONE and NMCB TWO SIX supported operations at Camp Buehring and surrounding areas. With the Army's 63<sup>rd</sup> Engineer Company (Combat Support Equipment) and 186<sup>th</sup> CSE TACON to the detail, 238 Seabees and Soldiers worked jointly to accomplish 10,000 mandays of construction throughout the region.

Receiving construction tasking from United States Army Central Command (USARCENT), the Detail completed 35 mission directives spanning the entire country of Kuwait. To meet requirements, Seabees redeployed to Camp Navistar, Kuwait Naval Base and Camp Virginia for extended periods of time. Other supported areas included the Udairi Army Airfield, the Udairi weapons range, Khabari Alawazem Crossing and Camp Victory. Horizontal construction was the primary focus of the deployment, including road and parking area construction, berm maintenance, and retention pond construction. Vertical tasking ranged from the placement of concrete pads and sidewalks to interior renovations of living trailers. Regardless of the task, the detail performed remarkably while increasing the force protection and quality of life for Coalition Forces.

One of the most challenging aspects of operations was working in conjunction with Camp Buehring's personnel surges. As the primary hub for Army personnel and aviation squadrons entering and exiting Iraq, 80% of the population was transient personnel resulting in 30,000 people in camp at a given time. Despite the challenges of constant foot and vehicle traffic on and around projects, the Detail maintained the base at the highest possible readiness.

Every Seabee at Camp Buehring received a unique experience having worked hand in hand with attached Army units, sharing resources and manpower to accomplish a common goal. This truly was a united effort from all parties and the camaraderie shared will most certainly be remembered.

#### **CONTINGENCY OPERATIONS**



Seabee places a control joint.



Completed sidewalk.

## BARRACKS AREAS 1-7 (EXCEPT 6) SIDEWALKS BU5-055

Integrated Active Duty and Reserve Seabees worked throughout Camp Buehring building concrete sidewalks that interconnected permanent party barracks to the centrally located shower, head and laundry facility. The sidewalks directly contributed to the overall health and comfort of the residents, especially during the rainy season.

**Project Scope:** Construct reinforced concrete sidewalks throughout barracks areas four, five and seven. Sidewalks shall be 0.1 m thick by 2 m wide, with a total length of 1,500 m per area. Twelve foot thickened sections shall be provided for vehicle crossings as indicated by FET NORTH.

Personnel: 10

**Duration:** October 2006 - January 2007

Mandays Expended: NMCB FIVE: 720

Cumulative: 720

Tasking: WIP at Turnover: 0%

WIP at Completion: 66% MD Tasked to NMCB FIVE: 778 Total Project MD: 1174

 Material Cost:
 \$155,132

 Cost Savings:
 \$270,200

Significant Safety Issues: None.

**Significant QC Issues:** Concrete varied in quality. Material contractor provided sufficient strength, but the concrete mix contained excessive Potash which resulted in surface cracking. Regardless of the placement method, surface cracking was evident after every placement.

Significant Design Issues: No design was required.

**Significant Material Issues:** The welded wire fabric was stronger than required. This increased expended man-hours due to the time spent cutting thicker steel.





Seabee installs light fixtures.



Exterior panels installed.

## DOL DS MAINTENANCE/CLASS VII YARD BU5-244

Integrated Active Duty and Reserve Seabees worked in Camp Buehring to complete the construction of the Pre-Engineered Buildings (PEB), clamshell facilities and fencing. This three phased project provided facilities and a staging yard for the Department of Logistics to effectively operate.

**Project Scope:** Erect five Kirby 20 m x 25 m maintenance sunshades and four Large Area Maintenance Structures (LAMS). Construct a Class VII yard by installing lighting, fencing and spreading reclaimed crushed concrete.

Personnel: 2

**Duration:** December 2005 - February 2007

Mandays Expended:NMCB THREE:1110NMCB SEVEN:508

NMCB FIVE: 13
Cumulative: 1631

Tasking: WIP at Turnover: 99%

WIP at Completion: 100%
MD Tasked to NMCB THREE: 1111
MD Tasked to NMCB SEVEN: 507
MD Tasked to NMCB FIVE: 22
Total Project MD: 1640

 Material Cost:
 \$725,000

 Cost Savings:
 \$574,000

**Significant Safety Issues:** Members wore certified fall protection harnesses while using the man lift to install electrical.

Significant QC Issues: None.

**Significant Design Issues:** Fire marshal removed the requirement to have fire exit signs above personnel doors due to the sunshade being open at the gable ends.

**Significant Material Issues:** Material for punch list items took seven months to arrive.

#### **CONTINGENCY OPERATIONS**



Seabees install sewer lines.



Completed trailer park.

## TRAILER PARK 3 BU5-374 & BU6-141

Integrated Active Duty and Reserve Seabees worked to connect water, sewer and electricity to 44 living trailers. The project increased the quality of life of permanent party personnel stationed at Camp Buehring, Kuwait.

**Project Scope:** Grade the site, place and level 44 trailer units. Make all trailers mission ready by installing electrical, sanitary and water systems.

Personnel: 6

**Duration:** March 2006 - September 2006

Mandays Expended: NMCB SEVEN: 663

NMCB FIVE: 110 Cumulative: 773

**Tasking:** WIP at Turnover: 90%

WIP at Completion: 100%
MD Tasked to NMCB SEVEN: 630
MD Tasked to NMCB FIVE: 70
Total Project MD: 700

 Material Cost:
 \$53,534

 Cost Savings:
 \$245,000

**Significant Safety Issues:** Immediately as trailers became operational, beneficial occupancy was assumed and personnel living around the job site were exposed to various construction hazards. Snow fencing was used to divert foot traffic and minimize risk.

**Significant QC Issues:** The final two living trailers could not be connected to the sewer line due to their deteriorated condition. The contractor performing interior renovations will complete the tie in.

**Significant Design Issues:** The provided design only displayed the trailer layout. It did not include descriptive notes on the plumbing or electrical systems.

**Significant Material Issues:** Project was delayed several months awaiting a lift pump station. A FAR was submitted and approved that removed the requirement for the lift pump station and replaced it with a gravity fed line that met camp engineer standards.





A Seabee screeds the concrete.



Completed sidewalk.

## BA6 SIDEWALKS AND FLOOD MITIGATION BU6-049

Integrated Active Duty and Reserve Seabees work to increase the quality of life of permanent party personnel at Camp Buehring by installing sidewalks in their living areas. During the winter months, the heavy rains cause drainage problems and create unnecessary hazards.

**Project Scope:** Construct reinforced concrete sidewalks throughout Barracks Area 6. Sidewalks shall be 0.1 m thick and 2 m wide. Entire length is approximately 1,500 m. Twelve foot thickened sidewalks shall be provided as indicated by FET North.

Personnel: 12

**Duration:** March 2006 - October 2006

Mandays Expended:NMCB SEVEN:428NMCB FIVE:290

NMCB FIVE: 290 Cumulative: 718

Tasking: WIP at Turnover: 63%

WIP at Completion: 100%
MD Tasked to NMCB SEVEN: 428
MD Tasked to NMCB FIVE: 252
Total Project MD: 680

 Material Cost:
 \$20,684

 Cost Savings:
 \$238,000

**Significant Safety Issues:** Rebar caps could not be placed on every form stake due to shortage of materials. Funding was not available to order additional caps.

**Significant QC Issues:** A majority of the concrete was delivered during the hottest part of the day due to Ramadan. The excessive heat caused the concrete to set too quickly and resulted in surface cracking.

Significant Design Issues: None.

**Significant Material Issues:** Delivery of concrete was untimely. A typical delivery arrived 2 hours late and sometimes not at all. Rework required due to occurrences of unsetting concrete.





A Seabee fabricates ductwork.



Seabees remove existing roof.

## AVIATION MAINTENANCE HANGAR BU6-067

Integrated Active Duty and Reserve Seabees worked at the Udairi Airfield to enclose two existing sunshade structures. These structures are used to modify aircraft to operate effectively in the desert environment. Construction on this facility enabled work to be performed in a more efficient environment outside of the extreme weather conditions.

**Project Scope:** Install siding, fascia and bi-fold hangar doors for two existing pre-engineered Kirby brand steel frame aviation maintenance sunshades. Complete installation directions and Professional Engineer's certification of modifications is required.

Personnel: 8

**Duration:** January 2007 - February 2007

Mandays Expended: NMCB FIVE: 99

Cumulative: 99

**Tasking:** WIP at Turnover: 0%

WIP at Completion: 12% MD Tasked to NMCB FIVE: 62 Total Project MD: 530

 Material Cost:
 \$165,064

 Cost Savings:
 \$185,500

**Significant Safety Issues:** Certified fall protection harnesses and lanyards limited the productivity of the crew. Additional equipment was sourced by main body.

**Significant QC Issues:** Construction of the roof was unknown to all crew members and the project started extremely slow due to inexperience.

**Significant Design Issues:** Contract was awarded as a design build and lacked many of the details prior to project commencement. As the project progressed, more design was provided, but the lack of upfront designs made project planning difficult.

**Significant Material Issues:** Contractor was still fabricating parts after construction started which resulted in project delays.





The MERS wets the gatch/gravel mixture.



Completed road section.

## ASR DALLAS IMPROVEMENT BU6-077

Integrated Seabees and Soldiers from the 63<sup>rd</sup> CSE worked in extreme weather conditions to repair the main ASR leading to Camp Buehring. Working as many as 20 hours per day, the crew expeditiously completed this tasking allowing civilian and military easy access to and from camp.

**Project Scope:** Repair the northbound and southbound lanes of ASR Dallas. Work included the placement and compaction of a gatch and gravel mixture on 12 mi. of roadway. The road was to be 24 ft. in width and constructed using two 4 in. lifts.

Personnel: 10

Tasking:

**Duration:** May 2006 - September 2006

Mandays Expended: NMCB SEVEN: 570

NMCB FIVE: 548
Cumulative: 1018
WIP at Turnover: 40%

WIP at Completion: 100%
MD Tasked to NMCB SEVEN: 480
MD Tasked to NMCB FIVE: 720
Total Project MD: 1200

 Material Cost:
 \$735,200

 Cost Savings:
 \$420,000

**Significant Safety Issues:** Vehicle speeds were a constant concern. Operators were complacent after performing project work for extended periods of time. Driving at night over desert terrain was a hazard which led to the 63<sup>rd</sup> CSE rolling a HMMWV while returning to camp after a shift.

**Significant QC Issues:** Sample compaction tests showed the construction process produced an average of 89% compaction. Maximum compaction was 98.3% and minimum compaction was 81.6%.

**Significant Design Issues:** The design cross section produced inconsistent results due to lack of knowledge of material properties and process techniques. The final dimensions of the road did not match the original scope as directed by Facility Engineer Team North.

Significant Material Issues: Two types of gravel produced two different end products.

#### **CONTINGENCY OPERATIONS**



A Seabee connects electrical to the panel.



Completed immigration booths.

## K-CROSSING ELECTRICAL BU6-157

Integrated Active Duty and Reserve Seabees worked at the Kuwaiti border to connect immigration booths to a power distribution system. The completion of the wiring contributed to the overall completion of the K-crossing project, the most visible NCF project in theater.

**Project Scope:** Pull wire through existing conduit and tie into the electrical panels of 24 immigration booths.

Personnel: 4

**Duration:** August 2006

Mandays Expended: NMCB FIVE: 41

Cumulative: 41

**Tasking:** WIP at Turnover: 0%

WIP at Completion: 100% MD Tasked to NMCB FIVE: 50 Total Project MD: 50

Material Cost: Material on site. No info.

Cost Savings: \$17,500

Significant Safety Issues: None.

**Significant QC Issues:** Three of the inspection booths could not be connected due to the preexisting conduit being crushed. Conduit did not include pull strings.

**Significant Design Issues:** No design provided. The electrical plan for K-crossing was not finalized when the mission directive was tasked. During construction, source for power was changed from generator to main distribution.

#### **CONTINGENCY OPERATIONS**



Soldier compacts the gatch and gravel lift.



Completed ECP inspection area.

## CONVOY TACTICAL ASSEMBLY AREA BU6-162

Soldiers from the 186<sup>th</sup> CSE constructed a convoy parking area, inspection area, and access road at Camp Virginia to prepare for a new function at that location. This project is a key piece in the base realignment along the Kuwait/Iraq border.

**Project Scope:** Construct a 450 m x 150 m gatch/gravel assembly area with a depth of 1 ft. Assembly area shall have a 6 ft. berm with triple-strand concertina wire on the inside perimeter. Construct a 900 m gatch/gravel road leading from the assembly area through ECP 2 and finishing at ASR Dallas.

Personnel: 16

**Duration:** December 2006 - February 2007

Mandays Expended:

NMCB FIVE:

Cumulative:

418

**Tasking:** WIP at Turnover: 0%

WIP at Completion: 90% MD Tasked to NMCB FIVE: 587 Total Project MD: 652

 Material Cost:
 \$535,691

 Cost Savings:
 \$228,200

Significant Safety Issues: None.

**Significant QC Issues:** Rain caused extreme damage to gatch and gravel placement throughout the project. Compaction was difficult to obtain due to the inability of the material to cure.

**Significant Design Issues:** Modified design reduced gatch and gravel lift and added a two to three inch top gravel layer. Change was required due to surface deterioration during the rainy season.

**Significant Material Issues:** Material borrowed from other camps to maintain project while the BOM was awaiting procurement. Haul missions limited the on-site production.





Operators create the exterior berm.



Completed berm relocation.

## PERIMETER BERM RELOCATION BU6-164

Integrated Seabees and soldiers from the 63<sup>rd</sup> CSE worked in extreme weather conditions to ensure Camp Buehring's force protection met all guidelines. The project required close coordination with Facilities Engineering Team North and two local contractors.

**Project Scope:** Work included the relocation of 4,550 m of existing perimeter berms, the removal of 43 km of triple-strand concertina wire, and grading between the interior and exterior berms around Camp Buehring. The exterior berm was required to be a minimum of 75 ft. away from the interior berm.

Personnel: 12

**Duration:** August 2006 - September 2006

Mandays Expended: NMCB SEVEN: 52 NMCB FIVE: 450

Cumulative: 502
WIP at Turnover: 8%

Tasking:WIP at Turnover:8%WIP at Completion:100%MD Tasked to NMCB SEVEN:52

MD Tasked to NMCB FIVE: 598
Total Project MD: 650

Material Cost: \$0

**Cost Savings:** \$227,500

**Significant Safety Issues:** Concertina wire gloves deteriorated quickly due to weather conditions and the large amount of wire that was demolished. Additional gloves were obtained through the Camp Buehring safety office.

**Significant QC Issues:** The exterior berm on the east side of camp was relocated across ASR Dallas, which required the demolition of 500 m of deteriorated road and approval to increase the base footprint. Progress was delayed for a short period of time and work resumed upon written guidance from Facility Engineer Team North.

Significant Design Issues: No design was required.

#### **CONTINGENCY OPERATIONS**



A Seabee creates part of the berm.



Completed berm.

## CLEAR SOUTH RANGE ROAD OF DUNES BU6-173

Integrated Active Duty and Reserve Seabees worked in extreme weather conditions to relocate a berm and the Udairi weapons ranges. The completed berm relieved the need for constant maintenance of the road and allowed non-tactical vehicles safe transit.

**Project Scope:** Clear road of loose sand and construct a berm on the north side of the road. Berm is to be 15 m from the road and shall be 200 m x 8 m x 2 m. Intent is to make the berm appear to be a naturally formed sand dune and protest the roadway from drifting sand.

Personnel: 8

**Duration:** September 2006

Mandays Expended: NMCB FIVE: 142
Cumulative: 142

**Tasking:** WIP at Turnover: 0%

WIP at Turnover.

WIP at Completion:

100%

MD Tasked to NMCB FIVE:

246

Total Project MD:

246

Material Cost: \$0 Cost Savings: \$86,100

**Significant Safety Issues:** Unexploded ordinance was found in various places around the site. Dust storms late in the morning caused limited visibility and slowed progress.

Significant QC Issues: None.

Significant Design Issues: No design was required.





Seabee screeds placed concrete.



Completed pad.

## ECP 2 TANK TURNING PAD BU6-182

Integrated Active Duty and Reserve Seabees construct a concrete pad on the interior of Camp Buehring's Entry Control Point Two (ECP 2). All tracked vehicles use this entrance and continually deteriorate the existing surface. The new concrete pad will prevent future site maintenance.

**Project Scope:** Excavate and compact an approximate area of 900 sq. m. Provide an 8 in. thick, 4,500 psi concrete pad for tanks turning. Project requires the removal of an interior berm section, relocation of the guard shack, and the reconfiguration of jersey barriers.

Personnel: 6

**Duration:** September 2006 - December 2006

Mandays Expended:NMCB FIVE:257Cumulative:257

**Tasking:** WIP at Turnover: 0%

WIP at Completion: 100% MD Tasked to NMCB FIVE: 178 Total Project MD: 178

 Material Cost:
 \$29,750

 Cost Savings:
 \$62,300

**Significant Safety Issues:** Lime burns were the greatest hazard on this project. The placement method and the slump of the concrete exposed most personnel to this risk even while wearing proper PPE.

**Significant QC Issues:** Several of the concrete trucks had slumps over 8 inches, which degraded the final product. Material contract did not include a pump truck and forced personnel to stand on the reinforcing steel cages which caused displacement of the cage.

**Significant Design Issues:** Initial design provided no cross section or details. The detail provided recommendations in AutoCAD format and received approval to proceed based on information provided.

**Significant Material Issues:** Material delays caused the project to span four months instead of six weeks. Reinforcing steel was delivered two months after the project start date and concrete was received a month after it was requested. The detail incurred extensive lost time due to an unresponsive contractor.

#### **CONTINGENCY OPERATIONS**



Soldier shapes road.



Completed repair.

## AIRFIELD GRAVEL ROAD BU6-183

Soldiers from the 186<sup>th</sup> CSE repaired the perimeter airfield road and modified the scope to include drainage. Their work provided an adequate surface for vehicles to travel on as well as relief from standing water caused by minor rainfall.

**Project Scope:** Grade and repair four major areas of concern on the existing airfield perimeter road with a 4 in. lift of 50/50 mix gatch/gravel. Construct a drainage ditch on both sides of the road to mitigate the flood hazard.

Personnel: 5

**Duration:** November 2006 - December 2006

Mandays Expended: NMCB FIVE: 146
Cumulative: 146

**Tasking:** WIP at Turnover: 0%

WIP at Completion: 100% MD Tasked to NMCB FIVE: 150 Total Project MD: 150

 Material Cost:
 \$17,000

 Cost Savings:
 \$52,500

Significant Safety Issues: None.

**Significant QC Issues:** Traffic was blocked along entire road which allowed crew to work unimpeded. Gatch/gravel mixture was given adequate time to cure. Average compaction on the repair was 96%.

Significant Design Issues: No design was provided.

**Significant Material Issues:** Gatch was already on site and had been sitting for an extended period of time prior to the project start date. Material had lost its moisture content when project started.





Seabee installs electrical.



Completed gym.

# CAMP PATRIOT FITNESS CENTER FLOOR RENOVATION BU6-195

Integrated Active Duty and Reserve Seabees worked at the Kuwaiti Naval Base to correct safety hazards present at the fitness center on Camp Patriot. Their efforts provided a quality facility for military personnel to maintain their physical fitness.

**Project Scope:** Perform site grading, surveying, and foundation preparation for new flooring system. Remove existing, rotted plywood flooring and raise the elevation using reclaimed gravel. Install AM-19 matting, construct wall partitions, and install electrical.

Personnel: 12

**Duration:** January 2007 - February 2007

Mandays Expended:NMCB FIVE:212Cumulative:212Tasking:WIP at Turnover:0%

WIP at Completion: 100% MD Tasked to NMCB FIVE: 365 Total Project MD: 365

Material Cost: \$17,788 Cost Savings: \$127,750

Significant Safety Issues: None.

**Significant QC Issues:** During demolition, crew discovered entire facility was improperly wired. Additional scope added to project to correct deficiencies.

**Significant Design Issues:** Customer changed design layout several times prior to and during construction.

**Significant Material Issues:** Project unable to start at requested time due to material delays. Construction started upon material receipt.





Looking down the fenceline.



Completed triple-strand concertina wire.

## CAMP NAVISTAR PERIMETER SECURITY UPGRADES BU7-002

Integrated Active Duty and Reserve Seabees reinforced the security around the perimeter of Camp Navistar to increase the force protection of personnel and equipment as local hostile activity increased. The completion of the security upgrades provided an additional layer of protection for coalition forces.

**Project Scope:** Construct over 2,000 m of triple-strand concertina wire around the exterior of Camp Navistar. Repair of existing triple-strand shall be performed as necessary. Repair of the existing berm along the southern road is required.

Personnel: 12

**Duration:** October 2006

Mandays Expended: NMCB FIVE: 98

Cumulative: 98

**Tasking:** WIP at Turnover: 0%

WIP at Completion: 100% MD Tasked to NMCB FIVE: 98 Total Project MD: 98

Material Cost: \$0 Cost Savings: \$34,300

**Significant Safety Issues:** Vehicle traffic on the public road created the most severe risk along the southern perimeter. Military vehicles and concertina wire were used to block one lane of the road to protect personnel from oncoming traffic. Working with razor wire constantly presented a hazard. Proper situational awareness and concertina wire gloves decreased the risk.

**Significant QC Issues:** Pickets were not all the proper height. Using reclaimed materials, pickets were used in a manner that would best secure the site.

Significant Design Issues: Design was based on P-437 drawings.

**Significant Material Issues:** All material was reclaimed from the perimeter of Camp Buehring. Fencing was constructed using small, medium and large pickets, which was not IAW P-437 specifications.

#### **CONTINGENCY OPERATIONS**



Seabee compacts gatch/gravel mix.



Completed layout yard.

## CRSP LAYOUT YARD BU7-023

Integrated Active Duty and Reserve Seabees worked in conjunction with local contractors to complete the new Central Receiving and Shipping Point (CRSP) facility at Camp Buehring. Seabees were responsible for all horizontal work while contractors were tasked with the vertical mission. All parties created a single place for all supplies to efficiently enter and exit camp.

**Project Scope:** Construct a 10,000 sq. ft. supply storage area. Grade the site as necessary to maintain positive drainage away from the building. Place a 4 in. lift of a 40/60 ratio of gatch and gravel.

Personnel: 4

**Duration:** November 2006 - December 2006

Mandays Expended: NMCB FIVE: 67
Cumulative: 67

Tasking: WIP at Turnover: 0%

WIP at Completion: 100% MD Tasked to NMCB FIVE: 99 Total Project MD: 99

Material Cost: \$0 Cost Savings: \$34,650

Significant Safety Issues: None.

**Significant QC Issues:** Compaction was not optimal due to the quality of the reclaimed material. The gravel varied in size up to 4 in. and was mixed with soil and other debris. Average compaction for the site was 88%.

**Significant Design Issues:** The provided site dimensions were inaccurate. Distance was added during the construction process to make the lot square.

**Significant Material Issues:** The material contract was not awarded prior to the required project completion date. This forced the crew to use reclaimed material that was scattered throughout the base.

#### **CONTINGENCY OPERATIONS**



Seabee installs rough plumbing.



Completed trailer living area.

# TRAILER PARK 2 INTERIOR REPAIRS BU7-024

Integrated Active Duty and Reserve Seabees performed interior renovations to five living trailers. Each trailer houses two permanent party personnel and this project directly increased quality of life at Camp Buehring, Kuwait.

**Project Scope:** Repair five trailers along the western side of Trailer Park 2. Repairs include floor repairs, carpet and flooring installation, drywall repairs, painting, sheet metal repairs, electrical and plumbing.

Personnel: 8

**Duration:** November 2006 - January 2007

Mandays Expended: NMCB FIVE: 270

Cumulative: 270

**Tasking:** WIP at Turnover: 0%

WIP at Completion: 100% MD Tasked to NMCB FIVE: 220 Total Project MD: 220

 Material Cost:
 \$35,000

 Cost Savings:
 \$77,000

**Significant Safety Issues:** Cleanliness of the job site. The project continually had multiple activities in progress in a confined space. Clean up was a constant requirement.

Significant QC Issues: None.

Significant Design Issues: No design provided.

**Significant Material Issues:** Material was ordered and delivered to the base maintenance contractor. The project was delayed several weeks due to the resubmission of BOMs to account for contractor receiving materials and not maintaining accountability.





A soldier levels soil pile.



Completed site retrograde.

### CAMP VICTORY SITE RESTORATION BU7-027

The 186<sup>th</sup> Combat Support Equipment (CSE) completed the retrograde of Camp Victory after a local contractor failed to perform as required. The site will be turned over to the Kuwait government and will be used as a training site for the Kuwaiti Army 35<sup>th</sup> Brigade.

**Project Scope:** Remove and transfer of gravel to a designated location at Camp Virginia. Leveling and grading of remaining soil piles. Clean up and removal of remaining trash located throughout the site.

Personnel: 16

**Duration:** November 2006

Mandays Expended: NMCB FIVE: 274

Cumulative: 274

**Tasking:** WIP at Turnover: 0%

WIP at Completion: 100% MD Tasked to NMCB FIVE: 623

Total Project MD: 623

Material Cost: \$0

**Cost Savings:** \$218,050

Significant Safety Issues: None.

Significant QC Issues: None.

Significant Design Issues: No design required.

**Significant Material Issues:** No material required.

#### **CONTINGENCY OPERATIONS**



Seabee grades the site.



Completed sub-base preparation.

## MOBILE AIRCRAFT FIRE TRAINER SLAB SUB-BASE PREPARATION BU7-034

Seabees worked in conjunction with KBR to complete the 12 in. sub-base for a 44,000 sq. ft. concrete pad. The pad will be utilized as a fire training platform for airfield personnel to increase their readiness and proficiency in emergency response situations.

**Project Scope:** Excavate training site down 20 in. and haul material to designated locations throughout camp. Fill and compact site using a gatch/gravel mixture in preparation for a concrete slab.

Personnel: 6

**Duration:** November 2006

Mandays Expended: NMCB FIVE: 55

Cumulative: 55

**Tasking:** WIP at Turnover: 0%

WIP at Completion: 100% MD Tasked to NMCB FIVE: 87 Total Project MD: 87

 Material Cost:
 \$20,000

 Cost Savings:
 \$30,450

Significant Safety Issues: None.

**Significant QC Issues:** KBR completed the final blue top and compaction. An independent contractor completed the final compaction tests and results are unknown. In-house compaction tests were taken prior to the final construction and averaged 90% compaction.

Significant Design Issues: None.

**Significant Material Issues:** Material delays caused two days of lost time.





Seabee trims sunshade column.



Completed deck and sunshade.

# NCW DECK AND SUNSHADE EXTENSION BU7-038

Integrated Active Duty and Reserve Seabees worked at the Kuwaiti Naval Base to complete the decking around Naval Coastal Warfare berthing. Project increased the units quality of life by providing easy access to berthing rooms and cover from sun exposure and rain.

**Project Scope:** Build out and finish wood decking and sunshade awning around existing double wide trailer.

Personnel: 0

**Duration:** January 2007

Mandays Expended: NMCB FIVE: 31

Cumulative: 31

Tasking: WIP at Turnover: 0%

WIP at Completion: 100% MD Tasked to NMCB FIVE: 48 Total Project MD: 48

Material Cost: \$0 Cost Savings: \$16,800

**Significant Safety Issues:** A crewmember received eye abrasion when removing undergarment covered in sawdust. Eye was flushed and no time was lost.

Significant QC Issues: None.

Significant Design Issues: No design provided. Crew based design off of similar existing construction.

Significant Material Issues: None.

#### **CONTINGENCY OPERATIONS**



Soldier uses excavator to build berm.



Completed berm.

### AHA BERM MAINTENANCE BU7-042

Soldiers from the 186th CSE increased the height of the Ammunition Holding Area (AHA) berm to increase the force protection of the site and provide greater blast protection.

**Project Scope:** Repair the existing perimeter protective berm as required for minimum blast protection. Place a cementatious coating over berm to provide protection against deterioration.

Personnel: 2

**Duration:** November 2006 - February 2007

Mandays Expended: NMCB FIVE: 78

Cumulative: 78

**Tasking:** WIP at Turnover: 0%

WIP at Completion: 91%
MD Tasked to NMCB FIVE: 109
Total Project MD: 120

Material Cost: \$0 Cost Savings: \$42,000

Significant Safety Issues: None.
Significant QC Issues: None.

Significant Design Issues: No design provided.

Significant Material Issues: Rhino Snot was the only cementatious coating available in theater and took

two months to procure.

#### **CONTINGENCY OPERATIONS**



Soldier pushes up the berm.



Completed berm section.

### EXTERIOR BERM MAINTENANCE BU7-043

Soldiers from the 186<sup>th</sup> CSE performed work around the perimeter of Camp Buehring to prep the site for the installation of an Intrusion Detection System (IDS).

**Project Scope:** Re-align the existing Camp Buehring force protection berms and grade, level and compact the area between the perimeter fence and exterior berm.

Personnel: 8

**Duration:** November 2006 - February 2007

Mandays Expended:NMCB FIVE:226Cumulative:226Tasking:WIP at Turnover:0%

WIP at Completion: 70%
MD Tasked to NMCB FIVE: 210
Total Project MD: 300

Material Cost: \$0

**Cost Savings:** \$105,000

Significant Safety Issues: None.

**Significant QC Issues:** Heavy equipment worked extremely close to the existing fence. Vehicle guides were utilized, but the fence required repairs at several locations.

**Significant Design Issues:** Design specifications were difficult to achieve due to environment. The IDS required level ground within 3 in. tolerance over a 200 m span. Sandy soil did not compact well and will erode over time.

Significant Material Issues: No material required.

#### **CONTINGENCY OPERATIONS**



Seabees excavate retention pond.



Completed sidewalks.

### AAFES SITE DEVELOPMENT BU7-052

Integrated Active Duty and Reserve Seabees prepared the site around the newly constructed AAFES facility for pedestrian traffic. The work accomplished provided primary access to the facility and mitigated the flood hazard during the rainy season.

**Project Scope:** Grade the site providing positive drainage away from the facility and the container storage area. Expand the current retention pond and install concrete pavers from the parking area to the primary entrance of the facility.

Personnel: 8

**Duration:** January 2007

Mandays Expended: NMCB FIVE: 48

Cumulative: 48

**Tasking:** WIP at Turnover: 0%

WIP at Completion: 100% MD Tasked to NMCB FIVE: 84 Total Project MD: 84

 Material Cost:
 \$29,819

 Cost Savings:
 \$35,000

**Significant Safety Issues:** Material arrived on site several days before new AAFES opened. Paver installation was only 30% complete when service members started walking on the construction site.

Significant QC Issues: Pavers were used shortly after placement causing sub-base movement.

**Significant Design Issues:** Original retention pond was twice the size, but constrained by an existing fiber line run. The northern half of the pond was at the lowest grade. With that portion eliminated, it was difficult to slope the entire site to the higher elevation.

Significant Material Issues: Gatch was used as sub-base for the pavers when sand was requested.





Soldier builds berm.



Completed tower placement.

### BERM MAINTENANCE AND TOWER SETTING AT K-CROSSING BU7-088

Soldiers from the 186th CSE performed force protection upgrades to the perimeter of the newly constructed Khabari Crossing. Their efforts provided necessary security measures to protect coalition forces traveling to and from Iraq.

**Project Scope:** Raise existing berm to a minimum of eight ft. and coat with Rhino-snot or similar product to increase longevity. Berm is approximately 6,000 m in length. Construct 35 light wells on interior of berm spaced at 145 m intervals. Also, install eight guard towers around interior perimeter.

Personnel: 4

**Duration:** January 2007 - February 2007

Mandays Expended: NMCB FIVE: 57
Cumulative: 57

Tasking: WIP at Turnover: 0%

WIP at Completion: 68%
MD Tasked to NMCB FIVE: 53
Total Project MD: 78

Material Cost: \$0 Cost Savings: \$18,550

Significant Safety Issues: QRF from Camp Buehring provided perimeter security.

Significant QC Issues: None.

Significant Design Issues: None.

Significant Material Issues: None.

#### **CONTINGENCY OPERATIONS**



Seabee paints the living space.



Completed trailer.

### TRAILER PARK 2 OIC-001

Integrated Active Duty and Reserve Seabees performed a variety of interior renovations to 50 living trailers. Each trailer houses four personnel and this project directly increased the quality of life of permanent party personnel stationed at Camp Buehring, Kuwait.

**Project Scope:** Interior renovation of 50 trailers. Work included repairs to drop ceilings, flooring and walls. Trailers were to be fully operational upon project completion.

Personnel: 6

**Duration:** June 2006 - September 2006

Mandays Expended: NMCB SEVEN: 277

NMCB FIVE: 210 Cumulative: 487

**Tasking:** WIP at Turnover: 58%

WIP at Completion: 100%
MD Tasked to NMCB SEVEN: 277
MD Tasked to NMCB FIVE: 200
Total Project MD: 477

 Material Cost:
 \$35,000

 Cost Savings:
 \$166,950

**Significant Safety Issues:** Working in confined spaces caused the greatest hazards. Ventilation and situational awareness were key elements to risk management.

**Significant QC Issues:** The quality of the final product was defined by the original condition of the trailers. The client did not want any major repairs to be conducted.

Significant Design Issues: No design required.

**Significant Material Issues:** Material was purchased by the Department of Public Works and was not readily available. There were several work stoppages due to material delays.









600

Seabees hang camp sign.

# DETAIL CAMP BUERHING CAMP MAINTENANCE CB6-300

### Camp Maintenance Tasking

 PMs
 0

 WRs
 0

 SJs
 0

 Projects
 600

#### Total Mandays Expended



Seabee disassembles MLO tent.











Seabees prep site for LAM erection.

# DETAILCAMP BUERHING OIC DISCRETIONARY CB6-500

## **Project Listing**

Trailer Park Two Interior Repairs	200
Khabari Crossing Force Protection	37
Airfield Retention Pond	36
ALFA Company LAM	35
Office spaces for MNC-K	12
Miscellaneous Projects	280
•	

### **Total Mandays Expended**

600



Soldiers place barriers at Khabari Crossing.



### NMCB FIVE DET BUEHRING

Labor Distribution Summary

	Aug	Sep	Oct	Nov	Dec	Jan	Feb	Total	%Total
Direct Labor MDs	770	1487	719	788	1141	1071	180	6156	58%
Indirect Labor MDs	233	646	228	773	673	433	111	3097	29%
Readiness/Training	117	177	149	369	136	282	135	1365	13%
Total MDs Exp	1120	2310	1096	1930	1950	1786	426	10618	100%
# Total Personnel	204	203	204	236	238	238	243	N/A	
# Direct Labor	99	99	53	106	103	106	86	N/A	
# Workdays	12	26	26	22	25	25	7	143	
% Direct Labor	49%	49%	26%	45%	43%	45%	35%	42%	
Ideal Capability	1485	3218	1723	2915	3219	3313	753	16649	
Availability Factor	60%	52%	50%	40%	40%	41%	42%	46%	



#### **DETAIL CAMP VIRGINIA EXECUTIVE SUMMARY**

Detail Camp Virginia was integrated active duty and reserve Detail ranging from 55 to 75 Seabees. During the first three months of deployment, NMCB TWO ONE Seabees worked hand-in-hand with NMCB FIVE Seabees to support on-going missions. In November, NMCB TWO ONE returned home and NMCB TWO SIX seamlessly integrated into the Detail. Detail Camp Virginia supported both ARCENT and 22NCR with construction missions on Camp Virginia, Ali Al-Salem's Life Support Area (AAS LSA) and Camp Moreell. Projects ranged from heavy earthwork outside the Camp Virginia perimeter to complete renovations of facilities to be used as offices on AAS LSA. In addition, camp maintenance personnel regularly supported the Camp Virginia Command Cell, units on camp and the Seabee compound with small projects totaling more than 1000 mandays to improve mission readiness and quality of life.

Detail tasking was very fluid consisting of multiple small projects. Sixteen projects were executed with seven less than 100 mandays tasked to NMCB FIVE and the largest being 484 mandays. Crew sizes were on average five to six Seabees with the largest projects having a crew of ten.

Five projects were turnover from NMCB SEVEN and the remaining eleven conceived and issued after arrival. In many cases, the scope was only an intent which required the crew to design the project, generate any drawings, and create the specifications. The crews improved on the ability to plan, estimate, and execute projects quickly.

NMCB FIVE was the third Battalion to be stationed on Camp Virginia and the Seabee compound celebrated its one year anniversary shortly after NMCB TWO SIX arrived. Camp maintenance, Alfa, MLO/CTR and armory personnel worked diligently to improve the camp in accordance with NCF practices. Several thousand dollars worth of parts for Army CESE were sorted and removed from camp, the MLO and excess yards were inventoried and reorganized, and the armory was redesigned to meet Navy guidelines.

#### **CONTINGENCY OPERATIONS**



Crew leader checks alignment of new post.



New fence.

## PERIMETER FENCE, CAMP MOREELL CV5-830

Combined force of Active and Reserve Seabees install a new perimeter fence to replace existing triple strand concertina wire, improving the camp's security and appearance.

**Project Scope:** Install 4,800 ft. of chain link security fence around the Camp Moreell perimeter to replace the existing concertina wire fence. The fence will include vehicle gate, barbed/concertina wire top, vehicle cable and will terminate on two sides into the existing Ali Al-Salem LSA perimeter fence.

Personnel: 6

**Duration:** June 2006 - February 2007

Mandays Expended: NMCB SEVEN: 367

NMCB FIVE: 342 Cumulative: 709

Tasking: WIP at Turnover: 30%

WIP at Completion: 70%
MD Tasked to NMCB SEVEN: 210
MD Tasked to NMCB FIVE: 321
Total Project MD: 709

 Material Cost:
 \$82,105

 Cost Savings:
 \$248,150

Significant Safety Issues: None.

Significant QC Issues: Special care taken to align all fence posts and place at the correct elevation.

**Significant Design Issues:** Existing water lines under the fence footprint not identified in the dig permit. Shallow water lines ran parallel to the fence and were a concern when digging fence pole foundations.

**Significant Material Issues:** The project was started without the correct material. Deficiencies were identified, but delays in funding and procurement delayed project.

#### **CONTINGENCY OPERATIONS**







Completed ramps.

## LOADING RAMP, CAMP MOREELL CV5-835

Seabees from NMCB FIVE and TWO ONE completed the new loading ramps started by NMCB SEVEN. The crew removed the forms and regraded the site around the ramps.

Project Scope: Construct two concrete loading ramps on Camp Moreell.

Personnel: 6

Mandays Expended:

**Duration:** August 2006

NMCB SEVEN: 323 NMCB FIVE: 34

Cumulative: 357

Tasking:WIP at Turnover:92%

WIP at Completion: 100%
MD Tasked to NMCB SEVEN: 323
MD Tasked to NMCB FIVE: 27
Total Project MD: 350

 Material Cost:
 \$33,039

 Cost Savings:
 \$122,500

Significant Safety Issues: None.

**Significant QC Issues:** Significant honeycombing and voids identified when the forms were removed. Crew made repairs with additional concrete.

**Significant Design Issues:** Edges on the ramp. Design specified 6 in.overhangs on either side of the ramp to obtain required total. A FAR was submitted to remove the overhangs and denied. One section failed while a tracked vehicle was being loaded soon after project completion.

Significant Material Issues: None.





Scraper moving spoil.



Completed entry and exit roads.

## CONSTRUCT ENTRY CONTROL POINT #2, CAMP VIRGINIA CV6-032

Detail Camp Virginia Seabees worked closely with FET North and Camp Virginia Command Cell to determine the requirements for ECP #2 and best layout in area to contain a new connex laydown yard, Tactical Assembly Area, and retention pond.

**Project Scope:** Construct a new ECP with two lanes for entry and exit, a vehicle search area, and drainage to the new retention pond at Camp Virginia. The ECP shall breach the interior berm but not the perimeter wire or exterior berm. The interior berm shall be secured nightly.

Personnel: 8

**Duration:** September 2006 - December 2006

Mandays Expended:NMCB FIVE:327Cumulative:327

Tasking: WIP at Turnover: 0%

WIP at Completion: 100% MD Tasked to NMCB FIVE: 363 Total Project MD: 363

Material Cost: \$25,000 Cost Savings: \$127,050

**Significant Safety Issues:** Crew briefed vehicle routes daily and ground guides were used to prevent mishaps.

**Significant QC Issues:** First crew leader and majority of the crew were from NMCB TWO ONE. Turnover with NMCB TWO SIX required new learning curve to complete work.

**Significant Design Issues:** ECP design provided by FET North did not integrate multiple other projects on the same site.

Significant Material Issues: None.





Seabee compacts gatch and gravel.



Completed road.

## CONEX LAYDOWN YARD, CAMP VIRGINIA CV6-058

NMCB FIVE and TWO ONE Seabees completed new conex laydown yard for Camp Virginia providing consolidated storage and increased camp force protection. Due to extreme heat during the day, crews worked nights to prevent the gatch and gravel drying too quickly during placement.

**Project Scope:** Clear and grade a 200 m x 400 m pad to be used as a conex laydown yard. Include drainage to an existing swale and placement of two gatch and gravel roads 18.5 m wide, 6 in. thick and the length of the yard.

Personnel: 8

**Duration:** August 2006 - September 2006

Mandays Expended: NMCB SEVEN: 108
NMCB FIVE: 214

Cumulative: 322

Tasking:WIP at Turnover:52%WIP at Completion:100%

WIP at Completion: 100%
MD Tasked to NMCB SEVEN: 108
MD Tasked to NMCB FIVE: 98
Total Project MD: 206

Material Cost:\$11,381Cost Savings:\$72,100

**Significant Safety Issues:** Light plants were utilized at night to assist visibility for equipment operators. Pedestrians were strictly prohibited on-site.

**Significant QC Issues:** Crew inexperience with gatch and gravel and difficulty seeing small elevation changes at night made placement difficult. Rework necessary to provide a quality product.

**Significant Design Issues:** Two roads had to be placed flush with the surrounding elevation to maintain drainage to the existing swale.

**Significant Material Issues:** Water delivery required daily by a contractor to allow the crew to wet the gatch and gravel during placement.





Seabees installing new drywall.



Completed interior.

## LIBRARY, AAS LSA CV6-084

Seabees from NMCB FIVE and TWO SIX demo interior of four old shower trailers and rebuild as one new library.

**Project Scope:** Build-out interior of relocated trailers to include interior flooring, casing, thresholds, roof sections, metal flashing and other items removed during relocation. Demolish interior and install new electrical drops, interior walls, exterior stairs, and new roof sections as required to achieve water tightness.

Personnel: 10

**Duration:** July 2006 - January 2007

Mandays Expended: NMCB SEVEN: 217 NMCB FIVE: 391

Cumulative: 391

Tasking: WIP at Turnover: 53%

WIP at Completion: 100%
MD Tasked to NMCB SEVEN: 124
MD Tasked to NMCB FIVE: 303
Total Project MD: 427

 Material Cost:
 \$6,842

 Cost Savings:
 \$149,450

Significant Safety Issues: Crew used masks and respirators as necessary while sanding drywall.

**Significant QC Issues:** Existing trailers were not plumb or level which required additional work prior to linoleum installation.

**Significant Design Issues:** Original design specified wood sheathing on the walls. Fire code did not allow use of wood sheathing which resulted in significant rework.

**Significant Material Issues:** Project material not ordered prior to the end of the fiscal year caused four month project delay.





Driving pickets for new wire.



Completed site.

## INTRUDER DETECTION SYSTEM SITE PREP, CAMP VIRGINIA CV6-088

First phase of Camp Virginia master plan is new intruder detection system. The system requires a 60 ft. wide path around the entire camp perimeter and movement of four miles of triple strand concertina wire currently in the footprint.

**Project Scope:** Grade eight mile long, sixty ft. wide path around Camp Virginia for installation of Intruder Detection System. Path shall be determined by the future location of a new vehicle fence as surveyed by FET North. The site shall drain water and have no abrupt elevation changes greater than three in. between IDS sensor locations.

Personnel: 5

**Duration:** November 2006 - January 2007

Mandays Expended: NMCB FIVE: 221

Cumulative: 221

Tasking: WIP at Turnover: 0%

WIP at Completion: 100% MD Tasked to NMCB FIVE: 484 Total Project MD: 484

Material Cost: \$0

**Cost Savings:** \$169,400

Significant Safety Issues: Crews wore long sleeves, proper gloves and eye protection while handling concertina wire.

**Significant QC Issues:** Crews constantly checked the grade with a laser level and EA's verified final elevations prior to completion.

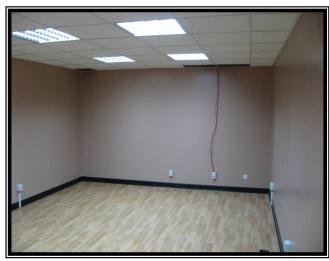
**Significant Design Issues:** Existing concertina wire was initially scheduled for removal by a contractor. Contract was not awarded and removal was tasked to crew.

**Significant Material Issues:** Majority of site is sand which will wash out over time.





Framing a new door.



Completed trailer interior.

## PSB HEADQUARTERS, AAS LSA CV6-111

NMCB SEVEN and NMCB TWO ONE started the project but material delays stopped work in August. NMCB FIVE and NMCB TWO SIX restarted the project in December.

**Project Scope:** Build-out interior of relocated trailer to include interior flooring, casing, thresholds, roof sections, metal flashing and other items removed during relocation. Demolish interior and install new electrical drops, interior walls, exterior stairs, and new roof sections as required to achieve water tightness.

Personnel: 10

**Duration:** July 2006 - February 2007

Mandays Expended: NMCB SEVEN: 44

NMCB FIVE: 257 Cumulative: 301

Tasking:WIP at Turnover:13%WIP at Completion:91%

WIP at Completion: 91%
MD Tasked to NMCB SEVEN: 44
MD Tasked to NMCB FIVE: 287
Total Project MD: 331

 Material Cost:
 \$37,231

 Cost Savings:
 \$109,550

**Significant Safety Issues:** Crew inexperience in cutting and installing steel studs increased chance of injury.

Significant QC Issues: None.

**Significant Design Issues:** The floor plan and HVAC design changed in December forcing add-on Bill of Material submission.

**Significant Material Issues:** Project material not ordered prior to the end of the fiscal year caused a four month project delay waiting for material.





A Seabee finishes a new pad.



Completed pads.

## INSTALL TEMPER TENT PADS, AAS LSA CV6-137

NMCB TWO ONE and FIVE Seabees worked in extreme weather conditions on Ali Al-Salem's Life Support Area to significantly improve the quality of life for troops moving in and out of Iraq and Afghanistan. The crew worked at night to minimize risk of heat related injuries and provide more time before the concrete set.

**Project Scope:** Construct six new reinforced concrete pads for use as floors in temper tents.

Personnel: 6

**Duration:** August 2006 - September 2006

Mandays Expended: NMCB FIVE: 135

Cumulative: 135

Tasking: WIP at Turnover: 0%

WIP at Completion: 100% MD Tasked to NMCB FIVE: 120 Total Project MD: 120

 Material Cost:
 \$9,797

 Cost Savings:
 \$42,000

**Significant Safety Issues:** Project site was between inhabited troop housing and the showers, toilets, and laundry facilities. Site had to be clearly defined and marked.

**Significant QC Issues:** Extreme heat caused the concrete to set very quickly. Additives also caused surface cracking if slabs were not kept hydrated.

**Significant Design Issues:** Vapor barrier below the slabs required to prevent subgrade from absorbing all of the concrete's moisture. Subsurface also wetted prior to placement.

**Significant Material Issues:** Concrete delivery drivers did not have camp passes, were always late, and often became lost driving to the camp. One truck overheated on-site while placing concrete and the water used to wet the concrete had to be used to keep truck running.

#### **CONTINGENCY OPERATIONS**



Excavating existing drainage ditch.



Restored drainage ditch.

## DRAINAGE PLAN, AAS LSA CV6-158

Repair and improve LSA drainage plan. Initially divided into six phases, host nation approval problems required the scope be reduced to two. The LSA is built in a flood plane with no natural drainage. Previous flooding caused extensive damage and impacted to mission.

**Project Scope:** Survey and repair existing drainage on Ali Al-Salem Life Support Area. Restore drainage to critical areas as designated by the Command Cell.

Personnel: 4

**Duration:** September 2006 - January 2007

Mandays Expended: NMCB FIVE: 277

Cumulative: 277

Tasking: WIP at Turnover: 0%

WIP at Completion: 100% MD Tasked to NMCB FIVE: 315 Total Project MD: 315

 Material Cost:
 \$2,500

 Cost Savings:
 \$110,250

**Significant Safety Issues:** High congestion around work site. The work site was clearly marked and spotters always used around equipment.

Significant QC Issues: EA support required to ensure all new drainage was correctly sloped.

**Significant Design Issues:** Initial design was not approved by the host nation and project was significantly reduced. The customer continually requested more work to offset the reduced scope.

**Significant Material Issues:** Without any soil stabilization permitted, all excavation in the sandy subsoil prone to heavy erosion in any rain.





Completed new deck.



New deck.

## TF GATOR AND TITAN DECK, CAMP VIRGINIA CV6-167

Seabees from NMCB FIVE and NMCB TWO ONE built a new deck to improve quality of life for the Soldiers of Task Force Titan and Gator. The task forces provided all necessary material.

Project Scope: Construct two wood decks for TF Titan and TF Gator's office spaces.

Personnel: 4

**Duration:** September 2006

Mandays Expended: NMCB FIVE: 68

Cumulative: 68

**Tasking:** WIP at Turnover: 0%

WIP at Completion: 100% MD Tasked to NMCB FIVE: 52 Total Project MD: 52

Material Cost: \$2,000 Cost Savings: \$18,200

Significant Safety Issues: None.

Significant QC Issues: None.

Significant Design Issues: No design provided which required crew to design the decks on-site.

**Significant Material Issues:** All material provided by the customer.





Seabee cutting a piece of lumber.



Completed stand.

## ANTENNA STAND, CAMP VIRGINIA CV6-168

NMCB TWO ONE and NMCB FIVE Seabees worked together to construct a new elevated stand for Camp Virginia Signal Corps' antenna. Antenna provides information link for all NIPR on the camp. To save time and material, crew developed a plan to reuse two discarded water towers welded together as the new stand with a new wooden platform and stairs constructed with material from excess.

**Project Scope:** Construct an 11 ft. x 11 ft. elevated stand to mount a signal antenna. The stand must be tall enough to provide line-of-site above the adjacent buildings.

Personnel: 4

**Duration:** September 2006 - October 2006

Mandays Expended: NMCB FIVE: 45
Cumulative: 45

Tasking: WIP at Turnover: 0%

WIP at Completion: 100%
MD Tasked to NMCB FIVE: 65
Total Project MD: 65

 Material Cost:
 \$1,500

 Cost Savings:
 \$22,750

**Significant Safety Issues:** Crew welded tie-off loops to the water tower platforms so they could correctly tie-off during construction.

**Significant QC Issues:** Water towers did not have identical dimensions and were not plum. The steelworker shop re-welded any damaged members before connecting the towers, and the feet were shimmed to provide a plum finished product.

**Significant Design Issues:** No design was provided by FET. The crew developed the design to re-use the water towers.

**Significant Material Issues:** Because the mission directive was issued during the change to the new fiscal year, material was not readily available. The crew used material from excess and the camp scrap yard to complete the project.





Leased D-8 ripping solid rock.



Completed pond after a light rain.

## CONSTRUCT NORTH RETENTION POND, CAMP VIRGINIA CV6-169

Seabees excavated a new retention pond for the new connex laydown yard, ECP #2, and Tactical Assembly Area. Because of site constraints, the depth required was 8 feet below grade.

**Project Scope:** Construct a new retention pond capable of holding 7,400 cu. m of water with a minimum berm height of 3 ft. around the pond.

Personnel: 4

**Duration:** September 2006 - December 2006

Mandays Expended: NMCB FIVE: 123

Cumulative: 123

**Tasking:** WIP at Turnover: 0%

WIP at Completion: 100% MD Tasked to NMCB FIVE: 72 Total Project MD: 72

Material Cost: \$0 Cost Savings: \$25,200

**Significant Safety Issues:** Crew briefed vehicle routes daily and used ground guides to prevent mishaps. Dust raised on the site severely limited visibility.

Significant QC Issues: None.

**Significant Design Issues:** The ECP design provided by FET North did not include multiple other projects on the same site or how the projects fit together. Solid caliche was encountered at 2-4 ft. The organic D-7 bulldozer was too small to rip the rock and a leased D-8 was required.

**Significant Material Issues:** After contract for the leased CESE expired more than two months were required to renew the lease so the crew could complete the project.





Seabees building dressing room floor.



Completed dressing room and rear wall.

## CONSTRUCT BACKSTAGE FOR MWR STAGE, CAMP VIRGINIA CV7-025

Seabees built a new backstage wall and dressing room for the Camp Virginia MWR stage, increasing the number of MWR shows the camp can support and the quality of life for troops stationed on or moving through the camp. The existing stage was a simple platform with a tent cover.

**Project Scope:** Construct a back stage for the MWR stage on Camp Virginia. The stage shall include doors and hardware, plywood walls and flooring, air conditioning, light fixtures, corrugated metal roof for the dressing room, wood picture frame for movies, and paint for all interior finish work.

Personnel: 6

**Duration:** November 2006 - December 2006

Mandays Expended: NMCB FIVE: 137
Cumulative: 137

Tasking: WIP at Turnover: 0%

WIP at Completion: 100%
MD Tasked to NMCB FIVE: 197
Total Project MD: 197

 Material Cost:
 \$20,000

 Cost Savings:
 \$68,950

**Significant Safety Issues:** Crew used fall protection secured to the existing tent structure whenever working at heights.

**Significant QC Issues:** Stage platform and tent were existing. All new construction had to be at the same elevation and match the tent shape.

**Significant Design Issues:** Scope was to match an existing stage on Camp Beuhring. Crew had to measure the existing stage and develop a design based on the measurements.

Significant Material Issues: None.





Hand digging around an existing utility.



Completed communication closet.

## COMMUNICATION UPGRADE, CAMP MOREELL CV7-303

Upgrade communications to provide Camp Moreell with a hard line connection.

**Project Scope:** Install new buried communication conduit, electrical outlets, and HVAC to a new communication closet as indicated by the Air Force communication contractor.

Personnel: 6

**Duration:** June 2006 - February 2007

Mandays Expended: NMCB FIVE: 62

Cumulative: 62

**Tasking:** WIP at Turnover: 0%

WIP at Completion: 100% MD Tasked to NMCB FIVE: 55 Total Project MD: 55

Material Cost: \$34,000 Cost Savings: \$19,250

**Significant Safety Issues:** Unmarked lines forced crew to hand dig the majority of trenches.

Significant QC Issues: None.

Significant Design Issues: Accurate drawings of utilities on Camp Moreell do not exist.

Significant Material Issues: None.





Framing a new wall.



Completed interior walls and raised platform.

# BUILD-OUT THE NEW USO TENT, CAMP VIRGINIA OIC DISCRETIONARY

The new USO for Camp Virginia moved into the old gym tent with no walls and only a warped floor. The crew worked with the new USO representative to design and construct a new floor plan.

**Project Scope:** Construct interior walls in the USO tent.

Personnel: 6

**Duration:** September 2006 - December 2006

Mandays Expended: NMCB FIVE: 159
Cumulative: 159

WID at Turnover

Tasking: WIP at Turnover: 0%

WIP at Completion: 100% MD Tasked to NMCB FIVE: 150 Total Project MD: 150

 Material Cost:
 \$20,000

 Cost Savings:
 \$55,650

**Significant Safety Issues:** End walls were two stories tall which required crew to tie-off to tent structure.

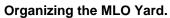
**Significant QC Issues:** Existing floor was not level or square. All new walls built to match floor contours and tops cut level.

**Significant Design Issues:** Design created by the crew and USO representative working together.

Significant Material Issues: All material provided by the USO.









Cutting steel templates for a project.

# DETAIL CAMP VIRGINIA CAMP MAINTENANCE CV6-300

### Camp Maintenance Tasking

 PMS
 0

 WRS
 0

 SJO
 0

 Projects
 1050

#### Total Mandays Expended 1050



Shelving construction for an adjacent unit.









Locating power lines.

# DETAIL CAMP VIRGINIA OIC DISCRETIONARY CV5-500

## **Project Listing**

Pre-cast footers for reclaimed sunshades	22
Post Office Loading Ramp Shelter	36
Locate Utility Lines, Camp Moreell	2

### **Total Mandays Expended**

60



Post Office loading ramp shelter.



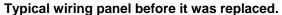
### **NMCB FIVE DET VIRGINIA**

Labor Distribution Summary

	Aug	Sep	Oct	Nov	Dec	Jan	Feb	Total	%Total
Direct Labor MDs	325	926	914	464	721	582	31	3963	71%
Indirect Labor MDs	26	216	182	160	139	158	15	896	16%
Readiness/Training	83	123	118	106	129	102	66	727	13%
Total MDs Exp	434	1265	1214	730	989	842	112	5586	100%
# Total Personnel	77	76	79	51	55	56	55	N/A	
# Direct Labor	47	44	49	28	31	31	15	N/A	
# Workdays	12	26	26	22	26	23	6	141	
% Direct Labor	61%	58%	62%	55%	56%	55%	27%	54%	
Ideal Capability	705	1430	1593	770	1008	891	113	6169	
Availability Factor	58%	73%	65%	74%	84%	77%	86%	74%	









Shower and head facilities at Camp Moreell.

# CAMP MOREELL CAMP MAINTENANCE CM6-300

#### **Camp Maintenance Tasking**

Trouble Calls	1179
PMS	853
SJO	26
Projects	57

#### Total Mandays Expended 2115



Charlie Company begins removing the roof of the Armory.









Interior finish of one gym addition.

# CAMP MOREELL OIC DISCRETIONARY CM6-500

## **Project Listing**

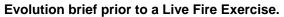
Total Mandays Expended	272
Wardroom/Chief Mess site prep	10
ECP Road repair	90
NAVCENT Trailer Install	16
Camp gym addition	156



NAVCENT trailer install.









1194

Seabees BZO on a 25 m range.

# CAMP MOREELL SEABEE SPECIFIC TAILORED TRAINING (S2T2) CM6-902

### S2T2 Tasking

**Total Mandays Expended** 

Troop RSO&I	
Personnel Trained	2592
Range Hours	242
Rounds Expended	
5.56	109,390
7.62	16,300
9mm	16,450
.50 cal	18,400
M203 40mm	100



Junior Seabees get instruction in 9mm marksmanship.



### NMCB FIVE DET MOREELL

Labor Distribution Summary

	Aug	Sep	Oct	Nov	Dec	Jan	Feb	Total	%Total
Direct Labor MDs	478	1049	1349	1642	1771	1944	234	8467	85%
Indirect Labor MDs	40	95	140	139	153	130	39	736	7%
Readiness/Training	87	85	158	201	98	125	12	766	8%
Total MDs Exp	605	1229	1647	1982	2022	2199	285	9969	100%
# Total Personnel	69	74	70	80	80	80	52	N/A	
# Direct Labor	40	40	50	58	58	58	30	N/A	
# Workdays	12	26	26	25	25	27	9	150	
% Direct Labor	58%	54%	71%	73%	73%	73%	58%	66%	
Ideal Capability	600	1300	1625	1813	1813	1958	338	8946	
Availability Factor	94%	87%	93%	102%	103%	106%	73%	94%	



#### **DETAIL HORN OF AFRICA EXECUTIVE SUMMARY**

NMCB FIVE deployed 124 Seabees to Camp Lemonier, Djibouti in support of the Combined Joint Task Force Horn of Africa (CJTF-HOA) with water-well drilling capability, humanitarian relief/ disaster recovery capabilities, and public works support personnel. Numerous detachments well spread throughout an AOR larger than the United States and Iraq combined.

Immediately upon arrival, the Detail was requested by the US Ambassador in Ethiopia to respond for humanitarian support and successfully planned and deployed 36 Seabees to Dire Dawa, Ethiopia for Operation HONEST ECLIPSE 06-02. The Detail supported 8,000 Ethiopians displaced by flash floods with the delivery and erection of 58 Temper tents, installation of sanitation infrastructure, and training of Ethiopian Defense Force to maintain the camp.

While Seabees were conducting humanitarian operations in Ethiopia, an on-going operation, NATURAL FIRES, required Seabees to complete Engineering Civil Affairs Program (ENCAP) projects. Ten Seabees deployed to Baringo, Kenya to rehabilitate a three-room schoolhouse and 10,000-gallon water tank. Adapting to local construction techniques, the detachment assisted Kenyan DoD engineers and significantly enhanced the quality of life for the local population by providing a source of water for surrounding villages during the dry season and the only schoolhouse within an eleven mile radius.

While executing NATURAL FIRES and HONEST ECLIPSE, the detail focused on designs, plans, and estimates to commence Camp Lemonier projects. Within weeks the Detail commenced construction of the Camp Expansion Area Perimeter Road with AT/FP ditch and berm, Quick Reaction Force SWA Huts, and construction of office spaces for the Camp Safety Department and A/DACG facility. The learning curve was steep due to poor materials and logistical challenges.

The Details "outside the wire" work commenced with the launching of eleven Seabees to provide maintenance and construction support to the Coalition Operating Locations in Manda Bay, Kenya and Hurso, Ethiopia. The Detail deployed twelve Seabees to Praslin Island, Seychelles to construct the Bay St. Anse Hospital Morgue and rehabilitate the Anse La Blague Clinic. Ten Seabees commenced construction of the Balbala #3A Primary School bathroom facility and twelve Seabees deployed to Tadjoura to commence construction on a girl's dormitory security fence located in the remote village's secondary school.

The next major milestone was the commencement of Operation IDEAL KNIGHT in Northeastern Kenya, a high-visibility and much anticipated water well mission. Crew overcame heavy flooding and force protection issues to complete two productive water wells while also working in conjunction with the KDoD well drillers through worker exchanges and on the job training.

The Detail's final planned mission was to plan and launch crews to Addis Ababa and Bilate, Ethiopia to commence school projects. The primary focus of the ten Seabees launched downrange was to identify and procure materials needed to commence the vast majority of the construction activities.

Unplanned, but more important than any mission to date, was Task Force support of the kinetic mission in Somalia. The task force was created and deployed at the onset of hostilities in Somalia with no supporting infrastructure to sustain operations. The Detail deployed ten Seabees to construct a camp in Dire Dawa, Ethiopia and eight to COL Manda Bay to increase the camps limited capacity. The Seabees performed flawlessly, earning the praise of the Combined Joint Task Force.





Construction of berm.



Completed v-ditch, road, and berm.

## PERIMETER ROAD EXPANSION, CAMP LEMONIER DJ6-049

Detail worked to excavate and construct a perimeter road with a security ditch and berm for the Camp Lemonier Expansion Area. Completion of the project will enable the camp to move into the expansion area in the summer of 2007.

**Project Scope:** Development of 7,500 linear ft. of perimeter road for the Camp Lemonier expansion area. Roadwork includes clearing, grubbing, grading as well as construction of AT/FP ditch and berm along the outer perimeter.

Personnel: 5

**Duration:** August 2006 - January 2007

Mandays Expended: NMCB FIVE: 379

Cumulative: 379

**Tasking:** WIP at Turnover: 0%

WIP at Completion: 100% MD Tasked to NMCB FIVE: 405 Total Project MD: 405

 Material Cost:
 \$225,000

 Cost Savings:
 \$141,750

Significant Safety Issues: None.

Significant QC Issues: Continued erosion due to heavy rains resulted in heavy rework to the v-ditch.

**Significant Design Issues:** Early scope and design changes resulted in project becoming much more intensive than originally anticipated.

**Significant Material Issues:** Project delayed due to new fiscal year funding impacting purchase and delivery of "just in time" road gravel.





Installation of SWA Hut floor.



Completed SWA huts.

# QUICK REACTION FORCE SWA HUTS, CAMP LEMONIER DJ6-050

Detail constructed three 20 ft. x 40 ft. customized South West Asia (SWA) Huts to provide the Camp Lemonier Quick Reaction Forces teams with facilities to improve on-call berthing areas, on-duty lounge areas, and office spaces. Project was completed in three phases to accommodate Marines living in existing tents.

**Project Scope:** Construct three 20 ft. x 48 ft. wood framed SWA Huts with gable finish roof and corrugated metal exterior finish. Interior finish includes gypsum with textured paint and vinyl tile floor. Structures included mechanical, electrical, and communications systems.

Personnel: 8

**Duration:** August 2006 - January 2007

Mandays Expended: NMCB FIVE: 835

Cumulative: 835

Tasking: WIP at Turnover: 0%

WIP at Completion: 100% MD Tasked to NMCB FIVE: 551 Total Project MD: 551

 Material Cost:
 \$101,425

 Cost Savings:
 \$196,350

Significant Safety Issues: None.

**Significant QC Issues:** Early learning curves dealing with poor materials resulted in 80 mandays of rework. Crew inexperience resulted in substantial rework of trusses and decking for SWA Hut #1.

Significant Design Issues: None.

**Significant Material Issues:** Available wood was very poor quality. To maintain quality standards, framing had to be completed on site, vice the faster pre-fabrication method originally attempted. Delivery of gypsum board significantly delayed project.





Framing of walls and joists.



Completed exterior.

# BLDG 200 SAFETY OFFICE, CAMP LEMONIER DJ6-085

Seabees demolished an existing garage storage area to construct a 1,200 sq. ft. office building for the Camp Lemonier Safety, Environmental, and Explosive Safety Offices. Detail performed all the design work to construct the office spaces within the existing structure.

**Project Scope:** Demo existing garage spaces interior and construct two office spaces within the existing structure. Raised sub-floor with a customized ceiling and joist design. Install electrical and lighting, air conditioning units, and communications lines.

Personnel: 7

**Duration:** August 2006 – December 2006

Mandays Expended: NMCB FIVE: 291
Cumulative: 291

**Tasking:** WIP at Turnover: 0%

WIP at Completion: 100%
MD Tasked to NMCB FIVE: 167
Total Project MD: 167

 Material Cost:
 \$36,423

 Cost Savings:
 \$58,450

Significant Safety Issues: None.

**Significant QC Issues:** Exterior metal sheeting screw alignment and spacing not within specifications resulted in rework.

Significant Design Issues: Completely designed by Detail project crew and EA's.

**Significant Material Issues:** Warping of untreated lumber occurred after installation causing rework and significant delays. Project on hold for three weeks waiting for gypsum board delivery.





Exterior view of new wall and door.



Finished interior office #1.

# A/DACG PASSENGER SERVICE OFFICE, CAMP LEMONIER DJ6-087

Construct new office spaces inside the Camp Lemonier Arrival/Departure Airfield Control Group Passenger Terminal. The completed offices were utilized as the Military Passenger Services Administration Offices.

**Project Scope:** Renovate existing area into two 8 ft. x 10 ft. office spaces to include installation of electrical lighting, receptacles, doors, suspended ceiling, gypsum drywall, and trim.

Personnel: 4

**Duration:** September 2006 - October 2006

Mandays Expended: NMCB FIVE: 71

Cumulative: 71

Tasking: WIP at Turnover: 0%

WIP at Completion: 100% MD Tasked to NMCB FIVE: 68 Total Project MD: 68

Material Cost:\$3,971Cost Savings:\$23,800

Significant Safety Issues: None.

Significant QC Issues: None.

Significant Design Issues: None.





Crew placing concrete for head facility.



Completed structure.

# BALBALA # 3A SCHOOL HEAD FACILITY, DJIBOUTI DJ6-132

Seabees conducted Operation GALLANT DART 06-02 to construct new facilities for the Balbala #3A Primary School near Camp Lemonier. The crew overcame adversity in tight and congested working areas with daily vandalism and harassment to complete a bathroom facility and septic system.

**Project Scope:** Construct a 25 ft. x 17 ft. CMU head facility with two sinks, two western style and ten Turkish style water closets. Install a pre-fabricated septic tank and cast-in-place concrete leech tank. Fabricate and install metal water towers for gravity fed water distribution system.

Personnel: 10

**Duration:** September 2006 - January 2007

Mandays Expended:NMCB FIVE:429Cumulative:429

**Tasking:** WIP at Turnover: 0%

WIP at Completion: 100% MD Tasked to NMCB FIVE: 371 Total Project MD: 371

Material Cost: \$53,864 Cost Savings: \$129,850

**Significant Safety Issues:** Local children threw rocks at Seabees on a daily basis. Community officials and local police engaged on numerous occasions. One Seabee was transported to Germany to remove mortar from ear.

**Significant QC Issues:** Vandalism of stucco finish resulted in substantial rework. CMU was delivered in three sizes making QC extremely difficult.

Significant Design Issues: None.

**Significant Material Issues:** CMU cores had to be removed and were delivered in three sizes. Crew could not leave construction materials on-site due to theft. Daily pack-up greatly impeded progress.

#### **CONTINGENCY OPERATIONS**



Seabees and ENDF setup tents.



Completed tent camp.

# OPERATION HONEST ECLIPSE DJ6-902

Seabees delivered and erected 58 temper tents and excavated trash and latrine trenches, providing humanitarian assistance as requested by the US Ambassador to Ethiopia. NMCB FIVE successfully launched 36 personnel to Dire Dawa, to provide job training for 200 Ethiopian National Defense Force (ENDF) personnel.

**Project Scope:** Provide temper tents and training to Ethiopian National Defense Forces and Non-Governmental Organizations to erect a tent camp for 6,000-8,000 displaced Ethiopians.

Personnel: 32

**Duration:** August 2006

Mandays Expended: NMCB FIVE: 198

Cumulative: 198

**Tasking:** WIP at Turnover: 0%

WIP at Completion: 100% MD Tasked to NMCB FIVE: 198 Total Project MD: 198

Material Cost: No Information

Cost Savings: \$34,300

**Significant Safety Issues:** Area wildlife and disease potential was very high. Mosquito netting was required for open air berthing.

Significant QC Issues: None.

Significant Design Issues: Tent erection was most successful when anchored with sandbags or rocks.

**Significant Material Issues:** Tents inventoried on site due to deployment time restraints. Missing parts were shipped via CH-53.





Seabees construct concrete lid for tank.



Finished facility with new roof.

# OPERATION NATURAL FIRES DJ6-903

Detail deployed ten Seabees to Baringo, Kenya to assist construction efforts in support of Operation NATURAL FIRES. NMCB FIVE provided contingency construction support in the rehabilitation of a three-room schoolhouse and a 10,000 gal. water tank.

**Project Scope:** Plaster three classroom walls, stucco exterior walls, install eight new trusses, sheet roof, and place overhead concrete roof. Install two doors, four windows, and masonry gables. Refurbish water tank and construct new walls using masonry units.

Personnel: 10

**Duration:** August 2006 - September 2006

Mandays Expended:NMCB FIVE:132Cumulative:132

**Tasking:** WIP at Turnover: 0%

WIP at Completion: 100% MD Tasked to NMCB FIVE: 132 Total Project MD: 132

Material Cost: No Information

Cost Savings: \$46,200

Significant Safety Issues: None.

Significant QC Issues: None.

Significant Design Issues: None.

#### **CONTINGENCY OPERATIONS**



Seabee installing CMU block for wall.



Completed dormitories.

# TADJOURA DORMITORIES DJ6-904

Seabees lived and worked in arduous conditions in the remote village of Tadjoura, Djibouti to construct a perimeter wall and complete construction of a dormitory facility. The school will afford children of nomadic families the means to acquire an education. Convoy and airlift movements coordinated at Camp Lemonier delivered majority of construction materials and supplies.

**Project Scope:** Construct a 421 linear ft. CMU security wall, enclosing the existing dormitory structures. Replace eight western style toilets with traditional Turkish style toilets and install doors on toilet and shower stalls. Fabricate metal stands and place two concrete slabs to improve water tower supporting structure. Test electrical, replace defective components, and run electrical lines for commercial power installation. Place eight sets of concrete stairs. Install 42 metal shutters over existing window openings.

Personnel: 11

**Duration:** September 2006 - January 2007

Mandays Expended: NMCB FIVE: 718

Cumulative: 718

**Tasking:** WIP at Turnover: 0%

WIP at Completion: 100% MD Tasked to NMCB FIVE: 446 Total Project MD: 446

 Material Cost:
 \$1,013,130

 Cost Savings:
 \$156,100

Significant Safety Issues: None.

**Significant QC Issues:** Improper setup and placement of 40 ft. of CMU block perimeter wall resulted in demolition of section and reconstruction.

Significant Design Issues: None.

**Significant Material Issues:** Material delivery from Seven Seas vendor in Dubai delayed progress of some activities. CMU block was delivered wet, cores had to be chipped out, and block came in varying dimensions.





Seabees installing rafters for clinic.



Completed clinic exterior.

# ANSE LA BLAGUE CLINIC, SEYCHELLES DJ6-905

Seabees rehabilitated a Ministry of Health Clinic on Praslin Island, Seychelles. Clinic is located in an isolated village that does not have access to medical support.

**Project Scope:** Renovate existing 24 ft. x 12 ft. facility to include replacement of existing roof, ceiling, doors, windows, electrical, and plumbing. Install underground utilities, septic tank, and power distribution system.

Personnel: 10

**Duration:** October 2006 - January 2007

Mandays Expended: NMCB FIVE: 237

Cumulative: 237

**Tasking:** WIP at Turnover: 0%

WIP at Completion: 100% MD Tasked to NMCB FIVE: 161 Total Project MD: 160%

 Material Cost:
 \$82,434

 Cost Savings:
 \$56,350

Significant Safety Issues: None.

Significant QC Issues: None.

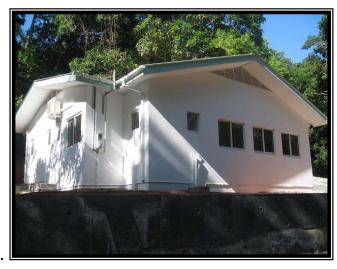
Significant Design Issues: None.

**Significant Material Issues:** Project experienced delays due to limited contractor material availability. Sole source contractor on Mahe Island provided all materials but could not meet prearranged delivery deadlines.





Seabees placing CMU block.



Finished morgue.

# BAYE ST. ANSE MORTUARY, SEYCHELLES DJ6-906

Detail provided QA for the contracted demolition of the existing morgue facility and built a temporary morgue to serve the community during construction of a new morgue on Praslin Island.

**Project Scope:** Constructed a 35 ft. x 27 ft. morgue facility. Facility included 2 bathrooms, waiting room, office spaces, storage room, post-mortem examination room, power distribution system, contracted stone retaining wall, and sewer system.

Personnel: 10

**Duration:** October 2006 - January 2007

Mandays Expended: NMCB FIVE: 643

Cumulative: 643

**Tasking:** WIP at Turnover: 0%

WIP at Completion: 100% MD Tasked to NMCB FIVE: 493 Total Project MD: 493

 Material Cost:
 \$123,651

 Cost Savings:
 \$153,650

Significant Safety Issues: None.

Significant QC Issues: None.

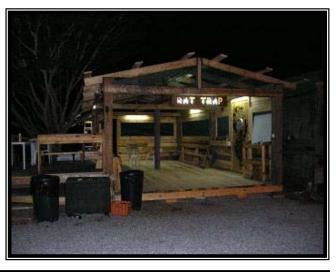
Significant Design Issues: None.

**Significant Material Issues:** Project experienced delays due to limited contractor material availability. Sole source contractor on Mahe Island provided all materials but could not meet prearranged delivery deadlines.





Installation of fencing at COL Hurso.



Completed MWR facility at COL Manda Bay.

# COALITION OPERATING LOCATION SUPPORT DJ6-907

NMCB FIVE provided support to the Coalition Operating Locations (COL) in Manda Bay, Kenya and Hurso and Bilate, Ethiopia. NMCB FIVE provided construction support to build an MWR facility, replaced 2,600 linear ft. of fenceline, upgraded a Tactical Operations Center, and provided camp maintenance support. The three forward bases are primarily tasked to provide mil-to-mil training.

**Project Scope:** Provide maintenance and construction support to forward operating bases in HOA.

Personnel: 19

**Duration:** September 2006 - February 2007

Mandays Expended: NMCB FIVE: 917

Cumulative: 917

**Tasking:** WIP at Turnover: 0%

WIP at Completion: 100% MD Tasked to NMCB FIVE: 1222 Total Project MD: 1222

Material Cost: No Information Cost Savings: \$427,700

**Significant Safety Issues:** Seabee redeployment due to injury from improper tool use. Incident amplified requirement to send safety-oriented leaders on remote detachments.

Significant QC Issues: Quality control dependent on on-site crew due to remote location.

**Significant Design Issues:** Seabees required ability to perform all design work due to remoteness and work generation process.

**Significant Material Issues:** Majority of material support provided through local vendors in Addis Ababa, Dire Dawa, and Mombassa.





Drilling operations in Alongo Arba.



Well turnover in Raya.

# OPERATION IDEAL KNIGHT, GARISSA, KENYA DJ6-909

NMCB FIVE deployed 24 Seabees to conduct drilling operations with Kenyan Department of Defense Well Drillers in northeastern Kenya. Drilling was consistently delayed due to heavy flooding and Somalian terrorist threats. Following heavy floods, the crew utilized tactical vehicles to deliver more than 55 tons of food for World Food Program and conducted community relation projects at local schools.

**Project Scope:** Drill and develop nine fresh water wells in five locations. NMCB FIVE team was responsible for completing five wells, while the KDOD team was responsible to complete four. Teams also conducted worker exchanges to conduct military-to-military well drilling training.

Personnel: 24

**Duration:** October 2006 - January 2007

Mandays Expended:NMCB FIVE:1260Cumulative:1260

Tasking:WIP at Turnover:0%WIP at Completion:52%

WIP at Completion: 52% MD Tasked to NMCB FIVE: 1582 Total Project MD: 1582

Material Cost:No InformationCost Savings:\$553,700

**Significant Safety Issues:** One Seabee broke hand while loading supplies and was returned to Camp Lemonier for follow-up treatment.

Significant QC Issues: Alonga Arba well did not develop due to geologic conditions.

**Significant Design Issues:** Original well sites changed during PDSS due to poor considerations of local population proximity.





Excavation for schoolhouse footers.



Seabees prefabricating rebar for footers.

# CHARCHENO SCHOOL, BILATE, ETHIOPIA DJ6-910

Seabees constructed school facilities at the Bilate Charcheno School Complex. The completed facilities will greatly increase educational opportunities for 350 students in the isolated and small village.

**Project Scope:** Construct two 1,450 sq. ft. masonry classroom buildings and one 280 sq. ft. dry pit 8-stall head facility.

Personnel: 8

**Duration:** December 2006 - January 2007

Mandays Expended: NMCB FIVE: 148

Cumulative: 148

**Tasking:** WIP at Turnover: 0%

WIP at Completion: 13% MD Tasked to NMCB FIVE: 148 Total Project MD: 443

 Material Cost:
 \$120,000

 Cost Savings:
 \$155,050

Significant Safety Issues: None.
Significant QC Issues: None.

Significant Design Issues: All design work was completed by the Detail.

Significant Material Issues: Material and equipment availability was extremely limited in remote area.

Most materials procured through local vendors in distant town of Awassa, Ethiopia.





Tile work in the bathroom.



Completed command suite hallway.

# BUILDING #100 COMMAND SUITE RENOVATION, CAMP LEMONIER DJ6-951

Remodeling of the Combined Joint Task Force Horn of Africa Command Suite to enhance the overall appearance and quality of life for personnel assigned to these offices. Project crew worked at night to limit disturbance to personnel working in these offices.

**Project Scope:** Remodel eight office spaces and two restrooms. Office work consisted of patching and painting wall and ceiling surfaces and replacing and painting all trimwork. Restroom work consisted of removing and replacing wall tile, installing new bathroom accessories, and construction of new toilet stalls.

Personnel: 4

**Duration:** October 2006 - January 2007

Mandays Expended: NMCB FIVE: 369

Cumulative: 369

Tasking: WIP at Turnover: 0%

WIP at Completion: 100% MD Tasked to NMCB FIVE: 287 Total Project MD: 287

 Material Cost:
 \$23,583

 Cost Savings:
 \$100,450

Significant Safety Issues: None.

Significant QC Issues: Poor quality required rework of CMU restroom stall walls.

Significant Design Issues: None.

Significant Material Issues: Wall tile damaged during shipment and had to be reordered.





**Drilling operations inside Camp Lemonier.** 



Seabee & Army Well Drillers working together.

# CAMP ROWPU WELL, CAMP LEMONIER DJ6-952

Water well team provided support to Public Works by drilling a well for a Camp Reverse Osmosis Water Purification Unit to provide a backup water supply source for the existing camp wells. Team was requested to provide assistance due to Army rig failure.

**Project Scope:** Drill 10 in. borehole for reverse osmosis water purification unit to provide backup water distribution source for Camp Lemonier utilizing ITWD rig.

Personnel: 19

**Duration:** September 2006 - October 2006

Mandays Expended: NMCB FIVE: 270

Cumulative: 270

**Tasking:** WIP at Turnover: 0%

WIP at Completion: 100% MD Tasked to NMCB FIVE: 270 Total Project MD: 270

Material Cost:\$10,000Cost Savings:\$94,500

Significant Safety Issues: None.

Significant QC Issues: Initial borehole collapsed due to heavy rains requiring new hole to be drilled.

Significant Design Issues: None.





Seabee installing electrical for SWA Hut.



Seabees finishing interior of SWA Hut.

# TASK FORCE SUPPORT, ETHIOPIA AND KENYA DJ7-901

Detail deployed eighteen Seabees to provide contingency camp construction support for berthing and support facilities to accommodate U.S. and Allied forces in Dire Dawa, Ethiopia and Manda Bay, Kenya.

**Project Scope:** Construct and maintain tent camps to include power distribution, air conditioning, head facilities, bunkers, watchtowers, Hesco barriers, and protective wire.

Personnel: 10

**Duration:** January 2007

Mandays Expended: NMCB FIVE: 263

Cumulative: 263

**Tasking:** WIP at Turnover: 0%

WIP at Completion: 100% MD Tasked to NMCB FIVE: 293 Total Project MD: 293

Material Cost: No Information Cost Savings: \$102,550

Significant Safety Issues: None.

Significant QC Issues: None.

Significant Design Issues: None.









Freshly painted Detail sign and doors.

# DETAIL HOA CAMP MAINTENANCE DJ6-300

### Camp Maintenance Tasking

 PMs
 0

 WRs
 0

 SJs
 0

 Projects
 354

#### Total Mandays Expended 354



Seabees constructed new shelter for MLO storage.









Constructed new roof for K9 shack.

# DETAIL HOA MINOR PROJECTS DJ6-500

### **Project Listing**

Chapel Renovation	35
Construct EOD Boat Awning	40
K9 Guard Shack	15
Install disintegrator for J3	10
Remove Airline HESCO Barriers	32
Renovate Post Office	40
Prefab and install N6 Metal Gate	24
Construct Combat Camera Tent Wall	8
Total Mandays Expended	204



Seabees constructed Explosive Ordnance Disposal Boat Awning.



### NMCB FIVE DET HOA

Labor Distribution Summary

	Aug	Sep	Oct	Nov	Dec	Jan	Feb	Total	%Total
Direct Labor MDs	938	1718	1957	1682	1672	1856		9823	71%
Indirect Labor MDs	218	485	490	383	463	503		2542	18%
Readiness/Training	153	274	286	287	234	220		1454	11%
Total MDs Exp	1309	2477	2733	2352	2369	2579	0	13819	100%
# Total Personnel	123	122	122	127	127	126		N/A	
# Direct Labor	84	80	83	84	83	85		N/A	
# Workdays	11	26	26	22	24	25	0	134	
% Direct Labor	68%	66%	68%	66%	65%	67%	0	0	
Ideal Capability	1155	2600	2698	2310	2490	2656	0	11940	
Availability Factor	94%	77%	83%	85%	77%	78%	0	0	



#### **DETAIL AFGHANISTAN ONE (AF) EXECUTIVE SUMMARY**

NMCB FIVE and TWO ONE Seabees deployed to Afghanistan in direct support of Operation ENDURING FREEDOM VII. Critical airfield repairs significantly increased operational capabilities of Joint Task Force.

#### **DETAIL AFGHANISTAN TWO (AT) EXECUTIVE SUMMARY**

NMCB FIVE deployed 40 Seabees within 100 hours of mission tasking to Afghanistan in support of Combined Joint Task Force 76 (CJTF 76). OPCON to Task Force Spartan, Detail AT supported the mission to defeat the Taliban and Al-Qaeda extremist movement in eastern Afghanistan.

Seabees from NMCB FIVE and NMCB TWO SIX hit the ground running upon arrival at Bagram Air Force Base, Afghanistan with immediate forward deployment to Forward Operating Base (FOB) Salerno and Outpost (OP) Kamdesh. In Kamdesh, the Detail overcame austere conditions and enemy activity to complete critical construction which enabled the first ever winter occupancy at the vital strategic foothold near an enemy supply route. The other half of the Detail supported the Brigade Engineer at FOB Salerno and simultaneously echoed the professional reputation of NMCB FIVE and TWO SIX by executing multiple vertical construction projects in direct support of the war fighter. Throughout the deployment five different "tiger team" sections deployed to nearby FOBs and OPs in support of Task Force Spartan and Special Forces. Projects included Southwest Asia (SWA) Huts, an aviation warehouse, concrete pads, a medical storage facility, a Tactical Operation Center (TOC) renovation, a timber tower, cold weather utility assessments, concrete and masonry partitions, contractor quality assurance, and camp maintenance. During one mission, two Seabees took enemy fire and have been nominated for Combat Action Ribbons.

As the first CJTF 76 Seabee Detail, Detail Afghanistan Two set the standard for a significant, future NCF presence in Region Command East. The reserve and active duty Detail components integrated seamlessly. The overall effort provided monumental engineering support at critical locations throughout the deployment and directly supported the war on terror and Operation ENDURING FREEDOM VII.

#### **DETAIL NAVCENT EXECUTIVE SUMMARY**

NMCB FIVE deployed 21 Seabees to NSA Bahrain, Kingdom of Bahrain and Kuwaiti Naval Base in support Naval Forces Central Command (NAVCENT). Detail NAVCENT was tasked with operation and maintenance of 16 pieces of Civil Engineering Support Equipment (CESE) for forward deployment in support of CENTCOM Theater Operations and contingency missions as directed. Immediately upon arrival, Detail NAVCENT was tasked to renovate a Tactical Operation Center for Naval Special Warfare Unit 3. Detail NAVCENT also executed two missions on the KAAOT oil platform in support of Coalition Forces assigned facility force protection duties. Installation of a water purification unit and the repair of a much needed walkway system increased security capabilities and quality of life for critical Kuwaiti infrastructure.

#### **DETAIL TALLIL EXECUTIVE SUMMARY**

NMCB FIVE deployed a 15-person detachment to Tallil, Iraq in support of Operation Iraq Freedom. Detail was tasked to build a 16 ft. x 48 ft. SWA hut to be used as a morgue. The SWA hut was to have two floor drains, with tile four feet off of the floor in the remains processing area allowing the area to be cleaned easily. It was also equipped with four A/C units, three heaters, shower, toilet, two deep sinks, and washer and dryer.

#### **CONTINGENCY OPERATIONS**



Milling operations.



Sweeping operations.

# RUNWAY REPAIR AF6-900

NMCB FIVE and TWO ONE Seabees deployed to Afghanistan to support critical airfield upgrades in a contingency environment. The team significantly increased operational capabilities for Joint Task Force in direct support of Operation ENDURING FREEDOM VII.

**Project Scope:** Repair existing runway to include variations, cracks and spalls in order to improve operations capability.

Personnel:

**Duration:** September 2006 - October 2006

Mandays Expended: NMCB FIVE: 267

Cumulative: 267

Tasking:WIP at Turnover:0%

WIP at Completion: 100% MD Tasked to NMCB FIVE: 315 Total Project MD: 315

Material Cost:No InformationCost Savings:\$110,250

Significant Safety Issues: None.

Significant QC Issues: None.

Significant Design Issues: None.





Initial site conditions.



Completed billeting facility.

### OUTPOST KAMDESH EXPANSION AT7-901

NMCB FIVE and TWO SIX Seabees overcame austere threat and weather conditions while working in a joint environment. The motivated crew successfully completed critical construction, which enabled the first ever winter occupancy at a vital offensive strategic foothold. The project increased the capabilities of the Combined Joint Task Force 76 and in direct support of Operation Enduring Freedom VII.

**Project Scope:** Provide outpost expansion support as required. Construct three Afghanistan National Army (ANA) SWA Huts. Finish 1,250 sq. ft. billeting facility construction on contractor placed stone foundation. Erect 1,352 sq. ft. dining facility on contractor placed stone foundation. Construct 1,512 sq. ft. tactical operation center (TOC) on contractor placed stone foundation.

Personnel: 18

**Duration:** November 2006 - January 2007

Mandays Expended: NMCB FIVE: 728
Cumulative: 728

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**Tasking:** WIP at Turnover: 0%

WIP at Completion: 100% MD Tasked to NMCB FIVE: 728 Total Project MD: 728

 Material Cost:
 \$260,000

 Cost Savings:
 \$254,800

**Significant Safety Issues:** Threat and weather conditions were hazardous, but no serious mishaps occurred.

Significant QC Issues: None.

Significant Design Issues: None.

**Significant Material Issues:** Inconsistent quality and delivery delays caused the workability and finish of the concrete to vary significantly. Most lumber was procured locally which required extra care to be taken to maintain design standards despite inconsistencies such as nominal and actual dimension sized lumber.





Seabees place timber tower.



Completed SWA Hut.

# FORWARD OPERATING BASE METHER LAM SUPPORT AT7-903

Integrated NMCB FIVE and TWO SIX Seabee team deployed to support FOB requirements in a contingency environment. The team significantly increased mission capability for the residing Infantry Unit in direct support of Operation ENDURING FREEDOM VII.

**Project Scope:** Provide support in conjunction with master plan. Construct and wire two surge Southwest Asia (SWA) Huts. Demolish and renovate 896 sq. ft. (32 ft. x 28 ft.) space within existing brick and mortar building for tactical operations center.

Personnel: 8

**Duration:** December 2006 - January 2007

Mandays Expended: NMCB FIVE: 315 Cumulative: 315

Tasking: WIP at Turnover: 0%

WIP at Completion: 100%
MD Tasked to NMCB FIVE: 315
Total Project MD: 315

Material Cost: \$57,000 Cost Savings: \$110,250

Significant Safety Issues: None.

Significant QC Issues: Additional quality assurance necessary due to poor material quality.

**Significant Design Issues:** Final master plan changed considerably from initial design. Extra coordination and design approval required throughout project.

**Significant Material Issues:** Most of the lumber procured locally. Extra care required to ensure constructability and maintain design standards despite inconsistencies such as nominal and actual dimension sized lumber.





Shimming doorway.



Local construction quality assurance.

### FORWARD OPERATING BASE JALALABAD SUPPORT AT7-905

NMCB FIVE and TWO SIX Seabees deployed to support FOB requirements in a contingency environment. Projects included quality assurance for local brick and mortar contractor, minor projects, and camp maintenance. The work was in direct support of Operation Enduring Freedom VII.

**Project Scope:** Provide quality assurance for local contractor, perform camp maintenance and minor projects as required.

Personnel: 4

**Duration:** December 2006 - January 2007

Mandays Expended: NMCB FIVE: 200

Cumulative: 200

Tasking: WIP at Turnover: 0%

WIP at Completion: 100% MD Tasked to NMCB FIVE: 200 Total Project MD: 200

 Material Cost:
 \$35,000

 Cost Savings:
 \$42,600

Significant Safety Issues: None.

**Significant QC Issues:** Local contractor was not familiar with industry standards and did not follow design entirely resulting in rework.

Significant Design Issues: None.

**Significant Material Issues:** Material availability was extremely limited due to other higher priority work at nearby outposts and FOBs. Crews were not fully employed and work was assigned and executed by transient Seabees awaiting flights.

#### **CONTINGENCY OPERATIONS**



Romex installation.



Completed lighting.

### SWA HUT ELECTRICAL AT7-915

NMCB FIVE and TWO SIX Seabees deployed to Forward Operating Base Salerno to support FOB requirements in a contingency environment. Project saved government money by installing electrical infrastructure for four different end users.

**Project Scope:** Install rough and finish electrical for four SWA Huts with three service panels and four HVAC units.

Personnel: 5

**Duration:** November - December 2006

Mandays Expended: NMCB FIVE: 40

Cumulative: 40

**Tasking:** WIP at Turnover: 0%

WIP at Completion: 100% MD Tasked to NMCB FIVE: 40 Total Project MD: 40

 Material Cost:
 \$46,000

 Cost Savings:
 \$14,000

Significant Safety Issues: None.

Significant QC Issues: None.

Significant Design Issues: None.

Significant Material Issues: Adjustments were made based on availability of American or European

material.





Site preparation and logistics.



Completed site preparation.

### MEDICAL STORAGE FACILITY AT7-929

Forward Operating Base (FOB) Salerno vertical crew improved mission and function of the FOB hospital by significantly increasing the storage capacity to accommodate base and local medical needs.

**Project Scope:** Remove and relocate existing containers on site. Prepare and place 2400 sq. ft. (60 ft. x 40 ft.) concrete pad. Construct 1600 sq. ft. (40 ft. x 40 ft.) warehouse for medical storage. Relocate mortuary affairs and morgue containers adjacent to facility on top of concrete slab.

Personnel: 5

**Duration:** January 2007

Mandays Expended: NMCB FIVE: 35

Cumulative: 35

Tasking: WIP at Turnover: 0%

WIP at Completion: 34% MD Tasked to NMCB FIVE: 35 Total Project MD: 105

 Material Cost:
 \$66,000

 Cost Savings:
 \$31,500

Significant Safety Issues: None.

Significant QC Issues: None.

**Significant Design Issues:** Design was not finalized until after project was started. Last minute changes had to be rapidly incorporated into construction.

**Significant Material Issues:** Most of the lumber procured locally. Extra care required to ensure constructability and maintain design standards despite inconsistencies such as nominal and actual dimension sized lumber.

#### **CONTINGENCY OPERATIONS**



Placing pad four.



Completed pad with cargo.

# AIRCRAFT CARGO STAGING PADS AT7-944

NMCB FIVE and TWO SIX Seabees combined efforts with local national workers produced four staging areas for inbound and outbound cargo, greatly decreasing aircraft loading and unloading time.

**Project Scope:** Prepare site and place 2520 sq. ft. of concrete in four 6 in. pads varying in size: 8 ft. x 45 ft., 8 ft. x 70 ft., 8 ft. x 80 ft., and 8 ft. x 120 ft.

Personnel: 4

**Duration:** December 2006

Mandays Expended: NMCB FIVE: 60

Cumulative: 60

**Tasking:** WIP at Turnover: 0%

WIP at Completion: 100% MD Tasked to NMCB FIVE: 60 Total Project MD: 60

Material Cost: \$8,700 Cost Savings: \$21,000

Significant Safety Issues: None.

**Significant QC Issues:** Concrete slump and consistency from local batch plant varied significantly. Extra care was taken to ensure a quality finished product.

**Significant Design Issues:** Plans called for vertical rebar as dunnage placeholders. After discussion with the base engineer and customer, it was agreed to delete the vertical placeholders from the project scope in order to avoid concrete rust stains and spalling.

#### **CONTINGENCY OPERATIONS**



Placing concrete pad extension.



Completed facility.

# AVIATION STORAGE FACILITY AT7-957

NMCB FIVE and TWO SIX Seabees combined efforts with local national workers constructed an aviation equipment storage building. The facility provided much needed storage area for rotary blades and other aviation parts.

**Project Scope:** Construct 1,440 sq. ft. timber storage facility with corrugated sheeting roof and chain link exterior. Extend existing 25 ft. x 40 ft. concrete pad to match proposed facility footprint.

Personnel: 4

**Duration:** November 2006 - December 2006

Mandays Expended: NMCB FIVE: 95

Cumulative: 95

Tasking: WIP at Turnover: 0%

WIP at Completion: 100% MD Tasked to NMCB FIVE: 95 Total Project MD: 95

 Material Cost:
 \$37,000

 Cost Savings:
 \$33,250

Significant Safety Issues: None.

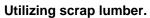
Significant QC Issues: None.

**Significant Design Issues:** Wood I-beams were under designed. Additional work was performed to reinforce the facility's structural integrity.

**Significant Material Issues:** Most lumber was procured locally which required extra care to be taken to maintain design standards despite inconsistencies such as nominal and actual dimension sized lumber.









HVAC unit installation with stand.

# DETAIL AFGHANISTAN OIC DISCRETIONARY AT7-500

### **Project Listing**

Pumps	10
Weapon Racks	10
Tactical Operation Center Build out	20
Desks, Workbench, and Table	20
Minor Projects	10
Total Mandays Expended	70



Pump preparation.





Seabee installing door frame.



Completed building interior.

# TACTICAL OPERATIONS CENTER RENOVATION BA6-901

Renovate existing Tactical Operations Center at Kuwait Naval Base.

**Project Scope:** Erect two 19 ft. x 12 ft. walls and twelve interior doors. Install 953 sq. ft. ceramic tile, fourteen fluorescent light fixtures, four receptacles, three exit lighting systems, and air-conditioning unit.

Personnel: 5

**Duration:** September 2006 - February 2007

Mandays Expended:NMCB FIVE:475Cumulative:475

Tasking: WIP at Turnover: 0%

WIP at Completion: 79%
MD Tasked to NMCB FIVE: 160
Total Project MD: 204

Material Cost:\$10,000Cost Savings:\$33,600

Significant Safety Issues: Interior walls tested positive for lead.

Significant QC Issues: None.

Significant Design Issues: None.

**Significant Material Issues:** Project started with 2% materials on hand. Local vendors have difficulty meeting project requirements due to miscommunication, misunderstanding, and lack of materials in country.





Seabees welding c-channel angle iron.



Completed walkway.

# KAAOT OIL PLATFORM WALKWAY PROJECT BA6-904

Repair deteriorated platform walkway near Kuwait Naval Base.

**Project Scope:** Repair steel plate walkway on oil platform. Grind bolts flush with deck, replace damaged I-beam and rectify walkway tripping hazards. Stabilize walkway with prefabricated truss system, replace 260 ft. of wooden walkway with heavy timber and install handrail.

Personnel: 9

**Duration:** October 2006 - November 2006

Mandays Expended: NMCB FIVE: 186

Cumulative: 186

**Tasking:** WIP at Turnover: 0%

WIP at Completion: 100% MD Tasked to NMCB FIVE: 158 Total Project MD: 158

Material Cost: \$0 Cost Savings: \$55,300

Significant Safety Issues: None.

Significant QC Issues: None.

Significant Design Issues: None.

#### **CONTINGENCY OPERATIONS**



Ready for concrete placement.



Completed project.

### TALLIL MORGUE PROJECT TL6-901

Seabees worked through extreme weather conditions in a contingency environment to complete a SWA Hut that will be utilized as a remains processing facility. The project increased the capabilities of the Mortuary Affairs Collection Point, Tallil, Iraq.

**Project Scope:** Construct a 16 ft. x 48 ft. SWA hut with interior build-out. Project included 4 ft. tile wainscoat, drains for washdown area, installation of air conditioning/heater combination units, and a head with a shower. Washer and dryer were provided for camp personnel.

Personnel: 14

**Duration:** December 2006 - January 2007

Mandays Expended:NMCB FIVE:390Cumulative:390

**Tasking:** WIP at Turnover: 0%

WIP at Completion: 100% MD Tasked to NMCB FIVE: 610 Total Project MD: 6510

 Material Cost:
 \$148,000

 Cost Savings:
 \$213,150

Significant Safety Issues: None.

Significant QC Issues: None.

Significant Design Issues: None.

**Significant Material Issues:** Some material was damaged during delivery. A portion of the air conditioning units did not have heaters as expected. Worked with KBR to overcome the material issues.



#### **NMCB FIVE DETAIL AFGHANISTAN**

Labor Distribution Summary

	Aug	Sep	Oct	Nov	Dec	Jan	Feb	Total	%Total
Direct Labor MDs		127	338					465	94%
Indirect Labor MDs		0	0					0	0%
Readiness/Training		4	26					30	6%
Total MDs Exp	0	131	364	0	0	0	0	495	100%
# Total Personnel		16	16					N/A	
# Direct Labor		14.5	14.5					N/A	
# Workdays		8	22					30	
% Direct Labor		91%	91%					26%	
Ideal Capability		138	380					518	
Availability Factor		95%	96%					95%	

### NMCB FIVE DET AFGHANISTAN TWO (AT)

**Labor Distribution Summary** 

	Aug	Sep	Oct	Nov	Dec	Jan	Feb	Total	%Total
Direct Labor MDs				118	998	869		1985	85%
Indirect Labor MDs				3	27	35		65	3%
Readiness/Training				140	70	72		282	12%
Total MDs Exp	0	0	0	261	1095	976	0	2332	100%
# Total Personnel				40	40	40		N/A	
# Direct Labor				35	35	35		N/A	
# Workdays				10	27	25		62	
% Direct Labor				88%	88%	88%		88%	
Ideal Capability				417	1125	1041		2582	
Availability Factor				62%	95%	90%		82%	

#### **NMCB FIVE DET NAVCENT**

Labor Distribution Summary

	Aug	Sep	Oct	Nov	Dec	Jan	Feb	Total	%Total
Direct Labor MDs	73	370	393	72	349	553	32	1842	70%
Indirect Labor MDs	52	68	51	9	110	150	45	485	19%
Readiness/Training	45	47	32	63	42	47	12	288	11%
Total MDs Exp	170	485	476	144	501	750	89	2615	100%
# Total Personnel	21	21	21	21	21	21	21	N/A	
# Direct Labor	17	17	17	17	17	17	17	N/A	
# Workdays	12	26	26	25	22	30	9	150	
% Direct Labor	81%	81%	81%	81%	81%	81%	81%	81%	
Ideal Capability	255	553	553	531	468	638	191	3188	
Availability Factor	46%	75%	77%	25%	84%	94%	23%	61%	



#### NMCB FIVE DET TALLIL

Labor Distribution Summary

	Aug	Sep	Oct	Nov	Dec	Jan	Feb	Total	%Total
Direct Labor MDs					309	44		353	81%
Indirect Labor MDs					52	7		59	13%
Readiness/Training					26	0		26	6%
Total MDs Exp	0	0	0	0	387	51	0	438	100%
# Total Personnel					14	14		N/A	
# Direct Labor					13	12		N/A	
# Workdays					23	3		26	
% Direct Labor					93%	86%		89%	
Ideal Capability					356	43		387	
Availability Factor					94%	103%		98%	

# SUPPLY LOGISTICS EQUIPMENT





#### LOGISTICS / SUPPLY MANAGEMENT

#### Statistical Data

Validity of ARP inventory during Kuwait Deployment	98%
Validity of CTR inventory during the Kuwait Deployment turnover	100%
Validity of CSR inventory during the Kuwait Deployment turnover	N/A
Validity of MLO inventory during the Kuwait Deployment turnover	98%
Number of TAD travel orders issued during deployment	911
Average number of haircuts per day with the command barber during FY06	21

The NMCB FIVE Supply Department supported four Camps in Kuwait and eight Details worldwide. After turnover with NMCB SEVEN, NMCB FIVE assumed custody of a negative balance in the Operation Maintenance Navy (OMN) funds and resolved the deficiency within 72 hours of receipt of the OPTAR. The Financial SK requested and justified additional funding from 1NCD to get the budget out of the red and accurately predicted unfunded requirements for the remainder of FY06.

In Automotive Repair Parts (ARP), a 100% inventory was conducted on Blades, Tires and Batteries with an inventory validity of 93%, 88%, and 92% respectively. Inventory of the SIM and Non-SIM items was accomplished. SIM 325 line items inventory resulted in 95% validity. Non-SIM 9,215 line item inventory resulted in 96% validity. CTR 4,685 line item inventory resulted in an exceptional 100% validity. Infantry and CBR Warehouses 208 line item inventories achieved validity of 100% validity while MLO 332 line item inventory achieved 98% validity. A 100% Navy Stock Number (NSN) level inventory of 81 Table of Allowance (TOA) containers was conducted over the course of deployment.



#### **FINANCIAL OUTLET**

Throughout the deployment, NMCB FIVE Supply Department accomplished several funding, repair parts, prime vendor, and other logistical and contractual taskings with overwhelmingly positive results. Displaying tenacious initiative and desire, the Stores Financial, Contracting, and Expediting Branch proficiently managed \$1.7M Cost of War budget crossing two fiscal years. FY06 close-out encompassed six separate OPTAR budgets from three different geographic locations.

Fully utilizing the Army Logistics Process, NMCB FIVE acquired approximately \$892,000 in reutilized material from the local Defense Reutilization Material Office (DRMO). These materials included infantry gear, tools, office supplies, furniture, and construction materials. Material that would have taken an average of three months to acquire through the Supply System was made available in less than 48 hours, saving significant budgetary and manpower resources.

NMCB FIVE conducted the first Southwest Asia Logistics Operational Readiness Inspection with focus on ensuring proper Army and Navy logistics processes are in place to support the Global War on Terror. All areas evaluated scored Excellent or above and received accolades as the "benchmark" for future operations.

The Contract Management section of Supply thoroughly monitored two bulk fund purchase order contracts while working closely with Area Support Group, Kuwait Resource Management Office to obligate \$3.5M in contracts for construction machinery rental and CESE repairs and preservation. A



comprehensive team of SKs successfully provided and loaded out all required supplies and tools to Detail Afghanistan in a timely manner greatly contributing to a successful mount out.

Supply's Financial Management team was instrumental to all facets of supply support for the entire Battalion, enabling efficient and timely project completion. Meticulous management of the government credit card program, consisting of four Camp Arifjan accounts and one Homeport account, was applied for 420 discrete purchases valued in excess of \$165K. SKs took the lead on financials, maintaining a \$15K homeport OPTAR and a \$500K Cost of War OPTAR, transmitting seven Budget OPTAR Reports and 157 Monthly Filled Order Expenditure Difference Listing transmittals, 2,700 line item requisitions and 680 receipts. In addition, the SKs completed and closed all prior fiscal years continuing services and constantly maintained an excellent program for current fiscal year's Continuing



Service contracts for Camp Arifjan. Supply Department was instrumental in processing 54 Not Operationally Ready Supply (NORS) and 222 Anticipated NORS requisitions valued in excess of \$80K.

The Disbursing Office released record pay amounts in excess of \$250K for deployment pay, per diem, and various allowances without a single discrepancy. The Travel division contributed greatly to the success of the department by obligating \$125K in travel funds for Cost-of-War airfare and trans-Atlantic flights to mission essential battalion locations.

## **MATERIAL LIAISON OFFICE**

Material Liaison Office (MLO) maintained line items of material in support of various Kuwait projects located at Camp Arifjan, Camp Moreell, Camp Buehring, and Camp Virginia. The MLO team maintained



accountability of over 3,000 project material line items valued at \$2.5 million for 41 battalion projects. MLO utilized and diligently worked with the ASG-KU Field Engineering Teams and Army Contracting Command to procure construction material and special equipment from six local vendors, contributing to the economic stability of the state of Kuwait. By coordinating with numerous Army units in theater, MLO was able to fill critical material needs when the standard channels were not available. The completion of the Engineering Camp's Supply Department Large Area Maintenance Structure (LAMS) made it possible to store all perishable project material out of the harsh desert environment. The arrival of several storage lockers for HAZMAT material greatly increased the efficiency of the

MLO facilities while contributing to the team's success. Entire MLO ensured an outstanding review by 22NCR during the mid-deployment Logistics Management Assessment. The improvements made to the MLO spaces and processes have made a positive impact that will be felt by future Battalions.

#### **CENTRAL TOOL ROOM**

The Central Tool Room (CTR) staff provided tools and equipment support to NMCB FIVE Mainbody in Camp Arifjan and Details at Camp Moreell, Camp Buehring, and Camp Virginia in Kuwait, and Camp Lemonier Djibouti. Attention to detail was instrumental to the team's success and resulted in an Outstanding rating by 22NCR during November 2006 Logistics Management Assessment. Regimental inspectors called NMCB FIVE's CTR the "best tool room they'd ever seen." The augment tools procured



from Camp Arifjan DRMO increased productivity by providing projects with specific mission essential items not readily available through the Supply system. The 221 TOA tool kits were expertly managed and resource leveled to adequately support all project sites. The condition of the tool kits was greatly enhanced by monitoring required assets and taking appropriate action to repair or replace all unserviceable tools. Additionally, CTR provided much needed tool support to NMCB ONE in Bucca, Iraq, allowing their Gulfport counterparts to perform construction projects after serving in detainee operations billets for four months. Even while preparing for Battalion Military Skills Exercise, CTR was able to effectively mount out of Detail



Afghanistan II with the requisite materials in less than 24 hours.

## **BARBER SHOP**

Barber shop provided 3,150 haircuts during deployment, saving troops \$24K in disposable income.

# **POST OFFICE**

NMCB FIVE Postal organization was extraordinarily successful in ensuring all deployed personnel received Christmas season gifts. Tremendous effort resulted in the receipt and distribution of 900 packages to deployed NMCB FIVE Seabees by name. The end result was that every single troop at every pay grade received gifts, candy, cards, and special "Thanks!" from Americans dedicated to saluting the efforts of personnel serving in support of Operation ENDURING FREEDOM and Operation IRAQI FREEDOM.



## **EQUIPMENT**

NMCB FIVE inspected 108 pieces of CESE during turnover with NMCB SEVEN. Three pieces were awaiting disposition and at the conclusion of the Battalion Equipment Evaluation Program (BEEP), eleven pieces were on deadline and the "Professionals" took charge with 89% of equipment availability.

The Battalion's CESE management program maintained an average availability of 92% for over 430 pieces of CESE at eight different locations. The hard work and perseverance of the Construction Mechanics reduced the deadline pieces to eight prior to the end of deployment. Even with very junior personnel, Alfa Company overcame numerous obstacles and their "CAN DO" spirit made the deployment highly productive. Additionally, the "Alfa Dawgs" continued to master the 3M system and provided the operational support required to exceed all tasking.

The crane crew performed certification of 40T hydraulic crane during the 22NCR Management Assist Visit (MAV). Minor discrepancies were found and many were corrected prior to MAV completion. Alfa Company worked to correct all findings while continuing day to day effort of reducing the deadline and raising equipment availability. Throughout the deployment Alfa Company filled manning requirements for all the detail sites. NMCB FIVE coordinated first Southwest Crane Audit focused on program execution and crane operation. NCTC conducted Crane Audit prior to turnover with NMCB ONE THREE THREE and found minor deficiencies.



# MAINBODY CAMP ARIFJAN, KUWAIT

# **Equipment Population**

Vehicles	BEEP	AUG	SEP	ОСТ	NOV	DEC	JAN	BEEP
In Service	108	108	105	105	106	110	106	102
In Preservation	0	0	0	0	0	0	0	0
Total	108	108	105	105	106	110	106	102

# PM & Interim Repair ERO Summary

Month	SKED Checks	Checks Completed	RAR	Spot Checks	UNSAT Checks	Partial Checks	ACF	PPR
AUG	101	101	100%	0	0	0	100%	100%
SEP	178	178	100%	0	0	0	100%	100%
OCT	231	231	100%	2	0	0	100%	100%
NOV	198	198	100%	5	1	0	90%	100%
DEC	217	217	100%	1	0	0	100%	100%
JAN	126	126	100%	4	0	0	100%	100%
TOTAL	1051	1051	100%	12	0	0	98%	100%

Vehicles	BEEP	AUG	SEP	ОСТ	NOV	DEC	JAN	BEEP
On Deadline	11	11	12	10	8	7	5	9
Auto	3	3	4	2	1	2	2	6
Construction	8	8	8	8	7	5	3	3
MHE	0	0	0	0	0	0	0	0
Total	108	108	105	105	106	110	106	102
Total in service	97	97	93	95	98	103	101	93
% Availability	89	89	89	87	92	90	90	90



# **DETAIL CAMP BUEHRING, KUWAIT**

# **Equipment Population**

Vehicles	BEEP	AUG	SEP	ОСТ	NOV	DEC	JAN	BEEP
In Service	73	73	73	73	73	78	78	72
In Preservation	0	0	0	0	0	0	0	0
Total	73	73	73	73	73	78	78	72

# PM & Interim Repair ERO Summary

Month	SKED Checks	Checks Completed	RAR	Spot Checks	UNSAT Checks	Partial Checks	ACF	PPR
AUG	52	52	100%	2	0	0	100%	100%
SEP	63	63	100%	3	0	0	100%	100%
OCT	167	167	100%	11	0	0	100%	100%
NOV	145	145	100%	25	0	0	100%	100%
DEC	133	133	100%	14	0	0	100%	100%
JAN	305	305	100%	0	0	0	100%	100%
TOTAL	865	865	100%	54	0	0	100%	100%

Vehicles	BEEP	AUG	SEP	ОСТ	NOV	DEC	JAN	BEEP
On Deadline	4	4	6	8	10	6	5	5
Auto	3	3	3	2	4	1	1	1
Construction	1	1	3	4	4	4	4	4
MHE	0	0	0	2	2	1	0	0
Total	73	73	73	73	73	78	78	72
Total in service	69	69	67	65	63	72	73	67
% Availability	90	90	90	88	81	86	90	90



# **DETAIL CAMP VIRGINIA, KUWAIT**

# **Equipment Population**

Vehicles	BEEP	AUG	SEP	ОСТ	NOV	DEC	JAN	BEEP
In Service	38	38	38	38	37	40	40	37
In Preservation	0	0	0	0	0	0	0	0
Total	38	38	38	38	37	40	40	37

# PM & Interim Repair ERO Summary

Month	SKED Checks	Checks Completed	RAR	Spot Checks	UNSAT Checks	Partial Checks	ACF	PPR
AUG	82	82	100%	25	0	0	100%	100%
SEP	119	119	100%	35	0	0	100%	100%
OCT	137	135	98.5%	30	0	0	100%	98.5%
NOV	125	124	99.2%	8	0	0	100%	99.2%
DEC	94	94	100%	29	0	0	100%	100%
JAN	58	58	100%	0	0	0	100%	100%
TOTAL	615	612	99%	127	0	0	100%	99%

Vehicles	BEEP	AUG	SEP	ОСТ	NOV	DEC	JAN	BEEP
On Deadline	2	2	2	6	3	2	2	1
Auto	1	1	1	3	1	1	1	0
Construction	1	1	1	2	2	1	1	1
MHE	0	0	0	1	0	0	0	0
Total	38	38	38	38	37	40	40	37
Total in service	36	36	36	32	34	38	38	36
% Availability	95	95	95	86	86	90	91	91



# **DETAIL HORN OF AFRICA, DJIBOUTI**

# **Equipment Population**

Vehicles	BEEP	AUG	SEP	ОСТ	NOV	DEC	JAN	BEEP
In Service	74	64	64	74	74	53	53	74
In Preservation	0	10	10	0	0	21	21	0
Total	74	74	74	74	74	74	74	74

# PM & Interim Repair ERO Summary

Month	SKED Checks	Checks Completed	RAR	Spot Checks	UNSAT Checks	Partial Checks	ACF	PPR
AUG	88	86	97.7%	0	0	0	100%	100%
SEP	186	185	99.5%	0	0	0	100%	99.5%
OCT	176	174	98.9%	33	0	0	100%	98.9%
NOV	150	147	98.0%	15	0	0	100%	98.0%
DEC	158	151	95.6%	7	0	0	100%	95.6%
JAN	104	104	100%	0	0	0	100%	100%
TOTAL	862	847	98%	55	0	0	100%	98%

Vehicles	BEEP	AUG	SEP	ОСТ	NOV	DEC	JAN	BEEP
On Deadline	6	10	10	9	9	8	6	6
Auto	3	3	3	3	3	3	3	3
Construction	3	6	6	5	5	4	2	2
MHE	0	1	1	1	1	1	1	1
Total	74	74	74	74	74	74	74	70
Total in service	68	64	64	65	65	66	68	64
% Availability	90	90	89	92	93	92	85	88



# **DETAIL NAVCENT**

# **Equipment Population**

Vehicles	BEEP	AUG	SEP	ОСТ	NOV	DEC	JAN	BEEP
In Service	0	0	1	1	1	1	1	1
In Preservation	16	16	15	15	15	15	15	15
Total	16	16	16	16	16	16	16	16

# PM & Interim Repair ERO Summary

Month	SKED Checks	Checks Completed	RAR	Spot Checks	UNSAT Checks	Partial Checks	ACF	PPR
AUG	32	32	100%	0	0	0	100%	100%
SEP	54	54	100%	0	0	0	100%	100%
OCT	88	88	100%	5	0	0	100%	100%
NOV	69	69	100%	9	0	0	100%	100%
DEC	71	71	100%	9	0	0	100%	100%
JAN	63	63	100%	0	0	0	100%	100%
TOTAL	377	377	100%	23	0	0	100%	100%

Vehicles	BEEP	AUG	SEP	ОСТ	NOV	DEC	JAN	BEEP
On Deadline	0	0	0	1	2	3	3	2
Auto	0	0	0	0	0	0	0	0
Construction	0	0	0	0	0	2	2	1
MHE	0	0	0	1	2	1	1	1
Total	16	16	16	16	16	16	16	16
Total in service	16	16	16	15	14	13	13	14
% Availability	100	100	100	90	88	85	91	92



# **DETAIL ANDROS, BAHAMAS**

# **Equipment Population**

Vehicles	BEEP	AUG	SEP	ОСТ	NOV	DEC	JAN	BEEP
In Service	10	8	8	11	10	8	8	8
In Preservation	2	3	3	0	1	3	3	3
Total	12	11	11	11	11	11	11	11

# PM & Interim Repair ERO Summary

Month	SKED Checks	Checks Completed	RAR	Spot Checks	UNSAT Checks	Partial Checks	ACF	PPR
AUG	14	14	100%	10	0	0	100%	100%
SEP	21	21	100%	4	0	0	100%	100%
OCT	16	16	100%	4	0	0	100%	100%
NOV	18	18	100%	4	0	0	100%	100%
DEC	19	19	100%	3	0	0	100%	100%
JAN	16	16	100%	0	0	0	100%	100%
TOTAL	104	104	100%	25	0	0	100%	100%

Vehicles	BEEP	AUG	SEP	ОСТ	NOV	DEC	JAN	BEEP
On Deadline	1	3	2	2	3	2	0	0
Auto	1	2	1	1	1	0	0	0
Construction	0	1	1	1	2	2	0	0
MHE	0	0	0	0	0	0	0	0
Total	12	11	11	11	11	11	11	11
Total in service	11	8	9	9	8	9	11	11
% Availability	84	82	82	82	73	80	93	93



# **DETAIL GUANTANAMO BAY, CUBA**

# **Equipment Population**

Vehicles	BEEP	AUG	SEP	ОСТ	NOV	DEC	JAN	BEEP
In Service	43	37	37	40	40	37	37	37
In Preservation	0	6	6	0	0	4	4	4
Total	43	43	43	40	40	41	41	41

# PM & Interim Repair ERO Summary

Month	SKED Checks	Checks Completed	RAR	Spot Checks	UNSAT Checks	Partial Checks	ACF	PPR
AUG	70	68	97.1%	0	0	0	100%	97.1%
SEP	37	33	89.2%	0	0	0	100%	89.2%
OCT	33	33	100%	7	0	0	100%	100%
NOV	40	40	100%	10	0	0	100%	100%
DEC	30	30	100%	6	0	0	100%	100%
JAN	57	57	100%	0	0	0	100%	100%
TOTAL	267	260	97%	23	0	0	100%	97%

Vehicles	BEEP	AUG	SEP	ОСТ	NOV	DEC	JAN	BEEP
On Deadline	3	6	7	9	10	10	6	6
Auto	1	1	2	4	6	4	3	3
Construction	2	5	5	6	4	6	3	3
MHE	0	0	0	0	0	0	0	0
Total	43	43	43	40	40	41	41	41
Total in service	40	37	36	30	30	31	35	35
% Availability	98	96	96	74	65	73	82	85



# **DETAIL ROTA, SPAIN**

# **Equipment Population**

Vehicles	BEEP	AUG	SEP	ОСТ	NOV	DEC	JAN	BEEP
In Service	60	8	8	8	8	8	60	57
In Preservation	0	52	52	52	52	52	0	0
Total	60	60	60	60	60	60	60	57

# PM & Interim Repair ERO Summary

Month	SKED Checks	Checks Completed	RAR	Spot Checks	UNSAT Checks	Partial Checks	ACF	PPR
AUG	98	98	100%	0	0	0	100%	100%
SEP	186	185	99.5%	0	0	0	100%	99.5%
OCT	187	187	100%	10	0	0	100%	100%
NOV	156	156	100%	6	0	0	100%	100%
DEC	154	154	100%	8	0	0	100%	100%
JAN	153	153	100%	0	0	0	100%	100%
TOTAL	934	933	99%	24	0	0	100%	99%

Vehicles	BEEP	AUG	SEP	ОСТ	NOV	DEC	JAN	BEEP
On Deadline	1	1	1	2	2	0	0	1
Auto	1	1	1	1	1	0	0	0
Construction	0	0	0	0	0	0	0	1
MHE	0	0	0	1	1	0	0	0
Total	60	60	60	60	60	60	60	57
Total in service	59	59	59	58	58	60	60	56
% Availability	95	95	95	93	93	95	95	95

# LESSONS LEARNED





# **GENERAL BATTALION**

#### 1. KEYWORD: RESERVE INTEGRATION

ITEM: RESERVE COMPONENT DEPLOYMENT OFFSET FROM ACTIVE COMPONENT DISCUSSION: Reserve Component Heavy Air Detachment attached to the Active Duty Battalion mobilized on a cycle to cross Active Battalion's deployment cycle. Reserve Component mobilized to one Battalion and was assigned TAD to other Active Battalion for half of deployment. Continuity at Detail sites provided follow-on Battalions with corporate knowledge, but was overshadowed by integration issues. Emergent mission manning was limited due to rotation dates. Company, Detail and Department changes resulted in two reduced production periods vice single turnover. Reserve Component personnel were required to adhere to Active Battalion's daily routine and policies which were often very different.

RECOMMENDATION: Mobilize Reserve component at Active Battalion homeport and fully integrate into Battalion organization prior to deployment. Personnel qualifications would be maximized and allow Battalion to most efficiently staff missions.

## 2. KEYWORD: ADMIN

ITEM: DEPLOYMENT OF NEW CHECK-INS

DISCUSSION: New personnel to Battalion often arrive at final deployment destination without full seabag or medical/dental records.

RECOMMENDATION: Homeport Liaison conduct gear inspection prior to departure and ensure final location is aware of member flight arrival information.

#### 3. KEYWORD: OPERATIONS

ITEM: NCF PROJECT MANAGEMENT

DISCUSSION: Due to contingency construction focus of past deployments, the majority of Project Supervisors and Crew Leaders were unskilled at planning projects, executing projects according to the plan, or managing the execution according to the Crewleader Handbook. Few personnel were well versed in CBCM or the basics of project packages.

RECOMMENDATION: Continue focus on NCF project management throughout homeport in order to better train Seabees for future deployments. Conduct project planning and management training regularly and supervise planning process regularly.

#### 4. KEYWORD: SUPPLY

ITEM: PARTS EXPEDITOR

DISCUSSION: Parts expeditor assigned to Gulfport was invaluable to Battalion support and was required to locate vendors to support mission essential non-NSN or not carried parts. Support was limited by training and lack of Government Purchase Card.

RECOMMENDATION: Provide additional training and coordinate government purchase card prior to deployment. Majority of parts required are from outside vendors and government purchase card is vital to acquiring parts and limiting delays.

## 5. KEYWORD: SUPPLY

ITEM: REFERENCE MATERIALS

DISCUSSION: Crewleader Handbook, 29 CFR, Battalion instructions, and additional reference material were limited or non-existent at most Detail sites.

RECOMMENDATION: Build reference library mount out kit for each Detail site during homeport.

## 6. KEYWORD: SUPPLY

ITEM: RATE TRAINING

DISCUSSION: Culinary Specialist opportunities were limited at all deployment locations. CS's were utilized outside their rate in needed areas.

RECOMMENDATION: Identify assignments as early as possible for troops required to work out of rate and conduct training on specific deployment assignment throughout Homeport.

#### 7. KEYWORD: CHAPLAIN



ITEM: DETAIL COMMAND RELIGIOUS PROGRAM REPRESENTATIVE

DISCUSSION: Battalion Command religious information often did not reach troops due to lack of assigned point of contact. Local resources were also available which were not utilized due to lack of awareness.

RECOMMENDATION: Assign CRP Representative at Detail sites to coordinate with Main Body and maximize all Battalion resources. Contact local Chaplains to establish additional resources.

#### 8. KEYWORD: CHAPLAIN

ITEM: UNITED THROUGH READING (UTR) PROGRAM

DISCUSSION: UTR program was very successful for troops to correspond home, but did not address correspondence from homeport to the troops.

RECOMMENDATION: Provide equipment at each Detail site and Homeport to encourage communication between the troops and their families.

## 9. KEYWORD: SAFETY

ITEM: SAFETY COSAL

DISCUSSION: Due to dispersion of Detail sites and multiple projects at each site, PPE was limited and impacted project execution.

RECOMMENDATION: Provide augment equipment to ensure adequate PPE at all locations.

## 10. KEYWORD: SAFETY

ITEM: EYE PROTECTION

DISCUSSION: Issued Wiley-X safety glasses provided good protection, but had some deficiencies. Frame arms scratched interior of lens when glasses were folded. The foam inside the frames resulted in lens fog due to excessive heat. Glasses would not accommodate prescription inserts and resulted in goggles being issued. Goggles were not utilized due to extreme heat and lack of comfort during every day use.

RECOMMENDATION: Operationally test glasses prior to issue. Ensure eye protection has capability to accommodate prescription inserts.

# **GENERAL CENTCOM**

# 1. KEYWORD: OPERATIONS

ITEM: PROJECT TASKING

DISCUSSION: Lack of long term planning resulted in extended periods of under tasking followed by critical projects with unrealistic deadlines. Tasking did not maximize available capability and resulted in approximately 10,000 mandays of lost capability.

RECOMMENDATION: Seek missions outside current sites to fully employ Battalion. Reduce number of Seabees assigned to CFLCC under current RFF to better reflect actual workload. Continue to build long term project list which would allow for material procurement timelines. Educate all potential customers on Seabee capabilities to maximize tasking.

## 2. KEYWORD: OPERATIONS

ITEM: PROJECT DESIGNS

DISCUSSION: Inadequate project designs and limited existing information resulted in incomplete bill of materials, project rework, project delays, and inadequate project planning.

RECOMMENDATION: Increase design capabilities of Field Engineering Team and better educate FET on design requirements. Ensure adequate time is allocated for planning, conduct preconstruction meeting prior to project execution, and validate bill of materials prior to submission.

# 3. KEYWORD: OPERATIONS

ITEM: PROJECT PLANNING AND MANAGEMENT

DISCUSSION: Command Cells operated by Army or Air Force provided vague mission directives which resulted in scope creep or rework to meet customer expectations.



RECOMMENDATION: Educate Command Cells about NCF capabilities and scope requirements. Hold pre-construction meetings prior to project commencement to clearly define end product and address changes prior to start of work.

#### 4. KEYWORD: OPERATIONS

ITEM: PROJECT EXECUTION

DISCUSSION: Due to limited initial tasking, many projects started without 100% of materials on hand and resulted in project stoppages due to continued material delays or incorrect materials. RECOMMENDATION: Commence projects once all materials are on hand.

## 5. KEYWORD: OPERATIONS

ITEM: DIG PERMITS

DISCUSSION: Dig permits often required one to three weeks for approval.

RECOMMENDATION: Submit dig permits as early as possible during the project planning.

## 6. KEYWORD: SUPPLY

ITEM: MATERIAL PROCUREMENT

DISCUSSION: Local material contractors and vendors were often difficult to work with and unresponsive, directly resulting in construction delays.

RECOMMENDATION: Establish multiple contractor outlets and account for material challenges during project planning phase.

## 7. KEYWORD: SUPPLY

ITEM: MATERIAL QUALITY

DISCUSSION: Local vendors had difficulty meeting project requirements due to miscommunication, misunderstanding, and lack of required materials in country. Plumbing and electrical gear were particularly difficult to procure and often resulted in incorrect materials. RECOMMENDATION: Continue use of DDKS through DLA, acquire vendor catalogues to show pictures of desired materials, and coordinate site visits to vendor locations to visually inspect materials prior to delivery.

## 8. KEYWORD: SUPPLY

ITEM: BILL OF MATERIAL (BOM)

DISCUSSION: Accurate BOMs were difficult to create due to limited plans and specifications. Add-on's were often required due to differing unit of measures, confusion by vendors, and unforeseen existing conditions.

RECOMMENDATION: Ensure Project Supervisors evaluate all construction activities to determine every work element required to complete work.

## 9. KEYWORD: SUPPLY

ITEM: MATERIAL PROCUREMENT

DISCUSSION: Average procurement time (from BOM submission to vendor delivery) was 30 days in Arifjan and 50 days in the northern Kuwaiti camps. Major delay was award of material contracts.

RECOMMENDATION: Transfer project funds to NMCB and conduct material and procurement internal to the Battalion. Maintain warranted Contracting Officer in Battalion MLO.

# 10. KEYWORD: SUPPLY

ITEM: CBR EQUIPMENT

DISCUSSION: Majority of CBR gear was past inspection or expiration dates.

RECOMMENDATION: Maintain accurate inventory of all CBR gear and their applicable inspection and expiration dates. Seal containers to limit theft.

## 11. KEYWORD: QUALITY CONTROL

ITEM: QUALITY CONTROL EXPECTATIONS

DISCUSSION: Majority of customers desired quick project execution with limited quality.



RECOMMENDATION: Educate customers on NCF quality standards. Ensure all project crews meet or exceed expectations and do not settle for substandard work.

#### 12. KEYWORD: EQUIPMENT

ITEM: LEASED CESE SUPPORT

DISCUSSION: Organic TOA equipment was insufficient to support tasking due to equipment capability and dispersion of equipment across three continents and six primary deployment sites. Battalion was able to utilize leased equipment to accomplish assigned tasks, but the untimely delivery, unreliable operation, and contract challenges limited benefit. Specific examples included Camp Virginia D7's inability to break retention pond subsurface, multiple 186<sup>th</sup> CSE projects with limited organic equipment, lack of scaffolding required scissor lifts, organic dump truck volume was insufficient for project timelines, and insufficient organic graders for multiple projects at multiple locations.

RECOMMENDATION: Determine permanently assigned augment equipment at each deployment location to maximize capabilities. Continue to coordinate leased equipment for specific projects to maximize productivity.

#### 13. KEYWORD: CHAPLAIN

ITEM: CHAPLAIN SUPPORT

DISCUSSION: Joint environment created challenges due to philosophy and ministry differences between the Army and Navy.

RECOMMENDATION: NMCB Chaplains establish contact with the senior AOR Navy Chaplain to define expectations. Fully establish differences between Army and Navy Chaplains such as mandatory disclosure requirements for Army Chaplains. Ensure Army understands unit requirements of NMCB Chaplain and does not supersede Battalion Chain of Command.

#### 14. KEYWORD: COMMUNICATIONS

ITEM: LIMITED COMPUTER ASSETS

DISCUSSION: Computer assets were limited for daily operations and required NKO training. RECOMMENDATION: Increase computer assets in NMCB TOA or provide augment assets to deployed Battalions. If connections to LAN are limited, stand alone computers and printers would provide suitable substitute.

## **MAINBODY**

## 1. KEYWORD: OPERATIONS

ITEM: CAMP MAINTENANCE MISSION

DISCUSSION: Camp Arifjan Department of Public Works (DPW) was assigned with the camp maintenance mission, but required two military engineer units and two contractors to execute the work. NMCB FIVE focused on the Seabee Camp, but executed significant camp maintenance throughout Zone VI to maintain full employment of troops.

RECOMMENDATION: Limit camp maintenance tasking outside the Seabee Camp and revise NMCB manning to ensure full employment.

## 2. KEYWORD: SUPPLY

ITEM: GOVERNMENT PURCHASE CREDIT CARDS (GPCC)

DISCUSSION: GPCC were not received until fourth month. Coordination started well prior to deployment, but CITIBANK sent incorrect number of cards and then to an incorrect address. RECOMMENDATION: Coordinate with 22NCR to receive GPCC prior to deployment.

## **KUWAIT DETAILS**

1. KEYWORD: EQUIPMENT

ITEM: CESE UTILIZATION BY ARMY



DISCUSSION: Mission tasking required use of NMCB CESE by TACON Army CSE. CESE was often returned in a deteriorated condition and resulted in delays to other projects.

RECOMMENDATION: Limit CESE usage by TACON units. Ensure vehicle conditions are

properly documented and operator's unit is held accountable for any damage.

#### 2. KEYWORD: EQUIPMENT

ITEM: CESE LOSSES

DISCUSSION: During Army personnel surges, CESE was often cannibalized and parts removed. RECOMMENDATION: Ensure Alfa Yard has 24-hr watch and perimeter security to prevent unauthorized entry and CESE damage.

## 3. KEYWORD: SAFETY

ITEM: CAMP ELECTRICAL SYSTEM

DISCUSSION: Current electrical distribution system in Camp Moreell is not documented, resulting in electrical life safety concerns, and was cut during the majority of subsurface projects. Mislabeled electrical system put camp maintenance personnel at risk when performing maintenance on system and potentially life threatening situations.

RECOMMENDATION: Establish baseline electrical requirement for Camp Moreell and existing electrical distribution system. Program complete electrical infrastructure replacement project.

# **DETAIL HORN OF AFRICA**

#### 1. KEYWORD: OPERATIONS

ITEM: MISSION PLANNING

DISCUSSION: Short fused missions required extensive planning prior to execution to include embarkation, logistics, force protection, medical, equipment support, and communications. RECOMMENDATION: Train Detail leadership on all facets of mission planning prior to deployment. Implement Operational Planning Teams upon receipt of mission tasking to expedite planning and coordinate execution.

## 2. KEYWORD: OPERATIONS

ITEM: GENERATOR SUPPORT

DISCUSSION: Current operations required augment generator support from KBR to meet

mission requirements.

RECOMMENDATION: Augment Detail with additional two (2) 30Kw and one (1) 60Kw generator.

# 3. KEYWORD: ALFA

ITEM: PARTS SUPPORT

DISCUSSION: Repair parts were shipped via Main Body, increasing delivery timeline in excess

of 45 days.

RECOMMENDATION: Ship repair parts directly to Camp Lemonier vice via Main Body.

## 4. KEYWORD: ALFA

ITEM: BATTERIES

DISCUSSION: Extreme weather shortened battery life spans.

RECOMMENDATION: Procure additional batteries to support requirements.

# 5. KEYWORD: ALFA

ITEM: CESE LIMITATIONS

DISCUSSION: Increased missions required additional HMMWV's.

RECOMMENDATION: Augment Detail with six (6) additional HMMWV's.

## 6. KEYWORD: EMBARK

ITEM: EMBARK STAFF

DISCUSSION: 1,200 mandays were expended on embark support with multiple personnel utilized to meet mission requirements.



RECOMMENDATION: Source Detail with full time embark leadership which has received all required training and serve as continuity for all embark missions. Source missions with trained embark team to coordinate redeployment back to Camp Lemonier.

#### KEYWORD: ENGINEERING

ITEM: SOILS LAB

DISCUSSION: Detail soils lab was limited in capabilities.

RECOMMENDATION: Create complete soils lab from 20 ft. CONEX box.

## 8. KEYWORD: ENGINEERING

ITEM: PLOTTER

DISCUSSION: Detail created maps and designs which required plotting capabilities.

RECOMMENDATION: Provide Detail with plotter.

## 9. KEYWORD: ENGINEERING

ITEM: CALIBRATION LAB

DISCUSSION: Detail did not have calibration capabilities.

RECOMMENDATION: Provide Detail with calibration lab or local means to calibrate equipment.

#### 10. KEYWORD: MEDICAL

ITEM: CORPSMAN SUPPORT

DISCUSSION: Camp Lemonier medical support was limited and unable to support multiple

missions outside camp.

RECOMMENDATION: Source Detail with additional Corpsman for duration of deployment.

# **DETAIL ANDROS**

## 1. KEYWORD: OPERATIONS

ITEM: PROJECT DESIGN

DISCUSSION: CBH 15 design was not finalized until after project commenced. Scope changes resulted in project delays due to confusion between designer and Detail. Final design was received near end of deployment.

RECOMMENDATION: Finalize scope prior to project commencement and ensure all facets of construction are clearly understood by customer and Detail.

## 2. KEYWORD: SUPPLY

ITEM: MATERIAL PROCUREMENT

DISCUSSION: Material funding was allocated in quarters vice fully at project start. Materials were unable to be procured until the required quarter which resulted in project delays due to the extensive material procurement time. Project funding had no contingency for equipment rental fees or concrete testing.

RECOMMENDATION: Fully fund project and procure all materials during project planning phase. Maintain 90 days of materials on island.

## 3. KEYWORD: SUPPLY

ITEM: MATERIAL PROCUREMENT

DISCUSSION: Project materials were delayed due to limited barge space and no process was in place to track material once on island. Materials shown as received were often unable to be located by Supply Department.

RECOMMENDATION: Order materials well before required and immediately receive materials upon arrival on island. Maintain project materials in secure location with limited access.

# **DETAIL CUBA**



## 1. KEYWORD: EQUIPMENT

ITEM: PROPER TOOLS

DISCUSSION: Available mechanic tools were in poor condition or outdated.

RECOMMENDATION: Replace outdated battery chargers, load testers, flukes, and light testers. Add larger snap ring pliers, transmission repair tools, hose making equipment and track jacks.

## 2. KEYWORD: EQUIPMENT

ITEM: CESE SUPPORT

DISCUSSION: CESE is in poor condition due to age of equipment, harsh climate and

deterioration of hoses, seals and gaskets.

RECOMMENDATION: Replace CESE with new equipment.

## 3. KEYWORD: EQUIPMENT

ITEM: ARP

DISCUSSION: MOD 96, 97, 98 were inadequate at Detail site.

RECOMMENDATION: Because of excessive logistic timeline, stock Detail with consumable

items such as wire, hoses, and fittings to limit down time for simple repairs.

## 4. KEYWORD: EQUIPMENT

ITEM: SMALL ENGINES

DISCUSSION: Small engines were in need of replacement.

RECOMMENDATION: Train personnel in the proper techniques in repairing and maintaining small engines. Replace items beyond repair and order proper replacement parts to meet current maintenance requirements.

## 5. KEYWORD: EQUIPMENT

ITEM: MOSS

DISCUSSION: Equipment usage was compiled for Main Body and Detail Sites. Detail used stand-alone system for tracking, but was unable to make TAB A or shop status adjustments. RECOMMENDATION: Provide access rights to Detail to facilitate adjustments.

# 6. KEYWORD: 3M

ITEM: SKED FORCE REVISIONS

DISCUSSION: Force Revision sent by Main Body often took an excessive amount of time and was not complete.

RECOMMENDATION: Ensure Force Revision is verified and all MRC's are included prior to sending to Details and sent as expeditiously as possible.

# **DETAIL ROTA**

## 1. KEYWORD: OPERATIONS

ITEM: DETAIL TASKING

DISCUSSION: Detail tasking was not well defined prior to deployment, but required manning for potential Deployment For Training Exercises. Detail was tasked with Hogan's Alley project as Public Works Support to keep Seabees employed. Task Force 68 missions did not come to fruition so without Hogan's Alley project, the Detail would have had wasted direct labor Seabees. RECOMMENDATION: Source Detail with only Seabees required to maintain Camp Mitchell and the assigned TOA and increase manning upon mission tasking. If Seabees are required for duration of deployment, coordinate with Public Works for additional local projects.

## 2. KEYWORD: SUPPLY

ITEM: MATERIAL PROCUREMENT

DISCUSSION: Lumber procured in Spain was very expensive and with metric dimensions. RECOMMENDATION: Procure lumber through Prime Vendor to reduce cost. If local lumber is utilized, ensure plans and specifications identify metric dimensions.



# **DETAIL AFGHANISTAN TWO**

## 1. KEYWORD: COMMUNICATIONS

ITEM: NIPR AND SIPR ASSETS

DISCUSSION: Electronic mail and DSN phones were primary means of communication between many smaller Details, adjacent units, and higher headquarters. SIPR was required to request movement between sites and to check current threat levels and enemy activity. NIPR and SIPR assets were very limited.

RECOMMENDATION: Include computer and radio capability in organizational gear pack out.

#### 2. KEYWORD: SUPPLY

ITEM: TOOLS AND CONSUMABLES

DISCUSSION: Broken materials and consumables were difficult to replace at remote locations. Required items often were borrowed or progress slowed until re-supply was available. RECOMMENDATION: Ensure Details identify supply sources and establish dedicated property account for enduring locations. Maintain communication with Main Body to identify and work supply issues. Ensure Detail includes supply personnel to assist with logistic challenges.

## 3. KEYWORD: MOVEMENT

ITEM: AIR TRANSPORTATION

DISCUSSION: Transportation to forward operating bases was via fixed or rotary wing and required 96 hour advance planning. Flights were often cancelled without notice. RECOMMENDATION: Submit mission requests as soon as possible and establish secondary plan in case of flight cancellation.

# **DETAIL NEW HORIZONS**

## 1. KEYWORD: ADMIN

ITEM: COUNTRY CLEARANCE

DISCUSSION: Country clearance requirements limited final exercise manifest and resulted in additional tasking for approved personnel. Pre-determined exercise duration resulted in project completion deadlines that were extremely difficult to achieve. Additionally, reduced personnel increased tasking with no extension to already tight timelines. Result was extensive work hours and limited rest for entire exercise.

RECOMMENDATION: Clearly establish expectations as early as feasible in order to ensure correct personnel are assigned and approved for exercise.

## 2. **KEYWORD:** EQUIPMENT

ITEM: OPERATIONAL CHECKS

DISCUSSION: Four Detail personnel conducted operational check of well drilling rig over four day period. Period was based upon operational constraints with goal to "spud in" rig. Operational check only achieved pumping water through mud pump due to gear being dispersed to multiple locations upon arrival of team in Gulfport. A day and a half was spent consolidating gear and conducting required repairs prior to actual test.

RECOMMENDATION: Co-locate well rig and collateral gear prior to unit arrival for operational test. Inspect rig 30 days prior to operational test and repair as required to ensure maximum usefulness of the test. Increase test period to five days to allow for setup, three drill days, and tear down.

## 3. KEYWORD: EQUIPMENT

ITEM: UNSAFE CONTAINER CHASSIS

DISCUSSION: Provided container chassis did not have brakes adjusted which caused trailers to roll while being married to tractors. A quarter of chassis had bad gladhand connections or airlines. The legs collapsed on two occasions during redeployment from Peru.



RECOMMENDATION: Ensure Transportation Battalions (SDDC) have adequate quality assurance plan in place when accepting chassis from contractor.

## 4. KEYWORD: OPERATIONS

ITEM: PROJECT TASKING

DISCUSSION: NMCB FIVE was initially provided plans for previous buildings constructed during past New Horizons exercises. Projects were expected to be similar, but altered to use CMU block. Water well design was not finalized and did not clarify if it included submersible or hand pumps. Pump decision directly impacts well depth and required materials.

RECOMMENDATION: Finalize project tasking as early as possible to allow for accurate planning and material procurement.

# 5. **KEYWORD: OPERATIONS**

ITEM: PACKOUT

DISCUSSION: Longer duration required for TOA pack-out.

RECOMMENDATION: Increase packout to fourteen days in order for all equipment to be tested prior to inspection and pack-out. Pre-stage core DFT equipment in box trailer in order to allow for ready access, efficient inspection, and ready storage trailer. Only replacement equipment would require procurement, greatly expediting the exercise mobilization process.

## 6. KEYWORD: OPERATIONS

ITEM: TRAVEL FROM CAMP TO WORK SITE

DISCUSSION: Base camp was located up to 2 hours from project sites which added a minimum of 3 hours to work day and reduced time on the projects. Travel time for tactical vehicles was significantly longer than non-tactical vehicles. Detail Availability Factor (AF) did not accurately reflect required travel time and falsely reflected manday capability.

RECOMMENDATION: Limit distance from base camp to project sites or plan for berthing at each site. Recommend berthing at site includes showers and regularly scheduled hot meals.

## 7. **KEYWORD: OPERATIONS**

ITEM: PRE-DEPLOYMENT SITE SURVEY

DISCUSSION: Due to late exercise approval, short planning cycle, existing operational constraints, and host nation clearance requirements, Detail personnel were unable to conduct site survey of project locations or accurately understand road conditions. Lack of coordination with Peruvian contractors resulted in confusion and delays in material procurement early in exercise. All project site surveys, contractor coordination, and crew orientation were required to be conducted upon arrival in Peru.

RECOMMENDATION: Plan exercise as early as possible to ensure site survey by key Detail personnel and proper planning of exercise. Planning would result in more efficient use of resources and better project execution under tight time constraints.

#### 8. KEYWORD: OPERATIONS

ITEM: CONTRACTED WORK

DISCUSSION: Contracted earthwork at three project sites was not completed prior to exercise as planned. USARSO engineer also raised final elevation of all projects by two feet due to flooding concerns. Delayed earthwork resulted in three week construction delay.

RECOMMENDATION: Contracts should be finalized and pre-construction activities should be completed prior to execution.

#### 9. **KEYWORD: OPERATIONS**

ITEM: USARSO ENGINEER

DISCUSSION: Four different engineers directed "final" project design resulting in multiple scope changes and rework throughout exercise. Multiple engineers led to confusion with site preparation and contractor requirements.

RECOMMENDATION: Assign single USARSO engineer for duration of exercise.



## 10. KEYWORD: PERSONNEL

ITEM: ASSIGNMENT OF PERSONNEL

DISCUSSION: Entire Detail chain of command had arrived to NMCB FIVE after last deployment and was unfamiliar with reporting requirements and deployment expectations.

RECOMMENDATION: Ensure minimum of one Detail Khaki complete a deployment with Battalion prior to a New Horizons exercise to ensure adequate training prior to exercise.

#### 11. KEYWORD: PERSONNEL

ITEM: TASK FORCE STAFF

DISCUSSION: Task Force engineers were nearly all Army Combat Engineer officers. Unlike Navy Civil Engineer Corps officers, Army Combat Engineering officers are not required to have an engineering degree which created a disparity in relevant knowledge and caused technical design confusion, communication difficulties, and delays on the vertical projects.

RECOMMENDATION: Assignment of a CEC Officer as Task Force J3 or J7 would promote joint operations and provide requisite knowledge to mitigate technical questions.

#### 12. KEYWORD: PERSONNEL

ITEM: TASK FORCE MEDICAL STAFF

DISCUSSION: Medical officer rotated out every two weeks for duration of exercise resulting in treatment inconsistencies. Limited experience with field environment led to delays in medical treatment and unfamiliarity with evacuation plans impacted treatment of injured personnel. RECOMMENDATION: Assign one medical officer for duration of exercise. Detail should deploy with Independent Duty Corpsman (IDC) to enhance capabilities of Task Force. Ensure all local medical facilities are identified and visited during PDSS.

## 13. KEYWORD: SUPPLY

ITEM: MATERIAL AVAILABILITY

DISCUSSION: Provided base camp materials were not compatible and required substantial on site ingenuity to complete camp. Specifically the spider boxes were not compatible with cables supplied for generators and lights were not compatible with spider boxes. Resulted in electrical system being hardwired to include washers, dryers and shower trailers.

RECOMMENDATION: Adopt NCF-type coordinated base camp system for exercises.

# 14. KEYWORD: SUPPLY

ITEM: PROCUREMENT

DISCUSSION: Mud pump repair kits were ordered through Navy supply system, but did not arrive

in timely manner.

RECOMMENDATION: Order repair kits as early as possible to ensure receipt.

# **DETAIL TALLIL**

## 1. KEYWORD: SUPPLY

ITEM: MATERIAL TRACKING

DISCUSSION: Insufficient material tracking made it difficult to plan and execute job. Late deliveries and vendor base access hindered detail deployment.

RECOMMENDATION: Schedule personnel to arrive after majority of material is on site. Ensure vendors are able to access base to deliver materials prior to personnel arrival.